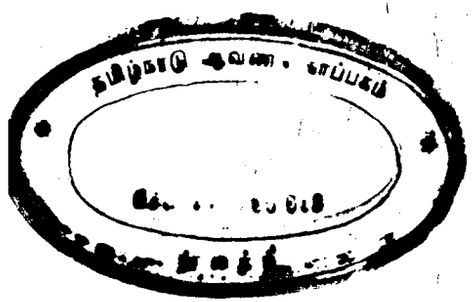


THE INDIAN AND PAKISTAN YEAR BOOK 1948

19-1-49

VOLUME XXXIV

...ical and Historical Annual of the Dominions of ...a & Pakistan, with an Explanation of the Principal Topics of the day.

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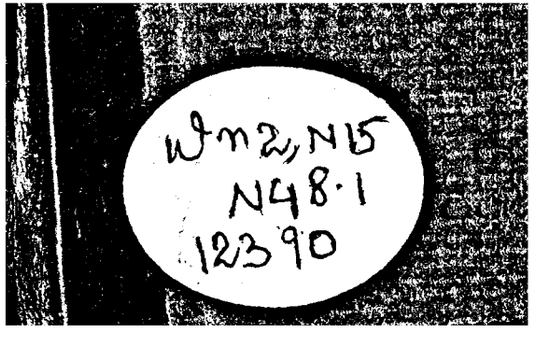
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Physiography

BEFORE describing the physiography of India, there is a little point about nomenclature which must be settled. Right down to August 15, 1947, India was politically and geographically one and there was no doubt what the expression 'India' meant. But on August 15, 1947, politics and geography parted company. For, on that day India was formally divided into two independent political units. One of the two units they decided to call Pakistan, and the other, after some deliberation, they decided to call India. Now the question which arises is this: If India minus Pakistan is India what is India to be called? In other words, what are we to call the great mass of land which lies to the south of the Himalayas and which now comprises the Dominion of Pakistan and the Dominion of India? Two answers appear to be possible. We might call it the Pakistanian sub-continent or we might call it the Indian sub-continent. Actually the expression 'Indian sub-continent' has long been in use as an alternative to old undivided India; and so it would be more in keeping with tradition if we decided to call the mass of land comprising India and Pakistan as the Indian sub-continent rather than as the Pakistanian sub-continent, and that is the expression which is used throughout this book.

A minor point about nomenclature may also be mentioned here. In the north-west of the Indian sub-continent the boundary between India and Pakistan cuts right across what was old Punjab; similarly in the north-east, the boundary between India and Pakistan cuts right across what was old Bengal. Hence expressions like 'Punjab' or 'Bengal' have no meaning in the present context. Instead we have East Punjab and West Punjab and East Bengal and West Bengal, East Punjab and West Bengal being parts of India, and West Punjab and East Bengal being parts of Pakistan. But it is a fact that 'Punjab' and 'Bengal' are still occasionally used and when they are so used they stand for the old undivided Punjab and the old undivided Bengal respectively. The important point to remember is that whatever the expression used at the moment may be, Punjab, Bengal, India, the Government of the Punjab, the Government of Bengal and so on, the context will make clear in every case what the expression is meant to stand for.

The Indian sub-continent, it may be noted once more, consists of the Dominion of India, the Dominion of Pakistan, the Portuguese possessions of Goa, Daman and Diu, the French possessions of Mahe, Karikal, Pondicherry, Yanam and Chandernagore, and the independent kingdom of Nepal. There are two areas which lie outside the geographical limits of the sub-continent and are still part of India or the other Dominion. These are Baluchistan which is now a part of the Dominion of Pakistan, and the uninhabited plateau of northern Kashmir, now a part of the Dominion of India.

Though politically separate, India and Pakistan are geographically one, and in the whole of the present section they will be treated as one and will be referred to together as the Indian sub-continent.

We will now proceed to give a physiographical description of the sub-continent. In form the sub-continent is like a triangle with its base resting on the Himalaya Mountains in the north and its apex running far into the ocean in the south. At the southern extremity the triangle tapers with a pear-shaped curve to a point called Cape Comorin.

LOCATION AND SIZE

The Indian sub-continent lies entirely to the north of the equator. From south to north it stretches from 8° north latitude to 37° north latitude, with the Tropic of Cancer cutting the sub-continent roughly into two halves. West to east it stretches from 62° east longitude to 97° east longitude.

Broadly speaking the Indian sub-continent is shut off from the mainland of Asia by the Himalaya Mountains, the highest mountain range in the world. Going from west to east along the sub-continent's land frontier are Persia, Afghanistan, Russian Turkestan, Tibet, China and Burma. In the south, the sub-continent is surrounded on all sides by water—the Arabian Sea in the west, the Indian Ocean in the south and the Bay of Bengal in the east.

Here are a few figures which indicate the enormous size of the sub-continent. It is about 2,300 miles from east to west, and about 2,000 miles from north to south. Its land frontier is 6,000 miles long and the sea frontier 5,000 miles. The total area involved is 1,575,107 sq. miles, which is about twenty times the size of Great Britain. Another method of comparison which is often employed is to say that the Indian sub-continent is as large as the whole continental Europe without Russia. The total population is 388.8 millions, which is about one-fifth of the population of the whole world.

Ports.—Compared with the size of the sub-continent, the coast-line is short, as there are few bays or inlets. Hence there are also very few harbours. The fact is the west coast is rocky and the sea is deep near the coast, while in the east the sea is extremely shallow so that big ocean-going ships have to weigh anchor at some distance from the shore. The only so-called natural harbours are Bombay and Goa. While Madras, Vizagapatam and Port Okha are examples of purely artificial harbours built by human enterprise.

The principal ports in the Indian sub-continent (going round the coast) Karachi, Bedi Bunder, Port Okha, Porbandar, Surat, Bombay, Marmugoa, Mangalore, Calicut, Cochin, Aleppey, Quilon, Tuticorin, Dhanushkodi, Negapatam, Karikal, Cuddalore, Pondicherry, Madras, Masulipatam, Coconada, Vizagapatam, Calcutta, and Chittagong. Of these, Karachi and Chittagong are in Pakistan, Karikal and Pondicherry belong

to France, Marmugoa belongs to Portugal, while the rest are in the Dominion of India. (For more details see section on ports.)

THE MOUNTAIN WALL

The Indian sub-continent can be divided into three natural regions as shown in the physical map—1. the mountain wall, 2. the Plain of Hindustan, and 3. the Indian Plateau.

Let us take the mountain wall first. From the Pamir Knot in the far north two mountain ranges radiate one in the south-east and easterly direction called the Himalayas, and the other in a south-western direction reaching almost down to the sea, called the Sulaiman Range in the north and the Kirthar Range in the south. In the east the mountain wall between the Indian sub-continent and Burma is called by different names in different places. In the north, for instance, it is known as the Patkoi Hills, further south as the Naga Hills. In Assam it is called Jaintia, Khasi and Garo. Southward are the Lushai Hills, then finally there are the Arakan Yoma which reach the sea at Cape Negrais and continue in the Andaman and Nicobar Islands.

Of the three ranges which constitute the mountain wall the Himalayas are the most note-worthy. Extending like a scimitar for a distance of 1,500 miles along the northern frontiers of the Indian sub-continent they form the loftiest mountain range in the whole world, and contain many of the highest mountain peaks, Mount Everest 29,000 ft., Mount Godwin Austen 28,250 ft., and Kinchinjinga 27,815 ft.

Passes.—There are no easy ways in and out through the mountain wall which shuts off the sub-continent from the rest of Asia, but there are a few difficult passes. From north-west to south are the Khyber Pass, the Kurram Pass, the Tochi Pass, the Gomal Pass and the Bolan Pass. Of these the Khyber Pass which leads from Peshawar to Kabul and the Bolan Pass which leads from Quetta to Kandahar are the most famous. In the very north are the Zojila Pass and the Shipki Pass which lead out of Kashmir and the Punjab respectively. Then from Shipki right down to Darjeeling there is no route across the mountain wall. Across the Burma frontier again there are a few routes but they are of little use for purposes of communication.

Detailed Survey.—The following is a more detailed description of the mountain region.

In the east on the border of Burma and comprising part of Assam and East Bengal, the mountain wall is much lower. Here it [illegible] accurately be described as a range of hills rather than of mountains. This region is wet, forested and very thinly populated. The region round about Cherrapunji in Assam has the highest rain-fall in the world.

Then from Darjeeling to Kashmir are the Himalayas proper over 2,000 miles in length and 150 to 200 miles in breadth. The Himalayas are thus not a mountain chain in the proper sense of the word. They can be described as a series of parallel but converging ranges intersected by valleys and big plateaus. On the whole, the slopes of the mountains facing the Indian sub-continent are very steep, while those facing north are much more gentle. We say, on the whole, because though the Eastern Himalayas (in West Bengal and Bihar) rise abruptly from the plains, in the west (western U. P. and East Punjab) the rise from the plains is a little more gradual. Hence the Himalayas themselves can be further sub-divided into three parallel zones, the Great Himalayas with an average elevation of 20,000 ft., always covered with snow; the Lesser Himalayas, the middle range, with an average elevation of 15,000 feet; and finally the Outer Himalayas lying between the Lesser Himalayas and the plains with an average elevation of about 3,500 feet. The last are a sort of foot-hills to the Great Himalayas, and are usually described as forming the sub-Himalayan region, a region which extends from eastern Bihar to East Punjab all along the Plain of Hindustan.

In the north and the north-west the altitudes of the range is much lower: there are few peaks, which exceed a height of 20,000 feet. The Punjab Himalayas are comparatively dry, and the snow-line is much higher than elsewhere. The northern slopes are bare while the southern slopes are forested.

Two of the longitudinal valleys which separate the mountain ranges are worth a note. They are the Vale of Kashmir and the valley of Khatmandu in Nepal. They are both fertile extensive and from a tourist's point of view a dream of beauty.

Thus it is clear the whole region possesses great variety in climate and a range of vegetation stretching from the tropics to the poles.

The north mountain wall has a tremendous influence on the physiography of the Indian sub-continent. On the one hand it keeps out the bitterly cold winds which blow from Central Asia and Tibet during the winter, and on the other it intercepts the moisture laden winds which blow from the sea in the south so that the northern plains of the sub-continent have rain during the monsoon. Second, the melting snow and rain falling on the mountains go to form the chief source for the water of the rivers which flow from the Himalayas. Hence the rivers of Hindustan never go completely dry in the summer. In short, if Egypt is a gift of the Nile, the Plain of Hindustan is no less a gift of the Himalayas.

THE PLAIN OF HINDUSTAN

Geologically, the Indus-Ganga Plain can be considered as a fore-deep or the mountain to the north of it. This fore-deep extends thousands of feet below the sea-level, though since its formation it has been filled in by deposit. In the east this deposit consists of alluvial material from the mountains, in the west it consists of material blown by the wind. All through the deposit is fine grained made chiefly of muds and sands.

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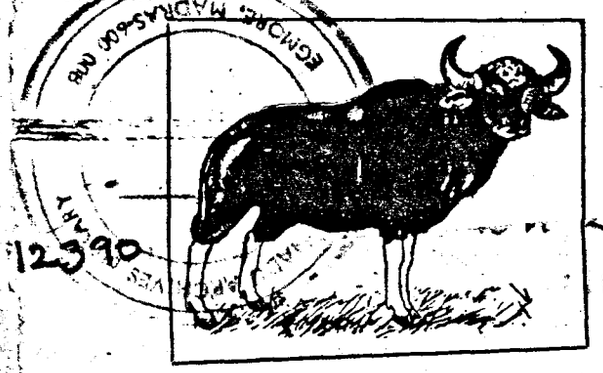
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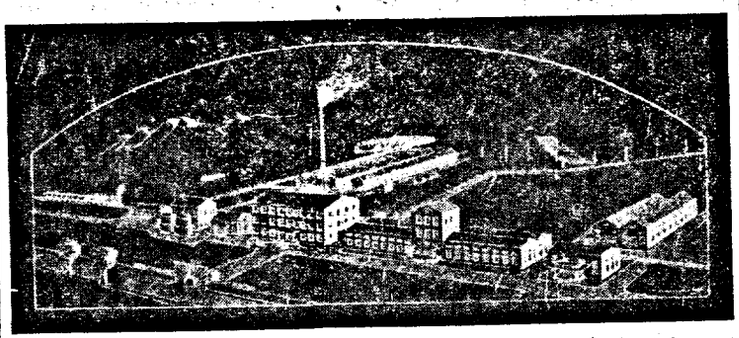
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The Hindustan Plain extends from the Bay of Bengal in the east to the Afghan frontier in the west, that is to say, it is more than 2,000 miles long and from 150 to 200 miles broad. Throughout this vast tract of land not a hill can be seen. The slope from the mountains to the sea is so gradual that about 100 miles from the mouth of the River Ganga the surface is no more than 500 feet above sea-level.

The Plain of Hindustan is probably the most important part of the sub-continent. For one thing, it contains some of the richest soil in the world. Second, it is on the Plain of Hindustan that the whole drama of race conflict and race assimilation was played out, a drama which finally shaped the political and cultural destiny of the entire sub-continent.

Going into more detail the Plain of Hindustan is formed by the basins of three distinct river systems. In the far west is the Indus and its tributaries, the Jhelum, Chenab, Ravi, Bias and Sutlej, draining into the Arabian Sea. Further east is the River Ganga with its tributaries the Yamuna, Gogra, Rapti and Gandak which flows south-eastwards into the Bay of Bengal. The capital of the Indian Dominion, Delhi, stands on the water-shed between the Indus and the Ganga river basins. The third of the three river systems, the Brahmaputra rises, like the Indus, beyond the Himalayas, turns east and enters the sub-continent at its eastern extremity and joins the Ganga before reaching the Bay of Bengal. The Brahmaputra has no important tributaries.

On the Himalayas these rivers are rushing, roaring torrents, cutting their way through steep and rocky gorges. But when they reach the vast plains they broaden out and wander slowly till they get to the sea. The land is so flat that the rivers sometimes leave their old beds and cut out new channels flooding the surrounding area.

The rivers of Hindustan are notable for three reasons, 1. They give a constant supply of water, 2. The land through which they flow is broad, flat and fertile and eminently suitable for irrigation, 3. Because water flows perennially they are navigable through the greater part of the year.

As we go from west to east in the Plain rainfall increases and so does the fertility of the soil.

The whole plain can be sub-divided according to climate into a number of natural regions. There is first the lower Indus valley, comprising the Province of Sind, a dry alluvial plain which depends for cultivation on the inundation canals of the Indus. Then there are the plains of the north-west, of the Upper Indus, comprising the Provinces of East and West Punjab, another dry area depending on the irrigation canals of the five tributaries of the Indus for its water. Third, there is the valley of the Upper Ganga covering the major part of the United Provinces, a comparatively dry region which depends for its cultivation on the irrigation canals of the Ganga and the Yamuna. Fourth, we have the valley of the middle Ganga embracing the Province of Bihar, which is an intermediate zone, with both wet and dry cultivation. As we go further east we have the lower valley of the Ganga, comprising the whole of West Bengal and part of East, a wet region with considerable rainfall growing rice and jute.

THE INDIAN PLATEAU

The third of the natural regions into which the sub-continent is divided is called the Indian Plateau because it comprises a three-sided table-land covering the whole of the sub-continent in the south except for two coastal strips one very narrow in the east, and the other a little broader in the west. The Indian Plateau is marked off from the Plain of Hindustan by a confused mass of ranges running with a general direction of east to west. Three of these ranges have been distinguished by the names of Vindhyas, Satpuras and Ajantas respectively. They stand from 1,500 feet to over 4,000 feet high and though pierced by road and railway at the present time were not easy to cross in the old days and thus formed a barrier of hill and jungle between the northern and the southern portions of the sub-continent.

The Indian Plateau is higher in the west and the south than in the east and north. Along the western and eastern edge of the plateau run the Western and Eastern Ghats. They start southward, from the extremities of the Vindhya mountain system and run along the western and eastern coasts of India and unite to form a sort of upheaved angle towards their southern extremity. The Western Ghats run through the Province of Bombay and ascend to an average height of about 3,000 feet while some of the peaks are anything between 5,000 feet and 9,000 feet high. The Eastern Ghats stretch down the Province of Madras and have an average elevation of 1,500 feet. The inner triangular plateau which the Western and Eastern Ghats form far in the south is seamed with little ranges of hills exceeding 4,000 feet in height the best known among which are the Nilgiris. It is on the Nilgiris that Ootacamund the famous summer captial of the Madras Province stands.

Drainage Systems.—There are three systems of drainage in the Indian Plateau—one towards the north, the second towards the west and the third towards the east. The drainage from the northern or Vindhya edge of the plateau falls into the Ganga. Two rivers Narbada and Tapti carry the rainfall of the southern slopes of the Vindhya and Satpura mountains respectively in almost parallel lines into the Arabian Sea. Further south, as we have already stated, the plateau is much higher in the west than the east. So the drainage has to make its way across the whole breadth of the plateau eastwards until it falls into the Bay of Bengal. The most important rivers are the Mahanadi, the Godavari, the Kistna and the Cavery. These rivers differ from the rivers of the Plain of Hindustan in three ways; 1. They are fed only by the monsoon rains and therefore do not yield a constant supply of water, 2. Their valleys are less suitable for irrigation, 3. And finally, they are not navigable for certain seasons in the year when parts of the river dry up.

From a geological point of view the Indian Plateau consists mainly of very old crystalline rocks—much older than the Himalayan fold mountains. On some of the edges of the plateau

in the north-east for instance, are areas of sedimentary rocks from which the sub-continent obtains most of its coal. About nine-tenths of the coal resources of the sub-continent lie in Jharia in Bihar and Raniganj in West Bengal, though coal-bearing beds are also found in the valley of the Godavari and the northern slopes of the Vindhyas. The north-west of the plateau is covered by vast stretches of lava called the Deccan lavas. This region is one of the largest areas of lava in the world, covering as it does an area of 250,000 square miles with a total thickness of several thousand feet. In spite of the great extent of the lavas there are few or no signs of volcanoes. In the rest of the Plateau valuable minerals occur here and there among old crystalline rocks. Gold is obtained in Kolar, manganese in Vizagapatam, Mysore and the Central Provinces, copper and iron in Bihar and Orissa, mica in Madras and the south-east. The point about diamonds is of some interest. They occur in sand-stones or conglomerate in Pannah in Bundelkand or Karnul in Madras, though no diamond-bearing igneous rocks are found.

Natural Regions.—From the point of view of climate and vegetation the Indian Plateau can be divided into ten natural regions. There are first of all the coastal regions round the plateau. In the north covering part of the Province of Bombay is the Gujerat region, moderately dry and hilly in places. Further south is the west coast region covering part of Bombay and part of Madras, very narrow and very wet. In the east is the Carnatic or Tamil region comprising part of Madras, moderately wet but wider than in the west. In the north is what is called the Northern Circars region covering part of Madras and part of Orissa, also moderately wet. Then there are the dry regions lying to the north of the Vindhya mountains sloping downwards to the Plains of the Ganga and the Indus. These are the Thar or Great Indian Desert, the Rajputana uplands dry and hilly, and the Central Indian Plateau comprising part of the Central Provinces. Finally there is a third group of regions which can be distinguished, all lying in the Indian Peninsula proper. These are first the southern part of the plateau covering the whole of Mysore and parts of Madras and Bombay, dry, somewhat barren and thinly populated; second, the Deccan lavas region in the north-west, containing parts of Bombay, Hyderabad and the Central Provinces, dry but with fertile black soil suitable for cotton and moderately thickly populated; and lastly, the North-Eastern Plateau covering parts of Bihar, the Central Provinces, and Orissa. This last mentioned region has moderate rainfall, is thinly populated, but thickly forested. The inhabitants are mainly concentrated in two river valleys.

Ceylon is the only important island lying off the coast of the sub-continent to which it is joined by a line of sand flats collectively called Adam's Bridge. But Ceylon is politically separate from the Indian sub-continent. Two groups of very small islands in the Bay of Bengal, the Andamans and the Nicobars, and one group in the Arabian Sea the Laccadives are part of the Dominion of India. So is the island of Cutch off the Kathiawar Peninsula in Western India. But Cutch is a dry, rocky, treeless country.

VEGETATION

The Indian sub-continent is thickly populated and so over a greater part of the country the natural vegetation has been removed. The sub-continent has no distinctive botanical features peculiar to itself. Where the rainfall is more than 80 inches a year there are ever green forest on the hills. The wood from these forests is hard but the forests have not yet been commercially exploited. These ever green forests are chiefly found on the slope of the Western Ghats, the wetter eastern parts of the Himalayas up to a level of 5,000 feet, and in Assam.

Where the rainfall is less than 80 inches but more than 40 we have what are called the monsoon forests, so-called because the trees in these forests lose their leaves in the dry season. The monsoon forests are very valuable, because they contain the two most important kinds of tree, the teak and the sal. The teak is found chiefly in the western parts of the sub-continent while the sal is obtained in the lower slopes of the Himalayas and the north-east of the plateau. Where the rainfall is less than 40 inches, in the drier parts of the sub-continent, we find small thorny trees, sometimes so small that they are more like bushes than like trees. In the driest parts where the land is desert or semi-desert even bushes cannot grow. There we find plants with thick fleshy stems and long roots. As we go up the mountains too the vegetation changes. In the higher reaches of the mountains, above 5,000 feet in the south, and 3,000 feet in the north the forests are similar to those found in temperate lands. Some of the trees have broad leaves and are like the oak while others are tall and have needle-shaped leaves like the pine.

On the highest parts of the mountains it is too cold and too dry for trees to grow and so we find only small bushes and short grass.

Along the sea-coasts and in the great river deltas where the land is flat and muddy grows a kind of tree called mangrove. These trees are most frequent in the deltas of the River Ganga where they are called Sundarbans.

There is not much grass land in the Indian sub-continent though in the hills in the monsoon areas a few patches can be seen. (For a description of the forest wealth of the sub-continent see section on forests.)

The main cultivated plants include rice, wheat, pulses and grains. Among the important seeds grown are castor, sesamum and ground nut. The chief fruit trees include mango, coconut, areca-nut and certain citrus fruits. Apples, peaches, pears, apricots and walnuts are confined chiefly to the Himalaya valleys. There are tea plantations over large areas on the mountains in the north-east and south, while coffee, cardamom, pepper and rubber are extensively grown in the south of the sub-continent. In some of the damper regions the cincona is successfully cultivated. (For more detailed description see section on agriculture.)

ANIMALS

Just as natural vegetation has disappeared over the greater part of the land so have a great many wild animals. The lion, for instance, was not uncommon within historical times in the north. Today it is confined wholly, to the Gir forest in the State of Junagadh in Kathiawar.

The most famous among the wild animals which survive are the tiger and the elephant. The leopard or panther is more common than the tiger and equally destructive of life and property. The cheetah or the hunting leopard is found only in the Deccan and is generally trained for hunting the antelope. Other wild Indian animals of the cat family are the marbled cat and the so-called jungle cat.

In the open country-side wolves are plentiful and usually prey on sheep. The Indian fox is comparatively scarce but the jackal is very common. The wild dog is found in the denser jungles and generally hunts in packs. Among other dogs are the pariah common in the south, and the grey hound used for hunting.

The black bear is common wherever rocky hills and forests occur. It lives on ants, honey and fruit but if agitated it may prove dangerous. The Himalayan bear which is found only in the north, stays in the mountains during the summer but comes lower down during the winter.

The rhinocerii found in the sub-continent are of three different types, two have a single horn and one has double. The rhinocerii are commonest in the Brahmaputra valley and in the Sundarban. With the rhinoceros might be mentioned the crocodile which can be very dangerous specially in the rivers of the north. The wild hog is also well-known in certain parts of the sub-continent and is very destructive of crops.

In the remote parts of the deserts of Sind and Cutch is found the wild ass but its contacts with man are few. Many wild varieties of sheep and goat can be come across in the mountain ranges of the north.

The antelope proper is more widely distributed. On the coasts of Gujerat and Orissa, for instance, a herd of does accompanied by a single buck is a common sight. The gazelle can also be found in the sub-continent. The sambar is confined to hill forests, while the spotted deer is considered to be the most beautiful animal of the Indian jungle.

In the Western Ghats, and in the hill jungles of Assam and the Central Provinces is found the bison. It is a fierce animal and almost as dangerous to hunt as the tiger. Akin to the bison is the wild buffalo very commom in Assam.

The rat and the mouse are a perpetual nuisance. The bandicoots some of which can be as long as 2 feet burrow under stores and godowns and are often deadly to plants and fruit.

The reptiles abound in garden and jungle and even intrude into dwelling places specially during the rains. Thousands of people die every year in the country-side of snake-bite. The most dreaded of the reptiles is the cobra. There is another variety called Russel's viper whose bite is equally fatal. Generally speaking the salt-water snakes are dangerous while the fresh-water ones are harmless. The bigger variety scorpion which abounds in parts of Madras is a terror.

Of all the wild animals in the sub-continent the elephant is the most interesting as well as the most useful. It generally lives in the wilder parts of the monsoon forests and being an intelligent animal can be trained to do heavy work such as dragging great logs of wood, or arranging them in neat piles. The elephant is also excellent as a transport animal as it can push its way through the thickest jungle where roads cannot be built.

Domestic Animals.—So much for the wild animals. Among the domestic animals the most useful are the oxen. It is estimated that there are about one bullock or cow to every two people in the sub-continent. Milk is not a staple article of food and the oxen are chiefly used for ploughing or drawing carts. The bullocks are more valuable than the cows though in parts of the sub-continent like the United Provinces dairy-farming is an important industry. One handicap is that in most parts of the country fodder has to be specially grown for the cattle.

There are 40 million buffaloes in the sub-continent. The buffalo is stronger than the bullock and is chiefly used for ploughing. The she-buffalo is the typical dairy animal.

It is estimated that there are about 25 million sheep in the two Dominions together. But they are a very poor specimen and do not give good wool or meat. Sheep are most numerous in Madras and live chiefly on waste land which is not good enough for cattle. Goats are found everywhere because it does take much to keep them alive. They can feed on the poorest grass or shrub and so find enough to eat even in the driest parts of the sub-continent.

There are about two million horses and ponies, most of which are used as draught animals. Mules, donkeys and camels are also used for purposes of transport: mules and donkeys on the hilly parts, and camels in the sandy desert.

The birds of the Indian sub-continent though not as gorgeous as those of some other tropical lands deserve mention. The parrot is easily the most beautiful of the Indian birds. The peacock is another beautiful bird, while the maina like the parrot lives happily in a cage and talks well. Of the vulture there are four varieties which include the common scavenger. There are many types of eagle too and some of the falcons can be trained for hawking. A bird much sought after for its plumage is the king-fisher and among the birds which are hunted for their flesh are pigeons, ducks, partridges, plover, quail and snipe. The jungle fowl, however, is not considered good for eating.

There are many beautiful butterflies in the Indian sub-continent, while among the more useful insects are the bee, the silk-worm, the *coceus laca*, that is, the insect which gives lac. Certain varieties of Indian moth and ant are very destructive. Locust invasions are not frequent but when they appear they leave complete destruction behind them. Mosquitoes abound everywhere.

In the Indian sub-continent fish is eaten fresh as methods of fish preservation are either primitive or not practised. Among the edible Indian fishes are the carp family and the cat fishes. But the most delicious is the hilsa which is also a rich food. A fish which is found in all hill streams is the mahseer. (For a more detailed discussion see section on fisheries).

THE TWO DOMINIONS

Politically the Indian sub-continent now comprises the Dominion of India, the Dominion of Pakistan, the States governed by Indian Princes and the French and Portuguese possessions already mentioned.

The Dominion of India comprises the Provinces of East Punjab, the United Provinces, Bihar, West Bengal, Orissa, the Central Provinces, Bombay and Madras, and the centrally administered areas of Delhi, Ajmer-Merwara, Coorg, Panth Piploda and the Andaman Islands.

The Dominion of Pakistan comprises the Provinces of West Punjab, the North West Frontier, Baluchistan, Sind and East Bengal.

Of the States ruled by Indian Princes, Bahawalpur, Khairpur, Kalat, Chitral, Dir and Swat have acceded to the Dominion of Pakistan, while the rest of the 500 odd States with the exception of Hyderabad have acceded to the Dominion of India. Some of the smallest like those in Chatisgarh in the Central Provinces and on the borders of Orissa have been absorbed into the nearest Provinces of the Indian Dominion while others contiguously situated have coalesced to form larger administrative units. Examples are Sourashtra, Rajasthan and Vindhya Pradesh.

The partition of what was British India took place on August 15, 1947. Broadly speaking, the areas in the north-west and the north-east inhabited predominantly by people belonging to the Muslim religion were cut off and formed into a separate independent Dominion. Only two Provinces were primarily affected by the decision to partition the sub-continent, and a third to a smaller degree. The two which were primarily affected were the Punjab in the West and Bengal in the East. The old Punjab was divided into West Punjab which is part of Pakistan and East Punjab which is part of India. The old Bengal was divided into East Bengal now part of Pakistan and West Bengal now part of India.

The Province of West Punjab includes the whole of the Multan and the Rawalpindi Divisions and the Districts of Gujranwala, Sheikhupura and Sialkot of the Lahore Division. The Province of East Punjab includes the whole of the Jullundur and Ambala Divisions and the Amritsar District of the Lahore Division. The Gurdaspur and Lahore districts of the Lahore division are divided between the two new Provinces.

In the east the Province of East Bengal includes the whole of the Chittagong and the Dacca Divisions and the Districts of Rangpur, Bogra, Rajshahi, Pabna and Khulna. The Province of West Bengal includes the whole of the Burdwan Division and the Districts of Calcutta, the 24 Parganas, Murshidabad and Darjeeling. The Districts of Nadia, Jessore, Dinajpur, Jalpaiguri and Malda are divided between the two Provinces.

The Province of Assam too was affected to a minor degree. Except four thanas the whole of the District of Sylhet was transferred to the newly created Province of East Bengal.

RELATIVE POSITION

An attempt is made below to summarize the present position in regard to the population etc. of the two Dominions. But the estimate can only be regarded as very provisional for the following reasons: First, the latest figures that are available are for 1944-45; in some cases indeed one has to go even further back. Second, big changes have recently taken place as between the two Dominions in men and material for which no figures can so far be obtained. Thirdly, the allocation of resources in the divided Provinces of Punjab and Bengal are not yet final.

The population of India is roughly 297,542,000 and that of Pakistan 71,096,000.

The area of the Indian Dominion is 1,055,621 sq. miles and that of the Dominion of Pakistan 361,218 sq. miles. Another estimate puts this latter figure at 233,000.

The general economic position can roughly be summarized as follows:

As we have seen, the bulk of the population and territory go to India. Most of the roads and railways also fall to India's share as well as most of the ports and air-fields. The canal system is divided while the largest dams remain in India.

As regards food resources India as a whole is deficient while Western Pakistan is expected to have a surplus of 1½ million tons of which about half a million may have to be sent to Eastern Pakistan to meet the latter's deficiency. Pakistan has a good deal of cotton to spare and holds a virtual world monopoly in jute. But Pakistan has to import textile goods in which she is deficient. Nearly all the jute mills are also in India, but unless India imports a good deal of the jute of Pakistan, most of the mills will be idle. The major part of the mineral resources of the sub-continent with the possible exception of chromium remain in India. And out of about 780 factories covering all the major industries Pakistan's share will be 9 and India's 771.

As regards fuel, India keeps most of the coal, but this is not very much. Hydro-electric power is going to be much more important in the future than it is today. And though India produces almost all the electric power in the sub-continent at present, Pakistan's potentialities are much bigger. At the present moment, however, Pakistan cannot do without Indian coal for her railways, of which she has to import about 2½ million tons a year.

As regards foreign trade Pakistan is expected to have a favourable balance of Rs. 18 crores while India will have an unfavourable balance of Rs. 110 crores owing mainly to the need to import food.

Communications.—That is a rough over-all picture. A more detailed account is given down below through a series of statistical tables. It must be emphasized once again that only a rough estimate is all that is possible.

India has 264,605 miles of road and 25,970 miles of railway while Pakistan has 49,863 miles of road and 14,542 miles of railway. As has already been stated in the earlier part of this section all the major ports except Karachi and Chittagong are in India. Of the 19 of the largest air-fields in the sub-continent India has 15 and Pakistan has 4. There are 8 large canal systems, Sukkur, Sarda and the Sutlej valley. Of the three the first is in Pakistan (Sind), the second is in India (U.P.), and the third is divided between the two. The sub-continent is well known for its large dams. Of these the largest are in India (Madras, Bombay). Of the larger dams which are under construction at present, the Bakra, the Damodar, the Tungabhadra and the Thal, the first three are in India (East Punjab Bihar and Madras, respectively) while the last is in Pakistan (West Punjab). One generalization which may be permitted is while the States which have acceded to the Indian Union add substantially to its economy those which have acceded to Pakistan (with the exception of Khairpur) do not.

Agricultural Produce.—Here are the figures for the chief food crops in tons.

Cereal	Total	India	Pakistan	States
Rice	26,249,000	17,154,500	8,662,500	432,000
Wheat	10,458,000	6,901,000	3,457,000	100,000
Jowar	7,446,000	6,020,000	199,000	1,227,000
Bajri	4,249,000	3,672,000	411,000	166,000
Maize	2,952,000	2,518,000	382,000	52,000

The position in regard to cash crops is somewhat as follows:

Cash Crop	Total	India	Pakistan	States
Jute (in bales)	7,991,100	1,455,700	6,535,400	..
Cotton (in bales)	3,438,000	2,059,000	1,118,000	321,000
Rubber (lbs.)	35,530,000	4,695,000	..	30,835,000
Linseed (tons)	432,000	382,000	7,000	43,000
Sesamum (tons)	433,000	426,000 (States included)	7,000	
Castor seed (tons)	105,000	..	*Nil*	
Groundnut (tons)	3,702,000	3,702,000	*Nil*	
Coffee (lbs.)	34,822,000	34,822,000 (includes States)	*Nil*	
Tea (lbs.)	4,63,881,000	4,63,881,000 (includes States)	*Nil*	

So far as tobacco, copra and hemp are concerned the whole of the supply comes from India, while the position in regard to wool is obscure.

Mineral Resources.—And this is how the mineral resources (in tons) are roughly distributed:

Ore	Total	India	Pakistan
Coal	28,342,906	28,118,000	100,837
Petroleum (gallons)	87,082,371	65,968,951	21,113,420
Chromium	44,000	22,100	21,900
Copper	288,100	288,100	*Nil*
Iron	2,743,675	2,743,675	*Nil*
Mica (cwts.)	1,23,169	123,169	*Nil*
Gold (ounces)	321,138	321,138	*Nil*
Silver (ounces)	22,300	22,300	*Nil*
Magnesite	25,611	25,611	*Nil*
Saltpetre (cwts.)	148,824	148,824	*Nil*
Bauxite	14,768	14,768	*Nil*
Manganese	992,795	992,795	*Nil*

Other minerals of which India has a much bigger supply than Pakistan are ilmenite, steatite, graphite, monazite and some others containing radio-active substances.

And here finally are the production figures for the chief industrial goods :

Goods	Total	India	Pakistan
Iron and Steel ..	18 works 1,959,000 tons ingots 978,000 tons finished	18 works. 1,959,000 tons ingots 978,000 tons finished	*Nil*
Textiles	389 mills	380 mills 5 billion yds. 1¼ billion lbs. of yarn	9 mills
Chemicals	....	42,000 tons of sulphuric acid 22,000 tons of ammonium sulphate	very little
Paper	....	73,138 tons	very little

Almost all other industrial plants such as those making matches, paints, glue, glass, soap, aluminium, cement, etc., are in India. The great bulk of hydro-electric power too as we have stated is produced in India. In rural electrification, for instance, development is most advanced in Madras, Mysore and the United Provinces, two of which are in India while the third (Mysore) has acceded to the Indian Union. The great hydro-electric projects now under construction are also in India. But it is believed that the potentialities of Pakistan in this regard are much higher.

Meteorology

THE all-important fact in the meteorology of the sub-continent is the alternation of the seasons known as the summer and winter monsoons. During the winter monsoon the winds are of continental origin and hence, dry, fine weather, clear skies, low humidity and little air movement are the characteristic features of this season. The summer rains cease in the East and West of the North-West Frontier Province and Punjab about the middle of September after which cool westerly and northerly winds set in over that area and the weather becomes fresh and pleasant. These fine weather conditions extend slowly eastward and southward so that by the end of October, they embrace all parts of the country except the southern half of the Peninsula, and by the end of the year have extended to the whole land and sea area, the rains withdrawing to the Equatorial Belt. Thus the characteristics of the cold weather from October to February over the sub-continent are :—Westerly winds of the temperate zone over the extreme north, to the south of these the north-east winds of the winter monsoon or perhaps more properly the north-east Trades and a gradually extending area of fine weather which, as the season progresses, finally embraces the whole land and sea area.

Two exceptions to these fine weather conditions exist during this period, *viz.*, the Madras coast and the north-west. In the former region the north-east winds which set in over the Bay of Bengal in October coalesce with the damp winds of the retreating summer monsoon, which current curves round over the Bay of Bengal, and blowing directly on to the Madras coast gives to that region the wettest and most disturbed weather of the whole year, for while the total rainfall for the four months June to September, *i.e.*, the summer monsoon, at the Madras Observatory amounts to 15.46 inches the total rainfall for the three months October to December amount to 31.78 inches. The other region in which the weather is unsettled, during this period of generally settled conditions, is the north-west. This region during January, February and part of March is traversed by a succession of shallow storms from the westward. In normal years, in the north periods of fine weather alternate with periods of disturbed weather (occurring during the passage of these storms) and light to moderate and even heavy rain occurs.

These two periods of subsidiary "rains" are of the greatest economic importance. The fall in Madras is, as shown above, of considerable actual amount, while that of the north-west though small in absolute amount is of the greatest consequence as on it largely depend the grain and wheat crops of the north.

THE SOUTH-WEST MONSOON

It is now necessary to trace the changes which occur and lead up to the establishment of the south-west monsoon period. The sun at this time is progressing slowly northward towards the northern Tropic. The temperature increases rapidly and barometric pressure diminishes, owing to the air rising and being transferred to neighbouring cooler regions—more especially the sea areas. Thus we have the southern Trade circulation extending northward and the local land and sea circulation extending southward until about the beginning of June the light unsteady interfering circulation over the Arabian Sea finally breaks up, the immense circulation of the south-east Trades, with its cool, moisture laden winds rushes forward, becomes linked on to the local circulation proceeding between the land area and the adjacent seas and the sub-continent is invaded by oceanic conditions—the south-west monsoon proper. This is the most important season of the year as upon it depends the prosperity of at least five-sixths of the people.

When this current is fully established a continuous air movement extends over the Indian Ocean, the seas and the land area from Lat. 30° S. to Lat. 30° N. the southern half being the south-east Trades and the northern half the south-west monsoon. The most important fact about it is that it is a continuous horizontal air movement passing over an extensive oceanic area where steady evaporation is constantly in progress so that where the current enters the seas and flows over the land it is highly charged with aqueous vapours.

The current enters the Indian seas quite at the commencement of June and in the course of the succeeding two weeks spreads over the Arabian Sea and Bay of Bengal up to their extreme northern limits. It advances over the sub-continent from these two seas. The Arabian Sea current blows on to the west coast and sweeping over the Western Ghats prevails more or less exclusively over the Peninsula, Central India, Rajputana and north Bombay. The Bay of Bengal current blows directly up the Bay. One portion is directed towards East Bengal and Assam while another portion sweeps over Bengal (East and West) and after meeting the Himalayas gets deflected and blows as a south-easterly and easterly current right up the Ganga plain.

DISTRIBUTION

The south-west monsoon continues for three and a half to four months, *viz.*, from the beginning of June to the middle or end of September. During its prevalence more or less general though far from continuous rain prevails throughout the sub-continent, the principal features of the rainfall distribution being as follows. The greater portion of the Arabian Sea current, the total volume of which is probably three times as great as that of the Bengal current, blows directly on to the west coast districts. Here it meets an almost continuous hill range, is forced into ascent and gives heavy rain alike to the coast districts and to the hilly range, the total averaging about 100 inches, most of which falls in four months. The current after parting with most of its moisture advances across the Peninsula giving occasional uncertain rain to the Deccan and passes out into the Bay where it coalesces with the local current.

The northern portion of the current blowing across the Gujarat, Kathiawar and Sind coasts gives a certain amount of rain to the coast districts and frequent showers to the Aravalli Hill range but very little to Western Rajputana, and passing onward gives moderate to heavy rain in the Eastern Punjab, Eastern Rajputana and the North-West Himalayas. In this region the current meets and mixes with the monsoon current from the Bay.

The part of the monsoon current over the southern half of the Bay of Bengal which advances sufficiently far northward to blow over Bengal and Assam gives very heavy rain to the low-lying districts of East Bengal and immediately thereafter coming under the influence of the Assam Hills is forced upwards and gives excessive rain (perhaps the heaviest in the world) to the southern face of these hills. The remaining portion of the Bay current advances from the southward over Bengal, is then directed westward by the barrier of the Himalayas and gives general rain over the Ganga plain and fairly frequent rain over the lower ranges of the Himalayas from Sikkim to Kashmir.

To the south of this easterly wind of the Bay current and to the north of the westerly wind of the Arabian Sea current there exists a debatable area running roughly from Hissar in East Punjab through Agra, Allahabad and part of Chota Nagpur to Orissa, where one or the other current of the monsoon prevails. In this area the rainfall is conditioned by the storms from the Bay of Bengal which exhibit a marked tendency to advance along this track and to give it heavy falls of occasional rain.

The total rainfall of the monsoon period (June to September) is 100 inches over part of the west coast, the amount diminishes eastward, is below 20 inches over a large part of the centre and east of the Peninsula and is only 5 inches in South Madras; it is over 100 in the north Assam Valley and diminishes steadily westward and is only 5 inches in the Indus Valley.

The month to month distribution for the whole of India including Burma is :—

May	.. ..	3·1 inches.
June	.. ..	7·9 „
July	.. ..	11·2 „
August	.. ..	10·3 „
September	..	7·0 „
October	.. ..	3·3 „

Cyclonic storms are an almost invariable feature of the monsoon period. In the Arabian Sea they ordinarily form at the commencement and end of the season, *viz.*, May and November, but in the Bay they form a constantly recurring feature of the monsoon season.

METEOROLOGICAL DEPARTMENT

Now there are two Meteorological Departments, one for India with headquarters in Delhi and the other for Pakistan with headquarters in Karachi. Both the Departments perform much the same kind of functions the more important of which are :

(*a*) The issue of warnings to ports and coastal districts of the approach of cyclonic storms.

(*b*) The issue of storm warnings by wireless to ships in the Indian seas, and the collection of meteorological data from ships.

(*c*) The maintenance of systematic records of meteorological data and the publication of climatological statistics.

(*d*) The issue to the public of up-to-date weather reports and of rainfall forecasts.

(*e*) Meteorological researches of a general character, but particularly regarding tropical storms and the forecasting of monsoon and winter rainfall.

(*f*) The study of agricultural meteorology, *i.e.*, the study of the meteorology of soil, air and the air layers near the ground with particular reference to the growth of plants and crop production.

(*g*) The issue of seasonal rainfall forecasts.

(*h*) The issue of telegraphic warnings of heavy rainfall and frost (cold wave) mainly to Government officials (*e.g.*, Canal and Railway Engineers, Collectors, Directors of Agriculture, etc.) and through the newspapers to the public in general.

(*i*) Determination of time and the issue of time-signals, also the determination of errors of chronometers for the Royal Indian and Pakistan Navies.

(*j*) Maintenance of seismological instruments at various centres.

(*k*) Issue of weather forecasts to Civil Aviators.

(*l*) The issue of weather bulletins to farmers broadcast by the Provincial Broadcasting stations.

Normal Monthly and Annual Maximum Temperature in Shade at Some Stations in India and Pakistan

Stations	Elevation in feet	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
		°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.
Hill Stations														
Darjeeling	7,432	47.0	47.8	55.4	61.2	62.9	64.9	65.7	65.6	64.6	61.7	55.6	50.5	58.0
Shillong	4,921	60.1	62.5	70.4	74.1	74.0	74.5	75.3	75.1	74.3	71.1	66.0	61.6	69.9
Simla	7,224	47.5	48.8	57.0	65.9	73.2	75.1	70.9	68.4	68.4	64.3	58.3	50·6	62.4
Coast Stations														
Bombay	37	68.2	68.1	86.2	89.1	91.1	88.5	85.5	85.0	85.5	88.8	89.4	86.6	86.8
Karachi	18	75.5	76.9	81.8	85.4	88.6	90.4	88.5	85.8	85.6	87.3	85.2	78.7	84.1
Madras	67	85.8	88.3	91.4	95.5	101.3	99.6	96.3	94.8	93.9	90.1	85.4	84.1	92.2
Stations on the Plains														
Allahabad	322	74.8	79.2	91.7	102.6	107.1	102.7	92.1	89.4	91.5	90.4	83·4	75.7	90.1
Calcutta	21	79.6	83.7	92.5	96.8	95.6	92.4	89.5	89.0	89.9	89.2	84·2	79·4	88.5
Cawnpore	413	71.9	77.0	89.4	99.4	106.2	102.7	92.4	89.7	90.9	91.2	82.8	74.0	89.0
Cuttack	87	83.1	88.2	96.6	101.2	101.4	95.5	89.5	89.0	90.0	89.7	85.0	81.2	90.9
Delhi	714	70.5	74.7	85.0	96.6	104.8	102.4	95.3	93.0	93.5	92.5	88.2	73.7	88.8
Jacobabad	183	72.7	78.5	90.5	100.4	111.6	113.9	108.0	104.3	103.2	99.0	87.6	76.1	95.5
Lahore	702	68.0	72.1	82.6	94.5	103.7	105.9	99.6	97.0	97.3	94.0	82.9	72.8	89.2
Lucknow	371	73.9	78.6	90.8	101.4	105.4	100.2	92.4	90.5	91.9	91.4	88.9	75.9	89.7
Patna	173	73.0	77.8	89.8	98.9	100.3	96.2	90.7	89.1	89.7	88.6	82.1	74.6	87.6
Peshawar	1,175	63.0	66.2	74.8	85.2	97.0	105.0	102.5	98.2	95.0	87.8	76.8	68.7	85.0
Plateau Stations														
Dehra Dun	2,239	66.1	69.3	79.4	90.0	96.0	93.7	86.5	84.5	84.8	82.9	75.4	68.7	81.4
Nagpur	1,022	83.7	88.2	96.7	104.5	108.7	99.5	88.3	87.3	89.8	91.0	85.5	81.7	92.1

Normal Monthly and Annual Minimum Temperature in Shade at Selected Stations in India and Pakistan

Stations	Elevation in feet	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
HILL STATIONS	For elevation, see table of maximum temperature normals	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.
Darjeeling		35.4	36.6	43.0	48.8	52.4	56.5	58.0	57.7	56.0	50.2	43.1	36.6	47·9
Shillong		38.8	42.4	50.8	57.0	59.1	63.0	64.6	64.0	61.6	54.8	46.2	40.0	53.5
Simla		35.4	36.1	43.6	50.6	57.7	60.1	59.2	59.2	56.3	51.4	44.2	39.3	49.4
COAST STATIONS														
Bombay		66.7	67.4	71.9	76.1	79.6	78.6	76.7	76.1	75.7	75.6	72.5	68.8	73.8
Karachi		57.4	61.0	68.1	74.2	79.0	82.3	81.1	78.5	76.7	73.7	66.9	60.1	71.6
Madras		67.1	68.4	72.4	78.1	81.7	81.1	79.3	78.0	77.2	75.0	71.9	68.9	74.9
STATIONS ON THE PLAINS														
Allahabad		47.1	50.9	61.0	71.4	79.9	82.9	79.8	78.5	76.6	67.1	54.3	47.1	66.4
Calcutta		54.6	59.4	68.8	75.5	77.5	78.6	78.6	78.3	78.0	73.8	63.7	55.0	70.2
Cawnpore		45.7	51.0	60.1	70.6	80.4	88.0	79.9	78.7	76.2	66.0	53.9	46.5	66.0
Cuttack		59.8	64.8	71.8	77.5	79.9	79.6	78.3	78.1	77.8	74.4	65.8	58.7	72.2
Delhi		43.3	49.2	57.1	67.7	78.8	82.5	80.1	78.4	75.5	64.3	51.8	45.0	64.5
Jacobabad		43.8	49.1	59.9	70.2	79.0	84.9	85.0	82.2	77.0	64.4	52.8	44.9	66.1
Lahore		40.1	44.5	53.2	63.2	72.2	79.0	80.1	78.7	73.1	59.8	47.3	40.6	61.0
Lucknow		47.1	51.4	60.6	70.8	78.3	81.7	79.5	78.6	76.5	66.5	54.1	47.3	66.0
Patna		51.1	54.8	64.3	73.5	78.1	79.9	79.9	79.7	78.9	72.8	61.0	52.3	68.9
Peshawar		40.4	44.0	52.4	60.5	70.4	77.2	80.2	78.9	71.8	60.5	48.9	40.9	60.5
PLATEAU STATIONS														
Dehra Dun		44.0	46.6	54.1	62.5	70.1	74.1	73.8	72.9	69.5	60.3	51.1	45.1	60.3
Nagpur		57.7	61.9	69.3	77.2	82.7	79.6	75.5	75.0	74.7	69.0	61.8	57.2	70.1

Normal Monthly and Annual Rainfall at Some Stations in India and Pakistan

Stations	Elevation in feet	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
HILL STATIONS	For elevation, see table of maximum temperature normals	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Darjeeling		0.53	1.19	1.88	4.14	9.63	24.18	32.92	26.56	18.90	5.41	0.81	0.27	126.42
Shillong		0.52	1.06	1.97	5.10	11.29	18.16	13.65	12.49	11.79	6.72	1.61	0.28	84.64
Simla		2.61	2.92	2.36	1.81	2.53	6.04	16.30	16.85	6.68	1.18	0.52	1.24	61.04
COAST STATIONS														
Bombay		0.14	0.08	0.05	0.03	0.65	19.06	24.27	13.39	10.39	2.54	0.53	0.08	71.21
Karachi		0.46	0.44	0.29	0.15	0.06	0.72	3.20	1.56	0.52	0.02	0.08	0.20	7.70
Madras		1.41	0.41	0.29	0.61	1.03	1.86	3.60	4.58	4.68	12.04	13.96	5.45	49.92
STATIONS ON THE PLAINS														
Allahabad		0.85	0.63	0.56	0.17	0.63	5.04	12.56	10.03	8.36	2.34	0.31	0.34	41.82
Calcutta		0.37	1.17	1.36	1.75	5.49	11.69	12.81	12.92	9.95	4.48	0.81	0.18	62.98
Cawnpore		0.56	0.66	0.29	0.22	0.32	3.19	10.75	11.20	6.79	1.30	0.35	0.28	35.91
Cuttack		0.32	0.78	1.04	1.07	3.57	9.95	12.89	13.40	9.76	5.34	1.62	0.23	59.97
Delhi		0.99	0.83	0.51	0.33	0.52	3.03	7.03	7.23	4.84	0.40	0.10	0.43	26.24
Jacobabad		0.23	0.33	0.22	0.17	0.14	0.26	0.95	0.88	0.17	0.03	0.05	0.17	3.60
Lahore		1.04	0.97	0.79	0.57	0.59	1.64	5.45	5.15	2.20	0.24	0.10	0.47	19.21
Lucknow		0.76	0.72	0.34	0.25	0.77	4.46	12.00	11.50	7.40	1.28	0.22	0.32	40.02
Patna		0.59	0.74	0.42	0.27	1.40	7.14	11.58	13.09	8.60	2.30	0.34	0.22	46.69
Peshawar		1.44	1.53	2.44	1.76	0.77	0.31	1.26	2.03	0.81	0.23	0.31	0.67	13.56
PLATEAU STATIONS														
Dehra Dun		2.32	2.47	1.26	0.65	1.45	8.55	26.30	28.79	10.62	1.26	0.35	1.02	85.04
Nagpur		0.37	0.65	0.60	0.60	0.76	8.82	14.60	11.42	8.01	2.17	0.77	0.47	49.24

1947 Monsoon

The chief features of the 1947 monsoon are: (*i*) Unusual delay in the setting in of the monsoon in the interior of the country; (*ii*) bad distribution according to time of rainfall in many parts, a period of drought during the first six weeks followed by a period of excessive rainfall; (*iii*) excessive rainfall in East Bengal during July and August and in East Punjab during the last week of September, resulting in disastrous floods in those regions.

Here is a summary month by month:

June.—The monsoon appeared over Malabar on 3rd June which is about the usual date, but remained confined with rather feeble activity, mainly to the coastal regions up to the Konkan during the first three weeks. In association with a depression from the north Bay of Bengal, it temporarily advanced into the Deccan the central parts of the country and South Bengal for a short period during the second week. There was again an increased activity of the monsoon in the country outside the north-west and Gujarat during the last week of June in association with a cyclonic storm from the north Bay; but the rainfall during the month was normal only in the north-east, the south Peninsula and Kashmir while it was in large defect in the north-west, Gujarat and the west United Provinces and in moderate defect over most other areas.

July.—There was a distinct improvement in the behaviour of the monsoon during July, although even through this month the drought over the north-west and Gujarat continued. Two depressions moved from the north Bay to the Central Provinces during the second and third weeks respectively and caused particularly heavy rain in south-east Bengal, the central parts of the country and the east United Provinces. The Arabian Sea branch which had strengthened considerably during the second week, became vigorous for a short spell and extended to Gujarat and east Rajputana in the third week when very heavy rain fell in the Konkan, Gujarat, east Rajputana, the southern divisions of the United Provinces and in and near Central India. The rainfall for July was therefore normal or in excess over the Peninsula, the Central parts of the country, the United Provinces and the north-east and in marked defect in Baluchistan, the North-West Frontier Province and west Rajputana, while Sind had no rain at all. Considering June and July together, the rainfall was in large defect in Gujarat, the Punjab, west Rajputana, Sind, Baluchistan and the North-West Frontier Province and in slight to moderate defect in East and West Bengal, Chota-Nagpur, Orissa, east Rajputana, west Central India, Berar, the Bombay Deccan and north Hyderabad. Elsewhere the rainfall was normal or in slight excess.

August.—During the first half of August, the activity of the monsoon was confined to the north-east, the east United Provinces and Malabar. The Peninsula, however, had its normal share of rainfall from frequent thunderstorms. The weather was dry in the north-west except for a few days of thundershowers in north Baluchistan, East Punjab and north of East and West Punjab and Kashmir during the second week. The Arabian Sea branch strengthened on the 15th and extended vigorously into the Konkan, Gujarat, east Rajputana and the central parts of the sub-continent between the 16th and 20th. A depression formed in the north Bay on the 19th, travelled across the central regions and south Rajputana into lower Sind and intensified into a cyclonic storm over north Cutch by the 30th. It served to strengthen and maintain the activity of the monsoon over the eastern divisions of the north-east, the central parts of the sub-continent and the Peninsula and to extend it to west Rajputana, Sind, Baluchistan and East and West Punjab. During the second half of August, the rainfall was therefore in moderate to large excess over these regions and this excess made up to a large extent the deficiencies of the previous monsoon months in regions like Gujarat, Sind, west Rajputana and the south-west of West Punjab.

September.—Under the influence of the Cutch cyclonic storm of the last week of August and two Bay depressions, the first of which moved up to the east Central Provinces and the other to the west United Provinces the monsoon continued active too strong over the country outside south-east Madras, the south Deccan and the western divisions of the north-west. During the second week widespread thundershowers occurred in the south Peninsula in association with unsettled conditions over the Bay of Bengal. During the latter half of September rainfall decreased in the northern regions and increased in the Peninsula and central regions. A low pressure area moved across the Deccan into the east Central Arabian Sea by the 23rd, intensified into a deep depression which moved north-eastwards to cross the coast near Surat and finally filled up over East Punjab by the 27th. Under its influence widespread and locally heavy rain fell in the Peninsula south of Lat. 23°N between the 21st and 24th and in East Punjab and the hills of the west United Provinces between the 25th and 27th. The rainfall in East Punjab caused serious floods in all the rivers there, damaging most of the bridges and bringing all transport completely to a standstill. The filling up of this depression marked the withdrawal of the monsoon from the north-west and the central parts of the sub-continent. In association with a depression from the central Bay of Bengal which crossed the coast near Vizagapatam and moved up to the north Bombay Deccan, widespread rain fell along the Circars coast, in Hyderabad, the east Central Provinces, the north Bombay Deccan, the north Konkan and east Gujarat during the last three days of the month. By the end of September the monsoon had more or less withdrawn from the entire sub-continent excepting the eastern divisions of the north-east.

The total rainfall for the month was in large excess in the west United Provinces, East Punjab and north of West Punjab, Sind, Rajputana, Gujarat, west Central India, Berar, the Konkan and Malabar, and in slight to moderate excess in the Bay Islands, Assam, Bengal, Chota Nagpur, east Central India, the Central Provinces, north Hyderabad and in the rest of the Madras Presidency. Elsewhere it was normal or in slight defect except in Orissa where it was in moderate defect and in Baluchistan where no rain fell. Data for Kashmir and the North-West Frontier Province are not available. Averaged over the plains of India and Pakistan the month's rainfall was 47 per cent. in excess.

Season as a whole.—Though the monsoon arrived at the usual time in June, it was very feeble during the first three weeks and did not extend into the interior of the country so that the rainfall for the month was in moderate to large defect excepting in the north-east, Kashmir and the south Peninsula. Increased activity of the monsoon and its extension into the central parts of the country, the United Provinces and the Peninsula during July gave more than normal rain over these regions while Gujarat and the north-west still continued to be in large defect. The monsoon got into its stride by about the middle of August and extending into Gujarat and the north-west gave very heavy rain over most parts of the sub-continent and made up, to a large extent, the deficiencies of the previous months. It continued active in the United Provinces, the central parts of the sub-continent and in the north-east outside Orissa during September, and the rainfall for the month was normal or in excess over these areas. It withdrew from the north-west and the centre after the 25th of September, and from the rest of the sub-continent excluding Assam and West Bengal by the end of the month. Averaged over the plains of India and Pakistan the rainfall for the season as a whole was 7 per cent. in excess.

The following table contains information about rainfall during the period June to September 1947.

SUB-DIVISION.	Period, June to September 1947			
	Actual	Normal	Departure from Normal	Percentage Departure from Normal
1	2	3	4	5
1. Bay Islands	89·2	70·8	+ 18·4	+ 26
2. Assam*	66·4	61·3	+ 5·1	+ 8
2 (*a*) Upper Assam	62·4	58·2	+ 4·2	+ 7
2 (*b*) Lower Assam	76·6	69·0	+ 7·6	+ 11
3. Bengal* (before partition)	58·9	57·7	+ 1·2	+ 2
3 (*a*) Do. North	58·8	66·0	— 7·2	— 11
3 (*b*) Do. South-East	77·4	66·9	+ 10·5	+ 16
3 (*c*) Do. South-West	44·8	44·9	— 0·1	0
4. Orissa	38·1	43·1	— 5·0	— 12
5. Chota Nagpur	36·6	42·8	— 6·2	— 14
6. Bihar	36·2	41·4	— 5·2	— 13
7. United Provinces, East	38·1	37·5	+ 0·6	+ 2
8. Do. do. West	40·2	35·1	+ 5·1	+ 15
9. Punjab (before partition), East and North	19·5	20·7	— 1·2	— 6
10. Do. do. South-West	5·0	6·8	— 1·8	— 26
11. Kashmir	..	..	..	..
12. North-West Frontier Province	..	..	..	..
13. Baluchistan	1·2	2·4	— 1·2	— 50
14. Sind	3·0	5·1	— 2·1	— 41
15. Rajputana, West	8·8	9·9	— 1·1	— 11
16. Do. East	33·7	24·6	+ 9·1	+ 37
17. Gujarat	22·3	23·7	— 1·4	— 6
18. Central India, West	44·5	38·1	+ 6·4	+ 17
19. Do. do. East	46·2	41·7	+ 4·5	+ 11
20. Berar	34·4	27·9	+ 6·5	+ 23
21. Central Provinces, West	53·6	43·1	+ 10·5	+ 24
22. Do. do. East	58·3	47·5	+ 10·8	+ 23
23. Konkan	97·5	88·7	+ 8·8	+ 10
24. Bombay Deccan	34·9	34·2	+ 0·7	+ 2
25. Hyderabad, North	30·9	28·1	+ 2·8	+ 10
26. Do. South	27·8	23·6	+ 4·2	+ 18
27. Mysore	31·1	28·6	+ 2·5	+ 9
28. Malabar	93·4	76·0	+ 17·4	+ 23
29. Madras, South-East	11·9	11·2	+ 0·7	+ 6
30. Do. Deccan	23·1	15·6	+ 7·5	+ 48
31. Do. Coast, North	22·3	20·4	+ 1·9	+ 9
Mean of India excluding Bay Islands, Kashmir and Baluchistan.	† 34·5	32·3	+ 2.2	+ 7

* The sub-divisions of Assam and Bengal comprise of the following districts:—

Upper Assam.—Lakhimpur, Sibsagar, Nowgong, Darrang, Kamrup and Goalpara.

Lower Assam.—Garo Hills, Khasi and Jaintia Hills, Sylhet, Cachar, Naga Hills, Manipur and Lushai Hills.

Bengal, North.—Pabna, Bogra, Rangpur, Cooch Behar, Jalpaiguri, Darjeeling, Dinajpur, Malda and Rajshahi.

Bengal, South-East.—Bakarganj, Faridpur, Dacca, Mymensingh, Tipperah, Noakhali, Chittagong, Chittagong Hill Tracts and Tripura.

Bengal, South-West.—24-Parganas, Khulna, Jessore, Nadia, Murshidabad, Birbhum, Burdwan, Bankura, Hooghly, Howrah and Midnapore.

† Mean of India excluding N.-W.F.P. also.

Earthquakes

THE Indian continent is divided geologically and therefore physiographically into three distinct and well-defined units. The northernmost unit consisting of sedimentary and crystalline rocks comprises the great mountain ranges of the Himalayas that were upraised, geologically speaking, in comparatively recent times, and are believed to be still undergoing elevation. They constitute the sub-continent's most unstable region and are therefore the seat of the most violent earthquakes. The north-south running mountains of Burma are components of the same mountain system, the Andaman and Nicobar Islands being their southern continuation, and Burma likewise pays the same penalty for their instability.

The southward push of these mountains caused a sinking of the Himalayan foreland—the region of the Indo-Gangetic basin, now filled with alluvium. This constitutes the second unit, and on account of its proximity to the restless mountains in the north, it shares, though in a lesser degree, the effects of the Himalayan earthquakes. But it also makes its own independent contribution of such catastrophies, as we know from the Bihar earthquake of January 1934.

The triangular portion of the Peninsula proper constitutes a stable landmass—a Horst—as the geologists call it—and is the third and most stable region in the sub-continent, being comparatively free from any severe earthquakes. Only one earthquake which did any considerable damage has been recorded from this region (April 1843). From the apex of the Peninsula to Madras, however, runs a region of minor shocks, probably connected with some dislocation in the earth's crust, though there is no direct evidence of this.

These three units, then, constitute regions of decreasing intensity of earthquakes as we travel from north to south. They are indicated on the accompanying map, which is essentially the same as the one prepared by W. D. West of the Geological Survey of India.

CAUSES

It will be unnecessary to go into the origin of the individual earthquakes, but a few remarks on the main causes of these phenomena will be illuminating. While minor earthquakes may be due to volcanic activity, the major ones are almost invariably the result of movement along dislocations in the earth's crust or "faults" as the geologists call them, and thrust planes.

A number of important faults run close to the southern edge of the Himalayas and the Himalayan foot is therefore a very unstable region. A similar fault runs along the foot of the Shan Plateau in Burma while the Kyaukkyan fault runs north and south in the Northern Shan States, and has probably given rise to earthquakes.

It may, however, be pointed out that it is only such 'faults' as are still active that give rise to earthquakes. Thus the faults in the Peninsular area appear to be inert and therefore few earthquakes occur there. Although the immediate cause of the shocks may be movement along a fault or faults, the ultimate cause is often the rapid denudation of steep ranges, which upsets the equilibrium of the earth (Kangra, 1905) in the readjustment of which these movements occur. The same result is achieved by the slipping of large alluvial masses in deltaic areas or their uplift owing to tectonic forces (Rangoon Dec. 1927). The regions where mountain ranges, take sharp bends, being highly folded, are naturally areas of pent-up strains seeking relief and are therefore zones of great danger. The violent Quetta earthquake of 1935 and the earlier ones of Mach and Sharigh (1931) were of this nature, for these places lie near sharp bends in the Suleiman, Bugti or Kirthar ranges.

Recent Shocks.—Numerous earthquake shocks were experienced during the year 1946 in various parts of the Union of India and in Pakistan, but none of these appear to have caused any serious damage or loss of life. In the Union of India shocks of varying intensity were recorded at Digboi, in Assam (7th March, 1946), at Srinagar in Kashmir (25th February, 1946), at Jubbulpur in C.P. (19th January, 1946), at Dehra Dun in the United Provinces (4th September, 1946), and at Faridpur (12th September, 1946) where the hitherto calm water of the river was agitated and rose to a height of 2 feet, the phenomenon being observable for 15 seconds.

In Pakistan, earthquake shocks were recorded from Drosh, where a continuous shock was felt for 40 seconds (31st January, 1946) at Nagar Parker (Sind) where shocks lasted for 20 seconds (14th July, 1946). Shocks were also felt at Peshawar on the 26th of December, 1946, and lasted from 1 to 3 seconds.

Very little is known of the Indian earthquakes previous to the year 892 A.D. and accounts of the earlier of the recorded earthquakes are necessarily incomplete. T. Oldham has recorded the different sources of information of the earlier Indian earthquakes in his catalogue. Among the works in which records of Indian earthquakes later than 892 A.D. occur are the *Tárikhul Khulafá* (History of the Caliphs), the *Alkámil-fi-l Tárikh* by Ibnulathír—a historical work of the Arabians, the *Mir-át-ul-'Alam*, an unpublished work in the library of the Royal Asiatic Society of Bengal, *Badáoní* (Bibliotheca Indica), Bábar's memoirs, Khafi Khans *Muntakhabullabáb*, etc.

Much information is also gleaned from the Journals of the *Royal Asiatic Society of Bengal* the *Philosophical Transactions*, etc. Accounts of the later earthquakes appear in detail in the records and memoirs of the Geological Survey of India, from which much of the information here given is drawn.

HISTORICAL REVIEW

The chronological occurrence of the more important earthquakes may now be given.

The earliest earthquake authentically recorded in India took place about the close of the year 893 A.D. or early in 894 A.D., when Daibul or Daipul, an important town on the coast of the Indian Ocean was severely shaken and about 150,000 persons lost their lives. As noted by Oldham a record of this earthquake appears both in the *Tárikhul Khulafá* (History of the Caliphs) and in *Alkámil-fi-l Tárikh*.

The earthquake of July 6, 1505 affected Afghanistan and the northern part of the sub-continent. It is recorded that great fissuers appeared in many parts and there were extensive landslips causing much damage and loss of life. In one day as many as thirty-three shocks were felt and continued for a whole month.

The Province of Kashmir was shaken by an earthquake in 1552, but no details are available.

Several earthquakes of less intensity took place between the years 1618 and 1664. On the 26th of May, 1618, Bombay experienced an earthquake in which nearly two thousand lives were lost. The accompanying hurricane resulted in the destruction of several vessels. Lakhugar in Assam suffered an earthquake on the 7th February 1663. Shocks were felt in certain parts of eastern Bengal for a period of thirty-two days during the year 1668.

The next earthquake of great intensity which affected the sub-continent occurred in 1668, between the dates 2nd—11th May. Its effect was so serious that Samáji or Samáwáni—a town of 30,000 inhabitants sank into the ground.

Following this terrible catastrophe there was a period of comparative quiescence of about 50 years. Upper India was however shaken by an earthquake on the '14 Muharam of Aurangzib's 12th year' (Mir-át-ul-'Alam, an unpublished work of Bakhtiwar Khan) that is, the 4th of June 1669. This earthquake was accompanied by a big shower of meteors, which, it is reported, falling into a lake caused its waters to overflow.

Kashmir and Attock were affected by shocks on 22nd and 23rd June 1669 respectively, but not much damage appears to have been done.

Delhi Earthquake.—A severe earthquake shook Delhi on Friday, the 17th of July 1720, at about mid-day and was accompanied by considerable damage to the fortress, Fatehpur Mosque and other property, as well as loss of life. It is reported that comparatively severe shocks continued for more than a month, so much so that the population of Delhi had to sleep out of doors during this period!

A violent earthquake accompanied by a hurricane of great intensity occurred in Calcutta and the delta of the Ganges in October 1737. It is reported that 20,000 craft plying on the Ganges were cast away, the steeple of a church sank completely into the ground, and 300,000 people lost their lives. It is further reported that 60 ton barques were blown two leagues up the river:

Bengal, Burma and the Arakan coast were affected on 2nd April 1762. In fact it is reported that the emergence of the Arakan coast from the sea is due to this earthquake, but that is an obvious exaggeration, though partial elevation of the coastal strip probably occurred. It is stated that oysters were found attached to rocks forty feet above ground level. Near Chittagong 60 square miles of land sank permanently under water.

Several shocks of varying intensity occurred in different parts of the sub-continent—Calcutta, Kashmir, Ongole and the upper reaches of the Ganges between 13th July 1762 and 22nd May 1803, but they were not of much importance.

A violent earthquake took place on 1st Sept. 1803, affecting Mathura, Calcutta, Garhwal, Kumaon and Delhi. At Mathura the domes of several mosques erected by Ghazi Khan sank into the ground. Several villages were swallowed up in Garhwal.

This earthquake is noted for the fact that the upper portion of the famous Qutab Minar fell as a result of it, though it is stated that the Minar was also struck by lightning.

The earthquake of June 16, 1819 was one of the worst earthquakes experienced in the sub-continent. Its effect was the severest in Cutch, the chief town of which—Bhuj—was completely ruined and 2,000 persons perished. Ahmedabad, Broach, Surat and Poona were all affected.

A Town Submerged.—In the western region of Cutch the town of Sindree and the neighbouring area was submerged as a result of tidal waves. A tract 15 miles wide was raised in front of a branch of the Indus and the river had to cut a fresh channel across it. This ridge is known to the local inhabitants as Allah Band, or God's Embankment.

One very severe shock followed by minor ones occurred on 29th October 1826 and resulted in several houses falling in Khatmandu and Patan, in Nepal.

Sometime in September 1827 the fort of Kolitaran, near Lahore, was destroyed and about 1,000 persons lost their lives. It is stated that a hill falling into the river Ravi resulted in extensive floods.

There is record of at least eighty earthquakes affecting the Indian sub-continent between June 6, 1928 and the year 1839, but of these only two are worth mentioning, namely, the one that shook the vale of Kashmir on June 6, 1828 and the other that affected Nepal and the eastern and central region in the north. In Kashmir alone over a thousand persons lost their lives and for at least two months following the earthquake the number of shocks was as high as one to two hundred per day.

The earthquake of August 26, 1833 was felt in Khatmandu (Nepal) and North Bihar. In Khatmandu alone 100 houses were levelled to the ground and a similar fate overtook other places. There was continuous agitation for full 24 hours.

The earthquake of February 19, 1842 lasted for about three minutes in Kabul and affected Peshawar, Jallalabad, etc. It was very destructive at Peshawar and one-third of the town of Jallalabad was destroyed. Hot springs at Sonah became cold and the amount of water also diminished. The area affected was about 216,000 square miles. The epicentral area was probably near Jallalabad.

Two earthquakes which affected the Deccan in March and April 1843 may be here recorded, for the Deccan, being a stable landmass, is rarely affected by earthquakes of any intensity. Sholapur, Maktal, Singrurgarh, Bellary, Kurnool, Belgaum were all affected and much damage was done. This is the only earthquake known in the Deccan which caused considerable damage. The epicentre was near Bellary.

Upper Sind—Severe shocks, local in their effect, occurred in Upper Sind on 24th January 1852. Fort Kahan was completely ruined and about 350 persons were killed.

An earthquake occurred on January 10, 1869 in Assam (Cachar). The total area where shocks were felt extended 250,000 square miles.

A severe earthquake occurred in the Bay of Bengal on the morning of 31st December 1881. The radius of the area affected was about 800 miles, and the total area over which the shock was felt was in the neighbourhood of 2,000,000 square miles, most of it being sea. It was felt at Gaya, Hazaribagh, Agra, Ootacamund and Calicut in India. The northernmost point affected was near Monghyr.

The earthquake of May 30/ 1885 although comparatively not so severe, resulted in heavy loss of life and about 3,000 persons perished in Kashmir. The epicentre was a few miles west of Srinagar. The radius of felt area was 300-450 miles, the total area affected being about 110,000 square miles.

The epicentre of the earthquake of July 14, 1885 was north-west of Dacca. It was felt violently throughout East and West Bengal, but extended also into Chota Nagpur, Bihar, Sikkim, Bhutan and Assam. The area affected was approximately 230,400 square miles.

There was an earthquake on December 20, 1892, which was felt over the greater part of Baluchistan, and was connected with an old fault line that runs along the foot of the Kojak range in a N.N.E. direction. The foot of the range is marked by a depression and numerous springs which are indicative of the fault. It is interesting to note that as a result of this earthquake the area west of the fault subsided about one foot and moved southward about 2½ feet. The earthquake was, however, local in its effects.

The Worst Ever—The worst earthquake which has affected Assam and probably the greatest within historic times occurred on 12th June 1897. Stone buildings in Shillong, Goalpara, Gauhati, Nowgong and Sylhet were almost entirely destroyed everywhere and Calcutta was seriously affected. Over 1,600 lives were lost and the earthquake was felt in an area of 1,730,000 square miles. The earthquake was caused by a "movement along a thrust-plane or thrust-planes, and along secondary thrust and fault-planes, which had a maximum length of about 200 miles and a maximum width of about 50 miles." This movement was due to the relief of differential strains set up in the interior of the earth.

The district of Kangra in the Punjab suffered heavily on 4th April 1905, more particularly because the shocks occurred early in the morning when people were still asleep. There was heavy loss of life—20,000 persons having perished. The area affected was 1,625,000 square miles. Kangra and Dharamsala were completely destroyed. The main shock was from north to south, followed by an equally severe one from south to north. The earthquake is ascribed to movement along one of the reverse faults of the Himalayas.

The earthquake of October 21, 1909 affected only the Kachhi plain, Baluchistan. Considerable damage was done and over 200 lives were lost. The radius of the felt area was about 15-45 miles. The elongated epicentre was N.W.-S.E. in direction. The earthquake was presumably due to the presence of a fault, though, the area being covered with alluvium, this is more or less conjectural.

A violent shock was felt on 8th July 1918 which affected East Bengal, Assam, Burma, and the north-west as far as Lahore. It was most strongly felt in Srimangal (Assam) where many tea-estates were ruined. The total area over which it was felt was 800,600 square miles. This earthquake was due to subsidence along a fault. It was accompanied by pouring out of sand, mud and water from fissures created in the ground.

The areas around Rawalpindi, Peshawar and Attock are regarded as very unstable, as one big fault and numerous smaller ones are located in this region. The earthquake on 1st February 1929 in the north-west Himalayas was at first thought to be connected with these faults. But it has been shown that the focus of this earthquake lay at a considerable depth—160 *kms.* Which is a point of interest, for it shows that the shocks were not connected with any surface features such as faults. The epicentre was situated about 25 miles north-west of Abbottabad. Some damage was done to property and a few lives were lost.

Assam was shaken by a severe earthquake on 3rd July 1930, after about 12 years of comparative quiescence. The total area affected was about 350,000 square miles. The town of Dhubri suffered considerable damage, but fortunately no loss of life occurred. This is probably due to the fact that many houses are built of 'flexible superstructure supporting light, often galvanised iron roofs' and at that time of the year many persons were not sleeping inside their houses. The earthquake was probably due to weakness at the foot of the Assam range, movement along which zone was assisted by the rapid denudation of the mountains, which presumably upset the equilibrium.

The earthquake of August 27, 1931 was one of the worst of the Baluchistan earthquakes, and about 200 lives were lost. It was preceded on the 25th by an earlier earthquake the epicentre of which was near Sharigh. The March earthquake was felt over an area of 370,000 square miles. Both these earthquakes were connected with the sharp bends of the Suleiman, Bugti and Kirthar hills for such bends are regions of strain where earth movements are likely to occur.

The earthquake of January 15, 1934, the North Bihar earthquake, is still fresh in our minds. It was one of the most violent earthquakes that have affected the Indian subcontinent. It is estimated that over 10,000 lives were lost and several crores worth of property was damaged. Sitamarhi, Madhubani, Monghyr, Patna, Jamalpur, Muzaffarpur, Darjeeling, etc., and the Nepal valley suffered heavily. The epicentre of this earthquake ran from near Motihari through Sitamarhi to Madhubani. The total area over which it was felt was 1,900,000 square miles. The earthquake is attributed to faults underlying the alluvium. It is fortunate that it occurred in the afternoon (about 2-15 p.m.), for had it occurred at night it would have been one of the worst of such disasters ever experienced by mankind.

Quetta Earthquake.—The Quetta earthquake of May 31, 1935 was one of the latest of the more violent catastrophies that have overtaken the Indian sub-continent. This can be seen from the fact that 25,000 people perished and damage to private property, railway lines, etc., ran into several crores. The town of Quetta was practically destroyed and the area affected was about 100,000 square miles. The causes leading to these earthquakes are unknown, but the focus was probably shallow. The earthquake is probably connected with the sharp bend in the hill ranges near Quetta.

The frequency of aftershocks of the Quetta earthquake of May 1935, according to the Geological Survey of India, appears to be considerably diminished, but several sharp shocks were felt during the year in the Assam seismic area, including those of 16th January at about 18.45 hours and of 21st March at 21.45 hours, Indian standard time.

The last severe earthquake to be experienced in the Indian sub-continent occurred in the Hindu Kush on 14th November 1937, and was felt throughout the North-West Frontier Province, Kashmir, as well as largely over East and West Punjab, United Provinces, northern Sind and Baluchistan. Severe shocks were felt at Lahore, Rawalpindi, Peshawar, Kangra, Chitral and Drosh, and considerable damage was done. No loss of life was reported.

Although minor earthquakes have been reported from different parts of the sub-continent later than November 1937, none of these has caused damage or loss of life. Details of some of these are given below:

***5th January* 1938.**—Two shocks were felt at Drosh in the Chitral District, North-West Frontier Province. Another shock of the same intensity was felt on the 7th January, but there was no damage or loss of life.

***3rd May* 1938.**—Two shocks were felt at intervals of about five seconds at Shillong in Assam, at 10-21 p.m. The shocks lasted for about 40 seconds. There was very little damage to property and no loss of life.

***7th February* 1939.**—Two shocks were felt at Drosh in Chitral at intervals of two seconds, but there was neither material damage nor loss of life.

In 1939.—Mention must also be made of the earthquake of 21st November, 1939, which was felt at Jammu, Mianwali, Dehra Ismail Khan, Peshawar, Rawalpindi, Srinagar, Dalhousie, Kabul, Gilgit, Skardu, etc. Its epicentre was in the Hindu Kush range being situated at 36° N. 75.5° E. Its focal depth was 200 KM.

The intensity of this earthquake at Srinagar and Gilgit was VII on the Mercali scale. At Srinagar three shocks were felt at intervals of 10 seconds each. Cracks developed in the walls of the Observatory and other buildings in the city. At Gilgit, which suffered three shocks at intervals of 2 seconds each, boulders slipped down from the surrounding mountains and dust spread all over the valley.

During 1940 earthquake shocks were felt at Gulmarg in Kashmir, at Barmer (Rajputana) and at Bhuj and Radhanpur in the Western Indian States.

At Gulmarg two shocks of moderate intensity were felt on the 3rd August at 14.45 (I.S.T.) and cracked walls of *kutcha* houses. Shocks of moderate intensity were also felt on 8th August and 21st September, 1940, but apart from cracks in *kutcha* houses no damage was done. Barmer and Bhuj experienced a slight shock on 31st October while Bhuj had another shock on 13th November, 1940.

There was no loss of life or serious damage to property during any of these earthquakes.

In 1941.—A large number of earthquake shocks occurred in the sub-continent during the year 1941. It is unnecessary to give details of all these but particulars of three or four of the more important ones may be given.

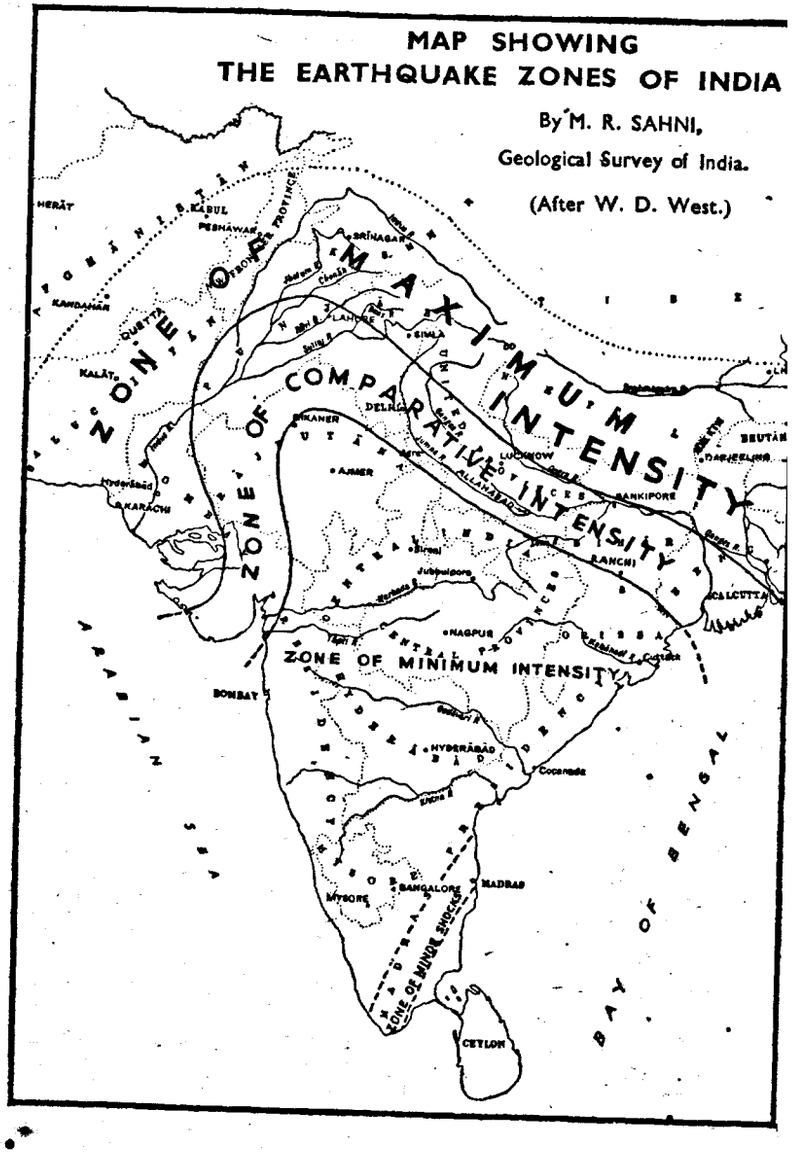
An earthquake of moderate intensity took place on the 21st of January 1941 at 18-16 hours (I.S.T.) with its epicentre to the north of Assam. The shocks lasted for about one minute but no damage was caused.

Another earthquake occurred on the 26th June at 17-27 hours (I.S.T.) This earthquake whose epicentre lay in the neighbourhood of Nicobar Islands, was of very great intensity and was felt in Madras, Chittagong, Chandwadi, Colombo, etc. Extensive damage to buildings occurred in Port Blair where 4 persons were killed and 4 seriously injured. The duration of the shock was less than half a minute.

On the 30th of June at 23-58 hours (I.S.T.) a shock of moderate intensity was felt at Port Blair. Its epicentre lay in the neighbourhood of north Andaman.

Another earthquake occurred on the 29th of September at 8-5 hours (I.S.T.) at Quetta. The shocks lasted for about 35 seconds and caused damage to *kaccha* buildings and mud houses in Quetta.

Three earthquakes of slight to moderate intensity were recorded during the year 1942. An earthquake of slight intensity with its epicentre in Assam was felt at 16-17 hours (I.S.T.) on 22nd February in parts of old undivided Bengal and Assam. No loss of life or damage was reported. On 22nd March a quake of moderate intensity was felt at 7-38 hours at Lahore, Rawalpindi and Simla. The epicentre



was in the Hindu Kush Mountains. A third earthquake of slight intensity was felt in parts of India on the 15th of May 1942 at 22-25 hours (I.S.T.). The epicentre lay in the Hindu Kush. There was no loss of life or damage to property.

Srinagar.—Two shocks of slight intensity were felt at Srinagar in Kashmir and at Drosh in Chitral, on Feb. 6, 1943, at intervals of 30 seconds. On Feb. 9, an earthquake of slight intensity was felt in parts of Assam. Slight shocks were felt over a wide area—Rawalpindi, Muzaffarabad, D. I. Khan, Gauhati, Gulmarg and Srinagar on 9th Sept. 1943, at 10-36 I.S.T. The epicentre of this earthquake was near the Hindu Kush Mountains. An earthquake of great intensity with epicentre in Assam was felt in parts of Assam and North Bengal, on Oct. 23 at 23-54 I.S.T. Slight shocks were felt at D. I. Khan on Nov. 27 at 15.15 I.S.T.

Although a large number of earthquakes have occurred during 1944-45, with the exception of one they were all of comparatively small intensity. An earthquake of moderate intensity was felt on the 25th December, 1944, at Silchar, Shillong and Calcutta, at about 9-25 p.m., I. S. T. At Silchar shocks were felt over a period of 3 minutes and several houses suffered damage. No damage was, however, reported from either Shillong or Calcutta.

Another earthquake of slight intensity was felt at Patna, Bihar district, at 10-25 p.m. on the 18th February, 1944. Though the shocks felt were fairly sharp no damage to property or loss of life took place.

On Feb. 29, 1944, an earthquake of great intensity, with epicentre in the Maldive Islands, was felt in the Ceylon region at 22-58 I.S.T. An earthquake of moderate intensity with epicentre near the Andaman Islands, was recorded on Sept. 27, 1944. During 1944 further shocks were felt in different parts of India—Kashmir, Bihar, Assam—but none of them is of much importance.

Between January 1945 and March 1945 the reported shocks are all of small intensity and occurred in Nepal and Assam.

A severe earthquake however took place on the 28th November, 1945, and shocks were felt intermittently for a period of two hours, commencing at 3 hours 31 minutes, over a wide area in north-western India. This earthquake was due to a submarine land slide. A characteristic feature of this earthquake was the high tide which swept the coastal region of Mekran and neighbouring areas, causing heavy floods, damage to property and loss of life. A lasting visible effect of this earthquake was the appearance of two small islands about 10 miles into the sea, off the Mekran coast.

Population

THE main facts can be easily stated. The population of the sub-continent is about 389 millions (388,997,955). Out of this roughly 230 mlns. are in the Dominion of India, 80 mlns. are in the Dominion of Pakistan, and 80 mlns. in the States ruled by Princes. Out of the 80 mlns. in the States again more than 78 mlns. live in the States which have acceded to the Dominion of India and about 2 mlns. in the States which have acceded to Pakistan.

Of the total population 201 mlns. are males and 188 mlns. are females. The urban population is about 50 mlns. while the rural population is about 340 mlns. The birth-rate is about 40 per thousand, and the death-rate is about 30 per thousand.

Seven physical types can be distinguished among the people living in the sub-continent: the Turko-Iranian, the Indo-Aryan, the Scytho-Dravidian, the Aryo-Dravidian, the Mongolo-Dravidian, the pure Mongolian and the pure Dravidian. But the types are all so mixed together that it is much easier to classify the people according to the language they speak or the religion they profess.

The chief religions of the sub-continent are Hinduism, Islam, Buddism, Sikkism, Jainism, Christianity, Zoroastrianism, and Animism. The number of Hindus are 240 mlns. of Muslims about 94·4 mlns. of Buddhists about 13 mlns. of Sikhs about 5·7 mlns. of Christians about 6·3 mlns. of Parsis about 110,000 and of Animists roughly 8 mlns. To represent the figures in the form of a ratio, Hindus form about 64 per cent. of the total population, Muslims about 27 per cent., Buddhists about 3·5 per cent., Sikhs 1 per cent., Jains 4 per cent., Christians 1 per cent., Parsis ·03 per cent., and Animists 2·5 per cent.

According to a linguistic survey no fewer than 220 languages are spoken throughout the sub-continent. But they all fall into four main groups: the Munda languages, the Dravidian languages, the Indo-Aryan languages and the Tibeto-Chinese languages.

Literacy is very low, being about 12 per cent.

ECONOMIC SET-UP

A few more figures from the economy of the sub-continent will complete the over-all picture. The per capita income is about Rs. 65 a year which is among the lowest in the world. In the U.S.A. it is Rs. 1,406 and in Japan Rs. 281. A word of caution is, however, necessary here. The figures given above represent income in terms of money. And it is possible that real incomes, that is, the amount of goods which the money can buy, do not vary as much.

About 44 per cent. of the population was enumerated as workers in the census of 1931. Out of this about 67 per cent. was engaged in agriculture, 10·2 per cent. in mining and industry and the rest, 22·8 per cent. in trade, transport, etc.

In 1931 the average worker in agriculture earned about Rs. 86, in industry and mining Rs. 192, and in trade and transport Rs. 305 a year respectively.

Carrying the analysis of industry further, there are two types of industry, cottage industry and large-scale industry. About 90 per cent. of the total industrial population is engaged in small scale or cottage industry, and 10 per cent. in large-scale industry. The average monthly income varies from Province to Province. In Bombay in 1936-37 the average income of a worker in cottage industry was Rs. 15, while the average earnings in organised industry was Rs. 27 a month. These figures could be taken as representative for the sub-continent as a whole.

Turning to agriculture, the amount of land available for cultivation is 362 mlns. acres. The number of workers in agriculture which comprises cultivating owners, tenant-cultivators, etc., was 66½ mlns. according to the census of 1931. Thus the amount of land per worker works out at 5½ acres. 70 per cent. of all farms are less than 5 acres each, and a good percentage are actually less than one acre each.

We shall leave the vital statistics to a later section, and deal with the rest of the items one by one in greater detail.

PHYSICAL TYPES

As we have already stated the physical type found in the sub-continent varies considerably from place to place. No one, for instance, would confuse the main types, such as Gurkhas, Pathans, Sikhs, Rajputs, Nagas, Tamils, etc., nor does it take long to carry the differentiation much farther. The typical inhabitants of the sub-continent—the Dravidians—differ altogether from those of Northern Asia, and more nearly resemble the tribes of Malaya, Sumatra and Madagascar. Whatever may be their origin, it is certain that they have settled in the sub-continent for countless ages and that their present physical characteristics have been evolved locally. In the north-west they have been displaced by successive hordes of invaders, including Aryans, Scythians, Pathans and Moghals, and in the north-east by Mongoloid tribes allied to those of Burma. Between these foreign elements and the pure Dravidians is a borderland where the contiguous races have intermingled.

The people of the sub-continent are generally divided into seven main physical types. There would be eight if the Andamanese were included, but this tiny group of Negritos may be disregarded.

The Turko-Iranian type is represented by the Baloch, Brahui and Afghans of Baluchistan and the North-West Frontier Province. It was formed by a fusion of Turki and Persian elements, in which the former predominate. Typical characteristics are: stature above mean; complexion fair; eyes mostly dark but occasionally grey; hair on face plentiful; head broad, nose moderately narrow, prominent, and very long. The feature that strikes one most prominently is the portentous length of the nose, and it is probably this peculiarity that has given rise to the tradition of the Jewish origin of the Afghans.

The Indo-Aryan type is found in the Punjab, Rajputana, and Kashmir, and has as its characteristic members the Rajputs, Khattris, and Jats. This type, which is readily distinguishable from the Turko-Iranian, approaches most closely the traditional Aryan type which colonised the sub-continent. The stature is mostly tall; complexion fair; eyes dark; hair on face plentiful, head long; nose narrow and prominent but not specially long.

The Scytho-Dravidian type comprises the Maratha Brahmans, the Kunbis, and the Coorgs of Western India. It is formed probably by a mixture of Scythian and Dravidian elements. This type is clearly distinguished from the Turko-Iranian by a lower stature, a greater length of head, a higher nasal index, a shorter nose, and a lower orbito-nasal index. All of these characters, except perhaps the last, may be due to an intermixture of varying degree with the Dravidians. In the higher groups the amount of crossing seems to have been slight; in the lower Dravidian elements are more pronounced.

The Aryo-Dravidian or Hindustani type is found in the United Provinces, in parts of Rajputana and in Bihar and is represented in its upper strata by the Hindustani Brahman and in its lower by the Chamar. This type is probably the result of the intermixture, in varying proportions of the Indo-Aryan and Dravidian types. The head-form is long with a tendency to medium; the complexion varies from lightish brown to black; the nose ranges from medium to broad, being always broader than among the Indo-Aryans; the stature is lower than in the latter group and usually below the average according to the scale. The higher representatives of this type approach the Indo-Aryans while the lower members are in many respects not very far removed from the Dravidians. The type is essentially a mixed one, yet its characteristics are readily definable, and no one would take even an upper class Hindustani for a pure Indo-Aryan or a Chamar for a genuine Dravidian. The distinctive feature of the type, the character which gives the real clue to its origin and stamps the Aryo-Dravidian as racially different from the Indo-Aryan is to be found in the proportion of the nose.

The Mongolo-Dravidian, or Bengali type of Lower Bengal and Orissa, comprising the Bengal Brahmins and Kayasthas, the Muslims of eastern Bengal, and other groups is peculiar to this part of the sub-continent. This type is a blend of Dravidian and Mongoloid elements, with a strain of Indo-Aryan blood in the higher groups. The head is broad; the complexion is dark; hair on face usually plentiful; stature medium; nose medium, with a tendency to broad. This is one of the most distinctive types in the sub-continent and its members may be recognised at a glance. Within its own habitat the type extends to the Himalayas on the north and to Assam on the east, and probably includes the bulk of the population of Orissa; the western limit coincides approximately with the hilly country of Chota Nagpur and western Bengal.

The Mongoloid type of the Himalayas, Nepal, and Assam is represented by the Kanets of Lahul and Kulu; the Lepchas of Darjeeling and Sikkim; the Limbus, Murmis and of gurungs of Nepal; and the Bodo of Assam. The head is broad; the complexion is dark, with a yellow tinge; hair on face scanty; stature short or below average; nose fine to broad, face characteristically flat; eyelids often oblique.

The Dravidian type extends from Ceylon to the valley of the Ganga and pervades Madras, Hyderabad, the Central Provinces, most of Central India and Chota Nagpur. Its most characteristic representatives are the Paniyans of Malabar and the Santals of Chota Nagpur. Probably this was the original type of the population of the sub-continent, now modified to a varying extent by the admixture of Aryan, Scythian, and Mongoloid elements. In typical specimens of this type the stature is short or below mean; the complexion very dark, approaching black; hair plentiful, with an occasional tendency to curl; eyes dark; head long; nose very broad, sometimes depressed at the root, but not so as to make the face appear flat. This race, the most primitive of the Indian types, occupies the oldest geological formation in the sub-continent, the medley of forest clad ranges, terraced plateau, and undulating plains which stretch roughly speaking, from the Vindhyas to Cape Comorin. On the east and the west of the peninsular area the domain of the Dravidian is conterminous with the Ghats, while further north it reaches on one side to the Aravallis, and on the other to the Rajmahal Hills. Where the original characteristics have been unchanged by contact with Indo-Aryan or Mongoloid people, the type is remarkably uniform and distinctive. The Dravidian is a hard labourer and is found wherever there is demand for hard manual labour whether hoeing tea in Assam, the Duars, or Ceylon, cutting rice in the swamps of eastern Bengal or doing scavenger's work in the streets of Calcutta, Rangoon and Singapore, he is recognizable at a glance by his black skin, his aquat figure, and the negro-like proportion of his nose. In the upper strata of the vast social deposit which is here treated as Dravidian these typical characteristics tend to thin and disappear, but even among them traces of the original stock survive in varying degrees.

RELIGION, COMMUNITY

The main facts have already been stated. Hindus form about two-thirds of the whole population, Muslims a little less than a third; while Sikhs, Christians and Parsis and others cover the rest. In the omnibus head 'others' go foreigners and minor elements not falling within the main divisions. Further on a table is given which shows the distribution of population by religion in the provinces of India and Pakistan and some of the chief States and States groups.

Community.	India & Pakistan (millions)	States (millions)
Hindus { Scheduled Castes	39·9	8·9
Hindus { Others	150·9	55·2
Muslims	79·4	15·0
Tribes	16·7	8·7
Sikhs	4·2	1·5
Christians	3·5	2·8
Others	1·2	1·0

Hindus largely predominate in the centre and south of the sub-continent, and in the Madras Province they are no less than 87 per cent. of the population. Hindus are in the majority in Bihar, Orissa, the United Provinces, the Central India tracts, Rajputana and Bombay. Muslims monopolise the North-West Frontier Province, Baluchistan, and Kashmir and are considerably in excess in western Punjab and eastern Bengal and Sind. They form about 34 per cent. of the population of Assam, 15 per cent. in the United Provinces.

The Sikhs are localised in the Punjab and the Jains in Rajputana, Ajmer-Merwara and the neighbouring States.

More than half of the total number of Christians reside in south India including the Hyderabad State. The remainder are scattered over the continent, the larger numbers being returned in the Punjab, the United Provinces, Bengal, Bihar and Bombay. The Parsees and Jews are chiefly residents of the Bombay Presidency.

The Christian community now numbers just 6.3 millions of persons in the sub-continent or 1.7 per cent. of the population. This constitutes an increase of 6 per cent. over the last census. Nearly 60 per cent. of Christians are returned from the Madras Province and its States, and the community can claim 40 persons in every 1,000 of the population of Madras and as large a proportion as 29 per cent. in Cochin and 32 per cent. in Travancore. Elsewhere the Christians are scattered over the larger Provinces and States, the two Punjabs, Bihar and Orissa.

Comparing with the older figures we find that the Muslims have gradually increased over the continent as a whole, but the increase is very small. The ratios in East and West Bengal remain about the same. In the Punjab as a whole the Muslim population has increased by ½ to 1 per cent. Within the Punjab itself, however, the population has resorted. There are hardly any non-Muslims left in West Punjab, or the N.W.F.P. and Baluchistan for the matter of that, and hardly any Muslims in East Punjab. The most noticeable rise is in the Assam area which for the present purpose includes Sylhet, the rise being a consequence of migration from Mymensingh Dt. in East Bengal. In some provinces the ratio of Muslims has dropped. Sind for instance, registered a drop of 1 per cent. but now the balance may be more than restored by the recent migrations in and out of the Province. Other areas where a drop is registered are Ajmer 2 per cent. and Kashmir 1 per cent. Once again recent events may have helped to reinforce the tendency both in Ajmer and Jammu.

The proportion of Hindus shows little change over the sub-continent as a whole. There is a small rise in Delhi, Ajmer, Gwalior and Travancore, while there is a small drop in Madras (1¼ per cent. due to excision of Ganjam and Korapet), Bengal (1¼ per cent). U.P. (¼ of 1 per cent), and Bihar, C.P., Assam and Mysore. The overall position is substantially unchanged, though recent developments have tended to make Hindu areas more Hindu and Muslim areas more Muslim in the north-west and the north-east.

In the census of 1941 religion as a census criterion was dropped in favour of the concept of community. The chief reason was that there were a great number of tribes who were more or less assimilated towards Hinduism so that it was always difficult to draw the line of demarcation.

For this reason it was felt that enumeration by community rather than by religion would not only be simpler but actually give a more accurate picture of the whole set-up.

Here is a table which shows the number of people of some of the chief castes among the Hindus in the sub-continent. Certain of the castes are grouped together as 'scheduled castes' or 'Harijans' as Mahatma Ghandhi calls them. The scheduled castes number between 50 to 60 mlns. and are one-fifth of the Hindus as a whole, or one-eighth of the total population of the sub-continent.

Baniya	2,800,000
Brahmin	14,250,000
Chamar	11,260,000
Dhobi	2,000,000
Gond	2,000,000
Hajjam	2,900,000
Jat	7,400,000
Kayasth	2,300,000
Koli	2,500,000
Kumbar	3,350,000
Kumbi	8,300,000
Lingayat	2,700,000
Mahar	8,000,000
Mahratha	6,600,000
Namasudra	2,200,000
Rajput	9,800,000
Teli	4,200,000

LANGUAGES

A note on language will not be out of place here. As we have already stated there are four main groups of languages, the Munda languages, the Dravidian languages, the Indo-Aryan languages and the Tibeto-Chinese languages.

The Munda languages are spoken by the pre-Dravidian inhabitants of the sub-continent now confined chiefly to the hills and jungles of the Chota Nagpur plateau.

The principal Dravidian languages, Tamil, Telugu, Malayalam, Kanarese and Tulu have a much wider distribution. Once they were spoken over the whole sub-continent. Now they are limited to peninsular India. The last-named language Tulu is indeed spoken in just one district in the whole sub-continent, *viz.* South Canara in the Madras Presidency.

The Indo-Aryan languages were introduced by the invaders coming from the north-west. But the languages have now spread over the whole of the north and have penetrated further south than the Vindhyas. In the far north-west are found Baluchi, Pushto, and Brahui. Going east we find Pahari, Lahnda, Punjabi, Kashmiri, Hindi, Bihari, Oriya and Bengali. Going south we find Rajasthani, Gujerati and Marathi. Another language which is generally grouped with Hindi is Urdu. Urdu was born in the bazaars of northern India when the Moghul soldiers came into touch with the local population. Urdu may be called Persianized Hindi and is widely spoken by the Muslims in the north and in certain areas by the Hindus as well.

The Tibeto-Chinese languages are not important as they are confined wholly to Himalayan hill tribes such as Lepchas.

The following figures are intended to give some idea of the distribution of the various Indian languages mentioned above :—

Hindi	79,000,000
Bengali	54,000,000
Telugu	26,000,000
Marathi	21,000,000
Tamil	20,000,000
Punjabi	16,000,000
Rajasthani	14,000,000
Kanarese	12,000,000
Oriya	11,000,000
Gujerati	11,000,000
Malayalam	10,000,000
Sindhi	4,000,000
Assamese	2,000,000
Kashmiri	1,500,000
Baluchi	600,000
Munda languages ..	4,000,000

URBAN AND RURAL

Passing next to the question of the distribution of population between urban and rural areas we find, as we have already stated, that the percentage of the urban population to the rural is about 13, which shows an increase of 2 per cent over the last census due partly to natural increase and partly to migration from rural areas.

The percentage of urban population ranges from 2.8 in Assam to 26.0 in Bombay which is the most urbanized of the major Provinces. The relative figures for the major Provinces and States—and States groups are given in a table further on.

India and Pakistan are so often referred to as a land of villages that one is apt to overlook the real dimensions of the urban population. It is true that only 2 per cent. of the population is urban; but then it is a 2 per cent. of 389 mlns., which makes it 50 mlns., that is to say, 3 mlns. more than the population of Britain which is always referred to as a highly urbanized country. In the same way it is true that there are 700,000 villages in the sub-continent. But there are also nearly 3,000 urban areas, that is, areas with a population of more than 5,000. Of these urban areas 56 are cities, towns with a population of 100,000 and more. In 1931 there were only 38 cities which means that the number of cities had risen by 19 by 1941. Only one place Tinnevelly-Palamcottah has been reduced from the status of a city to that of a town.

The new cities are Surat, Jamshedpur, Jullunder, Kolar, Peshawar, Coimbatore, Trivandrum, Bikaner, Hyderabad, Jodhpur, Calicut, Bhatpara, Aligarh, Ludhiana, Shahjhanpur, Saharanpur, Gaya, Jhansi, Bhavnagar, Hyderabad (Sind).

City.	Population 1941.	Population 1931.
Calcutta with Howrah ..	2,488,083	1,388,644
Bombay	1,489,883	1,161,383
Madras	777,481	647,230
Hyderabad	739,159	466,894
Delhi	521,849	347,539
Lahore	671,659	429,747
Ahmedabad	591,267	310,000
Bangalore with Civil and Military Station ..	406,760	306,470
Lucknow	387,177	274,659
Amritsar	391,010	264,840
Karachi	359,492	247,791
Poona	258,197	198,078
Kanpur	487,324	243,755
Agra	284,149	229,764
Nagpur	301,957	215,165
Benares	263,100	205,315
Allahabad	260,630	183,914
Madura	239,144	182,018
Srinagar	207,787	173,573
Patna	175,706	145,432
Sholapur	212,620	144,654
Jaipur	175,810	150,579
Bareilly	192,688	144,031
Trichinopoly	159,566	142,843
Dacca	213,218	138,518
Meerut	169,290	136,709
Indore	203,695	147,100
Jubbulpore	178,339	124,382
Peshawar	130,967	87,440
Ajmer	147,258	119,524
Multan	142,768	119,457
Rawalpindi	181,169	119,284
Baroda	153,301	112,860
Moradabad	142,414	110,562
Tinnevelly with Palamcottah	91,644	109,068
Mysore	150,540	107,142
Salem	129,702	102,179
Lashkar	182,492	126,949
Surat	171,443	98,936
Jamshedpur	148,711	83,738
Sialkot	138,348	100,973
Jullunder	135,283	89,030
Kolar	133,859	85,103
Coimbatore	130,348	95,198
Trivandrum	128,365	96,016
Bikaner	127,226	85,927
Jodhpur	126,842	94,736
Calicut	126,352	99,273
Bhatpara	117,044	84,975
Koil-Aligarh	112,655	83,878
Ludhiana	111,639	68,586
Shahjahanpur	110,163	83,764
Saharanpur	108,263	78,655
Gaya	105,223	88,005
Jhansi	103,254	93,112
Bhavnagar	102,851	75,594
Hyderabad (Sind) ..	127,521	96,021

The population of the cities as a whole increased from 9.1 mln. to 16.5 mln., a rise of 81 per cent. which is in notable contrast with the 15 per cent. rise in the sub-continent as a whole.

It is interesting to note how the urban element has gradually risen over a number of years from 1891. Here is a short table which makes the trend quite clear.

Year	Rural	Urban.
1891	90.5	9.5
1901	90.1	9.9
1911	90.6	9.4
1921	89.8	10.2
1931	89	11
1941	87	13

The United Provinces shows the largest accretion in numbers to the city category with the Punjab (East and West) coming second. Over a third of the new names come from these three Provinces. The growth of Rawalpindi is conspicuous a sa military centre, while industrialism is chiefly responsible for the growth of Sialkot in West Punjab and Jamshedpur in Bihar.

In a relative sense the United Provinces has always had more large towns than any other Province. Bengal (East and West) presents a very interesting contrast in this respect. It has the highest population but the least number of urban centres. It has only one metropolis—Calcutta, only one city practically suburban to Calcutta—Howrah, and one new arrival—Bhatpara.

On any showing both India and Pakistan are in for urbanization on a big scale, which will affect more pronouncedly really large towns than the smaller ones. Much of this urbanization is attended by the usual evils of lack of control, squatters' freedom and general squalor. The approach to some of the fast growing towns like Delhi or Calcutta are hideously defaced by brickfields, aquatter's camps and general riff-raff. The matter of the spreading town cries aloud for a plan.

The rate of growth is much higher in the larger units than in the smaller ones. Reasons: First, industrialization which has for instance largely created Coimbatore as a modern phenomenon. The case of Coimbatore is interesting as it is the first striking instance of a large town based on electric and not steam power.

A contributory cause of the growth of large towns is the fact that city life has begun to appeal to the middle and lower middle classes in the sub-continent. Accommodation which is within its means and to its taste is now available. There are the huge blocks of flats with such amenities as electric lights and running water which have altered the face of cities like Bombay and Calcutta. Other city features like trams, buses, cinemas also appeal. Education is not only better in the towns it is sometimes not available in the rural areas. Thus housing, transport, and the sheer conveniences of life in the city have led to a steady stream of migration into the larger towns of the sub-continent. During the war owing to the enormous demand for manual and clerical work, the stream of migration became a flood which overwhelmed cities like Bombay, Calcutta and Delhi. The present population of Bombay is estimated at three millions† while that of Calctuta at four millions†. After London, New York and Moscow, Calcutta was the largest Allied capital during the War.

LITERACY

We can now wind up the first half of this survey with a short note on the literacy position. Literacy by which was meant, until the 1931 census, ability to read a letter and write a reply was in the 1941 census expanded to provide for a record of partial literacy, *i.e.* ability to read only. According to the latest census, 120 out of every 1,000 of the population are now literate as against 95 ten years ago and less than 40 half a century ago. The increase in the sub-continent as a whole amounted to 70 per cent. over 1931 of which the male increase was 60 and the female 150. The reason for the disparity is that in the case of women the field for improvement was much bigger.

For the Provinces the increase was 80 and for the States 70, with the sex components more or less the same. The most remarkable figures are returned by the old undivided Punjab which professes a 140 per cent. increase to a present literacy of 13. This figure covers 110 increase for males and no less than 390 per cent. for females. In the U.P. the literacy figure is below that of other areas and all major Provinces and is still only 8 per cent. for the whole population but the decade increase is 80 per cent. all over, 70 for men and 170 for women. Even now, however, the percentage of literacy among women is only 2.

Bombay leads the Provinces, as it did in 1931, and shows also an increase of over 100 per cent. to produce a 30 per cent. literacy for males and 9 per cent. for females. Old undivided Bengal follows with 16 per cent. all over, representing 25 for males and 7 for females. The percentages are on the total population.

These figures are left far behind by Travancore and Cochin, which show a literacy figure over the whole population of 45 per cent, representing 56 for men and 34 for women. The latter figure is four times the highest from any Province of India or Pakistan.

The primary reason for the growth of literacy is the great expansion in education which took place all over the sub-continent between the years 1920 and 1930 and specially the general strenghtening of the primary education side. It is the fruit of this expansion which has shown itself so strikingly—in the census of 1941. A second cause but a minor one of the rise in literacy is the anti-illiteracy drive among adults which was so prominent a feature of the 1930-1940 decade. The fact must be bluntly stated, however, that the quality of literacy attained, through the adult literacy movement is very low.

There is no doubt that the diminution in illiteracy revealed this time will be continued at future census and at an acceclerating rate. A democratic system and a mainly illiterate population go ill together and in some ways are very nearly a contradiction. There is a great stirring of conciousness among the people themselves in this regard. More and more people are feeling the need for literacy either for themselves or more probably for their children and despite obvious difficulties of the position this want will insist on being answered in some form or other.

VITAL STATISTICS

The main facts have already been stated. The total population of the sub-continent is 388,997,955. Out of this 201,025,726 are males and 187,972,229 are females. 339,301,902 live in rural areas, and 49,696,053 in urban areas. Out of the 339,301,902 who live in rural areas 173,638,089 are males and 165,663,813 are females. And out of the 49,696,053 who live in urban areas ,27,387,637 are males and 22,308,416 are females.

VITAL STATISTICS

The following table shows the distribution of population (based on 1941 figures) in the Provinces of India and Pakistan :—

	Area in sq. miles.	Total population.	Density per sq. mile.	Male	Female	Rural	Urban
India	1,055,621	297,542,000	246	.....	.....	.....	.....
Madras	126,166	49,341,810	391	24,557,143	24,784,667	41,476,927	7,864,883
Bombay	76,443	20,849,840	272	10,817,333	10,032,507	15,437,671	5,412,169
W. Bengal	28,215	21,196,453	751	11,493,305	9,703,148	16,582,503	4,613,860
U.P.	106,247	55,020,617	518	26,860,214	28,160,403	48,165,349	6,855,268
E. Punjab	30,541	12,406,924	406	.....	.....	.....	.....
Bihar	69,745	36,340,151	521	18,224,428	18,115,723	34,333,932	1,956,219
C.P.	98,575	16,813,584	170	8,430,282	8,383,822	14,719,817	2,093,767
Assam	4,959,920	7,404,064	149.53	3,923,750	3,480,344	7,179,318	224,776
Orissa with States	36,458	12,982,435	271	4,218,121	4,510,423	8,407,743	320,801
Delhi	574	917,939	1,599	535,236	382,703	222,253	695,686
Ajmer-Merwara	2,400	583,693	243	307,172	276,521	369,595	214,098
Coorg	1,593	168,728	106	92,347	76,379	157,508	11,218
Panth-Piploda	25	5,267	211	2,666	2,601	5,267	....
Andamans and Nicobars ..	3,143	33,783	11	21,453	12,310	33,783	....
Pakistan	361,218	71,096,000	197	....	....	....	....
W. Punjab	62,012	18,746,000	302	10,123,000	8,623,000	....	....
Sind	48,136	4,535,008	94	2,494,190	2,040,818	3,643,305	891,703
N.W.F.P.	14,263	3,038,067	213	1,651,214	1,386,853	2,485,874	552,193
Baluchistan	54,456	501,631	9	294,516	207,115	401,168	100,463
E. Bengal	54,091	41,949,710	775	21,733,549	20,216,161	40,568,948	1,380,762

AGE GROUPING

A third way of grouping the population and one which is very important from an economic point of view, is by age. The table below shows the age distribution of 10,000 males and females of the population of the sub-continent by 10-yearly age-groups at the 1931 census.

Age-groups	1931		1921	
	males	females	males	females
10–20 ..	2,086	2,062	2,087	1,896
20–30 ..	1,768	1,856	1,640	1,766
30–40 ..	1,431	1,351	1,461	1,839
40–50 ..	968	891	1,013	967
50–60 ..	561	545	619	606
60–70 ..	269	281	347	377
70 and over ..	115	125	160	180
Mean age	23.2	22.8	24.8	24.7

If we were interpreting the same figures as a ratio we should set out the position as follows.

Age-Period	Male	Female
1–4 ..	14.7	15.9
5–9 ..	13.2	12.8
10–14 ..	12.0	11.9
15–19 ..	8.9	9.4
20–24 ..	9.1	9.8
25–29 ..	8.6	8.7
30–34 ..	7.9	7.6
35–39 ..	6.4	5.9
40–44 ..	5.5	5.0
45–49 ..	4.2	3.9
50–54 ..	3.3	3.2
55–59 ..	2.3	2.3
60–64 ..	1.8	1.9
65 ..	2.1	2.3

The table makes it quite clear that the population of the sub-continent is a very young population. As high as 39.9% of males and 40.6% of females is in the age-group 0-14. For purposes of comparison the percentages for England and Wales may be given, which are 25.2% and 22.6% respectively. At the other end of the scale, we find that only 9·% of males and 9·7% of females are 50 and above. The corresponding figures for England and Wales are 22.8% and 23.6% respectively.

Another point which must be noted is the very low mean age—23.2 for males, and 22·8 for females.

One reason for grouping the inhabitants of a country by age is to show the size of its working population, that is to say, that part of the population which is engaged in producing wealth. Other things being equal, the larger the size of the working population the bigger the national dividend.

Now if we assume the working age of the population in the Indian sub-continent is from 15 to 60 about 44% of the aggregate population could be classed as workers. 'Aggregate' because in India or Pakistan women in the lower classes at any rate usually join the men-folk in their work and so can be classed as workers. In the rural areas this practice is probably universal. At the 1931 census, for instance, it was found that for every 1,000 men there were as many as 465 women workers. But the percentage of the working population high as it is, actually less than the percentage for England and Wales which is 47%. If we take males only the disparity is still higher—57% as against 63%. It becomes higher still, if we extend the working age of the English people to 64—68%. Thus in the race for production India and Pakistan are handicapped as against a European country because of the age composition of their population.

The national dividend is influenced not merely by the percentage of the working population but by the working period. Consider the following facts, for instance: Out of every 1000 males born in the sub-continent 541 survive to enter the working period. Out of these 541 again only 14 survive to reach the age of 60. So out of a theoretical maximum of 45 years of working life a person of 15 in India can expect to get only 30, while a European can look forward to 40 years of working life. The whole argument, in short, leads to two conclusions: One, the Indian sub-continent has a smaller proportion of people in the working age, and for every person reaching the working age the working period which is available is also much shorter.

INCREASE IN POPULATION

So far we have given what may be called an instantaneous picture of the community, Indian as well as Pakistanian, that is to say, a picture which affords some knowledge of numbers and conditions, valid only for a particular point. But a community is subject to change; there are drifts and currents in national life and they must be defined and measured. This census have a second aspect. They are not only a source of statical

knowledge but one item in a consecutive series which afford the necessary data for forecasting future trends and developments. Among the more important of these data is the one relating to the population trends in a country.

In 1931, the population of British India (now includes India and Pakistan) was 256.8 mlns. and that of the States was 81.3 mlns. making a total of 338.1 mlns. The present figures which have already been given are roughly 230 for India, 80 for Pakistan, and 80 for the States making a total of 390 mln. people in all. That is to say during the last 10 years the population of the sub-continent as a whole has risen by about 50 mlns., 39 mlns. in India and Pakistan, and 11 mlns. in the States.

The following Table gives the trend of population since 1881, and the percentage increase:

Year	Population	Increase	Percentage
1881	253,896,330	47,733,970	23.2
1891	287,314,671	33,418,341	13·2
1901	294,361,056	7,046,385	2.5
1911	315,156,396	20,795,340	7.1
1921	318,942,480	3,786,084	1.2
1931	352,837,778	33,895,298	10.6
1941	388,997,955	50,878,801	15.0
Total 1881 to 1941	....	149,820,249	39

Provinces and States—The following Table shows how the population of some of the major Provinces has risen from 1891 to 1941:

Province	1891	1901	1911	1921	1931	1941
Madras	33,732,664	36,258,955	39,129,111	40,126,512	44,205,243	49,341,810
Bombay	15,985,427	15,319,405	16,136,666	16,012,342	17,992,053	20,849,840
Bengal E. and W.	39,097,023	42,149,154	45,491,056	46,703,702	50,115,548	60,306,525
U.P.	46,501,064	47,312,031	46,806,203	45,374,658	48,408,482	55,020,617
Punjab E. and W.	18,652,614	19,942,715	19,579,047	20,685,478	23,580,864	28,418,819
Bihar	28,200,818	28,250,853	29,347,372	29,023,240	32,367,909	36,340,151
C.P. and Berar	12,946,195	11,843,115	13,758,993	13,741,952	15,323,058	16,813,584
Assam	5,364,240	5,726,337	6,579,281	7,459,657	8,622,791	10,204,733
N.W.F.P.	1,857,519	2,041,534	2,196,933	2,251,340	2,425,076	3,038,067
Orissa	6,709,813	7,127,077	7,582,362	7,351,414	8,025,671	8,728,544
Sind	2,875,100	3,210,910	3,513,435	3,279,377	3,887,070	4,535,008
Baluchistan	—	382,106	414,412	420,648	463,508	501,631
Ajmer-Merwara	482,246	426,127	449,232	446,842	506,964	583,693
Andamans and Nicobars ..	15,609	24,649	26,459	27,086	29,463	33,768
Coorg	173,055	180,607	174,976	163,838	163,327	168,726
Delhi	373,136	405,819	413,851	488,452	636,246	917,939
Panth-Piploda	4,093	3,544	4,483	4,406	4,545	5,267

And here are the figures which show the population trends in some of the major States and States groups:

States and States groups	1891	1001	1911	1921	1931	1941
Baroda	2,422,731	1,958,445	2,036,736	2,131,755	2,448,283	2,855,010
Cochin	722,906	812,025	918,110	979,080	1,205,016	1,422,875
Gwalior	—	3,073,651	3,235,303	3,193,176	3,523,070	4,006,159
Hyderabad	11,537,040	11,141,142	13,374,676	12,471,770	14,436,148	16,338,534
Kashmir	2,543,952	2,905,578	3,158,126	3,320,518	3,646,243	4,021,616
Mysore	4,943,604	5,539,390	5,806,193	5,978,892	6,557,302	7,329,140
Travancore	2,557,736	2,952,157	3,428,975	4,006,062	5,095,973	6,070,018
Assam States	—	401,074	481,753	531,118	625,606	725,655
Bengal States	1,248,548	1,350,682	1,551,783	1,651,240	1,862,939	2,144,829
Central India States ..	—	5,444,480	6,144,799	6,010,948	6,643,761	7,506,427
Deccan States	2,288,043	2,225,327	2,212,703	2,155,062	2,457,971	2,785,428
Gujerat States	1,102,428	793,246	1,014,261	1,069,148	1,265,078	1,458,702
Madras States	419,080	423,904	464,756	475,170	453,495	498,754
Punjab States	3,828,924	4,031,494	3,837,810	4,006,630	4,496,928	5,503,554
Rajputana States	12,516,029	10,143,066	10,823,952	10,144,117	11,570,583	13,670,208
U.P. States..	938,705	894,569	889,055	816,467	856,497	928,470
Western India States ..	4,228,468	3,390,619	3,680,053	3,723,170	4,220,595	4,904,156

States.—These are the corresponding figures for some of the major States or States groups which have acceded to the Dominion of India :—

	Area in sq. miles.	Total population	Density per sq. mile.	Male	Female	Rural	Urban
Assam States	12,408	725,655	58	357,951	367,704	600,949	124,706
Baroda	8,236	2,855,010	345	1,472,909	1,382,101	2,135,738	719,272
Central India	52,047	7,506,427	144	3,854,781	3,651,646	6,625,983	880,444
Cochin	1,493	1,422,875	953	696,889	725,986	1,155,059	267,816
Deccan and Kolhapur	10,870	2,785,428	257	1,405,571	1,379,857	2,267,347	518,081
Gujerat States	7,352	1,458,702	198	755,388	703,314	1,336,856	121,846
Gwalior	26,008	4,006,159	154	2,116,568	1,889,591	3,456,183	549,976
Kashmir including Feudatories	82,258	4,021,616	49	2,129,872	1,891,744	3,607,181	414,435
Madras States	1,602	498,754	311	243,166	255,588	402,155	96,599
Mysore	29,458	7,329,140	249	3,763,318	3,565,822	5,982,934	1,346,206
Rajputana States	132,559	13,670,208	103	7,169,527	6,500,681	11,728,511	1,941,697
Travancore	7,662	6,070,018	792	3,045,102	3,024,916	5,378,993	691,025
U.P. States	1,760	928,470	528	481,117	447,293	784,302	114,168
Western India State	37,894	4,904,156	129	2,477,928	2,426,228	3,750,426	1,153,730
Manipur	8,620	512,069	59	249,183	262,886	....	....
Khasi	3,788	213,586	56	108,768	104,818	....	....
Cooch Behar	1,321	640,842	485	340,981	299,861	....	....
Tripura	4,049	513,010	127	272,025	240,985	....	....
Mayurbhanj	4,034	990,977	246	494,210	496,767	....	....
Kapurthala	645	378,380	587	202,155	176,225	....	....
Faridkot	637	199,283	312	108,396	90,884	....	....
Patiala	5,942	1,936,259	326	1,066,105	870,154	....	....
Jind	1,299	361,812	279	193,004	168,808	....	....
Nabha	947	340,044	359	184,493	155,551	....	....

And here are the figures for the States which have acceded to the Dominion of Pakistan :—

	Area in sq. miles	Total population	Density per sq. mile	Males	Females	Rural	Urban
Bahawalpur	17,494	1,341,209	71	737,474	603,735	....	....
Khairpur	5,989	305,787	51	168,043	137,744	....	....
Kalat	53,995	253,305	5	138,590	114,715	....	....

And here are the figures for Hyderabad: area, 82,313 sq. miles; Pop.: 16,338, 534; Urban: 2,194,294; Rural: 14,144,240; Males: 8,346,775; Females: 7,991,759; Density: 198.

The position has to be interpreted from a different angle. For in those areas formerly designated Indian States there has been reshuffling of territory. Some of the smaller States have been merged into adjoining Provinces. Some others big and small have coalesced to form new administrative units. Here are the figures for the new set-up :—

	Area in sq. miles.	Population
1. Madhyabharat	47,000	7,000,000
2. Rajasthan	29,000	4,400,000
3. Sourashtra	35,000	4,000,000
4. Vindhya Pradesh	25,000	3,500,000
5. Fulkian	10,000	3,500,000
6. Matsya	7,536	1,900,000

At the time of writing the Fulkian Union is not formally inaugurated.

A word of explanation about the sex ratio is needed. The present position is this: In the sub-continent as a whole there are 940 women for every 1000 men. Reckoning by the community, there are 902 women for every 1,000 men among the Muslims, and among the Hindus 944 women for every 1,000 men. The only Provinces in which there is an excess of women over men are Madras and Orissa, though the Central Provinces can be added if Berar is excluded.

All these figures show that the proportion of women to men has continued to fall from the beginning of the century. This shortage of women is peculiar to the Indian sub-continent. The figures for England and Wales, for instance, are 1,088 women for 1,000 men. But the view so widely held that an increase in masculinity is an indication of declining population may be true of Europe but quite clearly it cannot apply to India or Pakistan.

What are the reasons for the relative scarcity of women? Here are some of the reasons which are generally given: comparative neglect in infancy, the strain of child bearing in adolescence, relative under-enumeration of women at the census. There may be some truth in all these reasons. But a simpler explanation is available in the mortality conditions of men and women in the sub-continent. For ages of 11 and beyond the female death rate exceeds the male, and the margin of excess increases with the advance of years. These conditions should be sufficient explanation for the relative scarcity of women in the sub-continent. The higher mortality of women may be the result of the more strenuous labour that the women are called upon to do. It is also a fact that adverse living conditions like poverty, ignorance and the absence of usual aids to health tell more heavily on women than on men.

DISTRIBUTION BY COMMUNITY

A second way of sorting the population is by religion or community :—

India	Total population	Hindus		Muslims	Christians	Sikhs
		Caste	Scheduled			
Madras	49,341,810	34,731,330	8,068,492	3,896,452	2,001,082	416
Bombay	20,849,840	14,700,242	1,855,148	1,920,308	338,812	8,011
W. Bengal	21,496,453	14,3	30,930	5,301,698	60,296	15,087
U.P.	55,020,617	34,094,511	11,717,158	8,416,308	131,327	232,445
E. Punjab	12,409,924	....	....	....	....	....
Bihar	36,340,151	22,173,890	4,340,379	4,716,314	24,693	13,218
C.P. and Berar	16,813,584	9,880,583	3,051,413	783,697	48,260	14,996
Assam	7,404,094	2,947,989	....	1,710,423	35,724	3,742
Orissa	12,982,435	5,594,535	1,238,171	146,301	26,584	232
Delhi	917,939†	444,532	122,693	?	10,494	16,157
Ajmer-Merwara	588,693	376,481	?	89,899(?)	3,895	867
Coorg	168,726	105,013	25,740	14,730	3,309	—
Panth-Piploda	5,267	3,745	981	251	216	—
Andamans and Nicobars	33,768	8,427	....	8,005	1,032	744

Pakistan	Total population	Hindus		Muslims	Christians	Sikhs.
		Caste	Scheduled			
W. Punjab	18,746,000	?	?	18,319,000	4,26,000	?
N.W.F.P.	3,038,067	....	....	2,788,797	5,426	....
Sind	4,535,008	?	?	3,208,325 (?)	13,232	?
Baluchistan	501,631	....	....	438,930 (?)	2,633	....
E. Bengal	41,949,710	11,7	36,027	29,481,099	56,882	1,197

Two Swarming Areas—These tables speak for themselves but a few explanatory notes may be added. The population of the sub-continent has risen by 50 mlns. in a decade. This is more than the entire population of any European country except Russia or Germany. And in the fifty years preceding the census of 1941 the population of the sub-continent increased by 110 mlns. or 39%. We realise something of the enormity of the whole problem when we remember that the aggregate population of France and Germany is only slightly greater than 110 mlns. But large as these figures are it still remains true that the population of the Indian sub-continent expanded less rapidly than that of some other countries. Here are two corresponding figures. The increase for Europe minus Russia was 60%, and for Japan it was as high as 113%.

A second point which must be noticed is that the increase in the 1931-1941 decade is not uniform all over the sub-continent, though a greater rise than in the 1921-1931 decade is universal. Coming back to the 1941 census, we find that the rate of increase is greater in the north than in the south, and two areas stand out as peaks, as it were, the west and the north-west, and the east. In fact, the Punjab and East Bengal form two swarming areas. This is no matter for surprise. For, where there is an empty country with the means for filling it the country gets filled up very quickly. We see much the same process going on in Bikaner and Bahawalpur. In every case the means for filling the country came from irrigation projects. This, of course, does not apply to East Bengal, but East Bengal too is a young country from a habitation point of view.

Another reason for the difference between the north and the south may also be noted. The boycott of the 1931 census was more effective in the north generally than in the south, so the rates of increase in the 1941 census are correspondingly higher in the north than in the south. The present figure for Ahmedabad, for instance, bears no relation to the 1931 determination. Not only were the 1941 census not boycotted people everywhere were very anxious that they should not be left out; they were much more census-conscious, so to say, than ever before. The reason for this active interest was that communal considerations were becoming important. In certain areas every Hindu and Muslim went to great trouble to see that he was not left out. The effect of this attitude is once again more noticeable in Bengal and Binar, for instance, than in Madras and Mysore.

BIRTH-RATE

The size of the population depends upon a country's birth and death-rates, that is by the number of births and of deaths per thousand of its population. The following table shows the birth and mortality rates from 1920 to 1940:

Year	Birth-rate	Death-rate	Infant mortality
1920	35	31	195
1921	32	31	198
1922	32	24	175

Birth-Rate—*Contd.*

Year	Birth-rate	Death-rate	Infant mortality
1923 ..	34	25	176
1924 ..	33	28	189
1925 ..	32	24	174
1926 ..	33	25	189
1927 ..	33	23	167
1928 ..	34	24	173
1929 ..	33	24	178
1930 ..	33	25	189
1931 ..	35	25	179
1932 ..	34	22	169
1933 ..	36	23	171
1934 ..	34	25	187
1935 ..	35	24	164
1936 ..	36	23	162
1937 ..	35	22	162
1938 ..	34	24	167
1939 ..	34	22	156
1940 ..	33	22	160

Let us take the question of the birth-rate first. The officially recorded birth-rate for 1940 was 33, but this is known to be an underestimate, for in a backward country like India or Pakistan about a third of the births are likely to go unregistered, so that we would not be far wrong if we assumed that the actual birth-rate is in the neighbourhood of 47 or 48 per thousand.

This is the highest birth-rate in the world and only about four points less than the highest possible—52. There are a few countries including Palestine whose birth-rate is about the same but they are all unimportant. The birth-rate of the more important countries are far below 40 and in the most advanced of them the birth-rate is as low as 20 or even 15. If we restate the same position in absolute numbers about 1,250,000 babies are born every year in the sub-continent. Only a third of them live to be 30, while a fourth of them die before they are one year old.

Reproductive Capacity—Now the birth-rate of a people depends among other things on three important factors: the number of women of child-bearing age in the community, the number of women of child-bearing age who are married, and the age at which the women generally marry, for fertility rate is higher in the first half of the child-bearing age than in the second half.

Let us see the position statistically first. The following table gives the proportion of women in each group per 10,000 women according to the 1931 census:

Ages	1931 per 10,000	1921 per 10,000
5–9 ..	1,280	1,494
10–14 ..	1,124	1,081
15–19 ..	938	815
20–24 ..	985	881
25–29 ..	868	885
30–34 ..	756	833
35–39 ..	595	565
40–44 ..	505	621
45–49 ..	889	346

If we assume that the reproductive period of Indian women ranges from 15 to 45 we find that for every 10,000 women there are about 5,036 women of child-bearing age, 46.47%. To convert this into absolute numbers, there were about 75.4 mlns. women in the sub-continent in 1931 in the age group 15-45 compared with 79.9 mlns. men. Women fell short of men by about 4.5 mlns.

In a number of European countries, on the other hand, England for instance, women are always in excess of men. The excess of women over men in this particular age-group in England is about 1.7 mlns. At first sight therefore the sex ratio in the sub-continent, would appear to be unfavourable from the reproduction point of view. But actually the sex ratio has not affected reproductive capacity because the men in the sub-continent find their wives from a much wider age-group than elsewhere and are not averse to marrying much below their age.

Again we have assumed the reproductive period of Indian women to be from 15-45. Actually, there is a great deal of evidence to show that the period starts at least two years earlier at the age of 13, but then it also ends two years below 45 and so it is not necessary to make any adjustments as the variations at either end cancel each other. In any case, we have no figures except for the five year age periods on which to base any calculations.

Incidence of Marriage—A second factor which influences reproductive capacity is the number of women of child-bearing age who are married.

Here is a table which gives the proportion of married women per thousand women at the same ages:

Ages	1931 per thousand	1921 per thousand
15–20 ..	818	771
20–25 ..	886	877
25–30 ..	869	863
30–35 ..	824	797
35–40 ..	703	727
40–45 ..	627	599
45–50 ..	473	527

In 1931, that is to say, about 49.3% of Indian women were recorded as married. The corresponding figure for England and Wales was 41.3. The reason for the disparity between the figures for the Indian sub-continent and those for England is that there are more men than women in the Indian sub-continent, and marriages are mostly arranged by parents so that it is rarely that a marriageable girl goes unmarried. Also in the Indian sub-continent people marry very young. The following table gives the number of unmarried women for every 1,000 women in the different age-groups:

Age	Unmarried per 1000
0–4	969
5–9	802
10–14	609
15–19	148
20–29	44
30–39	17
40–60	11
60 and over	10

Only 1% of the women are unmarried by the time they reach 60 which compares favourably with 13.6% in England and Wales. Notice the fall from the age-group 15-19 to the age-group 20-29. By the time they are 29 almost all marriageable girls are married.

Fertility Rate—There is yet another point which has to be taken into account when calculating the reproductive capacity of people. In the child-bearing period itself the frequency of child-bearing varies from age to age. The earlier years, and 15-25 particularly, are markedly more fertile than the later ones in the reproductive span, so that distribution by age of reproductive women is as important as the proportion which the women in the aggregate bear to the total population. When we look up the appropriate table we find that the first half of the productive period contained as many as 60% of women of child-bearing age. The corresponding figure for England is 53.5%.

To sum up, about 80% of the women in the age-group 15-45 are married and of these 64% are in the age-group 15-30 when the rate of fertility is very high.

That brings us to the last of the elements which go to make up reproductive capacity—the rate of fertility. Fertility rate is different from birth-rate. Birth-rate is the number of children born per thousand of a people. Fertility rate is the frequency of births among the women. The fertility rate simply shows how prolific the women are.

The only data which we possess for calculating fertility rate for the sub-continent relate to the States of Cochin and Travancore but then these

data can be taken as representative for the sub-continent as a whole. The following table gives the fertility rates for married women in Cochin and also for purposes of comparison those for married women in England and Wales:—

Age period	Cochin	England and Wales
15–19	224	372
20–24	249	267
25–29	253	187
30–34	246	127
35–39	182	81
40–44	120	33
Total Fertility	6,370	5,335

Thus we find that while the disparity between the birth-rates in the Indian sub-continent and in England is very great, the disparity between the fertility rates is very narrow. The average Indian woman leaves about 6 children behind her while the average English woman leaves about 5. Contrary to general impression the Indian woman is not very much more fecund than the English woman. And if we consider certain national habits like the use of contraceptives, for instance, it may turn out that the Indian woman is actually less fecund than the English woman.

A second point which we notice is that the fertility rate among English women varies more sharply from age-group to age-group than the fertility rate among Indian women. The fertility rate among English women belonging to the first age-group, is more than ten times that among English women belonging to the last age-group, while the corresponding ratio for Indian women is only 2.

DEATH-RATE

So far we have been concerned with the question of birth-rate and allied problems. But the population of a country depends not only on its birth-rate but also on its death-rate. The death-rate indeed affects the aggregate population in a double sense. In the first place it reduces the number of people who are living, and secondly it reduces future accretion by killing off potential mothers. The effects of mortality must therefore be studied in both these aspects.

The death-rate and, the infant mortality rate have already been given in a previous table. For purposes of comparison the death-rate for the sub-continent may be set out once again along with the death-rates for a number of other countries:—

	1911–13	1921–25	1926–30	1931–35	1936	1937	1938	1939
Indian sub-continent ..	29.9	26.0	23.5	24.3	22.6	22.4	24.3	21.1
Germany	14.8	13.3	11.2	11.8	11.8	11.7	11.6	12.3
France	19·7	17·2	15·7	16·8	15·3	15·0	15·4	15 3
U.K.	14.2	12.4	12.5	12.3	12.3	12.8	11.8	12.2
U.S.A.	14.1	11.8	10.9	11.8	11.6	11.3	10.6	10.6
Australia	10.9	9.5	9.0	9.3	9.5	9.4	9.6	9.9
Japan	20.7	21.7	17.8	19.3	17.6	19.1	17.6	17.6

Even as it is the death-rate in the sub-continent is high. But these figures are really not comparable for while vital statistics are very accurate in every one of the countries cited above they are notoriously defective in the Indian sub-continent. It is difficult to say how faulty the figures are but according to one estimate an average death-rate of 33 would be near enough. Assuming that is so we have a death-rate in the sub-continent which is nearly double that of Japan, a little more than double that of France, and over three times that of Australia.

If instead of converting the figure into a ratio we simply put down the total number of deaths in India and Pakistan, we will get some idea of the enormous scale of Indian mortality. The average recorded deaths per year in the sub-continent from 1921-1938 were 6.40 mlns. But the total actual deaths were probably in excess of 8 mlns. Compare this with the scale of mortality in Europe. The total number of deaths per year in Europe minus Russia was 5.28 mlns. This means that in the years between 1921 and 1938 about 54 mlns. more people died in India and Pakistan than in Europe minus Russia. Or to put it differently about the same number of people died in the sub-continent between 1921 and 1938 as the population of Britain and Canada taken together.

Distribution of Death-Rate:—Not only is the death-rate in the sub-continent high but the distribution of death according to age and sex is not very favourable either. Consider the figures for deaths per 10,000 of either sex given in the table below:

Age group	Male	Female	Female as percentage of male
0–1 ..	1,844	1,671	95·5
1–4 ..	376	346	92.0
5–9 ..	100	99	99.0
10–14 ..	63	63	100.0
15–19 ..	89	106	119.0
20–29 ..	95	119	125.3
30–39 ..	128	113	105.6
40–49 ..	187	163	87.2
50–59 ..	318	283	89.0
All ages ..	236	119	..

As we have already said the death-rate is high all along the scale. It is very high among first year infants—about 20% of them die every year, 60% of them in the first week after birth. In the second age-group the death-rate comes down but compared with European standards it is still very high. Then from 5 year onwards it continues to fall till the 10-14 age-group is reached when it starts rising again till it reaches the climax in the 50-59 and over group.

Now considering the same figures from the point of view of sex distribution we find that during infancy and childhood the female death-rate is higher than the male. In the 10-14 age-group it is about equal. Then the female death-rate begins to overtake the male. In the age-group 15-29 the female death-rate is higher. Then it begins to fall below that of the male, and thenceforth is always lower than the male.

Thus we find that the odds against women are specially high in the reproductive age which means that maternal mortality is abnormally high in the sub-continent. There are no records for maternity mortality for the sub-continent as a whole. But two enquires, one made in 1933 and the other in 1936 reveal that the average mortality rate might be in the neighbourhood of 24 per thousand births. That is to say, the maternal death-rate in the sub-continent was about eight times as high as that in England and Wales.

Effect on Dividend—The incidence of mortality in the sub-continent specially the distribution by age greatly hampers economic advancement. The reason for this will be clear if we follow the progress of a group of 1,000 newly born babies and see what happens as they move from infancy to old age through youth and manhood. The following table shows how many of a group of 1,000 babies survive through successive stages to contribute to the country's economic wealth.

Age	Indian sub-continent		England	
	Males	Females	Males	Females
1 ..	751	768	928	945
5 ..	602	628	901	920
10 ..	565	593	890	911
15 ..	541	568	883	904
20 ..	512	528	872	894
25 ..	478	479	858	881
30 ..	439	427	844	868
35 ..	395	373	829	853
40 ..	346	318	809	837
45 ..	294	264	784	817
50 ..	243	215	750	790
60 ..	149	132	636	702
70 ..	70	66	434	531

Interpreting the figures we find that about 250 people have died before the first year is reached. By the age of 5 another 150 have dropped out. With the age of 20 when a person is mature enough to take a hand in the economic business of the country only about half are left. And in the age-group 25-50 which period represents the major part of a man's working life there are on an average only about 360 people to shoulder the whole burden.

If we now turn to conditions in England we see how different the picture is. After the first five years are over, the loss is insignificant. And in the age group which is most crucial for the present purpose there are as many as 750 men out of the original 1,000 to enter into the business of production.

Applying the same analysis to the incidence of mortality among women about 450 die before they enter the reproduction stage, and of those who enter the reproduction stage only 346 live through the whole of it. Second, the heavy mortality among women in the child-bearing age leads to a certain scarcity of partners for married life. One way in which this difficulty is circumvented is by forming unequal partnerships, unequal in the sense that the difference in age between a husband and wife is very great. Though this situation leaves little scope for spinsterhood among women it produces a great number of widows. In 1931 as many as 15.5% of all women in the sub-continent were recorded as widows while the corresponding percentage in England was only 8.7. The incidence of widowhood is particularly high in the reproductive stage—about 14%. Going up the scale we find that as the proportion of spinsters diminishes the proportion of widows increases.

Causes of Mortality—We can wind up this section with a short note on the chief causes of mortality in the Indian sub-continent.

The overwhelming majority of deaths are caused by such typical tropical diseases as small-pox, typhoid, dysenteries, cholera and malaria. Out of 6,165.234 deaths in 1939 1,411,614 were caused by malaria, 260,300 by diarrhœas and dysenteries, 97,566 by cholera and 48,103 by small-pox. Tuberculosis which is one of the biggest killers in the larger cities continues to spread. Malnutrition and nutritional diseases are very common. This is no surprise considering the general poverty of the people. In fact, it would be no exaggeration to say that poverty and the consequent lack of vitality and resisting power are the root cause of the overwhelming majority of deaths from diseases in the sub-continent. Remedies for most of the diseases mentioned above exist but no medicine can be of any help where a patient has little or no reserves on which he can call in time of danger. This is the chief reason why in a general campaign against disease measures aimed at raising the average income of the citizen will bring in a quicker return than an extension of medical facilities. In other words, the most import single disease which has to be fought and overcome in the Indian sub-continent is poverty.

The figures for the larger cities like Calcutta, Bombay or Madras are generally more accurate than figures for the smaller towns or rural areas. Here is a table which shows the specific death-rates per thousand for Calcutta, Madras and Bombay and also for purposes of comparison for London and New York:

	Calcutta	Bombay	Madras	London	New York
Tuberculosis	270.0	170.0	113.0	87.0	47.0
Dysentery and Diarrhœa ..	250.0	252.0	436.0	0.0	0.0
Typhoid	90.0	40.0	16.0	0.4	0.2
Cholera	50.0	0.0	0.0	0.0	0.0

Turning to infant mortality figures in the larger towns we find that there has been no perceptible improvement as the following table makes the position quite clear:

City	1935	1936	1937	1938	1939	1940	1941
Bombay	248	250·2	246·3	267·9	212·2	201·5	211·4
Calcutta	239	241·6	252·7	218·6	205·4	212·5	..
Madras	227	218·3	223·8	222·1	241·6	205·7	208·9
Lucknow	224	224·4	223·5	226·4	212·2	214·4	134·3
Lahore	..	..	..	..	..	..	..
Nagpur	261	283·5	234·6	264·2	226·2	294·6	218·8
Delhi	196	170·0	187·4	156·0	169·9	173·8	185·9
Karachi	151	167·0	142·2	149·6	135·7	136·8	127·8
Ahmedabad ..	280	303·4	280·2	283·0	267·4	310·2	133·2
Hyderabad (Sind) ..	232	198·2	205·1	192·6	182·4	259·1	220·6

Special causes contribute to the high mortality of infants in the sub-continent.

Owing to the custom of early marriage, cohabitation and child birth commonly take place before the woman is physically mature and this, combined with the primitive and insanitary methods of midwifery, seriously affects the health and vitality of the mother and through her of the child. If the child survives the prenatal and natal chances of congenital debility and the risks of child birth, it is exposed to the dangers of death in the early months of life from diarrhœa or dysentery. According to the Executive Health Officer of Bombay city, by far the greater number of infantile deaths are due to infantile debility and malformation, including premature birth, respiratory diseases coming next, then convulsions, then diarrhœa and enteritis.

[*N.B.*—Part of this section is based on D. Ghosh's "Pressure of Population and Economic Efficiency in India" which represents some of the latest work done in this field. The figures for communities and languages were taken from Dudley Stamp's "Geography."]

There has not been any marked reduction in the general rate of mortality due to specific diseases over the last two decades either:

Year	Cholera	Small-pox	Plague
1920 ..	0.6	0.4	0.4
1925 ..	0.5	0.3	0.5
1930 ..	1.3	0.3	0.3
1931 ..	0.9	0.1	0.2
1932 ..	0.3	0.2	0.2
1933 ..	0.3	0.4	0.2
1934 ..	0.8	0.3	0.3
1935 ..	0.8	0.3	0.1
1936 ..	0·6	0·4	0·04
1937 ..	0.4	0.2	0.1
1938 ..	0.9	0.1	0.06
1939 ..	0.4	0.2	0.1
1940 ..	0.3	0.3	0.7

Manners and Customs

Next to the complexion of the people, which varies from fair to black, the tourist's attention in India is drawn by their dress and personal decoration. In its simplest form the dress of a Hindu consists of a piece of cloth round the loins. Many an ascetic, who regards dress as a luxury, wears nothing more, and he would dispense with even so much if the police allowed him to. The Muslim always covers his legs, generally with trousers, sometimes with a piece of cloth tied round the waist and reaching to the ankles. Men and women on the hills who at one time wore a few leaves before and behind and were totally innocent of clothing, do not appear today within the precincts of civilisation and will not meet the tourist's eye. Children, either absolutely nude or with a piece of metal hanging from the waist in front, may be seen in the streets in the most advanced cities, and in the homes of the rich. The child Krishna, with all the jewels on his person, is nude in his pictures and images.

Dress—The next stage in the evolution of the Hindu dress brings the loincloth nearly down to the feet. On the Malabar coast, the ends are left loose in front. In the greater part of the sub-continent they are tucked up behind—a fashion which is supposed to befit the warrior, or one end is gathered up in folds before and the other tucked up behind. The simplest dress for the trunk is a scarf thrown over the left shoulder, or round both the shoulders like a Roman toga. Under this garment is often worn a coat or a shirt.

When an Indian appears in his full indigenous dress, he wears a long robe, reaching at least down to the elves: the sleeves may be wide, or long and sometimes puckered from the wrist to the elbow. Before the Europeans introduced buttons, a coat was fastened by ribbons, and the fashion is not obsolete. The Muslim prefers to button his coat to the left, the Hindu to the right. A shawl is tied round the waist over the long coat, and serves as a belt, in which one may carry money or a weapon, if allowed.

The greatest variety is shown in the headdress. More than seventy shapes of caps, hats, and turbans, may be seen in the city of Bombay. In East and West Punjab and the United Provinces, in Bengal, and in Madras other varieties prevail. Cones and cylinders, domes and truncated pyramids, high and low, with sides at different angles, folded brims, projecting brims, long strips of cloth wound round the head or the cap in all possible ways, ingenuity culminating perhaps in the "parrot's beak" of the Maratha turban—all these fashions have been evolved by different communities and in different places, so that a trained eye can tell from the head-covering whether the wearer is a Hindu, Muslim or Parsi, and whether he hails from Poona or Dharwar, Ahmedabad or Bhavnagar.

Fashion Variations—Fashions often vary with climate and occupation. The Bombay fisherman may wear a short coat and a cap, and may carry a watch in his pocket: yet, as he must work for long hours in water, he does not cover his legs, but suspends only a coloured kerchief from his waist in front. The Pathan of the cold north-west wears loose baggy trousers, a tall head-dress befitting his stature and covers his ears with its folds as if to keep off cold. The poorer people in East and West Bengal and Madras do not cover their heads, except when they work in the sun or must appear respectable.

Many well-to-do Indians and Pakistanis wear European dress at the present day, or a compromise between the Indian and European costumes; notably the Christians and Parsis. Most Parsis however have retained their own head-dress, and many have not borrowed the European collar and cuffs. The majority of the people do not use shoes: those who can afford them wear sandals, slippers and shoes, and a few cover their feet with stockings and boots after the European fashion in public.

On ceremonial or religious occasions indigenous dress is almost always preferred and with the recent change in the political landscape, it is possible that blind imitation will give place to intelligent selection.

There is also a certain tendency to economise in the use of cloth. At the present moment cloth is scarce, dear and rationed. One way in which people in urban areas are trying to meet the situation is to make, what they call, bush shirt' or 'bush coat' which is really a cross between a coat and a shirt and can be made to do duty for either.

Women's Costumes—The usual dress of a woman consists of a long piece of cloth tied round the waist, with folds in front, and one end brought over the shoulder or the head. The folds are sometimes drawn in and tucked up behind. In the greater part of the sub-continent women wear a bodice: on the Malabar coast many do not, but merely throw a piece of cloth over the breast. In some communities petticoats, or drawers, or both are worn. Many Muslim ladies wear gowns and scarfs over them. The vast majority of Muslim women are *gosha* and their dress and persons are hidden by a veil when they appear in public: a few of the converts from Hinduism have not, however, borrowed the custom. In the north, Hindu women have generally adopted the Muslim practice of seclusion. In the Deccan and in Southern India they have not.

As a rule the hair is daily oiled, combed, parted in the middle of the head, plaited and rolled into a chignon, by most women. Among high caste Hindus, widows sometimes shave their heads in imitation of certain ascetics, or monks and nuns. Hindu men do not, as a rule, completely shave their heads, some Muslims, however, specially in Malabar, do. The orthodox remove the hair from a part of the head in front, over the temples, and near the neck and grow it in the centre, the quantity grown depending upon the fancy of the individual. Nowadays many have their hair combed in the European fashion which is also followed by Parsis and Christians. A great many Muslims grow beards. But

most Hindus do not, except in places as in the north where Muslim influence was paramount in the past. Parsis and Christians follow their individual inclinations. Hindu ascetics, known as Sadhus or Bairagis as distinguished from Sanyasis, do not clip their hair, but coil it into a crest, in imitation of the God Shiva.

Hindu women wear more ornaments than women of any other community. Ornaments bedeck the head, the ears, the nose, the neck, the arms, wrists, fingers, the waist and the toes, until motherhood is attained, and by some even later. Children wear anklets. Each community affects its peculiar ornaments, though imitation is not uncommon. Serpents with several heads and flowers, like the lotus, the rose and the champaks, are among the most popular object of representation in gold or silver.

Caste Marks—Caste marks constitute a mode of personal decoration peculiar to Hindus, especially of the higher castes. The simplest mark is a round spot on the forehead. It represents prosperity or joy, and is omitted in mourning and on fast-days. It may be red, or yellowish as when it is made with ground sandalwood paste. The worshippers of Vishnu draw a vertical line across the spot to represent Lakshmi who is the goddess of prosperity. A more elaborate mark on the forehead has the shape of a U or a V, generally with a central line, sometimes without it, to represent Vishnu's foot. The worshippers of Shiva adopt horizontal lines, made with sandalwood paste or ashes. Some Vaishnavas stamp their temples, near the corners of the eyes, with figures of Vishnu's conch and disc. Other parts of the body are also similarly marked. The material used is a kind of yellowish clay.

To smear the arms and the chest with sandalwood paste is a favourite kind of toilet, especially in the hot season. Beads of Tulsi or sacred Basil, and berries of Rudraksha *elaeocarpus ganitrus*, strung together are worn round their necks by Vaishnavas and Shaivas respectively. The Lingayats, a Shaiva sect suspend from their necks a metallic casket containing the Linga or phallus of their god. Bairagis, *i.e.*, ascetics, besides wearing Rudraksha rosaries round their necks and matted hair, smear their bodies with ashes. Religious *mendicants* suspend from their necks figures of the gods in whose name they beg. Strings of cowries may also be seen round their necks. Muslim dervishes sometimes carry peacock's feathers.

Hindu women mark their foreheads with a red spot or horizontal line. High caste widows are forbidden to exhibit this sign of happiness, nor may they deck themselves with flowers or ornaments. Flowers are worn in the chignon. Hindu women smear their faces arms and feet sometimes with a paste of turmeric, so that they may shine like gold. It is not always possible to say why a particular colour has been selected. The red liquid with which the evil eye is averted may recall the blood of the animal slaughtered for the purpose in former times. But many other cases this particular colour has no such associations. The Muslim dervish affects green, the Sikh Akali is fond of blue, the Sanyasi adopts orange for his robe, and no reason can be assigned for the choice.

Festivals and Observances

Bara Wafat—(Death on the 12th) is called in Bengal Fatiha-i-Duwazdahum (Prayers of the 12th). In Turkey and Egypt the day is known as Mauludu-'n-Nabi (Birth of the Prophet). The date is 12, Rabi I.

It is a joint celebration of the birth and the death of the Muslim Prophet. In some parts of the sub-continent it is celebrated only as the birthday of the Prophet. (Jashn-i-Milad-Sharif). It is believed that his birth and death took place on the same day, although there are differences of opinion on this. It is a great day of feasting for Muslims (the Wahhabis, however, do not observe it; they regard it to be an innovation or *Bidat*). On this occasion the life story of the Prophet is recited and its points of excellence stressed. Prayers are offered for the benefit of his soul. Prayers are also read over cooked food which is then given to the poor. Some observe it on the second day of the month. As the date is disputed, the more devout read the prayers on all the days from the 1st to the 12th day of the month.

Dasara (DASHAMA—TEN DAYS).—This festival is held on the 10th of Ashwin Shuddh (Oct.). It is called *Durga Puja* or *Durgotsava*, and is supposed to relate to the autumnal equinox. The festival commemorates the victory of Devi, wife of Shiva, over the buffalo-headed demon Mahishasura. Her image is worshipped for nine days and afterwards consigned to the river. This is also the day on which Rama marched against Ravana, the demon king of Lanka (modern Ceylon). Early in the morning Hindus perform *puja* to their household gods or religious books. Marathas and Kshatriyas, or those who consider themselves of the martial race, worship their weapons and ask protection for them throughout the year in the faith that, to the propitiousness of the sword, they owe every prosperity. In the afternoon they go to the temple in procession.

The day is also considered most auspicious by the Hindus to begin education of their children. The nine preceding days of Dasara are called *navaratra*, a compound word for 'nine nights'. During this period devotees of *Durga* engage a Brahman to read hymns before her image, extolling her exploits and describing her rewards to her votaries. On the ninth day, at every temple of *Durga*, the sacred fire is made and fed with rice and ghee to the chanting of *mantras*. It is customary among Bania women to keep up a dance called *garba* during these nine nights.

The celebration of Dasara is also said to owe its origin to the Pandavas (the five sons of Pandu) who selected this day as an auspicious one for making preparations for their war with their paternal cousins, the Kauravas, which is narrated in detail in the *Mahabharata*.

In modern times Dasara is observed with great pomp in Mysore State.

Dipavali—(Popularly termed Divali or Dewali).—Dipa means a lamp and Dipavali means a row or collection of lamps. It is a festival of rejoicing at Lord Krishna's triumph over Narakasura, a demon. Rows of lamps at all places, sacred and secular, make a most beautiful feature on the occasion. Exhibitions of fireworks, crackers, etc., add to its festive nature.

On the 14th day of the waning moon of Kartika (Sept.-Oct.), known as Naraka or Bhuta Chaturdashi (Chaturdashi means 14th lunar day), Krishna destroyed Narakasura. The demon was, however, a great devotee of Krishna and had done severe penance to propitiate the Lord, but he had abducted 16,000 women for his harem and had to be destroyed for his sins. In view of his piety, however, the death anniversary was enjoined to be observed as a sacred day. In the morning a bath is taken and certain rites with a lamp made of rice-dust, etc., are observed. New dresses are worn and sweets are served.

Gahambars—These are traditional festivals of Iran (Persia) adopted by the Parsis, and mark the six festivals of the six seasons of the year. The first one commences on the 11th day of Ardibenesht (Oct. 15), the second on the 11th day of Tir (Dec. 14), the third on the 26th day of Shehnever (Feb. 27), the fourth on the 26th of Meher (March 29), the fifth on the 16th day of Dai (June 17) and the 6th on the 1st day of Gatha at the end of the Parsi year (Aug. 31). They were mainly agricultural festivals and necessarily formed formal seasonal celebrations. The Parsis hold public feasts on the days of the Gahambars.

Ganesh Chaturthi—On this day was born Ganpati, or Ganesh, who is regarded as the god of wisdom and one to be propitiated for the removal of obstacles. As such he is invoked at the commencement of all ceremonies and undertakings. There are varying versions of the circumstances attending his birth. One relates that as the god Kartikavirya was created by Shiva without connubial assistance, in like manner Ganpati was formed by his consort Parvati from the turmeric and oil scraped from her body while bathing. The loss of his human head and the substitution of that of a female elephant with one tusk are also variously explained. By some his head is said to have been cut off by Shiva when he endeavoured to prevent the god from entering the chamber of Parvati when she was performing her ablutions. According to others, it was reduced to ashes by a glance from Shani (Saturn) who, with all the gods, went to look at the newborn child, and it was replaced by that of the animal first found, which happened to be an elephant.

The fourth of Bhadrapad Shuddh (Aug.) is the period appointed for the celebration of this festival in honour of Ganpati's birth. His image is installed in Hindu households and offered *puja*. Some people keep the image for a day and a half; some for five or ten days, according to the wealth and wish of the householder. On the final day, the image is taken in procession and eventually committed to the river, sea or tank.

There is a legend that one day Ganpati while riding his favourite mouse had a fall, at which the moon laughed. Enraged at the insult, Ganpati cursed the moon and all who should look at her, but afterwards restricted it to one day, *viz.*, his birthday. Thus, on the day of Ganesh Chaturthi, Hindus avoid the moon lest they should incur any calamity during the year. If by any chance they happen to see the moon, they try to provoke their neighbours into reviling them in the belief that its ill-effects will stop at such abuse.

Gokulashtami—(Also known as Janmashtami and Krishnashtami). The occasion marks the celebration of Krishna's birth on the 8th day of the dark moon in the month of *Shravana* (July-August) or *Bhadra* (Aug.-Sept.). In each case (*i.e.*, either in *Shravana* or *Bhadra*) different sects observe it on either of the two consecutive days of Ashtami. At the temple of Puri a Brahmin and a dancing girl play the roles of Vasudeva and Devaki, the parents of Krishna.

To the Vaishnavites, the devotees of Vishnu, and therefore also of Krishna (who was one of Vishnu's incarnations), the occasion is a great festival. It is also observed by non-Vaishnavites, and thus sets an example of the spirit of toleration. Janmashtami is a day of fasting. A large part of the day is spent in worshipping Krishna, Shri (the consort of Vishnu) and Devaki the mother of Krishna. *Kirtans* or religious songs (relating to Krishna) make a notable feature. Dacca (East Bengal) brings out a great procession on this occasion.

Grahana—Grahana means an eclipse. Hindu astronomers were the first to declare that the earth is round and Hindu astronomy was the first to discover the scientific facts relating to eclipses. The popular tradition of other days, however, stuck in the popular mind. And the sight of an eclipse continues to suggest to the ignorant person that *rahu* (the ascending node), the trunkless demon, is devouring the sun or the moon as the case may be. Rahu in the guise of a god had attempted to share the nectar along with the gods. As soon as his tongue had tasted the nectar (a drink having the power of making those drinking it immortal), Vishnu detected the false god and struck off his head. Trunkless, up to the throat, as the nectar had passed, Rahu became immortal. Necessarily when he gulps the divine orbs they emerge out down his throat. Acceptance of the version therefore makes it an unholy sight and the defilement of the gods entails a defilement of the earth. Defilement requires a bath and a bath in holy water is held to be particularly efficacious on this occasion. As a matter of fact, two baths are required, one at the first contact of the eclipse and another when it terminates. People flock to the Ganges and other holy sites for baths are resorted to. The occasion, naturally, reminds one of death and oblations are offered to the dead. To ensure full merit of the bath, gifts must be offered after the bath. As a matter of fact gifts make an essential condition of all Hindu fasts and festivals. It would be normal to surmise that the same were to an extent ordained to ensure a spirit of charity. The period of the eclipse is a period of fasting. No food should be prepared during this period. Food prepared earlier cannot be used later.

Haj—It means "setting out" or "tending towards," and is the term used for the pilgrimage to Mecca. The performance of the *Haj* is to all good Muslims a most cherished ambition. It is one of the five pillars of the practices of Islam (Arkan), and there are the highest Quranic injunctions for its observance. The rites of the *Haj* may be divided into three groups; *Farz* or compulsory; *Wajib* or obligatory (in a lower degree than *farz*); and optional. *Farz* compulsions are three in number; wearing of Ihram (two seamless garments, one worn round the waist and another thrown loosely over the shoulder; standing in *Arafat* and doing the *Tawaf* (circumambulation of the Ka'bah). The Wajib rites are five in number in the case of those who do not belong to Mecca; to run between Mount As-safa and Mount Al-Marwah, to remain in Al-Muzdali-fah, to cast stones to the three pillars of Mina (Ramyu'r-rijam), to perform a second *tawaf* and shave the head as the final ceremony. The month of Zu'l-Hijjah (the 12th Muslim month) is the month of the Haj.

Idu'l-Azha (also called Iduz-Zuha).—It is the Muslim counterpart of the Passover. It is enjoined in the *Quran* (xxii 33-38) and falls on the 10th Zul-Hijjah. The words of the prophet are: Man cannot (by any act) on this day propitiate God better than by shedding blood.

Idul-Azha means the (great) sacrificial ceremony or festival. The festival commemorates Abraham's offer to sacrifice the object dearest to him, his son Ishmael (not Issac), on Mount Mina close to Mecca (the Bible gives the name of the land as Moriah). Its observance is one of the necessary acts in the performance of the Haj. All adult Muslims who can afford it are required to make a sacrifice of an animal. If the animal is a big one (*e.g.*, a camel or a cow), it is allowed to be the joint offering of seven, (according to some authorities as many as seventy). It is meritorious to sacrifice one animal for each member of the family, but on economic grounds the sacrifice of one animal for a whole family is allowed. A fully grown-up and sound camel, cow, goat or sheep is considered best. The sacrifice is offered with a short prayer absolutely surrendering the soul to Allah and acknowledging His greatness as the accepted creed. The meat is distributed equally among the poor, the relatives and friends and members of the household.

In India the cow is the usual beast of sacrifice. In other Muslim countries the camel takes its place. The cow being held most sacred by Hindus, the more popular Muslim monarchs of India (possibly a few of Afghanistan as well) had stopped its slaughter out of consideration for Hindu sentiment.

'Id-ul-Fitr—"The festival of *breaking fast*," called also *Ramazan-ki-'Id*, and "the feast of alms," is celebrated on the 1st of Shavval. On this day Muslims bathe, put on new clothes, apply antimony to the eyes, and perfume themselves; then distribute the *fitr* or *sadkah*, which is 2½ seers of wheat, dates, or any grain used for food, to the poor or religious mendicants. All then proceed to the *Idgah*, repeating "God is great. There is no God but God." The Mulla ascends the *mimbar* or pulpit, and after a short thanksgiving reads the *Khutbah* or sermon. He then descends to the lowest step (which with the Shiahs is the third, but the fourth with the Sunnis) and recounts the virtues of the king, and prays for him. Then a general prayer is offered, and the congregation rise with a shout of *Din!*—"Faith!" and fire of muskets. The evening is spent in rejoicing and merriment.

Khordadsal—The birthday (the 6th day of the 1st Parsi month, Farvardin, 10th Sept.) of Zarathustra, the Prophet of the Parsis. He is the earliest known founder of a great religion of faith, courage and hope. The exact date and place of his birth have not yet been fully ascertained. Probably he was born in the province of Media, Iran (Persia) about 3,000 years ago. His great sermons are preserved in the Gathas (Parsi Scriptures). He was held in great respect by the court of Gushtasp. He professed the doctrine of monotheism and held that Ahura Mazda is the Creator of the Universe. He preached the doctrine of *Asha* or piety, which would infuse in man the spirit to fight the force of evil and attain the beatific region of Ahura Mazda.

Muharram (Ar. Muharram, 'most sacred')—The mourning held annually in remembrance of the first martyrs of Musalmans, Hasan and Husain, from whom the whole race of Sayads are descended. Abu Muhammad al Hasan and Husain were the two sons of 'Ali bin Abi Taleb, the cousin, and Fatimah, the daughter of Muhammad. The Muslims are divided into two distinct sects, called the Shiahs and the Sunnis; the former regard Ali and his descendants, Hasan, Husain, Zain-ul-Abidin, Muhammad Baugar, Jafar Sadik, and Ismail bin Jafar Sadik, as the lawful leaders after Muhammad; and the latter, the Caliphas, as Abubakar, Omar, Oosman and 'Ali—hence quarrels, animosities, and dislikes are hoarded up to be avenged during Muharram. Taziyas (a term signifying grief, applied to a representation of the mausoleum erected over the remains of Imam Husain at Karbala) made of ivory, ebony, sandalwood, cedar, and sometimes wrought in silver filigree—and indeed of every variety of material, from pure silver to bamboo and paper, according to the rank and wealth of the party—are exhibited and conveyed in procession through the streets.

Navroz, Nauroz—Jamshed of "the seven-ringed cup," who fixed the Parsi calendar, marked the day on which the Sun enters Aries (20th or 21st March) to be the New Year's Day. It is held that he chose to make the State entry on this day to the newly founded capital of Persepolis. The festival was given the name of Id of Jamshed and it has been celebrated with the greatest eclat in both Parsi and Muslim Iran (Persia). Shah Jalaluddin commenced his administrative year from this day. The Shiahs celebrate the day as Id-i-Khilafat or the festival in commemoration of 'Ali's formal succession on this day to the Caliphate. For the Parsis it is only next to Pateti as a festival of social merriment and they begin the Fasli (agricultural) year on this day. Navroz is one of the three celebrated Jashans of ancient Iran. Modern Iran celebrates the festival as a national event.

Pajjusana—A great Svetambara Jain festival. Literally it means serving with a whole-hearted devotion. Formerly it was only observed by the ascetic order, but now the laity also do so. The festival, as is common to all

Jain festivals, is marked with rigorous fasting and penance.

Two schools, both of the Svetambara sect, observe the festival on slightly different dates, either from the 12th or the 13th day of the dark fortnight to the 9th or the 5th day of the bright fortnight of Bhadra (Aug.-Sept.). In either case it lasts for eight days. The more devout observe complete fasting during the whole period, while others fast on the last day only.

Pateti—The Parsi New Year, being the first day Hormazd of the first month Farvardin (Sept. 5). Firdausi associates many historical events of Zoroastrian Iran (Persia) with this day. It is the greatest social festival of the Parsis. In the great gatherings in their Fire Temples the cause of purity and chastity is preached.

Ram-Lila—An open-air amateur dramatic representation of selected episodes from Rama's life. The performance continues all through the Navaratra (the first nine days of the bright fortnight of Asvin) (Sept.-Oct.) and the Vijaya-Dashami (the tenth lunar day). Every day in the afternoon one act is played, the battle between Rama and Ravana being the most popular theme.

Ram-Lila is an important festival observed in the Hindi-speaking provinces.

Ram-Navami—It celebrates the birth of Rama, one of the incarnations of *Vishnu* of the Hindu Trinity, on the 9th lunar day (*navami*) of *Chaitra* (March-April). Besides Rama, his consort Sita, and brothers Lakshmana, Bharata and Shatrughna are also worshipped. Prayers are offered to them at intervals of three hours. The day is one of strict fasting. The night is spent in worshipping. The learned give discourses upon Rama's life, stressing its excellent points as examples for man to follow. A legend (the *vrata-katha*) relating to the origin of this ceremony with pointers to the merits of observing it is recited. At Puri (*Jagannath*), an incarnation of Rama (*Vishnu*), in his representative figure *Madanamohana* is dressed as Rama and worshipped with great eclat. On this day oblations are offered to the departed ones.

In some cases, preparatory ceremonies commence from the first day of the waning moon. In the evenings sermons or discourses (kathas) are delivered in the temples of Rama. The birth is celebrated at 12 noon of the ninth day. This day is observed by a great many people as the New Year's day.

Ramzan—This Muslim fast commences from the morning after the new moon of Ramzan is first observed, and is kept each day throughout the month of this name from 4 a.m., or when the first streak of light borders the eastern horizon, till the stars are clearly discerned in the heavens. During the whole period not the slightest particle of food, or a single drop of water or any other liquid should pass the lips. The day is spent in occasional prayers, besides the usual *namaz*, and in reading the *Quran* or the life stories of the prophets. The fast is generally broken by a cooling draught, called *Dandhi*. On the 21st and 22nd the Shiahs celebrate the night of Ali, the nephew and adopted son of Muhammad, who is said to have died on one of these two nights. They perambulate the streets, carrying a *tabut* and beating their breasts. The odd ones of the last ten nights are called, *Lailut-ul-Kadr*, or 'night of power,' because it is said the *Quran* descended from heaven during one of those nights. It should be observed as a vigil.

Shiva-Ratri—The 14th night of the dark fortnight in Megha (Jan.-Feb.) is known as the night specially consecrated to Shiva. The 13th night of the waning moon of each month is held as the night of Shiva (Shiva-Ratri). The month of Shravana (July-August) is very sacred to Shiva. Hence, Shivaratri of Magha is generally called Mahashivaratri (maha meaning great).

In the *Mahabharata*, Bhishma, the great celibate, most scholarly and valorous prince, relates that King Chitrabhanu of the Ikshvaku dynasty popularised the festival. On this day when the King was fasting, a sage suggested to him that the human soul being one with God, indulgence in pleasure to the self and not infliction of pain to it by fasting would please God best. The King explained that the self of flesh and blood was not the real self and narrated the legend of a fast. In a previous life, the King was born a hunter. One dark night he lost his way in the forest and took shelter for the night on a *bilva* or bel (Indian wood apple) tree. The hunter had no food for the whole day and was ruminating on how his family must keenly feel the double misery of starving and missing him. He wept bitter tears. To make himself comfortable and also to have a better view of the lie of the land and approaching game, he tore away and threw down the boughs and leaves obstructing his vision. It so happened that that night Shiva was under that *bilva* tree, and the tears and leaves fell on him. Shiva was propitiated by this act of the hunter, although unknowingly done, and declared that if anybody fasted on that day and worshipped him with offerings of water and *bilva* petals he would, on death, be accepted in Shiva's heaven.

Another account in later Puranic stories (*e.g.*, *Linga-Purana*) narrates that a hunter spending the day imprisoned in a Shaiva monastery or temple for having failed to pay his debt, was let out on parole. His way home lay through a forest and as night grew too dark to continue the journey, he took shelter on a *bilva* tree with his store of water. Hunger, anxiety and expectation of game kept him awake all through the night. Throughout the day in the monastery he had nothing to do but listen to the incessant recitation of Shiva's name, which had made an almost indelible impression upon his weakened brain. He filled his time mumbling the term in mock fashion, plucking the *bilva* leaves and throwing them down. Often his water pot was knocked about either by his movements or the wind and its contents trickled down. Shiva happened to be resting under the tree and was propitiated. The moral is that acts of devotion, even if not meant to be so, are accepted by the Lord.

Zarthost-No-Diso—The anniversary day of Zoroaster's death. The Parsi Prophet died a martyr's death, at the age of 77, while at prayer in a fire temple, at the hand of Turbratur. On this solemn occasion of mourning, discourses on the life and teachings of the Prophet form the most important feature.

Art

Sculpture & Painting

Characteristics :—Indian Art (which here includes the art of Pakistan too) is almost completely a religious art. Creation as well as contemplation of a work of art is a devotional act. From this it follows that Indian art is predominantly spiritual and contemplative and not concerned with the representation of appearances. Form in Indian art achieves symbolical meaning. Without the help of correct anatomy and perspective, Indian artists fill their works with life from within. Naturalistic to a degree, they give expression to the internal forces of nature through its visible form. The essential qualities of Indian Art are its inherent rhythm and vitality and its plastic power which, in painting and sculpture alike, reaches a perfection hardly ever matched in world art.

Indian art, up to very recent times, was anonymous, *i.e.*, hardly any names of individual artists were known or connected with any particular work of art. The arts of ancient and medieval India sprung from the co-operative effort of craftsmen guilds who worked in the employ of rulers or religious institutions. In the course of time a collection of scriptures came into being, the *shilpa shastra*, which laid down certain rules to be followed in the creation of religious images, buildings, etc. While these manuals were originally meant to guide design without interference in the creative work of the artist, they had, in the long run, a sterilizing effect on the artists' imagination and may have contributed to the decline of Indian art.

History:—Art in India is always Indian regardless of the religious or dynastic powers which it happened to serve at different times. The idiom of expression was always Indian. Racial and provincial peculiarities can be traced in all Indian styles, but "what separates the provinces of Indian art is subsidiary to what they have in common" (S. Kramrisch). The inherent strength of this art enabled it to absorb and overcome numerous foreign influences (such as Greek, Persian, Scythian, etc.) without being altered in its course.

The chronology of Indian art is a difficult problem. The classification of periods given here tries to do justice to the development of styles and is based on a broad dynastic framework.

Early Art.—The excavations of Sir John Marshall and others in the Indus valley at Mohenjodaro and in Harrappa in the Punjab discovered an ancient civilisation which in about 3000 B. C. had already reached a considerable degree of refinement. In many forms and symbols Mohenjodaro heralds the beginning of Indian art with a strong Dravidian flavour. Outstanding are animal engravings on seals and little statuettes in terracotta, stone or bronze, amongst which a bronze girl in a dancing pose anticipates later qualities of Indian plastic art.

From Mohenjodaro to about 300 B.C. hardly any traces of artistic activities survive. Yet we know from the description of houses and palaces in the great epics that painting, image making and the minor arts existed. The intervening time saw the arrival of the Aryans in India and the coming into being of the three great Indian religions, Brahmanism, Buddhism and Jainism. The archaic sculptures, made under the patronage of the Buddhist Maurya rulers, retain vestiges of earlier and more primitive cults in the large "*yaksha*" stone statues of Besnagar and Mathura (Muttra). Soberly naturalistic animal sculpture adorns the capitals of Asokan edict pillars.

Beginnings of Classic Art :—After the fall of the Maurya Empire, the Sungas ruled in the North, the Andhras in the South (2nd—1st century B.C.). The robust sculpture of earlier stages is made pliable by a penetrating flowing rhythm. The characteristic voluptuous forms of Indian art, through which pulsates the sap of life, make their appearance in the Yakshi figures of the Bharhut stupa rails. A certain angularity and flatness of modelling are gradually being overcome. The art of the period is almost exclusively Buddhist. Its famous centres are Bharhut, Sanchi, Budh Gaya, Mathura and Pataliputra (Patna), Bhaja in the Western Ghats and Vengi in South India. Sculpture and relief (and most probably not surviving painting) were used to illustrate religious teaching on the rails, gates and walls of *stupas* (relic mounds which had become the centres of worship) and in the monasteries and chapels attached to them. In the reliefs depicting Buddha's life or that of his previous incarnations (*jatakas*) Buddha is never presented in human form, but his presence is shown by symbols such as the tree of enlightenment, his footprints, the throne on which he sat or the platform on which he used to walk.

Kushan and Andhra Art :—The first and second centuries A.D saw the power of the Kushan Empire establishing itself in the north west and north, while the Andhras ruled the south. The classic progress shows itself in increased plastic penetration of large-size sculptures and in greater vitality. The centre of artistic creation is Mathura (Muttra). Buddhism is still the predominant theme. Mathura creates the Indian Buddha image in direct continuation of the Mauryan tradition of large-size stone figures, overcoming bulk and crudeness in spirited modelling. Frankly sensuous, but in a different way from the nudes of the Greek schools, are the female figures of Mathura and other centres. Most probably originating from aboriginal symbols of fertility, these graceful if voluminous nymphs fix, for centuries to come, the round-breasted, narrow-waisted, full-hipped ideal of female beauty for the Indian artist. In the South, the *stupa* of Amaravati has yielded a wealth of magnificent sculpture.

Belonging to the first century B.C., the fresco paintings in cave 9 and 10 in Ajanta (Nizam's Dominions) are the earliest well-preserved paintings, though still earlier work survives in several other localities. The high level of competence in Ajanta proves a long, but lost, history of this art.

Graeco-Indian Art :—From the first century A. D. onwards a peculiar hybrid art develops in the north-west, the Gandhara country. Through direct contact with Graeco-Scythian and Parthian neighbours, Hellenistic forms were applied to Indian Buddhist themes. The Gandhara school is famous for the quantity of its output and for fine workmanship. From an artistic point it is inferior and derivative. Its chief interest is archæological.

THE GUPTA AGE

In 320 A. D. Chandragupta founded the Gupta dynasty in Patna, which was to be the dominant power in India for about 250 years. Pauranic Hinduism came to the forefront during this period and the most powerful Brahmanical art was produced all over the sub-continent especially in Deogarh, Badami and Aihole (Deccan), Udaygiri (near Sanchi), Gwalior and many other places. The art of the Gupta period can best be characterised by the word spiritual. The latent naturalism of earlier periods is now overcome or harnessed to the spiritual representations of superhuman, elementary or cosmical powers. The human figure is only the vehicle of transcendental forces. The artist masters every mood from the lyrical to the terrible. The Buddha images of Mathura and Sarnath are in their classic simplification and perfection of modelling, in their serene spirituality and dignity amongst the world's supreme religious images. The boar incarnation of Vishnu in Udaygiri is of impressive power which changes primitive terror to a deep experience of divine force. The iconography of the Hindu pantheon is developed during this age.

Painting :—During the sixth and seventh centuries the Gupta spirit survives in Indian art in spite of the decline and overthrow of the Gupta empire; therefore, in our classification of styles they are included in Gupta art. The art of fresco painting had then reached its zenith. Ajanta, Bagh (Buddhist) and Badami (Brahmanical) are the chief centres of this art as it survives today, but the Jain paintings of Sittanavasal (South India), the Brahmanical paintings of Tirumalaipuram and the Singhalese rock pictures of Sigiriyâ (Ceylon) testify to its distribution over the whole sub-continent.

All these paintings are mostly narrative in character. The painters depict religious legends in easily understandable form, making use of the costume, scenery and manners of their own time. The colours, made from minerals, are bright green, red, brown, yellow, black and blue (Ajanta). The greatest artistic merit of these paintings lies in their rhythmical, flowing outline which indicates the plastic volume of a body. Light and shade are unknown, but forms are modelled with colour shading. Perspective in the Western sense was not known but compositions achieve a surprising degree of depth.

Climax of Indian Art :—During the seventh and eighth centuries sculpture reaches its high water mark. The surging power of Brahmanism fills Indian sculpture with unheard-of virility. Sweeping movement becomes an expression of force; the swelling, rounded forms of human or animal bodies become signs of pent-up energies. The rock-hewn sculptures of Elephanta (near Bombay), Ellora (Deccan) and Mahavalipuram (seven pagodas, near Madras) are the finest representatives of this period. In Ellora, the close union between sculpture and architecture, so typical for Indian art, is carried to an extreme in the Kailasanatha temple which, an enormous building, was carved out of solid rock as a whole.

Medieval Art :—From the 9th and 10th centuries onwards Hindu art conquered every corner of the sub-continent. With wider distribution, local schools and styles developed in the course of time, without, however, breaking its unity. Medieval sculpture was called upon to decorate with stone carvings the innumerable temples, that were being built, and to provide images for worship in temples and private chapels in stone, bronze or wood.

While much of the grandeur of the classical age survives in medieval sculpture its simplicity and force are gradually lost in an over-elaboration of decorative by-work such as jewellery and the iconographical attributes of deities. The tendency towards spiritualism is accentuated especially under the influence of *tantric* symbolism. In the end, the demands of iconographical correctness, made on the artist by the priests, suppressed his own imagination and sensitivity and produced an enormous volume of indifferent and mediocre work.

Paintings :—It was, not so long ago, a widely accepted belief that the art of painting died out in the Indian sub-continent after the 7th century and was not revived till the 16th century by the miniature paintings of the Moghul Court. But there is enough evidence now to show that mural painting was practised throughout the medieval period even if, owing to large-scale destruction (especially in the North) and to neglect, little of it survives. Medieval painting is of varying vigour and excellence and tends, like sculpture, towards an over-emphasis of decorative detail and to a hardening of accepted forms. In Ellora paintings of the 8th-10th century are preserved, in Tanjore frescoes of the 11th century, in Polonnaruva in Ceylon Buddhist work of the 12th century. Later work of the Vijayanagar period is known and a large volume of murals survives in Jain temples and monasteries of Gujerat and in the palaces of Rajputana, all dating from a much later time. In Cochin and Travancore many examples of elaborate Kerala painting can be found belonging to the 16th-19th century. Jain paintings in Conjeevaram of the 17th and 18th century illustrate the close affinity between medieval mural art and miniature book illustrations.

The illuminating and illustrating of religious scriptures was a widespread art in the sub-continent even if little of it escaped destruction with the exception of a large number of Jain manuscripts from Gujerat. The earliest, painted on palm leaves, date from the 12th and 13th centuries. They have highly conventionalized figures with sharp noses and protruding eyes. The background is first red, later blue.

Rajasthani and Pahari :—The middle of the sixteenth century sees the beginning of an Indian School of miniature painting in Rajputana of great vitality, charm and artistic merit.

The early Rajasthani paintings are known as *ragmalas*, pictorial representations of musical moods (*Ragas*). These paintings have an intimate, lyrical flavour and are full of the loving devotion which the Vaishnava revival brought with its intense cult of Krishna. Rajasthani painting, like the *pahari* Schools of the North, is strictly formalised, *i.e.*, human figures, animals and trees are represented in a simplified, conceptual manner but are, nevertheless, very alive and expressive. The plastic quality of the great frescoes is absent, the line very gentle and sensitive. The colours are flat, yet brilliant and colour schemes vary in the different schools (*kalams*). Perspective is attempted but not in the Western, scientific manner. The *pahari* (Hill) Schools of the Hill States in the North, are similar in type to Rajasthani painting. They flourished in several *kalams* (Kangra, Basholi, Jammu, etc.) from the 17th to 19th century.

Moghul :—Derived from the Timurid School of miniature painting in Persia and beginning under strong Persian influence in the middle of the 16th century, Moghul painting developed into an Indian art, if that term can be accepted with reservations. Already Akbar employed indigenous artists who under the guidance of Persian masters were put to the task of illustrating manuscripts. Under Jehangir and Shajahan Moghul painting reached its climax. Moghul art is a court art, limited in its scope, and overshadowed by the demand for extreme technical perfection. It is individualistic with a clear development of personal styles of different artistis which are known by name (a thing rarely heard of in popular Indian art). It is illustrative, and mainly concerned with the representation of court scenes, portraits, historical events, or the skilful rendering of flowers or animals. But Indian painters did not only introduce Hindu themes into Moghul art, but gradually flavoured it with a Hindu spirit. In technical excellence, accurate and delicate drawing, observance and taste Moghul art is unsurpassed. The wrong notion that the Moghul court art was responsible for the revival of painting in the sub-continent must be given up though a strong influence on Rajasthani and Pahari painting is obvious.

MODERN ART

With the eclipse of medieval powers and the arrival of European civilisation, the indigenous arts experienced a rapid decline. Art schools were initiated in the sub-continent on British models in the 19th century and attached to the educational system. In these the arts of drawing, painting and modelling and certain arts and crafts were taught on the lines of Western academic tradition.

At the beginning of this century a rivival of traditional and indigenous art was propagated by Mr. Havell, then Principal of the Calcutta Art School, and by Abanindranath Tagore and his followers. By a reorientation on the lines of Ajanta and medieval miniature painting these men began a powerful and successful art movement, which, known as the Bengal School, very soon influenced artists throughout the sub-continent. An outstanding figure of this school is Nandalal Bose whose imaginative force is great. Jamini Roy, the celebrated artist of India to-day with an international reputation, is also a Revivalist although not belonging to the Tagore School of re-orientation. Jamini Roy, first studying the naturalistic approach gradually became interested in the indigenous art of Bengal from which he evolved a style and technique of his own, unequalled among his contemporaries for its excellence of art forms and æsthetic import.

Concurrently with the Revivalist movement, there was a school of painters who believed in the naturalistic approach to art and persisted in its work although the intellectuals at that time were not in favour of it. On the dwindling of the Revivalism, however, this School rose into prominence attracting artistic talents and compelling a recogultion of its own. Notables in this line are J. P. Gangooly, H. Mazumdar, Atul Bose and Zainul Abedin.

There is yet another School of Art which may be termed Modernistic, after its marked tendencies in that direction gaining a wide field of admirers in recent times. The evident learnings of Gaganendranath Tagore and later Rabindranath Tagore in their approach to art, although exclusive and individualistic, nonetheless, justify their being regarded as the precursors of this School. Well-known among those experimenting in this line are Rathin Maitra, Gopal Ghose and Paritosh Sen. The three distinct currents in the flow of art movements mentioned here apply actually to Bengal alone, but these are traceable in the art world of India generally too.

Institutions :—The Government School of Art, Calcutta teaches Fine Art, Indian Painting, Commercial Art, Modelling Lithography, Wood-Engraving and Draftsmanship and has a Teachership Department for post-graduate studies. The present principal is Atul Bose.

Under its successive principals Messrs. Lockwood Kipling, Griffiths, Greenwood, Cecil Burns, Gladstone Solomon and Charles Gerrard, the Sir J. J. School of Arts in Bombay has grown into a large and many-sided institution. The School favoured thorough training on European lines. Under Mr. Gladstone Solomon a class of mural painting was added in which Western art was fused with Indian decorative principles.

The J. J. School teaches a variety of crafts and industrial arts, such as stone carving, metal work, leather work, textile design, etc. It has also a large commercial art and photographic section. Under Mr. Gerrard interesting modern tendencies developed in painting which seem to indicate a union of contemporary European work with sound Indian traditions.

Many art schools flourish in India and Pakistan in different centres such as Lahore, Delhi, Lucknow, Benares, Shantiniketan, Madras, Mysore, Travancore, Patna, etc., under the patronage of provincial governments, State governments or as private institutions. Indian and Pakistan artists of today strive for new forms of expression which would be in tune with present day life without breaking with the ancient traditions of their country. An impressive solution for this problem was attempted in the moving paintings of Amrita Sher Gil who died prematurely in 1941.

Arts and Crafts

IT is in the arts and crafts of a people that its heritage of artistic feeling, design and religious belief remain alive over many hundreds, if not thousands, of years. The Indian sub-continent absorbed throughout its long history innumerable foreign influences into its arts. Beginning with the fusion of Aryan and Dravidian art during the first millenium B.C., over the influx of Greek, Persian, Hellenistic, central Asiatic or Far-Eastern elements in pre-Gupta and Gupta times, to the blending of Islamic with Hindu forms of design after the Muslim conquest and even to the absorption of European features, the arts and crafts of the Indian sub-continent have adopted new designs, fused them with old ones and infused them with the spirit and the sensitiveness of this country. Two main elements can be discerned; on the one hand we have the geometrical element of the Northern nomads in which all natural forms are reduced to decorative patterns. This element came into the country in successive waves with the Aryans, the Scythians, the White Huns, the Mongols and the Muslims. The other element, which might be taken as belonging to the indigenous Indian South, is more exuberant and uses natural forms such as human or animal figures with greater freedom. The desire to decorate even the humblest articles of daily use and to introduce beauty into every feature of life has been inherent in the Indian sub-continent from time immemorial and has even survived, sadly weakened, the industrial revolution of our age. The gay and tasteful dresses of the village folk of today testify to the indestructible atistic sense of this ancient race.

Pottery—In the excavations of Mohenjo-daro and other Indus valley sites pottery of the 4th and 3rd millenium B.C. has been found, of pleasing shape and with very decorative paintings in black or red in which animal forms feature prominently. Up to the present time, the potter's wares have usually been of good functional design and quite often they have been painted. Well known is the glazed ware from Agra. Terracotta work has found manifold adaptations throughout the ages, a particularly beautiful one in the terracotta reliefs on 17th century temples in Bengal. Glazed tiles were used by the Muslims for architectural decoration. The many coloured tile mosaics of Lahore Fort are famous.

Stone Work—Carved stone work is the principal form of decoration on Hindu or Muslim buildings. Ranging from fully sculptured figure friezes to the finest trellis work it is found on buildings of every epoch. Well known for the skill and the imagination displayed, are the Jain marble temples of Dilwara in Mount Abu and the Hoysala temples of Mysore. Muslim buildings are soberer in their ornamentation. The stone carvers of Ahmedabad excelled in delicate "*jali*" (stone tracery) work for windows (Sidi Sayyid's mosque). On buildings of the Pathan dynasty of Delhi wonderful decorative use has been made of carved Persian or Arabic lettering (Qutb Minar). The use of marble inlay and mosaic work became fashionable under the Moghuls and led to mastership in the costly art of "pietra dura" in which precious stones are inlaid in marble in most delicate and delightful flower patterns. The stone masons of modern Jaipur are highly skilled in architectural carving.

Wood Work—Wood carving was, as elsewhere, the mother of the art of stone carving. With a fine range of precious timbers suitable for the purpose, wood has always played an important part in building and decoration. Typical are the carved house fronts in Ahmedabad and other Gujerat cities, in Nasik and in the Punjab. 16th and 17th century Jain temples in Ahmedabad are carved in wood and painted right up to their domes teeming with multitudes of figures. They are the prototype of the stone carved temple ceilings of Mount Abu. Richly carved furniture is made today in Kashmir (walnut) and in South India (rosewood and blackwood). Decorative carving in sandalwood for domestic or religious purposes is at home in South India.

Ivory—An inscription in Sanchi (1st century B.C.) says that part of the stone relief work of the Southgate was done by the ivory carvers of Besnagar. This alone proves the close interrelation of all the arts and crafts in the Indian sub-continent. Still a flourishing art in South India (Mysore, Travancore) and in Delhi, ivory articles find a ready market inland and overseas. Though of perfect finish, modern work lacks the sensitive sculpturing of earlier work.

Metal Work—With the exception of weaving the metal industry employed and still employs the greatest number of craftsmen and the greatest variety of methods and techniques. There is hardly a place where metal objects are not made in one form or other. Iron and steel, known from early times, were mainly used in weapons. The best damascened blades come from South India and Rajputana. Brass and copper go to make the plain but beautiful untensils of domestic use (*lota*, *huqqa*, etc.) and ceremonial lamps, images, vessels, etc., for religious worship. These articles are cast, hammered, chased, inlaid, encrusted or otherwise worked. The South Indian image maker's (*sthapati*) bronze or brass castings are a marvel. Well known is *bidri* ware (from Bidar in Hyderabad) in which silver is inlaid in a dark metal alloy or *koftgari* ware, the best specimens of which come from Muradabad and the Punjab, in which gold and silver are inlaid in steel. Gold and silver in repoussé or filigree, are worked into fine articles in Kashmir, Lucknow and other places.

Jewellery—From time immemorial jewellery of rich design was made in the Indian sub-continent, and worn by both sexes. Simple beads of polished precious stones have been found in many pre-historic and early historic sites. Classic and medieval sculptures and paintings tell us about the endless variety of jewellery, to describe which would require a large treatise. Flowers being the most primitive form of adornment, many forms of jewellery, up to the present day, derive their name and shape from floral prototypes. Perhaps the finest jewellery work is done in gold enamelling, Lahore and Jaipur giving the choicest pieces. Typical is the incrustration of gold and silver with gems which are always *cabochon* cut (never facetted as modern European jewellery) for a fuller colour effect. Another very ancient technique is gold and silver filigree applied to ornaments. Nothing can compare with the exuberant splendour of

the country's jewellery, though the skill in stone-cutting and also in setting has not always reached the level of Western craftsmen.

Lacquer Work and Papier Mache—Lac being an indigenous product, laquer work in various techniques has assumed industrial proportions in parts of the sub-continent. Best known perhaps are the products of the Kashmiri craftsmen, especially in connection with papier maché painting. Lac turnery for furniture, toys and other objects is a widespread art in western India, especially in Kathiawar and Gujerat. In Sawantwadi (Konkan Coast) a small laquer industry produces artificial fruit, playing cards, toys, etc.

Textiles—No other country, East or West, has ever excelled the Indian sub-continent in the weaving of cotton and silken fabrics. Since ancient times, Indian textiles were in great demand in all world markets. There is hardly a technique or art in fabric making that was or is not known in some part of India or Pakistan. A very short enumeration must suffice *Patola* silks of Gujerat, in which the threads are variously dyed before weaving; fine silks and brocades from Benares, Murshidabad, Hyderabad, Madras, Tanjore and other places; finely woven woollen Kashmir shawls; delicate muslins from Dacca; tie-dyed fabrics from Rajputana; various forms of dye-painting on cotton (*qalmdar*, similar to Javanese batic) from South India; printed silks and cottons from all parts north or south with some of the finest cotton prints coming from Sanganir near Jaipur. As there is no limit to the styles of embroidery, mention may be made only of the *phulkari* work of the Punjab, the colourful embroideries of Kathiawar and the world-famous Kashmir shawls. Carpet making is at home in the North. Especially under Akbar in the 16th century, gorgeous rugs and carpets were made, exquisite in colour and fabric, though the finest work from Persia was never equalled.

It has been estimated that there are still 2½ million handlooms in India and Pakistan and the industry though depressed by the competition of the power loom, survives with part of its old artistic sense and skill.

Rangolis—Worth mentioning are the artistic designs made by the women with coloured powders on the floor or on the doorsteps of their houses as festival decoration. Preserving the age-old designs of religious symbolism, they are known in all parts of India in a great variety of patterns (*rangoli* in Gujerat, *alpona* in West Bengal, *kolam* in South India, etc.).

There can be no doubt that the skill and artistic sense of the craftsman is still alive, perhaps slumbering. As Mr. Fred H. Andrews said, "deterioration is not the fault of the craftsman but of his employer." Well directed official and private patronage can do much to save the cultural heritage of the arts and crafts in India and Pakistan which may, otherwise, fall a victim to progressive industrialisation.

Archæology

ALTHOUGH the Indian sub-continent is one of the most ancient lands in the world and the cradle of an ancient civilization, it has long remained in the background owing to the absence of written histories going back to the earliest recorded period as in the case of other ancient lands such as Egypt or Mesopotamia. Just over a hundred years ago the foundation of Indian Archæology was laid by Prinsep, who first deciphered the ancient Brahmi script and thus opened the way to a knowledge of the edicts of the Emperor Asoka and other ancient documents, which till then were a sealed book to the people of India and Pakistan. Since then a large number of scholars Indian, Pakistani and European have helped in building up the edifice of Indian and Pakistani Archæology which though fairly comprehensive is still incomplete in several respects.

PRE-HISTORY

The story commences with the beginnings of human existence in the vast sub-continent. The roughly chipped stone implements discovered in various parts of the sub-continent, particularly in the eastern districts of the Madras Presidency, and the valleys of the Sabarmati, Narmada and Godavari show the first attempts made by man to work his tools with which to master his surroundings. Two of these palæolithic implements were found in association with the bones of extinct animals, one at Bhutra in Narsingpur district, C.P. on the banks of the Narmada and the other at Mungi on the upper Godavari. The age of the palæoliths determined mostly by geological considerations may be anywhere from 50,000 to 200,000 years, and the great interval of time between the microlithic and the palæolithic periods is shown by nearly a hundred feet of alluvial and wind-blown loam deposits in the valley of the Sabarmati river.

Stone Age— The whole field of prehistory is receiving increasing attention, which is expected to systematise our knowledge of the earliest inhabitants of the Indian sub-continent and systematic work has been recently attempted at several sites in Madras, and Mayurbhanj, Rajpipla and Baroda State.

Neolithic man, who used a large variety of polished stone implements, was more widely distributed throughout the continent, particularly in the Peninsula and the Vindhyan regions and his skeletal remains have for the first time been unearthed in Gujerat. On the other hand the megalithic tombs which occur in a great variety of forms in the central and southern parts of the Peninsula, belong to the iron age and some even persist to our own age. The knowledge of metals developed differentially in the North and the South. Thus in the North the copper implements of the Gangetic Valley and the copper and bronze antiquities of the Indus culture exclude any knowledge of iron. In the South, however, though certain recent finds in Raichur Dt. do not exclude the knowledge of copper smelting in the Peninsula, the neolithic settlements of the Bellary district seem to have been immediately followed by the knowledge of the smelting of iron, as evidenced by the large scale furnaces which stand in the shape of cinder mounds notably at Kudatini. It is clear, however, that while copper and bronze were known in the North in the third millennium B.C. the South may have been generally content with the use of stone implements right down to the first millennium B.C. until stone was supplanted by iron. It is remarkable that in some of the localities in the ancient Deccan, comprising the Bombay Karnatic, the Ceded Districts of Madras, South Hyderabad and North Mysore, stone implements and painted pottery are followed by antiquities of the regular historic period. This gives the hope that a regular sequence can be established and links forged between the history and the prehistory of the Deccan.

INDUS VALLEY

The most interesting and significant phase of the prehistoric civilization of the sub-continent is, that represented by the excavations at Harappa in the Punjab and Mohenjo-daro in Sind. These have completely revolutionized ideas on this subject and proved that as far back as the 3rd millennium B.C. we were in possession of a highly developed civilization with well-planned and populous cities, well built houses and public buildings of brick, carefully constructed wells and a system of drains and many other amenities not always enjoyed at that period by the peoples of Mesopotamia and Egypt. Both at Mohenjo-daro and Harappa there are the remains of some 5 or 6 cities super-imposed one upon the ruins of another.

Mohenjo-daro—The structures that have so far been exposed at Mohenjo-daro include a large bath, surrounded by fenestrated galleries and halls. Another massive and extensive building found at Harappa appears to have been a public granary. All were built of well burnt brick and most of them were of two or more storeys with staircases giving access to the upper rooms. In and around the ruins have been found many minor antiquities including gold and silver jewellery some remarkable statuary in stone and copper, engraved seals of stone, ivory and paste, some of them exquisite specimens of glyptic art, copper implements and vessels, terracotta figurines and toys, shell ornaments, potteries, both painted and plain, and polished stone weights progressively ascending in a regular scale—all denoting a well-developed artistic sense and business-like habits.

These discoveries establish the existence in Sind and the Punjab during the 3rd millennium B.C. of a highly developed city life; and the presence, in many of the houses, of wells and bathrooms as well as an elaborate drainage system betoken a social condition of the citizens at least equal to that found in Sumer and superior to that prevailing in contemporary Babylonia and Egypt. The inhabitants of these cities lived largely no doubt by agriculture and it is a point of interest that the specimens of wheat found at Mohenjo-daro and Harappa resemble the common variety grown in the north-west today. Their food appears to have included bread, beef, mutton, and pork, the flesh of tortoises turtles and gharial, fresh fish from the Indus and dried fish from the sea coast. Among their domesticated animals were the humped bull, the buffalo, a short horned bull, the sheep, pig, dog and elephant. Besides gold and silver they used copper, tin, bronze and lead; they were familiar with the arts of spinning, weaving and the cultivation of cotton. and had attained a high degree of proficiency in the jeweller's and potter's arts.

That they possessed a well-developed system of writing is evidenced by the discovery of over a thousand tablets engraved with well-executed animal devices and pictographic legends in an unknown script. The method of the disposal of the dead during the Indus Valley period, as revealed by the excavations at Harappa during 1946, was that of inhumation. The body usually oriented from north to south and laid supine, was buried in a grave together with funerary pottery; sometimes a few ornaments and toilet objects were also placed. A unique example was that of a "coffin-burial" with reed-shroud, the only one of its kind so far known in the Indus Valley but of a type common in contemporary Mesopotamia.

Previous excavations revealed "pot-burials" which contained a skull and some other human bones. These are seemingly post-exposure burials, and are later in point of time than the proper Harappa burials.

Other Sites—The 1946 excavations also discovered fortifications in the western part of the city of Hatappa around an area of 450 yards by 250 yards. The main wall, built of mud-bricks, is 40 feet wide and now stands to a height of over 30 feet. It is battered both internally and externally and has a baked-brick facing on the outside. The wall is reinforced at intervals on the outside by rectangular bastions. The discovery of defences points to a "citadel-rule" under whose shadow was carried on the highly centralised life of the Indus people.

The late Sir Aurel Stein's survey of the whole of Baluchistan and his last journey in Bahawalpur and Las Bela States have added to our knowledge a number of ancient sites of the pre-historic epoch. Among the 20 or more sites in Sind, discovered mostly by the efforts of the late Mr. Majumdar, at least three are now recognised as representing distinct phases, some earlier and some later than the main culture of Harappa and Mohenjo-daro.

The Indus Valley culture has now been traced in the North-east as far as Rupar in the Ambala District, relatively close to the watershed of the Sutlej and Jumna and it is therefore highly improbable that this civilization was confined to the Indus Valley. There can hardly be any reasonable doubt that future researches will trace it or its successors into the valley of the Ganges where already painted pottery has been traced in the earliest levels. In the south-east, this pre-historic culture has been traced upto Limbdi State in Kathiawar.

Of the long period of more than 2,000 years that separates the pre-historic monuments referred to above from the historic period little is yet known except some painted pottery but there is every hope that this gap in our knowledge may be filled in by further finds in western U.P. and East and West Punjab.

BUDDHIST MONUMENTS

From the time of the Mauryas, *i.e.*, 4th century B.C., the history of architecture and of the formative arts is clear and can be traced with relative precision.

The earliest monuments of the historical period that have come down to us relate to the Mauryan period from which time onwards the main currents are pretty clear. The Mauryan monuments include certain caves in the Barabar hills near Gaya the remains of a pillared hall near Patna (ancient Pataliputra), remains of the wooden palisade near Patna, a number of stupas at different places, built of large sized bricks traditionally attributed to Asoka, and a wealth of minor antiquities such as sculptures, terracottas, beads, etc., recovered in the excavations at Patna, Taxila (Bir Mound), Benares and Sarnath and in course of the sewage operations at Patna.

Asoka's edicts—The rock and pillar edicts of Asoka (*circa* 250 B.C.), deserve special mention. His major rock edicts are engraved in seven places, ranging from Shahbazgarhi in the Peshawar District to Jonnagiri in the Karnul District in the south. Amongst the thirteen pillars of Asoka (besides the Elephant capital of a 14th at Sankisa and a fragment of a 15th at Benares) ten bear his inscriptions. Of these the Lauriya-Nandangarh column in the Champaran District, Tirhut, is practically uninjured. Special mention must be made here of the *stupa* at Piprahwa opened by Peppé in 1898, which yielded a large stone box containing an inscribed steatite or soap-stone reliquary with a number of relics and beautiful precious stones now preserved at the Indian Museum, Calcutta. The inscription written in characters of the 4th-3rd century B.C., speaks of the relics being of the Buddha himself and enshrined by his kinsmen, the Sakyas.

The Mauryas were followed in the second century B.C. by the Sungas in the east, while in north-west Græco-Bactrian rulers were gradually extending their sway. The Buddhist stupa at Bharhut (Nagaud State, Central India) is the most typical and remarkable monument of this period illustrating the simple but expressive character of the art. Besides dedicatory inscriptions the labels inscribed on the Bahrhut panels are of unique importance. Antiquities of this period particularly terracotta figurines with exquisite ornamentation have been found in the excavations of city sites all over the North notably Kosam and Bhita near Allahabad, Ahichchhatra near Bareilly, and Benares and Patna.

Taxila—The best preserved in the series of early Buddhist monuments are the magnificent Buddhist remains at Sanchi in Bhopal State. Here the main stupa of which the core probably belongs to the time of Asoka, was later faced with stone and surrounded by a stone railing with four great gateways, one at each cardinal point, sometime about the first century B.C. Besides the stupas, a number of other buildings, temples, apsidal halls and monasteries of different periods form a splendid galaxy, illustrating the principal phases of the religion of the Buddha, from its early days to its decline.

The extensive remains of the ancient city of Taxila, near Rawalpindi, are among the most important in the land, constituting three different cities that flourished in adjacent sites in successive epochs and a number of monastic establishments centered around stupas, situated in the suburbs or perched on the tops of hillocks in the vicinity. For over a quarter of century, Sir John Marshall's labours here have served to elucidate the splendid history and culture of this centre, the meeting-place of the three great civilizations of Greece, Persia, and the Indian sub-continent.

Mathura—The most prosperous of the cities was an Indo-Scythian city, now known as Sirkap, dating from a century on either side of the Christian era with regularly planned streets, houses and palaces, the antiquities from which including exquisite jewellery, beads, coins, all kinds of household objects and pottery, etc., form the bulk of the exhibits of the fine Museum on the spot.

Mathura, one of the most important religious and art centres in the north from ancient times was galvanised into activity from the second century A.D. onwards. Here the abundance of red sandstone in the neighbourhood was availed of by the followers of all the religions and some of the earliest Brahmanical and Jain images were manufactured here in a peculiarly attractive and playful though sensuous art. From Mathura the Buddha image and some of the Hellenistic motifs travelled further to the east and south and even to the distant Buddhist school of the lower Krishna valley as at Amravati, Nagarjunikonda and other places. By the fourth century A.D. the Hellenistic element in native art was, however, completely absorbed when under the stimulus of the Gupta Empire it reached its golden age.

THE GUPTA AGE

The rise of the Gupta dynasty early in the fourth century was a signal for the high water mark of Hindu achievement in literature, art and sculpture.

The best sculpture of this period has been found in Sarnath, Muttra, Deogarh and Garhwa in the United Provinces, while examples of terracotta and minor arts have been found in all the excavations in the North. Sarnath, where Buddhism first saw the light of day, was the most prosperous centre of Buddhism at this time and, significantly enough, is the centre of a Buddhist revival in India, the Mulagandhakuti vihara founded here by the Mahabodhi Society, having received from the Government of India three Buddhist relics recovered from excavations at Nagarjunikonda in Madras, Mirpurkhas in Sind and Taxila in West Punjab.

In the field of religion the Brahmanical faith was steadily in the ascendency while Buddhism still held its own, the intellectualism of the age finding expression in a broad spirit of tolerance. Simplicity of conception and restrained ornament is the keynote of the architecture of this period, examples of which are found at Sanchi, Bhumara, and Deogarh in stone and Bhitargaon, Ahichchhatra and other places in brick. A well known monument of the Gupta period is the iron pillar standing in the middle of the open court of the mosque near the Qutb Minar near Delhi, which has an inscription referring to King Chandra (identified with Chandragupta II) *circa* A.D. 379-413. It is wonderful to find that a bar of wrought iron of such dimension should have been made at this early period and still more surprising that not a speck of rust appears anywhere on it in spite of the weather action of 15 centuries. Other interesting examples of wrought iron are the beams from Konarak, 12th century, and the iron pillar at Dhar, C.I., dating back to the time of the Paramara King Bhoja early 11th century.

INSCRIPTIONS

We now come to inscriptions, of which vast numbers have been brought to light and which are particularly numerous in South India. They have been engraved on varieties of materials, but principally on stone and copper. The former are mostly associated with temples of which they record the construction or donations, while the copper plate records are usually grants of land made by kings on special occasions. In either case, the mention of the exploits of the donor and his ancestors and the dates (where specified) give the student of history, valuable contemporary material.

The earliest of these are found incised in two distinct kinds of alphabet, known as Brahmi and Kharoshthi, the latter being confined to the north-west. Brahmi was read from left to right, and from it have been evolved all the modern vernacular scripts of India. The Kharoshthi script was written from right to left, and was a modified form of the ancient Aramaic alphabet introduced into the north-west during the period of the Persian domination in the 5th century B.C. It was prevalent up to the 4th century A.D., and was supplanted by the Brahmi.

The earliest dateable inscriptions are the celebrated edicts of Asoka to which a reference has been made above. One group of this has been engraved on rocks, and another on pillars. They have been found from Shahbazgarhi 40 miles north-east of Peshawar to Nigliva in the Nepal Tarai, from Girnar in Kathiawar to Dhauli in Orissa, from Kalsi in the Lower Himalayas to Jonnagiri in Madras showing by the way the vast extent of territory held by him.

The reference in his Rock Edicts to the five contemporary Greek Princes, Antiochus II of Syria, Ptolemy Philadelphus, and so forth is exceedingly interesting, and fixes B.C. 269 as the date of his coronation. His Rummindei pillar inscription, again, discovered in Nepal Tarai, now settles beyond all doubt, the birth-place of Buddha which was for long disputed. Another noteworthy record is the inscription of the Besnagar Pillar, at Besnagar, near Bhilsa, C.I., which records the erection of this column, which was a Garuda Pillar, in honour of the god Vasudeva by one Heliodoros, son of Dion, an envoy of King Antialkidas of Taxila. Heliodoros is herein called a *Bhagavata* which shows that though a Greek he had become a Hindu and a Vaishnava. Another inscription worth noticing in this connection is that of Cave No. 10 at Nasik, in which Ushavadata, who calls himself a Saka or an Indo-Scythian, granted three hundred thousand kine and sixteen villages to gods and Brahmans and annually fed one hundred thousand Brahmans. Here is another instance of a foreigner having embraced Hinduism.

The part played by Numismatics in reconstructing the continent's ancient history may also here be mentioned. The earliest coins are those of the silver punch-marked series, going back at least to the 4th century B.C., and found all over the land in large hoards, which are still being systematically studied. Next come the cast coins issued by almost all the tribes and rulers of the North. For the Indo-Greek, Indo-Scythian and Indo-Parthian periods, coins are our almost exclusive source of information, having revealed the names of scores of rulers, otherwise unknown. The entire genealogy, succession and regnal years of the kings of Kathiawar and surrounding territories, known as the Western Kshatrapas (2nd to 4th centuries A.D.) has been built up on the numerous coins issued by them.

ARCHÆOLOGICAL DEPARTMENT

The work of the Archæological Department is primarily twofold, conservation, and research and exploration. None but spasmodic efforts appear to have been made by Government in these directions till 1870 when they established the Archæological Survey of India and entrusted it to General (afterwards Sir) Alexander Cunningham, who was also the first Director-General of Archæology. The first systematic step towards recognising official responsibility in conservation matters was taken by Lord Curzon's Government who established most of the Archæological Circles that now obtain, placed them on a permanent footing and united them together under the control of a Director-General, provision being also made for subsidising local Governments out of imperial funds, when necessary. The Ancient Monuments Preservation Act was passed for the protection of historic monuments and relics especially in private possession and also for State control over the excavation of ancient sites and traffic in antiquities.

Under the direction of Sir John Marshall, Kt., C.I.E., late Director-General of Archæology, a comprehensive and systematic campaign of repair and excavation was prosecuted and at present the Central Governments bear all expenditure in connection with the preservation and maintenance of monuments, as well as with excavation and research. Under later Directors-General it was continued with equal vigour and the result of it is manifest in the present altered conditions of many old and historic buildings and in the scientific excavation of buried sites such as Taxila, Pataliputra, Sanchi in the Bhopal State, Sarnath near Benares, Nalanda in Bihar, Pahar-

pur in Bengal and Nagarjunikonda in Madras, and in the Indus Valley at Harappa in West Punjab and Mohenjo-daro in Sind. The last systematic excavations were those at Ramnagar (ancient Ahichchhatra) in Bareilly District, U.P., where an extensive walled town inhabited from before the fourth century B.C. to the ninth century A.D. has been unearthed stratum by stratum with far-reaching results for the study of archæology throughout the sub-continent's age-long history. The present Director-General, Dr. R. E. Mortimer Wheeler (India) opened an excavation training centre at Taxila in 1944, where a large number of students were trained in the latest methods of archæological excavation. He has also carried out excavations at the ancient port of Arikamadu near Pondicherry, which have yielded vestiges of Roman intercourse and have thus helped in the dating of an associated Indian culture of the 1st and 2nd centuries A.D.

Museums—The Archæological Survey of undivided India has devoted great attention to the organization of museums as centres of research and education. It maintains the archæological section of the Indian Museum at Calcutta, small museums at the Forts at Delhi and Lahore, and at the Taj, and the Central Asian Antiquities Museum at New Delhi. Local museums have also been established at the excavated sites of Taxila, Sarnath, Nalanda, Mohenjo-daro and Harappa with the object of keeping the principal movable antiquities recovered at these sites in close association with the structural remains to which they belong.

Duplicates of antiquities from Mohenjo-daro and Harappa have, however, been widely distributed among other museums.

The epigraphical material dealt with by the Archæological Survey has enabled the history of the various dynasties of undivided India to be established on a firmer basis and in greater detail. The "Epigraphia Indica" is now in the 26th volume, a revised edition of the Asoka inscriptions has been recently published, while the companion volume of post Asokan Brahmi inscriptions is under preparation along with two others devoted to the records of the Gupta and Kalachuri epochs. The volume of work done in South India, which is particularly rich in lithic records, will be apparent from the fact that over 20,000 inscriptions have been copied and noticed in the Annual Reports on South Indian epigraphy and a large number published *in extenso*.

THE STATES

The example of the Dominion has stimulated several of the progressive States to create their own Archæological Departments. Prominent among these must be mentioned Hyderabad, Mysore, Gwalior, Baroda and Jaipur. In Hyderabad the systematic and scientific treatment of the frescoes at Ajanta is an outstanding achievement of the Archæological Department of the State. Besides this, attention has been devoted to the rock cut temples at Ellora and many other structural temples. Among the Islamic monuments the great mosque of Gulbarga and the Bahamani mosque at Bidar have been fully conserved. Of late, systematic excavation of ancient sites as at Maski and Paithan has been a regular feature of the Department's work the latest excavations at the Andhra city site of Kondapur and at Kallur in Raichur being fraught with results of immense importance.

The Mysore Archæological Department has nearly completed half a century of its existence. The first Director, Mr. B. L. Rice, published some 10,000 inscriptions in 12 volumes of the Epigraphia Karnatica. This progress has been well maintained, and the conservation work has rescued many famous temples, such as the Kesava temple at Somanathpur, and the temples at Belur and Halebid. Excavations conducted at Chandravalli and Brahmagiri have been very fruitful.

In Gwalior the Department established in 1913 has done excellent work in exploration of ancient sites, such as Pawaya, Ujjain, Besnagar and Mandasor. The conservation of the Bagh caves and other ancient monuments and the maintenance of a good museum are among the other achievements of the Department.

In Jaipur excavations initiated by the late Rai Bahadur Daya Ram Sahni have revealed the existence of a unique Buddhist establishment at Bairat and a city site near the Sambhar lake. The excavations at Rairh, an ancient commercial and industrial mart, have brought to light large hoards of punch-marked and other coins of early date, and the work now started at the great site of Karkotanagar bids fair to assume great importance.

The recently started Archæological Department of the Baroda State has done valuable work in the listing of monuments and the exploration of several sites including Amreli in Kathiawar and Pattan in Gujarat.

Indore, Mayurbhanj, Travancore, Jodhpur, Kashmir, Pudukkottai, Patna, Rewah, Cochin and Rajpipla are some of the other States that maintain Archæological Department of their own.

The recently amended Ancient Monuments Preservation Act has established a system of licenses for scientific excavations to non-official bodies. The first Society to take part in this work was the American School of India and Iranian Studies which, co-operating with the Boston Museum of Fine Arts, organized an expedition for work in Chanhudaro in Sind in 1936. Here several phases of the pre-historic culture of the Indus Valley represented by Harappa were unearthed. Unfortunately the work was discontinued after the first season. The University of Calcutta have conducted excavations at Bangarh in North Bengal for a number of years with success and the Punjab Exploration Fund have done work at the site of Bhera in the District of Punjab.

Architecture

THE first comprehensive work, accessible to lay readers, to give a history of styles in architecture in the Indian sub-continent is Mr. Percy Brown's *Indian Architecture* in two volumes which marks a definite advance in the treatment of the subject over Fergusson's *Indian and Eastern Architecture* which, for many years, was considered to be the standard work.

The chief characteristics of our architecture, especially in its later stone phase, are (*a*) its use of heavy masses; (*b*) construction based on vertical not lateral pressure, *i.e.* without true arches or true domes; (*c*) its plastic treatment and close relationship with sculpture, (*d*) its undeveloped treatment of space and (*e*) its spiritual significance and symbolism.

Hindu Styles—In Harappa and Mohenjo-daro and other sites of the Indus valley extensive cities have been discovered under the mud and sand of the river. These cities were built from c. 3000—2000 B.C. by a people whose chief occupation was trading. The buildings, which are carried out in brick in "English bond", are plain, functional and without great artistic merit. They are mainly houses, store houses, baths and wells and no certain traces of temples or palaces have yet been found. The city drainage system was perfect. The corbelled arch was used, the true arch being unknown.

With the invasion of the Aryan tribes a new architecture came into existence which, originating from the village, developed into the city and palace architecture of the epic period. Wood being the only building material, hardly any visible traces of this period exist. The main forms were the long house with a vaulted roof constructed with bamboo or reed and with horse-shoe shaped "sun windows" on either end; circular village huts (and perhaps shrines) and the wooden fence with wooden "cowgates". In the South are found "dolmens" covered with a single slab of stone, and in Rajgriha, the ancient capital of Maghada, cyclopean fortifications in stone were carried to a height of 12 feet.

With the establishment of a large political power under Asoka the use of a more permanent stone architecture was gradually introduced. Monuments of this period include (*a*) 13 monolithic edict pillars, some with beautifully carved animal figures on bell shaped capitals (Persian influence); (*b*) remains of a large, three storied wooden palace near Patna supported on stone pillars; (*c*) several *stupas* or Buddhist relic mounds built largely in brick and (*d*) a group of rock-cut caves in the Barabar Hills in Bihar.

Buddhist Styles—During almost four centuries, from 200 B.C. to 200 A.D., under two great dynasties, the Sungas of the North and the Andhras of the South, Buddhist zeal gave us some of our most remarkable monuments. In this period the *stupas* are stonefaced, with a stone casket and umbrella on top, surrounded by stone railings in which are set four doorways or *toranas*. All forms though carried out in stone, betray their wooden origin. Sculpture and relief are used profusely to decorate the sacred shrines. The most famous *stupas* are those of Sanchi (Bhopal State), Barhut (C.I.), Budh Gaya, Sarnath and Amaravati in Madras Presidency which is the latest and most elaborate one.

To serve priests, monks and lay worshippers, temples and monasteries were built, mainly in brick and wood. Little of these has survived but their exact replicas have come to us, carved from solid rock in the shape of cave temples and monasteries; the largest caves (Karli, 124 ft. long 46½ ft. wide and 45 ft. high) reach considerable proportions.

Buddhist caves are generally of two types—*chaityas* or chapels, and *viharas* or monasteries. The *chaityas* are long apsidal buildings with a vaulted roof and a horse-shoe window over the entrance. The interior is divided into a nave for the priests and aisles for the lay worshippers by means of a double row of pillars. At the apsidal end is a *stupa*. *Viharas* are rectangular halls surrounded by cells and having (in a later development) a sanctum in the centre of the backwall containing a Buddha image. The most important groups of caves of this period are those of Bhaja, Kondane, Pitalkhora, Bedsa, Nasik, Ajanta, Ellora, Junnar and Kanheri, all in Western India.

During the Gupta age (c. 350—650 A.D.) a flood of creative energy swept over India. It is during this period that the later Hindu temple begins to take shape. Wood architecture is gradually replaced by stone masonry. Builders used the simple construction of pillar and bracket supporting beams. Arches, except corbelled arches, were not used. Pillars and beams are, preferably, monolithic i.e., made from single large slabs of stone. Masonry consists of large, very well worked stones bonded without mortar.

The reawakening of Brahmin culture soon developed its own forms for houses of worship. Typical of the age are flat roofed temples consisting of a square sanctum with a pillared porch. They are found in Udaygiri (Bhopal) Sanchi, Tigowa, Bhumara and Nachna Kuthara (C.I.) and in Aihole (Lad Khan Temple). Some have another cell on the roof which may mark the first beginnings of the *shikhara*. In the Ganges valley originates a form of brick temple consisting of a square shrine with a pyramidal roof which is made up by duplicating the roof twice or repeatedly (Bhitargaon near Cawnpore). The northern temples have pillars with bell-shaped capitals or with "vase and flower" capitals, the Deccan temples use square pilasters with heavy brackets.

Temples—During the 200 years from 600 to 800 A.D. the medieval temple is established in its main forms and styles. The typical temple consists of a cell which houses the image (*Garbha Graha*—womb-house), and a pillared hall (*mandap*). Originally not connected, these two parts were joined by an intermediate chamber (*antarala*). Leading into the main hall are one or several porches (*ardhi-mandap*). The cell is surmounted by a *shikhara* (spire or pyramidal roof) which is the main distinguishing mark of temple styles. The whole temple may be raised on a platform and be surrounded by an enclosure through which leads a gateway (*gopuram*).

At Bhuvaneshvar in Orissa, the northern style unfolds in many beautiful temples (from 750 A.D.). The rock-cut temples of the "seven pagodas" at Mahavalipuram near Madras, excavated by the Pallavas of the 7th century, show how the earliest southern temples grow out of common forms of preceding times; the house, the village shrine, the Buddhist *chaitya* and the many-storyed Buddhist monastery. Under the Rastrakuta family which overwhelmed the Chalukyans in Western India during the 8th century, rock-cut caves and temples, Shaiva in character, were excavated in Elephanta and Ellora (Deccan). The Kailasanath temple of Ellora is a complete Dravidian structural temple carved in solid rock.

The time from the 8th to the 13th century is the great age of temple-building in India. The three main styles are now clearly differentiated, the northern or Indo-Aryan style emphasising the perpendicular, the southern or Dravidian style stressing the horizontal, while the Chalukyan or western style combines elements of both. Apart from Bhuvaneshvar in Orissa, the northern style comes into full flower in Khajuraho in Bundelkand, in Rajputana (Mount Abu), Gujarat (Modhera), Osia in Marwar, in the Deccan (Ambarnath) and many other places.

In the south, temple architecture develops independently through its successive phases. Typical of the southern temple is the addition of spreading pillared halls and long covered corridors. The temple compound expands into a whole complex of buildings surrounded by large walls. The entrance gates are marked by impressive pyramidal towers (*gopurams*) which grow larger in time and far exceed the *vimana* in size. Famous Dravidian temples, in their order of origin, are the Kailasanath of Conjeeveram, the great temple of Tanjore, the Vithala temple of Vijayanagar and the Meenakshi temple of Madura.

Indo-Saracenic Architecture—This begins with the 13th century after the permanent occupation of the Muslims. Their first mosques were constructed of the materials of Hindu and Jaina temples, and sometimes with comparatively slight alterations. *The Quwwat-ul-Islam* mosque near the Qutb Minar in Delhi and the *Arhai-din-ka-jhompra* mosque in Ajmer are the best examples of this kind. Gradually new methods and principles of construction were introduced from Persia and other Islamic countries of the West. The Muslims brought the arch and the true dome, they used mortar (which became necessary because of the lateral pressure exercised by arches) and they introduced novel types of buildings (the mosque and the tomb). They laid greater emphasis on the perfection and the proportions of interior spaces than the temple builders who did not require lofty spaces.

The early Pathan architecture of Delhi was massive and at the same time characterised by elaborate richness of ornamentation. The Qutb Minar and the tombs of Iltitmish and Ala-ud-din Khilji are typical examples. The tomb of Ghiasuddin Tughlak at Tughlakabad, the Lodi tombs, and lastly the tomb of Sher Shah at Sasaram in Bihar clearly illustrate the subsequent progress of Pathan architecture.

The Rulers of the Bahmani dynasty of Gulbarga and Bidar were great builders, and adorned their capitals with important buildings. The most striking of these is the great mosque of Gulbarga, which differs from all mosques in the country in having the whole central area covered over so that what in others would be an open court is here roofed by sixty-three small domes.

"Of the various forms which the Saracenic architecture assumed," says Fergusson, "that of Ahmedabad may probably be considered to be the most elegant." It is notable for its carved stone work; and the work of the perforated stone windows in Sidi Sayyid's mosque, the carved niches of the minars of many other mosques, the sculptured *Mihrabs* and domed and panelled roofs is so exquisite that it will rival anything of the sort executed elsewhere at any period. No other style is so essentially Hindu.

In complete contrast with this was the form of architecture employed by the Adil Shahi dynasty of Bijapur. There is here relatively little trace of Hindu forms or details. The principal buildings now left at Bijapur are the Jami Masjid, Gagan Mahal, Mihtari Mahal, Ibrahim Rauza and Mosque and the Gol Gumbaz. The latter is supposed to have the largest dome in existence.

Like their predecessors, the Pathans of Delhi, the Moghuls were a great building race. Their style first began to evolve itself during the reign of Akbar in a combination of Hindu and Mohammedan features. Noteworthy among the Emperor's buildings are the tomb of Humayun, and the palaces at Fatehpur Sikri and Agra. Of Jehangir's time his tomb at Lahore and the tomb of Itimad-ud-daula at Agra are the most typical structures. The force and originality of the style gave way under Shah Jahan to a delicate elegance and refinement of detail and it was during his reign that the luxurious buildings in the forts at Delhi and Agra and the most splendid of the Moghul tombs, the Taj Mahal at Agra, the tomb of his wife Mumtaz Mahal, were constructed. The Moti Masjid in Agra Fort is another surpassingly pure and elegant monument of his time.

Modern Architecture—With the arrival of Europeans western styles of architecture were soon introduced. The Portuguese built churches and palaces in an agreeable baroque style. The early British colonial style of which many pleasant examples survive, especially in South India, was appealing in its simplicity and its clever adaptation to the local climate. During the 19th century public buildings were erected in a hybrid style composed of classic, romanesque, Gothic and Indian elements comparable with the derivative styles of the Victorian epoch, in Europe. In more recent times, two schools of thought have fought for supremacy; the one propagating a revival of indigenous art as still practised by Hindu and Muslim "master builders" surviving in Rajputana and other parts of the country; the other proclaiming the development of a modern architecture on western lines. The western school has found more widespread acceptance. The work of building the new capital in Delhi was entrusted to Sir Edwin Lutyens and Sir Herbert Baker. This most ambitious scheme, incorporating the design and planning of a whole new city, has led to a new style of official architecture, the merit of which is still a controversial question. The contemporary use of reinforced concrete structures, though indubitably cheaper, safer and faster, emphasises the dangers of standardisation and suppression of national character. The solution to the problem will have to be found by a young generation of architects who, while fully trained in modern methods of construction, are yet conscious of the glorious artistic heritage of their country.

A School of Architecture, recognised by the R.I.B.A., is part of the Sir J. J. School of Arts in Bombay. Its professors of Architecture since 1913 were R. W. Cable, H. Foster King and Claude Batley. The present Professor of Architecture is Mr. C. M. Master, M.A., F.R.I.B.A., The Indian Institute of Architects, affiliated to the Royal Institute of British Architects in 1925, co-operate with the R.I.B.A. in conducting the Final R.I.B.A. Examinations in Bombay.

Literature

Modern Indian Literature

INDIA (meaning India and Pakistan) achieved her political freedom on 15th August 1947.

But she had attained her intellectual independence many years earlier. For on the day she began to react *creatively* to the impact of the West, she not only re-claimed her ancient cultural heritage but also commenced enriching it with further fresh contributions. Roughly speaking, this came to pass towards the end of the last century. Till then the principal Indian Literatures—Assamese, Bengali, Gujarati, Hindi, Kannada, Marathi, Malayalam, Maithili, Oriya, Punjabi, Tamil, Telugu, Sindhi, Urdu—which are some of the windows to the indigenous mind, more or less were either in the stage of imitation of the thought of the West *via* English literature or on the defensive. Then followed a period of assimilation and re-creation, which received a much-needed impetus during the twenties of the present century. The Indian literatures, therefore, are to-day in spring, though in the words of Dr. Grierson it must be said that "whether the nation has made the literature, or the literature the nation, I know not."

The common characteristics of present-day literary aspiration and activity in India in the main are two; namely, an attitude of realism and an angle of world-vision as against narrow nationalism and cloud-capped idealism of the immediate past. The result is a kind of scientific humanism. Man is the hub of the universe, but man as understood with the aid of the scientist's gospel and gadgets. But soon the study of man in all his integralness, including his entity as Spirit, will become the aim of Indian literature, thus falling into line with the age-long tradition.

In this bird's-eye view of current Indian literatures only names of important authors and here and there of their well-known works can be given. And this is all that is attempted here together with an indication of the trend towards the future of the Indian literatures.

Modern **Assamese literature** dates back to the publication of *Jonaki* (Moonlight), a monthly magazine, published in 1899, and conducted by Lakshminath Bez Baruah, Chandrakumar Agarwalla and Hemchandra Goswami. This trio essayed in every branch of literature and soon others followed: poets like Kamalakanta, Ambikagiri and Nalinibala Devi; novelists like Rajanikanta, Padmanath Gohain Barooah, Saratchandra Goswami, Paziruddin Ahmed and Moulvi Mafizuddin Hazarika; and research scholars like Dr. S. K. Bhuyan, Dimbeshvar Neog, Kaliram Medhi and Birinchi Kumar Barua.

Bengali literature came into its own during the time of Raja Ram Mohan Roy. Then came the poet Michael Madhusudan Datta, the novelist Bankimchandra and the many-sided genius Rabindranath, Satyendranath Dutta, Sarat Chandra Chatterji,—the prince among story-writers,—Kazi Nazarul Islam,—the poet of the people,—and Mir Masharaff Hossain, Latfur Rahman and Begum Rokaya among young Muslim writers, Ramananda Chatterji and Pramatha Chaudhuri, Gokul Nag, Premendra Mitra, Jibananda Das, Buddhadeva Bose, Achintya Sengupta, Annada Sankar Ray, Bishnu De, Manik Bandhopadhaya, "Banaphul," Bibhutibhushan Bandopadhaya, Tarasankar Bandyopadhaya, Sailajananda Mukhopadhayal Sudhindra Datta and Prabodhkumar Sanyar among young Hindu writers.

Mahatma Gandhi—Narmadashanker is the parent of present-day **Gujarati literature.** He was succeeded by Dalpatram Mahipatram, Nandashanker Ranchhodbhai and Mansukhram. Then appeared the Bombay University group of scholars: Govardhanram, Manilal, Narasinharao, Keshavlal, Ramanbhai, Manishanker, "Kalapi," Anandshanker and Balwantrai. Keshavlal Dhruva's translations of Sanskrit classics, critical studies, Ramanbhai's *Bhadram Bhadra* and *Karita ane Sahitya*, Govardhanram's *Saraswati Chandra*, Kalapi's *Kekarava*, Balwantrai's *Prithvi Chhanda*, Khabardar's *Kalika* are considered milestones. This group passed on the torch to Kavi Nanalal and Kanaiyalal Munshi, when there appeared on the scene Mahatma Gandhi whose contribution to Gujarati literature is at once voluminous, varied and vital. In his wake have come Kaka Kalelkar, Ramnarayan Pathak, Gaurishankar Joshi, Ramanlal Desai, Jhaverchand Meghani, Krishnalal Jhaveri, Sundaram, Umashankar Joshi, Chandravadan Mehta and lady-writers like Vidyagauri, Sumati Trivedi, Dipika Desai, Jyotsna Shukla, Lilavati Munshi and Hansa Mehta.

The **Hindi literature** of today can be traced back to Bharatendu Harishchandra and to Nagari Pracharini Sabha which developed

Khari Boli literature in all its variety, under the guidance of Pandit Mahabir Prasad Dwivedi. A band of poets then sprang into being: Ayodhyasingh Upadhyaya whose *Priya Praras* is a classic, Maithili Sharan Gupta of *Bharat Bharati* fame, Nathuram Shanker Sharma, Rai Devi Prasad Purna and Kampta Prasad Guru. The coming of Munshi Premchand opened the floodgates of fiction-writing. His *Godan*, *Karmabhumi* and *Sevasadan* have been the enjoyment and inspiration of many. He was followed by Jeyanandra Kumar, Bhagwati Charan Verma, Brindaban Lal, Kaushik, S. H. Vatsayana and several others. A school of critics also came into existence, led by Pandit Ram Chandra Shukla, Pandit Hazari Prasad Dwivedi and Mata Prasad Gupta. Shri Jaya Shanker Prasad, Pandit Sumitra Nandan Pant and Shrimati Mahadevi Verma are the mystical poets whose *Kamayani*, *Pallava* and *Yama* are highlights. The drama had its exponents in Madhava Shukla, Makhanalal Chaturvedi, Govind Ballabha Pant, Laxminarain Misra and Upendranath "Ashk."

"The aesthetic crystallisation of the new consciousness in **Kannada literature**" took place, it is said, in *Ramashwamedha* of Muddana. It was canalized by Karibasava Shastry, Santa Kavi, Panje Mangesharao, B. Venkatachar and V. T. Galaganath and others. Devadu Hoyasala, B. S. Mandala, Karanth and Rajaratnam have appreciatively contributed to children's literature B. M. Srikantia, D. V. Gundappa and Masti Venkantesa Iyengar are some of the other pillars of the pantheon. The "wizard" is D. R. Bendre, followed by Sali Khanolkar, K. V. Puttappa, V. Sitaramiah, V. K. Gokak, P. Sadasiva Rao, R. S. Mugali and others. Among the novelists there are A. N. Krishna Rao, Kerur and N. K. Kulkarni; among the short story writers, K. Betigeri and Gopala Krishna Rao; among the dramatists, T. P. Kailasam and R. V. Jagirdar; and among the women writers there are Mrs. Gouramma, Kalyanamma, Shyamala.

A Turning Point—Mahamahopadhyayas Muralidhara Jha, Parameshwara Jha, Ganganath Jha, Madhusudana Jha and Ramachandra Mishra are the inaugurators of the modern **Maithili literature.** Among the leading writers are the poets Bhanuhatha Jha, Bhola Jha, Munshi Raghunathdanadasa, Acyutanandadatta and Sitaram Jha; dramatists Ishanatha Jha and Tantranath Jha; novelists Kashinath Jha and Gangananda Sinha; and women-writers Arundhati Devi, Harilata and Yoganaya.

"The *Gitanjali* of Rabindranath Tagore was the turning-point in the history of contemporary **Malayalam** poetry," says an eminent scholar. The death of Kerala Varma Valia Koil Thampuran, the acknowledged king in the literary domain in 1914 was the beginning of the present renaissance, to the ushering in of which Vallathol, Ullur S. Parameshwara Aiyer, Nalapat Narayana Menon, K. M. Panikkar, Krishnan Tampi, C. V. Raman Pillai, T. M. Appu Nedungadi, Sankara Pillai, Hari Sharma and Dr. C. Kunhan Raja have contributed a good deal.

In modern **Marathi literature** after the stalwarts, Chiplunkar, Tilak and Agarkar, the names of writers to be conjured with are Hari Narayan Apte, Keshavsuta, S. M. Paranjape, N. C. Kelkar, Phadke, Sane Guruji, Khadilkar, P. K. Atre, V. M. Joshi, Gadkari and T. M. Patwardhan.

To Radhanath Rai, Fakir Mohan Senapati and Madhusadan goes the credit of creating the modern **Oriya literature.** They have been succeeded by a chain of writers: Gangadhar Meher, Ram Shankar Rai, Nandakishore Bal, Pandit Gopabandhu, Sri Padma Charan, Nilakantha Das, Gopal Chandra Praharaj, Godavarish Mahapatra, Kuntala Kumari Devi and Kanhu Charan—poets, essayists and story-writers.

The **Punjabi literature** of to-day is dominated by the personality and performance of Bhai Vir Singh, who has been ably assisted by Mohan Singh Vaidya in the work of "revival." Dhani Ram Chatrak, Puransingh, Charan Singh, I. C. Nanda, young Mohan Singh, Amrita Pritam, Nanak Singh, Joshua Fazal Din and Gurbux Singh constitute the present shining ranks of writers.

In **Sindhi literature** the school of writers preceding the present one was a creation of Dayaram Gidumal, Nirmaldas Fatehchand, Kalich Beg Mirza, Allah Bakhsh Abojho, Permananda Mewaram and Kouromal Chandanmal. Among the writers who hold public attention these days are Kishinchand Bewas, Hyder Bakhsh Jatoti, Akbar Ali Ayaz, Bhurumal Mahirchand, Jethmal Parsram, Lalchand Jagtiani, Ansari, Ram Punjwani, Narain Malkani, Nanki Gidwani and Guli Sadarangani.

The Future—Modern **Tamil literature** has been usually divided into three sections: the era of origin, the era of Bharathi and the era of Gandhiji. Arumuga Navalar of Jaffna was a pioneer in simple prose style. Subramania Bharati was a poet and translator. Kavi Ramalingam, Shuddhananda Bharati, T. S. Chokkalingam and R. Krishnamurti are among the prominent writers of the Gandhian era, while among the wome writers *mention* must be made of V. M. Kothanayagi Ammal, Swarnambal Subramaniam and Ambujammal. P. Sambanda Mudaliar, Rajam Iyer, "S.V.V.," "Va Ra" are leading dramatists and story-writers.

Veeresalingam, Chilakarmarti Lakshminarasimham and Guruzada Appa are the fathers of **Telugu literature** in the twentieth century. They were followed by Gidugu Ramamurti Pantulu, Venkata Parvatisvara Kavulu, Tallavajjhula Sivasankara Sastry, Vajjhababu, Nori, Chinta, R. V. M. G. Ramarau Bhadur, Gadiyaram Venkata Sesha Sastri, author of *Siva Bharatamu* and Dr. C Narayana Rao.

Modern **Urdu literature**, before Iqbal was dominated by Sir Syed Ahmed, Shibli and Hali. They have been succeeded by Abul Kalam Azad, Syed Sulaiman Nadvi and Mohammad Ali as well as by Sh. Abdul Qadir, Qazi Abdul Ghaffar and Sajjad Hyder. *Ghazal* has been developed intensively during this period. The other writers who deserve a mention are Bedi, Josh, Krishna Chandra Akhtar, Ansari, Sharar, Hasrat, Fani, Asghar and Jigar.

The recent political changes in the country have for the present deprived Urdu of one of its ancient homes, as they have Punjabi. Its emergence in "pastures new," as that of Punjabi, will be watched with anxious interest, just as the future of English as a medium of literary expression will be, though the writings in this language of Sri Aurobindo Ghosh, Rabindranath Tagore, Sarojini Naidu, Gandhiji and Radhakrishnan will continue to spur many of the educated people to employ this medium at least for a generation more to come.

A word about **Sanskrit literature.** It is not "dead," as is wrongly supposed so often. Not only does it continue to function as the fountain-head of inspiration to almost all the Indian languages, but also in the critically edited editions of classics as well as in several original works.

Whither Indian literature? With an answer to this question this brief survey may be concluded. It is at the threshold of still greater achievements inasmuch as freedom brings out the best in the people and their artists and authors. Add to it the expected redistribution of the Provinces on a linguistic basis, which is bound to give a great fillip to further and fuller growth in each of the literatures. But there is also a danger in this, a note of warning against which must be sounded—the danger of decentralization resulting in a narrowing down of the all-India angle of vision and attitude, on the one hand, and of world loyalty on the other. Prudence lies, however, in co-operating with the evolutionary spirit which is steadily moving towards one world, one religion, one people, one philosophy of life.

Aspects of Indo-Anglican Literature

An Indian writing in English starts off with a crushing handicap. He has to attain a certain degree of mastery over the medium before proceeding to use it as a vehicle for self-expression at the level of literature. Now it is true that Indians have scored certain remarkable triumphs in their use of the English language. Some have used it with great precision and clarity as, for instance, Mahatma Gandhi. Others speaking in English have reached remarkable heights of eloquence—Gokhale or Bulabhai Desai in the latter days of his career. Yet others have been able to acquire a manner of writing whose rhythms are indistinguishable from those of an Englishman's English—G. K. Chettur, for instance, who had a true feeling for the English language, or V. S. Shrinivasa Shastri whose expression was always lucid, idiomatic and absolutely correct according to the best English standards. Finally, there are those like Pandit Jawaharlal Nehru, who for expressiveness or animation or range of subject-matter challenge comparison with the best work that is produced in England or other English-speaking countries.

But there is something which escapes even the best-schooled and the most sensitive among the writers, something which makes the higher branches of Indo-Anglican writing seem hollow and unreal. The truth is that while control over English for purposes of law or political and social discussion may come easily to the foreigner, control over English for purposes of self-expression at the highest level is a much more difficult achievement. This is just the reason why Indians writing in English have made a better showing in the literature of political, legal or general discussion than in literature properly so-called such as poetry, drama, fiction, essay or criticism.

POETRY

In poetry, for instance, which is the quintessence of literature, a great deal of early Indo-Anglican effort appeared quite stale and flat. Indeed here we come upon yet another obstacle which Indo-Anglicans have had to overcome in their struggle for creative expression. For not only was the medium in which the poet was trying to express himself foreign but the very sources from which he drew his inspiration were also strange and alien. A great many Indo-Anglicans knew little about the tradition in which they were born and their ancient culture and heritage. The history which they learnt at school was English history. The literature which fed their imagination was English literature. In fact much of the passion of young India for education was focussed in exuberant enthusiasm around English language and literature. Young Tamils and Punjabis, Bombay Parsis and Calcutta Babus drunk in fascination at the fount of English literature. They who had never heard an English skylark sing over an English meadow wrote whole essays on Shelley's *Ode to the Skylark*. In the hot aridity of an Indian summer, they puzzled over Keats's exact meaning when he called autumn a season of *mists* and *mellow fruitfulness*. The result was that when later they felt the need for self-expression themselves it was to the sights, the smells and the sounds of the English countryside that they turned for inspiration. Early Indo-Anglican writing was full of the song of the nightingale, the smell of the musk-rose, the beauty of the English spring or the bleakness of the English winter. The result was pure disaster for Indo-Anglian poetry. Neither in India nor in England did it carry any special appeal. To the Indian the verses seemed unreal, while to the Englishman they seemed at best like clever machine-made imitations of English classics. Not even such a gifted poet as Mrs. Sarojini Naidu succeeded in making robins and skylarks seem authentic. Everyone knows the advice which the famous English critic Edmund Gosse gave her "....write no more about robins and skylarks....set your poems firmly among the mountains, the gardens, the temples ....introduce to us the vivid populations of your own voluptuous and unfamiliar province ... In other words be a genuine Indian poet of the Deccan, not a clever machine-made imitator of the English classics." Mrs. Naidu promptly changed her tune and turned to such typical Indian figures as the corn-grinder, the palanquin bearer, the bangle-seller or such authentic Indian landscapes as the call of the bulbul from a

cassia plume, the song of the weaver at work at the loom, the voice of the shepherd gathering his flock under the pipal tree or the shout of the young Banjira woman driving her cattle across the fields. Here was Indo-Anglican poetry at its best—sweet, sensuous, sincere and unmistakably Indian.

Indeed Mrs. Naidu's success marked a turning point in the history of Indo-Anglican poetry. It taught other practitioners of the art where to look for inspiration if they were to produce any worthwhile stuff. They saw that all genuine poetry was rooted in the tradition in which the poet was born or in modes of thought and action which were common to all humanity such as love, faith, desire, devotion, self-sacrifice. Thus, to cite a few examples, we have G. K. Chettur writing about a temple-tank or the Bevunje waterfall, Sheshadri about champak leaves, or Joseph Furtardo about Brahmin girls. Best of all there is the example of Tagore himself describing a typical rustic scene such as a farm-labourer plodding along a dusty road to the market. In a different category there is once again G. K. Chettur celebrating the triumph of heavenly over earthly love, Armando Menezes pouring out the thoughts of an exile from his native Goa, or S. R. Donkerkery wondering where the secret of music lies. At a still higher level, we have the philosophical poetry of Aurobindo Ghosh, Sadhu Vaswani and J. Krishnamurthi describing the adventures of those who set out in quest of Truth, Beauty and Goodness.

LANGUAGE PROBLEM

The poets seemed to have solved their problem in regard to subject-matter. Thenceforward the subject of Indian poetry was to be wholly Indian—Indian people, Indian landscape, Indian mythology and Indian history, which were as rich a source of inspiration as the heritage of any other country. But the other difficulty, namely, the difficulty about language remained as acute as ever, retarding complete freedom of expression, inhibiting mental processes and generally introducing an element of unreality into the work of the Indo-Anglicans. The language problem was not, of course, peculiar to the poets: it was common to all practitioners of the art of literature—novelists, dramatists, essayists, short story writers as well as to poets. And unless the means were found of solving the language problem there was no chance of Indo-Anglican literature developing along healthy and vigorous lines. One suggestion was that Indians should evolve an English of their own. There was American English, Irish English, Welsh English. Why not, it was asked, Indian English? But then a further question arose: What is Indian English and exactly how does it differ from English English? Neither Raja Rao nor Mulk Raj Anand the two supporters of this theory clearly answered this question. Mulk Raj Anand wrote a pamphlet in which he hotly attacked English English under the name of King Emperor's English. But the kind of language in which he wrote the whole pamphlet did not seem very different from the kind of language which he was engaged in attacking at the moment. Indeed if one was to judge from the idiom which the other exponent of the theory used in his novel *Kanthapura* it would seem as though the new English consisted in little more than literal translation of Indian swear-words (son of a bitch, son of a widow) or Indian word groups (killing flies to mean whiling away time) into English. It was quite clear that the solution of the language problem did not lie along the lines suggested by Raja Rao or Mulk Raj Anand. It cannot for the simple reason that the real problem is of a totally different nature. This may be stated in some such way as this. How exactly are Indians to acquire with the greatest economy a thorough command of whatever sort of English it is that they wish to employ? One has merely to put the question in this way to realize that it is more concerned with methods of teaching than with the creation of a new species of language.

A second way in which the language problem has sometimes been met is through collaboration between an Indian and an Englishman. This has, on the whole, produced happier results though for obvious reasons it is not a solution which is frequently possible. Two examples of collaboration may be mentioned here. One is the autobiography of Mahatma Gandhi. The Mahatma himself has told his readers how the manuscript of his autobiography was touched up by his English disciple Miss Margaret Slade better known as Mira Ben. The Mahatma, of course, wrote in a language which was entirely adequate for his purpose. But surely something of the even flow and the quiet beauty of the narrative can be partially ascribed to Mira Ben's co-operation. The autobiography of Mahatma Gandhi cannot, of course, be regarded as a good example of collaboration since the parts played by Mahatma Gandhi and Mira Ben in the writing of it were very unequal. A better example of collaboration is afforded by Hilda Werner and Huthi Singh in their novel about Indian village life entitled *The Land and the Well*. Hilda Werner who is the principal author has lived in such a village as she describes in the book; but she wisely sought the assistance of an Indian collaborator to make her ground doubly sure. The result is an authentic and fascinating record of the hopes and fears, joys and tragedies of peasant life in a north Indian village.

FICTION

Turning to Indo-Anglican fiction we find that there are many failures but there is also a large measure of achievement. There are some Indian novelists who tend to fall between two stools. They aim to attract and please the English reader and at the same time to attract and please the Indian. This leads inevitably to inconsistencies. Mr. Hilton Brown (to whose work a great deal of the following sketch of the Indian novel is indebted) gave the Indo-Anglican novelists the same kind of advice as Edmund Gosse gave the Indo-Anglican poets. Mr. Hilton Brown told Indo-Anglican novelists that they would never do any good till they dropped the horrible habit of forcing Indian pictures into European frames, of distorting a Hindu story into the mould of the *Strand Magazine*. "Write well as an Indian," he said, "And Europeans will read you."

One of the difficulties of the Indian novelist is that in India sex does not make stories as in Europe. And if someone does try to compose love stories on Western lines he will be doomed to failure for he is at once introducing an unnatural and jarring element. If he is to succeed at all he must contrive as R. K. Narayan and K. Nagarajan have contrived to handle the love interest in the delicate, elusive, unsubstantial form. And if he cannot so contrive he must leave it out altogether. But then, if sex and love interest are to be barred what is left? Once again R. K. Narayan has pointed the way. The Indo-Anglican novelist must fall back, as Narayan has done, on the components which make up the social sketch or skit—such as family and social humours, life's daily business and mischiefs, the difficulties of political intercourse, the hopes and renunciations of youth, the clash of modernity on old established tradition. He could write about the arrangement for a marriage, the election to a municipal council or a deal in tamarind or betel-nut, a transaction in the black market—write in such a way as to elevate these commonplaces into literature. R. K. Narayan's *Bachelor of Arts*, for instance, contains no striking events. But it is a deft, vivid, truthful piece of writing for all that. It depends wholly on character and atmosphere. Its people are charming people and its picture of an Indian family is actually real. It does contain love interest, but the love interest is decidedly of the Indian brand. The first girl cannot even be spoken to and the final bride only gets the length of casting down her eyes. And indeed little more than that happens at all.

This type of novel is really an extension of social sketch. But then there is also the novel proper which describes the general doings of men and women over a period of time. A typical example is K. S. Venkataramani's *Murugan the Tiller* a novel which has fine descriptive power, a few great ideas and is thoroughly Indian. Another good example in this genre is K. Nagarajan's *Athawar House* which along with Raja Rao's *Kanthapura* and Ahmed Ali's *Twilight in Delhi* is the nearest thing to a full-dress novel Indo-Anglican literature has yet produced. *Athawar House* deals with the financial, matrimonial and social ups and downs of a Bhramin family. Its characters are sound and real, its episodes coherent and probable and its essence genuine.

Of late Indian novelists have inevitably turned to politics for ideas. The scope is wide enough. The escape of Subhas Chandra Bose, the I.N.A. movement, the Bengal famine, the Punjab upheaval and consequent mass migration or the British withdrawal from India should all prove to be a fruitful source of material for the fiction-writer. But so far the whole of this field remains unexplored with one notable exception—the Bengal famine which is the subject of a heart-rending novel entitled *So Many Hungers* by Bhabhani Bhattacharya.

Tagore has, of course, dealt with some of the political movements of his time in a story entitled *Four Chapters*, while in the most famous of his longer novels *Gora* he has given the reader a wonderful picture of the home life of Bengal and the changes which came over it during the last century. To give yet another example, A. Subramaniam has written a novel entitled *Indira Devi* in which he looks forward to 1951 when Indians and Europeans are found living side by side on the most intimate terms, and inter-marry quite naturally, and where barriers of all sorts have vanished with the years.

But the typical political novel at the moment is concerned with proletarian questions. Mulk Raj Anand, the author of *the Untouchable* and *the Coolie* is the best known representative. *The Coolie* which is the life-story of a young man from the hills who works successively as domestic servant, factory boy, mill-labourer and rickshaw-puller is in its fashion quite perfect. Mr. Anand writes of the working class not as so many proletarian writers do in a superior condescending fashion but with dignity and comradeship. There is not a single false note in this novel, no touch either of sentimentality or caricature. But there is no hiding the conviction that the social structure of India is thoroughly decadent, a natural result of the heartless behaviour of men to one another. Mr. Anand pleads for greater joy in life and more love in the relations between different classes of society.

ESSAY

So much for fiction. Let us next rapidly pass under review Indo-Anglican achievement in essay, drama, criticism and biography.

Not many Indo-Anglicans have used the essay form for the simple reason that it does not constitute a natural vehicle for the expression of Indo-Anglian artistic genius. The one outstanding success is S.V.V. of the *Hindu* for whom no praise could be too high. Some of the stuff which he wrote was of the most delicious kind, light as a feather, satirically humorous, most intimately revealing of Hindu life. It can indeed bear comparison with the kind of work which E. M. Delafield used to do for *Punch*. No praise could be higher. Then there were the group of writers who flourished in the hey-day of the *My Magazine* and *Merry Magazine* like R. Bangaruswami and A. T. Macnaughton Thomas. They did some fine work and gave their readers immense pleasure, but it must be confessed that a great deal of the humour was coarse and most of the language undignified. G. K. Chettur who always wrote with a sensitiveness to the finer points of the language was a more considerable figure. His work does not bulk large but some of his efforts are in the best English tradition. But the truth must be faced. The essay properly so-called is the expression of an attitude of mind which is rare in this country. As a branch of literature the essay originated with Montaigne in France but it has had its spiritual home in England where there is a certain disposition to deal with the minor occurrences of life in a big, light-hearted, mock-serious fashion. But the Indian spirit is flatly opposed to this mode of expression. It is deadly serious for one thing. For another it is disposed to deal with big issues in a big way. It can, for instance, describe with great subtlety the sensations produced by the sight of a star. But in the presence of a loaf of bread it may be dumb.

DRAMA

In the realm of drama the Indo-Anglican output is even more scanty. Whatever drama has been produced, is either heavily symbolical like that of Tagore, or frankly propagandist like that of Harindranath Chattopadhyaya. Taking the latter as a typical example, we find that Mr. Chattopadhyaya's plays are more in the nature of Socialist propaganda than genuine expressions of the dramatic spirit. His characters are mere puppets and neither speak nor act like human beings. Where, however, Mr. Chattopadhyaya lays aside his didactic purpose and follows his characters the dialogue acquires considerable force and eloquence. His treatment of abnormal psychology is wholly convincing. In a play called *Evening Lamp* the creeping crawling sea of shadows envelopes and overpowers the reader with an insidious terror such as we find in the more poetical parts of Ibsen. Another play entitled *The Parrot* reels with a magnificent drunkenness which imparts to it a structural as well as symbolic beauty, and in the end an almost dramatic power. Mr. Chattopadhyaya is a writer of genius and it is hard to believe that he can escape his character and destiny very long.

CRITICISM

Much of Indo-Anglican criticism is dull and lifeless. In the first place, there is hardly any scholarly reviewing of books in Indian newspapers and periodicals; very few reviewers have, in fact, the mental equipment necessary for the task to which they address themselves. Criticism of poetry like the writing of it can be specially difficult. In any case critical work by Indo-Anglicans can be justified only if the point of view from which the criticism is presented is thoroughly Indian. As it is, much of what passes for criticism is a mere rehash of the work of foreign critics lacking conviction, vigour or originality. There is one man, however, to whom the above criticism does not apply, one who stands out of the general run by reason of his scholarship and critical judgment. That is the man whose reviews used to appear in the *Hindu* under the initials " K.S." K.S. is streets above any other Indian reviewer. He is witty, original, fearless and his critical judgments are always backed by a wide reading and real appreciation of English literature. His introduction to an abridged edition of Trevalyan's *Life of Macaulay*, for instance, is a masterpiece of its kind. So are some of the obituary notices of well-known South Indian literary figures which he was in the habit of writing in the columns of the *Hindu*. His criticism of Chattopadhyaya which is reproduced in the course of this article is a good example of his work.

Of late much critical work has come out of Indian Universities from painstaking conscientious scholars preparing themselves for a doctor's degree. The outstanding name here is that of C. Narayana Menon whose *Shakespeare Criticism* is far and away the most notable contribution made by any Indian to the scholarly study of English literature. Mr. Menon who has knowledge, wisdom, tolerance, has synthesized a vast mass of Shakespeare criticism. By illuminating paraphrases of certain well-known Shakespearean passages and by some unconventional character-interpretation of Falstaff, Brutus, Hamlet, Macbeth, Lear, Othello and Cleopatra, he leads the reader to an exhilarating and completely satisfying apprehension of Shakespeare's plays and a clear comprehension of his multifarious critics. Dr. Menon should now take rank along with Raleigh, Bradley and Dover Wilson among the few inevitable critics whom no serious student of Shakespeare can afford to ignore.

BIOGRAPHY

Indo-Anglicans have made a better showing in the art of biography than in criticism. Wisely enough no attempt was made to imitate the manner of Lytton Strachey except in some of the smaller sketches. Nor is there anything in the style of Boswell which attempts to recreate a living personality by the sheer accumulation of detail. Most Indo-Anglican biographers are content to record in a straightforward manner the main facts in the life and times of their subject. Such, for instance, are the series of lectures given by V. S. Shrinivasa Shastri on Gopal Krishna Gokhale, which together go to make up a clear, lucid and moving account of the life and times of the great Liberal leader. Professor P. A. Wadia's *Mahatma Gandhi*, another outstanding work in this class is set out in the form of a discussion and is concerned more with the Mahatma's personality than about his life. Then there are the biographies published by G. A. Natesan & Co.—workman-like little books with no claim to literary merit but entirely adequate for their purpose.

The greatest Indo-Anglican work in autobiography is, of course, Mahatma Gandhi's *Experiments with Truth*. The simplicity and the complete candour with which the Mahatma wrote make it one of the most moving personal documents of all time. Pandit Nehru's *Autobiography* is more in the nature of an exposition of Indian politics than an account of personal development. As politics it is excellent, but as autobiography it is much inferior in human interest to the autobiography of Mahatma Gandhi. Much of its celebrity would today be ascribed to the eminence of the author rather than to any intrinsic autobiographical qualities in the work.

A much humbler work which belongs to the same class is the *Last Enchantment* by G. K. Chettur. G.K. Chettur was one of those remarkable men who wrote English like a native. For sheer literary merit the account of his experiences at Oxford is inferior to none in the whole domain of Indo-Anglican literature.

THE PRESENT

So much for the perspective. Now for the present. We shall select four books for special notice as typical of the work which is being done by Indo-Anglians at the present moment—a novel (*So Many Hungers*), an autobiography (*Girl in Bombay*), a book of travel (*Delhi-Chungking*) and a historical-philosophical-political sketch of India (*The Discovery of India*).

Girl in Bombay by Ishvani, is the first volume of an autobiography of an Indian girl belonging to the upper middle class. Its importance lies in the fact that it gives a pen-picture of a society in transition—the gradual breaking up of the old India and the birth of the new of which the author regards her own mental development as a kind of symbol. The joint family system, the petty intrigues, the ludicrously grave grand-mothers, the innumerable relations and the obsequious servants are all presented with a kind of cynical humour. One would not regard it as a great book. But it is written with much charm and wit and as representative of a certain kind of writing it is very effective indeed.

Another book published recently which found its mark is *Delhi-Chungking* by K.P.S. Menon the record of the author's travels through Sinkiang. Mr. Menon followed the old caravan route which the famous Chinese traveller Huan Tsang took in the seventeenth century when he visited the Indian sub-continent in search of Buddhist scriptures. The man who reads for pleasure will find in the book many good stories and much delightful descriptions of the scenery through which the author's route lay. And the man who reads for profit will find many interesting side-lights on religion, archæology, and politics and the inter-play of Russian and Chinese policies in a region where three empires met and manoeuvred for supremacy. What gives the book its value, however, is the author's zest for life and the quiet humour with which he records his observations.

So Many Hungers by Bhabhani Bhattacharya has had the unique honour of being selected by the Left Book Club for distribution among its members. The novel takes its background from one of the greatest tragedies of the War—the Bengal famine. The story is concerned with the lives of a village family which is perfectly happy and contented until the great famine strikes them. They then flee to Calcutta where they fight with dogs around garbage heaps for scraps of food. Mr. Bhattacharya piles horror on horror until a picture of Bengal in the grip of famine takes shape in all its stark nakedness. A woman is eaten alive by jackals; a child offers jasmine to the image of a goddess, praying to be injured by a Japanese bomb so that he might find food and shelter inside a hospital. Mr. Bhattacharya is equally pitiless in his castigation of the Government, and the profiteers of 'Bengal Rice Limited' who inflict such ghastly suffering on fellow men and women.

The fourth book selected for special notice is *An Astrologer's Day* by R. K. Narayan, a collection of short stories. There is nothing original about these stories; the central incidents are perfectly commonplace—the ruining of a trusting employer by a smart employee, for example, or the unwillingness of a child to go to school. It is the manner of the writing. Mr. Narayan has pathos, irony, guile, but never more than his simple material will allow. He has great understanding for his characters and what is more important great liking for them. The result is that these stories afford pleasure out of all proportion either to their subject matter or the skill with which they are built up.

The Discovery of India by Jawaharlal Nehru, the last book in our list, is as much the story of the discovery of his own self as of the country of which he is the leader. When he returned to India from England at the age of twenty-three, Nehru was in mind and habit a Westerner. Hinduism meant nothing to him. His approach was that of a scientist and a rationalist. He was a stranger in India. The awakening came at the age of thirty when Mahatma Gandhi emerged as the leader of a nationalist movement, making its appeal for the first time to the Indian masses. Pandit Nehru's response was immediate and vigorous. He made a self-discovery which changed the current and object of his life; one of the results is this amazing book of nearly 500 closely printed pages, which starts with the early times and, takes the story right down to the 'Quit India' movement of 1942. The vivacity of the writing never slackens from beginning to end. Whether it is about Vedic civilization, the founders of religion, the sacred books, the emperors, the waves of conquest, the writing is lucid, abundant and animated.

TAGORE

Even the briefest survey of Indo-Anglican literature would be incomplete without an appreciation of Rabindranath Tagore who is one of its chief glories. In a sense, Tagore belongs to Bengal. His poems are full of the beauty of Bengal scenes. And it is surprising how much of his work was originally published in Bengali—*Gitanjali*, *The Crescent Moon*, *Chitra*, *The Post Office*, *The Gardener*, *Fruit Gathering*, *The Home and the World*, all the works in fact which made Tagore famous were all translations from original Bengali. But in a sense too he belongs to the whole of India as much as any man which the country has produced, the country whose heritage and culture he enshrined in such matchless prose and poetry.

Tagore had an abiding sense of the beauty of the world. Nothing on earth was dull for him: the most ordinary things had a new and wonderful meaning. Rain or harvest, a rice-filled or a clump of bamboos—such things stirred Tagore to noble and unique utterance. Tagore's work is permeated not only by a sense of the beauty of the universe but also by a sense of its abiding mystery. The dark depths of the earth, the infinite distances of the sky filled him with consciousness of God. To him earthly beauty is a reflection of eternal beauty.

Tagore was not only a poet, he was a prophet and also a patriot—the creator of Vishwabharati, the interpreter of the East to the West, the citizen of the world. But it is impossible to separate in him the poet from the patriot or the patriot from the citizen of the world. In him they were all one and of that one the poem and the plays are the undying voice.

A SELECTION

Here is a selection from among the works of Indo-Anglians made with the help of K. R. Shrinivasa Iyengar's *Indo-Anglican Literature*:

POETRY

Rabindranath Tagore: *Collected Poems and Plays*. Tour Dutt: *Ancient Legends and Ballads of Hindustan*; *A Sheaf Gleaned in French Fields*. Sarojini Naidu: *The Bird of Time*; *The Broken Wing*; *The Golden Threshold*. R. C Dutt;

***The Mahabharata*; *The Ramayana*.** Aurobindo Ghosh: *Collected Poems and Plays*. Brijendranath Seal: *The Quest Eternal*. Harindranath Chattopadhyaya: *Ancient Wings*; *The Dark Well*; *The Feast of Youth*; *The Magic Tree*; *The Perfume of Earth*. K. S. Venkatramani: *On the Sand-Dunes*. Humayun Kabir: *Poems*. G. K. Chettur: *Gumataraya*; *The Shadow of God*; *The Temple Tank*; *The Triumph of Love*. Armando Menezes: *Chaos and Dancing Star*; *Chords and Discords*; *The Emigrant*; *The Fund*; *A Mock Epic*. Joseph Furtardo: *A Goan Fiddler*; *Songs in Exile*. T. B. Krishnaswamy: *Swallow Flights*. K. P. Appaji Rao: *Dawn And Other Poems*. P. Seshadri: *Bilhana*; *Champak Leaves*; *Sonnets*; *Vanishing Hours*. Muhammad Iqbal: *Himalayan Mountain*. Mrs. Dennis Stoll (Bharati Sarabhai): *The Well of the People*. S. R. Dongerkerry: *The Ivory Tower*.

FICTION

Rabindranath Tagore: *Gora*; *Home and the World*; *The Wreck*; *Hungry Stones and Other Stories*; *Mashi And Other Stories*. R. C. Dutt: *The Lake of Palms*; *The Slave Girl of Agra*. Cornelia Sorabji: *Love and Life behind the Purdah*; *Between The Twilights*; *Sun-babies*. T. Ramkrishna: *Padmini*; *The Dive for Death*. K. S. Venkatramani: *Murugan the Tiller*; *Kandan the Patriot*; *Jatadharan and Other Stories*. K. Nagarajan: *Athawar House*. A. Subramaniam: *Indira Devi*. K. Raja Rao: *Kanthapura*. R. K. Narayan: *Bachelor of Arts*; *The Dark Room*; *The English Teacher*; *Malgudi Days*; *Swami and His Friends*; *Astrologers' Day*. Mulk Raj Anand: *The Coolie*; *The Untouchable*; *The Village*; *Across the Black Waters*; *Two Leaves and a Bud*; *The Tractor and the Corn Goddess*. Ahmed Ali: *Twilight in Delhi*. Shanker Ram: *The Children of Cavery*; *The Love of Dusts*. A. S. P. Iyer: *Indian After-Dinner Stories*. G. K. Chettur: *The Ghost City and Other Stories*. S. K. Chettur: *Bombay Murder*; *The Cobras of Dharmasheri*. K. Ahmed Abbas: *Rice*. Hilda Wernher and Huthi Singh: *The Land and the Well*. Humayun Kabir: *Men and Rivers*; *Three Stories*. Bhabhani Bhattacharya: *So Many Hungers*. Santa Devi and Sita Devi: *Tales of Bengal*; *The Garden Creeper*. Sita Devi: *The Cage of Gold*.

DRAMA

Rabindranath Tagore: *Chitra*; *Post-Office*; *The King of the Dark Chamber*. Chattopadhyaya: *Five Plays*. Fyzee Rahamin: *Daughter of Ind*. V. V. Shrinivas Iyengar: *Dramatic Divertissements*. Armando Menezes: *Caste, A Social Comedy*. V. N. Bhushan: *Anklet Bells*; *Ear Rings*; *Mortal Coils*; *Samyukta*.

CRITICISM

C. Narayana Menon: *Shakespeare Criticism*; *An Essay in Synthesis*. Amiya Chakravarti: *The Dynasts and the Post-war Age in Poetry*. Aurobindo Ghosh: *The future of Poetry*. Amarnath Jha: *Shakespearean Comedy and Other Studies*. K. R. Shrinivas Iyengar: *Lytton Strachey: A Critical Study*. V. K. Ayappan Pillai: *Shakespeare Criticism*. Brijendranath Seal: *New Essays in Criticism*. Humayun Kabir: *Poetry, Monads and Society*.

MISCELLANEOUS

Rabindranath Tagore: *The Religion of Man*; *Sadhana*. Aurobindo Ghosh: *Essays on the Gita*; *The Life Divine*. S. Radhakrishnan: *The Hindu View of Life*; *An Idealist View of Life*. M. K. Gandhi: *My Experiments with Truth*. Jawaharlal Nehru: *Autobiography*; *Glimpses of World History*; *Letters from a Father to His Daughter*; *The Discovery of India*. P. A. Wadia: *Mahatma Gandhi*. R. P. Masani: *Dadabhai Naoroji*. V. S. Shrinivasa Shastri: *Life of Gokhale*. G. K. Chettur: *The Last Enchantment*. Khasa Subba Rao: *Men in the Lime-light*. A. S. P. Iyer: *An Indian In Western Europe*. D. F. Karaka: *I Go West*; *Chungking Diary*. S. Natarajan: *West of Suez*. K. P. S. Menon: *Delhi-Chungking*. Minoo Masani: *Our India*. K. S. Venkatramani: *A Day with Shambhu*; *Paper Boats*. S. V. V.: *Chaff and Grain*; *Soap Bubbles*; *More Soap Bubbles*. R. Bangaruswami: *Misleading Cases*.

Indian Standard Time

FOR many years Indian time was in a state of chaotic confusion. What was called Madras or Railway time was kept on all the railways: and each great centre of population kept its own local time, which was not based on any common scientific principle and was divorced from the standards of all other countries. It was with a view to remedying this confusion that the Government of India took the matter up in 1904, and addressed the Provincial Governments and through them all local bodies, a long letter which reviewed the situation and made suggestions for the future.

The Government pointed out that the Madras local time kept on all railway and telegraphic lines is not useful. So the timing arrangement was completely altered for international scientific purposes in India. This was done in such a manner as to bear a simple and easily remembered relation to Greenwich time.

It was proposed, therefore, by the Government of India, to put on all the railway and telegraph clocks in the sub-continent by 8m. 50s. This represented a time 5½ hours faster than that of Greenwich, which would be known as **Indian Standard Time**; and the difference between standard and local time at the places mentioned below were approximately as follows, the figures representing minutes, and F. and S. meaning that the standard time is in advance of or behind local time respectively.—Dibrugarh 51 S., Shillong 38 S., Calcutta 24 S., Allahabad 2 F., Madras 9 F.; Lahore 33 F., Bombay 39 F., Peshawar 44 F., Karachi 62 F., Quetta 62 F.

On the 1st of January 1906 all the railway and telegraph clocks in India were put at Indian Standard Time. Bombay local time is retained only in the clocks which are maintained by the Municipality and in the establishment of some orthodox Hindus. Elsewhere Standard Time is universal.

The Bengal Government decided from October 1, 1941, to move forward their clocks by 36 minutes. Bengal time therefore became an hour ahead of Indian Standard Time and 36 minutes ahead of Calcutta local time. This was followed by the Indian Standard Time also being advanced by one hour with effect from September 1, 1942, making it 6½ hours ahead of Greenwich Mean Time. With the end of the Second World War the old Indian standard time was restored with effect from 2 a.m. on October 15, 1945.

Weights and Measures

THE maund is the denomination of weight common all over the sub-continent, but we may find that in a given city there are nearly as many maunds as there are articles to weigh. It varies even from district to district. Thus in the United Provinces itself the maund of sugar weighs 48½ seers in Cawnpore, 40 in Muttra, 72½ in Gorakhpur, 40 in Agra, 50 in Moradabad, 43½ in Saharanpur, 50 in Bareilly, 46 in Fyzabad, 48½ in Shahjehanpur, 51 in Goshangunge. Thus the maund varies throughout the sub-continent from the Bengal or railway maund of 82-2/7 lbs. to the Factory maund of 74 lbs. 10 oz. 11drs., the Bombay maund of 28 lbs., which apparently answers to the forest Department maund in use at the Fuel depot, and the Madras maund, which some authorities estimate at 25 lbs. and others at 24 lbs.

Committees of Inquiry—As there are variations in the weights and measures from one place to another in the sub-continent there is much confusion and sometimes heavy individual loss. And Municipal and commercial bodies are continually returning to the problem with a view to devising a practical scheme of reform. The Central and Provincial Governments have made various attempts during the past to solve the problem of common units of weights and measures; commercial and trade interests have agitated about the question for the past century. The Indian Railways and Government departments adopted a standard tola (180 grains), seer (80 tolas) and maund (40 seers) and it was hoped that this would act as a successful "lead" which would gradually be followed by the whole trade throughout the empire, but the expectation has not been realised.

The Government of India considered the whole question in consultation with the provincial Governments as early as 1890-1894 and various special steps have at different times been taken in different parts of India with a view to uniformity. The Government of Bombay appointed a committee in 1911 to make proposals for reform for the Bombay Presidency. Their final report was not published, but they presented in 1912 an *ad interim* report which was issued for public discussion. It points out the practical impossibility of proceeding by compulsory measures affecting the whole of the sub-continent. The Committee stated that over the greater part of the Bombay Presidency a standard of weights and measures would be heartily welcomed by the people. They opined that, legislation compulsorily applied over large areas subject to many diverse conditions of trade and social life would not result in bringing about the desired reforms so successfully as a "lead" supplied by local legislation based on practical experience.

Weights—The various systems of weights used in India combine uniformity of scales with immense variations in the weights of units. The scales used generally throughout Northern India, less commonly in Madras and standardized in Bombay Presidency under the Bombay Weights and Measures Act, 1932, may be thus expressed as one maund = 40 seers,

one seer=80 tolas. The actual weight of seer varies greatly from district to district and even from village to village except in Bombay Presidency. In the standard system the tola is of 180 grains, and seer thus weighs 2.057 lbs. and the maund 82.28 lbs. This standard is also used in official reports.

Retail—For calculating retail prices, the universal custom is to express them in terms of seers to the rupee. Thus, when prices change what varies is not the amount of money to be paid for the same quantity, but the quantity to be obtained for the same amount of money. In other words, prices in India are quantity prices, not money prices. When the figure of quantity goes up, this of course means that the price has gone down. If it be desired to convert quantity prices from Indian into English denominations without having recourse to money prices (which would often be misleading), the following scale may be adopted—based upon the assumption that a seer is exactly 2 lb., and that the value of the rupee remains constant at 1s. 4d., 1 seer per rupee=(about) 3 lb. for 2s., 2 seers per rupee=(about) 6 lb. for 2s., and so on.

The name of the unit for square measurement in India generally is the *bigha*, which varies greatly in different parts of the country. So the areas have been expressed here either in square miles or in acres.

Attempts At Reform—A lead is apparent in the East Khandesh District of the Presidency, where the then District Officer, Mr. Simcox, during the course of three years, gradually induced the people to adopt throughout the district uniform weights and measures, the unit of weight in this case being a tola of 180 grains. But the committee abstained from recommending that the same weights and measures should be adopted over the whole Presidency, preferring that a new system started in any area should be as nearly as possible similar to the best system already prevailing there.

The whole problem was again brought under review by the Government of India in October, 1913, when the following committee was appointed to inquire into the entire subject anew:—

C. A. Silberrad (*President*).

A. Y. G. Campbell.

Rustomji Fardoonji.

This Committee reported, in August, 1915, in favour of a uniform system of weights to be adopted in India based on the 180 grain tola, viz.:—

8 khaskhas	= 1 chawal
8 chawals	= 1 ratti
8 rattis	= 1 masha
12 mashas or 4 tanks	= 1 tola
5 tolas	= 1 chatak
16 chataks	= 1 seer
40 seers	= 1 maund

The tola is the tola of 180 grains, equal to the rupee weight. The viss has recently been fixed at 3·60 lbs. or 140 tolas.

Government Action—The Government of India at first approved the principles of the Report and left the Provincial Governments to take action, but they passed more detailed orders in January, 1922. They also announced their decision not to adopt all-India standards of length or area.

As regards weights they decided in favour of the standard mentioned under the heading "Weights", earlier. These were recommended by a majority of the Weights and Measures Committee and received the unanimous support of the Local Governments. At the same time they provisionally undertook to assist provincial legislation on standardisation and stated that if subsequently opinion developed strongly in favour of an Imperial standardisation of weights, the Government of India would be prepared to undertake such legislation but for the time being they considered that any such step would be premature.

STANDARDS OF WEIGHTS ACT, 1939

By 1939 opinion in favour of legislation by the Government of India for the standardisation of weights crystallised to the extent that the Indian Legislature passed the Standards of Weight Act (Act No. IX of 1939) applicable to the whole of British India. The Act received the assent of the Governor-General of India on the 28th March, 1939, and was published in Part IV of the Gazette of India of the 1st April, 1939. The Act laid down the following standard weights:—

(*a*) the standard tola, being a weight of 180 standard grains;

(*b*) the standard seer, being a weight of 80 standard tolas or 14,400 standard grains;

(*c*) the standard maund, being a weight of 40 standard seers;

(*d*) the standard pound, being a weight of 7,000 standard grains;

(*e*) the standard ounce, being one-sixteenth part of the weight of a standard pound;

(*f*) the standard hundred-weight, being a weight of 112 standard pounds;

(*g*) the standard ton, being a weight of 2,240 standard pounds.

Under sub-section (2) of section 4 of the Act, the Central Government undertook to supply to each Provincial Government a complete set of duly authenticated standard weights. Accordingly in October, 1941, Government of India supplied to the Provincial Government of Bihar a complete set of Reference Standard Weights, which was placed under the charge of the Senior Marketing Officer, Bihar.

The enforcement of standard weights throughout the Province of Bihar, was awaiting a supplementary provincial legislation which may be possible under normal conditions. But the Government of Bihar in their notification No. 185 D.R. dated the 7th May, 1942, in exercise of the power conferred by sub-section (1) of section 92 of the Government of India Act, 1935, have directed that the Standards of Weight Act, 1939 (IX of 1939), shall apply to the Chota Nagpur Division and to the Santal Parganas District, as a special measure. In Bihar it was felt that it may be convenient to start with the enforcement of standard weights alone in the first instance, and the measures of capacity may be left alone for some time to allow the buyers and sellers to adjust the measures on the basis of the standard weights.

BOMBAY WEIGHTS

The following are the Standard Weights and Measures according to the Bombay Weights and Measures Act of 1932:—

Weights—

(i) The Bombay Tola of 180 grains.
The Bombay Seer of 80 tolas.
The Bombay Maund of 40 seers.
The sub-multiples ½, ¼, ⅛, 1/16 and 1/32 and the multiples 2, 4 and 8 of the tola, seer and maund.

The pound avoirdupois equal to 7,000 grains and the sub-multiples ½, ¼, ⅛, 1, 2, 4 and 8 ounces, the multiples 1, 2, 4, 7, 14, 28 lbs. (a quarter), 56 lbs., 112 lbs. (1 cwt.) and 2,240 lbs. (1 ton).

(ii) The Bullion Tola of 180 grains. Multiples 2, 3, 4, 5, 10, 20, 30, 50, 100, 200, 300, 500, 1,000 and 2,000 and sub-multiples ½, ¼, ⅛ and 1/16 of a Tola.
The Val. = 1/40 of Tola = 4.5 grains.
Sub-multiples ½ and ¼ of Val.

(iii) The Rati=1/62 of Tola. Multiples 2, 3, 6, 12, 24, 48, 72, 120, 240 and sub-multiples ½, ¼, ⅛, 1/16, 1/32 and 1/64 of Rati.

(iv) The dram is equal to 1/16th part of an ounce or 1/256 part of a lb. Sub-multiples ½, ¼, ⅛ of dram and multiples 2, 4, 8 drams.
The grain and sub-multiples .01, .02, .03, .05, .06, .1, .2, .25, .3, .5, .6 and multiples 2, 3, 4, 5, 6, 8, 10, 12, 16, 20, 24, 30, 48, 50, 60, 72, 100, 120, 240.

(v) (APOTHECARIES)
Apothecaries ounce equal to 8 drachm or 480 grains.
Apothecaries drachm equal to 60 grains.
Sub-multiples 1/16, ⅛, ¼, ½ and multiples 2, 4, 6, 8 and 10 apothecaries oz. The Scruple equal to 1/3 drachm or 20 grains.
Sub-multiples ½ and multiples 2 of Scruple.

Note.—Apothecaries weights from 10 oz. to 1 oz. should be marked "Apoth".

Dry measures—

(i) The Bombay Seer.
The sub-multiples ½, ¼ and ⅛ seer.
The Bombay Chatak=1/16 seer.
The Adpao=¼ seer.
The Adholi=2 seers.
The Bombay Payali of 4 seers.
The Bombay Maund of 16 payalis.
The Bombay Map of 2 maunds.

(ii) Sub-multiples 1/32 seer.
Sub-multiples ½, ¼, ⅛, ½ of Bombay Maund.

Liquid measures—

(i) The Bombay Seer.
The sub-multiples ½, ¼, ⅛ and 1/16 seer.
The multiples 2, 4 and 8 seers.
The Imperial Gallon.
The Pint=⅛ gallon.

(ii) Sub-multiples 1/32 and 1/64 and multiples 10, 20, 30 and 40 seers.
The maund = 40 seers.
Sub-multiples ½, ¼, ⅛ and multiples 2, 4, 5, 8, 15, 16, 20, 25, 40, 50, 100 and 200 of Imperial Gallon.
The Gill = ¼ pint.
Sub-multiples ½, ¼, ⅛ and multiples 2, 4, 8, of Pint and Gill.

(iii) Liquid measures (For Road Tank Vehicles used as Measures)—
All multiples of Imperial Gallon.

(iv) APOTHECARIES—
Fluid oz. = 1/60 Imperial Gallon.
Fluid drachm ⅛ Fluid oz.
Minim = 1/60 Fluid drachm.
All measures of capacity from 40 fluid oz. down to a half-fluid oz.
All measures of capacity from 16 fluid drachm down to a half-fluid drachm.

(v) All the measures of capacity from 60 minims down to 1 minim.

(vi) The liquor dram = 1/48 of Imperial Gallon.
Sub-multiples ½, ¼ and multiples 2, 4, 8, drams.
The Peg = 2 fluid oz. or 1/80 Imperial Gallon.
Sub-multiples ½ Peg.

Length—

(i) The Inch=1/36th yard, and
The Foot=⅓rd yard.
The Furlong of 220 yards.
The Mile of 1,760 yards.

The yard is that unit of length which is exactly equal to the certified yard kept in the custody of the Mint Master, Bombay.

(ii) Sub-multiples ½ of the Yard.
Multiples 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 25, 33, 50, 66, 100 of the Foot.
Multiples 6, 18, 30, 42, 56, 66 and 100 all sub-multiples of the Inch.

Area and volume—

(i) The Square Yard, Square Foot and Square Inch.
The Cubic Yard, Cubic Foot and Cubic Inch and sub-multiples of a Cubic Inch.
The Anna of ½ of the guntha.
The Guntha of 121 square yards and the acre of 4,840 square yards for land measurement.
The Square of 100 square feet.
The Brass of 100 cubic feet.

(ii) Sub-multiples ½, ¼ and ⅛ of Brass.

Education

SINCE August 15, Education at the Centre has been constituted into a separate Ministry of Education, the present Minister for Education being Maulana Abul Kalam Azad. The provincial Governments are fully autonomous in regard to educational matters except in respect of educational development programme for which they receive grants-in-aid from the Central Government. Such programme has to be approved by the Central Government who have to examine whether it is in accord with the All-India approved educational policy.

The Minister is advised by an Educational Adviser who is also the Secretary to the Ministry. There is one Deputy Secretary cum Deputy Educational Adviser, in charge of the Overseas Division of the Ministry which deals with the award of Overseas Scholarships and one Educational Adviser in charge of Technical Education. These officers in turn are assisted by Assistant Educational Advisers, Education Officers and Assistant Education Officers. The Ministry has also an Educational Liaison Officer in the U.S.A., whose headquarters are at Washington. Assisted by his Deputies, the Educational Liaison Officer is responsible for securing admission for Indian students in American Universities and other institutions of higher education, and looking after the welfare of Indian students abroad. The Education department of the Office of the High Commissioner for India in London has also been expanded for the same purpose.

PROVINCIAL ORGANISATION

In Provinces also, the subject 'Education' is under the control of a Minister. The Director of Public Instruction is the permanent head of the Department and acts as an expert Adviser to the Minister in charge of Education. The Director controls the inspecting staff and the teaching staff of the Government institutions. In Bombay there is an Educational Adviser in addition to the Director of Public Instruction. A list of the Provincial Ministers of Education with their Directors of Public Instruction is given below:—

In the Centrally Administered Areas of Delhi and Ajmer, there is a Superintendent of Education, and for Coorg, there is an Educational Officer. These Officers perform the functions of Directors of Public Instruction in provinces.

The authority of Government in controlling the system of public instruction is in part shared with and in part delegated to Universities, and Boards of Secondary and Intermediate Education as regards secondary education and to local bodies as regards elementary education.

Certain forms of Technical Education are under the technical departments concerned and come within the purview of the Minister in Charge of those Departments.

ASSAM
Education Minister.—The Hon'ble Srijut Gopinath Bordoloi, M.A., B.L.
D.P.I.—P. C. Sanyal, Esq., M.A., M.B.E.

WEST BENGAL
Education Minister.—The Hon'ble Sri H. N. Chaudhury.
D.P.I.—Dr. Snehamoy Dutta, M.Sc.(Cal.), D.Sc., (London), D.I.C., F.N.I.

BIHAR
Education Minister.—The Hon'ble Acharya Badri Nath Verma.
D.P.I.—Kamta Prasad, Esq., B.A.(Cantab.), O.B.E.

BOMBAY
Education Minister.—The Hon'ble B. G. Kher, M.A., LL.B.
D.P.I.—D. C. Pavate, Esq., M.A. (Cantab.).
Educational Adviser.—K. G. Saiyidain, M. Ed. (Leeds).

CENTRAL PROVINCES & BERAR
Education Minister.—The Hon'ble S. V. Gokhale.
D.P.I.—Dr. V. S. Jha, Ph.D.

MADRAS
Education Minister.—The Hon'ble Sri T. S. Avinashilingam Chettiar.
D.P.I.—D. S. Reddi.

ORISSA
Education Minister.—The Hon'ble Pandit Lingaraj Misra, M.A.
D.P.I.—S. C. Tripathi, O.B.E., M.A., I.E.S.

EAST PUNJAB
Education Minister.—The Hon'ble Dr. Gopi Chand Bhargava.
D.P.I.—G. C. Chatterji, M.A., I.E.S.

UNITED PROVINCES
Education Minister.—The Hon'ble Sri Sampurnand, B.Sc.
D.P.I.—Rai Bahadur Chuni Lall Sahney, M.Sc.

SIND
Education Minister.—The Hon'ble Pir Illahi Baksh.

NORTH-WEST FRONTIER PROVINCE
Education Minister.—The Hon'ble Mian Jaffer Shah.

WEST PUNJAB
Education Minister.—The Hon'ble Sheik Karamat Ali.

EAST BENGAL
Education Minister.—The Hon'ble Abdul Hamid.

In India there are six Boards of Intermediate and/or Secondary Education, and 20 Universities. The names of the Vice-Chancellors of the Universities are given below:—

1. *Agra University.*—Dr. Narain Prashad Asthana, M.A., LL.D., C.I.E.
2. *Aligarh Muslim University.*—Mr. Mohamed Ismail Khan.
3. *Allahabad University.*—Dr. D. S. Bhattacharya.
4. *Andhra University.*—Sir C. R. Reddy, M.A. (Cantab.), Hon. D. Litt. (Andhra).
5. *Annamalai University.*—M. Ruthnaswamy, Esq., C.I.E., M.A., Bat-at-Law.
6. *Benares Hindu University.*—Pt. Amara Natha Jha.
7. *Bombay University.*—Mahamahopadahyaya Pandurang Vaman Kane, M.A., LL.M.
8. *Calcutta University.*—P. N. Bannerjee, M.A., B.L., Bar-at-Law.

9. *Delhi University.*—Sir Maurice Gwyer, K.C.B., K.C.S.I., D.C.L., LL.D.
10. *Lucknow University.*—Raja Rajeshwar Dayal Seth.
11. *Madras University.*—Diwan Bahadur Sir A. Lakshmanaswami Mudaliar, M.D., LL.D., D.Sc., F.R.C.O.G., F.A.C.S.
12. *Mysore University.*—M. Sultan Mohiyuddin, Esq., M.A., LL.B., B.Ed.
13. *Nagpur University.*—Lt.-Col. Pandit K. L. Dubey, B.A., LL.B.
14. *Osmania University.*—Dr. Wali Mohammed, M.A., Ph. D.
15. *Patna University.*—Sir Chandresvar Prasad Narayan Singh, C.I.E, M.A.
16. *Travancore University.*—H. C. Papworth, Esq., O.B.E., M.A.
17. *Utkal University.*—P. Prija, Esq., O.B.E., M.A. (Cantab.), I.E.S.
18. *Saugar University.*—Sir Hari Singh Gour.
19. *Rajputana University.*—Dr. G. F. Marajani.
20. *East Punjab University.*—(Registrar) Mr. D. N. Bhalla, M.A.(Punjab), B.A.(Cambridge)

THREE STAGES

The whole structure of education in India is being remodelled. Old Primary Schools, which in some provinces comprised of four classes, in others of five and six, in still others of seven or eight are giving place to Junior and Senior Basic Schools; High Schools will be/are being reorganised into Higher Secondary Schools to include the 1st Year of Intermediate Education, leading up to three year degree course. So far, only in Delhi Province has this change been introduced. Technical Education is in the forefront and definite vocational bias is being given to education in Basic Schools.

The Central Advisory Board of Education in India, has since its revival in 1935 been considering the question of educational reconstruction in India. At their meeting held in December, 1935, the board passed the following resolution on the subject.

(1) The Board is of opinion that a radical readjustment of the present system of education in schools should be made in such a way as not only to prepare pupils for professional and university courses, but also to enable them at the completion of appropriate stages, to be diverted to occupations or to separate vocational institutions.

(2) These stages should be:—

(*a*) The primary stage, which should aim at providing at least a minimum of general education and training and still ensure permanent literacy.

(*b*) The lower secondary stage, which will provide a self-contained course of general education either for higher education or for specialised practical courses.

In rural areas, the courses at this stage should be attuned to rural requirements.

Higher Secondary Stage.—Some form of manual training at this stage should be provided which would aim at the development of practical aptitudes and be made compulsory.

(*c*) The higher secondary stage, in which would be included institutions with varying length of courses:—

(*i*) preparing students for admission to universities in arts and science;

(*ii*) for the training of teachers in rural areas;

(*iii*) for agricultural training;

(*iv*) for clerical training, and

(*v*) for training; in selecte technical subjects which should be chosen in consultation with employers.

Where separate institutions are not possible for the diversified courses, some of them might be incorporated in a higher secondary course of enlarged scope which would permit a choice of alternative groups of subjects and would end in leaving certificates.

(3) At the end of the lower secondary school course there should be the first public examination.

(4) Candidates desirous of joining the subordinate clerical service of Government and of local bodies should pass such qualifying examinations as might be prescribed by proper authority and should not be more than 19 years of age at the date of their examinations.

The certificate granted to pupils completing other specialised courses should receive Government recognition.

(5) Expert advice would be of value in organising the scheme of reconstruction outlined above; and also for suggesting methods of training masters who would assist pupils and selection, by the pupils, of courses of study with due regard to their aptitudes.

WOOD-ABBOT REPORT

As the board had recommended that expert advice will be necessary for planning educational reorganisation, Messrs. A. Abbot, C.B.E., formerly Chief Inspector of Technical Schools, Board of Education, England, and Mr. S. H. Wood, M.C., Director of intelligence, Board of Education, England, were invited to India for the purpose. Their visit resulted in the production of the famous report on educational reconstruction commonly known as "Wood-Abbot Report". The most important recommendations outlined in this report are:—

(*a*) Infant classes should, so far as possible, be entrusted to trained women teachers; and for this and other reasons the development of educational provision for girls and women is of paramount importance.

(*b*) The education of children in the Primary Schools should be based more upon the natural interests and activities of young children and less upon book learning. Concentrations on literacy as a narrow objective is unsound.

(c) The curriculum of the rural Middle (or Lower Secondary) Schools should be closely related to children's environment; and if English is taught to any children of middle "school" age it should not be allowed to result in an excessive amount of time being devoted to linguistic studies.

(d) The Vernacular language should, so far as possible be the medium of instruction throughout the High (or Higher Secondary) Schools, but English should be a compulsory language for all pupils in these schools.

(e) The teaching of English should be made more domestic and less attention should be devoted by the average boy to the study of English "prose and poetry"—arrangements being made to meet the needs of those boys specially qualified to pursue more advanced English studies.

(f) More systematic attention should be paid to the teaching of Art; and steps should be taken to secure for the High (or Higher Secondary) Schools a supply of qualified teachers of Art.

(g) The pre-employment course of training for teachers of Primary and Middle (or Lower Secondary) Schools should be three-year course following without any gap, the completion of Middle (or Lower Secondary) School course.

OTHER REPORTS

In conjunction with the Wood-Abbot Report, the Board gave their considered thought to the scheme of educational reconstruction whose real author was Mahatma Gandhi, which had emerged in the shape of Dr. Zakir Hussain Committee report. The Board accepted the Basic Education Scheme with certain essential modifications, and on this subject two very important reports known as Kher Committee reports were published.

In the expectation that sooner or later the problem of providing India with a system of education approximation to those available in other countries will have to be tackled, serious attention was devoted to the surveying of the main fields of educational activity so as to ascertain the minimum provisions required. Thus since the Board's revival in the year 1935, the various committees of the Board reported on following subjects, up to the year 1945.

(1) Basic Education; (2 reports); (2) Adult Education; (3) The Physical Welfare of Schoolchildren; (4) School Buildings; (5) Social Service; (6) The Recruitment, Training and Conditions of Service of Teachers in Primary, Middle and High Schools; (7) The Recruitment of Education Officers; (8) Technical (including Commercial and Art) Education; (9) Text-Books; (10) Examinations; (11) Educational Administrations; (12) Agricultural Education; (13) Religious Education; (14) Selection of Pupils for Higher Education.

At their meetings held in October, 1943 and January, 1944 the Board reviewed the recommendations of their Committees with special reference to post-war needs and developments. They were satisfied that the Educational Adviser's Memorandum on Post-war Educational Development in India, subject to the modifications suggested by them, would provide the foundation upon which an efficient system of public instruction, suited to the needs and circumstances of the country could effectively be erected. Their final recommendations are contained in the published Report on Post-War Educational Development in India. These have been given in the previous issue of the Year Book, and are repeated here for convenience.

BASIC (PRIMARY AND MIDDLE) EDUCATION

(a) A system of universal, compulsory and free education for all boys and girls between the ages of six and fourteen should be introduced as speedily as possible though in view of the practical difficulty of recruiting the requisite supply of trained teachers it may not be possible to complete it in less then forty years.

(b) The character of the instruction to be provided should follow the general lines laid down in the reports of the Central Advisory Board's two Committees on Basic Education.

(c) The Senior Basic (Middle) School, being the finishing school for the great majority of future citizens, is of fundamental importance and should be generously staffed and equipped.

(d) All education depends on the teacher. The present status and remuneration of teachers and especially those in Primary Schools are deplorable. The standards in regard to the training, recruitment and condition of service of teachers prescribed in the report of the Committee approved by the Central Advisory Board in 1943 represent the minimum compatible with success of a national system. These should be adopted and enforced everywhere.

(e) A vast increase in the number of trained women teachers will be required.

PRE-PRIMARY EDUCATION

(a) An adequate provision of pre-primary instruction in the form of Nursery Schools or classes is an essential adjunct to any national system of education. The provision in this respect at present is negligible.

(b) In urban areas, where sufficient children are available within a reasonable radius, separate Nursery Schools or department may be provided: elsewhere Nursery classes should be attached to Junior Basic (Primary) Schools.

(c) Nursery Schools and classes should invariably be staffed with women teachers who have received special training for this work.

(d) Pre-primary Education should in all cases be free. While it may not be feasible to make attendance compulsory, no efforts should be spared to persuade parents to send their children to school voluntarily, particularly in areas where housing conditions are unsatisfactory and/or mothers are accustomed to go out to work.

(e) The main object of education at this stage is to give young children social experience rather than formal instruction.

HIGH SCHOOL EDUCATION

(a) The High School course should cover six years and the normal age of admission should be about eleven.

(b) Entry to High Schools should be of a selective basis; only those pupils should be admitted who show promise of taking full advantage of the education provided. Additional places may be provided for those not selected provided that no cost falls on public funds.

(c) In accordance with the general principle set out in (b) above, places in High Schools should be provided for at least one child in every five of the appropriate age-group.

(d) In order to secure the right children, the methods of selection to be employed will require the most careful consideration. Special arrangements will have to be made for the transfer from Senior Basic (Middle) Schools to High Schools of suitable children and particularly of those who show signs of late development.

(e) High Schools should be of two main types (A) Academic (B) Technical. The objective of both should be to provide a good all round education combined with some preparation in the later stages for the careers which pupils will enter on leaving school.

(f) The curriculum in all cases should be as varied as circumstances permit and should not be unduly restricted by the requirements of Universities or examining bodies.

(g) In order that no poor child of ability may be excluded, liberal assistance in the form of free places, scholarships and stipends should be available throughout the course.

(h) In order to secure teachers of the right type, the salaries paid in all recognised schools, whether maintained by the State or by private bodies, should not be less than those prescribed by the Central Advisory Board of Education.

UNIVERSITY EDUCATION

(a) Indian Universities, as they exist today, despite many admirable features do not fully satisfy the requirements of a national system of education.

(b) In order to raise standards all round, the conditions for admission must be revised with the object of ensuring that all students are capable of taking full advantage of a University Course. The proposed reorganisation of the High School system will facilitate this. Adequate financial assistance must be provided for poor students.

(c) The present Intermidate course should be abolished. Ultimately the whole of this course should be covered in the High School but as an immediate step the first year of the course should be transferred to High School and the second to Universities.

(d) The minimum length of a University degree course should be three years.

(e) The tutorial system should be widely extended and closer personal contacts established between teachers and students.

(f) The importance of establishing a high standard in post-graduate studies and particularly in pure and applied research should be emphasised.

(g) Steps should be taken to improve the conditions of service, including remuneration of University and College teachers where those now in operation are not attracting men and women of the requisite calibre.

(h) An Indian University Grants Committee should be constituted for the purpose and with the terms of reference set out in this chapter.

TECHNICAL, COMMERCIAL & ART EDUCATION

(a) In view of the prospective needs of post-war industry and commerce for skilled technicians, and in order to cater for the aptitudes of those who will derive greater benefit from a practical course, the establishment of an efficient system of Technical Education at all stages on the lines set out in the report of the Technical Education Committee, is a matter of great urgency.

(b) Due regard should be had to the recommendations of the Abbot-Wood Report in respect of the scope and content of Technical Education.

ADULT EDUCATION

(a) Comprehensive arrangements on the general lines set out in the Adult Education Committee's report should form an integral part of education. These are particularly important in India today in view of the very high percentage of illiterates.

(b) Literacy is a means not an end in itself. Although the main emphasis in the beginning may be placed on the liquidation of illiteracy, adult education in the full sense must be provided for those already literate. The amount of this should progressively increase as illiteracy disappears.

(c) It is estimated that even with introduction of a universal system of Basic education there will be over 9 crores of illiterates (age group 10-40) to be dealt with. Plans should be made to solve this problem by a campaign spread over twenty years. Before this campaign opens, five years should be devoted to the necessary preparation, including the recruitment and training of the staff of teachers required.

(d) In this as in all branches of education the quality of the teachers is of supreme importance. The difficulty of obtaining a sufficient number of teachers of the right type, particularly women, must on no account be underestimated.

(e) The responsibility for adult education must rest with the State but every effort should be made to enlist the aid of suitable voluntary organisations wherever available.

TRAINING OF TEACHERS

(a) The proposals for the recruitment and training of teachers as set out in the Report approved by the Central Advisory Board in January, 1943 should be generally adopted.

(b) The existing training institutions are barely sufficient to meet wastage among existing teachers to train those hitherto untrained.

(*c*) New Training Schools and Colleges (including University Education Department) must be provided to supply the additional teachers whom a national system will require. These will amount to over 20,00,000 non-graduates for schools of all types and 180,000 graduates for High Schools.

(*d*) Arrangements should be made to pick out suitable boys and girls towards the end of the High School course. This is particularly important in Girls' High School in view of the vast increase in the number of women teachers required.

(*e*) The courses provided should be essentially practical and should be specially related to the needs of the schools in which the trainees will subsequently serve.

(*f*) No fees should be charged either in Training Schools or Training Colleges; liberal assistance should be available for the maintenance of poor students.

(*g*) Refresher courses are of the utmost importance and should be provided for all types of teachers but particulatly for those in remote rural areas. Facilities should be provided for research and selected teachers should be encouraged to study educational methods in foreign countries.

The Health of the School Child:—Provision for ensuring the pyhsical welfare of all pupils and students should be made on the lines set out in the report of the Joint Committee.

THE EDUCATION OF THE HANDICAPPED

(*a*) Provision for the mentally or pyhsically handicapped should form an essential part of a national system of education and should be administered by the Education Department.

(*b*) Hitherto in India Governments have hardly interested themselves at all in this branch of education: what has been done has been due almost entirely to voluntary effort.

(*c*) Wherever possible, handicapped children should not be segregated from normal children. Only when the nature and extent of their defect make it necessary, should they be sent to special schools or institutions. Partially handicapped children should receive special treatment at ordinary schools.

(*d*) The blind and deaf need special educational arrangements, including specially trained teachers. It may be desirable to establish central institutions for training the teachers required.

(*e*) Particular care should be taken to train the handicapped, wherever possible for remunerative employment for them. After care work is essential.

RECREATIVE & SOCIAL ACTIVITIES

(*a*) The provision of recreative and social activities on an adequate scale is an essential feature of any modern educational system.

(*b*) Apart from the needs of boys and girls in schools and colleges special attention should be paid to those in the 14-20 age-group who are no longer attending school. To serve these a Youth Movement on an All-India basis should be set up.

(*c*) A Youth Movement should aim at co-ordinating and supplementing rather than superseding the work of organisations already dealing with aspects of this problem.

(*d*) This main need of a Youth Movement will be for leaders, both men and women, who who will have to be specially trained. The possibility of finding suitable recruits among demobilised Officers and N.C.O.'s should be explored.

(*e*) The provision of social and recreative facilities for adults should form an important part of any Social Service Scheme. Reference is invited to the report of the Board's Committee on Social Service and Public Administration (1941).

Employment Bureaux.—(*a*) Employment Bureaux form an essential part of educational administration: they are especially necessary in India in view of the restricted openings at the moment for progressive employment.

(*b*) Employment Bureaux, if they are to fulfil sucessfully the functions set out in this chapter, must be staffed by trained experts with practical experience of teaching and of industrial conditions.

(*c*) While contact should be maintained with Unemployment Exchanges, Labour Tribunals, etc. established by other Departments, Employment Bureaux which deal with the output of educational institutions should be under the control of the Education Department.

ADMINISTRATION

(*a*) The Provinces should remain the main units for educational administration except in regard to University and Higher Technical Education, the activities of which could be co-ordinated on an All-India basis.

(*b*) In the event of the Indian States taking part in educational development on an All-India scale it may be necessary in order to form economic educational units to group the smaller ones or attach them to larger States or contiguous Provinces.

(*c*) A rational system of education will mean closer co-operation, financial and otherwise between the Central and Provincial Governments.

(*d*) Provincial Governments should be left to make such changes in their administrative arrangements as the carrying out of education developments on the scale contemplated may require. Experience, however, suggests that they would be well-advised to resume all educational powers from local bodies, except where these are functioning effectively.

(*e*) In order to enlist local interest in education, School Managing Bodies, School Boards and District Education Committees may be constituted, if and when sufficient people of the right type are available to serve on them. An Educational Advisory Board for the whole Province may be desirable.

(*f*) A strong Education Department will be required at the Centre and in this connection the scope and functions of the Central Advisory Board should be enlarged.

(*g*) Steps should be taken in accordance with the recommendations of the Board's Committee on the Recruitment of Education Officers (1943) to check the present deterioration in the status and calibre of the educational administrative service and to enable it to secure the services of the type of officer who will be capable of carrying a scheme of the kind contemplated into successful operation.

(*h*) Arrangements should be made for the exchange of officers between the Centre and the Provinces and between one Province and another. The desirability of establishing a senior educational administrative service on an All-India basis should receive consideration.

(*i*) The Director of Public Instruction should be directly responsible for the general administration of education, other than University and Higher Technical Education, throughout the Province. He should also be Secretary for Education, should it be thought necessary to keep in existence a separate post of this kind.

SOME OBJECTIONS

(i) Forty years is too long a period, in which the whole scheme is to be brought into effect. Such a scheme is in grave danger of being put on one side and neglected. During this period, so many changes may take place which may bring the wheel back to the starting point.

(ii) Any educational post-war reconstruction scheme, should give, subject to a minimum fitness an equal opportunity for all rich and poor, those from the rural areas as well as those from the urban areas, and from backward communities as well as from the more advanced communities. Selection for higher education on merits will be an injustice to students of backward communities and groups which for whatever reason take longer to develop mentally.

(iii) Compulsion has existed for many years in some areas in India, but on the whole it has been a failure, because it was never properly enforced. A plan for universal compulsory education in India must at the very outset indicate a strong enough possibly governmental machinery, for seeing that compulsion is actually effective.

(iv) The idea that where compulsory education can only be introduced by stages, the progress should be from area to area and not from age-group to age-group, may create serious conflicts, since the people in certain areas may have to wait a long time for educational advantages which those in other areas may already be enjoying.

GOVERNMENT APPROVAL

As a result of the general agreement which Provincial Governments expressed with the policy outlined in the Board's report the Government of India generally accepted, subject to the limitation of finance, the principles and objects of the Board's scheme.

In 1944, the Government of India asked the Provincial Governments to prepare their Five-Year Post-War Educational Development Plans on the general lines laid down in the report of the Central Advisory Board of Education. Early in 1946, the Provincial Governments were asked to select a few important schemes like Training of Teachers, and Compulsory Primary Education from their plans, and start implementing them after their approval by the Government of India. All the schemes submitted by the Provincial Governments to the Government of India have been examined, and such of them as conformed to the recommendations contained in the Report have been approved by the Government of India for immediate execution. The outstanding feature of the Provincial Development schemes is that the scales of pay of teachers will be appreciably raised, so as to secure for them a 'living wage'. For example, the teachers who get in certain provinces a salary from Rs. 8 to 15 will henceforth get at least Rs. 20 if not Rs. 25, and matriculate trained teachers will invariably be placed in the scale of pay recommended by the Central Advisory Board of Education, *viz.*, Rs. 30-1-35-3 (biennially)-50 p.m. plus house rent and other allowances recommended. Even these salaries are not adequate, but they certainly effect some improvement on the existing lamentable plight of the teachers. Free and compulsory basic education for boys and girls of the age-group 6-11 will be introduced forthwith, and it will be extended to the 11-14 group. On the University education side, there will be general improvement in the scales of pay of teachers, increased facilities for scientific education and for research work. Technical and Adult Education will also receive their due share.

The 1947-48 Educational Development Programme of the Provincial Governments which is also based on the the Central Advisory Board of Education Report has also been approved by the Central Government in almost all cases, and is being implemented.

Financial Assistance:—The Government of India undertook that the entire expenditure incurred by the Provincial Governments on their educational development plans, approved by the Centre, during 1946-47 will be borne by the Central Government. They have further undertaken to give over forty crores of rupees to Provincial Governments for their entire Post-War Development Programme during 1947-48. Whatever portion of the total development budget is allocated by a Province to educational development the same portion of the total Central grants is assumed to be the contribution of the Centre towards education (in that Province) *e.g.*, if a Province is spending 10 per cent. of its development budget on education, then 10 per cent. of the Central grant is deemed to be the Centre's contribution for education

Financial Aspect of Central Schemes.—The Government of India in the Ministry of Education have also drawn up their Five-Year Plan which is complementary to the Development Plans of the Provinces and is expected to cost over Rs 23.71 crores. A start has already been made with a number of Central Schemes, *e.g.* Training of Teachers for Basic Schools, Technical Education, Development of Central Universities, and so on.

PROVINCIAL SCHEMES

Here is a brief account of the Five-Year Educational Plans (1947-52), Province by Province.

ASSAM

Basic Education:—Assam proposes to adopt the 'basic' system of education, though compulsion is not contemplated. Junior Basic primary education is already free in this province. During the first quinquennium 1,250 junior basic (1,000 two-teachers and 250 one-teacher) and

senior basic schools will be opened. At present, approximately 9 lakhs children of age-group 6-11 and 6·5 lakhs of the ages of 11-14 are not at school. At the rate proposed, and provided compulsion is applied to the whole of the age-group 6-14, a minimum period of 35 years will be required to cover the whole province.

The expenditure proposed on basic education in the first period, including indirect expenditure on teachers' training and inspection approximates to Rs. 57 lakhs (Rs. 24 lakhs capital and Rs. 33 lakhs recurring). This is 52 per cent. of the total expenditure proposed on all education schemes. This does not take into account the Rs. 400 lakhs additional expenditure proposed education.

Pre-Primary Education :—It is proposed to open six Pre-Primary schools and classes in suitable areas every year for a period of five years.

The expenditure proposed on Pre-Primary education in the first five-year period is Rs. 1.99 lakhs (Rs. 1.5 lakhs N.R. and Rs. 49 lakhs R.)

High School Education :—It is proposed to open 3 high schools and 25 middle schools during the quinquennium.

It is also proposed to introduce vocational subjects in selected High Schools and to improve the condition of buildings and equipment of the non-Government High Schools.

Separate figures of expenditure are not available.

Technical, Commercial & Art Education :—(*a*) There are at present 3 Technical Schools in the province and it is proposed in the Five-Year Plan to start 2 new Junior Technical Schools, and to open Technical and Commercial Classes in 4 High Schools. Also it is intended to give increased grants to Commercial schools.

The total expenditure on this expansion will amount to Rs. 9 lakhs (Rs. 3.3 lakhs N.R. and Rs. 5.7 lakhs R.) during the quinquennium.

(*b*) There is at present only one scholarship for training in Music and 4 scholarships for Domestic Science. It is intended to create at least 5 more scholarships for training of both boys and girls in these and other special subjects, facilities for which do not exist in Assam, so that in due these subjects may be introduced in the educational institutions.

The total expenditure proposed during the quinquennium is Rs. 60,000.

Adult Education :—At present there are 400 centres with one part-time teacher in each on a monthly allowance of Rs.6 but it is intended to open 400 centres (at 100 per year from the 2nd year) on a monthly allowance of Rs. 12 with a view to liquidate illiteracy and promote adult education. The total number of illiterates of age-group 10-40 in the province approximates to 40 lakhs. At the rate proposed it will take three to four decades to render literate the entire population.

The expenditure proposed for the purpose during the quinquennium is Rs. 3,39.000.

Training of Teachers :—There are at present only Government training schools for men teachers and two aided Training Schools for women teachers. These institutions cannot cope with the existing and potential demand, and hence it is intended to open at least one Training School for men and another for women teachers in each valley with a view to providing facilities for the training of untrained teachers as also for the expansion of Basic Education.

The total expenditure involved on this account comes to Rs. 10.7 lakhs (Rs. 4.7 N.R. and Rs. 6.0 R.)

The Health of the School Child :—As there are no arrangements for proper medical service for school children, it is proposed to strengthen the staff of Inspectors and Inspectresses of Physical Training and establish a School Medical Service.

The total expenditure proposed is Rs. 3.4 lakhs (Rs. 1.3 lakhs N.R. and Rs. 2.1 lakhs R.)

The Education of the Handicapped :—There being no Government institution for the education of the handicapped in the province, it is proposed to open one Government School for the Blind, and one Governemt School for the Deaf and Dumb.

The total expenditure proposed for the five-year plan period is Rs. 1.7 lakhs (Rs. .8 lakhs N.R. and Rs. .9 lakhs R.)

Administration (Inspectorate):—To strengthen the inspecting staff with a view to ensure efficient inspection and supervision of the basic schools as also the mass literacy centres, 2 hosts of Deputy Inspectors, 2 of Sub-Inspectors, and 24 of Assistant Sub-Inspectors will be created.

Figures of expenditure are not separately available.

Miscellaneous :—There are also schemes for giving increased grants-in-aid to the existing aided European Schools (Rs 2 lakhs for five-year period), and for the improvement and expansion of cultural education.

WEST BENGAL

On account of the partition of the old province of Bengal, the Five-Year Educational Plan prepared for the province of Bengal is no longer operative in West Bengal, for which a revised plan is being prepared. For the immediate requirements of the province, a few educational schemes selected out of the old Plan but modified to fit in the new order are being put into execution.

BIHAR

Basic Education :—(*a*) Universal and compulsory basic education for all children, boys and girls of the age-group 6-14 in one-fourth of the province will be introduced according to the basic scheme in a period of 35 years. At this rate not less than 60 years may be required to complete the introduction of compulsory education throughout the province.

(*b*) The expenditure proposed on basic education in the first five-year period including indirect expenditure on teachers, training *etc.*; is Rs. 641 lakhs (Rs. 374 lakhs capital and Rs. 267 lakhs R.) which is 71 per cent. of the total expenditure proposed on all education schemes.

(*c*) The trained teachers possessing matriculation or equivalent qualification will be placed in the scale (Rs. 30-50) recommended by the Board but for the middle trained and lesser qualified teachers the scale proposed is Rs. 15-1/3-25.

Middle School Education :—(*a*) It is proposed to give additional grants-in-aid (Rs. 19 lakhs) to existing non-Government middle schools in order to enable them to improve the pay and qualifications of the teachers and their buildings.

(*b*) For the encouragement of girls' education it is proposed to open 40 Government managed Middle English Schools for girls with 8 classes.

The total expenditure involved in the scheme is Rs 24.6 lakhs (Rs. 19.8 lakhs N.R. and Rs. 4.8 lakhs R.).

(*c*) It is also proposed to convert 32 upper primary schools into middle schools each year. This will cost Rs. 5.8 lakhs recurring in the five-year period.

High School Education :—(*a*) It is proposed to open 15 Government High Schools for girls, and to improve an existing Girls' High School.

The total expenditure on this scheme will amount to Rs. 35.3 lakhs. (Rs. 26.4 lakhs N.R. and Rs. 8.9 lakhs R.)

(*b*) It is also proposed to give additional grants-in-aid to High Schools for improvement in the pay of teachers and their buildings and to open Science Classes. The total expenditure will amount to Rs. 24 lakhs (Rs. 5.3 lakhs N R. and Rs. 18.7 lakhs R.).

University Education :—(*a*) It is proposed to open a college for women to teach Arts subjects including Psychology up to the B.A. hons. and Science up to the intermediate stage, and to attach to it post-graduate training classes.

The total expenditure will amount to Rs. 24.5 lakhs (Rs. 18 lakhs N.R. and Rs. 6.5 lakhs R.).

(*b*) It is further proposed to expand the Government managed and aided Arts and Science Colleges for providing increased facilities for the teaching of Arts and Science subjects. In the five-year period Rs. 42.5 lakhs N.R. and Rs. 10.6 R. will be spent.

Technical, Commercial and Art Education :—(*a*) There are at present 35 Technical Schools and 2 Technical Colleges or Institutions for advanced studies in the province. It is proposed in the Five-Year Plan to start a new college of Technology and 2 new junior Technical Institutions and 15 part-time vocational institutions. It is also proposed to expand one Senior Technical Institution and 3 Junior Technical Institutions and to provide for a Technical Education Loan Fund and a Technical Education Scholarships Fund.

(*b*) There is also a proposal for opening a Commercial Institute by Government for teaching shorthand, type-writing, book-keeping, etc.

Adult Education :—A net-work of voluntary-run adult education centres will be opened all over the province in 25 years. It is expected that these centres will be the custodian of the culture of the country-side. The province has about 174 lakhs adults of the age-group 10-40 who are illiterate.

A sum of Rs. 15 lakhs has been proposed for the first five years period.

Training of Teachers :—The following provision has been made in the Five-Year Plan.

(*a*) Expansion of existing 55 elementary training schools for men teachers and opening of 15 new elementary training schools for them.

(*b*) Opening of 4 new elementary training schools for female teachers and improvement of the 2 existing women training classes and a training college.

(*c*) Opening of a large secondary training school for men and women, and improvement of the C.T. classes attached to a Training College.

(*d*) Opening of two training colleges.

Health of the School Child :—(i) It is proposed to appoint a Superintendent of Physical Training to supervise the work done by the Professors and Instructors of Physical Culture in training schools and colleges and to appoint one Physical Instructor in the Patna Training College where there is none.

The total expenditure proposed for the scheme is Rs. 17 lakhs non-recurring and Rs. 51 lakhs recurring.

(ii) For the medical inspection of school children, and improvement of school hygiene it is proposed to give grants-in-aid to all high schools to enable them to appoint a qualified Medical Officer. For this purpose, a sum of Rs. 1 lakh is proposed as expenditure.

(iii) Government proposes to subsidise the mid-day lunch scheme by giving a small grant of annas 4 per head per month for feeding the really poor children. The estimated five-year cost on this account comes to Rs 30 lakhs.

Education of the Handicapped :—At present there are two schools for the blind in the province but this provision has been found to be inadequate. It is therefore proposed to open another school for the blind, deaf and dumb.

The estimated expenditure for five-year comes to Rs. 1.55 lakhs (Rs. .83 N.R.).

BOMBAY

Basic Education :—The Provincial Government have proposed the introduction of free and elementary education for children of 6 to 11 years of age throughout the province within a period of 10 to 12 years. The school course has been reduced from 5 to 4 years. The total number of children attending primary schools in the province at present is about 16 lakhs, and the proposal is to provide for the education of 16 lakhs additional children during a period of 10 to 12 years. Compulsion will be introduced through the local bodies concerned, but the Government will bear the whole expenditure over and above what could be met by increasing the cess contributions to 15 pies in the case of District Local Boards and half of the additional cost on compulsion in the case of Local Authority Municipalities.

The total estimated cost for the five-year period is Rs. 417 lakhs. The primary school teachers will be placed in the scale of Rs. 30-1-50-5/2-75.

(*b*) The Provincial Government's policy is to provide a school for each school-less village (population 400 to 1000) through private bodies who will be given grants-in-aid for the purpose; 1400 school-less villages with a population of 400 to 700 will be provided with schools by private bodies, and in villages with a population of 700 to 1000, District Local Boards will be encouraged to open 300 schools on payment of grants-in-aid equal to the actual expenditure on the schools.

The total cost on this scheme for the five-year period has been estimated at Rs. 28.3 lakhs.

(*c*) For the construction of some 6,000 new buildings required for providing additional accommodation in the existing schools or for new schools to be opened under the compulsory elementary education scheme, the total expenditure is estimated for the five-year period at Rs.2.13 lakhs N.R. and Rs. 5.5 lakhs R.

(*d*) The Provincial Government have finally decided to introduce basic education by stages in all primary schools. As a first step it is proposed to introduce the teaching of a suitable craft in every primary school as soon as it is possible to secure a teacher to teach the craft concerned. For giving effect to this proposal a sum of Rs. 138 lakhs N.R. and Rs. 60.8 R. lakhs has been estimated as the probable cost for the five-year period.

The Government proposes to ask local Authorities to convert 100 full grade primary schools into Agricultural Bias schools during 1947-52 at the rate of 20 per year. Also 20 hostels will be attached to centrally situated Agricultural Bias schools in places where there is need for such hostels.

The estimated total cost for the five-year period is Rs. 25.9 lakhs of which Rs. 8.7 lakhs will be N. R.

Secondary Education :—(*a*) In order to improve the standard of the secondary schools, many of which depend for their finances on the fees collected and Goverunmnet grants, it is proposed to give increased grants. Thereby the schools will improve the pay scales and conditions of service of teachers. A sum of Rs. 70 lakhs is the estimated cost for the five-year period.

(*b*) At present, Provincial Government maintains 4 Agricultural High Schools in the Province. It is proposed to raise the number to 8, and for this purpose an expenditure of Rs. 9.7 lakhs N.R. and Rs. 4.1 lakhs R. has been estimated for the five-year period.

(*c*) Also there is a proposal to increase the number of existing Technical High Schools from 2 to 12. An expenditure of Rs. 56.6 lakhs N.R. and Rs. 8.2 lakhs R. has been estimated for the quinquennium period.

University Education :—The Government has accepted the principle of the establishment of Regional Universities in the Province for Maharashtra in 1948-49, for Gujarat and Karnatak in 1949-50 and 1950-51 respectively. On this proposal, the estimated expenditure for the five-year period is Rs. 24 lakhs N.R. and Rs. 49.9 lakhs R.

Technical, Commercial and Art Education :—There are at present 39 Technical schools and 6 Technical Colleges or Institutions for advanced studies in the province. It is proposed to undertake expansion of 2 Senior Technical Institutions and the reorganisation of one Industrial School and the expansion of Apprenticeship scheme. It is also proposed to start 4 new industrial schools.

Adult Education :—At present adult education classes are maintained by private bodies or individuals and given grant-in-aid by Government. Since 1945, a small area of suitable size in some 5 districts has been selected for concentrated effort and adult education classes organised. It is proposed to extend the scheme to 21 other compact areas during the year 1946-47, and to all the 190 Talukas in the whole province within 5 years from 1947-48. The annual cost of each area is Rs. 9,400 and it is intended to make about 1,000 adults literate during a year in each area.

The total cost of the scheme during the five-year period has been estimated at Rs. 58.6 lakhs.

In addition it is proposed to spend a sum of Rs. 2.4 lakhs on imparting literacy at Labour Welfare Centres.

Training of Teachers :—(*a*) In order to increase the output of trained teachers it is proposed to expand the existing training institutions and to open 13 new training colleges 7 for men and 6 for women in addition to the 3 training colleges for men already opened in 1946-46.

The estimated expenditure on the scheme for the five-year period is Rs. 52.6 lakhs N.R. and Rs. 51 lakhs R.

(*b*) It is proposed to open 36 Lokshalas during the five-year period 1947-48 to 1951-52, in additon to the four opened in 1946-47, which will be attached to Government Secondary Schools or full-grade Primary Schools or Training Colleges. The total expenditure on this scheme in the five-year period has been estimated at Rs. 24.8 lakhs.

Health of the School Child :—(*a*), It is proposed to create a School Health Service to provide for (*i*) the medical examination of all children in Primary and Secondary Schools once on entry into a primary school and again at the ages of 11, 14 and 17 (*ii*) the re-examination every year of those who are not found fit and (*iii*) their treatment locally or at some central place. It has also been proposed to appoint a Chief Medical Officer to make a general survey in the whole province and to submit detailed proposals for the organisation of the scheme from 1948-49. On this scheme, the estimated expenditure for the five-year period is Rs. 58.6 lakhs.

(*b*) It is proposed to provide a light mid-day meal to primary school children in 10 selected backward districts of the province as an experimental measure. The total cost for the 3rd, 4th and 5th year period has been estimated at Rs 34.4 lakhs.

(*c*) It is proposed to hold short-term courses for the training of primary and secondary teachers in physical education, to create 32 posts of Assistant Deputy Education Inspectors, and a post of Chief Inspector of Physical Education for the province. The total estimated expenditure for the five-year period is Rs. 26.3 lakhs.

Administration :—It is proposed to strengthen the existing Inspecting staff by the creation of 220 additional posts of Assistant Deputy Educational Inspectors (180 for men and 40 for women) during the five-year period. The expenditure proposed for the purpose is Rs. 14 lakhs.

In addition there are certain other miscellaneous schemes for educational development.

MADRAS

Basic Education.—At present there are about 3 million children at school and 4 million remain to be brought under instruction. The Provincial Government have proposed to bring about 1.33 millions of children under instruction in the course of the first five years, compulsion being applied upto the V standard, though the ultimate objective is to make education free and compulsory for both boys and girls throughout the province upto the senior basic stage (6-14 age-group) in a period of 20 years.

The total expenditure proposed on this scheme for the five-year period is Rs. 700 lakhs.

Technical Commercial and Art Education :—There are at present 84 Technical Schools and 6 Technical Colleges or institutions for advanced studies. It is proposed in the Five-Year Plan to start 6 new Polytechnics, 2 new Engineering Colleges, 1 Research Institution and 15 new Junior Technical Schools.

Training of Teachers :—(*a*) As additional trained teachers will be required for the introduction of compulsory elementary education in the province, it is proposed to provide additional sections in the existing training institutions, and to a limited extent to open additional training schools, where necessary. For this purpose a sum of Rs. 60 lakhs has been proposed for the five-year period.

(*b*) It is proposed to train 1,250 instructors and instructresses in Physical Education in order to attach them to boys' and girls' Secondary Schools at the rate of one instructor or instructress for every 250 pupils. The total expenditure proposed on this scheme is Rs. 5.65 lakhs.

The Health of the School Child :—(*a*) It is proposed to provide for mid-day meals for children attending elementary schools. In the first year provision is required to be made or about 6 lakhs of children.

At the rate of one anna for a meal and for 220 days in a year an expenditure of Rs. 12.79 lakhs is provided under this scheme.

(*b*) It is proposed to make suitable arrangements for the Medical Inspection of school pupils through the agency of registered medical practitioners. So far as colleges are concerned, the medical inspectors' remuneration will be covered by fees recovered from students and in secondary schools only a portion will be met from fees receipts. The total expenditure proposed under this scheme is Rs. 60 lakhs.

Scales of Pay of Teachers :—It is proposed to introduce the minimum scales of pay suggested in the report of the Central Advisory Board of Education while the additional cost of applying the scales will fall wholly on Government in respect of institutions directly controlled by them the additional cost in respect of institutions maintained by local bodies and private managements will be borne by Government to the extent to which the managing agencies cannot be made to share it. The five-year estimated expenditure on the scheme is Rs. 894 lakhs.

ORISSA

Primary Education :—(*a*) The aim of the Provincial Government is to introduce compulsory free education all over the province upto the junior basic stage, 6-11 age-group, in a period of 40 years. In the first five-year period compulsory free education will be introduced in all municipalities and in selected rural areas in each thana, 24,000 children will be brought to school every year from the 3rd year.

Necessary improvements and enlargement of the scope of existing primary schools is contemplated, since it is felt that all the schools are in need of improvement in the matter of building, playground, equipment and furniture.

The total expenditure proposed on these schemes in the five-year period is Rs. 101.4 lakhs (Rs. 67.7 lakhs N.R.)

In addition to the schools required under compulsory education system, 500 junior basic (Primary) schools will be opened in partially excluded areas where it may not be possible to introduce 'compulsion' at the start.

(*b*) In Orissa, the minimum pay of a teacher in a primary school is Rs. 10, in the case of an untrained and Rs. 13, in the case of a trained teacher inclusive of the dearness allowance of Rs. 3. It is proposed to give a minimum pay of Rs. 20-1/2-25 a month to trained teachers and of Rs. 15-1/2-20 to untrained teachers. Women teachers will be given a special pay of Rs. 5 a month each besides rent free quarters, and a special pay of Rs. 2 a month for teachers serving in urban areas.

The total expenditure proposed on this scheme is Rs. 33.73 lakhs R.

Senior Basic (Middle School) Education :—It is proposed to open mostly in partially excluded areas 25 middle English Schools for boys with a vocational class attached to each school such as carpentry, weaving agriculture etc.; to provide each Middle English School with an additional teacher and a Physical Instructor, to introduce vocational classes in ¼ of the existing schools and to make non-recurring grants for buildings, hostels, furniture and equipment. It is further intended to open 20 Middle English Schools for girls in populous villages, and to effect necessary improvements in the existing aided Middle English Schools for girls.

The total estimated expenditure on these schemes is Rs.51.8 lakhs (Rs. 26.2 lakhs included).

High School Education :—(*a*) It is proposed to establish 30 high schools for boys through adequate grants-in-aid, to open 10 Government High Schools for girls, to improve the existing high schools for boys by providing for the teaching of Science, Manual Training, Physical Education and Playgrounds, to improve the existing high schools for girls by providing them with hostels, playgrounds, teachers' quarters and extensions to buildings. In addition, an allowance of Rs. 25 p.m. is proposed for graduate teachers in each

high school to act as Career Adviser, assisted by a co-ordinating officer attached to the office of the D.P.I.

The total expenditure proposed on these schemes for the five-year period is Rs. 66.5 lakhs (Rs. 50.3 lakhs N.R.)

(*b*) It is further proposed to convert the existing Government Zila Schools in North Orissa into Technical High Schools, and to establish two Technical High Schools.

Expenditure proposed is Rs. 7.8 lahks (Rs. 4 lakhs N.R.)

(*c*) It is proposed to spend a sum of Rs. 12.5 lakhs (N.R.) during the five-year period on the construction of quarters for teachers of existing Government High Schools for boys.

University Education :—It is proposed to give grants to private aided colleges for buildings and equipment, to start teaching of certain additional useful subjects in other colleges, to open a college for women and to construct buildings for Utkal University.

The expenditure proposed is Rs. 123 lakhs (including Rs. 104 lakhs N. R.)

Technical Commercial and Art Education :—It is proposed to establish a College of Commerce, to construct buildings for a law college, and to open a 'Sava Sadan' (Occupational Institution for women) and a School of Arts and Crafts. It is also proposed to give grants to a School of Music.

The total five-year expenditure proposed is Rs. 10.1 lakhs (Rs. 9.1 lakhs N. R.)

Adult Education :—It is proposed to make provision for the education of adults in areas in which Village Welfare Centres are started. In the first instance, illiteracy among adults will be removed.

A sum of Rs. 3.7 lakhs—recurring—is proposed for the purpose.

Training of Teachers :—(*a*) At present there are 13 Elementary Training Schools in which 140 pupil-teachers are admitted annually and 220 bi-annually. Now it is proposed to open 6 Elementary Training Schools to increase the output of teachers, and 2 for women teachers.

(*b*) It is proposed to expand the two existing Secondary Training Schools to increase the annual admission by 150. Provision has been made for a stipend of Rs. 15 a month for each candidate. It is also proposed to expand the training college at Cuttack, so as to increase the output of graduate teachers for high schools, and Sub-Inspectors of Schools.

(*c*) It is also intended to open a Secondary Training School for women teachers, required for the opening of a large number of girls' Middle English and High Schools.

(*d*) It is proposed to provide a suitable school building with modern equipment and hostel for the pupil-teachers and quarters for mistresses for the Hindu Women's Training Institute at Cuttack.

(*e*) It is proposed to train every year ten suitable candidates as Physical Instructors for High School who will be granted stipends of Rs.50 p.m. In addition a College of Physical Education will be started.

(*f*) The total expenditure proposed on all these schemes is Rs. 33.3 lakhs Rs. 20.0 lakhs N.R.

Health of the School Child :—(*a*) It is proposed to provide for the physical welfare of all pupils and students by appointing 1 Chief Inspector of Physical Education, 6 Inspectors and 1 Chief Inspectress of Physical Education.

(*b*) It is proposed to give a subsidy to provide poor pupils in schools with mid-day refreshment. This will include free distribution of powdered milk, multi-vitamin tablets to deserving pupils.

The total expenditure on the two schemes is Rs. 7.4 lakhs (Rs. .9 lakhs N.R.)

Education of the Handicapped :—It is proposed to open a school for the education of blind children, to construct a building for the institution, and to provide stipends for poor students. The existing Deaf and Dumb School will be provided with new buildings and arrangements for stipends to poor students will be made.

A sum of Rs. 1.2 lakhs (Rs. .8 lakhs N.R.) is proposed.

Administration :—It is proposed to increase staff attached to the Directorate of Public Instruction, and to appoint 1 Inspectress, 1 District Inspectress and 2 Deputy Inspectresses, 6 District Educational Officers and 78 Inspecting Officers in subordinate Educational Services.

The total expenditure is Rs. 20.5. lakhs (Rs. 13 lakhs N.R.)

Miscellaneous :—Provision is made for sending anually 8 graduates for higher study abroad, and 3 school teachers and inspecting officers for study in educational methods, for more scholarships, books, etc., to the students of scheduled castes, backward classes and hill tribes; awarding of 5 research scholarships and 5 post-graduate scholarships outside the province for the encouragement of higher education, and for training research workers; stipends to women students for study in certain subjects outside the province. Also it is proposed to extend female education by increasing the number of peripatetic teachers encourage Oriya literature and to give increased grants-in-aid to Tole and Madrassahs, etc.

The total expenditure proposed on the Miscellaneous schemes is Rs. 19.6 lakhs (Rs. 3.6 lakhs N.R.)

UNITED PROVINCES

Basic Education—In the first five-year period it is proposed to introduce compulsory free education up to the junior basic stage in 12 districts for boys and girls of the age-group 6-11. During this period, about 16 lakhs boys and girls will be brought under instruction. Provision for the extension of the scheme to other areas and to the higher age-group (11-14) is to be made in the 2nd five-year period.

Apart from Schools to be opened under the compulsory scheme 200 junior basic schools will be opened in villages not having a school which supplied recruits during the war.

It is proposed to give a scale of Rs. 30-50 to 7,774 basic school trained teachers.

It is proposed to convert 7,270 Local Bodies schools for boys and 1,319 for girls into basic schools. Government will bear all the expenses involved.

The total expenditure on all these schemes is Rs. 467 lakhs (Rs. 130 lakhs N.R. included).

Middle School Education :—(i) It is proposed to establish an Anglo-Vernacular Middle School for boys (Classes III to VIII) and 2 such schools for girls.

(ii) With a view to providing better facilities for education for the children of the soldiers, introduction of manual training in 7 selected vernacular middle schools is contemplated.

The total proposed expenditure is Rs. 4.2 lakhs.

High School Education :—(*a*) It is proposed to open 70 new high schools for girls in the municipalities where no such schools already exist.

(*b*) In order to help the aided institution to come into line with the scheme of reorganisation of secondary education in the province and to rise their standards, it is proposed to give additional recurring grants to all the Intermediate Colleges and High Schools run by private bodies, as well as for their building programme.

(*c*) It is proposed to introduce the study of vocational subjects, *e.g.*, like commerce, and and manual training in certain high schools.

The total expenditure proposed on these schemes is Rs. 1,116 lakhs (Rs. 103 lakhs N.R.).

(*d*) In addition there are schemes relating to the construction of building for new girls' high school and for Intermediate classes to be attached to a high school.

An expenditure of Rs. 18.1lakhs N. is proposed.

(*e*) It is proposed to establish 5 Technical High Schools on the lines recommended by the Central Advisory Board of Education.

An expenditure of Rs. 80 lakhs (Rs. 50 lakhs N.R.) is proposed.

University Education :—To enable the degree colleges to improve the staff, buildings, and to undertake research work, it is proposed to give additional recurring and non-recurring grants. It is also proposed to give similar war grants to the Universities of Lucknow and Allahabad.

The total expenditure proposed is Rs. 145 lakhs (Rs. 80 lakhs N.R.).

Adult Education :—It is proposed to introduce adult education in 7 out of the 12 districts selected for the application of the compulsory primary education. The total number of adults who will come under this scheme is about 55 lakhs. This scheme provides for post-literacy work as well at 10 per cent. of the expenditure on adult literacy.

The total expenditure proposed is Rs. 1,40,81,210 N.R.

Training of Teachers :—(*a*) It is proposed to open 10 Normal Schools for the training of teachers for compulsory primary education in specially selected areas, and to construct buildings for the schools.

(*b*) It is proposed to convert Primary Teachers' Certificate Course into Vernacular Teachers' Certificate Course for men teachers by advancing the period of training to 2 years with a view to improving the quality of teachers. Similarly, the senior Basic Education Refresher Course Centres will be converted into Normal Schools.

(*c*) To serve as a Practising School for teachers, a Middle School for girls is proposed to be attached to the Training College for women at Allahabad.

(*d*) Construction of buildings proposed for the existing Teachers' Training College for women at Allahabad, the Training College for Undergraduate Women Teachers at Lucknow and for five existing Normal Schools for girls.

The total expenditure proposed on these schemes is Rs. 51.8 lakhs (Rs. 30.5 lakhs N.R.).

Administration :—To help the D.P.I. in carrying out the work of educational reconstruction, it is proposed to appoint an Additional Deputy D.P.I. and another Officer in Class II service.

The total expenditure proposed is Rs. 1,65,728.

Health of the School Child :—Physical Education is compulsory both for Vernacular and Anglo-Vernacular Schools, and consequently there is a need for trained teachers in the subject, for whom no facilities exist at present. It is therefore proposed to establish a College for Physical Education at Allahabad where both men and women teachers will be trained for two years.

The total expenditure proposed is Rs. 2.3 lakhs (Rs. .8 lakhs N.R.)

Miscellaneous :—There is a provision for six foreign scholarships for the teachers of the soldiers' sons and daughters, and for the improvement of education of scheduled caste children.

On all these schemes, the total expenditure proposed is Rs. 11.6 lakhs (Rs. 6.9 lakhs N.R.).

AJMER-MERWARA

It is proposed to introduce compulsory primary education up to junior basic stage in selected areas, to provide technical sections in a Government High School, to give stipends for poor students in existing schools, and to strengthen the inspecting and administrative staff. The teachers in training schools will get maintenance allowance, and prospective teachers scholarships. The activities of existing educational institutions will also be expanded.

The total development programme provides for an expenditure of Rs. 43 lakhs.

COORG

The post-war educational development programme of Coorg includes provision for stipends and training of 3 graduate teachers, for buildings for three high schools, for compulsory primary education in one area, for a first grade college, and for remodelling and expansion of Elementary School buildings. The total expenditure proposed for the five-year period is Rs. 12 lakhs.

DELHI

The development programme includes provision for compulsory and free primary education throughout the province, for new High Schools, and two Training Schools, for adult education, improvement of scales of pay of teachers, education of handicapped, and strengthening of administrative staff. It is also proposed to provincialize all the local bodies' schools.

The total expenditure proposed on these schemes is Rs. 1.81 lakhs.

CENTRAL SCHEMES

The Central Plan provides for facilities not aimed at in Provincial Plans, and to supplement key services such as the training of teachers.

Higher Technical Institutions :—(*i*) It is proposed to establish two high grade technical institutions, one in the Eastern and the other in the Western Zone, to provide for the training of high grade engineers, technologists (designers, planners, research workers and production experts, etc.), to take up positions of trust and responsibility in industry. Each of them will have an annual output of about 1,000 technologists.

(*ii*) A High Voltage Engineering Laboratory and a Power Engineering College will be established at the Indian Institute of Science, Bangalore.

(*iii*) The Delhi Polytechnic will be developed into a college of Technology and will eventually constitute the Technological Wing of the Delhi University.

(*iv*) The Overseas Scholarship Scheme to depute about 500 scholars each year to receive training in Technology and applied Science subjects.

Institute of Education :—A Central Institute of Education has been established at Delhi. There are proposals for an institute for Physical Education, for increased provision for Home Science and Economics, Arts and Crafts, and Music. The Marris College of Hindustani Music (Sangit Vidyapith), Lucknow, and Kala Kashetra, Adyar, are being given grants by the Central Government for expansion of their activities in certain fields. There is also a proposal for the establishment of a Central College of Karnataka Music in Madras.

University Grants Committee :—There are proposals for the development of Scientific Research (fundamental) in Universities and All-India Research Institutions. The scope and functions of Delhi University are being expanded. The University Grants Committee, which was set up as an advisory body to deal with the Central Universities, i.e., Aligarh, Benares and Delhi only, has been expanded and given wider functions.

There is a consensus of opinion in the country among top-rank educationists that the improvement of existing facilities for advanced training in India in all subjects is a matter of immediate urgency, since this alone will prevent the drainage of money from this country to other countries for sending abroad a large number of trainees.

The Central Government have also proposed to set up a National Museum and a Central Reference Library, for developing the Archæological and Anthropological Surveys, and for creating a National Cultural Trust.

INSTITUTE OF EDUCATION

In regard to the progress made in the execution of the Central Schemes, it may be pointed out that the Central Institute of Education came into being in a unclear form during the third week of December, 1947. The Institute will not only train post-graduate teachers, but will also provide facilities for high class research in education.

The Stock of the Central Library of Educational and Cultural Films is being increased by a further addition of films. A projector has also been purchased

A Uniform Braille Code covering all the major Indian languages including the Perso-Arabic group, devised by a Committee of experts was finally approved by the Expert Braille Committee of the Central Advisory Board of Education at its meeting held in Simla on June 17, 1947. This code known as the Uniform Indian Braille has been finally accepted by the Government of India.

The accepted Code will replace eight Braille Codes in current use and two to be introduced and this will facilitate the publishing of embossed literature for the Blind on a large scale. The Central Bureau of Education have brought out a new handbook (Phamplet No. 16, Amended Reprint, 1947) containing ink-print codes, with a short history, and instructions for their use.

The setting up of a Central Braille Press and Central Library is also receiving active consideration of the Ministry of Education.

TECHNICAL EDUCATION COUNCIL

The progress made in the field of Technical Education may be summed up under two main headings :—

(1) All-India Council for Technical Education.

(2) Central Technical Institutions—Development Schemes.

On the recommendation of the Co-ordinating Committee of the All-India Council for Technical Education which met in Februray, 1947, five Visiting Committees were appointed to inspect some of the high grade technical institutions in the country and to make recommendations in regard to their improvement. The Reports of these committees were considered by the Council in May, 1947. As the recommendations did not appear to have been based on uniform principles, a small committee was appointed by the Council to scrutinise the reports. The Council also appointed three more Visiting Committees to inspect some other important technical institutions.

The reports of the visiting committees on several technological institutions were considered by the Co-ordinating Committee of the All-India Council for Technical Education in November, 1947 together with the recommendations of the Scrutinising Committee referred to above. The Co-ordinating Committee have recommended that grants from the Central Revenues to the extent of Rs. 1·5 crores on special expenditure and Rs. 30 lakhs on recurring expenditure be made to some important high grade technical institution in the country for improvement and expansion. The committee have further recommended that these grants should be spread over a period varying from three to five years beginning with the financial year 1947-48. These recommendations are now under the consideration of the Government of India.

Regional Committees :—The question of setting up the Regional Committees of the All-India Council for technical Education had to be kept in abeyance owing to the necessity for redemarcation of the regions in the light of the new political set up and changed geographical and economical situation. This is being taken in hand now. The functions for the Regional Committees will in no way overlap those of the Provincial Governments.

At its second meeting held in May, 1947 the Council decided that :—

(*i*) The All-India Diploma Courses should be equivalent in standard to the Degree Courses in Universities, but greater emphasis should be laid on the practical side.

(*ii*) The All-India Certificate Courses should be equivalent in standard to the Foremanship courses and should be so designed that these can be taken mainly on a part-time basis.

(*iii*) Admission qualifications should be so prescribed and rules and regulations so framed that persons engaged in full or part time occupation in appropriate branches of technology may acquire these "All-India" qualifications by taking the courses on part-time basis.

A comprehensive memorandum on the above decisions was considered by the All-India Boards of Technical Studies at their meetings held during July-August, 1947. The Boards are now engaged in working out details of the schemes in the light of the above decisions of the Council.

Co-ordination with University :—To ensure co-ordinated development in the field of technical education the Council decided that the Inter-University Board should be asked to consider the advisability of appointing a committee with which a small committee of the All-India Council for Technical Education may co-operate in drawing up the general principles to be observed in regard to technical education in University and non-University Institutions of technology.

The Council passed a resolution expressing the opinion that higher technical education should be under the directive of the Council and that for the promotion of higher technical education the Central Government should provide funds for the next five years at least.

CENTRAL TECHNICAL INSTITUTIONS

The development scheme in regard to technical institutions centres round the expansion of the Delhi Polytechnic and of the Indian Institute of Science at Bangalore. The expansion of the Delhi Polytechnic includes the opening of a training college of teachers in technology while the expansion of the Indian Institute of Science includes the establishment of a high-voltage engineering laboratory and of a power engineering department besides a four-year development plan of the Institute itself.

Delhi Polytechnic :—With a view to making the Delhi Polytechnic a really first class technological institution, a four-year development scheme of Delhi Polytechnic, costing about Rs. 80 lakhs was accepted in principle by the Government of India in 1945. This scheme included provision for fully equipped workshop and laboratories and new buildings. The scheme could not be implemented fully on account of war-time limitations but a fair amount of progress has been made in achieving the object with which the institution was started. The Polytechnic comprises a Technical High School and six Senior Departments namely, Engineering, Architecture, Commerce, Chemical Engineering and Technology, Art and Chemical Technology. It also provides facilities for All-India Diploma Courses in some subjects besides the Polytechnic Courses.

The proposal to introduce degree courses in certain departments, and to shift Senior Departments to a new site near Delhi University, have necessitated a revision of the original plan. The revised plan is estimated to cost Rs. 91·2 lakhs non-recurring and an ultimate recurring expenditure of Rs. 9·6 lakhs in 1949-50. It envisages expansion of the existing facilities, introduction of new courses and affiliation of certain Departments to the Delhi University.

The Scheme for the starting of a training college for teachers in technology could not be taken up on account of lack of accommodation at the Polytechnic. This scheme has now been merged in the revised development plan of the Delhi Polytechnic.

Indian Institute of Science :—An all-round development of the Indian Institute of Science, Bangalore, is being carried out with financial assistance from the Government of India. The important development schemes in hand are briefly described below :—

(*i*) Establishment of High Voltage Engineering Laboratory :—

Capital cost	Rs. 23,13,000
Ultimate annual recurring cost	Rs. 45,000

The scheme has been taken in hand and a special Officer from England has been appointed by the Council of the institute for setting up the Laboratory.

(*ii*) Four-year development plan :—

Capital cost	Rs. 40,00,000
Ultimate recurring cost	Rs. 3,59,000

The Plan is in the second year of its execution and steps taken so far are :—

1st year programme 1946-47.—Opening of a division of General Chemistry in the Department of Pure and Applied Chemistry.

2nd year programme 1947-48.—Expansion of the activities of the Departments of Metallurgy and Internal Combustion Engineering.

Enlarging the scope of the Departments of Pure and Applied Chemistry, Bio-Chemistry, Electrical Technology and Metallurgy;

Efficient maintenance of the water, gas and sanitary systems, roads and buildings.

(*iii*) Establishment of a power Engineering Department :—

Capital cost	Rs. 40,00,000
Ultimate annual recurring cost	Rs. 3,90,000

Overseas Scholarships :—136 Scholarships were awarded in the year 1947-48 by the Central Government in various subjects. Of the selected scholars, 31 opted for Pakistan, and the scholarships of 14 others were cancelled for various reasons, leaving a balance of 91 on the list. 42 of the scholars have already gone abroad. The question of continuing the scheme next year is still under consideration.

Scheduled Castes Scholarships :—In order to make adequate financial provision to meet the educational needs of the Scheduled Castes, the Government of India have sanctioned an annual grant of rupees three lakhs for a period of five years from the year 1944-45. During the years 1944-47, 888 scholarships were awarded for Post-Matriculate studies in India.

CENTRAL BOARD OF EDUCATION

The thirteenth meeting of the Central Advisory Board of Education in India was held at Bombay in January, 1947. At this meeting many questions of educational importance were discussed. A short account of these is given below—

Basic English :—The Board considered the report of the Committee on Basic English in relation to the Indian Education system and endorsed the views expressed therein that Basic English cannot be considered as a really satisfactory method of teaching the English language to beginners in India nor is it an adequate medium for scientific communications and publications. The main conclusions of the Committee are :

(*i*) That for a period of 6 years in the first instance Basic English should be taught in some Senior Basic and Standard English in others as far as practicable under identical conditions and by equally competent and trained teachers.

(*ii*) At the end of 6 years, the position should be reviewed with the object of determining whether Basic English is quicker and easier to acquire and if so, whether it gives to the pupils the requisite ability to use English for purposes of everyday life.

(*iii*) Simultaneously, an endeavour should be made to examine and work out various plans and schemes for improving and simplifying the teaching of English at this stage.

(*iv*) It would be necessary to ensure that the price of books in Basic English approximates to that of other books of the same standard.

(*v*) It would be necessary to ensure that Basic Text Books used in India will suit Indian conditions.

(*vi*) In the Secondary Schools only Standard English should be taught.

(*vii*) The question of transition from Basic to Standard English needs very careful examination. In the 3rd or final year of the Senior Basic (Middle) Schools and in the 4th or 5th High Schools, the English course should be approximated so as to ease the transition from Basic to normal English for those who are to be transferred to High Schools from Senior Basic (Middle) schools.

(*viii*) Basic English cannot prove useful as a method for the teaching of standard English to beginners.

(*ix*) Provision should be made for the teaching of both standard and Basic English for such adults as desire to have a knowledge of English, Standard for those who desire it for cultural purposes and Basic for those who have a limited time at their disposal and who wish to acquire a knowledge of English for strictly utilitarian purposes.

(*x*) Basic English is not suitable for use at International gatherings.

Secondary Schools Examination Council :—The Board expressed their general agreement with the recommendations of the Committee appointed to examine the formation of a Secondary Schools Examination Council for India and hoped that it would be possible to set up the proposed Council at an early date as an advisory and co-ordinating agency with a view to ensuring a proper standard in School Leaving Examination throughout the country. The main standard conclusions and recommendations of the Committee are :

(*i*) It should be in the public interest to have one examination at the end of the school course and every effort should be made to meet the requirements of the Universities in that Examination.

(*ii*) It is desirable to amend the syllabus framed by the Joint Committee of the Central Advisory Board of Education and Inter-University Board on Matriculation Examination.

(*iii*) The examination to be held at the end of the High School course should serve both the purposes, *viz.* (*a*) for entry into the University and (*b*) employment on leaving school, and as far as possible, papers should be restricted to a maximum duration of 2½ hours.

(*iv*) The Secondary Schools Examination Council for India should not be an examining body and should, for the present at any rate, be endowed with advisory functions only. It should be concerned with examinations at the end of High School stage for entry to the Intermediate courses of Universities which have four-year Degree courses and examinations for entry to the three-year Degree course of Universities which have adopted such a course.

(*v*) The proposed All-India Council should consist of representatives of Universities, Boards of Secondary Education and Provincial Education Departments and distinguished teachers.

National Cultural Trust :—The Board were of the opinion that the formation of a National Cultural Trust for India would go a long way towards stimulating and co-ordinating cultural activities in this country. The main conclusions and recommendations of the Committee appointed to examine the proposal for the formation of such a Trust are :

(*i*) It is desirable to establish an autonomous body called the "Indian Cultural Trust" to stimulate and promote the cultural life of the country.

(*ii*) The Trust should be constituted by a Charter or an Act of the Legislature and should be handsomely endowed by Government.

(*iii*) The functions of the Trust should be:—

- (*a*) To encourage cultural education and research with particular reference to the preservation and development of traditional Indian Culture in relation to such subjects as literature, architecture, sculpture, painting, music, dramatic art and dancing.
- (*b*) To acquire for the State sites, monuments, manuscripts, pictures or other subjects of importance from the point of view of Indian culture.
- (*c*) To advise the Government of India and the provincial Governments with regard to cultural matters.
- (*d*) To co-operate with Indian Universities in the development of activities in the purely cultural fields.
- (*e*) To co-operate with the learned societies of India in order to encourage and expand the cultural side of the work now performed by them.
- (*f*) To publish suitable popular literature on cultural matter.
- (*g*) To maintain close touch with all parts of India (including the States) by holding periodical conferences.
- (*h*) To organise Archæological and other cultural missions to foreign countries and generally to develop and extend existing cultural contacts between India and other countries.

(*iv*) The main activities of the Trust should be carried on through Academies of which the following three should be constituted in the first instance:—

- (*a*) The Academy of Letters which will deal with Indian Languages and Literature, Philosophy and History.
- (*b*) The Academy of Arts (including the Graphic, Plastic and Applied Arts) and Architecture.
- (*c*) The Academy of Music, Drama and Dancing.

(*v*) Each Academy should be an autonomous body with a separate endowment which may be supplemented by grants-in-aid from the Trust and donations from other sources.

(*vi*) The Trust will exercise a general control over the Academies in regard to financial matters by means of regulations. In other matters, the Academies will be independent of the Trust.

(*vii*) The object of these Academies will be to foster and develop the subjects with which they deal and to promote the study of those subjects with a view maintaining the highest possible standards of achievement.

(*viii*) The initial endowment of the Trust should be not less than Rs. 4 crores to enable the Trustee to function properly. If the Central Government contributed half of this sum, a quarter could be raised from the Provincial Governments and the balance from the States.

University Commission:—The Board considered it desirable that the work of the Indian Universities should be reviewed that for this purpose the Government of India in consultation with other Governments concerned should appoint a Commission on the lines of the Sadler Commission to report on Indian University Education and to suggest improvements and extensions that may be desirable to suit the present and future requirements of the country. They also suggested that the Commission so appointed should mainly be composed of eminent educationists with University experience including some eminent educationists from foreign countries.

Other important questions considered by the Board included (*i*) the use of Roman Script for learning Hindustani as a Lingua Franca, (*ii*) Provision for suitable broadcasts for school children, (*iii*) teaching of Physiology in Primary and Secondary Schools and in Colleges and Universities, and (*iv*) production of suitable magazines for children by the Government of India. Among the Committees appointed by the Board was one to examine the question of the formation of a National Education Commission for India and another to draw up curricula for Junior and Senior Basic Schools.

JANUARY MEETING

A meeting of the Central Advisory Board of Education was held at New Delhi on the 13th, 14th, and 15th January, 1948. The Board's agenda consisted of 23 items. A brief account of the important ones is given below.

Basic Education :—In 1946-47 in Assam, ten more teachers and five women teachers were sent for training in the basic method of education.

In Cochin State a Compulsory Education Bill was passed by the Legislative Council, and its introduction was under consideration. There were 507 primary schools, of which 376 were under private management. The total number of children attending primary classes was 1,85,656.

In Mysore, the principles of basic education have been accepted and accordingly a training centre for teachers has been started.

In Travancore, compulsory primary education was introduced in 1946-47 in 7 out of the 30 talukas of the State. It is reported that due to the introduction of compulsory training education, the enrolment in primary classes has risen by 50 per cent.

Development in Adult Education :—In Assam, the scheme of mass literacy movement was taken up by the successive Governments from the year 1940. During the period 1940 to 1946, about 200,000 persons were made literate. It is reported that women literacy organisations have been established practically in all the districts, but the progress of work is handicapped for want of funds.

In Bihar, literacy work was continued on an intensive scale in selected areas during the year 1946-47. In this connection, the active co-operation and support of public associations like All-India Spinners' Association, All-India Village Industries Association, Harijan Sewak Sangh, etc., was invited. The total number of voluntary workers in the literacy centres was 7,981 of whom 1,423 were teachers and 6,558 non-teachers. 1,94,185 persons passed the literacy and post-literacy tests.

In Coorg, there are no regular schools for adults, except a night school with an enrolment of 25 students. There is a keen desire among the women folk to learn Hindi.

It is reported from Cochin that a few adult education centres which were in existence during the previous year were closed down in 1946-47 on account of poor strength. A new scheme is however under consideration.

The Mysore Adult Literacy Council runs two months course for literacy and three months for post-literacy work. The teaching is done by primary school teachers who have undergone training in the teaching of adults. A Vidyapith has also been started for the furtherance of adult education. The course xtends over five months and training is given in Agricultural, Weaving and Home Crafts, besides general education. During the year 1946-47, 4,547 literacy classes were conducted and 78,010 persons were made literate. It is reported that from the year 1941-42 when the Council started its activities, 2,,35,910 persons have been rendered literate.

In Travancore, adult education work is carried on through departmental rural libraries situated in villages. During 1946-47, there were 124 such libraries. Besides there were 72 aided Libraries.

Overseas Scholarship Scheme :—It is intended to produce a sufficient number of highly trained persons, likely to be required for various development plans of the Central and Provincial Governments. In the selection of candidates greater importance is attached to their intellectual attainments and potential ability than to actual practical experience, though practical and research experience also receive considerable weight. This is essentially a short-term measure and is intended to last only so long as adequate facilities for advance training are not available in India. The Central Government pays the entire cost of training in respect of scholars selected for the centre, and meets half the total cost in respect of scholars selected on behalf of Provincial Government.

Overseas Information Bureau :—With a view to providing information and advice for students proceeding overseas the Government of India has set up an Overseas Information Bureau. The main function of this Bureau is to provide an up-to-date information service regarding various aspects of advanced studies abroad. It maintains a good reference library giving information about the universities and educational institutions in the U.K., the U.S.A. and other countries. It is available for consultation and reference. The Bureau publishes a Monthly Bulletin providing latest information regarding educational facilities available abroad, as well as all matters which would help Indian students in their studies abroad.

The Government of India have urged the Provincial Governments, University authorities and States to take steps for revitalising existing Advisory Bureaux and setting up new ones wherever they do not exist. No-one except the United Provinces have adequate organisations of this type at the present moment.

Adult Education :—Percentage of literacy in the country should be raised to at least 50 during the next three years, and in this connexion, the resources and personnel of the country should be fully mobilized. The army of teachers required, whole-time and part-time workers and volunteers, are to be recruited from among the intelligentsia in Government employment and from private bodies. The use of the radio, films, etc., will also be made. It was recommended that funds should be provided by the Central and Provincial Governments at the minimum rate of one anna per person to be educated.

Secondary Education :—It was recommended that a Commission be appointed to investigate the state of secondary education in India and to report on its aim and scope in the light of present conditions and future requirements.

Medium of Instruction :—In regard to the medium of instruction and examination in Indian Universities, suggestions were made that the present position may continue for a period of five years.

Basic Education :—It is accepted on all hands that without such education a modern democratic state, cannot flourish or perform those functions which are expected of it. The scheme of Post-War Education Development prepared by the Central Advisory Board of Education has not only been accepted by the Central and provincial Governments but steps are already under way for the implementation of the first five-year programme. But the whole programme has to be hastened. As the Minister for Education, Government of India, put it, "No one will for a moment tolerate today that 40 years must elapse before the full scheme of basic education for all the inhabitants of this land can be implemented. In fact even half that period will seem to many to savour of delay and procrastination. We must, therefore, devise measures by which the educational progress of this country can be so accelerated that we reach our objective within much shorter time".

Religious Instruction :—*About Religious Education the Minister made the following Points.*—"In connection with the scheme of the Basic Education the question of religious instruction had cropped up at the time. Two Committees of the Board pondered over it but they could come to no agreed decision. I should like that this question may be reconsidered in the light of the changed circumstances. For our country this question has a special importance. Our present difficulties, unlike those of Europe, are not a creation of materialistic zealots but of religious fanatics. If we want to overcome them, the solution lies not in rejecting religious instruction in elementary stages but in imparting sound and healthy religious education under our direct supervision so that misguided credulism may not affect the children in their plastic stage.

"But if religious instruction is to be a part of Basic Education, what will be the proportion? How is it to be managed? These are questions which are to be thoroughly considered. Indeed there will be difficulties in the way. If the main issue is settled, details can be tackled later on. In any case I request you to appoint a committee to go into the question *ab novo*. It may be authorised to send its recommendations directly to the Government."

Medium of Instruction :—In regard to this question the Minister said, "In future English cannot remain the medium of instruction. Whatever the change may be in this direction, it should not be sudden but gradual. In my opinion so far as Higher Education is concerned, we should come to the decision that the *status quo* may be preserved for five years. But along with it provision may be made by the Universities for the coming change.

"But in this connection a fundamental question arises with regard to Indian languages. How is the change to be brought about? Is University education to be imparted through a common Indian language or Provinces may be given an opportunity to have their own regional languages for University teaching? English was a foreign language. We were handicapped by having it as our medium of instruction. But we were also benefited in one way that all the educated people in the country thought and expressed themselves in the same language. It cemented the national unity. It was such a great boon to us that I should have advocated its retention as the medium of instruction, had it not been fundamentally wrong to impart education through a foreign language. But obviously I should desist from offering this advice. I put it to you if only till recently a Madrasi or Punjabi or a Bengali felt no difficulty in receiving education through a foreign language, why should he be handicapped if he were to be educated through one of the Indian languages? Instead of English we adopt an Indian language, we shall certainly be able to retain the same intellectual unity which was created for us by the English language.

"The alternative course before us is to have regional languages for university teaching and one common compulsory language for Central Government and for Inter-Provincial communication".

INTER-UNIVERSITY BOARD

The activities of this body should be mentioned in a survey of recent educational progress. A meeting of the Inter-University Board of India was held at Jaipur on the 3rd and 4th December, 1946, under the Chairmanship of Dr. Amarnath Jha, Vice-Chancellor, Allahabad University, in the absence of the Chairman Dr. J. C. Chatterjee, Vice-Chancellor of the University of Agra. As usual questions of great importance relating to University Education were discussed.

Indian National War Academy :—The Board welcomed the establishment of the Academy and noted that the syllabus for the Diploma to be instituted by the Academy compared favourably with that for the Degree Examination of an Indian University. The Board resolved to request the Universities to examine the syllabus in detail and to extend to the students of the Academy such benefits of continued study in the University as may be agreed upon based on equivalence of study and examination.

The Board decided that holders of special war certificates can be admitted to a University only after they pass the Matriculation or equivalent examination, but that conditions relating to attendance and residence may be waived for them.

Practical Bias :—In view of the need for specialised training for candidates who will be recruited for foreign services, the Board recommended that suitable courses of studies for their training should be instituted in Indian Universities for preparing persons for Political, Trade and Diplomatic services in foreign countries. For this purpose, the Government of India, Provincial Governments and States were asked to allot funds to Universities.

Administration :—In regard to the recommendation made by the Central Universities Grants Committee about the desirability of having a full-time Vice-Chancellor and an approved Finance Committee with the treasurer as chairman in each University for ensuring efficient administration the Board decided that

(*i*) All Universities should have full-time Vice-Chancellors.

(*ii*) In each University a Finance Committee should be constituted.

(*iii*) The question of appointment of a Treasurer be referred to the different universities for opinion.

(*iv*) The Government is requested to enlarge the scope of the Universities Grants Committee, and to place at its disposal more funds to enable it to make special grants to all Indian Universities for specified purposes. The grants so made should not disturb the autonomy of the Universities and the Committee should generally follow the procedure adopted by the Universities Grants Committee in England and Wales, for satisfying itself that the funds placed at the disposal of the University are properly spent. The Board further recommended that the Grants Committee should be remodelled on the lines of the Universities Grants Committee in England and Wales. In the opinion of the Board, the functions of the Grants Committee should be

(*a*) to assess and distribute grants from public funds to the Universities.

(*b*) To examine and advise upon all schemes for major developments.

(*c*) To visit the Universities once in five years and make recommendations.

Text-Books :—The Board recommended that books meant for educational institutions should as far as possible present an objective historical view and should not contain statements which have not passed the test of facts and critical judgment.

A Commission :—The Board resolved that it was desirable that the work of Indian Universities be reviewed and that for this purpose the Government of India should constitute a Commission to report on the lines of the Sadler Commission to report on the work of Indian Universities and to suggest any changes that may be deemed desirable in the light of modern conditions and changes in educational policies adopted in other countries and to suit modern requirements in India. This Commission should be mainly composed of eminent educationists with university experience including some eminent educationists from foreign countries.

The appointment of the Commission is under the consideration of the Government of India.

Scales of pay recommended for teachers in Schools by The Central Advisory Board of Education in India (All Pre-War Standards).

MINIMUM NATIONAL SCALES

(*a*) **Primary Schools (Including Infants and Nursery Schools) :**—Rs. 30-1-35-3 (biennially)-50 p.m. (for men and women teachers). Teachers of Village Schools should have free houses : where this is not possible, 10 per cent. should be added to their salaries. This is the scale for normal rural areas, and may be increased upto 50 per cent. to meet the needs of areas where the cost of living or other factors necessitate a more generous scale, *e.g.*. in Delhi or one of the provincial Capitals the initial salary for primary teachers may be raised to 45 and the maximum to 75.

(*b*) **Senior Basic (Middle) Schools :**—Rs. 40-2-80 p.m. with the same provision as in the case of primary teachers for increasing it to the needs of more expensive areas. Men and women will get the same scales of pay.

(*c*) **High Schools :**

NON-GRADUATE TRAINED TEACHERS :—Rs. 40-2-80 p.m. + 6¼ p.c. Contributory Provident Fund. 10 per cent. house allowance in normal rural areas ; possible increase up to 50 per cent. to meet higher cost of living or other special circumstances.

GRADUATE TRAINED TEACHERS IN HIGH SCHOOLS

Rs. 70-5-150 p.m. + 6¼ per cent. Contributory Provident Fund. 10 per cent. house allowance in normal rural areas ; possible increase up to 50 per cent. to meet higher cost of living or other special circumstances.

[*N.B.* Special posts of responsibility to be created among the senior teachers in High Schools which would carry Rs. 20 p.m. in addition to ordinary salary. Such teachers would be in charge of main groups of studies, *e.g.*, Languages, Science, etc., or of libraries, games, hostels and important features of school life.]

SCALES FOR HEAD TEACHERS IN ALL GRADES OF SCHOOLS

[*N.B.* As in the case of Assistant Teachers scales may be increased up to 50 per cent in areas where cost of living by pre-war standards is more expensive :

Grade	Size of School	Salary scale p.m.	Remarks
1.	*Primary Schools*		
A.	1 or 2 class sections	*Rs. 10 above scale for assistants.	Same scale for men and women. Where no house is provided 10 per cent. should be added to salary.
B.	3, 4 or 5 class sections	Rs. 50-4-70	
C.	5 or 6, 8 or 10 class sections	Rs. 60-4-80	
D.	Above 8 or 10 class sections	Rs. 80-4-100	
2.	*Middle Schools (Vernacular and Anglo-Vernacular)*		
A.	3 or 4 class sections	Rs. 80 4-100	Same scale for men and women. Where no house is provided 10 per cent. should be added to salary.
B.	4 or 5 to 6 or 8 class sections	Rs. 90-4-110	
C.	Over 6 or 8 class sections	Rs. 110-4-130	
3.	*High Schools*		
A.	Upto 250 pupils on roll	Rs. 175-10-255	Same scale for men and women.
B.	251-500 pupils on roll	Rs. 250-10-350	
C.	Over 500 pupils on roll	Rs. 350-15-500	

POST OF RESPONSIBILITY IN ALL TYPES OF SCHOOLS EXCEPT THE SMALLER ONES

Such posts to relieve head teachers of a certain amount of routine administrative responsibility and so to free them for attention to their more important duties and to act as a further incentive to the more ambitious type of teacher.

Primary Schools.

Grades A &B	None	Rs. 5 p.m. in addittion to the ordinary scale.
Grade C	1	
Grade D	2	
Middle Schools		
Grade A	None	Rs 10 p.m. in addition to the ordinary scale.
Grade B	1	
Grade C	2	
High Schools		
Grade A	2	Rs. 20 p.m. in addition to the ordinary scale.
Grade B	4	
Grade C	4	

Appointments to posts of special responsibility to be made for three years, the teachers in question being eligible for re-appointment subject to satisfactory service.

REMUNERATION OF SPECIALIST TEACHERS

It will be divided into two grades.

(*a*) Teachers of special subjects in Vernacular Middle (Senior Basic Schools), in Anglo-Vernacular Schools and in all middle classes of high schools ;

(*b*) Graduates.

No. (*a*) above to be granted one year's seniority in the appropiate scale together with Rs. 2 p.m. as a personal allowance ; No. (*b*) to receive no additional remuneration.

PENSION OR PROVIDENT FUND

It has been recommended that all recognised teaching service should ultimately become pensionable and that where no pension funds exist or can be expected to exist in the near future, contributory provident funds should be established on the basis of 50 per cent. of contribution from the teacher and 50 per cent. from the employer.

TRANSFER OF TEACHERS

Where teachers are transferred from one school to another, either in the same area or in different areas, the periods which they have spent in recognised service should be taken into account in determining their salaries in the new school or area.

SCALES FOR UNIVERSITY TEACHERS

The following minimum scales have been recommended by the Central Advisory Board of Education for different grades of teachers :

(*a*) **UNIVERSITY DEPARTMENTS**

Professors	*Readers*	*Lecturers*	*Junior Lecturers*
Rs. 1,000 to 1,250	Rs. 500–25–800	Rs. 300–20–500	Rs. 210–15–300

(*b*) **AFFILIATED AND CONSTITUENT COLLEGES.**

Principal	*Readers*	*Lecturers*	*Junior Lecturers*
Rs. 800 to 1,000	Rs. 500-25-800	Rs. 300–25–500	Rs. 210–15–300

(in Technical and Engineering Colleges and in subjects which require a certain amount of professional experience) and for others Rs. 150-15-300.

Where a college teacher is given or allowed to retain the title of Professor, this should not automatically entitle him for the salary prescribed in the case of a University Professor. In such cases, the rate of remuneration should be settled by consultation between the University and College authorities.

No distinction is to be drawn between teachers on account of their sex, the scales mentioned above being applied to both men and women.

Scales of Pay for Teachers in Delhi and Ajmer-Merwara accepted by the Government of India.

Name of Post.		Prescribed Scale.
Headmasters and Headmistresses of Vernacular and Anglo-Vernacular Schools.	(i)	Rs. 100-8-140-10 200 (upto six classes).
	(ii)	140-10-200- E.B. 10-300 (for more than six classes).
Headmasters and Headmistresses, High Schools	(i)	200-10-300
	(ii)	300-20-400
	(iii)	400-20-500
Principals of Higher Secondary Schools.		Rs. 350-25-500-30-590.
Teachers in Primary Schools (if untrained).		Rs. 35-1-40-2-60.
Trained Teachers in Primary Schools. Vernacular or Senior Basic Schools, Anglo-Vernacular Schools. and teachers in the middle classes of High Schools.	(i)	Rs. 50-2-60-3-90 (non-matriculate).
	(ii)	Rs. 68-4-120 5-170 (matriculates).
Graduate teachers in High Schools.		Rs. 80-5-120-8-200 10/2-220 Selection Grade Rs. 150-15-300.
Graduate teachers in High Schools with qualifications similar to those of College Lecturers who are expected to teach in higher classes.		Rs. 250-15-400-20-500.
Headmasters and Headmistresses in Primary Schools.	(i)	Grade pay + S.P. Rs. 10 for Schools with one or two class sections.
	(ii)	Grade pay + S.P. Rs. 20 for Schools with three, four, or five class sections.
	(iii)	Rs. 100-5-125 6-155—E.B. 6-185, for Schools with more than five class sections.

HISTORICAL SKETCH

Having surveyed the present position we can next pass on to a brief sketch of the history of Indian education with special emphasis on recent developments.

Indian education is in fact unintelligible except through its history. The structure is top heavy. The lower classes are largely illiterate while the middle classes who constitute the bulk of the *intelligentsia* are in point of number at least educated to a pitch equal to that of countries whose economic conditions are more highly developed. As might be expected from this abnormal distribution of education, the form which it has eventually assumed contains corresponding defects. In recent years, however, strenuous efforts have been made to remedy these defects. Primary Education Acts have been passed in several provinces in favour of the expansion of primary education among the masses. On the other hand, the numbers of students in colleges and universities have grown apace. The volume of educated unemployment had at one time reached alarming proportions, but in recent years, owing to the conditions of war and its aftermath many educated young men have been absorbed in the services; still the problem of finding suitable employment for all educated men in peace time has yet to be tackled successfully.

INTRODUCTION OF WESTERN LEARNING

In the early days of its dominion in India, the East India Company had little inclination for the doubtful experiment of introducing western learning into India. Warren Hastings, the dominating figure of the time, was a genuine admirer of the laws and literature of the East. His policy was to enable the ancient learning to revive and flourish under the protection of a stable government, and to interfere as little as possible with the habits and customs of the people; and mass education was not touched.

It was from sources other than Government that the desire for western knowledge arose in India. In 1816, David Hare, an English watchmaker in Calcutta, joined hands with the great Indian reformer, Raja Ram Mohan Roy, to institute the Hindu College for the promotion of western secular learning. Fifteen years later, the Committee of Public Instruction in Bengal reported that a taste for English had been widely disseminated and that independent schools, conducted by young men reared in the Hindu College, were springing up in every direction. A still more remarkable innovation was made in 1835 by the establishment of the Calcutta Medical College, whose object was to teach "the principles and practice of medical science in strict accordance with the mode adopted in Europe." Many pronounced the failure of the undertaking to be inevitable; for, under the Hindu custom the higher castes were forbidden to touch the dead. This obstacle was surmounted by Madhusudan Gupta who, with a few courageous pupils, began the dissection of the human body.

The Missionaries.—Another impetus to the introduction of western learning was the devotion of Christian missionaries. Carey, Marshman and Ward opened the first missionary College at Serampore in 1818; and twelve years later, Alexander Duff reversed the whole trend of missionary policy in India by his insistence on teaching rather on preaching and by founding his school and College in Calcutta.

Lord William Bentinck's minute of 1835 (based upon Macaulay's famous minute) marks a somewhat tardy acceptance by Government of the new policy. Government then determined while observing neutrality in religious matters to devote its available funds to the maintenance of secondary schools and colleges of Western learning, to be taught through the medium of English. But this decision did not entail that Oriental learning should be neglected; still less that the development of the vernacular should be discouraged. Other changes powerfully contributed to the success of the new system. The freedom of the Press was established in 1835; English was substituted for Persian as the language of the Courts in 1837; and in 1844 Sir Henry Hardinge ordained that preference in Government appointments should be given to those who had received western education. In the following decade the new learning took firm root in India; and, though the Muslims still held aloof, the demand for English schools outstripped the means of Government for providing them. Fortunately there has been of late a marked appreciation among Muslim leaders of the need for improving the instructional level of their co-religionists; and in many of the provinces of India a great impulse towards educational advance among the Muslim community is now noticeable. The Muslim University at Aligarh, more recently the Osmania University of Hyderabad, Deccan, are direct outcomes of the urge for higher education felt by the leaders of the Muslim community.

To Missionary Societies is due the initiative in the modern education of women, strongly supported by Hare and Ram Mohan Roy. The establishment of a Girls' school in Calcutta in 1849, by Drinkwater Bethune is a landmark in the history of female education in India.

WOOD DESPATCH

An epoch in Indian educational history is marked by Sir Charles Wood's despatch in 1854. Perhaps its most notable feature was the emphasis which it laid on the importance of primary education. The old idea that the education imparted to the higher classes of society would filter down to the lower classes was discarded. The new policy was boldly "to combat the ignorance of the people which may be considered the greatest curse of the country." For this purpose Departments of Public Instruction were created on lines which do not differ very materially from the Departments of the present day. The despatch also broke away from the practice followed since 1835, whereby most of the available public funds had been expended upon a few Government schools and colleges, and instituted a policy of grants-in-aid to private institutions. It emphasised the importance of encouraging the study of the vernaculars as the only possible media for mass education.

Another feature of the despatch was an outline of a university system which resulted in the foundation of the Universities of Calcutta, and of Madras and Bombay three years later. The affiliating type of university then became the pivot of the Indian education system. It has undoubtedly been of value in several ways. It enabled Government to select recruits for its service on an impartial basis; it did much, through the agency of its colleges to develop backward places; it accelerated the conversion of Indians to a zeal for western education; and it cost little at a time when money was scarce. On the other hand, the new universities were not corporations of scholars, but corporations of administrators; they did not deal directly with the training of men, but with the examination of candidates; they were not concerned with learning, except in so far as learning can be tested by examination. The colleges were fettered by examination requirements and by uniform courses; their teachers were denied that freedom which teachers should enjoy and their students were encouraged not to value training for its own sake but as a means for obtaining marketable qualifications.

In certain important respects the recommendation in the despatch were not followed. Directors did not intend that university tests, as such should become the sole tests qualifying for public posts; they also recommended the institution of civil service examinations. They did not desire the universities to be deprived of all teaching functions; they recommended the establishment of university chairs for advanced study. They were aware of the dangers of a literary course of instruction; they hoped that the system of education would rouse the people of India to develop the vast resources of their country.

The encouragement of the grants-in-aid system was advocated to an even greater extent by the Education Commission of 1882, which favoured the policy of withdrawing higher education from the control of Government within certain limits and of stimulating private effort. In theory the decision was correct, but in practice it was irretrievably wrong. In its fatal desire to save money, Government deliberately accepted the mistaken belief that schools and colleges could be maintained on the low fees which the Indian parent could be expected to pay. And, in the course of time, an unworkable system of dual control grew up, whereby the Universities with no funds at their disposal were entrusted with the duty of granting recognition to schools and the Departments of Public Instruction were encouraged to cast a blind eye on the private institutions and to be content with the development of a few favoured Government institutions.

THE UNIVERSITIES COMMISSION

In 1902, the Universities Commission was appointed by Lord Curzon's Government, and its investigation was followed by the Universities Act of 1904. The main object of the

Act was to tighten up control, on the part of Government over the universities, and on the part of the universities over the schools and colleges. The Government retained the power of cancelling any appointment and all university resolutions and proposals for the affiliation or disaffiliation of colleges were to be subject to Government sanction. The universities were given the responsibility of granting recognition to schools and of inspecting all schools and colleges, the inspection of schools being ordinarily conducted by the officers of the Department of Public Instruction. Permission was also given to the universities to undertake direct teaching functions and to make appointments, subject to Government sanction, for these objects, but their scope was in practice limited to post-graduate work and research. The territorial limits of each university were defined, so that universities were precluded from any connection with institutions lying outside those boundaries.

Neither the Commission nor the Government discussed the fundamental problems of university organisation, but dealt only with the immediate difficulties of the Indian system.

1913 Resolution—The Indian Universities Act of 1904 was followed by two important resolutions of the Government of India on Indian educational policy—one in 1904 and the other in 1913. The resolution of 1904 was comprehensive in character and reviewed the state of education in all its departments. The following passage from it summarises the intentions of Government:—"The progressive devolution of primary, secondary and collegiate education upon private enterprise and the continuous withdrawal of Government from competition therewith was recommended by the Education Commission in 1883 and the advice has generally been acted upon. But while accepting this policy, the Government of India at the same time recognise the extreme importance of the principle that in each branch of education Government should maintain a limited number of institutions, both as models for private enterprise to follow and in order to uphold a high standard of education. In withdrawing from direct management it is further essential that Government should retain a general control, by means of efficient inspection, over all public educational institutions." The comprehensive instructions contained in this resolution were followed in the next few years by the assignment to the provinces of large imperial grants, mainly for University, technical and elementary education.

The resolution of 1913 advocated, *inter alia*, the establishment of additional but smaller Universities of the teaching type; it reaffirmed the policy of reliance on private effort in secondary education; it recommended an increase in the salaries of teachers and an improvement in the amounts of grants-in-aid; and it insisted on proper attention being paid to the formation of character in the education given to scholars of all grades. It further discussed the desirability of imparting manual instruction and instruction in hygiene; the necessity for medical inspection; the provision of facilities for research; the need for the staffing of the girls' schools by women teachers and the expansion of facilities for the training of teachers. The policy outlined in 1913 materially accelerated progress in the provinces, but the educational developments foreshadowed were in many cases delayed owing to the effects of the First World War.

The Reforms Act.—The Reforms Act of 1919 altered the conditions of educational administration in India. Education became a provincial 'transferred' subject in the Governors' provinces under the charge of a Minister, but the education of Europeans was made a provincial 'reserved' subject, *i.e.*, it was not within the charge of the Minister of Education. The introduction of provincial autonomy under the Government of India Act, 1935, brought education in these provinces under the full control of their Ministers of Education.

Broadly speaking, an educational policy for India as a whole no longer existed, but in order that Provinces may co-ordinate educational activities and follow a uniform policy of development, the Central Advisory Board of Education was reconstituted in 1935. This Board in which all the provincial governments are represented meets annually to discuss all matters of education, and devise an all-India educational policy. Its function is, however, purely advisory.

At the time of handing over the administration of education to the provinces, the Government of India retained under their immediate control all education in the Centrally Administered Areas. They still deal with matters relating to Universities like Aligarh, Benares and Delhi.

ADMINISTRATION

The Director of Public Instruction is the permanent head of the Department of Education and acts as expert adviser to the Education or Adviser in charge of Education. He controls the inspecting staff and the teaching staff of Government institutions and is generally responsible to the provincial government for the administration of education. The authority of Government in controlling the system of public instruction, is in part shared with and in part delegated to Universities as regards higher education and to local bodies as regards elementary education and education through the mother-tongue.

The Central Provinces have a High School Board and Madras has an S.S.L.C. Board for control over secondary education, while old undivided Bengal (for Dacca area only) and the United Provinces (for the whole province except the areas under the jurisdiction of Benares Hindu and Aligarh Muslim Universities) had and still have Intermediate and Secondary Education Boards which control high school and intermediate education in the areas under their control. Delhi has a Board of Higher Secondary Education. The Rajputana (including Ajmer-Merwara). Central India and Gwalior High School and Intermediate Board has jurisdiction over schools and Intermediate Colleges in Ajmer-Merwara and Central India besides such institutions in Rajputana and certain other states.

PRESENT POLICY

The publication of the report of the Central Advisory Board of Education Post-War Educational Development in India, and acceptance generally of the principles and objects of that report by the Government of India, which is subject to the limitation of finance, make a land mark on the history of education in India. Until the recommendations contained in the report for all round educational development and reorganisation are fully implemented, this report will remain a 'watchword' in the field of education for many years to come.

Some of the principles underlying the new policy have already been set out in the earlier part of this section. Other recommendations are summarized below along with the action so far taken by Government to give effect to these recommendations.

(*i*) **Education Department.**—The Board had recommended that a strong Education Department would be required at the Centre and in this connection the scope and functions of the Central Advisory Board of Education should be enlarged.

The Government of India constituted a separate Department of Education with effect from the 1st September, 1945, consisting of several technical officers, besides Secretariat Officers. Besides, there are at present two Education Liaison Officers for India in U.S.A. and two Assistant Educational Advisers attached to the Office of the High Commissioner for India, London, in connection with the welfare of Indian students abroad.

The Department deals with education in the Centrally Administered Areas, Central Universities, Universities Grants Committee, Central Advisory Board of Education, Bureau of Education, Technical Education, Government Scholarships for technical training abroad, welfare of students overseas, Scientific Liaison Officers, Cultural Co-operation, and further education of demobilised personnel.

(*ii*) **Universities Grants Committee.**—The Central Advisory Board of Education had recommended that an Indian Universities Grants Committees should be constituted for the purpose and with the terms of reference set out in their report.

In accordance with this recommendation, the Government of India constituted such a Committee consisting of four members, with Sir Mirza Ismail as Chairman of the Committee. The present Chairman is Dr. M. R. Jayakar. This Committee was to act in the first instance in a consultative and advisory capacity only with regard to the three Central Universities. It may also consider application from others if and when received.

At their first session held in January, 1946, the Grants Committee considered schemes of development from the Aligarh Muslim University, the Benares Hindu University, and the Delhi University. They also considered some research schemes of all-India importance from a few provincial universities. As we have already stated recommendations have been made for enlarging the scope of the Committee.

(*iii*) **Council of Technical Education.**—The Central Advisory Board of Education had recommended that all technical education beyond school stage other than that given in the technological departments of universities should be placed under a Central controlling Body (to be called All-India Council for Technical Education) having representatives of all the interests concerned.

In pursuance of this recommendation, the Government of India set up an All-India Council for Technical Education with Mr. N. R. Sarkar as its Chairman.

The Council's immediate task is (*a*) to survey the entire field of technical education, (*b*) to consider immediate projects already under the consideration of the various Departments of the Government of India, and (*c*) to conduct preliminary investigation with a view to securing co-operation in an all-India scheme for Technical Education.

An *ad hoc* Committee, called the Higher Technological Education Committee has also been set up under the Chairmanship of Mr. N. R. Sarkar to advise on the provision of facilities for technical education in India on the lines of the Massachusetts Institute of Technology.

PRESENT SITUATION

The future plans have already been described earlier. The rest of the section will be devoted to a brief description of the present situation from the pre-primary to the university stage.

Pre-Primary Education.—At present the facilities available for this kind of education are negligible; there are a few schools scattered here and there in the Bengal area. In some provinces, pre-primary classes for children of the age-group 4-5 are attached to primary schools.

Middle School Education.—At present there are two types of middle schools; (*i*) Middle English Schools, with 1 to 8 classes generally; English is taught as a compulsory subject in the middle stage; and these schools are feeders for high school education. (*ii*) Middle Vernacular Schools or Indian Middle Schools, where the teaching is in the mother tongue, English is not taught as a compulsory subject, and education in these schools has a rural bias, and is of a practical nature. The teachers for primary schools are generally selected from the output

Institutions under private management are controlled by Government and by local bodies by "recognition" and by the payment of grants-in-aid, with the assistance of the inspecting staffs employed by Government and by local bodies.

of these schools, who receive a 2-year course of training in a normal, or an elementary training school.

High School Education.—The existing high school education system flows into three streams. In certain provinces high schools have primary, middle and high classes; in some middle and high classes, while in certain cases, notably the North-West Frontier Province, the Punjab area and the United Provinces, high classes are also attached to the Intermediate classes constituting 'Intermediate Colleges'.

Again in some provinces a high school stage consists of two classes IX—X (Punjab, N.-W.F.P. and United Provinces); in some three, IX, X & XI, (C.P., Madras and Orissa) while in some four classes. Against this unhomogeneous and non-uniform system, the Central Advisory Board of Education has recommended that high schools should be treated as distinct units differing in outlook and objective from the ordinary Senior Basic (Middle) schools, and that in future the High School Course should cover six years from about the age of eleven. Primary Departments, even if housed in the same premises as high schools should be regarded as entirely distinct units and organised separately.

In the re-organised system of education, high schools will be of two main types—(*i*) the Academic High Schools, and (*ii*) the Technical High Schools. The former are required to impart instruction in arts and pure Sciences, while the latter to provide training in the applied sciences, and in industrial and commercial subjects. In both types of schools, the course in the junior department, *i.e.*, middle stage, will be very much the same, with a common core of the 'humanities' throughout. There will be no differentiation between boys and girls high schools except that in the latter class of schools, Domestic Science will be added to the courses of study.

University Education.—Though the Central Advisory Board of Education has recommended as an essential and urgent reform the introduction of a three-year degree course in place of the existing two-years' one with the consequence that the one year of the intermediate stage will be added to the University course, and the other to the high school course, this change has not so far been effected in any province except Delhi. It appears that other Universities will fall in step with Delhi only if this experiment proves successful.

The Board had estimated that under the national system of education now proposed, roughly 11 lakhs out of an estimated total of over 33 lakhs of pupils in the Senior department of high schools, will be leaving school every year. They believed that at least one in fifteen of those leaving the high school would be able to reach the level of attainments required for and to be prepared to embark on a university course. In the year 1944-45, 52,938 boys and 6,824 girls were in the 1st year of the collegiate stage, showing that there is yet great room for the expansion of university education, the need for which will be accentuated when the high school education system has sufficiently developed, as recommended by the Board.

FINDING TEACHERS

The Central Advisory Board of Education were of the opinion that the fundamental requirement of any comprehensive development in the educational system is the provision of an adequate establishment of teachers and of the necessary institutions for training them. They therefore recommended that as the existing institutions were barely sufficient to meet wastage among existing teachers, new training schools and colleges (including University Education Depts.) must be provided. The minimum qualification of a teacher for a junior Basic School which has been prescribed by the Board is the possession of a Matriculation examination certificate or its equivalent followed by a two or three years course of professional training, and for a high school teacher, the possession of a degree followed by one year's training. The minimum scale recommended for a matriculate trained teacher is Rs. 30-1-35-3 (biennially)-50, in a senior basic (middle) school Rs. 40-2-80, and for a graduate trained teacher Rs. 70-5-150 p.m.

It has been recommended that the teachers of village schools should have free houses where this is not possible, 10 per cent. should be added to their salaries. Further the scale of matriculate trained teacher, may be increased to 50 per cent. to meet the needs of areas where the cost of living or other factors necessitate a more generous scale. In the case of non-graduate and graduate trained teachers, 10 per cent. house allowance in normal rural areas, possible increase upto 50 per cent. to meet higher cost of living or other special circumstances, *plus* 6¼ per cent. *contributory provident fund.*

The present output of matriculates is too small to meet the needs of basic schools. Eight years continuous education in a basic school imparted in an Indian language, is sufficient to make a scholar reach the present matriculation standard except English. Two to three years further education in a training institution given to these students will equip them to become suitable teachers for junior basic classes. In order to accelerate the rate of progress of education, and to enable to open a school in all villages having sufficient children of school-going age for a school within the shortest possible time, it is necessary that the best products from senior basic schools are encouraged to become teachers, alongside of willing matriculates.

ADVISORY BOARD MEETING

A report of the meeting of the Central Advisory Board of Education held at Mysore in January 1946 may also be given.

(1) **Religious Educations**:—The members of the Board were not unanimous in their views on the issue involved. While some members felt that the teaching of religion should be restricted exclusively to broad moral and ethical principles others held that the denominational teaching constituted the essence of religious instruction and must be provided for in schools.

Accordingly the Board resolved that while fundamental importance of spiritual and moral instruction in the building of character is duly recognised, the provision for such teaching, except where it can be provided in the normal course of secular instruction, should be the responsibility of the Home and the Community to which the pupil belongs.

(2) **Conditions of Employment**:—The report of the Committee on conditions of service of teachers was adopted by the Board with minor amendments and it was decided to forward it to the Provincial and State Governments for necessary action.

Among the main recommendations made by the Committee are:

(*i*) Selection Committees should be established for the appointment of teachers in all types of schools on the lines recommended. Teachers of all grades when confirmed in their appointments should be placed on a Provincial cadre.

(*ii*) Teachers should be appointed on a written contract basis.

(*iii*) Teachers should become entitled to 15 days' sick leave on full pay for every 6 months' service and should be allowed to accumulate it up to a maximum of 12 months.

Women teachers may avail themselves of three months' leave in the way of maternity benefit upto a maximum of one year in addition to the usual sick leave.

(*iv*) The size of a class should not exceed 40 students.

(*v*) Schools should be open for not less than 200 days or 400 sessions a year, each session consisting of 2½ hours approximately. A working day will consist of only two sessions.

(*vi*) Teachers should be given study leave on full pay.

(*vii*) The normal age of retirement should be fixed at 55, to be extended upto 60 when desirable.

(3) **Selection of Students**—The report of this Committee was also adopted by the Board with certain amendments, and it was decided to forward it to Provincial Governments for necessary action.

Among the main recommendations made by this Committee are the following:—

(*i*) The first selection of pupils for admission into the different types of high schools should be made at the end of the Junior Basic (Primary) stage, *i.e.*, at about the age of 11 *plus*.

(*ii*) A further selection stage at the age of 14 *plus* with a view to transferring to suitable high schools those pupils who have developed at a comparatively late stage and those who for some reason or other were missed at 11 *plus*.

(*iii*) The school record should give relevant and definite information, capable of being recorded in a convenient manner. But the form should include the following essential items of information:

(*i*) Attainment of subjects, which will furnish evidence of further educational promise.

(*ii*) Intelligence Quotient.

(*iii*) Personal qualities as a guide to the type of higher education best suited to the pupil.

(*iv*) It is important to have an assessment of the personal qualities of each selected candidate from the Head Teacher.

(*v*) The educational authorities should investigate the possibilities of applying modern technique of selection for admission into institutions.

(*vi*) The Committee consider that the Employment Selection Bureau established under the Home Department provides the suitable foundation on which an adequate organisation can be built for conducting research in selective methods and standardising tests of various types.

(*vii*) Until equal educational opportunities are made available to all in the selective process, special provision will have to be made to ensure the admission of a reasonable number of children from educationally backward communities and the selection should be confined, in filling such special places only to backward minority communities.

(4) **Teaching of Modern Languages.**—The question of the introduction of Russian, Chinese and other modern languages at the high school stage was another subject of importance discussed by the Board. It was agreed that the teaching of these languages at the high school stage was impracticable, but they should be taught in universities.

(5) **U. N. O.**—The Government of India had appointed a delegation consisting of Sir John Sargent, Rajkumari Amrit Kaur, Dr. Zakir Husain, Dr. Amarnatha Jha, Mr. K. G. Saiyidain and Dr. T. Quayle to attend the United Nations Conference held in London in November, 1945 for the purpose of considering the establishment of a permanent Educational, Scientific and Cultural Organisation.

The delegation from India was unanimous that it is well worthwhile for the Government of India to ratify the conclusions reached at the conference and to give their full support to the United Nations Educational, Scientific and Cultural Organisation, since India stands to gain very much from association with progressive educational countries and may derive great practical assistance from the machinery of co-operation which it will be one of the objects of the permanent organisation to establish.

(6) **Secondary Schools Examination Council.**—The Board considered the desirability of a Secondary Schools Examination Council with a view to bringing examinations upto a common standard, and decided to appoint a Committee to examine the ways and means of establishing such a body and its constitutions and to report.

(7) **Physical Education**—The Board sympathised with the objective that the schools should take all possible care for the promotion of the physical welfare of children in their care, but

they were unable to go so far as to say that 'Physical fitness' should be included as an examination subject, as it was felt that the object of physical education would be defeated if the suggestion was accepted.

With regard to the question of Indian languages as the medium of instruction in Collegiate stage, the Board recommended that (i) it was for the Central and Provincial Governments and States to subsidise the production of books of university standard in the different Indian languages, (ii) for the universities to select certain areas and institutions where the medium of instruction should be an Indian language and where special grants should be made for the employment of qualified teachers and the upkeep of such colleges, (iii) in the case of such languages as are common to more than one university there should be Inter-University and Inter-Governmental co-operation in the production of suitable text-books.

The Board further expressed the opinion that in order to encourage such universities that employ the Indian languages as media of instruction, it would be desirable that, other things being equal, the alumni of these institutions should receive special preference in the matter of employment, particularly in the Education Department and such other Departments where proficiency in the Indian languages is likely to prove an added qualification.

THE NATIONAL PLANNING COMMITTEE

The report of the Sub-Committee of the National Planning Committee, outlining a national system of Technical Education and Scientific Research in Indian states that the system in the Wardha scheme of a child learning a craft by the end of the school career to start a vocational life, is spiritually harmful to the child, as the vocation becomes the principal object of education. This gives a narrow and shallow knowledge of the subjects taught.

While accepting the syllabus for the primary schools under the Wardha scheme as satisfactory, the committee suggests that algebra should be taught side by side with arithmetic, and British units of length, area, volume, weight and currency may be avoided and Indian units substituted.

The report is not in favour of what is known as the exchange motion under the Wardha scheme, according to which current expenditure of the school is expected to be met by the sale of the goods produced in the technical section by the students. The report emphasizes that these schools should be a direct burden on the State.

Primary education covering a period of seven years, according to the report, should be free and compulsory for all children and may be co-educational, the medium of instruction being the mother tongue.

After the primary course of seven years, secondary schools of general arts and sciences of three or four years' course should be established, and these three or four years should prepare students for admission to the university or higher technical or professional courses. Secondary schools, admission to which is not to be compulsory, should provide the study of Western languages, preferably English, the medium of instruction remaining the mother tongue.

A regular sifting of students is to be made after completion of the primary school course. Only those intellectually fitted will enter the secondary schools and the rest will enter what are called "continuation schools" for training in arts and crafts and industries such as drawing, artistic designs, general economics, civics, accounts and physical culture and gymnastics.

EDUCATION IN THE INDIAN ARMY

Before the war the Indian Army had a system of education whereby all soldiers received instruction as an integral part of their training. Their school knowledge, if any, was revised and extended. Illiterate recruits were taught to read and write in Roman Urdu and further graded instruction was given upto roughly the Matriculation standard.

The outbreak of war and the consequent expansion of the army brought in large numbers of recruits, many of them illiterate, of different races, and speaking different languages. These had to be educated in a short time up to the standards required for the ranks they might hold and the parts they would have to play in a complicated mechanised army. And they had to be considered not merely as units of a machine but as individuals and prospective civilians of a developing State.

To deal with the problems that arose, the Army Educational Corps on whom the responsibility for their educational training devolved was expanded—largely by the intake of Indian Officers. And the educational training of the men was divided into two parts—normal and wartime.

Normal education is a development of the pre-war system, simplified and intensified. Wartime education, in spite of its title, dealt with war and peace. The technique adopted was that of the discussion group, within the unit, led by the platoon Comdr., under supervision of an officer of the unit.

The unit discussions and associated activities are based on handbooks and periodical pamphlets issued by the Directorate of Army Education at General Headquarters (India).

On cessation of hostilities, an elaborate educational plan was put into operation by the Army—THE RELEASE PERIOD EDUCATION SCHEME (INDIAN TROOPS)—The object of the scheme was to use the time between the cessation of hostilities and the date fixed for the soldier's release from service to prepare him for return to civil life as a better, more useful citizen educationally, more capable of obtaining a better position in civil life. The scheme not only constituted a powerful drive against illiteracy, but also included graded instruction from the literacy stage in a man's own vernacular to the Matriculation stage in English. The I.A. SPECIAL certificate of Education, the highest certificate obtainable in the I.A. is now recognised by most universities in India as equivalent to their Matriculation standard. The scheme also provided for intensive instruction in the principles of citizenship and rural and urban development.

THE DOON SCHOOL.

This School which is established in the Chand Bagh and Skinner's Estates at Dehra Dun owed its origin to the initiative and enthusiasm of S. R. Das. The aim of the school is to develop in an atmosphere of Indian culture and social environment the best features of English Public Schools. The school prepares the boys for the Senior Cambridge Examination (Cambridge School Certificates) and for the Intermediate of the Board of High School and Intermediate Examinations of the United Provinces. Some boys take the Cambridge Higher School Certificate. The school is open to all boys without distinction of caste, creed, or social position and aims at providing a thorough general education from 11-13 to 18 years. Particular emphasis is laid on games, extra curricular activities and the management of school affairs as far as possible by the boys themselves. The annual inclusive fee is Rs. 1,800.

THE INDIAN PUBLIC SCHOOLS CONFERENCE.

The conference was founded in 1939. It is composed of the heads of certain institutions which set out to give an all-round training of the character, emotions and body as well as of the mind, under conditions somewhat similar to those of the best Public Schools in England. All of the present member-schools are mainly boarding schools, though several of them admit day-boys also: but there is nothing in the rules of the Conference to exclude a Day School. Many of the schools started life as Chiefs' Colleges, but they have now bound themselves to abolish social exclusiveness as a qualification for entrance and all social privileges and distinctions within their walls.

Members of the Conference meet yearly in rotation normally at one another's schools and discuss matters of common interest.

The general views of the Conference on education can be found in their Pamphlet "The Indian Public School" (O.U.P.). Membership is at present confined to the following schools:—

The Doon School, Dehra Dun: The Daly College, Indore: The Scindia School, Gwalior: The Rajkumar College, Raipur: The Rajkumar College, Rajkot: The Shivaji Military School, Poona: St. Xavier's School, Patna: The Sadul School, Bikaner.

EDUCATIONAL STATISTICS

The progress made in education measured in terms of statistics is given in the succeeding tables. The latest figures available are for the year 1944-45. Certain consolidated provisional statistics in respect of institutions and scholars in 1945-46 in old British India, including Ajmer-Merwara, British Baluchistan, the Civil and Military Station of Bangalore, and the administered areas in Indian States, is however shown below:

Type of Institution.	No. of Institutions.		Scholars.	
	For Males.	For Females.	Males (*).	Females*.
GENERAL EDUCATION:				
Universities	16	..	..	..
Arts and Science Colleges ..	390	64	157,069	18,408
High Schools	4,264	685	1,723,011	256,507
Middle Schools	10,571	1,549	1,328,064	297,936
Primary Schools	147,014	20,827	8,834,742	3,268,445
SPECIAL EDUCATION:				
Professional and Technical Colleges	82	3	34,793	1,513
Training Colleges	22	16	1,674	879
Training Schools	395	122	21,460	5,305
Other Special Schools	9,315	665	357,725	45,167
Unrecognised Institutions ..	10,318	3,246	333,287	133,966
Total	182,371	27,177	12,791,825	4,028,126
Grand Total	209,548		16,819,951	

Expenditure = Rs. 46,00,37,191.

* Six Boards of Secondary or Intermediate Education in the Dominions are not included in this table.

(*), These include male scholars reading in institutions for males as also those in institutions for females.

There were in 1945-46, in British India, 196,000 'recognised' institutions with 16,352,698 scholars; and 13,564 'unrecognised' institutions with 467,253 scholars.

Statement showing the Numbers of Institutions during 1943-44 & 1944-45.

Province.	1943-44.						1944-45.					
	Recognised Institutions for		Unrecognised Institutions for		Total No. of Institutions for		Recognised Institutions for		Unrecognised Institutions for		Total No. of Institutions for	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Assam	8,931	1,305	715	75	9,646	1,380	9,143	1,399	854	86	9,997	1,485
Bihar	21,588	2,295	1,138	117	22,726	2,412	21,361	2,239	957	89	22,318	2,328
Bombay	19,628	2,181	318	27	19,946	2,208	18,621	2,175	326	31	18,947	2,206
C.P. & Berar	5,317	626	417	74	5,734	700	5,322	632	499	60	5,821	692
Madras	33,359	4,482	201	3	33,560	4,485	33,002	4,500	257	2	33,259	4,502
Orissa	6,958	288	698	6	7,656	294	6,814	252	761	4	7,575	256
U. P.	21,155	2,141	1,369	130	22,524	2,271	21,306	2,141	1,228	138	22,534	2,279
TOTAL	1,16,936	13,318	4,856	432	1,21,792	13,750	1,15,569	13,338	4,862	410	1,20,451	13,748
Bengal (E. & W.)	43,238	7,002	1,235	91	44,473	7,093	41,975	6,504	1,387	135	43,365	6,639
Punjab (E. & W.)	9,839	2,622	3,779	2,904	13,618	5,526	9,853	2,656	3,634	2,387	13,487	5,043
TOTAL	53,077	9,624	5,014	2,995	58,091	12,619	51,831	9,160	5,021	2,522	56,852	11,682
CENTRALLY ADMINISTERED AREAS:												
Ajmer-Merwara	280	87	82	5	362	92	280	92	72	4	352	96
Bangalore	58	38	3	..	61	38	58	39	3	..	61	39
Coorg	120	3	4	..	124	3	122	3	6	..	128	3
Delhi	243	99	70	2	313	101	245	100	90	5	335	105
Total (including minor administrations).	740	247	172	8	912	255	754	253	177	10	931	263
GRAND TOTAL	1,70,753	23,189	10,042	3,435	1,80,795	16,624	1,69,154	22,751	10,060	2,942	1,78,234	15,693

Number of Students
1943-44.

Province.	No. of students in Recognised Institutions.		No. of students in Unrecognised Institutions.		Total No. of students in all Institutions.		Percentage of total students to Population.	
	Men	Women	Men	Women	Men	Women	Men.	W.
Assam	3,49,896	98,584	21,926	7,270	3,71,822	1,05,854	6·9	2·1
Bihar	9,61,722	1,50,123	35,496	4,183	10,37,218	1,54,206	5·5	0·9
Bombay	13,20,461	5,03,586	15,652	7,042	13,36,113	5,10,628	12·2	5·0
C.P. & Berar.	4,02,372	1,03,879	16,548	5,969	4,18,920	1,09,848	4·97	1·31
Madras	21,82,075	11,85,065	6,497	484	21,88,572	11,85,549	8·9	4·8
Orissa	2,36,203	66,357	12,087	2,529	2,48,290	68,886	5·89	1·53
U. P.	14,61,441	2,64,042	4,549	7,340	15,08,990	2,71,382	5·2	1·0
Total	69,14,170	18,71,636	1,12,755	34,817	71,09,925	24,06,353		
Bengal (E. & W.)	28,17,784	6,92,263	50,038	7,719	28,67,822	6,99,982	9·0	2·5
Punjab (E. & W.)	10,85,835	2,45,329	83,086	64,763	11,68,921	3,10,092	7·0	2·37
Total	38,03,619	9,37,592	1,33,124	72,482	40,36,743	10,10,074		
CENTRALLY ADMINISTERED AREAS:								
Ajmer-Merwara	23,061	6,795	3,972	422	27,033	7,217	8·8	2·6
Bangalore	12,278	8,322	331	116	12,609	8,438	15·2	11·2
Coorg	9,272	5,284	109	92	9,381	5,376	10·2	6·9
Delhi	41,724	2,845	2,845	147	44,569	16,959	8·2	4·4
Other Administrations	8,418	3,310	839	235	9,257	3,545	3·93	8·02
Total	94,753	26,556	8,096	1,012	1,02,849	41,535		
GRAND TOTAL.	1,07,92,542	38,35,784	2,53,975	1,15,311	1,12,49,517	34,57,962		
The corresponding figures for 1944-45 are as follows :—								
Assam	3,78,851	1,05,582	26,197	8,424	4,05,048	1,14,006	7·5	2·3
Bihar	10,15,219	1,52,228	31,140	3,541	10,46,359	1,55,769	6·1	0·5
Bombay	13,40,656	5,26,639	17,254	8,320	13,36,113	5,10,628	12·4	5·3
C.P.	4,17,775	1,09,711	18,182	5,505	4,35,957	1,15,306	5·02	1·35
Madras	22,38,536	12,11,676	8,378	1,233	22,46,914	12,12,909	9·1	4·1
Orissa	2,25,339	61,896	13,982	3,502	2,39,321	65,398	..	..
U.P.	15,19,772	2,78,902	51,221	7,408	5,70,993	2,86,310	5·4	1·1
Total	71,35,348	24,46,734	1,66,354	37,933	73,02,502	24,84,657		
Bengal (E. & W.)	30,15,231	7,45,344	57,170	12,137	37,60,575	7,57,481	9·2	2·7
Punjab (E. & W.)	11,41,112	2,53,528	79,668	61,210	12,20,780	3,14,738	7·94	2·42
Total	41,56,343	9,98,872	1,36,836	73,347	49,81,355	10,72,219		
CENTRALLY ADMINISTERED AREAS:								
Ajmer-Merwara	24,664	7,077	4,005	416	28,669	7,493	9·3	2·3
Bangalore	12,969	8,805	240	234	13,109	9,039	16·4	11·3
Coorg	9,942	5,456	140	92	10,082	5,548	10·8	7·4
Delhi	47,142	18,390	2,726	411	49,868	18,801	9·3	4·9
Other Administrations	8,483	3,191	707	182	9,190	3,373	..	..
Total	1,03,200	42,919	7,818	1,335	1,10,918	44,254	..	..
GRAND TOTAL.	1,13,94,691	34,88,535	3,12,000	1,12,615	1,23,54,775	36,01,130		

Expenditure on Education by Sources

1943-44.

Province.	Government Funds.	Local Bodies Funds.	Fees.	Endowment.	Total.
	(Expenditure in Thousands of Rupees).				
Assam	43,17	9,63	13,89	6,47	73,16
Bihar	86,95	25,65	59,80	32,08	2,04,48
Bombay	2,22,30	94,30	1,64,33	67,61	5,48,54
C.P. & Berar	52,04	35,82	28,11	12,29	1,28,26
Madras	3,41,83	96,65	1,82,14	1,01,92	7,22,54
Orissa	28,56	3,16	9,28	5,30	46,32
U.P.	2,37,33	56,07	1,18,72	70,57	4,82,69
Total	10,12,20	3,21,28	5,76,27	2,96,24	22,05,99
Bengal (E. & W.) ..	2,03,21	82,11	2,18,17	88,53	5,92,02
Punjab (E. & W.) ..	2,02,55	55,08	1,20,01	47,99	4,25,63
Total ..	4,05,76	1,37,19	3,38,18	1,36,52	10,17,65
CENTRALLY ADMINISTERED AREAS:					
Ajmer-Merwara	6,46	1,12	4,08	3,36	15,02
Bangalore	3,47	82	6,22	2,75	13,26
Coorg	1,32	69	90	15	3,06
Delhi	27,76	5,76	12,00	6,07	51,59
Other Administrations ..	3,44	76	4,34	6,22	14,76
Total	42,45	9,15	27,54	18,55	97,69
GRAND TOTAL ..	14,60,41	4,67,92	9,41,99	4,51,31	33,21,33

The corresponding figures for 1944-45 are as follows :—

Assam	48,18	10,83	17,48	10,75	87,24
Bihar	91,17	27,19	68,73	35,98	2,23,07
Bombay	2,40,92	1,04,91	1,97,62	73,25	6,16,70
C.P. & Berar	58,66	40,88	33,71	12,77	1,46,02
Madras	3,90,87	1,38,04	1,78,87	1,23,83	8,31,61
Orissa	32,02	3,35	12,66	6,97	55,00
U.P.	2,47,43	63,47	1,37,31	70,70	5,18,91
Total	11,09,25	3,88,67	4,46,38	3,34,25	24,78,55
CENTRALLY ADMINISTERED AREAS:					
Ajmer-Merwara	5,76	1,20	4,46	3,23	15,65
Bangalore	5,90	1,80	10,16	4,87	22,73
Coorg	1,40	77	48	37	3,02
Delhi	29,81	5,62	14,22	7,51	57,16
Other Administrations ..	20,41	49	39,13	64,05	1,24,08
Total	64,28	9,88	68,45	80,03	2,22,64
GRAND TOTAL ..	16,60,94	5,39,10	11,01,86	5,73,81	38,75,21

Number of Primary Schools and the Pupils, 1944-45.

Province.	No. of Primary Schools for Boys	No. of Primary Schools for Girls	Enrolment in Primary Stage Boys	Enrolment in Primary Stage Girls
Assam	7,603	1,228	3,00,506	95,568
Bihar	19,112	2,101	5,51,772	84,513
Bombay	16,758	1,768	9,67,748	4,26,159
C.P. & Berar	4,505	503	2,48,386	95,671
Madras	31,849	4,186	18,51,202	11,15,497
Orissa	6,368	225	1,29,269	32,945
U.P.	17,710	1,495	7,53,809	1,31,398
Total ..	1,03,905	11,506	48,02,692	19,81,751
Bengal (E. & W.)	33,572	5,990	23,79,188	6,78,580
Punjab (E. & W.)	6,230	2,270	7,95,766	1,91,555
Total	39,802	8,260	31,74,954	8,70,135
CENTRALLY ADMINISTERED AREAS:				
Ajmer-Merwara	233	72	17,549	6,047
Bangalore	41	23	8,945	6,929
Coorg	117	2	7,601	4,630
Delhi	115	67	31,059	14,423
Other Administrations	24	13	5,239	2,597
Total ..	530	177	70,393	34,626
GRAND TOTAL ..	1,44,237	19,943	80,48,039	28,86,512

Compulsory Primary Education, 1946-47.

Province.	Age-group under compulsion.	Area with boys only under compulsion. No. of towns and cities.	Area with boys only under compulsion. No. of villages.	Areas with both boys and girls under compulsion. No. of towns and cities.	Areas with both boys and girls under compulsion. No. of villages.
Bengal (E. & W.) ..	6–10	1	..	1	..
Bihar	6–10	17	1	..	..
Bombay	6–11	11	208	9	211
C. P. & Berar	6–11, 7–12	34	1,031	..	..
Madras	6–14, 6–12	19	100	7	1,082
Orissa	6–12, 6–10	1	24	..	..
Punjab (E. & W.) ..	5–11	68	11,007	..	..
U.P.	6–11	36	1,371	3	3
Delhi	..	1	15	..	..

Middle Schools.

Province.		Middle English Schools.		Middle Vernacular Schools.		No. of pupils in middle stage.
		No.	Enrolment.	No.	Enrolment.	
Assam	M	392	25,123	286	30,498	41,589
	F	48	4,438	45	3,468	6,079
Bengal (E. & W.) ..	M	2,243	230,241	11	990	233,828
	F	257	30,261	2	274	15,524
Bihar	M	1,263	150,281	69	8,321	113,032
	F	81	11,857	9	914	5,706
Bombay	M	472	33,651	..	..	231,208
	F	64	5,082	..	..	68,235
Central Provinces and Berar.	M	245	47,207	378	72,633	38,235
	F	54	5,933	37	5,739	7,997
Madras	M	177	38,549	..	..	239,540
	F	62	9,071	..	..	70,963
North-West Frontier Province.	M	30	8,433	194	24,066	13,298
	F	10	2,463	23	5,625	2,106
Orissa	M	167	15,426	60	6,599	14,054
	F	13	1,610	3	241	1,203
Punjab (E. & W.) ..	M	185	49,471	2,786	387,242	181,072
	F	23	7,583	234	53,336	23,041
Sind	M	133	7,438	..	..	19,986
	F	9	..	..	..	5,394
United Provinces ..	M	122	21,813	1,017	118,366	141,748
	F	82	15,556	388	62,749	13,884
Ajmer-Merwara ..	M	9	1,355	18	1,073	4,859
	F	1	209	10	244	783
Baluchistan	M	7	1,361	.	..	1,101
	F	1	195	..	..	299
Bangalore	M	4	952	3	1,328	2,380
	F	4	423	3	925	1,318
Coorg	M	..	..	..	..	1,880
	F	..	..	..	..	645
Delhi	M	18	7,328	28	3,670	9,090
	F	6	1,337	8	2,444	2,566
Minor Administered Areas.	M	3	866	..	..	1,576
	F	2	291	..	..	460
Total ..	M	5,471	689,495	4,846	854,786	1,400,163
	F	717	96,279	762	135,959	237,938

N.B.—The figures relate to the year 1944-45.

HIGH SCHOOLS.

Province.		No. of high schools.	Enrolment.	No. of pupils in high school stage.
Assam	M	176	44,133	19,063
	F	27	6,093	2,154
Bengal (E. & W.)	M	1,492	444,456	94,422
	F	126	35,684	4,239
Bihar	M	341	103,611	44,444
	F	20	5,703	1,327
Bombay	M	369	164,547	82,359
	F	101	29,009	20,675
Central Provinces & Berar	M	126	16,783	17,356
	F	26	1,537	2,562
Madras	M	444	271,121	95,426
	F	117	40,351	13,922
North-West Frontier Province ..	M	47	24,316	3,776
	F	6	1,930	259
Orissa	M	58	15,918	6,220
	F	5	1,152	400
Punjab (E. & W.)	M	445	267,501	51,083
	F	70	25,202	3,382
Sind	M	63	22,752	7,038
	F	21	6,880	1,955
United Provinces	M	251	137,549	36,442
	F	61	20,754	2,614
Ajmer-Merwara	M	16	5,656	1,324
	F	5	790	140
Baluchistan	M	9	3,914	510
	F	4	1,152	77
Bangalore	M	7	4,603	1,082
	F	8	3,643	456
Coorg.	M	5	1,860	476
	F	1	555	182
Delhi	M	28	14,130	3,183
	F	13	4,504	563
Minor Administered Areas	M	6	2,813	1,139
	F	2	518	113
Total for the Dominions	M	3,893	1,545,663	553,909
	F	613	185,457	59,380

N.B.—The figures relate to the year 1944-45.

COLLEGES (1944-45)

Province.		INTER-MEDIATE COLLEGES. No. of Inst.	DEGREE COLLEGES. No. of Inst.	No. of students in inter. stage.	No. of students in degree & higher classes.	No. of passes in Matriculation & Equivalent Examinations.	No. of passes in B.A. & B.Sc. (Pass & Hons.) Examinations.
Assam	M	4	9	2,114	663	1,427	183
	F	..	4	340	108	209	20
Bengal (E & W) ..	M	23	41	23,373	9,616	17,740	2,307
	F	4	10	2,350	1,542	1,937	303
Bihar	M	8	10	6,185	2,205	8,059	645
	F	1	1	217	94	184	21
Bombay	M	..	21	40,703	5,404	7,670	1,618
	F	..	1	2,537	1,333	1,795	477
C.P. & Berar ..	M	..	11	2,148	1,196	3,050	377
	F	..	1	3,351	223	685	94
Madras	M	11	49	15,959	7,317	27,408	2,944
	F	1	7	1,894	844	3,015	396
N.-W.F.P.	M	..	5	801	266	1,403	86
	F	..	1	59	1	178	3
Orissa	M	5	5	1,689	424	1,500	170
	F	1	..	113	18	74	8
Punjab (E. & W.) ..	M	9	35	14,435	6,399	19,875	2,332
	F	..	8	1,431	793	3,162	455
Sind	M	..	4	1,809	748	700	213
	F	..	..	427	167	171	50
U.P.	M	82	10	13,148	9,598	14,108	2,883
	F	15	2	1,255	723	1,630	337
Ajmer-Merwara ..	M	2	1	377	149	437	44
	F	2	..	61	5	64	3
Baluchistan	M	..	..	..	..	149	..
	F	..	..	..	..	33	..
Bangalore	M	..	1	370	135	301	32
	F	..	..	46	29	106	9
Coorg.	M	..	..	..	..	36	..
	F	..	..	..	..	19	..
Delhi	M	..	5	787	1,399	516	392
	F	..	1	233	219	89	84
Administered Areas.	M	..	1	8	..	128	..
	F	..	..	..	..	22	..
Total for the Dominions	M	144	208	93,600	45,519	104,507	14,226
	F	24	36	11,314	6,099	13,373	2,260

TECHNICAL AND ART EDUCATION

The existing provision in this respect is meagre: in certain provinces proper facilities do not exist for medical education, in some for Engineering, or for Agricultural education while in others for all types of higher Technical Education. The position is summed up in the statistical statement below:—

Province.	Agricultural Colleges.		Commercial Colleges.		Engineering Colleges.		Law Colleges.		Medical Colleges.			
									Number.		Enrolment.	
	No.	Enrolment.	No.	Enrolment.	No.	Enrolment.	No.	Enrolment.	For Men.	For Women.	Men.	Women.
Assam ..	..	..	..	..	..	..	1	67	..	..	..	..
Bengal (E. & W.) ..	..	..	9	3,443	1	394	3	1,550	3	..	1,443	65
Bihar ..	..	..	..	..	1	108	1	402	1	..	276	19
Bombay ..	1	307	4	2,860	1	339	5	1,194	2	..	1,072	262
C.P. & Berar ..	1	165	1	397	..	..	2	478	..	..	..	..
Madras ..	1	182	..	..	1	466	1	500	3	1	1,230	412
N.-W.F.P. ..	..	..	..	..	..	..	..	..	..	..	..	..
Orissa ..	..	..	..	..	..	..	..	..	1	..	20	
Punjab (E. & W.)	1	329	1	187	1	379	1	394	4	1	957	..
Sind ..	1	34	..	..	1	202	1	198	..	..	..	..
U.P. ..	3	1,072	..	3,207	1	881	..	1,835	1	..	812	68
Ajmer-Merwara ..	..	..	..	..	..	..	..	..	..	..	..	..
Baluchistan ..	..	..	..	..	..	..	..	..	..	..	..	..
Bangalore ..	..	..	..	..	..	..	..	..	..	..	..	..
Coorg ..	..	..	..	..	..	..	..	..	..	..	..	..
Delhi ..	1	36	..	..	..	..	..	..	..	1	..	207
Administered Areas ..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	9	2,125	15	10,094	7	2,769	15	6,618	15	3	5,810	1,024

Province.	Arts Schools.		Engineering, Technical & Industrial Schools.		Commercial Schools.		Medical Schools.			
							Number		Enrolment.	
	No.	Enrolment.	No.	Enrolment.	No.	Enrolment.	For Men.	For Women.	Men.	Women.
Assam	..	..	18	642	4	192	..	..	..	..
Bengal (E. & W.) ..	5	265	193	5,532	14	1,633	9	..	2,422	119
Bihar	1	31	52	3,224	14	635	1	..	243	21
Bombay	3	729	94	6,391	30	2,125	12	..	754	130
C.P. & Berar ..	1	44	13	859	..	..	1	..	120	15
Madras	5	183	83	5,823	235	8,410	2	..	309	53
N.-W.F.P.	..	..	..	..	..	..	..	..	..	..
Orissa	..	..	9	313	2	43	1	..	42	1
Punjab (E. & W.) ..	1	128	68	4,104	2	247	3	..	268	..
Sind	..	..	8	670	3	327	1	..	94	22
U.P.	2	190	89	3,490	1	15	1	..	68	..
Ajmer-Merwara ..	..	..	1	44	..	..	1	..	..	..
Baluchistan ..	..	..	..	..	..	..	..	..	..	..
Bangalore	..	..	2	57	..	..	..	..	..	..
Coorg	..	..	..	..	..	..	..	..	..	..
Delhi	..	..	3	318	..	..	..	1	..	207
Administered Areas ..	..	..	..	..	..	..	1	..	301	27
Total	18	1,570	633	31,467	305	13,627	32	1	4,621	595

The expansion of technical and professional side of education has engaged the attention of provincial Governments. The indications are that they will give this side a proper place in their educational development programme.

The Training of Teachers.—The available facilities in respect are meagre in some provinces while in others they are quite abundant. The tables below tell their own tales:

Province.	Training Colleges.			Training Schools.			
				No. of Institutions.		Enrolment.	
	No. of Institutions.	No. of Men under training.	No. of Women under training.	For Men Teachers.	For Women Teachers.	Men Teachers.	Women Teachers.
Assam ..	..	..	..	4	2	182	51
Bengal (E. & W.)..	6	193	51	134	10	3,714	216
Bihar ..	1	83	8	64	10	1,357	276
Bombay ..	3	142	85	31	31	3,158	1,772
C.P. & Berar.	1	82	20	8	7	787	291
Madras ..	6	233	139	72	72	7,722	4,456
N.-W.F.P. ..	..	..	..	1	1	103	61
Orissa ..	1	16	1	14	3	474	53
Punjab (E. & W.)..	10	193	372	9	16	861	594
Sind ..	..	..	..	1	6	209	167
U.P. ..	7	625	156	35	29	1,254	757
Ajmer-Merwara ..	1	57	9	2	2	36	32
Baluchistan.	..	..	..	1	..	25	..
Bangalore ..	..	..	..	..	1	..	27
Coorg ..	..	..	..	..	..	..	..
Delhi ..	..	..	..	1	1	44	29
Administered Areas ..	..	..	..	1	2	84	75
Total ..	36	1,624	841	378	193	18 929	8,857

Output of Trained Graduates, 1944-45.

Province.	Men.	Women.
Bengal (E. & W.)	116	87
Bihar	5 (M. Ed.) 79 (Diploma)*	1 (M. Ed.) 4 (Diploma)*
Bombay	5 (M. Ed.) 81 (B.T.)	2 (M. Ed.) 108 (B.T.)
C.P. & Berar	42 (Diploma)*	11 (Diploma)*
Madras	7 (M. Ed.) 228 (B.T.)	3 (M. Ed.) 138 (B.T.)
Orissa	17 (Diploma)*	1 (Diploma)*
Punjab (E. & W.)	156 (B.T.) 12 (Diploma)*	172 (B.T.) 136 (Diploma)
U.P.	9 (M. Ed.) 250 (B.T. & L.T.) 80 (Diploma)*	1 (M.Ed.) 71 (B.T. & I.T.) 73 (Diploma)*
Ajmer-Merwara	65 (B.T.)	....
Total	1,152	808

* *N.B.*—The figures include undergraduates as well.

A Review of the Year (Jan. 1947—Apr. 1948)

WITH the establishment of the two Dominions of India and Pakistan on August 15, the year 1947 witnessed the partial dissolution of the British Empire. In one sense indeed power had been transferred in the Indian sub-continent not on August 15, 1947 but very much earlier, on September 2, 1946 when Lord Wavell set up an Interim Government with Pandit Nehru at its head.

Before September 2, 1946 the members of the Governor-General's Executive Council, however eminent as individuals, served at the pleasure of the Viceroy. He appointed them at his discretion, he could dismiss them at any moment he liked without producing unpleasant reactions in the country. There was no doubt at any time who was the master, and who the servant. But the men who constituted the Interim Government fell into a different category. They happened to be in the Cabinet in their own right, so to say; they were the leaders of two well organized, very powerful political parties, which together represented the whole country. These men were not of the Viceroy's choosing; they chose themselves and could not be dismissed even on a major issue without provoking a political convulsion of the first magnitude in the country. Thus effective self-government in India should be dated not from August 15, 1947 when the formal change-over took place, but from September 2, 1946, when the Interim Government assumed office.

GLOOMY OUTLOOK

The year itself did not open cheerfully. In fact, the outlook was decidedly gloomy, and the atmosphere heavy with fear, distrust and uncertainty. There was no relaxation of communal tension which incidentally resulted in long continuing business dislocation. Sporadic outbursts were occurring in the major cities. The inhabitants, particularly in the north, were resorting themselves: Hindus were leaving Muslim localities and Muslims were leaving Hindu localities. It seemed as if the country was living on the top of a volcano which might erupt at any moment with disastrous results. A League protest demonstration in Calcutta ended in slaughter on a colossal scale. Reverberations were felt in Noakhali, Bihar and distant Quetta, where the minorities were massacred with revolting brutality.

As for the Government, there was a general deterioration in administration everywhere which further encouraged forces making for disorder and disruption. There was a certain feeling that the old order was passing with no alternative authority capable of preserving law and order, ready to take its place. The British members of the services felt they had no stake in the future; most of them were only waiting to get away as soon as possible. The Indian members were in no mood to take any major decision such as might imperil their own career, and were thus losing all sense of initiative. General morale was also at a low ebb, with the unparalleled temptations provided by war conditions. The profiteer and the black marketeer were pursuing their giddy career, unhampered by business or patriotic scruples.

ATMOSPHERE CLEARS

A series of events, occurred beginning with the last week of February which helped partially to clear the political atmosphere. The statement of February 20 made the country realise for the first time that Britain was really serious in her intention of granting India immediate independence. At the same time political thought and feeling in the Congress began to crystallize. The leaders came to regard partition as inevitable, the discussion now centring round the boundaries of Pakistan rather than on the principle of Pakistan itself. A second event which influenced the course of political development was the recall of Lord Wavell and his substitution by Lord Louis Mountbatten. From then on events moved rapidly to their inevitable conclusion. The British Prime Minister announced on June 3, 1947 that Britain was prepared to transfer power immediately on the Dominion Status basis to one or more successor powers in India. The procedure for arriving at a decision on the partition issue was also decided on as quickly and was immediately set in motion. The result was a vote in favour of partition both in the Punjab and Bengal Legislatures. Once the decision was taken no time was lost in making arrangements to divide the assets of the undivided Indian Government. Simultaneously the British Prime Minister introduced the Indian Independence Bill which provided for the establishment of two Dominions on August 15 and for a Boundary Commission consisting of three members to demarcate the boundary between the two Dominions.

Meanwhile, immense preparatory work had been put through by Lord Mountbatten with the help of the Indian leaders. On August 15 the two Dominions were formally inaugurated. Lord Mountbatten became the first constitutional Governor-General of India at the invitation of the Indian Dominion and M. A. Jinnah of the Dominion of Pakistan. On the same day British troops started evacuating the territories of the Indian Dominion and of Pakistan, an evacuation which was completed on February 28, 1948, when the last Regiments sailed from Bombay and Karachi.

CHANGE-OVER CEREMONY

The change-over ceremony took place in the Constituent Assembly which met for the purpose at 11 p.m. on August 14, 1947.

At the hour of midnight when the clock struck twelve the 250 members of India's Constituent Assembly stood up in their seats to take a solemn pledge to dedicate themselves to the service of India.

PUNJAB UPHEAVAL

Meanwhile ominously little news was coming through from the Punjab where a storm was brewing. A certain amount of trouble was anticipated by the formation of a Boundary Force. But no one prepared against a calamity of such gigantic proportions and the destruction of life and property on such a colossal scale. Pandit Nehru gave the official figures 5,000

counted as dead. Many think that those uncounted are at least two to three times as many. Some even think that they may be as many as ten times the official figures.

Pandit Nehru and Mr. Liaquat Ali Khan made a tour of the Punjab in the early days of the upheaval. In the course of the tour they addressed conferences, issued appeals, set up peace committees—in the belief that the trouble was entirely of a local nature and would soon cease. The reality was enormously more terrifying. The trouble was neither local nor did it show any signs of abating. On the contrary it spread like a forest fire throughout the length and breadth of the whole Province. Entire villages were attacked and destroyed accompanied by acts of the utmost brutality. No quarter was asked or given; none was spared: neither the old nor the young, neither women nor children. Murder, arson, loot, rape and every species of torture which the wit of man could devise held free and undisputed sway.

Before ten days had passed it was clear that what was involved was not mere local rioting but mass uprisings and also mass migration of whole peoples from one part of the Punjab to the other. The migration started as a trickle and soon assumed the proportions of an uncontrollable flood. The moment the nature of what was occurring became clear all that the authorities could do was to regulate the mass movement and give it a proper direction, that is to say, to protect the routes, establish collecting and stopping points, look to the supply of food and clothing and combat disease. Flood and cold later added to the trouble. The sufferings of the minorities and of the refugees on the march were severe in the extreme. Many were attacked and killed on the way, others fell by the wayside to die of hunger and exhaustion. In less than two months about four millions had left their ancestral homes. By the end of the year another four millions had migrated. A great many are still waiting in refugee camps to be transported to places where they have promise of a new life.

What had happened? The truth may never be known for the whole question is wrapped up in partisan propaganda and deep-seated natural sympathy with one or the other side. To call it a Sikh uprising as some did is obviously an over-simplification. It would probably be truer to regard it as only a link in a chain of nation-wide retaliations.

Not only the facts themselves but even the sequence of events appear to be in doubt. But there are certain facts which do stand out. Even as early as the beginning of August authority was breaking down over wide areas in the Punjab specially in the middle Punjab where the three communities were living inextricably mixed together. There was no ministry either in East or West Punjab and after the purge of Muslim personnel from the security services in East Punjab nothing remained, but a nuclear organization quite unable to cope with a problem of this dimension. The so-called Boundary Force established on August 4 and disbanded on August 29 proved utterly inadequate as it was meant to preserve law and order in the border area and not to quell a mass uprising of Province-wide dimensions.

REPERCUSSIONS.

The refugees spilled over the neighbouring areas carrying a spirit of hatred and revenge—the Muslim refugees into N.W.F.P., the Sind and the States of Khairpur and Bahawalpur, and the Hindu refugees into West U.P. Rajputana and the States of Patiala, Faridkot and Kapurthala. The main impact was felt in Delhi, the capital of the Indian Dominion where masses of refugees converged in the hope of finding food, shelter and employment under the immediate auspices of the Central Government.

Towards the end of August communal tension in the capital redeveloped and continued to mount. On the evening of September 4 the storm burst in the city when Muslim street vendors were attacked at Connaught Place in the very heart of New Delhi. What followed is described not as riot but as massacre. Looting and killing lasted for some days; and nothing but the courage and firmness of the Government led by Pandit Nehru prevented a general collapse of all ordered Government. When control was re-established most of the Muslims in Delhi were in refugee camps and the whole complexion of the city had changed beyond recognition. A particularly vicious feature of the outbreak were the organised attacks on railway stations and airport concentrations. The official figures given of killed and wounded were 1,000.

Later still minor outbreaks in Quetta, Ajmer, Karachi and in Saharanpur, Mussoorie and Dehra Dun coupled with attacks on refugee camps and refugee trains at Parachinar in N.W.F.P. and Gujrat in West Punjab started a second wave of migration from one Dominion to another. Trouble also simmered in Calcutta; and nothing but Mahatma Gandhi's fast prevented that great city and all Bengal from following the Punjab down the slope to massacre and civil war.

The two young Dominions, in short, passed through a baptism of fire. A legacy of the trouble was the enormous problem of relief and rehabilitation of the refugees, a problem which both the Dominions set out to tackle with skill and vigour.

THE STATES

While the forces let loose in the Punjab were working largely for the disintegration of Indian and Pakistan economy, on another front a different set of forces were working towards the assimilation of hitherto outside elements into the body politic of India and Pakistan. This is the front of what used to be called the Indian Native States. The assimilation of the States took four different forms: 1. accession to India or Pakistan depending largely on the geographical factors, 2. an outright merger with the neighbouring Indian province, *e.g.*, Chhatisgarh States with the C.P. or Orissa, or the Deccan States with Bombay, 3. a coalition of smaller States to form a sizable union. *e.g.*, the Saurashtra Union of the Kathiawar States, the Matsya Union of the States of Bharatpur, Alwar, Dholpur and Karauli, 4. the introduction of a greater or smaller measure of responsible government on the Indian model. The general procedure was the same in every State affected by the new forces: the formal announcement of reforms the establishment of an interim Government, and the election of a Constituent Assembly based on adult franchise to frame a constitution in accordance with the terms announced.

It must be noted in passing that only one State stood outside the main stream of current history. That State was Hyderabad, situated in the geographical heart of South India. In the main this State remained untouched by any of the four drifts towards assimilation which we described above. Hyderabad had a temporary Stand-Still Agreement with the Government of India but so many questions arose to cause friction between Hyderabad and the Indian Dominion (border raids, Razaakar activities, movement of military stores, loan to Pakistan, responsible government) that the relations between the two were in an extremely unstable condition.

The process of consolidation, however, went on apace after the transfer of power. Out of the 600 odd States which existed at the time of British withdrawal less than 30 retained any separate political identity by the end of April 1948. All the accessions were effected without a hitch except two—Junagadh and Kashmir. Kalat acceded to Pakistan after some deliberation.

ASSASSINATION

On the evening of January 30, 1948, an incident occurred which sent a thrill of horror throughout the civilized world. This was the assassination of Mahatma Gandhi, who was shot while he was on his way to his prayer meeting.

The news of the Mahatma's assassination burst on an incredulous world when programmes of All-India Radio went off the air at five minutes to six and the announcer said: You will now hear a very important announcement. And in solemn words went on to announce the news of the death of Mahatma Gandhi.

State mourning was observed for 13 days from January 30.

On 12th February the ashes of Mahatma Gandhi were immersed with reverent ceremonies at various 'Kshetras' (holy places) throughout India (where they had been carried by the Prime Ministers and Governors) from the foothills of the Himalayas in the north to Kanya Kumari at the southernmost tip of India in the south, at several places associated with Mahatma Gandhi's life work, in all the holy rivers of India, and in principal cities and towns.

The whole country observed as complete a hartal during the day as was ever experienced in its history, with a total stoppage of activity except that of paying the last tribute to the Father of the Nation. All newspapers in India—as well as in Pakistan—remained closed during the day.

Vast crowds joined the immersion processions at all places, all communities being represented in them. The proceedings everywhere were marked by solemnity and discipline.

The main ceremony took place at the Sangam in Allahabad, where the ashes were carried in a special train from Delhi.

POLITICAL TRENDS

Meanwhile hard blows were struck at all radical communal organizations, private volunteer armies and leaders of extremist thought. The R.S.S. and the Muslim National Guards were the two most outstanding organizations which were immediately placed under a ban. Raids were carried out and a number of persons believed to have conspired in the assassination of Mahatma Gandhi and a plot to kill members of the Central Government for their so-called 'anti-Hindu' policy were rounded up. There were also outbreaks of rioting in which violence was directed chiefly against the persons and property of the Hindu Mahasabha and the R.S.S. The riots in the Bombay Presidency, particularly in the Deccan States, were prolonged and severe.

Ever since the transfer of power and the division of the sub-continent two trends became apparent in the political life of the country. First, there was a marked tendency towards secularization in politics, that is to say, the formation of parties based on economic principles rather than religious belief. This tendency received a powerful impetus with the assassination of Mahatma Gandhi by a Hindu communalist. The Hindu Mahasabha at once resolved to modify its political outlook at a conference in Calcutta and all Muslim League Legislature parties except Madras were voluntarily liquidated.

The second trend in the political life of the country was a certain shift in opinion towards the Left. The Communists, for instance, who had supported the National Government ever since its formation in September 1947 withdrew their support on the ground, as they explained at the party conference in Calcutta, that the Nehru Government was little more than a capitalist Government at heart. They then went on to build up what they called a united front of all Left Wing parties, which, they hoped, would include the Socialists too to fight 'capitalist' and 'foreign' elements. A second illustration of the trend towards the Left was the break between the Congress and the Socialists who had till March 1948 formed a Left Wing group in the Congress. The Socialists organised a separate party of their own and instructed all members to resign from the Dominion Parliament, the Provincial Legislatures and all municipal and district local boards if they were elected to these bodies on a Congress ticket. The Socialists were encouraged to take this step by the results of the elections to the Bombay Corporation which were, for the first time in India or Pakistan, based on adult suffrage.

Third, official Congress policy itself moved still further to the Left. The Congress constitution was revised to include the entire body of Indian citizens who if pledged to the party now form the Congress electorate entitled to vote in the election of Congress panchayats. What is more significant the economic policy of the Congress as formulated by its Programme Committee showed a pronounced Left Wing slant. In the event Congress policy became the object of heated criticism from various employers' groups like Chambers of Commerce and Federations of Industry.

There were signs of a parallel development in the Muslim League Party in Pakistan. Though the Party refused to change its communal basis Left Wing points of view had begun to appear in its councils.

DECONTROL

The struggle for food, clothing and shelter continued as before. Export and import control was in full force as foreign currency had to be conserved for purposes of buying priority goods such as food and capital equipment. Internally the Government of India followed what was called a policy of progressive decontrol in regard to food, sugar, gur and cloth. Cloth, sugar and gur were decontrolled everywhere while food remained under control only in certain urban areas. The decontrol policy was based chiefly on two grounds. First, the belief that if control on price was removed hoarded goods would begin to flow into the open market once again; and second, that controls were bad for public morale, an argument which received powerful support from Mahatma Gandhi. In the ultimate analysis, all arguments in favour of decontrol were based on the presumption that there was no scarcity except what was created by the system of control itself.

The immediate results of decontrol could be quickly summarised. The price of popular cereals like wheat and rice went up by about 50 to 300 per cent. of the old controlled price. High prices prevailed particularly in the deficit areas, both urban and rural, of the Provinces of Madras, Bombay and West Bengal. The Madras Government, for instance, was forced to set up fair price or relief shops in a number of places so great was the outcry. In regard to sugar and gur, the position was a little more satisfactory.

INDUSTRIAL TRUCE

Production had to be increased if the average citizen was to enjoy a decent standard of living. The attitude of Labour was crucial in this regard as strikes had broken out all over the subcontinent and the numbers of working days lost was mounting. The solution appeared to be some sort of truce between capital and labour whereby labour agrees to pull its weight in return for economic concessions. To achieve this end, a tripartite conference of representatives of Labour, Capital and Government met in New Delhi and after deliberation came to certain broad conclusions about future programme of action in Industry. First, there was to be a fair return both to capital and labour; second, Labour was to have a general say in the management of Industry; and third, if there were differences between an employer and his workers the latter were to make full use of the machinery of arbitration and conciliation before launching out on a strike. The Government backed up the 'industrial truce' idea with an ambitious programme of labour welfare legislation which included a factory act, a minimum wage act, sickness insurance and provision for building houses for workers. A declaration of policy in regard to nationalization followed. This became necessary as employers were betraying signs of nervousness about the future. According to this policy there were to be three types of industry, first, both owned and controlled by Government, second, partly owned and controlled by Government and third, privately owned and privately controlled. Government also gave an assurance that they would not take over any new industrial undertaking for ten years. Meanwhile certain tax concessions were also made to industrialists in the 1948-49 budget.

Pakistan's industrial policy was outlined by its Commerce Minister. Industries which were to be owned by the State would include railways and road transport, arms and munitions of war, generation of hydro-electric power, manufacture of railway, telegraph, telephone and wireless equipment. In 13 industries including coal, cement, textile mills, heavy chemicals, minerals and shipbuilding, Pakistan nationals were to be given the option to subscribe at least 51 per cent. of all classes of share capital and debentures. With regard to other industries 30 per cent. were to be reserved for the nationals of Pakistan but if, indigeneous capitalists were not forthcoming the balance might be made up by foreign investors.

In general because of the predominantly rural economy of Pakistan the initial emphasis in industrialisation must, perforce, be on agriculture and industries based on agricultural produce like jute, cotton and sugar.

Having given a brief account of the internal situation of India and Pakistan we will now turn to a review of the relations between the two Dominions.

INDO-PAKISTAN RELATIONS

Ever since partition was finally decided on, the whole process of economic and administrative separation of India and Pakistan went forward without engendering undue heat or passion. First came the division of the armed forces which was carried through under the auspices of the Joint Defence Council a body set up for the purpose. When the work of division was complete the Joint Defence Council was wound up though a committee at secretariat level was established to put the finishing touches. Next came the most important question of the division of assets and liabilities. It was a highly complex issue; but it was also settled out of court in a friendly and cordial atmosphere. The fact that the intervention of the Arbitral Tribunal did not become necessary was hailed as a signal triumph for Indian and Pakistani statesmanship and the hope was expressed that this would mark a turning point in the history of the relations between the two Dominions. It may be noted by the way, that the disputes between the newly created Provinces (East Bengal vs. West Bengal, and East Punjab vs. West Punjab) could not be settled except by reference to the Arbitral Tribunal.

In other directions too the process of political and economic separation was in full swing. Pakistan set up its own postal system and its own currency. A tariff barrier also sprang up between the two Dominions and goods passing from one Dominion to another became liable to customs duties. The Pakistan Government, for instance, levied a duty on jute exported to India, while the Government of India for their part taxed the jute products which were being exported to Pakistan. On July 1, 1948 a State Bank was established for Pakistan.

In the field of party politics and party organisation too all extra-territorial links were severed. The Congress organisation in Pakistan was completely separated from the Congress organisation in India. So was the Muslim League organisation in India completely separated from the Muslim League organisation in Pakistan. The Socialists and Communists quickly followed suit so that today no major political party in India or Pakistan has any extra-territorial affiliations.

When partition was put through there was a hope that during the transition the *status quo* with regard to control, customs and tariffs would be fully maintained. In order to ensure this a Stand-Still Agreement was signed under which there was to be complete freedom of movement of goods across the frontiers and no import or export duties were to be imposed on such goods. It was also agreed that each Dominion was to retain the taxes which it levied. This arrangement was to cover the period August 15, 1947 to March 31, 1948, which was regarded as being transitional. Unhappily the Agreement did not work out in the way it was intended to work. There were accusation of breach of faith followed inevitably after a time by counter-accusations of a similar nature.

CALCUTTA CONFERENCE

When trade conditions threatened to become chaotic an attempt was made to arrive at a fresh agreement so that trade could flow as freely as before to the benefit of both the peoples. In April an inter-Dominion conference met in Calcutta and arrived at a number of agreements of a general nature.

Agreements of a specific nature were also made for the exchange of food and other commodities between the two Dominions. For instance there was an agreement to exchange Indian wheat for Pakistan rice, Indian textiles for Pakistan cotton and also for the supply of Indian sugar to Pakistan. Other questions on which agreement was arrived at were the division of the sterling balances, the fixing of postal and telegraph rates, and the sharing of the waters from the Sutlej head-works between East and West Punjab commonly known as the Punjab Canals dispute. In this way attempts towards a reintegration at some points of an economy which was so suddenly disrupted on August 15, 1947 were being continually made.

CAUSES OF FRICTION

Causes of friction were, of course, inherent in the very nature of the situation. Partition itself had left a bitter feeling between the two Dominions. The tragedy in the Punjab served to raise it to boiling point. There were other irritants which contributed to the general bitterness such as border raids, search of refugees, the withholding of military stores and Pakistan's share of the assets of the Reserve Bank by the Government of India, the tariff war over jute and finally the issue over the accession of the States of Junagadh and Kashmir which brought the whole question of the future relations between the two Dominions to a head.

The facts about Junagadh may be summed up as follows: The Ruler of Junagadh acceded to Pakistan. The accession was strictly in order as the Nawab was a free agent but India contented that there was an unwritten understanding that in the matter of accession due regard was to be paid to such points as contiguity and the general wishes of the inhabitants of the State. The case of Alirajpur, Babariawad, and Mongrol were all more or less in the same class as Junagadh.

The accession, however, created an outcry in Kathiawar and some of the Princes sent a protest to the Government of India that the Nawab's action had endangered the security of the whole Peninsula. Meanwhile demonstrations were organised to move on the State itself, and the Nawab eventually left for Karachi, carrying away part of his movable property. The administration in the State appeared to be breaking down when a British Officer approached the Central Government on behalf of the Dewan and asked them to take over the administration. Indian troops moved in and the Government of India assumed charge of the State through an administrator. A plebiscite was subsequently held in Junagadh, Mongrol and Babariawad, which resulted in an overwhelming majority voting in favour of accession to India.

KASHMIR

A more serious issue was that of Kashmir. After the establishment of Dominion Status this State announced its intention of negotiating a Stand-Still Agreement with the two Dominions. Soon the Kashmir Government began to complain that Pakistan authorities were cutting off supplies of food, petrol and other essential commodities and were hindering the free transit of travellers between Kashmir and Pakistan. Alongside of this economic pressure, the Kashmir Government further complained, border raids in support of a rebellious movement were also beginning to occur. A complicating factor appeared to be that the southern districts of the State had become a sort of channel through which Muslim and non-Muslim refugees were moving, the one from East to West Punjab, and the other from West to East Punjab. Fighting was reported between the State forces and the raiders in the Rawalkot and Mirpur areas in the beginning of October. On the 15th of October the State troops were forced to evacuate Fort Owen. On the 18th the Kolli-Poonch Road was breached and heavy fighting took place. Action was also reported in Bhimbhar, Checkiam Mangla and Kotli areas. An undeclared war was already raging.

The main attack on State territory began in the third week of October. The central column of the invaders made considerable progress along the Kohala-Baramula road towards Srinagar fanning out in all directions. Uri and Baramula were captured in quick succession and the road to Srinagar lay open to the invaders.

On the 24th of October, the Maharaja approached the Government of India for help. Two days later the State formally acceded to India. And on October 27 the first contingent of Indian airborne troops landed in Srinagar.

When Indian troops opened a counter-offensive the invaders had advanced as far as Pattan only 17 miles from Srinagar. Baramula was

quickly recaptured. Indian troops then took Uri and finally removed any serious threat to Srinagar and to the surrounding valley.

Next the Indian troops turned their attention to the Jammu Province where large areas like Nowshera and Koli were relieved.

Simultaneously the happenings in Kashmir became a matter dispute between India and Pakistan. On October 30 the Government of Pakistan announced that it could not recognise Kashmir's accession to India as it was based on 'fraud and violence'. Pandit Nehru answering the charge on behalf of India maintained that the accession was legally made by the Maharaja and the State had taken into consultation Sheikh Abdullah, the leader of the All-Jammu and Kashmir National Conference (who had meanwhile been sworn in as head of the administration). Nevertheless, in accepting accession, Pandit Nehru went on to declare, the Government of India were regarding the agreement as purely provisional until such time as the will of the State people could be ascertained.

APPEAL TO U. N. O.

On December 30 India decided to appeal to the United Nations Security Council on the ground that the situation was one 'whose continuance was likely to endanger international peace and security'. India asked the Council to call on Pakistan to put an end immediately to its aid to rebel tribesmen, failing which India might be compelled in self-defence to enter Pakistan territory to deal with the rebel bases. Pandit Nehru maintained at a press conference on January 2, that this step would not be taken if it could be avoided and if taken it would not amount to war against Pakistan. A spokesman for Pakistan who answered Pandit Nehru's charges, however, made it clear that any move by Indian troops across the border would be regarded as an act of war and suggested that all disputed matters between the two Dominions and not only Kashmir should be brought before the United Nations for settlement.

The solution which the United Nations Security Council eventually proposed was that a commission consisting of five members was to be established to arbitrate in the dispute.

The commission was to go to Kashmir to investigate the facts, exercise mediatory influence and submit to the Security Council its conclusions and proposals from time to time.

Both India and Pakistan agreed to the establishment of the commission but disagreed on the terms of reference. Pakistan wanted the commission to have the widest possible powers which would include power to order cease fire, freedom to consult with all parties on equal terms including representatives of the *Free Kashmir Movement*, power to act in the nature of a neutral administration which would organise and supervise the holding of a plebiscite. Pakistan also asked that the commission should investigate other questions like 'Junagadh', 'geno-cide' and the 'implementation' of the Pact between India and Pakistan. The Indian view was that the proposed commission should be concerned firstly to stop the fighting and second to act as observer during the plebiscite which would be conducted by the present Kashmir administration.

Some Notable Dates (Jan. 1947—Mar. 1948)

JANUARY 1947

Jan. 2: Mahatma Gandhi starts walking tour of Bengal villages.
Jan. 5: Congress Working Committee recommends acceptance of Dec. 6, statement to A.I.C.C.
Jan. 6: A.I.C.C. adopts official resolution by 99 votes to 52.
Jan. 10: The Maharaja of Cochin welcomes Constituent Assembly resolution on people's sovereignty—first Indian Prince to do so.
Jan. 15: Communist offices raided all over country.
Jan. 16: K. P. S. Menon appointed Ambassador to China.
Jan. 20: Constituent Assembly reopens in Delhi.
Jan. 22: Assembly adopts Objectives Resolution.
Jan. 23: Madras Public Safety Ordinance promulgated; Communists rounded up.
Jan. 24: League leaders arrested in the Punjab.
Jan. 25: Sir Akbar Hydari appointed Governor of Assam.
Jan. 26: Arrested League leaders in the Punjab released.
Jan. 28: Punjab League leaders rounded up at midnight.
Jan. 29: Princes' terms for participation in Constituent Assembly deliberations defined at Standing Committee meeting.
Jan. 31: Muslim League Council rejects Constituent Assembly plan.

FEBRUARY 1947

Feb. 8: Baroda carries on independent negotiations with the Constituent Assembly.
Feb. 13: The Dewan of Baroda explains the step taken by State.
Feb. 15: Ministerial crisis in Madras.
Feb. 17: Railway Budget presented in the Legislative Assembly.
Feb. 20: Statement that Britain would quit by June 1948 made in British Parliament by the Prime Minister.
Feb. 23: Mob outbreaks in Lahore and Jullundur.
Feb. 25: Lords debate India.
Feb. 26: Conservative motion withdrawn; compromise reached between the Unionist Ministry and the League in the Punjab.
Feb. 28: Salt tax abolished by Central Government; Madras Congress Legislators elect new leader.

MARCH 1947

Mar. 1: Negotiations Committee of the Constituent Assembly discusses question of seats with Princes Chamber.
Mar. 2: Unionist Ministry resigns in the Punjab.
Mar. 4: Hindu-Sikh demonstrations in Lahore against proposed League Ministry.
Mar. 5: Governor takes over administration in the Punjab; Mahatma Gandhi arrives in Patna from Noakhali.
Mar. 6: Government motion on India passed by House of Commons.
Mar. 9: Congress invites League to discuss issue of transfer of power.
Mar. 11: Anti-Pakistan day demonstrations in Lahore.
Mar. 12: Bhavnagar, Gwalior, Jaipur and Jodhpur decide to join Constituent Assembly.
Mar. 15: Hindu Mahasabha demands partition of Bengal.

APRIL 1947

Apr. 2: Asian Conference concludes.
Apr. 6: Fundamental Rights Committee presents draft report to Constituent Assembly.
Apr. 11: League starts civil disobedience in Assam.
Apr. 16: Mahatma Gandhi and Quaid-e-Azam Jinnah make joint appeal for cessation of civil strife.
Apr. 17: Lord Pethwick Lawrence resigns and Lord Listowel takes his place.
Apr. 22: Madras Legislative Assembly decides in favour of linguistic provinces.
Apr. 28: Third session of Constituent Assembly opens; representatives of eight States participate.
Apr. 29: Mysore Dewan concedes representative Government to State.

MAY 1947

May 2: Constituent Assembly adjourns.
May 13: Calcutta Corporation votes in favour of partition of Bengal.
May 15: Report of Pay Commission published.
May 18: Lord Mountbatten leaves for London for consultation; Sir John Colville assumes office as acting Viceroy, and Sir S. V. Ramamurthy as Governor of Bombay.
May 19: Lord Mountbatten meets Mr. Attlee and the Cabinet.
May 21: Quaid-e-Azam Jinnah asks for corridor to connect West and East Pakistan.
May 23: The Maharaja of Udaipur appeals to Princes to join Constituent Assembly.
May 24: Bengal Anglo-Indians declare against to partition.
May 25: Pudukotah decides to join Constituent Assembly.
May 28: Bengal Scheduled Caste Conference meets in Calcutta and demands partition.
May 30: Lord Mountbatten arrives in India.
May 31: Rioting breaks out in Gurgaon villages.

JUNE 1947.

June 1: Viceroy visits Gurgaon.
June 2: Leaders Conference convened by Viceroy meets in Delhi.
June 3: Leaders accept British plan; Viceroy and leaders broadcast.
June 4: Lord Mountbatten holds press conference.
June 6: Cabinet sub-committee appointed to put through plans for partition.
June 7: 'Stay Still' order given to Central Government Departments in New Delhi.
June 8: Jaipur and Bikaner Dewans appeal to Princes to join Constituent Assembly.
June 9: League Council accepts British plan.
June 11: Bengal Governor appoint Group Presidents.

June 13: Sikh conference accepts plan on condition that partition does not split the community; Nizam declares independence and non-participation in either Constituent Assembly.
June 14: Congress Working Committee approves of British plan.
June 15: A.I.C.C. votes in favour of acceptance of British plan.
June 17: Mysore Maharaja declares Mysore would join Constituent Assembly.
June 18: Sir Olaf Caroe, Governor of N.W.F.P. goes on leave; Sir Rob Lockart takes his place.
June 20: Western section in Bengal votes in favour of partition.
June 22: Dr. Khan Sahib, Premier of N.W.F.P. demands establishment of independent Pathan State.
June 23: Punjab votes in favour of division.
June 24: N.W.F.P. Congress decides to boycott referendum.
June 26: Pakistan Constituent Assembly comes into existence.
June 28: Baluchistan decides to join Pakistan.
June 30: Boundary Commissions appointed.

JULY 1947

July 1: Dual Government established in Bengal.
July 3: New Bengal Cabinet sworn in.
July 4: Indian Independence Bill introduced in Parliament.
July 7: Interim Cabinet resigns.
July 8: Talks on sterling assets open in London.
July 10: Lord Mountbatten and Quaid-e-Azam Jinnah to be Governors-General of India and Pakistan respectively.
July 13: Sylhet incorporated into Pakistan.
July 14: Indian Constituent Assembly meets.
July 15: Third reading of Indian Independence Bill passed in Commons.
July 16: Indian Independence Bill passed by House of Lords.
July 18: Indian Independence Bill receives assent of King; Sir Shaafat Ahmed Khan dead.
July 20: N.W.F.P. decides to join Pakistan.
July 22: National Flag adopted by Indian Constituent Assembly.
July 23: Minorities Committee of the Constituent Assembly decides in favour of joint electorates.
July 25: Attempt made on the life of Sir C. P. Ramaswamy Iyer.
July 27: Akalis meet in Amritsar in defiance of ban.
July 29: Afghan claims on N.W.F.P. rejected.
July 31: Travancore accedes to Indian Union.

AUGUST 1947

Aug. 3: Appointment of new Governors announced.
Aug. 8: Quaid-e-Azam Jinnah bids farewell to Indian Union.
Aug. 10: Pakistan Constituent Assembly meets; Mysore accedes to Indian Union.
Aug. 11: Quaid-e-Azam in speech to Pakistan Assembly reassures minorities.
Aug. 14: Change-over ceremony at mid-night at New Delhi; Lord Mountbatten and Quaid-e-Azam Jinnah assume charge as Governors-General of India and Pakistan respectively.
Aug. 15: Independence day celebrated throughout India and Pakistan.
Aug. 16: Khan of Kalat declares independence.
Aug. 18: Premiers of India and Pakistan issue joint appeal for peace.
Aug. 19: Sir C. P. Ramaswamy Iyer resigns Dewanship of Travancore.
Aug. 22: Congress Ministry in N.W.F.P. dismissed.
Aug. 23: New Frontier Cabinet sworn in.
Aug. 24: Reports of worsening situation in Punjab; riots break out in Quetta.
Aug. 28: Indian Constituent Assembly decides to abolish separate electorates.
Aug. 30: Sardar Baldev Singh and Sardar Abdur Rab Nishtar visit Punjab.
Aug. 31: Pandit Nehru, Liaquat Ali Khan and Sardar Patel visit Punjab.

SEPTEMBER 1947

Sept. 1: Mahatma Gandhi goes on fast at Calcutta; Satyagraha campaign opens in Mysore.
Sept. 2: Joint Committee constituted for exchange and safe conduct of refugees; reports of mass evacuation in Punjab.
Sept. 3: Indian memorandum on South African issue submitted to U.N.O.
Sept. 4: Mahatma Gandhi breaks fast: Travancore Ruler issues proclamation granting self-government to his subjects.
Sept. 6: Mr. K. C. Neogy appointed Minister for Refugees and Rehabilitation.
Sept. 8: Delhi declared disturbed area.
Sept. 9: Mahatma Gandhi arrives in Delhi.
Sept. 20: Delhi Muslims surrender arms to Mahatma Gandhi.
Sept. 24: Mysore scheme for self-government published.
Sept. 25: Kathiawar States protest against accession of Junagadh to Pakistan.
Sept. 30: Pakistan admitted to membership of U.N.O.

OCTOBER 1947

Oct. 5: Indian Government refuses to recognize Junagadh's accession to Pakistan.
Oct. 15: Border clashes reported in Kashmir.
Oct. 16: Indian victory over South African issue at U.N.O.
Oct. 19: Kashmir Government protests to Pakistan.
Oct. 25: Attack in the direction of Srinagar gathers momentum.
Oct. 26: Kashmir Premier appeals for Indian help.
Oct. 27: Kashmir accedes to Indian Union; Asian Labour Conference meets in New Delhi.
Oct. 31: Situation in Kashmir eases.

NOVEMBER 1947

Nov. 1: Indian troops enter Mongrol and Babariawad.
Nov. 8: Indian troops enter Junagadh; administration passes to Government of India.

Nov. 10: C. Rajagopalachari assumes charge as acting Governor-General of India.
Nov. 15: Acharya Kripalani submits resignation of Presidentship of Congress.
Nov. 17: Dr. Rajendra Prasad elected President of Congress; G. V. Mavlankar elected Chairman of Union Assembly.
Nov. 25: Stand-Still agreement between India and Hyderabad arrived at.
Nov. 26: Budget introduced into Union Assembly.
Nov. 28: Nizam signs Stand-Still pact with India.
Nov. 30: General Auchinleck resigns post of Supreme Commander.

DECEMBER 1947

Dec. 4: Attempt made on Nizam's life.
Dec. 8: Sugar de-controlled by Government of India.
Dec. 9: Complete agreement with Pakistan on partition issues announced by Sardar Patel.
Dec. 12: Terms of Agreement published.
Dec. 16: Interim Government formed in Hyderabad.
Dec. 18: Delhi industrial conference meets; Pandit Nehru appeals for industrial truce.
Dec. 27: Union Muslims' conference sponsored by Moulana Azad meets in Lucknow.
Dec. 31: Indian Government decides to refer Kashmir dispute to U.N.O.

JANUARY 1948

Jan. 1: C. P. and Orissa take over outlying States.
Jan. 2: Kashmir dispute placed before U.N.O.
Jan. 6: Attack on Sikh refugees in Karachi; Gurudwara burned down.
Jan. 7: Indian Princes meet in Delhi.
Jan. 9: Proclamation announces reforms in Baroda.
Jan. 13: Mahatma Gandhi goes on indefinite fast.
Jan. 14: Personnel of new Congress Working Committee announced; P. C. Ghosh, Premier of West Bengal, resigns.
Jan. 15: B. C. Roy to be Prime Minister of West Bengal.
Jan. 17: Mahatma Gandhi lays down conditions on which he is prepared to break fast.
Jan. 18: Mahatma Gandhi breaks fast after receiving pledge.
Jan. 20: Country-made bomb explodes at Mahatma Gandhi's prayer meeting; U.N.O. commission appointed to mediate on Kashmir dispute.
Jan. 22: Indo-Pakistan dispute agenda widened at Pakistan's request.
Jan. 30: Mahatma Gandhi assassinated.

FEBRUARY 1948

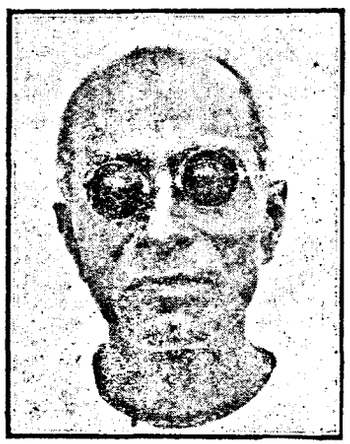
Feb. 1: Government of India issues statement to the effect that it will stick to Mahatma Gandhi's programme.
Feb. 2: Indian Parliament pays homage to the Mahatma.
Feb. 4: Rastriya Sevak Sangh declared unlawful body.
Feb. 5: Country-wide arrests of Mahasabha and R. S. S. Members; V. D. Savarkar detained.
Feb. 6: Mahasabha leaders discuss need for reorientation of Mahasabha policy.
Feb. 7: The Maharaja of Alwar and the Prime Minister Dr. B. N. Khare externed from State.
Feb. 8: Muslim National Guards and the Khaksars declared unlawful organisations.
Feb. 11: Bharatpur State temporarily taken over.
Feb. 12: Referendum on the issue of accession opens in Junagadh; the ashes of Mahatma Gandhi immersed in sacred waters.
Feb. 13: Kashmir debate in U.N.O. adjourned.
Feb. 14: U.P. League Parliamentary Party decides to liquidate itself.
Feb. 15: United States of Kathiawar (Saurashtra) inaugurated at Jamnagar by Sardar Patel; Mahasabha decides to withdraw from political activity.
Feb. 17: Pandit Nehru explains policy in regard to nationalization of industry in Parliament.
Feb. 19: Deccan Rulers sign agreement for merger with Bombay Presidency.
Feb. 20: Banganapalle State taken over by Madras Government.
Feb. 21: A.I.C.C. approves new Congress constitution.
Feb. 22: Financial agreement between Britain and India reached.
Feb. 23: Indian Military Mission arrives in London.
Feb. 24: Junagadh votes for accession to India; Parliament passes Railway budget.
Feb. 25: Draft constitution for India published.
Feb. 26: Government of India declares Pakistan foreign territory for customs purposes.
Feb. 29: General budget introduced into Parliament; The Maharaja of Nawanagar lays foundation-stone of Mahatma Gandhi's statue in Bombay.

MARCH 1948

Mar. 3: Pudukotah merges into India.
Mar. 5: White paper on Kashmir dispute presented to Dominion Parliament.
Mar. 8: Pandit Nehru expounds India's foreign policy in Dominion Parliament.
Mar. 9: Kashmir issue before U.N.O.
Mar. 10: Indian Council of Muslim League meets in Madras and decides to continue present organization.
Mar. 14: Sarvodaya Samaj set up; Pandit Nehru launches first Indian made ship at Vizagapatam.
Mar. 17: Matsya Union inaugurated.
Mar. 23: Responsible Government introduced in Travancore.
Mar. 24: Rajasthan Union inaugurated.
Mar. 25: Communist Party declared unlawful in West Bengal.
Mar. 28: Kalat accedes to Pakistan.

The Government of India

THE impulse which drove the British to the Indian sub-continent was not conquest but trade. The Government of India represents the slow evolution from conditions established to meet trading requirements. On September 24, 1599, a few years before the deaths of Queen Elizabeth and Akbar, the merchants of London formed an association for the purpose of establishing direct trade with the East and were granted a charter of incorporation. The government of this Company in England was vested in a Governor with a General Court of Proprietors and a Court of Directors. The factories and affairs of the Company on the east and west coasts of the sub-continent, and in the Bengal area, were administered at each of the principal settlements of Madras (Fort St. George), Bombay and Calcutta (Fort William), by a President or Governor and a Council consisting of the senior servants of the Company. The three "Presidencies" were independent of each other and subordinate only to the Directors in England.



H.E. Chakravarthy Rajagopalachari

Territorial Responsibility.—The collapse of government in the sub-continent consequent on the decay of Moghul power and the intrigues of the French on the east coast forced the officers of the Company to assume territorial responsibility in spite of their own desires and the insistent orders of the Directors. Step by step the Company became first the dominant, then the paramount power.

In these changed circumstances the system of government by mutually independent and unwieldy councils of the merchants at the Presidency towns gave rise to grave abuses. Parliament intervened, and under the Regulating Act of 1773, a Governor-General and four councillors were appointed to administer the Presidency of Fort William (Bengal), and the supremacy of that Presidency over Madras and Bombay was for the first time established. The subordinate Presidencies were forbidden to wage war or make treaties without the previous consent of the Governor-General of Bengal in Council, except in cases of imminent necessity.

Pitt's Act of 1784, which established the Board of Control in England, vested the administration of each of the three Presidencies in a Governor and three councillors, including the Commander-in-Chief of the Presidency Army. The control of the Governor-General-in-Council was somewhat extended again by the Charter Act of 1793.

Under the Charter Act of 1833 the Company was compelled to close its commercial business and it became a political and administrative body holding its territories in trust for the Crown. The same Act vested the direction of the entire civil and military administration and sole power of legislation in the Governor-General-in-Council, and defined more clearly the nature and extent of the control to be extended over the subordinate governments.

After the outbreak of 1857, there was passed, in 1858, an Act transferring the Government of India from the Company to the Crown. This Act made no important change in the administration in the sub-continent, but the Governor-General, as representing the Crown, became known as the Viceroy. The Governor-General was the sole representative of the Crown; he was assisted by a Council, composed of high officials, each of whom was responsible for a special department of the administration.

FUNCTIONS OF GOVERNMENT

The functions of the Government in India or Pakistan are perhaps the most extensive of any great administration in the world. It claims a share in the produce of the land and in some provinces it has restricted the alienation of land from agriculturists to non-agriculturists. It undertakes the management of landed estates where the proprietor is disqualified. In times of famine it undertakes relief work and other remedial measures on a great scale. It manages a vast forest property and is the principal manufacturer of salt and opium.

It owns the bulk of the railways of the country, and directly manages a considerable portion of them; it has constructed and it maintains most of the important irrigation works; it owns and manages the post and telegraph systems; it had until 1st April 1926 the monopoly of the note issue, and it alone can set the mints in motion. It lends money to municipalities, rural boards, and agriculturists and occasionally to owners of historic estates. It controls the sale of liquor and intoxicating drugs and has direct responsibilities in respect to police, education, medical and sanitary operations and ordinary public works of the most intimate character. The Government has also close relations with the States and Unions formed by some of them joining together.

The distribution of these great functions between the Central Government and the provincial administrations has fluctuated. It was definitely regulated by the Reform Act of 1919, and the democratic principle then widely implanted is greatly developed in the constitutions for the Provinces and the Centre enacted by the British Parliament in 1935.

THE REFORMS OF 1919 AND 1935

Great changes were made in the system of government in British India by the Government of India Act, 1919, which, together with the rules framed under it—almost as important in their provisions as the Act itself—came into general operation in January 1921, having received the Royal Assent on 23rd December 1919. (For detailed particulars see *The Indian Year Book*, 1936-37 and preceding years).

Still vaster changes in the direction of Indian self-government and of Dominion Status were brought about by the Government of India Act, 1935, which received the Royal Assent on 2nd August 1935. The new Act embodied two main principles—(1) Provincial Autonomy, with a Government responsible to an elected Legislature in every Province, and (2) at the centre a dyarchic form of Government, based on a federation of British Indian Provinces and Indian States. Detailed provisions for the whole scheme were made in the Act of 1935, which includes 321 sections and 10 schedules and was the largest and most complex legislative enactment of the kind ever negotiated on to a statute book.

Still more momentous changes were later made by the Indian Independence Act, 1947, which transferred full power to the two Dominions of India and Pakistan.

The constitutional provisions of the 1935 Act relating to the Provincial Governments were brought into force on 1st April 1937. Under the provisions of the Act it was contemplated that the States should enter into Federation with British India by executing Instruments of Accession. The federal programme was suspended on the outbreak of the war, but has been revived in a new form with the establishment of the Dominion of India on the 15th August 1947. Pending the inauguration of the permanent constitution to be framed by the Constituent Assembly the 1935 Act remains in force with adaptations made by Governor-General's orders under section 9 of the Indian Independence Act.

THE PROVINCES

The following are under the Act of 1935 the Governors' Provinces of British India (there being besides these Provinces certain Chief Commissioners' Provinces):—Madras, Bombay, Bengal, the United Provinces, the Punjab, Bihar, the Central Provinces and Berar, Assam, the North-West Frontier Province, Orissa, Sind. The Act recognises Berar as being under the sovereignty of H. E. H. the Nizam of Hyderabad whose Heir Presumptive is elsewhere created Prince of Berar and the Act specially provides for its administration along with the Central Provinces as one Governor's Province. These arrangements are continued by the Act as adopted.

The Act creates Orissa and Sind as separate Governors' Provinces and provides for the separation of Burma from India and for its constitution as a separate country under the Crown. The Act also gives powers for the creation of other Governors' Provinces.

The following are by the Act constituted as **Chief Commissioners' Provinces.**—Delhi, Ajmer-Merwara, Coorg, the Andaman and Nicobar Islands, Panth Piploda and British Baluchistan. Provision is made for the possible creation of others. A Chief Commissioner's Province is to be administered by the Governor-General acting, to such extent as he thinks fit, through a Chief Commissioner to be appointed by him.

The Constitution provides for the exercise of the executive authority of a Province (which extends to matters included in the Provincial and Concurrent Legislative Lists) on behalf of His Majesty by the Governor. It also provides for a "Council of Ministers to aid and advise the Governor in the exercise of his functions." The Governor chooses his Ministers, who hold office during his pleasure.

The Legislature.—The Act provides that there shall for every Province be a Provincial Legislature consisting of His Majesty represented by the Governor and (*a*) in the Provinces of Madras, Bombay, the United Provinces and Bihar two Chambers and (*b*) in the other Provinces one Chamber, the two Chambers being called the Legislative Council and the Legislative Assembly and where there is only one Chamber the Legislative Assembly.

Every Legislative Council is to be a permanent body not subject to dissolution but as near as may be one-third of its members are to retire every third year. Every Legislative Assembly of every Province unless sooner dissolved is to continue for five years.

Representation in the Legislative Assembly is by separate electorates for each community based on the provisions of the Communal Award as modified by the Poona Pact of September 25, 1932, under which a number of seats out of the seats classified as general seats are reserved to the Depressed Classes. The life of the Provincial Assembly is 5 years, while the Legislative Council is a permanent body periodically renewed.

While there are no nominated members and no officials in the Assembly—all members of the Lower House are elected—the Governor has the right to fill some seats in the Provincial Council wherever one exists. (See tables at the end of this Chapter for the composition of the Provincial Councils and Provincial Assemblies.)

The Acts of 1915 and 1919 provided for an electorate of approximately 3 per cent. of the total population, the franchise based mainly on a property qualification. Under the reformed constitution about 10 per cent of the total population were enfranchised. Women have a much wider franchise: there are over 6,000,000 women voters as compared with 315,000 provided by the Acts of 1915 and 1919. The Act of 1935 secures representation for women, for the Depressed Classes, for industrial labour and for special interests and for the bulk of the small landholders, small cultivators, urban ratepayers as well as a substantial section of the poorer classes.

Under the old constitution the Provinces had no original or independent powers. The local Governments were under the superintendence direction and control of the Governor-General-in-Council and the Secretary of State for India.

The first step which the new constitution took was to create autonomous provinces and to assign to them a certain exclusive share of the activities of Government. All subjects have been transferred to the control of the legislature. Subjects which are classified as provincial are as indicated below, exclusively dealt with by the Provincial Government which have power to make laws for peace and good government. There are no more "reserved" subjects. All subjects are "transferred." The subjects include public order, courts, police, prisons, education, health and sanitation, public works, agriculture, forests, land revenue, excise, tolls, unemployment and certain classes of taxation.

Both the Upper and Lower Houses have power to initiate legislation except that Money Bills can be initiated in the Lower House only. Should there be a difference of opinion between the two Houses with regard to a Bill the Governor has power to convene a joint session of the two Houses. Any Bill affirmed by the majority in the joint session shall be taken to have been duly passed.

Special provisions are made for cases in which the Governor finds himself unable to assent to Bills passed by the Legislature.

The Governor of a Province is given power to promulgate ordinances if, when his Legislature is not in session, he is satisfied that circumstances necessitate immediate action.

DIVISION OF POWERS

The Act provides for the institution of a Federal Court consisting of a Chief Justice of India and such other judges as His Majesty may deem necessary, the seat of the Court being Delhi and its original jurisdiction extending to disputes between the Dominion, any of the Provinces or any of the acceding States, its appellate jurisdiction to include certain classes of appeals from the High Courts and appeals laying from it to His Majesty in Council. The Federal Court held its first sitting on 6th December 1937.

Provisions are made in the Act in relation to the recruitment and control of the Public Services and for the appointment of a Public Service Commission for the Dominion of India and of one for each Province. The duties and powers of these Commissions in regard to the Services are laid down in the Act, which also provides that two or more Provinces may agree to have one Commission between them.

The Act abolished the Council of the Secretary of State for India and made him a Minister of the Crown individually responsible for the exercise of all authority vested in the Crown in relation to the affairs of India.

Provincial Legislation.—The Act provides for a new division of functions between the Central and Provincial authorities and the following is the new Provincial Legislative List, which came into operation on 1st April 1937 as amended and adapted.

1. Public order (but not including the use of His Majesty's naval, military or air forces in aid of the civil power); the administration of justice; constitution and organisation of all courts, except the Federal Court, and fees taken therein; preventive detention for reasons connected with the maintenance of public order; persons subjected to such detention.

2. Jurisdiction and powers of all courts except the Federal Court, with respect to any of the matters in this list; procedure in Rent and Revenue Courts.

3. Police, including railway and village police.

4. Prisons, reformatories, Borstal institutions and other institutions of a like nature, and persons detained therein; arrangements with other units for the use of prisons and other institutions.

5. Public debt of the Province.

6. Provincial Public Services and Provincial Public Service Commission.

7. Provincial pensions, that is to say, pensions payable by the Province or out of Provincial revenues.

8. Works, lands and buildings vested in or in the possession of His Majesty for the purposes of the Province.

9. Compulsory acquisition of land.

10. Libraries, museums and other similar institutions controlled or financed by the Province.

11. Elections to the Provincial Legislature subject to the provisions of this Act.

12. The salaries of the Provincial Ministers, of the Speaker and Deputy Speaker of the Legislative Assembly, and, if there is a Legislative Council, of the President and Deputy President thereof, the salaries, allowances and privileges of the members of the Provincial Legislature; and, to such extent as is expressly authorised by Part III of this Act, the punishment of persons who refuse to give evidence or produce documents before Committees of the Provincial Legislature.

13. Local government, that is to say, the constitution and powers of municipal corporations, improvement trusts, district boards, mining settlement authorities and other local authorities for the purpose of local self-government or village administration.

14. Public health and sanitation; hospitals and dispensaries; registration of births and deaths.

15. Pilgrimages, other than pilgrimages to places beyond India.

16. Burials and burial grounds.

17. Education, including Universities other than those specified in paragraph 13 of List I.

18. Communications, that is to say, roads, bridges, ferries, and other means of communications not specified in List I; minor railways subject to the provisions of List I with respect to such railways; municipal tramways; ropeways; inland waterways and traffic thereon subject to the provisions of List III with regard to such waterways; ports, subject to the provisions in List I with regard to major ports; vehicles other than mechanically propelled vehicles.

19. Water, that is to say, water-supplies, irrigation and canals, drainage and embankments, water storage and water power.

20. Agriculture, including agricultural education and research, protection against pests and prevention of plant diseases; improvement of stock and prevention of animal diseases; veterinary training and practice, pounds and the prevention of cattle trespass.

21. Land, that is to say, rights in or over land, land tenures, including the relation of landlord and tenant, and the collection of rents; transfer, alienation and devolution of agricultural land; land improvement and agricultural loans; colonization; Courts of Wards; encumbered and attached estates; treasure trove.

22. Forests.

23. Regulation of mines and oilfields and mineral development, subject to the provisions of List I with respect to regulation and development under Dominion control.

24. Fisheries.

25. Protection of wild birds and wild animals.

26. Gas and gasworks.

27. Trade and commerce within the Province; markets and fairs; money-lending and money-lenders.

28. Inns and innkeepers.

29. Production, supply and distribution of goods; development of industries, subject to the provisions in List I with respect to the development of certain industries under Dominion control.

30. Adulteration of foodstuffs and other goods; weights and measures.

31. Intoxicating liquors and narcotic drugs that is to say, the production, manufacture, possession, transport, purchase and sale of intoxicating liquors, opium and other narcotic drugs, but subject, as respects opium, to the provisions of List I and as respects poisons and dangerous drugs, to the provisions of List III.

32. Relief of the poor; unemployment.

33. The incorporation, regulation and winding-up of corporations not being corporations specified in List I or Universities; unincorporated trading, literary, scientific, religious and other societies and associations; co-operative societies.

34. Charities and charitable institutions, charitable and religious endowments.

35. Theatres, dramatic performances and cinemas, but not including the sanction of cinematograph films for exhibition.

36. Betting and gambling.

37. Offences against laws with respect of any of the matters in this list.

38. Inquiries and statistics for the purpose of any of the matters in this list.

39. Land revenue, including the assessment and collection of revenue, the maintenance of land records, survey for revenue purposes and records of rights, and alienation of revenue.

40. Duties of excise on the following goods manufactured or produced in the Province and countervailing duties at the same or lower rates on similar goods manufactured or produced elsewhere in India:—

(*a*) alcoholic liquors for human consumption;

(*b*) opium, Indian hemp and other narcotic drugs and narcotics; non-narcotic drugs;

(*c*) medicinal and toilet preparations containing alcohol or any substance included in sub-paragraph (*b*) of this entry.

41. Taxes on agricultural income.

42. Taxes on lands and buildings, hearths and windows.

43. Duties in respect of succession to agricultural land.

43A. Estate duty in respect of agricultural land.

44. Taxes on mineral rights, subject to any limitations imposed by any Act of the Federal Legislature relating to mineral development.

45. Capitation taxes.

46. Taxes on professions, trades, callings and employments, subject, however, to the provisions of section 142A of the Act.

47. Taxes on animals and boats.

48. Taxes on the sale of goods and on advertisements.

48A. Taxes on vehicles suitable for use on roads, whether mechanically propelled or not, including tramcars.

48B. Taxes on the consumption or rule of electricity, subject, however, to the provisions of section 154A of the Act.

49. Cesses on the entry of goods into a local area for consumption, use or sale therein.

50. Taxes on luxuries, including taxes on entertainments, amusements, betting and gambling.

51. The rates of stamp duty in respect of documents other than those specified in the provisions of List I with regard to rates of stamp duty.

52. Dues on passengers and goods carried on inland waterways.

53. Tolls.

54. Fees in respect of any of the matters in this list, but not including fees taken in any Court.

Concurrent List.—There is also prescribed a concurrent Legislative List containing subjects in regard to which both the Central Government and the Provincial Governments enjoy legislative powers.

PART I

1. Criminal law, including all matters included in the Indian Penal Code at the date of the passing of this Act, but excluding offences against laws with respect to any of the matters specified in List I or List II and excluding the use of His Majesty's naval, military and air forces in aid of the civil power.

2. Criminal Procedure, including all matters included in the Code of Criminal Procedure at the date of the passing of this Act.

3. Removal of prisoners and accused persons from one unit to another unit.

4. Civil Procedure, including the law of Limitation and all matters included in the Code of Civil Procedure at the date of the passing this Act; the recovery in a Governor's Province or a Chief Commissioner's Province of claims in respect of taxes and other public demands including arrears of land revenue and sums recoverable as such, arising outside that Province.

5. Evidence and oaths; recognition of laws, public acts and records and judicial proceedings.

6. Marriage and divorce; infants and minors adoption.

7. Wills, intestacy, and succession, save as regards agricultural land.

8. Transfer of property other than agricultural land; registration of deeds and documents.

9. Trusts and Trustees.

10. Contracts, including partnership, agency, contracts of carriage, and other special forms of contract, but not including contracts relating to agricultural land.

11. Arbitration.

12. Bankruptcy and insolvency; administrators-general and official trustees.

13. Stamp duties other than duties or fee collected by means of judicial stamps, but not including rates of stamp duty.

14. Actionable wrongs, save in so far as included in laws with respect to any of the matters specified in List I or List II.

15. Jurisdiction and powers of all courts except the Federal Court, with respect to any of the matters in this list.

16. Legal, medical and other professions.

17. Newspapers, books and printing presses.

18. Lunacy and mental deficiency, including places for the reception or treatment of lunatic and mental deficients.

19. Poisons and dangerous drugs.

20. Mechanically propelled vehicles.

21. Boilers.

22. Prevention of cruelty to animals.

23. European vagrancy; criminal tribes.

24. Inquiries and statistics for the purpose of any of the matters in this Part of this List.

25. Fees in respect of any of the matters in this Part of this List, but not including fees taken in any Court.

PART II

26. Factories.

27. Welfare of labour; conditions of labour; provident funds; employers' liability and workmen's compensation; health insurance, including invalidity pensions; old age pensions.

28. Unemployment insurance.

29. Trade unions; industrial and labour disputes.

30. The prevention of the extension from one unit to another of infectious or contagious diseases or pests affecting men, animals or plants.

31. Electricity.

32. Shipping and navigation on inland waterways as regards mechanically propelled vessels, and the rule of the road on such waterways carriage of passengers and goods on inland waterways.

33. The sanctioning of cinematograph films for exhibition.

34. Persons subjected to preventive detention under Dominions authority.

35. Inquiries and statistics for the purpose of any of the matters in this Part of this List.

36. Fees in respect of any of the matters in this Part of this List, but not including fees taken in any Court.

By an amendment passed in 1939, it was provided *inter alia* that in the event of a war emergency being proclaimed by the Governor-General the Central Government may assume executive in addition to legislative authority over any field and can also with the specific sanction of the Governor-General empower Federal officers to perform functions ordinarily the concern of provincial administrations.

Another amending Act was passed in 1940 [introduced in Parliament in 1939] to make certain readjustments found necessary in the operation of the 1935 Act. To safeguard provincial exchequers taxes on mechanical or other road vehicles or on the sale or consumption of electricity were added to the Provincial list.

THE CENTRAL GOVERNMENT

The structural changes made by the Act of 1919 in the system of government outside the "Governors' provinces" were of comparatively minor scope, though considerable modifications were made in the relationship hitherto subsisting between the Provincial Governments on the one hand and the Government of India and the Secretary of State in Council on the other.

The Act of 1935 provided for further extensive changes at the Centre, but these were only to come into force when the States acceded to Federation and meanwhile, at the Centre, the constitution established by the Act of 1919 prevailed, subject to certain modifications required to bring it into harmony with the new conditions in the Provinces. One of these changes was the vesting of certain powers in the Governor-General "in his discretion" which meant that they were vested in the Governor-General personally as distinct from that of the Governor-General in Council.

The Act of 1935 also took the relations between the Crown and the States outside the purview of the Governor-General in Council and entrusted them to a new authority called His Majesty's Representative for the exercise of the functions of the Crown in its relations with the States (Crown Representative for short). The offices of Governor-General and Crown Representative were held by the same person.

The only concrete changes made in the constitution of the Central Government by the 1919 Constitution were the removal of the statutory bar to the appointment of more than six members of the Governor-General's Executive Council (which, however, had the far-reaching consequence that a majority of the members of the Council were Indians) and the reconstitution in a much more enlarged representative and independent form of the Central Legislature. This became, like the Legislative Council in a Governor's province, a legislature with all the plenary powers generally given to such a body save such as are specifically withheld by the terms of the Act.

It consisted of two Chambers, the "Council of State" a body of 58 members, including 32 elected and 26 nominated, of whom not more than 20 might be officials. The "Indian Legislative Assembly" consisted of 141 members, of whom 102 were elected. Of the 39 nominated members, not fewer than one-third were required to be non-officials. The members of the Governor-General's Executive Council were not made *ex-officio* members of either Chamber, but each of them had to be nominated a member of one or other Chamber, and could vote only in the Chamber of which he was a member. Any member of the Executive Council could, however, speak in either Chamber.

The President of the Upper Chamber was appointed by the Governor-General. So also, for the first four years after the constitution of the Chamber, was the President of the Legislative Assembly. But after that period the Lower Chamber elected its own President ,its Deputy-President it elected from the very outset. The normal lifetime of each Council of State was five years, and of each Legislative Assembly three years; but either Chamber, or both simultaneously, could be dissolved at any time by the Governor-General who had also the power to extend the lifetime of either Chamber in special circumstances.

The following table shows the original allotment of the elective seats plus one added later for the North-West Frontier Province in the 1919 Act:—

	Legislative Assembly.	Council State.
Madras	16	5
Bombay	16	6
Bengal	17	6
United Provinces ..	16	5
Punjab	12	4
Bihar and Orissa ..	12	3
Central Provinces ..	6	2
Assam	4	1
North-West Frontier Province	1	..
Burma	4	2
Delhi	1	..
	105	34

The Government of India Act, 1935, by separating Burma from India eliminated the Burma members.

Till 1937 Berar was represented by nomination. After the commencement of the Government of India Act, 1935, the number of elected seats both in the Assembly and the Council of State were increased by one and assigned to Berar.

LATER AMENDMENTS

In order to validate a scheme of attaching the smaller States to bigger States, to ensure better administrative facilities, Parliament in the spring of 1944 enacted a measure which marks a departure from some of the provision of the Government of India Act of 1935. The measure was called the India (Attachment of States) Act of 1944. Here is the text:—

1. At the instance, or with the consent of His Majesty's Representative for the exercise of functions of the Crown in its relations with Indian States, any Indian State not mentioned in divisions I to XVI of the table of seats appended to part 2 of the First Schedule to the Government of India Act, 1935 (as in force at the passing of this Act), may be attached to any other Indian State and in connection with the attachment, provision may be made for:—

(a) The exercise by, or transfer to Courts and officers of the second mentioned Indian State, with or without limitations or conditions, of any powers or jurisdiction in or in relation to the first mentioned State which were or could have been exercised by or on behalf of the Crown therein before attachment.

(b) The relinquishment, as a consequence of attachment, of any such powers or jurisdiction of the Crown as aforesaid; and

(c) The transfer of cases pending at the date of attachment before courts or officers of the Crown, and this sub-section shall have effect notwithstanding anything in the Foreign Jurisdiction Act of 1890, the Government of India Act of 1935, any other Act for the time being in force, or any Letters Patent, Orders in Council, or other instruments.

2. This section shall be deemed always to have had effect. Provided that His Majesty's Representative for the exercise of the functions of the Crown in its relations with Indian States may give such directions, if any, as he thinks proper for rendering valid or lawful anything done or omitted before the passing of this Act which would be invalid or unlawful by virtue of the provisions of this sub-section.

3. The Act may be cited as the India (Attachment of States) Act, 1944.

Other Changes.—In March 1945 Parliament the amended Constitution Act to enable the Legislatures in India to authorise the imposition of estate duty and provided for the manner in which the proceeds were to be distributed.

In October of the same year Parliament passed an Act to remedy the anomalous situation in which persons who had been on war service lost their voting rights in some cases by failing to retain their "residential qualification."

In February 1946 an amending Act authorised the Central Legislature, when a Proclamation of emergency under section 102 of the Constitution Act is in force, to make laws upon matters which are not included in any of the Legislative Lists.

In March of the same year an Act was passed by which the provision that there should be three Service Members in the Viceroy's Executive Council, and one Member with stated legal qualifications, was removed. This was to enable a "political" Government to be formed at the Centre made up entirely of non-officials.

By this time the war was over and it was proposed to revoke the Proclamation of emergency under section 102. But the Centre would then have lost their war-time powers in matters which normally fall within the Provincial sphere. As the economic dislocation created by the war still persisted, it was desired that, in the interests of a smooth transition from the conditions of war to those of peace, the emergency powers of the Centre in regard to certain matters should continue for some time more. The Parliamentary Act referred to above accordingly continued temporarily for a maximum period of 5 years certain powers in respect of foodstuffs and some substances essential for the civil population such as paper, textiles, iron and steel, etc.; unemployment among war-workers; and the requisitioning of land and buildings.

ACT IN OPERATION

Formally inaugurated in April 1937, the provincial part of the new constitution functioned for about two and a half years with a fair amount of smoothness, but at the end of that period it broke down in seven out of the eleven provinces because of the resignation of their office by the Congress Ministries on the war issue. Thereupon the Governors of those provinces assumed sole charge of the Administration aided by Advisers responsible to them. The constitution remained virtually suspended in those provinces.

At the end of the war Congress Ministries were reinstated in eight provinces and in another (the Punjab) the Congress participated in a coalition.

The federal part of the constitution could not be inaugurated according to plan owing to diverse factors—the difficulties experienced by the Princes in acceding to Federation except on the fulfilment of certain conditions, the internal, political and communal differences in British India and, above all, by the declaration of war which militated against any major changes in the governmental machinery at the Centre.

The Viceroy openly announced that steps for the enforcement of the federal part of the constitution would remain suspended, although he also expressed the hope that conditions, internal as well as external, would so settle down as to permit of a reconsideration of the position at an early date. Apart from the war situation, which precluded any major undertaking relating to the Indian constitution, the steadily deteriorating internal political situation pushed into the background measures for the revival of the Federation envisaged by the Government of India Act.

Provincial Governments.—The Provincial Constitution was suspended in seven out of eleven provinces as the indirect result of the war—the popular Ministries in those provinces having resigned on the war issue and rendered the formation of other Ministries in their places impossible owing to the numerical disposition of the party strength.

The constitution was restored in one of the provinces, namely, Orissa, in the autumn of 1941, thanks to the successful efforts of the Opposition to wean away certain members from the majority party. This Ministry fell in 1944 and the Governor was once again forced to take over the administration.

Sind faded out of the picture during Christmas week in 1942. Following the resignation of one of his principal supporters in the Cabinet the Premier of Assam resigned and the Governor, finding it impossible to form a stable Ministry, took over the reins of administration by invoking section 93 of the Government of India Act. Eight months later the same Premier succeeded in forming a Coalition Ministry and obtaining adequate support for it.

Similarly in 1943 a Ministry was formed in the North-Western Frontier Province, where, too, the operation of section 93 of the Act was abrogated. Old undivided Bengal, which had had a fairly good run of provincial autonomy, came under a cloud in 1944 when consequent on the failure of the Ministry to command the confidence of the legislature, the Governor applied section 93 to the province. Subsequent to the general elections held in the cold weather of 1945-46, ministerial Government was restored in all the Provinces.

INDEPENDENCE ACT

Soon after the Labour Government took office it initiated measures to end the political dead-lock in the sub-continent. They first sent out a Parliamentary Delegation consisting of eight members to ascertain the views of Indian leaders and convey to them the broad general attitude of the political parties in Britain. After some time the British Government sent out a Cabinet Mission consisting of Lord Pethwick-Lawrence, Sir Stafford Cripps and A. V. Alexander who were authorised by the Cabinet to negotiate and settle within the broad framework of the British Government's policy the constitutional and political problems of India in association with the Viceroy. The Mission arrived in India on March 23, 1946 and remained in the country for about three months. (It left on June 30).

After prolonged consultations which showed that there was no agreement among the two major political parties on such fundamental issues as one state or two, the Cabinet Mission formulated its own proposals for the setting up of a machinery to draw a constitution for the sub-continent. These proposals were published on May 16.

MISSION PROPOSALS

At the outset the mission flatly declared that they were against the division of the sub-continent into two independent States but at the same time recognized the need for meeting the point of view of the Muslim League.

Inevitably the proposals took the form of a compromise both as regards the nature of the final constitution as well as of the machinery for drafting it. Broadly speaking, the Mission suggested what has been called a three-tier constitution consisting of a Union centre, the Provinces, and an intermediate authority formed by grouping contiguous Provinces according to a certain pattern.

The procedure for drafting such a constitution was also in the nature of a compromise. First there was to be a Constituent Assembly formed by representatives drawn from the Provincial Assemblies, the number of representatives to be proportional to the numerical strength of the community in the respective Provinces. Only three elements were to be recognized for purposes of representation, the Muslims, the Sikhs, and the rest grouped together and called general. After a preliminary meeting to decide general business, etc. the Provincial representatives in the Constituent Assembly were to divide up into three sections, one formed, broadly speaking, by those coming from the north-west, a second by those coming from the east, and a third by those coming from the rest of the country. These sections were then to settle Provincial constitutions for the Provinces included in each section and also to decide whether any group constitution was to be set up and if so with what Provincial subjects the group authority was to deal. In other words, the Constituent Assembly was a sovereign law-making body within certain limits and could frame whatever constitution it liked. India could remain within the Commonwealth, or if she so desired she could leave it.

At this point it would be interesting to set out the composition of the Constituent Assembly as proposed by the Mission, for it is this very same Assembly shorn of its representatives from Pakistan that is functioning today both as a Constituent Assembly as well as a parliament for the Dominion of India.

Province—	General	Muslim	Total
SECTION A			
Madras	45	4	49
Bombay	19	2	21
United Provinces	47	8	55
Bihar	31	5	36
Central Provinces	16	1	17
Orissa	9	0	9
Total	167	20	187

Province—	General	Muslim	Sikhs	Total
SECTION B				
Punjab	8	16	4	28
North-West Frontier Province	0	3	0	3
Sind	1	3	0	4
Total	9	22	4	35

Province—	General	Muslim	Total
SECTION C			
Bengal	27	33	60
Assam	7	3	10
Total	34	36	70
Total for British India	292		
Maximum for Indian States	93		
Total	385		

NOTE.—In order to represent the Chief Commissioners' Provinces there was added to Section A the member representing Delhi in the Central Legislative Assembly, the member representing Ajmer-Merwara in the Central Legislative Assembly and a representative elected by the Coorg Legislative Council. To Section B was added representative of British Baluchistan.

INTERIM GOVERNMENT

India also needed a new Government having popular support to carry through some of the heavy tasks with which the Administration was faced. So the Cabinet Mission also proposed that while the Constitution-making proceeded, an interim Government consisting of leaders drawn fron the major political parties was to be immediately formed.

Such, in outline were the main recommendation of the Cabinet Mission to help solve the political problem. Neither the Congress nor the League gave these recommendations wholehearted acceptance. Both sides expressed doubts and fears so that on a number of occasions the Mission had to come out with statements intended to clarify some point or other. Another factor which served to complicate the situation was that neither the Congress nor the League believed in the good faith of the other: each claimed that it had accepted the proposals while the other had rejected them. The problem of forming an Interim Government also presented enormous difficulty. After prolonged negotiations conducted by the Viceroy, however, the Congress agreed to accept office and an Interim Government was at last formed on Sept. 2. But the League continued to stand out and violent demonstrations occurred all over the country. The Viceroy followed up with further negotiations and, at last the League too agreed to join the Government (October 15), but refused to co-operate with the work of the Constituent Assembly on the ground that the Congress had not really accepted the Mission proposals in regard to certain points in the procedure.

Meanwhile temper both inside the Government and out in the country continued to rise, making any compromise between the two points of view impossible. The Congress argued that if the League did not co-operate in the work of the Constituent Assembly it could not stay in the Interim Government as the Constituent Assembly and the Interim Government were integral parts of a single formula. The League retorted that as the Congress had accepted neither the letter nor the spirit of the Mission proposals the League had as good a right to stay in the Cabinet as the Congress. A conference in London (December 5), availed little, except to make confusion worse confounded. The whole situation was fast getting out of hand and when at last the Congress bluntly demanded that the League must leave the Government and the League equally bluntly asked for the dissolution of the Constituent Assembly it was quite clear that a decision could no longer be postponed.

WITHDRAWAL PLAN

One way of trying to make the two sides agree was for Britain to declare that she would leave India by a certain fixed time regardless of whether the two sides had come to an agreement or not by then. This Britain at last did through an announcement made by the Prime Minister in Parliament. The date fixed by the British Government for withdrawal was June, 1948. It is worthwhile reproducing the relevant parts of the declaration made by Mr. Attlee on February 20, 1947 as it constitutes a landmark in the progress of India towards independence:

"It has long been the policy of successive British Governments to work towards the realisation of self-government in India. In pursuance of this policy, an increasing measure of responsibility has been devolved on Indians, and today the civil administration and the Indian armed forces rely to a very large extent on Indian civilians and officers. In the constitutional field, the Acts of 1919 and 1935 passed by the British Parliament each represented a substantial transfer of political power. In 1940, the Coalition Government recognised the principle that Indians should themselves frame a new constitution for a fully autonomous India, and in the offer of 1942 they invited them to set up a Constituent Assembly for this purpose as soon as the war was over.....

JUNE 1948

"The declaration of the Prime Minister of March 15 last, which met with general approval in Parliament and the country, made it clear that it was for the Indian people themselves to choose their future status and constitution and that, in the opinion of His Majesty's Government, the time had come for responsibility for the Government of India to pass into Indian hands.

"The present state of uncertainty is fraught with danger and cannot be indefinitely prolonged. His Majesty's Government wish to make it clear that it is their definite intention to take necessary steps to effect the transference of power to responsible Indian hands by a date not later than June, 1948.....

"His Majesty's Government are anxious to hand over their responsibilities to a Government which, resting on the sure foundation of the support of the people, is capable of maintaining peace and administering India with justice and efficiency. It is therefore essential that all parties should sink their differences in order that they may be ready to shoulder the great responsibilities which will come upon them next year.

"After months of hard work by the Cabinet Mission a great measure of agreement was obtained as to the method by which a constitution should be worked out.' This was embodied in their statements of May last. His Majesty's Government there agreed to recommend to Parliament a constitution worked out in accordance with the proposals made therein by a fully representative Constituent Assembly.

"But if it should appear that such a constitution will not have been worked out by a fully representative Assembly before the time mentioned, His Majesty's Government will have to consider to whom the powers of the Central Government in British India should be handed over, on the due date, whether as a whole to some form of Central Government for British India, or in some areas to the existing Provincial Governments, or in such other ways as may seem most reasonable and in the best interests of the Indian people."

PROCEDURE

This declaration did not by any means put an end to conflict. For though the British offered to withdraw they did not say to whom power was to be transferred in any particular

area in case no agreement had meanwhile been reached among the major parties in the country. Worse still, there were one or two passages in the statement which led one to infer that power would be transferred to those who happened to be in actual possession of it at the time of the withdrawal. This led to a mad struggle for power through mass movement in such of those Provinces as had a Muslim majority but a non-Muslim League Government. A mass movement in Assam too appeared to be imminent. Matters had undoubtedly come to a head and if an explosion was to be avoided yet another attempt had to be made to bring the two parties together and agree on a common solution. The instrument through which a common solution was at last reached was the person of Lord Mountbatten who had meanwhile taken the place of Lord Wavell as Viceroy and Governor-General (March 24, 1947). As soon as he assumed office Lord Mountbatten opened fresh negotiations with the Congress and the League and after prolonged talks with both sides succeeded in bringing about an agreement based on the division of India, the partition of the Punjab, Bengal and Assam, and the early transfer of complete power on the basis of Dominion Status. The procedure to be followed for dividing the country was simultaneously announced in London and in India on June 3.

The Provincial Legislative Assemblies of Bengal and the Punjab (excluding the European members) were each to be asked to meet in two parts, one representing the Muslim majority districts and the other the rest of the Province. For the purpose of determining the population of districts, the 1941 census figures were to be taken as authoritative.

The members of the two parts of each Legislative Assembly sitting separately would be empowered to vote whether or not the Province should be partitioned. If a simple majority of either part decided in favour of partition, division would be made accordingly.

Before the question as to the partition is decided, it is desirable that the representatives of each part should know in advance which Constituent Assembly the Province as a whole would join in the event of the two parts subsequently deciding to remain united. Therefore if any member of either Legislative Assembly so demands, there should be held a meeting of all members of the Legislative Assembly (other than Europeans) at which a decision would be taken on the issue as to which Constituent Assembly the Province as a whole would join if it were decided by the two parts to remain united.

In the event of partition being decided upon, each part of the Legislative Assembly would, on behalf of the areas they represent, decide which of the alternatives mentioned above to adopt.

Two Parts.—For the immediate purpose of deciding on the issue of partition, the members of the Legislative Assemblies of Bengal and the Punjab would sit in two parts according to Muslim majority districts and non-Muslim majority districts.

This was only a preliminary step of a purely temporary nature as it was evident that for the purpose of a final partition of these Provinces a detailed investigation of boundary questions would be needed; and as soon as a decision involving partition had been taken for either Province a boundary commission would be set up by the Governor-General, the membership and terms of reference of which would be settled in consultation with those concerned. It would be instructed to demarcate the boundaries of the two parts of the Punjab on the basis of ascertaining the contiguous majority areas of Muslims and non-Muslims.

It would also be instructed to take into account other factors. Similar instructions would be given to the Bengal Boundary Commission. Until the report of a boundary commission had been put into effect, the provisional boundaries indicated in the Appendix would be used.

Sind.—The Legislative Assembly of Sind (excluding the European members) would at a special meeting also take its own decision on the alternatives mentioned above.

N. W. F. P.—The position of the N.W.F.P. was exceptional. Two of the three representatives of this province were already participating in the existing Constituent Assembly. But it was clear, in view of its geographical situation, and other considerations, that if the whole or any part of the Punjab decided not to join the existing Constituent Assembly, it would be necessary to give the N.W.F.P. an opportunity to reconsider its position.

Accordingly, in such an event, a referendum would be made to the electors of the present Legislative Assembly in the N.W.F.P. to choose which of the alternatives mentioned above they wished to adopt. The referendum would be held under the aegis of the Governor-General and in consultation with the Provincial Government.

British Baluchistan.—British Baluchistan had elected a member but he had not taken his seat in the existing Constituent Assembly. In view of its geographical situation, this Province would also be given an opportunity to reconsider its position and to choose which of the alternatives mentioned above to adopt. H.E. the Governor-General was examining how this could most appropriately be done.

Assam.—Though Assam was predominantly a non-Muslim Province, the district of Sylhet which was contiguous to Bengal was predominantly Muslim. There had been a demand that, in the event of the partition of Bengal, Sylhet should be amalgamated with the Muslim part of Bengal. Accordingly, if it was decided that Bengal should be partitioned, a referendum would be held in Sylhet district under the aegis of the Governor-General and in consultation with the Assam Provincial Government to decide whether the district of Sylhet should continue to form part of the Assam Province or should be amalgamated with the new Province of Eastern Bengal, if that Province agreed.

If the referendum resulted in favour of amalgamation with Eastern Bengal, a Boundary Commission with terms of reference similar to those for the Punjab and Bengal would be set up to demarcate the Muslim majority areas of Sylhet district and contiguous Muslim majority areas of adjoining districts, which would then be

transferred to Eastern Bengal. The rest of the Assam Province would in any case continue to participate in the proceedings of the existing Constituent Assembly.

If it was decided that Bengal and the Punjab should be partitioned, it would be necessary to hold fresh elections to choose their representatives on the scale of one for every million of population according to the principle contained in the Cabinet Mission's Plan of May 16, 1946. Similar elections would also have to be held for Sylhet in the event of its being decided that this district should form part of East Bengal. The number of representatives to which each area would be entitled was as follows :—

Province	General	Muslims	Sikhs	Total
Sylhet District	1	2	Nil	3
West Bengal ..	15	4	Nil	19
East Bengal ..	12	29	Nil	41
West Punjab ..	3	12	2	17
East Punjab ..	6	4	2	12

In accordance with the mandates given to them, the representatives of the various areas would either join the existing Constituent Assembly or form a new Constituent Assembly.

INDIAN INDEPENDENCE ACT

Such were the terms of the procedure agreed upon for effecting the constitutional changes. The terms relating to independence announced by Lord Mountbatten were embodied in an Act called the Indian Independence Act which was introduced into Parliament on July 5, passed on July 15 and became law at 10.45 A.M. on July 18. The more important clauses of the Act are reproduced below :

Clause 1, Section 1 : As from August 15, 1947, two independent Dominions shall be set up in India, to be known respectively as India and Pakistan.

Section 2 : The said Dominions are hereafter in this Act referred to as 'the new Dominions' and the said 15th day of August is hereafter in this Act referred to as 'the appointed day'.

Clause 2, Section 1 : Subject to the provisions of sub-sections (3) and (4) of this section the territories of India shall be the territories under the sovereignty of His Majesty which, immediately before the appointed day, were included in British India except the territories which, under sub-section (2) of this section are to be the territories of Pakistan.

Pakistan Territories.—"Section 2 : Subject to the provision of sub-section 3 and 4 of this section, the territories of Pakistan shall be : the territories which, on the appointed day, are included in the Provinces of East Bengal and the West Punjab, as constituted under the two following sections ; the territories which, at the date of the passing of this Act, are included in the Province of Sind and the Chief Commissioner's Province of British Baluchistan ; and if, whether before or after the passing of this Act but before the appointed day, the Governor-General declares that the majority of the valid votes cast in the referendum which at the date of the passing of this Act is being or has recently been held in that behalf under his authority in the North-West Frontier Province are in favour of representatives of that Province taking part in the Constituent Assembly of Pakistan, the territories which, at the date of the passing of this Act, are included in that Province.....

Section 5 : For each of the new Dominions, there shall be a Governor-General, who shall be appointed by His Majesty and shall represent His Majesty for the purpose of the Government of the Dominion.

Provided that, unless and until provision to the contrary is made by a law of the legislature of either of the new Dominions, the same person may be Governor-General of both the new Dominions.

Legislature.—Section 6, Sub-section 1 : The legislature of each of the new Dominions shall have full power to make laws for that Dominion, including laws having extra-territorial operation.

Sub-section 2 : No law and no provision of any law made by the legislature of either of the new Dominions shall be void or inoperative on the ground that it is repugnant to the law of England, or to the provisions of this or any existing or future Act of Parliament of the United Kingdom, or to any Order, Rule or Regulation made under any such Act ; and the powers of the legislatures of each Dominion include the power to repeal or amend any such Act, Order, Rule or Regulation in so far as it is part of the law of the Dominion.

Sub-section 3 : The Governor-General of each of the new Dominions shall have full power to assent in His Majesty's name to any law of the legislature of that Dominion and so much of any Act as relates to the disallowance of laws by His Majesty, or the reservation of laws for the signification of His Majesty's pleasure thereon or the suspension of the operation of laws until the signification of His Majesty's pleasure thereon shall not apply to laws of the legislature of either of the new Dominions.

States.—Section 7, Sub-section 1 As from the appointed day :

(a) His Majesty's Government in the United Kingdom have no responsibility as respects the Government of any of the territories which, immediately before that day, were included in British India.

(b) The suzerainty of His Majesty over the Indian States lapses, and with it, all treaties and agreements in force at the date of the passing of this Act between His Majesty and the Rulers of Indian States, all functions exercisable by His Majesty at that date with respect to Indian States, all obligations of His Majesty existing at that date towards Indian States or the Rulers thereof, and all powers, rights, authority or jurisdiction exercisable by His Majesty at that date in or in relation to Indian States by treaty, grant, usage, sufferance or otherwise.....

Constituent Assemblies.— Section 8, Sub-section 1 : In the case of each of the new Dominions, the powers of the legislature of the Dominion shall, for the purpose of making provision as to the constitution of the Dominion, be exercisable in the first instance by the Constituent Assembly of that Dominion, and references in this Act to the legislature of the Dominion shall be construed accordingly.

Sub-section 2 : Except insofar as other provision is made by, or in accordance with a law made by the Constituent Assembly of the new Dominion under sub-section 1 of this section, each of the new Dominions and all Provinces and other parts thereof shall be governed as nearly as may be in accordance with the Government of India Act of 1935 ; and the provisions of that Act, or the Orders-in-Council, Rules and other instruments made thereunder, shall, so far as they are applicable, and subject to any express provisions of this Act, and with such omissions, additions, adaptations and modifications as may be specified in orders of the Governor-General under the next succeeding section, have effect accordingly.

Provided that—

(a) The said provision shall apply in relation to each of the new Dominions and nothing in this sub-section shall be construed as continuing on or after the appointed day any Central Government or legislature common to both the new Dominions.

(b) Nothing in this sub-section shall be construed as continuing in force on or after the appointed day any form of control by His Majesty's Government in the United Kingdom over the affairs of the new Dominions, or of any Province or other parts thereof.

(c) So much of the said provisions as requires the Governor-General or any Governor to act in his discretion or exercise his individual judgment as respects any matter shall cease to have effect as from the appointed day.

(d) As from the appointed day, no provincial Bill shall be reserved under the Government of India Act, 1935, for the signification of His Majesty's pleasure, and no provincial Act shall be disallowed by His Majesty thereunder."

Legislature's Power.—(e) The powers of the Federal legislature or Indian legislature under that Act, as in force in relation to each Dominion, shall in the first instance be exercisable by the Constituent Assembly of the Dominion, in addition to the powers exercisable by that Assembly under sub-section 1 of this section.

Sub-section 3 : Any provision of the Government of India Act, 1935, which as applied to either of the new Dominions by sub-section 2 of this section and the order therein referred to, operates to limit the power of the legislature of that Dominion shall, unless and until other provision is made by, or in accordance with a law made by the Constituent Assembly of the Dominion in accordance with the provisions of sub-section 1 of this section, have the like effect as a law of the legislature of the Dominion limiting for the future the powers of that legislature.....

Instruments of Instructions.—Section 16, Sub-section 4 : It is hereby declared that the Instruments of Instructions issued before the passing of this Act by His Majesty to the Governor-General and the Governors of Provinces lapse as from the appointed day, and nothing in this Act shall be construed as continuing in force any provision of the Government of India Act, 1935, relating to such Instruments of Instructions.

Sub-section 5 : As from the appointed day so much of any enactment as requires the approval of His Majesty-in-Council to any rules of court shall not apply to any court in either of the new Dominions.

TWO DOMINIONS

The Act, in short, established two independent Dominions, called India and Pakistan as from August 15, 1947 and transferred all power and authority in the respective areas to the Constituent Assembly of India which was already in existence, and the Constituent Assembly of Pakistan which was yet to be formed.

Pending the drafting and promulgation of the new constitution, the form of administration continued as under the 1935 Act as adapted by orders made by the Governor-General.

DRAFT CONSTITUTION

The Indian Constituent Assembly, set up on the recommendation of the Cabinet Mission, appointed a Committee (Aug. 29, 1947) consisting of Dr. B. R. Ambedkar, Mr. N. Gopalaswamy Iyyangar, Mr. K. M. Munshi, Saiyid Mohamed Saadulah, Mr. N. Madhava Rao and the late D. P. Khaitan with Dr. B. R. Ambedkar as chairman to draft a constitution for India. This committee submitted its report to the President of the Constituent Assembly on Feb. 21, 1948. Though there may be difference in detail the main features of the new Constitution will probably be the same as those proposed by the Draft Committee. Here is a summary of the draft constitution :

Preamble.—The preamble which closely follows the Objectives Resolution of the Constituent Assembly declares that the aim of the new Constitution is to constitute India into a Sovereign Democratic Republic ; to secure to all its citizens justice, social, economic and political ; liberty of thought, expression, belief, faith and worship ; equality of status and of opportunity ; and to promote among all Fraternity assuring the dignity of the individual and the unity of the Nation. In a foot-note to the Draft, the Committee explains that the question of the relationship between this Democratic Republic and the British Commonwealth of Nations remains to be decided subsequently. The reference to "Fraternity" in the preamble is of especial significance at the present moment as the need for fraternal concord and good-will in India is never greater than now.

Part I deals with the Union and its territory and jurisdiction.

India is described as a Union of States and for the sake of uniformity the Units of the Union have been described as 'States' whether they are known at present as Governors' Provinces or Chief Commissioners' Provinces or Indian States. The States have been divided into three classes :—

(a) States enumerated in Part I of the First Schedule which correspond to the existing Governors' Provinces :

(*b*) States enumerated in Part II of the First Schedule which correspond to the existing Chief Commissioners' Provinces; and

(*c*) States enumerated in Part III of the First Schedule which correspond to the Indian States which have acceded to the Dominion.

In addition, the territory of India includes the Andaman and Nicobar Islands enumerated in Part IV of the First Schedule and any other territory which may be acquired by the Union.

Provision has been made for the admission, establishment and formation of new States.

CITIZENSHIP

Part II deals with citizenship.

Article 5 of the Draft lays down who shall be a citizen of India at the date of the commencement of the new Constitution. Every person who or either of whose parents or any of whose grand-parents was born in the territory of India as defined in the Constitution and who has not made his permanent abode in any foreign State after the first day of April, 1947; and every person who or either of whose parents or any of whose grand-parents was born in India as defined in the Government of India Act, 1935 (as originally enacted), or in Burma, Ceylon or Malaya, and who has his domicile in the territory of India as defined in the Constitution, shall be a citizen of India, provided that he has not acquired the citizenship of any foreign State before the date of commencement of the Constitution. The main principle embodied in this Article is that in order to be a citizen of the Union at its inception a person must have some kind of territorial connection with the Union, whether by birth or descent or domicile. The Article also keeps in view the requirements of the large number of displaced persons who have had to migrate to India within recent months and provides for them a specially easy mode of acquiring domicile and, thereby, citizenship; for, under the Explanation to the Article, a person shall be deemed to have his domicile in the territory of India if he would have had his domicile in such territory under Part II of the Indian Succession Act, 1925, had the provisions of that Part been applicable to him, or if he has, before the date of commencement of the Constitution, deposited in the office of the District Magistrate a declaration in writing that he desires to acquire such domicile and has resided in the territory of India for at least one month before the date of the declaration.

The acquisition of citizenship after the date of commencement of the Consititution has been left to be regulated by law by the Parliament of the Union.

FUNDAMENTAL RIGHTS

Part III deals with Fundamental Rights.

The Fundamental Rights are based on the decisions of the Constituent Assembly.

These rights have been grouped as follows: rights of equality, rights relating to religion, cultural and educational rights, right to property and right to constitutional remedies. There is an express prohibition of discrimination on grounds of religion, race, caste or sex. All citizens are assured of equal opportunity in matters of public employment. 'Untouchability' is abolished and its practice in any form is forbidden. The State is prohibited from conferring any title and no citizen is to accept any title from any foreign State. Certain rights regarding freedom of speech, freedom to assemble peaceably and without arms, to form associations or unions, to move freely throughout the territory or to reside or settle in the territory of India or to acquire, hold and dispose of property or to practise any profession, or to carry on any occupation, trade or business are protected. It is declared that all persons are equally entitled to freedom of conscience and the right to profess, practise and propagate religion. Traffic in human beings and *begar* and other similar forms of forced labour are prohibited. The cultural and educational interests of minorities are also protected. The right to move the Supreme Court for the enforcement of the Fundamental Rights is guaranteed.

STATE POLICY

Part IV deals with the Directive Principles of State Policy and contains provisions which though not enforceable by any Court are nevertheless fundamental in the governance of the country and it is specifically provided that it shall be the duty of the State to follow these principles in making laws. The new State is to promote the welfare of the people by establishing and maintaining a social order in which justice, social, economic and political, shall inform all the institutions of national life. This Part also contains various injunctions regarding the right to education, to just and humane conditions of work, to a living wage for workers, and so forth.

THE UNION

Part V deals with the Union.

The Union Executive.—The head of the State is to be the President of India. All executive power of the Union is vested in the President, to be exercised by him on the advice of responsible Ministers. He is to be elected by the members of an electoral college consisting of the members of both Houses of Parliament, and the elected members of the Legislatures of the States. He is to hold office for a term of five years and is eligible for re-election once, but only once. The President must be a citizen not less than thirty-five years of age and qualified for election as a member of the Lower House of Parliament. The President may be impeached for violation of the Constitution. The Draft makes provision for a Vice-President also. He is to be the ex-officio Chairman of the Council of States and is to be elected by the members of both Houses of Parliament assembled at a joint sitting in accordance with the system of proportional representation by means of the single transferable vote. He is to hold office for a term of five years. Whenever the office of President becomes vacant, the Vice-President discharges its duties until another President is elected. All doubts and disputes arising out of or in connection with the election of a President are to be inquired into and decided by the Supreme Court whose decision is to be final. The Draft provides for a Council of Ministers with the Prime Minister at the head, to aid and advise the President in the exercise of his functions. The Council is to be collectively responsible to the House of the People. All executive action of the Government of India is to be expressed to be taken in the name of the President. It is the duty of the Prime Minister to furnish information to the President relating to the administration of the affairs of the Union and proposals for legislation whenever the President may call for the same. Provision has been made also for the appointment of an Attorney-General corresponding to the Advocate-General for India under the existing Constitution.

The Union Parliament.—The Union Parliament is to consist of a President and two Houses to be known respectively as the Council of States and the House of the People. The Council of States is to consist of 250 members of whom 15 members are to be nominated by the President to represent literature, art, science, etc., and the remainder are to be the representatives of the States. The House of the People is to consist of not more than 500 representatives of the territories of the States elected on the basis of adult suffrage, and there is to be not less than one representative for every 750,000 of the population and not more than one representative for every 500,000 of the population.

The Council of States will not be subject to dissolution, but as nearly as possible one-third of the members will retire on the expiration of every second year.

The House of the People is to continue for a period of five years and the expiration of that period operates as its dissolution, but provision has been made for extension of the duration of the House of the People for a period not exceeding one year during any emergency.

The usual provisions for the summoning, prorogation and dissolution of the Houses of the Union Parliament, the conduct of business therein, the disqualifications of members thereof and the Legislative procedure of the two Houses, including procedure in financial matters have been included generally on the lines of similar provisions contained in the Government of India Act, 1935. It has however been provided, following the practice prevalent in the Parliament of the United Kingdom that at the commencement of every session the President shall address both Houses of Parliament assembled together and inform Parliament of the cause of its summons.

A special procedure has been prescribed with regard to Money Bills on the lines of the practice in the Parliament of the United Kingdom.

It has been also provided that in the Union Parliament business shall be transacted in Hindi or English but that the Presiding Officer of the House may permit any member, who cannot adequately express himself in either of these languages, to address the House in his mother tongue.

Legislative Powers of the President.—Power has been given to the President to promulgate Ordinances at any time except when both the Houses of Parliament are in session. The President will promulgate such Ordinances on the advice of his Ministers, and such Ordinances will cease to operate at the expiration of six weeks from the re-assembly of the Union Parliament.

Federal Judicature.—There will be a Supreme Court of India consisting of a Chief Justice of India and not less than seven Judges. Provision has been made for the appointment by the Chief Justice of India of Judges of High Courts as *ad hoc* Judges at the sittings of the Supreme Court for specified periods following the practice prevalent in the Supreme Court of Canada. Provision has also been made for the attendance of retired Judges at sittings of the Supreme Court as in the United Kingdom and in the United States of America. Any person who has held office as a Judge of the Supreme Court (or of a High Court) is prohibited from practising in any court in India.

The Supreme Court is to have original, appellate and advisory jurisdiction. Its original jurisdiction extends to disputes between the Union and a State or between two States, if and in so far as the dispute involves any question whether of law or fact on which the existence or extent of a legal right depends. Disputes arising out of certain agreements have, however, been left out of the purview of the Supreme Court. The appellate jurisdiction of the Court extends to cases involving the interpretation of the Constitution and to all other cases from which an appeal now lies to the Federal Court or to His Majesty-in-Council. The minimum pecuniary limit of the subject matter of the dispute in the case of civil appeals has been fixed at Rs. 20,000. The Supreme Court has advisory jurisdiction in respect of questions which may be referred to that Court by the President for opinion.

Provision has been also made for special leave to appeal to the Supreme Court from any judgment, decree or final order in any Cause or matter passed or made by any court or tribunal in the territory of India.

In a foot-note the Committee has observed that in the Supreme Court of the United States of America all the Judges of the Court are entitled to participate in the hearing of every matter, that the Court never sits in divisions and that the Judges of that Court attach the greatest importance to this practice. The Committee has expressed the opinion that this practice should be followed in India at least in two classes of cases, namely, those which involve questions of interpretation of the Constitution and those which are referred to the Supreme Court for opinion by the President, and that whether the same practice should not be extended to other classes of cases may be left to be regulated by Parliament by law.

Auditor-General of India.—Provisions similar to those existing in the Government of India Act, 1935, have been made for an Auditor-General of India.

STATES

Part VI deals with States which correspond to Governors' Provinces.

The Executive in each States.—Each State will have a Governor and the executive power of the State is vested in him.

As to the mode of selection of the Governor, the Draft contains alternative provisions. One alternative, following the decision of the Constituent Assembly, provides that the Governor shall be elected by direct vote of all persons who have the right to vote at a general election for the Legislative Assembly of the State. The other alternative, favoured by some of the members of the Committee who feel strongly that the co-existence of a Governor elected by the people and a Chief Minister responsible to the Legislature might lead to friction and consequent weakness in administration, provides that the Governor shall be appointed by the President from a panel of four persons (who need not be residents of the State concerned) elected by the Legislature of the State.

The term of office of the Governors is to be five years. Provision has been made for impeachment of a Governor for violation of the Constitution.

The Committee has not thought it necessary to make any provision for Deputy Governors, because a Deputy Governor will have no function to perform so long as the Governor is there. At the Centre, the position is different, because the Vice-President is also the ex-officio Chairman of the Council of States; but in most of the States there will be no Upper House and it will not be possible to give the Deputy Governor functions similar to those of the Vice-President. There is a provision in the Draft enabling the Legislature of the State (or the President) to make necessary arrangements for the discharge of the functions of the Governor in any unforeseen contingency.

Provision has been made for a Council of Ministers with the Chief Minister at the head to aid and advise the Governor in the exercise of his functions. The Governor is to act on the advice of his Ministers, except in respect of certain matters, such as, the summoning and dissolving of the Legislature, the appointment of the Chairman and members of the State Public Service Commission and the Auditor-in-Chief of the state and the issue of a proclamation suspending the constitution in case of grave emergency threatening the peace and tranquility of the state. This last-mentioned power can be exercised only for a period not exceeding two weeks and the Governor is required to report the matter to the President. All executive action of the Government of the State is to be taken in the name of the Governor. It is the duty of the Chief Minister to furnish information to the Governor relating to the administration of the affairs of the State and proposals for legislation whenever the Governor may call for the same.

Advocate-General for the State.—There is to be an Advocate-General for every State whose functions are similar to those of the Advocate-General of the corresponding Province under the Government of India Act 1935. The Advocate-General is to retire from office upon the resignation of the Chief Minister of the State.

THE STATE LEGISLATURE

The State Legislature is to consist of the Governor and two Houses (Legislative Assembly and Legislative Council) in a few States and one House (Legislative Assembly) in all other states. The names of the States which will have two Houses have been left blank for the present.

The Legislative Assembly is to consist of members (not being in any case more than 700 or less than 60) who are to be chosen by direct election on the basis of adult suffrage in territorial constituencies. There is to be not more than one member for every lakh of the population except in the case of certain areas known as the "Autonomous districts" of Assam.

The total number of members of the Legislative Council of a State having such a Council is not to exceed 25 per cent of the total number of members in the Legislative Assembly of the State. One-half of the members of the Council are to be chosen from panels on functional basis and one-third of the members to be elected by the members of the Legislative Assembly in accordance with the system of proportional representation by means of the single transferable vote and the remainder are to be nominated by the Governor.

The Legislative Assembly is to continue for five years and the expiration of that period operates as its dissolution. The Legislative Council will not be subject to dissolution but as nearly as may be one-third of the members will retire on the expiration of every third year.

The usual provisions for summoning, proroguing and dissolving the House or Houses of the Legislature of the State, the conduct of business therein, the disqualifications of members thereof and the legislative procedure, including procedure in financial matters, have been included.

It has been provided that in the Legislature of a State business shall be transacted in the language or languages generally used in that state or in Hindi or English but that the Presiding Officer of the Legislature may permit any member who cannot adequately express himself in any of these languages, to address the Legislature in his mother tongue.

Legislative Powers of the Governor.—Power has been provided for the promulgation of Ordinances by the Governor of a State at any time except when the Legislature of the State is in session. The Governor will promulgate such Ordinances on the advice of his Ministers and they cease to operate at the expiration of six weeks from the re-assembly of the Legislature of the State.

Provision in cases of grave emergencies.—Provision has been made empowering the Governor in cases of grave emergency threatening the peace and transquillity of the State to issue a proclamation suspending certain provisions of the Constitution for a period of two weeks only, and the Governor is required to report the matter to the President. Upon receipt of the report the President may either revoke the proclamation or issue a fresh proclamation of his own, the effect of which will be to put the Central Executive in place of the State Executive and the Central Legislature in place of the State Legislature, or, in other words, the State concerned will become a centrally administered area for the duration of the proclamation. This replaces the "section 93 regime" under the Act of 1935.

Scheduled and tribal areas.—Special provision has been made in the Fifth and Sixth Schedules to the Draft Constitution for the administration, respectively, of the Scheduled areas in the States other than Assam and of the tribal areas in Assam, which mostly correspond to the excluded and partially excluded areas under the Government of India Act, 1935.

The High Courts in States.—The provisions with regard to High Courts in States corresponding to the Governors' Provinces and the Chief Commissioners' Provinces are mostly the same as in the Government of India Act, 1935. It has however been provided that a Judge of a High Court may hold office until he attains the age of 60 years or such higher age not exceeding 65 years as may be fixed in this behalf by the Legislature of the State. It has also been provided that a person who has held office as a Judge of a High Court shall be prohibited from practising in any court or before any authority within the territory of India.

Provision has also been made for the employment of retired Judges at sittings of the High Court following the practice in the United Kingdom and in the United States of America.

It has also been provided that the Union Parliament may by law extend the jurisdiction of a High Court to or exclude the jurisdiction of a High Court from any State other than the State in which the Court has its principal seat.

Auditors-in-Chief.—The person performing the functions of an Auditor-General in a State is to be designated as Auditor-in-Chief to distinguish him from the Auditor-General of India and provisions similar to those contained in the Government of India Act, 1935, in respect of Auditors-General for the Provinces have been made with respect to Auditors-in-Chief for the States.

CHIEF COMMISSIONERS' PROVINCES

Part VII deals with States which correspond to the Chief Commissioners' Provinces of Delhi, Ajmer-Merwara, Coorg and Panth Piploda which are at present administered by the Centre. Provision has been made for the administration of these States either through a Chief Commissioner or a Lieutenant-Governor, or through the Governor or the Ruler of a neighbouring State. What is to be done in the case of a particular area is left to the President to prescribe by order. He will, of course, in this, as in other matters, act on the advice of the responsible Ministers. The President has also been empowered to set up local legislatures and councils of advisers for these areas and to prescribe their Constitution and powers.

It has also been provided that Indian States (such as those of the Orissa group) which have ceded full authority, jurisdiction and power to the Central Government may be administered as if they were centrally administered areas, *i.e.*, through a Chief Commissioner or a Lieutenant-Governor or through the Governor or the Ruler of a neighbouring State, according to the requirements of each case.

Part VIII deals with the administration of the territories which are comprised within the territory of India but are not States, *e.g.*, the Andaman and Nicobar Islands. These territories will be administered by the President through a Chief Commissioner or any other authority appointed by the President. The President will have power to make regulations for the peace and good government of these territories.

UNION-STATES RELATIONS

Part IX deals with the legislative and administrative relations between the Union and the States. For the most part the Dratting Committee has made no change in the Legislative Lists as recommended by the Union Powers Committee and adopted by the Constituent Assembly.

The Committee has, however, provided that when a subject which is normally in the State List assumes national importance, then the Union Parliament may legislate upon it. To prevent any unwarranted encroachment upon State powers it has been provided that this can be done only if the Council of States, which may be said to represent the States as Units, passes a resolution to that effect by a two-thirds majority.

The Committee has also considered it desirable to put into the Concurrent List the whole subject of "succession" instead of only "succession to property other than agricultural land."

The Committee has also included in the Concurrent List all matters in respect of which parties are now governed by their personal law, so that the enactment of a uniform law in India in these matters may be facilitated. While putting land acquisition for the purposes of the Union into the Union List and land acquisition for the purpose of a State in the State List, the Committee has provided that the principles on which compensation for acquisition has to be determined shall in all cases be in the Concurrent List in order that there may be some uniformity in this matter.

In addition, in view of the present abnormal circumstances which require central control over essential supplies, it has been provided, on the lines of the India (Central Government and Legislature) Act, 1946, that, for a term of five years from the commencement of the Constitution, trade and commerce in, and the production, supply and distribution of, certain essential commodities, such as, cotton textiles, food-stuffs, and petroleum, as also the relief and rehabilitation of displaced persons, shall be on the same footing as Concurrent List subjects.

As regards the administrative relations between the Union and the States provision has been made for enabling a State which corresponds to an Indian State to enter into agreement with the Union or with any State which corresponds to a Governor's Province for the undertaking of executive, legislative and judicial powers in the former State by the Union or the latter State. Provision for settlement of the disputes

regarding inter-State water-supplies on the lines of the existing provision in the Government of India Act, 1935, has also been included.

As respects inter-State trade and commerce, all preferences or discrimination to one State over another have been prohibited. Provision has, however, been made to enable any State to impose reasonable restrictions in the public interest.

Provision has also been made for the appointment by the President of an Inter-State Council for the settlement of disputes between the States and for the better co-ordination of policy.

FINANCE, PROPERTY

Part X deals with Finance, Property, Contracts and Suits.

Provisions relating to the distribution of revenues between the Centre and the States and the grant of financial aid to the States have been retained for the present as in the Government of India Act, 1935. A provision has been included for the appointment of a Finance Commission at the end of five years from the commencement of the new Constitution to make recommendations as to the distribution of such revenues and other matters between the Union and the States.

The other provisions in this Part are mostly the same as in the Government of India Act, 1935.

EMERGENCY POWERS

Part XI deals with Emergency Powers. The President has been given power to issue a Proclamation of Emergency when a grave emergency exists whereby the security of India is threatened whether by war or domestic violence. The provisions relating to the Proclamation of Emergency are modelled on the existing provisions in the Government of India Act, 1935.

SERVICES

Part XII deals with services. Detailed provisions as to the services have been left to be regulated by Act of the appropriate Legislature.

Provisions for the Union and the State Public Service Commission have been included on the lines of the existing provisions in the Government of India Act, 1935.

ELECTIONS

Part XIII deals with Elections. Provision has been made for the superintendence, direction and control of all elections to Parliament by an Election Commission to be appointed by the President and of all elections to the Legislatures of States by an Election Commission to be appointed by the Governor of the State. The Committee has not thought it necessary to incorporate in the Constitution electoral details including delimitation of constituencies, and these have been left to be provided by auxiliary legislation.

MINORITIES

Part XIV deals with the safeguards for minorities. Provision has been made for the reservation of seats for the Muslim community, the Scheduled Castes, the Scheduled Tribes and the Indian Christians (in Madras and Bombay only) in the House of the People and in the Legislative Assemblies of the States for a period of ten years. Special safeguards for the continuance of certain rights in respect of services and educational grants for the Anglo-Indian community have been provided for a period of ten years.

Provision has also been included for the appointment of a special officer for minorities both for the Union and for the States and for the appointment of a periodic Commission to investigate the conditions of the backward classes. Provision has also been made for the appointment of a Commission to report on the administration of scheduled areas (which mostly correspond to the excluded and partially excluded areas in the present Constitution) and the welfare of scheduled tribes.

Part XV contains miscellaneous provisions.

Protection of the President and Governors.—Provision has been included in this Part for the protection of the President and the Governors from civil and criminal process during the term of their office.

AMENDMENTS TO CONSTITUTION

Part XVI contains provisions for the amendment of the Constitution. Ordinarily such amendment will require a two-thirds majority of the members of each House of the Union Parliament present and voting as well as an absolute majority of the total membership of each House. In the case of an amendment to make any change in the Legislative Lists or the representation of States in Parliament or the powers of the Supreme Court, the amendment will also require ratification by the Legislatures of not less than one-half of the States which correspond to the Governors' Provinces and not less than one-third of the States which correspond to the Indian States.

Provision giving limited constituent powers to the State legislatures in respect of certain definite matters has also been included.

TRANSITIONAL PROVISIONS

Part XVII deals with temporary and transitional provisions. It has been provided that all existing laws shall continue in operation subject to such adaptations made by the President by order as may be necessary to bring them into conformity with the provisions of the new Constitution. It has also been provided that until the Houses of Parliament have been duly constituted and summoned to meet for the first session, the Constituent Assembly itself will exercise the powers of the Union Parliament. Such person as the Constituent Assembly of the Dominion of India shall have elected in this behalf will be the provisional President of India until a President has been duly elected in accordance with the provisions of the new Constitution.

Ministers for the Dominion immediately before the commencement of the new Constitution will become Ministers of the provisional President under the new Constitution.

Similar provisions have also been made in respect of the Governors, Legislatures and Ministers in the States corresponding to Governors' Provinces.

Judges of the Federal Court shall, unless they have elected otherwise, become Judges of the Supreme Court, and the Judges of the High Courts, unless they have otherwise elected shall become Judges of the High Courts in the corresponding States.

Provision has been made for enabling the President to remove difficulties by order made under this Part; such orders may be made until the first meeting of the Union Parliament after the Parliament has been duly constituted under the new Constitution.

Part XVIII deals with commencement and repeals. The date on which the Constitution shall come into operation has been left blank, to be filled in afterwards. The Indian Independence Act, 1947, and the Government of India Act, 1935, and all other enactments amending or supplementing the latter Act will cease to have effect on the Commencement of the new Constitution.

SCHEDULES

First Schedule.—The First Schedule contains four Parts. Part I mentions the States which are at present the Governors' Provinces. Part II mentions the States which are at present Chief Commissioners' Provinces. Part III will contain the names of all the States which have acceded to the Dominion of India immediately before the commencement of the new Constitution. Part IV mentions the territory of the Andaman and Nicobar Islands.

Second Schedule.—This deals with the salaries, allowances, etc., to be paid to the President, the Governors, the Ministers, and the Judges of the Supreme Court and the High Courts.

Third Schedule.—This contains forms of oaths of office and secrecy to be taken by the Ministers for the Union and the States and of the declarations to be made by the members of the Union Parliament and the Legislatures of the States and the Judges of the Supreme Court and High Courts.

Fourth Schedule.—This Schedule contains the Instrument of Instructions for the Governors of the States. This follows the existing Instrument of Instructions to the Governors under the Government of India Act, 1935.

Fifth and Sixth Schedules.—These Schedules contain, respectively, provisions with respect to the scheduled areas and the scheduled tribes, in the States other than Assam and tribal areas in Assam.

Seventh Schedule.—This contains the Legislative Lists already referred to.

Eighth Schedule.—This contains the lists of scheduled tribes in the different States which correspond to Governors' Provinces.

CONSTITUENT ASSEMBLY OF INDIA

President.—The Hon'ble Dr. Rajendra Prasad.
Speaker.—The Hon'ble Shri G. V. Mavalankar.
Secretary.—M. N. Kaul, Bar-at-Law.
Deputy Secretary.—A. J. M. Atkinson.
Asstt. Secretary I.—N. C. Nandi.
Asstt. Secretary II.—C. V. Narayana Rao.

MADRAS

General.—O. V. Alagesan; Shrimati Ammu Swaminathan; M. Ananthasayanam Ayyangar; The Hon'ble Shri K. Chandramouli, M.L.A.; Shrimati Dakshayani Velayudhan, M.L.C.; Shrimati G. Durgabai; The Hon'ble Shri B. Gopala Reddi; The Hon'ble Shri N. Gopalaswami Ayyangar; D. Govinda Doss; Rev. Jerome D'Souza, S.J.; P. Kakkan, M.L.A.; K. Kamaraja Nadar, M.L.A.; V. C. Kesava Rao; T. T. Krishnamachari; Alladi Krishnaswami Ayyar; L. Krishnaswami Bharathi; P. Kunhiraman; The Hon'ble Shri K. Madhava Menon, M.L.C.; V. I. Muniswami Pillai, M.L.A.; Kummarraja Sir M. A. Muthiah Chettiyar, M.L.A.; V. Nadimuthu Pillai; S. Nagappa, M.L.A.; P. L. Narasimha Raju, M.L.A.; Dr. B. Pattabhi Sitaramayya; C. Perumalswami Reddi, M.L.C.; T. Prakasam; S. H. Prater, O.B.E., J.P., C.M.Z.S., M.L.A.; Raja of Bobbili; The Hon'ble Shri R. K. Shanmukham Chetty; T. A. Ramalingam Chettiyar; Ramnath Goenka; The Hon'ble Shri O. P. Ramaswami Reddiyar, M.L.C.; Professor N. G. Ranga; N. Sanjeeva Reddi, M.L.A.; K. Santhanam; B. Shiva Rao; The Hon'ble Shri H. Sitarama Reddi, M.L.A.; U. Srinivasa Mallayya; Dr. P. Subbarayan; C. Subramanyam; Dr. V. Subrahmanyam; M. C. Veerabahu Pillai; P. M. Velayudapani, M.L.A.; The Hon'ble Shri Kala Venkata Rao, M.L.A.; T. J. M. Wilson, M.L.A.

Muslim.—Haji Abdul Sattar Haji Ishaq Sait; K. T. M. Ahmed Ibrahim Sahib Bahadur, M.L.C.; Mahboob Ali Baig Sahib Bahadur, M.L.A.; B. Poker Sahib Bahadur, M.L.A.

BOMBAY

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Muslim.—Abdul Kadar Mohammad Shaikh, M.L.A.; Abdul Kadir Abdul Aziz Khan.

WEST BENGAL

General.—Prafulla Chandra Sen; Arun Chandra Guha; Mihir Lal Chattopadhyaya; Pandit Lakshmi Kanta Maitra; Satish Chandra Samanta; Suresh Chandra Majumdar; Upendra Nath Barman; Debi Prosad Khaitan; Basanta Kumar Das; Shrimati Renuka Ray; Dr. H. C. Mookerjee; Surendra Mohan Ghosh; Mukunda Behary Mallick; Damber Singh Gurung, M.L.A.; R. E. Platel.

Muslim.—Raghib Ahsan; Jalsmuddin Ahmed, M.L.A.; Naziruddin Ahmad; Abdul Hamid.

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Hon'ble Shri Purshottam Das Tandon; S. Radhakrishnan; Ram Chandra Gupta, M.L.C.; Prof. Shibban Lal Saksena, M.L.A.; The Hon'ble Pandit Shri Krishna Dutt Paliwal; The Hon'ble Dr. John Matthai, C.I.E.; Shrimati Sucheta Kriplani; Sunder Lall; Venkatesh Narayan Tivary, M.L.A.; Mohan Lal Gautam; Vishwambhar Dayal Tripathi, M.L.A.

Muslim.—Begum Aizaz Rasul, M.L.C.; Maharajkumar Amir Haider Khan of Mahmudabad, M.L.A.; Aziz Ahmed Khan, M.L.A.; Maulana Hasrat Mohani, M.L.A.; Nawab Muhammed Ismail Khan; The Hon'ble Mr. Rafi Ahmed Kidwai; S. M. Rizwan Allah, M.L.A.

EAST PUNJAB

General.—Dr. Bakshi Tek Chand; Pandit Thakur Dass Bhargava; Prof. Yashwant Rai; Bikramlal Sondhi; Ch. Ranbir Singh.

Muslim.—S. M. Ilahi; Ch. Mohd. Hassan, M.L.A.; Sufi Abdul Hamid Khan, M.L.A.; Maulana Daud Ghaznavi.

Sikh.—The Hon'ble Sardar Baldev Singh; Giani Gurumukh Singh Musafar.

BIHAR

General.—Amiyo Kumar Ghosh, M.L.A.; The Hon'ble Shri Anugrahnarayan Sinha; Banarsi Prasad Jhunjhunwala; Bhagwat Prasad, M.L.A.; Boniface Lakra, M.L.C.; Brajeshwar Prasad; Chandrika Ram, M.L.C.; Prof. K. T. Shah; Devendra Nath Samanta, M.L.C.; Dip Narayan Sinha, M.L.A.; Guptanath Singh, M.L.A.; Jadubans Sahai, M.L.A.; Jagat Narain Lal, M.L.A.; The Hon'ble Shri Jagjivan Ram; Shri Jaipal Singh; Maharajadhiraja Sir Kameshwara Singh, K.C.I.E.; Kamleshwari Prasad Yadav, M.L.A.; Mahesh Prasad Sinha, M.L.A.; Phulam Prasad Varma, M.L.A.; Dr. Raghunandan Prasad, M.L.A.; The Hon'ble Dr. Rajendra Prasad; Rameshwar Prasad Sinha, M.L.A.; Ramnarayan Singh; Dr. Sachchidananda Sinha, M.L.A.; Sarangdhar Sinha, M.L.A.; Satyanarayan Sinha; Dr. P. K. Sen; The Hon'ble Shri Krishna Sinha; Rai Bahadur Sri Narain Mahtha; Rai Bahadur Syamanandan Sahaya, C.I.E., M.L.A.

Muslim.—Hussain Imam; Saiyid Jafar Imam, M.L.A.; Latifur Rahaman, M.L.A.; Mohd. Tahir, M.L.A.; Tajamul Hussain, M.L.A.

C. P. and BERAR

General.—Guru Agamdas Agarmandas, M.L.A.; The Hon'ble Rajkumari Amrit Kaur; Bhagwantrao Annabhu Mandloi, M.L.A.; Brijlal Nandlal Biyani; Thakur Chhedilal, M.L.A.; Seth Govinddas; Dr. Sir Hari Singh Gour; Hari Vishnu Kamath; Hemchandra Jagobaji Khandekar; V. R. Kalappa, M.L.A.; Lakshman Shrawan Bhatkar; Dr. Punjabrao Shamrao Deshmukh; The Hon'ble Pandit Ravi Shankar Shukla; Rustom Khurshedji Sidhwa, M.L.A.; Shankar Tryambak Dharmadhikari; Frank Reginald Anthony.

Muslim.—Kazi Syed Karimuddin, M.L.A.

ASSAM

General.—Prof. Nibaran Chandra Laskar; Dharanidhar Basu Matari, M.L.A.; The Hon'ble Shri Gopinath Bardoloi; The Hon'ble Rev. J. J. M. Nichols-Roy; Rohini Kumar Chaudhury.

Muslim.—Saiyid Mohd. Saadulla, M.L.A.; Syed Abdur Rouf.

ORISSA

General.—B. Das; Biswanath Das; Maharaja of Parlakimedi; The Hon'ble Shri Hare Krishna Mahtab; Lakshminarayan Sahu, M.L.A.; Lokanath Misra, M.L.A.; Nandkishore Das; Raj Krishna Bose, M.L.A.; Santanu Kumar Das, M.L.A.

DELHI

Deshbandhu Gupta.

AJMER-MERWARA

Pandit Muhut Bihari Lal Bhargava.

COORG

C. M. Poonacha, M.L.C.

INDIAN STATES

Mysore.—Diwan Bahadur Sir A. Ramaswamy Mudaliar; K. Chengalaraya Reddy; H. R. Guruv Reddy; S. V. Krishnamurthy Rao; D. H. Chandrasekharaiya; Mahomed Sheriff; T. Channiah.

Gwalior.—M. A. Sreenivasan; Lt.-Col. Brijraj Narain; Gopikrishna Vijayavargiya; Ram Sahai.

Baroda.—Durbar Gopaldas A. Desai; Chunilal P. Shah.

Cochin.—P. Govinda Menon.

Udaipur.—Dr. S. V. Ramamurty, K.C.I.E.; Manikyalal Varma.

Jaipur.—Rao Bahadur Sir V. T. Krishnamachari, K.C.S.I., K.C.I.E.; Pandit Hiralal Shastri Raja Sardar Singhji Bahadur of Khetri, M.L.C.

Jodhpur.—C. S. Venkatachar, C.I.E., O.B.E., I.C.S.; Shri Jainarain Vyas.

Bikaner.—Sardar K. M. Panikkar.

Alwar.—Dr. N. B. Khare.

Kotah.—Lt.-Col. Dr. Dalel Singhji, M.A.

Indore.—V. S. Sarvate.

Rewa.—Raja Lal Shiva Bahadur Singh Rao of Churhat; Lal Yadvendra Singh.

Kolhapur.—A. B. Latthe.

Patiala.—Sardar Jaidev Singh, Bar-at-Law.

Mayurbhanj.—Lal Mohan Pati.

Frontier Groups

Sikkim & Cooch Behar Group.—Himmat Singh K. Maheshwari.

Tripura, Manipur & Khasi States Group.—G. S. Guha.

Interior Groups

U. P. States Group.—Col. B. H. Zaidi, C.I.E.

Eastern Rajputana States Group.—Maharaj Mandhata Singh; Maharaj Nagendra Singh; Gokulbhai Daulatram Bhatt.

Central India States Group (Including Bundelkhand and Malwa).—Rao Raja Jayendra Singh Ju Dev; Major Maharaj Kumar Pushpendra Singhji; Pandit Chaturbhuj Pathak.

Western India States Group.—Col. Shri Maharaj Himmat Singhji, C.I.E.; A. P. Pattani; Bhawanji Arjan Khimji.

Gujerat States Group.—Khan Bahadur F. Kothawala; Vinayakrao B. Vaidya.

Deccan & Madras States Group.—M. S. Aney; B. N. Munavalli.

Punjab States Group.—H. H. Raja Anand Chand of Bilaspur; Maharajkumar Balendu Shah; Chaudhri Nihal Singh Taxak.

Eastern States Group I.—N. Madhava Rau, C.I.E.; Rai Bahadur Lala Raj Kanwar; Sarangdhar Das; Yudhisthir Misra.

Eastern States Group II.—Raghuraj Singh Kishorimohan Tripathi; Ramprasad Potai.

Residuary States Group.—Balwant Rai Gopalji Mehta; Jai Sukh Lal Hathi; Kunwar Shamsher Jang.

LEGISLATIVE COUNCILS

Province	Total seats	General seats	Muslims	Indian Christians	Seats to be filled by Legislative Assembly	Seats to be filled by Governor
Madras	53–55	35	7	8		8–10
Bombay	28–29	20	5			3–4
United Provinces	57–59	34	17			6–8
Bihar	28–29	9	4		12	3–4

LEGISLATIVE ASSEMBLIES.

Province	Total seats	General		Seats for backward Areas and Tribes	Sikhs	Muslims	Anglo-Indians	Indian Christians	Representatives of Commerce, Industry, Mining and Planting	Landholders	University seats	Seats for women					
		Total of General seats	General seats reserved for scheduled castes									Labour	General	Sikh	Muslim	Anglo-Indian	Indian Christian
Madras	212	146	30	1		28	2	6	7	6	1	6	6		2		1
Bombay	172	114	16			29	2		7	2	1	2	1		1	1	
West Bengal	90	44	14			21	3	3	3	2	1	2	1				
U. P.	226	140	20			64	1	1	1	2	1	2	1		2		
East Punjab	81	31	6		20	23				4	1	2	1	1			
Bihar	150	86	15	1		39	1	1	1	6	1	2	1				
C. P. & Berar	111	84	20	1		14			1	2	1	2	1				
Assam	71	37	6	9		14	1			2	1	3	1				
Orissa	60	44	6	5		4			1	2		1	1				

Note.—In Bombay seven of the general seats are to be reserved for Marathas.
In the Punjab one of the Landholders' seats is to be a seat to be filled by a Tumandar.
In Assam and Orissa the seats reserved for women are to be non-communal seats.

Government of India Personnel

VICEROY AND GOVERNOR-GENERAL OF INDIA

His Excellency Sri Chakravarthy Rajagopalachari (Assumed charge of office of Governor-General of the Dominion of India on 21st June 1948).

PERSONAL STAFF OF THE GOVERNOR-GENERAL

Secretary to the Governor-General.—Shavax A. Lal.
Private Secretary.—S. Krishnamurti.
Press Attache.—T. R. V. Chari.
Military Secretary.—Col. B. Chatterji.
Dy. Mily. Secy.—Squadron/Leader D. N. Prakash, R.I.A.F.
Comptroller of the Household.—Major A. S. Wilson.
Hon. Aides-de-Camp.—Lieut. Parashar, R.I.N.; Capt. Narendra Singh, Indian Army, Capt. Davinder Singh, Indian Army, and Capt. Yunus Khan, Indian Army.

CABINET MINISTERS

The Hon'ble Pandit Jawaharlal Nehru (External Affairs, Commonwealth Relations & Scientific Research)—Prime Minister.



The Hon'ble Pandit Jawaharlal Nehru
Prime Minister

The Hon'ble Sardar Vallabhbhai Patel (Home Information, Broadcasting and States)—Deputy Prime Minister.

The Hon'ble Sardar Baldev Singh (Defence).

The Hon'ble Shri Jairamdas Daulat Ram (Food and Agriculture).

The Hon'ble Shri R. K. Shanmukam Chetty (Finance).

The Hon'ble Dr. Shyama Prasad Mookerjee (Industries and Supplies).

The Hon'ble Maulana Abul Kalam Azad (Education and Arts).

The Hon'ble Dr. John Mathai (Transport and Railways).

The Hon'ble Shri Jagjivan Ram (Labour).

The Hon'ble Shri N. V. Gadgil (Works, Mines and Power).

The Hon'ble Shri K. C. Neogy (Commerce).

The Hon'ble Srimathi Rajkumari Amrit Kaur (Health).

The Hon'ble Mr. Rafi Ahmad Kidwai (Communications).

The Hon'ble Shri Dr. B. R. Ambedkar (Law).

The Hon'ble Shri Mohanlal Saxena (Relief and Rehabilitation).

The Hon'ble Shri Gopala Swami Ayyangar (Minister without Portfolio).

SECRETARIAT OF THE GOVERNOR-GENERAL

Secretary to the Governor-General (Personal) (PERSONAL), Shavax A. Lal.
Private Secretary, S. Krishnamurti.
Press Attache, T. R. V. Chari.

CABINET SECRETARIAT

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Deputy Secretary (Military), Brig. Daulat Singh, I.A.
Staff Officer I, Commdr.(S) C. Srinivasan, R.I.N.
Staff Officer II, Sq/Ldr. M. Ramunny, R.I.A.F.
Under-Secretary, D. R. Kohli, I.C.S.
Asstt. Secretary, E. C. Donoghue.
Supdts., Rai Sahib Durga Pershad Mathur and T. S. Sawhney.

SECRETARIAT

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Minister.—The Hon'ble Maulana Abul Kalam Azad.
Secretary.—Dr. Shanti Swarup Bhatnagar, F.R.S.
Deputy Secretary.—Dr. D. M. Sen, O.B.E., M.A., Ph.D.
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Deputy Educational Advisers.—Ashfaque Hussain, B.A. (Oxon.), Bar-at-Law; Dr. S. R. Sen Gupta, B.Sc., Ph.D., A.M.I.E.
Officers on Special Duty.—Mrs. K. Taimni, B.A., T.D. (Lond.); Nawabzada Mir Saeed Alam Khan, Bar-at-Law; Dr. N. P. Mukherjee, M.Sc., Ph.D.
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Assistant Director of Archives.—Dr. P. Basu, M.A., LL.B., Ph.D.
Senior Superintendent.—S. N. Roy, M.A.

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Head of Commerce Department.—A. Das Gupta, M.A., B.Com.
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Agricultural Development Commissioner, D. R. Sethi, C.I.E., I.A.S.
Fisheries Development Adviser, Dr. Baini Prashad, D.Sc. (Edin.), F.R.S.C., F.L.S., F.Z.S., O.B.E.
Dairy Development Adviser, Dr. Zal R. Kothavalla, B.Ag., B.Sc. (Edin.), D.Sc., N.D.D.
Fruit Development Adviser, Dr. G. S. Cheema, C.I.E., D.Sc., I.A.S.
Cattle Utilization Adviser, Sardar Bahadur Sir Datar Singh.
Inspector-General of Forests, A. P. F. Hamilton, C.I.E., O.B.E., M.C., I.F.S.
Economics and Statistical Adviser, W. R. Natu, B.A., B.Sc. (Lond.).
Plant Protection Adviser, Dr. H. S. Pruthi, M.Sc., Ph.D., D.Sc. (Cantab.).
Director, Rice Research Institute, K. Ramiah, M.Sc., D.I.P. (Agri.), M.B.E.
Refrigeration Development Engineer, M. L. Khanna.

Deputy Fisheries Development Adviser, B. N. Chopra.
Deputy Agricultural Production Adviser (Manure and Fertilizers), C. S. D. Swamy.
Deputy Irrigation Adviser, Rai Bahadur K. C. Majumdar.
Deputy Dairy Development Adviser, H. C. Verma, I.D.D., N.D.D. (Scot.).
Deputy Economic and Statistical Adviser, J. S. Raj, M.Sc. (Lond.).
Assistant Agricultural Production Adviser (Vegetable Seeds), Dr. J. C. Ramchandani, Ph.D.
Assistant Fisheries Development Adviser, Dr. D. R. Bhatia, M.Sc., Ph.D. (Cantab.).
Assistant Economics and Statistical Adviser, S. C. Chaudhury, M.A.
Assistant Cattle Utilization Adviser, Harbans Singh, I.D.D., Assoc. I.D.I.
Assistant Director, Machinery, B. Sen.
Assistant Fruit Development Adviser, Dr. Sham Singh, B.Sc., Ph.D. (Agri.) (Bristol).
Second Assistant Fruit Development Adviser, Dr. S. S. Verma, M.Sc., Ph.D. (Lond.), D.I.C.
Assistant Dairy Development Adviser.—O. B. Shingal.
Assistant Refrigeration Development Engineer.—B. R. Mallya.
Officers on Special Duty, K. P. R. Kartha; L. Sahai, M.Sc., M.R.C.V.S.; Dr. S. Ramanujam, M.A., Ph.D.
Chief Bio-Chemist, Dr. C. N. Acharya, M.Sc., Ph.D., F.I.G., F.A.Sc.
Deputy Public Relations Officer, A. R. Vyas.
Technical Assistant to Irrigation Adviser, K. D. Sanwal, B.Sc., C.E. (Roorkee).
Technical Assistant to P.P.A., V. K. Subramaniam, B.Sc.
Research Officers, Dr. J. S. Ponniah, M.A., D.Litt., J. S. Sam, N. N. Agarwal, M. S. Menon.

List of Gazetted Officers employed in connection with the Administration of the F.P.C.O.:—

Senior Inspector (Fruit Products), S. P. Joshi.
Inspectors (Fruit Products), Delhi and Ajmer-Merwara, New Delhi, H. S. Sandhu, B.Sc. (Agri.); K. P. Ganguly, M.Sc.
Inspector (Fruit Products), Eastern Ambala, East Punjab, Hardyal Singh, B.Sc. (Agri.).
Inspector (Fruit Products), U.P., Lucknow, Kailash Chander Batra, B.Sc. (Hons.), Assoc. I.A.R.I.
Inspector (Fruit Products), West Bengal and Assam, Calcutta, K. P. Gangauly, M.Sc.,
Inspector (Fruit Products), Madras and Coorg, Madras, Daya Nand, B.Sc. (Agri.).
Inspector (Fruit Products), Bombay, Balwant Rai Suri, B.Sc., L.S.G.D. (Pb.).
Chemist-in-Charge, F.P.C. Lab., Delhi, Vacant.

LABOUR MINISTRY

Minister.—The Hon'ble Shri **Jagjivan Ram.**
Private Secretary.—S. K. Sinha.

(SECRETARIAT).

Secretary.—S. Lall, C.I.E., I.C.S.
Joint Secretary.—V. K. R. Menon, I.C.S.
Deputy Secretaries.—V. Narayanan; Rai Sahib S. C. Aggarwal; Rai Bahadur H. Khanna.
Under-Secretary.—N. C. Kupuswami, B.A. (Hons.).
Assistant Secretaries.—T. S. Sahni; R. R. Bhatnagar; P. N. Sharma.
Actuary.—K. K. Bhargava, M.Sc., F.I.A.
Director (Labour Conference).—S. P. Saksena, M.A., B.Com.
Private Secretary to Secretary.—Mahindra Kishore.
Superintendents.—P. S. Iswaran; Vidya Prakash; Din Dayal; Brij Bhushan Lal; K. N. Nambiar; A. P. Veera Raghavan; G. C. Kapur.
Research Officer.—K. D. Chatterjee.

(DIRECTORATE GENERAL OF RESETTLEMENT AND EMPLOYMENT).

D. G. R. & E.—Dr. N. Das, Ph.D., I.C.S.
Deputy Secretary.—Rai Bahadur Bindra Ban.
Under Secretaries.—P. V. Kuppuswamy; S. R. Haider.
Assistant Secretaries.—Bishamber Nath; Mathra Das; M. V. Nilakanta Iyyar.
Administrative Officer, Sardar Sahib Bhagwan Singh.
Asst. Director (Administration), S. L. Dang.

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Statistical Officer, A. N. K. Nair.
Asstt. Statistical Officers, P. N. Segal; P. N. Chaudhuri.

(DIRECTORATE OF PUBLICITY).

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Deputy Director, Dr. P. S. Muhar
Assistant Directors, K. Ramachandran; M. M. Chatterjee.

(DIRECTORATE OF TRAINING).

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(CENTRAL CLEARING HOUSE).

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Asstt. Central Clearing House Officers, Miss V. V. I. Arundhati; P. C. Malhotra; R. S. Bindra.
Asstt. Sub-Regional Employment Officers, P. Singh and A. S. Sinha.

(STAFF TRAINING CENTRE).

Officer-in-charge, C. P. S. Menon.
Senior Lecturer, O. N. Wankhade.
Junior Lecturers, M. K. Kutty Nair and Mahtha S. N. Singh.

(REGIONAL DIRECTORATES OF RESETTLEMENT AND EMPLOYMENT).

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Bombay.—
Director, M. G. Monani, I.C.S.
West Bengal.—
Director, S. Mullick, I.C.S.
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United Provinces.—
Director, Rai Bahadur Radha Kant
Deputy Director, G. R. Nagar.

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Director, Major R. D. A. Hodson.
Asst. Director (Orissa), D. K. Mardaraj.
East Punjab.—
Director, Major K. S. Malik.
Delhi & Ajmer-Merwara.—
Director, H. L. Varma.
Central Provinces & Berar.—
Director, A. B. Vaidya.

(CHIEF LABOUR COMMISSIONER, CENTRAL).

Chief Labour Commissioner, S.L. Joshi, M.A., LL.B.
Asst. Labour Commissioner, A. S. Devasthali.

(REGIONAL LABOUR COMMISSIONER CENTRAL)

Bombay.—
D. G. Jadhav, B.A., LL.B.
Calcutta.—
A. Talib.
Cawnpore.—
Harisingh.
Dhanbad.—
Rai Sahib Beni Madhab Prashad.

(CONCILIATION OFFICERS, CENTRAL).

New Delhi.—
C. A. Radha Bai.
Lucknow.—
M. T. Balani.
Calcutta.—
K. C. Chatterjee.
Poona.—
R. N. Basu.
Nagpur.—
G. S. Ahluwalia.
Gauhati.—
M. M. Mukherjee.
Bombay.—
Shiva Shan Kara.
Madras.—
C. Venkatachalam.
Central Inspector of Industrial Canteens, P. M. Isaac.
Chief Adviser, Factories, N. S. Mankiker.
Deputy Chief Adviser, Factories (Construction, etc.), H. B. Crawford.
Deputy Chief Adviser, Factories (Inspection), R. C. R. Atock.

MISCELLANEOUS.

Controller of Emigrant Labour, B. K. Mukerjee, M.B.E.

(LABOUR BUREAU).

Director, S. R. Deshpande, M.B.E.
Statistician, Dr. B. Ramamurti.
Research Officer, S. D. Punekar.
Assistants, B. N. Srivastava and R. U. Mathai.

(PERSONAL MINES).

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Deputy Chief Inspector of Mines in India, N. G. Chatterjee.
Electric Inspector of Mines, N. N. Sen Gupta.
Inspectors of Mines, H. K. Chatterjee; S. S. Grewal; G. S. Jabbi; I. J. Badhwar.
Junior Inspectors of Mines, S. N. Ramnathan; A. C. Bose; D. Chatterjee; H. B. Ghose.
Junior Electric Inspectors of Mines, N. Ghose; H. K. Bhattacharjee.
Statistician, P. Veeraraghavan.
P.A. to the C.I.M. in India, A. P. Connolly.

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Minister, The Hon'ble Mr. N. V. Gadgil.
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Private Secy. to Secy., Mahendra Prasad.
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Junior Adviser, Customs and Central Excises, A. J. Hunnisett.
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Senior Deputy Director of Inspection, Dalip Singh.
Assistant Directors of Inspection, H. F. B. Pais; K. C. Tharyan.

CENTRAL REVENUES CONTROL LABORATORY, NEW DELHI.

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Chemical Examiner, Grade I, Dr. V. Subramanian.
Chemical Examiner, Grade II, P. S. Krishnan, M.A., A.R.I.C.
Assistant Chemical Examiners, Manohar Lal, M.Sc.; K. S. Subramanyan, M.Sc., A.R.I.C.

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Assistant Chief Officer, B. Mazumdar.
Statistician, M. P. Shrivastava.
Section Controller, Y. N. Chopra.

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Authorised Representative, Allahabad Bench, A. K. Bose.
Authorised Representative, Bombay Branch, Gopal Laxman Pophale, M.A. (Cantab), Bar-at-Law.
Authorised Representative, Madras Bench, V. Sunderamurthy Mudaliar, M.A., B.L.

(INCOME-TAX INVESTIGATION COMMISSION).

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Commissioners, Justice G. S. Rajadhyaksha, I.C.S.; Rao Bahadur V. D. Muzumdar.
Secretary, Rao Sahib M. S. Ramaswami, Statistics and Intelligence Branch (Central Excise).
Chief Officer, Rai Bahadur B. B. Barman.
Asst. Chief Officer, B. Mazumdar.
Statistician, M. P. Shrivastava.
Section Controller, Y. N. Chopra.

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Asstt. Mint Master, Bombay, P. K. Tikku.
Works Manager, Bombay, M. R. Carr.
Refinery Superintendent, Bombay, H. E. Willard.
Melting Superintendents, Bombay, N. Race; C. E. Clarkson.
Artist Engraver, Bombay, P. W. M. Brindley.
Bullion Registrar, Bombay, Khan Sahib M. R. Tanksalwalla, B.Com.
Chief Technical Adviser in the Mint, G. C. Mitter, O.B.E., M.Sc., F.R.I.C., M.I. Met.

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Deputy Master, Currency Note Press, Major C. C. Rosher, R.E. Offg.
Offg. Dy. Master, J. C. Dutta Gupta, B.Sc. (Eng.).
Deputy Controller of Stamps, Rao Bahadur M. S. Srinivasan, B.A., O.B.E.
Offg. Assistant Master, Currency Note Press, India, Major N. D. Prabhu.
Offg. Assistant Masters, India Security Press, Capt. M. S. Pathak, W. S. C. Macey, M.B.E.
Labour Officer, Security Printing, India (Temp.), V. N. Joshi, B.A. (Hons.).

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Dy. Auditor General, M. K. Sen Gupta, C.I.E.

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Asst. Private Secy. to the Hon'ble Defence Minister, Gurbax Singh.
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Private Secretary to Defence Secretary, Miss G. G. Carroll.

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Principal Entitlement Officer and Ex-officio Deputy Secretary, Rai Bahadur C. D. Sharma, B.A. (Hons.).
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Government Representatives, Charanjit Singh, Tara Chand Datta, K. Swarup and K. P. Bhutt.

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Asst. Chief Administrative Officer, Raghunath Pershad, M.B.E.
Assistant Secretaries, Rai Sahib D. D. Bhardvaj, D.A., C.A.O. (O), Sardar Bahadur Khazan Singh, D.A., C.A.O. (A), Rai Sahib Har Gopal, Mela Ram Wadhawan, Rai Sahib D. D. Bhardwaj.
Security Officer, (AIRO), Lt.-Col. Ram Singh.
Asst. Security Officers, Capt. L. M. Hervettakar, (ICRO), Capt. L. K. Simon, Raj Rif.
Staff Captains, Capt. A. Chandra (RIA), Capt. K. L. Jetley (RIASC), Capt. P. L. Dhar, 15 (P. R.), Capt. R. Barnett (IML).
Senior Constabulary Officer, Lt.-Col. Apkar.
Staff Officer (2nd. Gde.), Major V. Mahey (RIE).

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Addl. Financial Adviser, K. Bhawanishankar Rao.
Joint Financial Adviser, J. Dayal, M.A.
Deputy Financial Advisers, S. Jayasankar, M.A.; E. W. Grindal, O.B.E.; S. Jagannathan, I.C.S.; Batuk Singh, M.A., M.B.E.; M. K. Hariharan, M.A., K. A. Joseph, M.A., M.B.E.; M. S. Ramayyar, M.B.E.; H. L. Wadera.
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Joint Secretary, R. A. Gopalaswami, O.B.E., I.C.S.
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Asstt. Secretaries, J. A. David, Rao Sahib A. V. Raman, K. N. Subbanna, C. B. Gulati.
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Supervisor, Essential Supplies Scheme, R. C. Nagar.

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Census Officer, D. Natrajan.

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Asstt. Managers, R. S. Bindra and Lieut. Pratap Singh.

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Secretary, H. V. Parkin.
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Chief Psychologist, Dr. N. W. Morton.
Psychologists, Dr. D. L. Sharma; S. A. Hussain.
Statistical Asstt. Officer, Dr. P. D. Shukla.

INFORMATION AND BROADCASTING

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Deputy Secretary, M. A. Husain, I.C.S.
Attache, P. R. Gupta.
Asstt. Secretary, H. P. Kaul.
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Officer on Special Duty (Film), E. H. K. Sen.
Private Secretary to Secretary, S. Padmanabhan.

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Deputy Advertising Consultant, Vacant.
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Photo Supervisor, D. Handa.
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Assistant Information Officers, P. N. Bhatia; Mahabir Sahai; Someswar Dayal; R.K. Chatterjee; S. Sunder Rajan; P. M. George; R. C. Asthana; Shanker Goure; K. K. Nair; P. R. Chona; V. D. Dev; Shamsher Singh Narula.

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Information Officer, S. N. Hussain.

BRANCH OFFICE AT BOMBAY.

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Statistician, B. R. Sehgal, M.A., B.A. (Hons.).
Officer In-charge, Sugar Research and Testing Station, Bilari (Moradabad), K. C. Joshi, B.Sc., Dip. T.I.

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Private Secretaries, V. H. Coelho; M. O. Mathai; O. Kachru.
Asst. Private Secretary, K. Rama Krishnan.
Superintendent, Mohan Lal Bazaz.
Private Secretary to Principal Secretary, T. Arumugham.

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Legal and Treaties Adviser, Kanwar, Sir Dalip Singh.

Private Secretary to Secretary General, J. S. Mehta.
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Attaches, Autar Singh; U. S. Bajpai.

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Joint Secretary and Controller General of Emigration, C. S. Jha, O.B.E., I.C.S.
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Attache, Amrik Singh Mehta.
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Private Secretary to Secretary, T. R. Raghuram.

MINISTRY OF STATES

Minister, The Hon'ble Sardar Vallabhbhai Patel.
Secretary, Rao Bahadur V. P. Menon, C.S.I., C.I.E.

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Secretary, C. C. Desai, C.I.E., I.C.S.
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Deputy Economic Adviser, B. N. Adarkar.
Chief Research Officer, Economics, P. G. Salvi.
Additional Chief Research Officer, Economics, M. V. Bhatawedkar.
Research Officers, Economics, V. Sambamoorthy; V. K. M. Menon and D. A. Mulchandani.
Statistician, S. Subramanian.
Statistical Research Officers, N. C. Chowdhuri and T. Dutt.
Director, Administrative Intelligence Room, P. W. R. Homfray.
Assistant Director, Statistics, T. P. Chatterjee.
Assistant Director (Technical), C. Biswas.
Assistant Director (Photography), A. K. Gavaskar.
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Joint Chief Controller of Imports, R. B. Ladli Pershad.
Deputy Chief Controllers of Imports, H. S. Bhai; V. S. Ramaswamy and R. S. P. M. Mukerjee.
Assistant Chief Controller of Imports, P. D. Srivastava.
Administrative Officer, A. N. Chopra.
Chief Controller of Exports, L. K. Jha, M.B.E., I.C.S.
Deputy Chief Controller of Exports, H. C. Dey, M.Sc.
Assistant Controller of Exports, T. S. Kucnthithampatham, B.A. (Hons.).
Administrative Officer, T. S. Seshukutty, M.A.

DEPARTMENT OF COMMERCIAL INTELLIGENCE AND STATISTICS

Director of Commercial Intelligence, Rai Bahadur J. N. Ghosh, M.A.
Director of Statistics, A. R. Sinha, M.A.
Assistant Director of Commercial Intelligence and Statistics, N. Sanyal, B.Sc.

MINISTRY OF INDUSTRIES AND SUPPLIES

Minister, The Hon'ble Dr. Syama Prasad Mookerjee.
Secretary, S. A. Venkataraman, C.I.E., I.C.S.
Joint Secretaries, M. P. Pai, I.C.S.; S. Bhoothalingam, O.B.E., I.C.S.
Deputy Secretaries, J. D. Kapadia, I.C.S.; P. R. Nayak, M.B.E., I.C.S.; N. O. H. O'Neill, M.B.E., I.C.S.; A. Bakshi.
Assistant Secretaries, A. R. Kapur; B.B. Saksena; Rao Sahib C. R. Natesan; Sardar Sahib Shiv Dev Singh; D. S. Benegal; S. R. Nagar; P. S. Sundaram; Rao Sahib S. A. Teckchandani; D. D. Agnihotri; Sri Ram Gupta; R. C. Ghosh.
Officer on Special Duty (Patents & Designs), B. N. Atrishi.
Private Secretary to H. M., A. K. Dutta.
Private Secretary to Secretary, C. B. Mathur.
Newsprint Officer, Simla, R. P. Sachdev.

OFFICERS OF OTHER MINISTRIES ATTACHED TO THE MINISTRY OF INDUSTRY & SUPPLY, MINISTRY OF FINANCE (INDUSTRY & COMMERCE DIVISION)

Joint Secretary (H.Q.), P. C. Bhattacharyya, O.B.E.
Deputy Secretary (H. Q.), V. V. Chary.
Under-Secretary (H.Q.), O. K. Ghosh.
Assistant Secretary (H.Q.), Hiqiqat Rai.

OFFICE OF THE CHIEF TECHNICAL ADVISER (F.P.) HEADQUARTERS.

Chief Technical Adviser, Fertilizer Project, Brig. M. H. Cox, C.I.E., O.B.E., M.C., I.A., M.I. Mech.E.
Administrative Officer, N. Ramakrishna Aiyar.
Senior Technical Officer, V. Seshadri.
Deputy Director, S. K. Banerji.
Accounts Officer, R. Srinivasan.

SIDRI.

Director (Planning), J. Mosson.
Administrative Officer, S. Venkataraman.
Deputy Assistant Director (Transport and Equipment), P. C. Banerjee.

OFFICE OF THE DIRECTOR OF INDUSTRIAL STATISTICS.

Director, Dr. B. N. Kaul.
Assistant Directors, D. Hejmadi; P. N. Nayer.
Research Officers, S. Ganpat Rao; M. Y. Kari.

DIRECTORATE GENERAL OF INDUSTRIES AND SUPPLIES.

Director-General of Industries & Supplies, Dr. Sir J. C. Ghosh.
Deputy Director-General (Development), Dr. J. N. Roy, O.B.E., Ph.D., D.SC.
Deputy Director-General (Supplies), R. P. Mathur.
Deputy Director-General (Inspection), R. G. Burt, O.B.E. (on leave); J. B. Glass (Officiating).

ADMINISTRATION & CO-ORDINATION.

Director (Administration & Co-ordination), W. Knox Chick.
Deputy Director (Administration), R. S. M. P. Srivastava.

ADMINISTRATION.

Deputy Directors, J. K. Roy; R. S. Karamchand Mohala.
Assistant Directors, Sardar Mohd. Khan; Dina Nath; V. Krishnamurthy; B. Ghosh; Ram Sarup Gupta.

CO-ORDINATION.

Deputy Director, S. C. Ramachandran.
Assistant Directors, Rao Sahib P. V. Krishna Ayyar; Dr. B. Natrajan.

STATISTICS.

Deputy Director, Rao Sahib G. V. Pillai.

DEVELOPMENT WING, CHEMICALS, DRUGS AND PLASTICS.

Deputy Development Officers, Dr. R. Venkateswaran; Dr. D. C. Sen; Dr. N. G. Mitra; N. Srinivasan.
Asstt. Development Officers, Joginder Singh; Dr. B. Shah; M. N. Kale.
Asstt. Director (Accounts), S. C. Mukerjee.

TIMBER DIRECTORATE.

Deputy Director, H. C. Mazumdar.
Assistant Directors, T. N. Dutta; M. A. Khan.

REGIONAL OFFICES (TIMBER DEPOTS AND SAWMILLS).

Asstt. O/I-C, Government Timber Salvage Depot, Wadala, Bombay, N. V. Reberio.
Asstt. Sawmill & Depot Officer, Govt. Sawmills & Depot, Ghorpuri (Poona), L. P. Bhatnagar.

MECHANICAL ENGINEERING.

Development Officer, J. B. Singh.
Deputy Development Officer, P. L. Kumar.
Asstt. Development Officer, S. S. Palit.

GENERAL AND ELECTRICAL ENGINEERING

Development Officer, B. C. Mallik.
Dy. Development Officer, P. K. Kapre.

NON-FERROUS METALS.

Development Officer, D. P. Antia.
Deputy Development Officer, M. B. Shankar.
Asstt. Development Officers, P. C. Gupta; V. C. Naidu.

TOOLS.

Development Officer, S. S. Iyengar.
Deputy Development Officer, Sagar Chand.
Assistant Development Officer, C. J. Shah.

BALANCING PLANT.

Assistant Director, S. Somasundaram.

LEATHER, RUBBER AND PAPER.

Development Officer, D. A. Randall.
Deputy Development Officers, P. C. Basu; S. N. Bhandari.
Assistant Development Officer, A. K. M. Pillai.

SILK.

Development Officer, S. K. Chaudhuri.

CEMENT.

Hony. Cement Adviser, H. E. Ormerod.
Hony. Consulting Engineer (Cement), E. B. Mogensen.

REGIONAL CEMENT ADVISERS.

Reg. Hony. Cement Advisers, Bombay, R. M. Dadachandji; *Kanpurapere*, S. N. Sapori; *Coimbatore*, A. Shanmughan; *Delhi*, C. J. L. Stokoe; *Madras*, R. B. Varma; *Calcutta*, A. Mansfield.

IMPORTS & SHIPPING.

Deputy Director, S. S. Venkata Krishnan.

SUPPLIES WING.

RAILWAY STORES.

Director, K. B. Rao.
Deputy Directors, M. A. A. Khan; I. N. Khanna.
Assistant Directors, B. Sengupta; I. S. Sund; H. L. Dutta; G. D. Dobhal; P. K. Samal; V. Swaminathan.

ENGINEERING STORES.

Director, K. C. Khosla.
Deputy Directors, H. V. Karve; D. P. Karnik; A. R. Khosla.
Assistant Directors, K. A. Abbas; K. N. Rao; J. N. Mustafi; Har Prakash; T. J. Kumaraswamy; R. K. Andley; Sant Ram Vashishta; C. L. Garg.

CHEMICALS & MISCELLANEOUS STORES.

Director, S. Sambasivan.
Deputy Director, C. L. Katial.
Assistant Directors, B. N. Sarobar; P. B. Sarkar; J. S. Mongia; S. C. Agarwal; S. N. Banerjee; G. D. Joshi; Saligram Sharma.

TEXTILES & LEATHER STORES.

Deputy Directors, J. G. Kumaramangalam; Zafar Ali.
Assistant Directors, Asadul Haq; H. K. Banerjee; K. N. Shenoy; R. Dayal; B. K. Nag.

CLAIMS SECTION.

Officer on Special Duty, Bakshi Shiv Charan Singh.

GOVERNMENT TEST HOUSE, ALIPORE.

Director, R. B. T. G. Banerjee (Officiating).
Deputy Directors (Chemicals), S. S. Sinha; S. R. Das.
Assistant Directors (Physical), K. D. Bhattacharjee; D. N. Bose; S. N. Mukherjee.
Asstt. Directors (Chemicals), S. S. Nayudu; D. S. Naidu.

CALCUTTA CIRCLE.

Director of Supplies, P. S. Gupta.
Asstt. Directors of Supplies, M. K. Roy; P. K. Guha; N. R. Reddy; S. Sen Gupta; J. Cyril Raj (Shipping); (*Administration*) A. Francis.
Asstt. Controller of Accounts, S. Vaidyanathan.
Stock Verification Officer, B. N. Chatterjee.
Manager, Hat and Tent Factories, L. B. Banerji.
Jt. Manager, Hat and Tent Factories, A. Roy.
Officer on Special Duty, S. Narayanaswamy.

BOMBAY CIRCLE.

Director of Supplies, F. H. Nallaseth.
Deputy Director, D. P. Guzdar.
Assistant Directors, P. R. Sheorey; K. Nain (Shipping); (*Administration*) J. C. Roche.
Stores Officer, D'Mello.

MADRAS CIRCLE.

Deputy Director of Supplies, R. Parthasarthy.

STORES & STORES ACCOUNT CONTROL ORGANISATION, CALCUTTA.

Asstt. Director In-charge, Stores & Stores Account, B. G. Idnani.
Asstt. Directors of Accounts, S. Ramamritam; S. K. Ghosh.
Stores Officer, C. Aaron.
Stores Officer, C. A. Dolby.

INSPECTION WING

HEADQUARTERS.

Offg. Director of Inspection (Engineering), K. N. Sharma.
Deputy Director of Inspection, R. N. Sarma.
Asstt. Director of Inspection, J. D. Aggarwal.
Asstt. Inspecting Officer, G. K. Pradhan.
Asstt. Inspecting Officers, H. S. Grewal; H. C. Tandon; Kartar Singh; Dhin Singh; N. L. Gulati; P. L. Sehgal.

TEXTILES.

Asstt. Director of Inspection, S. K. Gupta.
Asstt. Inspecting Officer, Randhir Singh.

CAWNPORE INSPECTION CIRCLE.

(ENGINEERING).

Inspection Officer, G. Katiar.
Assistant Inspecting Officer, Gurbaksh Singh.

TEXTILES.

Asstt. Inspecting Officer, S. R. Kochhar.

ALIGARH.

Assistant Inspecting Officer, P. G. Vidwans.

CALCUTTA INSPECTION CIRCLE.

(ENGINEERING).

Director of Inspection, F. Ashmore.
Dy. Directors of Inspection, K. K. Nathani; M. N. Mukerjee.
Inspecting Officers, S. S. Roy; A. K. Ghosh; M. N. Samanta; H. K. Banerjee; J. B. Mukerjee; Beni Lal; S. N. De.
Standardization Officer (Steel Struct.), R. S. N. G. Chatterjee.
Inspecting Officers, C. C. Sinha; S. K. Mitter.
Asstt. Inspecting Officers, B. N. Majumdar; S. R Ray; Kuldip Chand; P. R. Parker; S. N. Mukerjee; B. N. Mitra; T. A. D'Mello; B. K. Dass; S. S. Ghosh; P. L. Dass; P. C. Kapur; Syed Jan; R. N. Mukherjee; S. K. Ghosh; P. L. Kathuria; P. G. Sinha; N. R. Dass Gupta; M. C. Kudu; N. Bhanduri; S. Roy; N. Gupta; M. M. Bose; B. R. Barua; D. P. Chatterjee; R. Dutt; G. S. Subbaraman; P. V. Raman; J. K. Adhya; K. R. Joshey; P. K. Roy; H. D. Baihar; A. S. Selhi; M. L. Mukherjee; T. D. Banerjee; S. P. Roy; M. L. Dutt Roy; Harnam Singh.

TEXTILES.

Asstt. Inspecting Officers, T. V. Rao; B. N. De; H. C. Banerjee.

ADMINISTRATION.

Asstt. Director of Administration, R. K. Bhattacharjee.

OFFICE OF THE CHIEF INSPECTOR ENGINEERING (CIVIL WING), CALCUTTA.

Deputy Director of Inspection, J. E. Wallace.
Inspecting Officer, A. K. Mojumdar.
Asstt. Inspecting Officers, S. C. Hazra; A. K. Bakshi.

BOMBAY INSPECTION CIRCLE

(ENGINEERING).

Director of Inspection, K. I. N. Iyengar.
Inspecting Officers, Robert Webber; S. C. Banerjee.
Asstt Inspecting Officers, M.S. Suryanarayan Rao; H. B. Neale; S. R. Rao; U. S. Savakoor; H. C. Gulati; E. Durrant; V. B. Kudalkar; S. Krishnan; C. D. Dandekar; G. Kuppuswamy; A. S. Merchant; G. K. Ahuja; R. C. Chaturvedi.

TEXTILES.

Deputy Director of Inspection, Khan Sahib Y. S. Mirza.
Inspecting Officer, S. N. Das Gupta.
Asstt. Inspecting Officers, A. S. Mamoojee; B. V. Gogte; I. L. Patel.

ADMINISTRATION.

Asstt. Director of Administration, Gopal Dass.

MADRAS INSPECTION CIRCLE.

Controller of Inspection, V. S. Rangasayi.

ENGINEERING.

Inspecting Officer, R. T. Ramachandra.
Asstt. Inspecting Officers, S. Krishnamurthy; B. R. Rowe; M.J. Marathe.

TEXTILES.

Inspecting Officer, B. V. Raman.

Asstt. Inspecting Officer, S. Somanathan.

TATANAGAR INSPECTION CIRCLE.

Director of Inspection, P. Hinde.

Inspecting Officers, L. M. Ghosh; B. M. N. Goon; I. A. Shah; S. C. De. Offg. as D. CI. (Met.) P. N. Day.

Asstt. Inspecting Officer (Investigation), B. R. Nijhavan.

Asstt. Inspecting Officers, K. G. Mazumdar; S. C. Bose; M. M. Mitra; B. M. Pai; P. C. Ray Chaudhri; K. P. Banerjee; M. K. Gupta; T. V. N. Kidao; B. R. Nagar; P. G. V. Rao; S. K. Lahiri; E. K. N. Nambiar; D. P. Sen; K. P. Ghosh.

ADMINISTRATION.

Asstt. Director of Administration, P. H. Kunhi.

BURNPUR.

Dy. Director of Inspection, K. Ray.

Inspecting Officer, S. C. Lahiry.

Asstt. Inspecting Officers, T. K. Warrier; G. S. Pandya; N. V. Pandit; R. M. Ghose.

DIRECTORATE-GENERAL OF DISPOSALS, NEW DELHI.

Director-General (Disposals), Aftab Rai.

Dy. Director-General (Disposals), J. Munro, O.B.E.

Directors, P. M. Sundaram; A. R. Binns; Capt. M. C. David, M.B.E.; J. Byrne, M.B.E.; C. A. Subramanyam; J. S. Mathur; Prem Sunder.

Deputy Directors, J. M. Kitchlu; Bhagat Ram; Manmohan Singh; S. N. Mittar; J. G. Ghosh; N. A. Pillai; B. L. Varma; K. K. Dar; Dr. S. K. Mitra; K. N. Sinha; V. N. Kohli; J. L. Chopra; S. C. Murgai; K. Krishna.

Assistant Directors (Gr. I), A. K. Dutta; D. N. Venkataraman; C. K. Nair; P. B. Krishna Murthy; K. D. Advani; B. D. Kumar; Lachmi Narain; Balwant Singh; N. H. Nagarwala; K. K. Kanal; G. S. Tewari; B. S. Sharma; M. R. Pargal; R. M. Sharma; A. S. Dua; K. V. Bhaskaran; V. Subramanyam; P. P. Kapur; B. N. Khanna; S. P. Chugh; K. N. Agha; K. J. Shenoy; G. I. Mansukhani; S. K. Moitra; A. P. Aggarwal; K. R. Ghosh; S. Venkatesan; Harbans Singh.

Assistant Directors (Gr. II), Mohinder Singh; R. K. Dua.

Show-room Officer, Harnath Sahay.

CALCUTTA CIRCLE.

Regional Commissioner (Disposals), K. T. Pillai.

Directors (Disposals), S. T. Thadani; R. B. L. Mathur.

Deputy Directors, B. S. Roy; S. P. Chatterjee; N. C. Sen.

Administrative Officer, S. K. Sen.

Assistant Directors (Gr. I), H. H. Ahuja; A. N. Das; K. B. Sharma; B. K. Palit; M. K. Govind.

Assistant Directors (Gr. II), S. C. Deb; M. T. Sabrathanam; Bachan Lall.

Progress Officer, C. S. Natarajan.

Show-room Officer, B. B. Dutt.

UNITED STATES TRANSFERS DIRECTORATE, CALCUTTA.

Director, Major. C. V. Thomas.

Officer on Special Duty, T. Rigby.

Deputy Directors, C. H. Coelho; B. C. Mazumdar; N. K. Thadani; A. Mukerjee.

Assistant Director (Gr. I), S. C. Ghosh.

Assistant Director (Gr. II), P. L. Mukerjee; B. N. Kakar; S. Viswanathan.

ASSAM CIRCLE.

Assistant Director (Gr. I), A. K. Balasubramanayam.

BOMBAY CIRCLE.

Director, H. A. Sujan.

Deputy Directors, J. Maneksha; V. V. Chandersekharan.

Administrative Officer, C. M. Bhimaya.

Progressive Officer, K. S. Sahai.

Assistant Directors (Gr. I), P. T. Thadani; Kasturi Ranga Iyengar; P. R. Jog; Rup Narain; B. A. Shenoy.

Assistant Directors (Gr. II), K. A. Agaskar; C. V. Kamath; H. K. Kochar.

MADRAS CIRCLE.

Regional Commissioner, J. M. Fredrick, I.S.E.

Deputy Director, H. V. Gilson.

Assistant Directors (Gr. II), S. Venkataraman; C. S. Iyer; M. Sirinivasa Rao.

CAWNPORE CIRCLE

Deputy Director, B. K. Kochar.

Assistant Director (Gr. I), C. V. B. P. Rao.

Assistant Directors (Gr. II), C. M. Rohtgi; S. D. Malhotra; M. B. Ramchandani; B. S. Gupta.

Show-room Officer, V. S. Bhatnagar.

OFFICE OF THE IRON & STEEL CONTROLLER, MAIN OFFICE, CALCUTTA.

Iron & Steel Controller (on leave), E. G. Spooner, C.I.E.

Officiating I. & S. Controller, M. K. Powvala.

Price & Accounts Officer, A. C. Gutpa, O.B.E.

Dy. Iron & Steel Controllers, A. Mansfield; K. J. Cleetus; A. H. Sethna.

Asstt. Iron & Steel Controller and Secy. Iron and Steel Control Board, M. L. Mitra.

Administrative Officer, P. C. Roy.

Asstt. Iron & Steel Controllers, V. P. Dube; R. N. Dutt; D. D. Kamat; J. K. Basak; F. S. Bamji; S. K. Lahiri.

Director (Tool and Alloy Steels), K. N. P. Rao.

Dy. Price & Accounts Officer, R. Srinivasan.

Asstt. Administrative Officer, A. Dey.

Asstt. Accounts Officers, P. C. Sarkar; A. K. Roy Chowdhury.

Asstt. Industrial Planning Officer, S. V. Mehta.

Dy. Asstt. Iron & Steel Controllers, B. Dutt Roy; R. C. Parakh.

Dy. Asstt. Iron & Steel Controller (Accounts), J. P. Sen.

Dy. Asstt. Iron & Steel Controllers, D. N. Dutta; G. S. Ahuja; A. K. Roy; L. K. Bose; S. K. Sen; K. Ramachandran.

Quota Officer from Rly. Board, P. C. De.*

Asstt. Director (Pipes, Tubes and Fittings), B. N. Mukherjee.

Asstt. Director (Transport), E. W. Sackett.

Asstt. Director of Stores Accounts, S. K. Dutt.

Asstt. Controller of Steel Imports, H. S. Vazifdar.

REGIONAL OFFICES.

Bengal Circle, B. S. Randhawa, *Regl. Dy. Iron & Steel Controller; Bombay Circle*, B. H. Pastakia, *Asstt. Iron & Steel Controller; Madras Circle*, P. V. Subramaniam, *Regl. Dy. Iron & Steel Controller*; B. N. Patel, *Dy. Asstt. Iron & Steel Controller.*

COAL COMMISSIONER'S ORGANISATION.

Coal Commissioner, J. R. Harrison, O.I.E., C.S.I.

Secretary to Coal Commissioner, A. Nanu.

PRODUCTION.

Chief Mining Engineer, Railway Board and Dy. Coal Commissioner (Production), (On Leave), W. Fairfield.

Chief Mining Engineer, Railway Board and Dy. Coal Commissioner (Production), (Officiating), L. W. Morgan.

Asstt. Coal Commissioner (Headquarters), G. A. Carver.

Administrative Officer (Production), S. C. Dey.

Colliery Superintendent, Giridih, L. S. Corbett.

Indents Officer, K. Mitra.

Supdt. of Collieries, Kargali, M. L. Shome.

Asstt. Supdt. of Collieries, Kurasia, B. S. Marwah.

Asstt. Supdt. of Collieries, Bokaro, with Headquarters at Bhurkunda, D. R. Bagroy.

Manager, Kurharbarea Colliery, B. L. Ohri.

Manager, Serampore Colliery, M. G. Fell.

Manager, Coke Ovens, Giridih, Dr. A. N. Mukherjee.

Manager, Kargali Colliery, S. K. Ghosh.

Manager, Jarangdih' Colliery, C. R. Sharma.

Manager, Bokaro Colliery, C. L. Dhown.

Manager, Sawang Colliery, I. S. Jain.

Manager, Bhurkunda Colliery, B. R. Tooley.

Manager, Argada Colliery, S. D. Bannerjee.

Manager, Kurasia Colliery, S. N. Sahgal.

Manager, Ponri Hill Colliery, R. Hunter.

Manager, Talcher Colliery, R. R. Dhar.

Manager, Deulbera Colliery, B. K. Ghosh.

Asstt. Manager, Serampore Colliery (On Leave), W. Page.

Asstt. Manager, Serampore Colliery, M. L. Gupta.

Asstt. Manager, Kargali Colliery, I. B. Majumdar.

Asstt. Manager, M. & S. M. Rly., Talcher Colliery, N. K. Bhattacharjee.

Asstt. Manager, Bokaro Colliery, A. N. Bajerjee.

Elec. & Mech. Engineer, Kargali (On Leave), E. H. Daniels.

Asstt. Elec. Engineer, Kargali, N. Menon.

Elec. & Mech. Engineer, Giridih, C. R. Voller.

Grainshop Officer, Giridih, R. S. Mitra.

Food Supply Officer, Kargali, N. K. Das Gupta.

Officer-in-Charge, Sinking Trialpit, South Arcot, H. K. Ghosh.

DISTRIBUTION.

Jt. Dy. Coal Commissioner (Distribution), G. A. Carver; *Coal Transport Officer*, N. K. Misra; *Asstt. Coal Commissioners*, S. Basu, L. P. Farrell, A. K. Basu, S. N. Banerjee; *Dy. Asstt. Coal Commissioners*, A. K. Dutta, R. G. M. Scott, G. A. Khan, A. E. Ritchen, K. Ramaswamy, David Sen, S. K. Bose.

Jt. Coal Allotment Officer, Nagpur, N. R. Dutta Gupta.

REGIONAL COAL CONTROLLERS, PRODUCTION.

Dy. Asstt. Regional Coal Controller (Production), Dhanbad, A. C. Roy.

Dy. Asstt. Regional Coal Controller (Production), Asansol, G. C. Mukherjee.

R.C.C.(D), Bengal & Bihar, Dhanbad, A. B. Guha.

R.C.C.(D), K. C. Chatterjee.

Asstt. Coal Supdts., R. Sen, G. B. Sadhu, B. N. Mitra, B. R. Pai, G. D. Ghatak, B. Adhikari, H. N. Nundy, G. M. Dhowan.

OFFICE OF THE TEXTILE COMMISSIONER, BOMBAY.

Textile Commissioner & Ex-Officio Joint Secretary to the Government of India, T. Sivasankar, I.C.S.

Deputy Secretary to the Government of India, S. W. Shiveshwarkar, M.B.E., M.A. (Cantab.), B.Sc., I.C.S.

Under-Secretary to the Government of India, Prem Chand, M.A. (Cantab.).

Assistant Secretaries to the Government of India, R. D. Honavar; K. K. Mukherjee.

Officer on Special Duty (Administration), P. S. Nayar, M.A., S.A.S.

Superintendents, A. S. Nadkarni, B.com. and K. K. Sethi, B.A.

Assistant Administrative Officers, K. U. Menon, B.com.; M. B. Menon, B.A.; V. Sivaraman, M.A.; N. K. Achan; V. P. Mithal, B.A.; N. Subramanian; P. N. Barry, B.A., LL.B.

TEXTILE CONTROL BRANCH.

Deputy Assistant Directors, V. M. Srikumaran Nair, B.Sc., B.L.; S. R. Ramakrishnan, B.A., B.L.; B. V. T. Iyengar, B.A., LL.B.

CLOTH DISTRIBUTION BRANCH.

Director, M. R. Kazini.

Deputy Director, M. R. Row, B.A. (Cantab.), Bar-at-Law.

Deputy Directors, M. G. Gupte, B.Sc.; K. V. Nagaich, B. com.

Assistant Directors, Parmeshwar Nath, M.A.; C. M. Ghorpade, B.A. (Cantab.), Bar-at-Law.

Deputy Assistant Directors, E. M. Munsiff, B. A. (Hons.); G. N. Jarath, B.A. (Hons.), LL.B.; Chandrapal, B.A. (Hons.); A. H. Thakkar, B.Sc. (Hons.) (Tech.); T. M. B. Nedungadi, M.A.; M. Rangachari; H. G. Bhawsar, M.A., LL.B.; H. S. Dhir; V. V. Kothari, B.Sc.; M. K. Poyyamani, M.Sc., LL.B.; S. Srinivasan; S. S. Gargya.

Officer on Special Duty, A. U. Shenoy, L.T.M.

YARN DISTRIBUTION BRANCH.

Director, A. G. D. Madgavkar.

Deputy Director, S. N. Munshi, B. A. (Hons.).

Deputy Assistant Directors, H. N. Satyanarayana, M.Sc.; V. S. Nedungadi, B.Sc.; R. Viswanathan; Maud D'Costa, M.A.; M. R. Chandavarkar; P. Venkataraman, B.Sc., LL.B.

Assistant Progress Officer, A. G. Sud, B.Sc.

TRANSPORT BRANCH.

Additional Director, A. S. E. Iyer.

Deputy Director, P. P. Ramabhadran, M.A., M.L.

Assistant Directors, Sohan Singh, B.A.; V. V. Ananthakrishnan, B.Sc. (London).

Deputy Assistant Directors, L. Gomez, B.A.; S. S. Aggarwal, B.A.; G. Srinivasan; D. V. Ramachandran; C. K. B. Dave, M.A., LL.B.

PURCHASE BRANCH.

Joint Textile Commissioner, T. P. Barat, M.B.E., M.Sc.

Director, A. R. R. Deshpande, B.Sc. (Hons.), M.Sc. (Alig.)

Deputy Directors, Nathmal Marwari, B.A.(Hons.), LL.B.; S. A. Iyer.

Assistant Director, M. E. Chinoy.

Assistant Directors, K. N. Cama; G. C. Gupta; Sohanlal Sharma; N. H. Rao, B.A.; B. L. Bhatnagar; Ram Sahay, M.Sc.; I. S. Ahuja; N. D. Pal; S. D. Chitnis; C. Padmanabha Rao, B.Sc.; R. Sathiamoorthy, B.Sc.

MACHINERY, FUEL & STORES BRANCH.

Joint Textile Commissioner, T. P. Barat, M.B.E., M.Sc.

Director, D. E. Cooper, B.A.

Deputy Directors, F. A. F. Jesudian, L.T.M. (Hons.); Dr. S. R. Ramachandran, M.Sc., Ph.D.; M. W. Goklany, B.Sc. (Eng.); M. P. Madar.

Assistant Directors, H. D. Doongaji, M.A., LL.B.; A. K. Dasgupta, B.Sc. (Cal.), B.Sc. (Manch.).

Deputy Director, B. K. Dutt.

Deputy Assistant Directors, P. R. Chankar; P. J. Joshi, M.A.; H. L. Dutt.

Officer on Special Duty (Lighting), M. J. Kalaposi, B.Sc. (Tech.) (Manch.), A.M.I.E.E., A.M.I.E.E. (India).

COTTON BRANCH.

Deputy Director, V. V. Saraiya, B.Com.

Assistant Director, V. D. Chetal.

DISPOSAL BRANCH.

Deputy Director, M. L. Vyas, B.Sc., LL.B.

Deputy Assistant Directors, G. C. Joshi, B.Sc.; J. S. Popli; Rameshwar Dayal; T. A. Viswanathan.

HANDLOOM BRANCH.

Director, M. R. Kazimi.

Deputy Director, N. R. Venugopal, B.A.

Deputy Assistant Director, R. Rajagopalan, M.A.

CENTRAL STATISTICAL BRANCH.

Deputy Director, R. C. Dube, M.A.

Deputy Assistant Directors, K. A. Ramaih; P. V. Gunishastri, M.A., LL.B.; D. N. Shiveshwarkar, B.Sc.

MISCELLANEOUS BRANCHES.

LEGAL BRANCH.

Legal Adviser, G. S. Gaitonde, B.A., LL.B.

Assistant Legal Adviser, A. G. Kotval, Advocate.

POST-WAR PLANNING BRANCH.

Deputy Director, S. P. Kaura, B.A.

PUBLICITY BRANCH.

Additional Director, A. S. E. Iyer.

Deputy Assistant Director, M. G. Chaubal.

STANDARD CLOTH BRANCH.

Deputy Assistant Director, Thomas D'Sa, L.T.M.

CONSUMER GOODS SECTION.

Liaison Officer (Consumer Goods), S. S. Santhanam, M.A.

OFFICE OF THE RUBBER PRODUCTION COMMISSIONER.

Hony. Rubber Production Commissioner, P. Kurian John.

Secy., Indian Rubber Production Board, P. V. S. Sarma, M.A., B.L.

OFFICE OF THE CONTROLLER OF COFFEE.

Controller, Dewan Bahadur M. V. Vellod.

Secy., Indian Coffee Board, B. G. Achia.

Propaganda Officer, Indian Coffee Board (On Leave from 1st September, 1947), Rao Sahib M. J. Simon.

OFFICE OF THE CONTROLLER OF PATENTS & DESIGNS, CALCUTTA.

Controller of Patents & Designs, Pal, K. Rama, Diwan Bahadur, M.A.

Deputy Controller of Patents & Designs, Datta, T. P., Rai Sahib, B.E.

Examiner of Patents in Charge, Rao, K. Seshagiri, Rao Sahib, M.A.

Examiner of Patents, Ghosh, H. N., B.E.

Examiner of Patents, Chatterjee, Dr. N. N., D.Sc.

Examiner of Patents (On Deputation to the Deptt. of Industries and Supplies), Kapre, Dr. P. K., M.Sc., Ph.D. (Lond.), D.I.C. (Lond.), B.L.

Examiner of Patents, Pal, R.V., B.Sc. (Eng.), Grad. I.E.E.

Examiner of Patents (On Deputation to the Deptt. of Industry & Supply), Atrishi, B. N., M.Sc.

Offg. Examiner of Patents, Pal, C. S., B.Sc. (Eng.), B.Sc.

Offg. Examiner of Patents, Miranda, M. A., B.E.

Offg. Examiner of Patents (Transferred to Pakistan), Ahmed S. M., B.Sc. (Eng.).

Offg. Examiner of Patents, Ray, B. G., M.Sc., Grad. I.E.E.

Offg. Examiner of Patents, Narayan, R., B.Sc., B.L.

Administrative Officer, Roy, S. N., B.A.

CENTRAL SERICULTURAL RESEARCH STATION, BERHAMPORE, BENGAL.

Officer-in-Charge, Central Sericultural Research Station, Berhampore, Bengal, Dr. D. P. Rai-Choudhury, M.Sc. (Cal.), Ph.D. (Lond.), D.I.C. (Lond.), F.R.E.S.

SALT CONTROLLER'S OFFICE.

Salt Controller, R. B. Shiv Charan Dass, O.B.E.

Dy. Salt Controller, Vyas Dev.

Officer on Special Duty, S. P. Srivastava.

MATHEMATICAL INSTRUMENT OFFICE.

Superintendent, A. Lacamp.

Works Manager, F. H. Murray.

MINISTRY OF TRANSPORT

Minister, The Hon'ble Dr. John Mathai.

Secretary, Y. N. Sukthankar, C.I.E., I.C.S.

Deputy Secretaries, S. Chakravarti, M.B.E., I.C.S.; Hakumat Rai.

Consulting Engineer (Roads), G. M. Mckelvie, I.S.E.

Addl. Consulting Engineer (Roads), G. A. D. Cochrane, I.S.E.

Chief Controller of Railway Priorities, M. D. Sethna.

Road Transport Adviser and Petrol Rationing Officer, P. R. Puri.

Assistant Secretaries, K. Narayanan; R. S. Bahl; Topan Lal; J. G. Gomes; K. Ranganathan; B. V. Radhakrishnan.

Private Secretary to the Hon'ble Member, R. S. Haveli Ram.

Addl. Consulting Engineer (Bridges), R. B. Brij Narain, I.S.E.

Deputy Standards Officer, K. S. Raghavachary.

Assistant Controller of Motor Transport, S. K. Venkatachalam.

Private Secretary to Secretary, Z. S. Bains.

Planning Officers, D. B. Nageswara Aiyyer; R. S. Goverdhan Lal.

Deputy Materials and Plant Officer, R. S. Bhalla.

Deputy Bridge Officer, S. L. Bazaz.

Officers on Special Duty, S. K. Ghosh; C. S. Anantapadmanabhan.

Assistant Consulting Engineers (Roads), B. L. Manchanda; M. B. Lal.

Division Engineer (Consultant), H. Sunder Rao.

Assistant Material & Plant Officer, B. N. Ghose.

Assistant Engineers, N. S. Surya; A. J. Decosta; J. M. Trehan; Y. D. Kumar; M. P. Nageswar Seth; S. Subramanyam.

CIVIL AVIATION DIRECTORATE

Director-General of Civil Aviation, Rai Bahadur N. C. Ghosh, O.B.E., M.Inst.T. (Lond.).

Deputy Directors-General of Civil Aviation, E. M. Rossiter; P. H. Davy; K. M. Raha, B.A. (Cantab.), D.I.C.; A.F.R.Ae.S.

Deputy Director of Administration, N. R. K. Iyer, M.A.

Asstt. Directors of Administration, P. N. Kapur, B.A.; K. Sachidanandam, B.A.; B. D. Kawatra, B.A.; Gian Singh, B.A.

Director of Air Routes and Aerodromes, Wing Commander W. Dougall.

Deputy Directors of Air Routes and Aerodromes, M. G. Pradhan, B.E. (Mech.), D.I.C., A.F.R., Ae.S.; G. D. Singh, B.E. (Elec. & Mech.), D.I.C.

Deputy Director (Aerodrome Planning), R. K. Nanda, B.A., B.E. (Glasgow).

Aerodrome Inspector, L. K. Dey, A.M.I. Mech. E.

Estate Officer, Manohar Singh, M.A., LL.B.

Director of Training & Licensing, Wing Commander H. P. Hudson.

Asstt. Director. Examinations & Licensing, G. S. Subramaniam, B.E. (Mech), D.I.C.

Director of Regulations & Information, P. K. Roy, Bar-at-Law.

Asstt. Director, Conventions, Legislations & Aggreements, D. S. Bhatti.

Asstt. Director, Information & Publications, S. C. Sen, M.Sc., A.F.R. Ae.S., M.I. Ae.S.

Deputy Director of Air Transport, O. N. Dang.

Asst. Director of Air Transport, J. C. Puri.

Operations Officer, V. Sethuraman.

Accounts Officer, A. Varadachari.

Priority Officer, Mrs. Bridgewater Kitcat.

Asstt. Priority Officer, S. N. Kaul.

Director of Aeronautical Inspection, A. W. Francis.

Deputy Director, K. L. Puri, B.Sc. (London), A.E.G.I., M.I.B.E., A.F.R. Ae.S., A.M.I. Ae.R.

Aircraft Inspectors, A. V. Vartak; S/Ldr. H. G. Hudson.

Senior Scientific Officer, Dr. P. Nila Kantan, B.A., M.Sc., Ae. (England), D.Sc., M.I.Ae., M.S.A.E.

Scientific Officer, T. S. Krishnamurthy, B.Sc., B.E. (Elec. Eng.).

Director of Communication, R. G. Stuart.

Deputy Director, M. B. Sarwati.

Asstt. Directors, A. J. Srivastava; S. C. Bose: N. V. S. Iyengar; I. S. Ahuja.

Senior Communication Officers, G. M. Meswany; V. K. P. Naidu.

Senior Technical Officers, M. S. Ramchandran; Om Prakash; A. J. Mirchandani and K. R. Bharucha.

POSTS AND TELEGRAPHS DEPARTMENT

Director-General, Krishna Prasada, O.I.E., I.C.S., J.P.

RAILWAY DEPARTMENT (RAILWAY BOARD)

HEADQUARTERS (SIMLA & NEW DELHI)

Chief Commissioner, K. C. Bakhle.

Financial Commissioner, I. S. Puri.

Member (Engineering), Dr. H. J. Nichols, O.B.E.

Member (Transportation), V. P. Bhandarkar.

Member (Staff), F. C. Badhwar.

Director, Accounts, P. M. Joseph.

Director, Civil Engineering, P. C. Khanna.

Director, Establishment, K. P. Mushran.

Director, Finance, R. Ramaswamy Ayyar.

Director, Mechanical Engineering, W. Oldfield.

Director, Pay Commission, A. Balakrishnan.

Director, Transportation, A. A. Brown, O.B.E.

Secretary, S. S. Ramasubban.

Deputy Secretary, D. B. Patel.
Assistant Secretary, G. Rama Rau.
Joint Director, Civil Engineering, D. C. Baijal.
Joint Director, Establishment, M. E. Bartley.
Joint Director, Finance, M. R. Swaminathan.
Joint Director, Public Relations, G. Borker.
Joint Director, Stores, M. R. Carr-Hall.
Joint Director, Transportation (G), Anand Mohan.
Joint Director, Transportation (T), Rajendra Dev.
Deputy Director, Accounts, D. U. Rao.
Deputy Director, Civil Engineering I, H. D. Awasthy.
Deputy Director, Civil Engineering II, D. B. Singh.
Deputy Director, Finance I. K. L. Ghei.
Deputy Director, Finance II K. F. Bhandari.
Deputy Director, Mechanical Engineering I, M. S. Murthi.
Deputy Director, Mechanical Engineering II, R. Subbiah.
Deputy Director, Tele-Communication, E. W. Ross-Gwynne.,
Deputy Director, Traffic (Statistics), H. L. Biswas.
Assistant Director, Establishment, R. Srinivasan.
Assistant Director, Traffic, A. Hildreth.

CENTRAL STANDARDS OFFICE FOR RAILWAYS

Deputy Chief Controller (Mechanical), G. E. H. William.
Deputy Chief Controller (Civil), K. F. Antia.
Assistant Chief Controller (Loco), T. E. Q. Stewart.
Assistant Chief Controller (Mechanical), S. R. Woodmore.
Research Officer (Mechanical), G. da Costa.
Office Superintendent, G. K. Chary.

LEGISLATIVE DEPARTMENT

Minister, The Hon'ble Dr. B. R. Ambedkar, Bar-at-Law.
Secretary, Vacant.
Officer on Special Duty, K. V. K. Sundaram, I.C.S.
Joint Secretary, K. Y. Bhandarkar (Offg.).
Jt. Secretary & Draftsman, H. K. Kothare, B.A., LL.B.
Dy. Secretary, Shri Gopal Singh, M.A., LL.B.
Addl. Dy. Secretaries, Rai Bahadur N. C. Ray, M.A., B.L.; B. G. Murdeswar, B.A., LL.B.
Asstt. Secretaries, N. E. Debenham; A. R. Warrier; P. S. Subramaniam.
Private Secretary to Hon'ble Minister, Rai Saheb M. Massey.
Junior Legal Officer, C. B. Kapoor, M.A., LL.B.
Solicitor to the Government of India, D. H. Nanavati, B.A., LL.B.
Second Solicitor to the Government of India, P. A. Mehta, B.A., LL.B. (Offg.),
Assistant Solicitors to the Government of India, P. K. Bose, M.A., B.L.; S. Krishnaswamy.
Solicitor to the Central Government at Calcutta, S. K. Mandal, M.A., B.L.
Solicitor to the Central Government at Bombay, D. P. Sethna, B.A., LL.B.
Solicitor to the Income-Tax Dept. at Bombay, V. K. Patigara, B.A., LL.B.
Advocate-General of India, Sir Noshirwan Engineer.

INCOME-TAX APPELLATE TRIBUNAL

(HEADQUARTERS BENCH).

President, A. N. Shah, I.C.S.
Accountant Member, Rai Bahadur G. C. Khanna, B.A., LL.B.
Registrar, K. Srinivasan, M.A., M.L. (Offg.).

(BOMBAY BENCH).

Accountant Member, P. C. Malhotra, A.S.A.A.
Judicial Member, Rao Bahadur B. C. Sankara Narayana, M.A., LL.B., Bar-at-Law.

(ALLAHABAD BENCH).

Accountant Member, Rai Bahadur B. K. Mukerji.
Judicial Member, Khan Bahadur Syed Kalba Abbas.

(MADRAS BENCH).

Accountant Member, R. P. Dalal, F.S.A.A., R.A.
Judicial Member, S. M. Gupta, Bar-at-Law.

SURVEY OF INDIA

Surveyor General, Brigadier G. F. Heaney, C.B.E.
Directors, G. H. Osmaston, M.C. (On leave P. N.); Col. G. W. Gemmell (On leave P. N.); Col. J. B. P. Angwin, M.B.E. (On leave pending reversion to Home Estt.); Major I. H. R. Wilson, R.E.; Major R. H. Sams, R.E. (On leave); Lt.-Col. C. A. K. Wilson, O.B.E., R.E. (On leave pending reversion to Home Estt.); Major J. S. O. Jelly, R.E. (Offg.); Major (T. Lt.-Col.) C. A. Biddle, R.E. (Offg.); Major Gambhir Singh, I.A. (Offg.); B. L. Gulatee, M.A. (Cantab.); Major H. W. Wright, O.B.E., R.E.

GEOLOGICAL SURVEY OF INDIA

Director, Dr. W. D. West, M.A., Sc.D. (Cantab.).
States Liaison Officer, Dr. H. Crookshank, B.A., B.A.I., D.Sc. (Dub.).
Superintending Geologists, E. J. Bradshaw, B.A., B.A.I., M.Sc. (Calif.) (On Deputation as Director, Burma Geological Dept.); Dr. M. S. Krishnan, M.A. (Mad.), A.R.C.S., D.I.C., Ph.D. (Lond.), F.N.I., J.B.; Auden, M.A. (Cantab.), F.N.I.; V. P. Sondhi, M.B.E., M.Sc. (Punj.), F.G.S.; Dr. P. K. Ghosh, M.Sc. (Cal.), D.I.C., D.Sc. (Lond.) (Dy. Director); Dr. M. R. Sahni, M.A. (Cantab.), D.Sc. (Lond.), D.I.C.; A. M. N. Ghosh, B.Sc. (Cal.), B.Sc. (Lond.), A.R.C.S.; B. C. Roy, B.Sc. (Cal.), A.I.S.M., M.Sc. (Lond.), D.I.C., Dr. Ing. (Freiberg.); Dr. A. K. Key, B.Sc. (Cal.), D.I.C., Ph.D., London.
Geologists, Dr. A. G. Jhingran, B.Sc. (Benares); Ph.D. (Durham); S. Krishnaswamy, B.Sc., A.I.S.M.; Rai Sahib B. C. Gupta; P. N. Mukherjee, B.Sc. (Cal.), M.Sc. (Lond.), D.I.C.; V. R. R. Khedkar, M.Sc. (Benares.); P. C. Das Hazra, B.Sc. (Lond.), A.R.C.S.; A. P. Dutt, M.Sc. (Cal.); N. K. N. Aiyengar, M.A., B.L.; G. C. Chatterjee, B.Sc., A.I.S.M.; M. S. Venkatram, B.A., B.L.

Petroleum Geologist, V. H. Boileau, B.A. (Cantab).
Geophysicists, Dr. G. Dessau; Dr. F. Ermisch.
Deputy Mining Engineer, G. V. D. Upadhyaya.
Chemist, Dr. R. K. Dutta Roy, M.Sc. (Dac.) Dr. Ing. (Hanover).
Assistant Geologists, Dr. K. Jacob, D.Sc.; P. K. Chatterjee, M.Sc., F.R.S.; M. S. Balasundaram, B.Sc. (Hons.); D. Gupta, B.Sc.; R. N. P. Arogyaswami, B.Sc., A.I.S.M.; V. Subramanyam, B.Sc.; K. K. Dutta, A.I.S.M.; B. G. Deshpande, M.Sc.; S. P. Nautiyal, M.Sc.; P. K. Ghosh, B.Sc.; S. Narayanswami, B.Sc. (Hons.); D. K. Chandra, M.Sc.; V. S. Krishnaswamy, B.Sc. (Hons.); D. R. S. Mehta, A.I.S.M.; Mukti Nath, M.Sc.; A. K. Roy, M.Sc.; B. F. Mehta, B.Sc.; A. P. Subramanyam, M.Sc.; R. Thigarjan, B.Sc.; M. K. Roy Chowdhury, M.Sc.; S. C. Chakraborty, M.Sc.; S. N. Sen., M.Sc.; G. N. Dutt, M.Sc.; D. N. Sett, B.Sc.; R. A. Nagarajaiah, B.Sc.; F. Ahmad, M.Sc. (Aligarh); A. K. Belgaumi, M.A. (Madras); K. D. Shukla, M.Sc. (Benares); B. Laskar, A.I.S.M.; B. N. Sinha, M.Sc. (Benares); G. H. S. V. Prasada Rao, M.Sc. (Andhra); S. M. Mathur, M.Sc. (Benares); K. Narain, M.Sc. (Benares); N. A. Vemban, M.Sc. (Mad.); G. Kohli, M.Sc. (Benares); K. S. Mahapatra, A.I.S.M.; Y. G. K. Murty, M.Sc. (Benares); K. Balu, M.A. (Mad.); C. Ramaswamy, B.Sc. (Hons. Mysore); T. K. Kurien, M.Sc. (Benares); N. V. Chandrasekhariah, B.Sc. (Mysore); Mohd. Ziaudin, B.Sc. (Hons. Mysore); M. V. A. Sastry, M.Sc. (Mysore); D. M. Sen, B.Sc.; N. V. B. S. Dutt, M.Sc. (Mysore); A. S. Ramaiengar, A.I.S.M.; J. Narayana Murthy, M.Sc. (Mysore); T. Banerjee, M.Sc. (Cal.); M. N. Deekshituler, B.Sc. (Hons. Andhra); G. Gopala Krishna Sastry, M.Sc.; K. C. Channabasappa, B.Sc. (Hons.); G. Venkiteswara Rao, M.Sc.; V. Gopal, B.Sc. (Hons.); M. A. Anandalwar, B.Sc.; V. Venkitesh, M.A.; B. Srikantan, M.Sc.
Geological Technician, A. Del Carlo.
Registrar, Rai Sahib Manomohan Ghose.

BOTANICAL SURVEY OF INDIA

Officer-in-Charge, Superintendent, Royal Botanic Garden, Calcutta, Dr. K. Biswas, M.A., D.Sc. (Edin.), F.B.S.E.
Systematic Assistant, V. Narayanaswami, M.A.
Curator and Instructor, Royal Botanic Garden, Calcutta, K. S. Srinivasan, M.Sc.

ARCHÆOLOGICAL DEPARTMENT

Director-General of Archæology in India, New Delhi, R. E. Mortimer Wheeler, M.C., M.A., D.Lit., F.B.A., F.S.A.; *Joint Director-General of Archæology in India, New Delhi*, N. P. Chakravarti, M.A., Ph.D., O.B.E.; *Deputy Director-General of Archæology in India, New Delhi*, H. L. Srivastava, M.A.; *Executive Engineer, Archæological Survey of India, New Delhi*, Vacant.
Superintendent of Publications, Archæological Survey of India, Amalananda Ghosh, M.A.
Supdt., Excavation Branch, Vacant.
Asstt. Supdt., Braj Basi Lal, M.A.
Supdt., Museum Branch, Dr. Vasudeva Saran Agrawala, M.A., Ph.D., D.Litt. (Offg.).
Northern Circle, Agra.—
Supdt., M. S. Vats, M.A.; *Asstt. Supdt.*, Krishna Deva, M.A.
Western Circle, Poona.—
Supdt., Vacant; *Asstt. Supdt.*, M. N. Deshpande, B.A. (Hons.) (In-charge).
Southern Circle, Madras.—
Supdt., Vacant; *Asstt. Supdt.*, Vacant; *Asstt. Supdt., Pre-history*, V. D. Krishnaswamy, M.A. (In-charge).
South Eastern Circle, Vizagapatam.—
Supdt., T. N. Ramachandran, M.A.; *Asstt. Supdt.*, H. Ramasastry, B.A.
Central Circle, Patna.—
Supdt., Vacant; *Asstt. Supdt.*, K. R. Srinavasan, M.A. (In-charge).
Eastern Circle, Calcutta.—
Supdt., J. H. S. Waddington, M.B.E., (Offg.); *Asstt. Supdt.*, Dr. Y. D. Sharma, M.A.D. Phil.
Delhi Circle, New Delhi.—
Asstt. Supdt., Dr. K. N. Puri, B.Sc., D-es-Littres.
Archæological Section, Indian Museum, Calcutta—
Supdt., C. Sivaramamurti, M.A.
Chemical Branch, Dehra Dun.—
Archæological Chemist in India, Dr. B. B. Lal, M.Sc.; *Asstt. Archæ. Chemist*, Dr. S. Paramaswan, D.Sc.; *Asstt. Archæ. Chemist*, Vacant.
Epigraphical Branch, Ootacamund.—
Govt. Epigraphist for India, Dr. B. C. Chabra, M.A., M.O.L., Ph.D.; *Supdt. of Epigraphy*, N. Lakhsmi Narayan Rao, M.A.; *Supdt. of Museum Epigraphy*, Vacant; *Asstt. Supdt.*, Vacant.

MISCELLANEOUS APPOINTMENTS

Director-General, Health Services, Dr. K. C. K. E. Raja.
Deputy-Director General, Health Services, Vacant.
Addl. Deputy-Director General, Health Services (Refugee and Medical Relief), Lt.-Col. B. K. Sheorey, M.B.B.S. (Bom.), D.L.O., F.R.C.S. (Eng.).
Additional Deputy Directors-General, Health Services (Social Insurance), Major E. L. Jones, M.B., Ch.B. (Vict.), M.D. (Manch.), I.M.S. (E.C.); Major V. M. Albuquerque.
Additional Deputy Directors-General, Health Services (Public Health), Lt.-Col. T. C. Puri, M.B.B.S. (Pb.), D.T.M. (Camb.), D.P.H. (Camb.); Lt.-Col. C. Mani, M.B., Ch.B. (Birm.), M.R.C.S., D.P.H. (Eng.); Dr. B. C. Das Gupta, B.Sc. (Hons.), M.B., M.R.C.P., D.T.M. & H.; Major N. Jungalwalla, M.B.B.S. (Rang.), M.R.C.S. (Eng.), M.R.C.P. (Lond.).
Assistant Director-General, Health Services (Public Health Measures), Dr. P. L. Nirula, M.B.B.S. (Pb.), M.R.C.S. (Eng.), L.R.C.P. (Lond.), D.T.M. (Liv.), D.P.H. (Lond.).
Officer on Special Duty (Health Education), S. C. Batra.
Officer on Special Duty (Refugee Medical Relief), S. S. Rao, M.A., LL.B.
Senior Architect, J. D. Shastri, A.R.I.B.A., A.I.I.A.
Nutrition Officer, Dr. K. Kitra, M.B., D.P.H. (Cal.), D.T.M. & H. (Lond.).

Drugs Controller, Lt.-Col. M. K. Kelavkar, O.B.E., M.B.B.S.(Bom.)D.T.M.&H.(Eng.),M.R.C.P.(Edin.).
Assistant Drugs Controller, P. S. Ramchandran, M.Sc.
Officer on Special Duty (*Tuberculosis*), R. Vishwanathan (Lt.-Col.), M.B.B.S. (Mad.), M.D. (Mad.), M.R.C.P. (Lond.), T.D.D. (Wales).
Assistant Director-General, Health Service (*Stores*), Major A. S. Sen, M.B. (Lond.), F.R.C.S. (Eng.), L.R.C.P. (Lond.).
Consultant Medical Architect (*Medical Institutions*), W. S. Newman, L.R.I.B.A.
Associate Consulting Architect, (*Medical Institutions*), Captain H. H. M. Griffin, A.R.I.B.A., A.I.I.A.
Deputy Assistant Director-General, Health Services (*Medical*), Rai Sahib Khushi Ram.
Officer Supervisor (*General*), B.K. Kukherjee, M.Sc
Officer Supervisor (*P*), R. S. Bery, B.com.
Chief Advisory Chemist, P. M. Nabar, B.A., B.Sc. (Tech., Manchester).
Officer Supervisor (*Stores*), Bishan Das Jerath.
Rate Officer, M. A. Pillai.
Officer Supervisors (*P.H.*), B. D. Sharma ; H. R. Khattar.
Officer Supervisor (*Resettlement*), A. L. Handa.
Medical Librarian, Major H. P. Mehta.
Non-Medical Statistician, B. K. Parthasarathy.

GOVERNORS-GENERAL OF FORT WILLIAM IN BENGAL

Name	Assumed charge of office
Warren Hastings ..	..20 Oct. 1774
Sir John Macpherson, Bart.	.. 8 Feb. 1785
Earl Cornwallis, K.G. (*a*)	..12 Sep. 1786
Sir John Shore, Bart. (*b*)	..28 Oct. 1793
Lieut.-General the Hon. Sir Alfred Clarke, K.C.B. (*Offg.*)	..17 Mar. 1798
The Earl of Mornington, P.C. (*c*)	18 May 1798
The Marquess Cornwallis, K.G. (2nd time)	..30 July 1805
Captain L. A. P. Anderson, Sir George H. Barlow, Bart.	..10 Oct. 1805
Lord Minto, P.C. (*d*) ..	..31 July 1807
The Earl of Moira, K.G., P.C. (*e*)	4 Oct. 1812
John Adam (*Offg.*) ..	..13 Jan. 1823
Lord Amherst, P.C. (*f*) ..	.. 1 Aug. 1823
William Butterworth Bayley (*Offg.*)	13 Mar.1828
Lord William Cavendish Bentinck, G.C.B., G.C.H., P.C.	4 July 1828

(*a*) Created Marquess Cornwallis, 15 Aug. 1792
(*b*) Afterwards (by creation) Baron Teignmouth.
(*c*) Created Marquess Wellesley, 2 Dec. 1799
(*d*) Created Earl of Minto .. 24 Feb. 1813
(*e*) Created Marquess of Hastings, 2 Dec. 1816
(*f*) Created Earl Amherst .. 2 Dec. 1826

GOVERNORS-GENERAL OF INDIA

Name	Assumed charge of office
Lord William Cavendish Bentinck, G.C.B., G.C.H., P.C. ..	..14 Nov. 1834
Sir Charles Metcalfe, Bart. (*a*) (*Offg.*)	..20 Mar. 1835
Lord Auckland, G.C.B., P.C.(*b*) ..	4 Mar. 1836
Lord Ellenborough, P.C. (*c*)	..28 Feb. 1842
William Wilberforce Bird (*Offg.*)	15 June 1844
The Right Hon. Sir Henry Hardinge, G.C.B. (*d*) ..	.. 23 July 1844
The Earl of Dalhousie, P.C. (*e*)	.. 12 Jan. 1848
Viscount Canning, P.C. (*f*) ..	29 Feb. 1856

(*a*) Afterwards (by creation) Baron Metcalfe.
(*b*) Created Earl of Auckland, 21 Dec. 1839.
(*c*) Afterwards (by creation) Earl of Ellenborough.
(*d*) Created Viscount Hardinge, 2 May 1846.
(*e*) Created Marquess of Dalhousie, 25 Aug. 1846.
(*f*) Afterwards (by creation) Earl Canning.

NOTE.—The Governor-General ceased to be the direct Head of the Bengal Government from the 1st May, 1854, when the first Lieutenant-Governor assumed office. On 1st April 1912, Bengal was placed under a separate Governor and the appointment of Lieutenant-Governor was abolished.

Viscount Canning, P.C. (*a*) ..	1 Nov. 1858
The Earl of Elgin and Kincardine, Kt., G.C.B., P.C. ..	..12 March 1862
Major-General Sir Robert Napier, K.C.B. (*b*) (*Offg.*) ..	..21 Nov. 1863
Colonel Sir William T. Denison, K.C.B. (*Offg.*)	.. 2 Dec. 1862
The Right Hon. Sir John Lawrence, Bart, G.C.B., K.C.S.I. (*c*)	..12 Jan. 1864
The Earl of Mayo, K.P. ..	..12 Jan. 1869
John Strachey (*d*) (*Offg.*) ..	9 Feb. 1872
Lord Napier of Merchistoun, Kt. (*e*) (*Offg.*)	..23 Feb. 1872
Lord Northbrook, P.C. (*f*) ..	3 May 1872
Lord Lytton, G.C.B. (*g*) ..	..12 Apl. 1876
The Marquess of Ripon, K.G., P.C.	8 June 1880
The Earl of Dufferin, K.P., G.C.B., G.C.M.G., P.C. (*h*) ..	..13 Dec. 1884
The Marquess of Lansdowne, G.C.M.G.	..10 Dec. 1888
The Earl of Elgin and Kincardine, P.C.	..27 Jan. 1894
Baron Curzon of Kedleston, P.C.	6 Jan. 1899
Baron Ampthill (*Offg.*) ..	..30 Apl. 1904
Baron Curzon of Kedleston, P.C. (*i*)	13 Dec. 1904
The Earl of Minto, K.G., P.C., G.C.M.G.	..18 Nov. 1905

GOVERNORS-GENERAL OF INDIA.—*contd.*

Name	Assumed charge of office
Baron Hardinge of Penshurst, P.C., G.C.B., G.C.M.G., G.C.V.O., L.S.O. (*j*)	23 Nov. 1910
Lord Chelmsford..	Apl. 1916
Marquess of Reading	Apl. 1921
Baron Irwin	Apl. 1926
The Earl of Willingdon	Apl. 1931
The Marquess of Linlithgow ..	Apl. 1936
Field-Marshal Viscount Wavell of Cyrenaica and Winchester	1943.
The Rt. Hon. Sir John Colville, P.C. (*Offg.*)	4th June 1945 for 3 months.

(*a*) Created Earl Canning, 21 May 1859.
(*b*) Afterwards (by creation) Baron Napier of Magdala.
(*c*) Afterwards (by creation) Baron Lawrence.
(*d*) Afterwards Sir John Strachey, G.C.S.I., C.I.E.
(*e*) Afterwards (by creation) Baron Napier of Ettrick.
(*f*) Afterwards (by creation) Earl of Northbrook.
(*g*) Created Earl of Lytton, 28 April 1880.
(*h*) Created Marquis of Dufferin and Ava, 12 Nov. 1888.
(*i*) Created an Earl, June 1911.
(*j*) During tenure of office, the Viceroy is Grand Master and First and Principal Knight of the two Indian Orders (G.M.S.I. and G.M.I.E.). On quitting office, he becomes G.C.S.I. and G.C.I.E. : with the date of his assumption of the Viceroyalty.

Rear-Admiral the Rt. Hon. Viscount Mountbatten of Burma, K.G., G.C.S.I., G.C.I.E., G.C.V.O., K.C.B., 24, March 1947 to June 21, 1948.

Shri Chakravarthy 'Rajagopalachari (*Acting*) Nov. 10, 1947—Nov. 26, 1947.

COMMANDERS-IN-CHIEF IN INDIA.

Name	Assumed charge of office
Lieut.-General Sir John Clavering ..	1774
Lieut.-General Sir Eyre Coote	1779
Lieut.-General Sir Robert Sloper.. ..	1785
General Earl Cornwallis	1786
Major-General Sir Robert Abercromby ..	1793
Major-General Sir Alured Clarke.. ..	1798
Lieut.-General Gerard (Lord Lake) ..	1801
General Marquis Cornwallis (2nd time) ..	1805
Lieut.-General Lord Lake..	1805
Lieut.-General Sir G. Hewett	1807
Lieut.-General Sir George Nugent	1812
General Marquis of Hastings	1813
General Sir Edward Paget	1823
General Viscount Combermere	1825
General Earl of Dalhousie..	1830
General Sir Edward Barnes	1832
General Lord William C. Bentinck ..	1833
General Sir Henry Fane	1835
General Sir Jasper Nicolls..	1839
General Lord Gough	1843
General Sir Charles James Napier ..	1849
General Sir William Maynard Gomm ..	1850
General Sir George Anson	1856
Lt.-Gen. Sir Patrick Grant	1857
General Sir Colin Campbell (Lord Clyde)..	1857
General Sir Hugh Rose	1860
Lieut.-General Sir W. R. Mansfield ..	1865
General Robert Cornelis, Lord Napier (Baron Napier of Magdala)	1870
General Sir Frederick Paul Haines ..	1876
General Sir Donald Martin Stewart ..	1881
General Lord Roberts, V.C.	1885
General Sir George Stewart White, V.C...	1893
General Sir William Lockhart	1898
General Sir Arthur Power-Palmer ..	1900
Field-Marshal Viscount Kitchener of Khartoum	1902
General Sir O'Moore Creagh, V.C. ..	1909
General Sir Beauchamp Duff	1914
General Sir Charles Munro	1916
Field-Marshal Lord Rawlinson	1920
Field-Marshal Sir William Birdwood ..	1925
Field-Marshal Sir Phillip Chetwode ..	1930
Field-Marshal Sir Robert Archibald Cassels	1935
General Sir C. J. E. Auchinleck ..	1941
Field-Marshal Sir Archibald P. Wavell	1941
Field-Marshal Sir C. J. E. Auchinleck ..	1943
Lt.-Gen. R. M. Macdonald Lockart C.B., C.I.E., M.C.	Aug. 15, 1947.
Lt.-Gen. F. R. R. Francis Robert Roy Bucher	Jan. 1, 1948.

The Indian Legislature

The following is a list of the Ordinances promulgated between September 1946 and May 1948:

1. The Essential Supplies (Temporary Powers) Ordinance, September 25, 1946.
2. The Requisitioned Land (Continuance of Powers) Ordinance, September 25, 1946.
3. The Emergency Provisions (Continuance) Ordinance, September 25, 1946.
4. The Foreigners Act (Amendment) Ordinance, September 25, 1946.
5. The Delhi Special Police Establishment Ordinance, September 25, 1946.
6. The Special Tribunals (Supplementary Provisions) Ordinance, September 30, 1946.
7. The Indian Navy (Discipline) Amendment Ordinance, October 10, 1946.
8. The Sugar (Temporary Excise Duty) Ordinance, October 23, 1946.
9. The Indian Tariff Act (Amendment) Ordinance, October 23, 1946.
10. The Indian Tariff Act (Second Amendment) Ordinance, October 26, 1946.
11. The Railways (Emergency Provisions) Ordinance, December 14, 1946.

1947

1. The Argentine (Jute and Cereals) Agreement Ordinance, January 7, 1947.
2. The Indian Tariff (Amendment) Ordinance, January 16, 1947.
3. The Press (Special Powers) Ordinance, January 29, 1947.
4. The Punjab Disturbed Areas (Special Powers of Armed Forces) Ordinance, March 19, 1947.
5. The Capital Issues (Continuance of Control) Ordinance, March 22, 1947.
6. The Coal Production Fund (Repealing) Ordinance, April 26, 1947.
7. The Patents and Designs (Extension of Time) Ordinance, April 26, 1947.
8. The Tea (Export Licences) Ordinance, May 24, 1947.
9. The North-West Frontier Province Disturbed Areas (Special Powers of Armed Forces) Ordinance, July 2, 1947.
10. The Press (Special Powers No. 2) Ordinance, July 28, 1947.
11. The Bengal Disturbed Areas (Special Powers of Armed Forces) Ordinance, August 11, 1947.
12. The Delhi Premises (Requisition and Eviction) Ordinance, August 13, 1947.
13. The Central Nursing Council Ordinance, August 13, 1947.
14. The Assam Disturbed Areas (Special Powers of Armed Forces) Ordinance, August 13, 1947.
15. The Extra-Provincial Jurisdiction Ordinance, August 24, 1947.
16. The Railways (Protection by Armed Forces) Ordinance, September 10, 1947.
17. The East Punjab and Delhi (Disturbed Areas, Special Powers of Armed Forces) Ordinance, September 18, 1947.
18. The Delhi and Ajmer-Merwara Rent Control (Amendment) Ordinance, September 20, 1947.
19. The Reserve Bank of India (Temporary Amendment) Ordinance, September 20, 1947.
20. The Banking Companies (East Punjab and Delhi) Ordinance, September 27, 1947.
21. The Delhi Premises (Requisition and Eviction) Amendment Ordinance, September 29, 1947.
22. The United Provinces Disturbed Areas (Special Powers of Armed Forces) Ordinance, October 3, 1947.
23. The Delhi Evacuee Property (Supplementary) Ordinance, October 4, 1947.
24. The Delhi Refugees Registration Ordinance, October 11, 1947.
25. The Banking Companies (East Punjab and Delhi) Amendment Ordinance, October 27, 1947.
26. The Delhi Refugees Registration (Amendment) Ordinance, October 28, 1947.
27. The Indian Merchant Shipping (Restriction of Transport of Registry) Ordinance, October 31, 1947.
28. The Cotton Textiles Equalisation Fund Ordinance, December 4, 1947.
29. The Banking Companies (East Punjab and Delhi) Second Amendment Ordinance, December 13, 1947.
30. The Junagadh Administration (Property) Ordinance, December 24, 1947.
31. The Negotiable Instruments Act and the Indian Limitation Act (Temporary Amendment) Ordinance, December 27, 1947.

1948

1. The Pakistan Military Personnel Amnesty Ordinance, January 19, 1948.
2. The Indian Army Act (Application) Ordinance, January 23, 1948.
3. The Transfer of Property (India) Ordinance, February 7, 1948.
4. The Delhi Improvement Trust (Amendment) Ordinance, February 13, 1948.
5. The Indian Navy (Discipline) Amendment Ordinance, April 1, 1948.
6. The Exchange of Prisoners Ordinance, April 20, 1948.
7. The Coal Mines Provident Fund and Bonus Schemes Ordinance, April 23, 1948.
8. The Delhi Water Supply (Emergency Provisions) Ordinance, April 24, 1948.
9. The Arbitral Tribunal (Dissolution) Ordinance, May 3, 1948.
10. The Durgah Khawaja Saheb (Amendment) Ordinance, May 11, 1948.

ACTS

The following is a list of Acts passed by the Legislature. The date given is the date on which they became law:

1. The Reserve Bank of India (Amendment) Act, November 16, 1946.

2. The Essential Supplies (Temporary Powers) Act, November 19, 1946.
3. The Delhi Special Police Establishment Act, November 19, 1946.
4. The Special Tribunals (Supplementary Provisions) Act, November 22, 1946.
5. The Banking Companies (Restriction of Branches) Act, November 22, 1946.
6. The Hindu Marriage Disabilities Removal Act, November 22, 1946.
7. The Indian Tea Control (Amendment) Act, November 22, 1946.
8. The Registration of Transferred Companies (Amendment) Act, November 22, 1946.
9. The Foreigners Act, November 23, 1946.

1947

1. The Criminal Tribes (Amendment) Act, March 11, 1947.
2. The Prevention of Corruption Act, March 11, 1947.
3. The Indian Extradition (Amendment) Act, March 11, 1947.
4. The Coffee Market Expansion (Amendment) Act, March 11, 1947.
5. The Factories (Amendment) Act, March 11, 1947.
6. The Indian Railways (Amendment) Act, March 11, 1947.
7. The Foreign Exchange Regulation Act, March 11, 1947.
8. The Indian Navy (Discipline) Amendment Act, March 11, 1947.
9. The Sugar (Temporary Excise Duty) Act, March 11, 1947.
10. The Explosives (Temporary Provisions) Act, March 17, 1947.
11. The Reserve Bank of India (Amendment) Act, March 17, 1947.
12. The Railways (Transport of Goods) Act, March 17, 1947.
13. The Delhi Muslim Wakfs (Amendment) Act, March 17, 1947.
14. The Industrial Disputes Act, March 17, 1947.
15. The Armed Forces (Emergency Duties) Act, March 20, 1947.
16. The Trading with the Enemy (Continuance of Emergency Provisions) Act, March 20, 1947.
17. The Requisitioned Land (Continuance of Powers) Act, March 24, 1947.
18. The Imports and Exports Control Act, March 24, 1947.
19. The Delhi and Ajmer-Merwara Rent Control Act, March 24, 1947.
20. The Indian Finance Act, March 31, 1947.
21. The Business Profits Tax Act, April 11, 1947.
22. The Income-Tax and Excess Profits Tax (Amendment) Act, April 18, 1947.
23. The Reserve Bank of India (Second Amendment) Act, April 18, 1947.
24. The Rubber (Production and Marketing) Act, April 18, 1947.
25. The Indian Tariff (Amendment) Act, April 18, 1947.
26. The Control of Shipping Act, April 18, 1947.
27. The Motor Vehicles (Amendment) Act, April 18, 1947.
28. The Indian Coinage (Amendment) Act, April 18, 1947.
29. The Capital Issues (Continuance of Control) Act, April 18, 1947.
30. The Taxation of Income (Investigation Commission) Act, April 18, 1947.
31. The Antiquities (Export Control) Act, April 18, 1947.
32. The Coal Mines Labour Welfare Fund Act, April 18, 1947.
33. The Negotiable Instruments (Amendment) Act, April 18, 1947.
34. The Indian Boilers (Amendment) Act, April 18, 1947.
35. The Panth Piploda Laws (Amendment) Act, April 18, 1947.
36. The Indian Medical Council (Amendment) Act, April 18, 1947.
37. The Indian Patents and Designs (Extension of Time) Amendment Act, December 15, 1947.
38. The Foreigners (Amendment) Act, December 15, 1947.
39. The Press (Special Powers) Act, December 18, 1947.
40. The Foreign Exchange Regulation (Amendment) Act, December 18, 1947.
41. The Indian Merchant Shipping (Amendment) Act, December 18, 1947.
42. The Indian Finance (Supplementary) Act, December 18, 1947.
43. The United Nations (Security Council) Act, December 20, 1947.
44. The Income-Tax and Business Profits Tax (Amendment) Act, December 20, 1947.
45. The Indian Trade Unions (Amendment) Act, December 20, 1947.
46. The United Nations (Privileges and Immunities) Act, December 20, 1947.
47. The Extra-Provincial Jurisdiction Act, December 24, 1947.
48. The Indian Nursing Council Act, December 31, 1947.
49. The Delhi Premises (Requisition and Eviction) Act, December 31, 1947.
50. The Delhi and Ajmer-Merwara Rent Control (Amendment) Act, December 31, 1947.
51. The Indian Cotton Cess (Amendment) Act, December 31, 1947.
52. The Ajmer-Merwara (Extension of Laws) Act, December 31, 1947.
53. The Salaries of Ministers Act, December 31, 1947.

1948

1. The Federal Court (Enlargement of Jurisdiction) Act, January 5, 1948.
2. The Repealing and Amending Act, January 5, 1948.
3. The Armed Forces (Special Powers) Act, January 5, 1948.
4. The Armed Forces (Emergency Duties) Amendment Act, January 5, 1948.

5. The Indian Tariff (Second Amendment) Act, January 12, 1948.

6. The Code of Civil Procedure Amendment Act, February 21, 1948.

7. The Cotton Textiles Cess Act, March 1, 1948.

8. The Pharmacy Act, March 4, 1948.

9. The Dock Workers (Regulation of Employment) Act, March 4, 1948.

10. The Insurance (Amendment) Act, March 8, 1948.

11. The Minimum Wages Act, March 15, 1948.

12. The Rehabilitation Finance Administration Act, March 23, 1948.

13. The Railways (Transport of Goods) Amendment Act, March 25, 1948.

14. The Damodar Valley Corporation Act, March 27, 1948.

15. The Industrial Finance Corporation Act, March 27, 1948.

16. The Dentists Act, March 29, 1948.

17. The Indian Army and the Indian Air Force (Amendment) Act, March 29, 1948.

18. The Protective Duties Continuation Act, March 30, 1948.

19. The Indian Tea Control (Amendment) Act, March 30, 1948.

20. The Indian Finance Act, March 30, 1948.

21. The Indian Railways (Amendment) Act, April 3, 1948.

22. The Indian Power Alcohol Act, April 3, 1948.

23. The Taxation on Income (Investigation Commission) Amendment Act, April 12, 1948.

24. The Indian Aircraft (Amendment) Act, April 12, 1948.

25. The Provincial Insolvency (Amendment) Act, April 12, 1948.

26. The Junagadh Administration (Property) Act, April 13, 1948.

27. The control of Shipping (Amendment) Act, April 13, 1948.

28. The Ajmer-Merwara Rent Control (Amendment) Act, April 13, 1948.

29. The Atomic Energy Act, April 15, 1948.

30. The Indian Lac Cess (Amendment) Act, April 15, 1948.

31. The National Cadet Corps Act, April 16, 1948.

32. The Road Transport Corporation Act, April 16, 1948.

33. The Calcutta Port (Pilotage) Act, April 16, 1948.

34. The Employees' State Insurance Act, April 19, 1948.

PENDING

The following Bills are pending :

1. *The Hindu Code Bill.*—Introduced on April 11, 1947; motion for continuance adopted on November 17, 1947 and referred to Select Committee on April 9, 1948 with instructions to report not later than the last day of the first week of the next session.

2. *The Delhi and Ajmer-Merwara Land Development Bill.*—Introduced on November 22, 1947; referred to Select Committee on January 28, 1948 and Report of Select Committee presented on March 29, 1948.

3. *The Electricity Supply Bill.*—Introduced on November 26, 1947, referred to Select Committee on December 8, 1947, and Report of Select Committee presented on March 4, 1948.

4. *The Factories Bill.*—Introduced on December 3, 1947, and referred to Select Committee on January 30, 1948 with instructions to report on opening day of next session.

5. *The Banking Companies Bill.*—Introduced on March 22, 1948.

6. *The Estate Duty Bill.*—Introduced on March 22, 1948 and referred to Select Committee on April 6, 1948 with instructions to report not later than last day of first week of next session.

7. *The Income-Tax and Business Profits Tax (Amendment) Bill.*—Introduced on March 29, 1948 and referred to Select Committee on April 5, 1948 with instructions to report not later than last day of first week of next session.

8. *The Ajmer-Merwara Tenancy and Land Records Bill.*—Introduced on March 29, 1948.

9. *The Bombay, Calcutta and Madras Port Trusts (Constitution Amendment) Bill.*—Introduced on April 6, 1948.

10. *The Central Silk Board Bill.*—Introduced on April 6, 1948.

11. *The Indian Railways (Second Amendment) Bill.*—Introduced on April 9, 1948.

POLICY AND PROGRAMME

The Dominion Parliament held two sessions, one in November 1947 and the other in January 1948. The combined legislative output of the two sessions was fifty-one bills; seventeen in the November session and twenty-four in the January session. Eleven bills are still pending.

Both sessions, so to say, were Budget sessions. In the November session, the Dominion Parliament was presented with the partition Budget, covering the period August 15, 1947 to March 31, 1948. The annual budget was presented during the January session.

Industrial Policy—The most notable event was the Government's statement on industrial policy which mentioned the industries in regard to which the State porpose to acquire ownership and those which would be subject to State Control. The statement was approved by the Parliament after a full-dress debate.

Indian Banking Abroad—There are in all 30 branches of Indian Banks abroad. The Government have already taken steps to help Indian Banks to play their legitimate part in the exchange field by providing full facilities.

to all deserving Banks and actively to participate in the foreign trade of the country. The Government while naturally welcoming any move by authorised Indian Banks to increase their share in the business, feel that the facilities at present available through the operation of foreign banks are adequate to meet the needs of India's foreign trade. The establishment of branches has no direct bearing on the finance of foreign trade, which in certain circumstances may be more economically handled by Indian Banks through foreign correspondents.

Increased Production—Government have a short-term plan for increased production in 42 selected industries, the more important ones being alcohol, automobiles, bichromates, bicycles, caustic soda, cement, ceramics, diesel engines, drugs, electric motors, glass, machine tools, matches, metal, paper, plastics, plywood, rayon, refractories, rubber, shipbuilding, silk, soda-ash and super phosphates.

Among important schemes for increased production under consideration are those relating to iron and steel, aircraft, salt and synthetic oil. Provided present expectations are realised, the short-term plans should bear fruit within the next three to five years.

Andamans Forests—Messrs. Hind Construction Ltd., Dalmia Jain Limited, Himmatsinghka Timber Ltd. and Anamallai's Timber Trust Ltd.—the four promoting firms—and the Government with shareholders from the public will form a corporation named the Andamans Forest Industries Ltd. Out of the authorized capital of 25 million rupees 51 per cent of the shares will be held by the Government of India, 40 per cent by the firms, and 9 per cent will be issued to the public. The Corporation will enter into an agreement with Government for working the forest in north and middle Andamans, subject among other things to the condition that the period of the agreement will be 25 years.

Food Agreement With Australia—Government have entered into an agreement with the Australian Government according to which the latter will supply to India 25 million bushels which is approximately equal to 665,000 tons of wheat during 1948. There is a further provision under the agreement, that if the Australian Wheat Board is able to procure 210 million bushels, a further 5 million bushels will be sold to India by Australia.

India's Export Policy—The policy of Government is to encourage as far as possible the export of manufactured goods and processed or semi-processed articles with a view to encouraging indigenous industries and the utilization to the fullest extent possible of the supplies of raw material available in the country. The Provincial Government concerned will no doubt consider what facilities should be given in this direction to the various interests concerned.

Nationalisation Of Banks—The Government of India intend to take steps to nationalise the Reserve Bank of India as soon as possible after September 30, 1948. As regards the Imperial Bank of India, the Government accept the policy of nationalisation, but before that policy is implemented relevant technical questions will have to be examined.

Nationalisation of the Reserve Bank can be effected only after September 30, 1948 when the Reserve Bank ceases to be common banker to India and Pakistan under the terms of the Pakistan (Monetary and Reserve Bank, etc.) Order, 1947. Government propose to take steps to see that the nationalisation of the Bank is effected as soon thereafter as possible.

Government's intention is to acquire its shares at the average of the monthly market value of the shares during the period March 1947 to February 1948, taking the opening quotations for each month and to issue in lieu thereof to the shareholders 3 per cent long-dated stock of equivalent value of appropriate maturity.

In regard to the Imperial Bank of India, Government propose to adopt a similar basis for the acquisition of its share capital. The period for which the average of the market value of the shares is to be taken will be determined at the time of nationalising the Bank.

Government accept the policy of nationalising the Imperial Bank of India but as the Bank has branches outside India, Government propose to examine carefully the various technical questions that would arise in connection with the nationalisation of the Bank before the policy is implemented.

It is not the intention of the Government to nationalise other commercial banks. The Imperial Bank of India, which has been incorporated by a Special Act of the Indian Legislature, stands on a separate footing.

Rail-Road Co-ordination—Rail-road co-ordination in the matter of passenger transport is proposed to be achieved by the formation of road transport undertakings in which railways would be given a minimum of 20 per cent financial interest.

In the matter of goods transport, the policy of the Central Government is to encourage road transport for short distances and to reserve long distance traffic, except in perishable and fragile goods for the railways. A majority of the Provincial Governments who considered the matter have accepted it and correspondence with the rest is proceeding.

The new concerns are proposed to be operated on a monopolistic basis ultimately.

New Airports—The Government of India propose to construct new civil aerodromes in 14 places, viz., Ajmer, Aligarh, Berhampur, Calicut, Cuddalore, Dehra Dun, Hubli, Mangalore, Nellore, Ootacamund, Salem, Ratnagiri, Saugor and Surat.

Major construction works are in progress in three international, six major, two intermediate and three minor aerodromes. The works programme is to cover a period of five years.

Ships From Abroad—The total tonnage of merchant ships purchased from foreign countries during the period from 1st April 1944 to 31st March 1947 was 138,520 gross.

Production Of Aircraft—The Hindustan Aircraft Limited is at present engaged in the construction of trainer type aircraft under an arrangement with the Percival Aircraft Company, Luton, England. Fifteen such aircraft will be assembled from imported components, five will

be constructed from detailed parts supplied by manufacturers and 30 would be constructed using Indian raw materials to a large extent, with the exception of the engine and instruments. It is expected that this work which is now in hand will be completed in 18 months. The first planes are expected to be ready by August this year.

Aviation Training—A scheme for the training of commercial pilots, ground engineers, and flying control officers is expected to be put into operation during the next cold weather, possibly even earlier.

The present plans of Government contemplate the opening of a flying training and aerodrome school at Allahabad and an aircraft engineering school at Barrackpore. Government have no plans at this stage for opening training schools at other centres.

Import Of Cars—For January-June 1948 licensing period certain monetary ceilings have been fixed for imports of cars and trucks. Licenses are issued with the value as the limiting factor, but also with price limits in regards to each car or truck unit. In respect of imports from the U.S.A. the value of a C.K.D. (completely knocked down) car should not exceed Rs. 5,000 and that of a C.K.D. truck Rs. 4,000. In respect of imports from the U.K. the price of a car should not exceed Rs. 6,250 if assembled and Rs. 5,000 if C.K.D. No licences are issued for imports of assembled cars from dollar area. No licences have yet been issued for other countries.

Licence for C.K.D. cars and trucks have been granted so far to firms who have their own assembly plants in India and on the basis of their capacity to assemble components and for assembled vehicles to accredited dealers on the basis of their past imports of particular makes of cars.

Diesel Oil Shortage—The consumption of light diesel oil in India in 1945 was 429,923 tons and in 1946, 379,546 tons. Consumption of high speed diesel oil in 1945 was 149,535 tons and in 1946, 50,569 tons. The total quantity available in undivided India in 1947 was 462,067 tons of light diesel oil and 62,560 tons of high speed diesel oil. The quantity available for the whole of 1948 is not yet known. On the basis of actual availability for the first quarter of 1948 there should be 265,360 tons of light diesel oil and 30,000 tons of high speed diesel oil for the Indian Union.

The shortage became very pronounced from the beginning of this year. The shortage of light diesel oil and in particular high speed diesel oil is bound to have serious effect on private enterprises as well as on the industrial and agricultural projects sponsored by Government. The possibility of imposing control over consumption with a view to safeguarding the interests of essential consumers is being examined. Government are also taking steps to establish direct contact with the suppliers of oil outside India and those who are responsible for the allotment of petroleum products to this country in order to obtain increased supplies for the remainder of the year.

New Steel Factories—Steps are being taken to set up two new major steel producing units. Each would have 500,000 ingot tons capacity, capable of being doubled. The total estimated capital would be Rs. 480 million. Matters regarding the operation, location, design and construction of the plants and the nature of the foreign technical assistance required are under active consideration.

Government are also giving every assistance to the industry both for their production up to existing capacity and for their schemes of expansion.

Indian Air Services—While the Indian air service to U.K. has already started (June 1948), the question of establishing Indian air services to neighbouring foreign countries is under consideration by the Government of India.

Pakistan

(A Background)

PAKISTAN was established on August 15, 1947 as a Dominion by the division of the Indian sub-continent, according to an agreed plan between the British Government and the two main Indian political parties—the Indian National Congress and the All-India Muslim League. The word Pakistan has variously been construed but the general Muslim view is that it stands for all that is pure and noble in Islam.

The conception of Pakistan was first put forward by Sir Mohammad Iqbal in the course of his presidential address to the Muslim League in December 1930. The scheme was, however, not officially adopted by the Muslim League, and remained an ideal till after a decade. Meanwhile, Mr. C. Rahmat Ali, a barrister, founded the Pakistan movement in 1931 with the object of dividing India into Pakistan and Hindustan. His Pakistan comprised the Punjab, North-West Frontier (the land of the Pathans), Kashmir, Sind and Baluchistan, and the rest was Hindustan. This proposal was circulated to members of the First Round Table Conference, but the Muslim League spokesmen did not at this stage officially sponsor the scheme in spite of the general sympathy of Muslims for the movement.

QUAID-E-AZAM

Although, since its inception in 1905, the Muslim League sought to arouse political consciousness among Muslims, this organisation did not become very powerful till Quaid-e-Azam Jinnah became its President at the Bombay session in 1926. The next ten years saw slow but steady consolidation of the Muslim League under his leadership. All the rival Muslim groups and parties, both inside and outside the Indian National Congress, were losing ground rapidly by the time the Second Round Table Conference concluded in London. As the Congress and the Muslim League could not reach any agreement on a future constitution the then British Prime Minister Mr. Ramsay Macdonald gave a decision generally called the Communal Award under which the Muslims got separate representation. When the first elections were held under the 1935 Government of India Act reforms, the Muslim League did not win as great a victory as was expected, although a majority of Muslim seats were captured by it. Nothing daunted, Mr. Jinnah continued to organise provincial branches. The hope that under the new constitution both Congress and the League would work Provincial Autonomy in such manner as would prepare them for a joint shouldering of higher responsibility under a federal centre, as conceived under the 1935 India Act, disappeared when the Muslim League declined to sign the Congress pledge and merge its parliamentary party with that of the Congress, a condition on which the Congress insisted for the formation of Coalition Ministries. The Quaid-e-Azam refused to convert the League into as he called it "an understudy of the Congress."

The Lucknow session of the Muslim League in the autumn of 1937 found the League the most authoritative and representative organisation of the Muslims of India, although it was not the only spokesman for the community as many Muslims still remained outside the League either as members of the Congress or as members of other parties. When the Congress Ministries took non-League Muslims into the Government, it was construed as adding insult to injury, and a wide-spread campaign against the Congress administration ensued.



H. E. Quaid-e-Azam Mahommad Ali Jinnah

The outbreak of the Second World War came also as a blessing in disguise for the Muslim League which enhanced its power and prestige among the Muslims and its bargaining position with the British Power. Again the Congress attitude of neutrality to the war and its opposition to the war effort also helped the Muslim League whose Working Committee declared that it was ready to offer whole-hearted co-operation if the Government recognised the League as the sole representative organ of the Muslims. The rift with the Congress became wider still when the resignation of Congress Ministries was celebrated as a "Day of Deliverance" by Muslim Leaguers throughout India.

In October 1939, the then Viceroy, Lord Linlithgow, initiated a series of negotiations in order to bring about reapproachment between the two parties. One of the purposes of the Conference was to make known the British war aims *vis-a-vis* India. The subsequent Viceregal pronouncement was hailed as a charter of freedom for minorities, particularly for the Muslims of India.

THE RESOLUTION

The next and, in fact, the most important landmark in the history of Indian Muslims, is the resolution passed at the Lahore session of the Muslim League, urging the establishment of Pakistan. The resolution stated:

"While approving and endorsing the action taken by the Council and the Working Committee of the All-India Muslim League, as indicated in their resolutions dated the 27th August, 18th September, 22nd October 1939, and 3rd February 1940, on the constitutional issue, this session of the All-India Muslim League emphatically reiterates that the scheme of federation embodied in the Government of India Act 1935 is totally unsuited to, and unworkable in the peculiar conditions of this country, and is altogether unacceptable to Muslim India.

"It further records its emphatic view that while the declaration dated the 18th October 1939 made by the Viceroy on behalf of His Majesty's Government is reassuring, in so far as it declares that the policy and plan on which the Government of India Act 1935 is based will be reconsidered in consultation with the various parties, interests and communities in India, Muslim India will not be satisfied unless the whole constitutional plan is reconsidered *de novo* and that no revised plan would be acceptable to the Muslims unless it is framed with their approval and consent.

"Resolved that it is the considered view of this session of the All-India Muslim League that no constitutional plan would be workable in this country or acceptable to the Muslims, unless it is designed on the following principle—*viz.*, that geographically contiguous units are demarcated into regions which should be so constituted with such territorial adjustments as may be necessary, that the areas in which the Muslims are numerically in a majority as in the north-western and eastern zones of India, should be grouped to constitute "independent states" in which the constituent units shall be autonomous and sovereign.

"The adequate, effective and mandatory safeguards should be specifically provided in the constitution for minorities in these units and in the regions for the protection of their religious, cultural and economic, political, administrative and other rights and interests, in consultation with them; and in other parts of India where the Mussalmans are in a minority, adequate, effective mandatory safeguards shall be specifically provided in the constitution for them and other minorities for the protection of their religious, cultural, economic, political administrative and other rights and interests in consultation with them.

"The session further authorises the Working Committee to frame a scheme of constitution in accordance with these basic principles providing for the assumption finally by the respective regions of all powers such as defence, external affairs, communication, customs and such other matters as may be necessary".

In a nutshell the resolution intended that the provinces of Sind, Punjab, N.W.F.P. and Baluchistan in the north-west region and Bengal in the eastern region, should be constituted into independent states, and there should be no common centre for the Hindustan and Pakistan parts of the sub-continent.

THE BIRTH

From this day onwards, Quaid-e-Azam Jinnah who had become the permanent and undisputed President of the Muslim League, refused to consider any arrangement which did not recognise the validity of the two-nation theory. He explained that Pakistan alone would save Muslims from the tyranny of the Hindu majority in India. The two-nation theory caught the imagination of the Muslim mind and the stronger the Congress objection the more insistent the Muslims became. At the Madras session of the Muslim League in 1941, the Quaid-e-Azam called on the British Government to divide India and establish separate western and eastern zones where Muslims were in majority so that they were free to manage their affairs as they chose while adequate safeguards were to be provided for Muslims in Hindu areas. Later the League declared its opposition to the Cripps proposals which conceded the principle of provincial autonomy partly on the ground that the Congress had already rejected them and partly that they did not go far enough. It was about this time that the Quaid-e-Azam sought to establish League Ministries in provinces where Muslims were in a majority, and except in Sind and N.W.F.P. he quickly succeeded; later Sind also swung into line when Khan Bahadur Allahbaksh, Sind's non-League Premier was dismissed from office, for renouncing his titles.

The "Quit India" movement started by Mahatma Gandhi in 1942 actually gave the Muslim League a new slogan "divide and quit". But efforts were made to find a solution by both Mr. C. Rajagopalachari the Madras Congress leader, and later by Mahatma Gandhi himself, which would meet the League claim for Pakistan without loss of Indian unity. But it was too late. Still a last effort was made by the British Cabinet Mission consisting of Lord Pethwick-Lawrence, Sir Stafford Cripps and Mr. A. V. Alexander to preserve Indian unity. These three formulated a scheme which conceded the substance of the League demand of sovereign autonomous governments in the Western provinces of the Punjab, Sind, N.W.F.P. and Baluchistan, and the eastern provinces of Bengal and Assam, with an All-India federation having only three common subjects of defence, communications and foreign affairs. The League agreed; but the Congress rejected the grouping principle unless the provinces were given the right to opt out of a group, a right which the League would not allow. This again resulted in deadlock and having failed in their last effort to maintain the unity of India the British Government at last decided, with the agreement of the two parties to divide the country. And so a new state called Pakistan came to be established.

Pakistan is the fifth biggest state in the world, and the largest among Muslim states. It is bifurcated into two zones, separated from each other by over a thousand miles—one lying to the north-west of the Indian Union and the other in the east sandwiched between two of India's eastern-most provinces. It comprises Sind, N.W.F.P., Baluchistan and the western part of the Punjab in the west, and the eastern part of Bengal coupled with the Sylhet district of Assam in the east.

PAKISTAN CONSTITUENT ASSEMBLY

The first meeting of the Pakistan Constituent Assembly took place in the Assembly Chamber at 10 a.m. on Sunday August 10. Mr. Liaquat Ali Khan, The Prime Minister proposed and Khwaja Nazimuddin seconded Mr. Jogendra Nath Mandal to be temporary Chairman. Taking the Chair, Mr. Mandal said:

"It is hardly necessary for me to impress on you the gravity and solemnity of the occasion. I hope you will agree with me when I say that the free independent state of Pakistan will bring to one and all citizens, prosperity, happiness and peace. I believe and it is my firm conviction, that the state of Pakistan will be one of the most powerful, resourceful and magnificent states in the world.

"I cannot help expressing on this momentous occasion my gratitude to and admiration of the Muslims of India, for Quaid-e-Azam Mohammad Ali Jinnah, the great creator and architect of the state of Pakistan. I have every confidence that under his able leadership, astute statesmanship, and through his untiring devotion to the cause of Pakistan, all prosperity and happiness will come to the people of Pakistan. It is needless for me to reiterate that Quaid-e-Azam Mohammad Ali Jinnah is the greatest statesman, and one of the greatest men in the world today.

"I would like to point out that not only will the people of Pakistan and India, but the people of the whole world, look to the Pakistan Constituent Assembly and find for themselves that the Muslim community which was determined to acquire their legitimate rights and privileges and determined to have a separate state of Pakistan, will never lack in the quality of doing not only justice and fairness, but acts of generosity towards the people of minority communities."

ELECTION OF PRESIDENT

The election of the President took place the next day.

Quaid-e-Azam Jinnah was proposed and seconded by seven members for the Presidentship and as there was no other candidate, he was declared elected. The President was then congratulated by Messrs. Liaquat Ali Khan, M. A. Khuhro, Abdul Kasem Khan, Begum Shah Nawaz (League), Jogendra Nath Mandal (Depressed Class League) and Kiran Shanker Roy (Congress).

Mr. Liaquat Ali Khan said: "You have been rightly described as the architect of Pakistan and what greater fortune could we have than to have you as the President of this sovereign body to build the State which we have got through your devotion, untiring zeal, selfless service and unshakable determination?"

The Congress leader, Mr. Kiran Shanker Roy, said that having been a dreamer of Pakistan, it was but fair that Mr. Jinnah should also have the privilege of giving shape to his dream and be architect of its constitutional structure. He said that they had the very onerous and responsible task of framing Pakistan's future constitution. They had also to function as a full and complete sovereign body and as the federal legislature of Pakistan.

SOCIAL EVILS

Describing the functions of the new State, the Quaid-e-Azam said:

"The first duty of a government is to maintain law and order, so that the life, property and religious beliefs of its subjects are fully protected by the State. The second thing that occurs to me is this: one of the biggest curses from which India is suffering—I do not say that other countries are free from it, but I think our condition is much worse—is bribery and corruption. That really is a poison. We must put that down with an iron hand, and I hope that you will take adequate measures as soon as it is possible for this Assembly to do so. Blackmarketing is yet another curse. Now you have to tackle this monster too which today is a colossal crime against society in our distressed condition when we constantly face shortage of food and other essential commodities of life".

The Quaid-e-Azam continued: "I know there are people who do not quite agree with the division of India and the partition of the Punjab and Bengal. Much has been said against it, but now that it has been accepted, it is the duty of every one of us loyally to abide by it and honourably act according to the agreement which is now final and binding on all. A division had to take place. In my judgment, there was no other solution, and I am sure future history will record its verdict in favour of it. And what is more, it will be proved by actual experience as we go on that that was the only solution of India's constitutional problem.

"Now if we want to make this great State of Pakistan, happy and prosperous, we should wholly and solely concentrate on the well-being of the people and especially masses of the poor. If you will work in co-operation, forgetting the past, burying the hatchet, you are bound to succeed."

MAJORITY AND MINORITY

"We should begin to work in that spirit and in course of time all these angularities of the majority and minority communities—the Hindu and the Muslim community—because even as regards Muslims you have Pathans,

Punjabis, Shias, Sunnis and so on, and among the Hindus, you have Brahmins, Vishnavas, Khatris, and also Bengalees, Madrasis and so on,—will vanish. Indeed, if you ask me, this has been the biggest hindrance in the way of India's attaining its freedom and independence and but for this we would have been free peoples long ago. No power can hold another nation, and especially a nation of four hundred million souls in subjection. Nobody could have conquered you, and even if it had happened nobody could have continued its hold on you for any length of time but for this. Therefore, we must learn a lesson from this. You are free, free to go to your temples, you are free to go to your mosques or to any other places of worship in this State of Pakistan. You may belong to any religion, or caste or creed—that has nothing to do with the business of the State. We are starting with this fundamental principle that we are all citizens and equal citizens of one State."

In conclusion, the President said: "I shall always be guided by the principles of justice and fairplay, I am sure that with your support and co-operation, I can look forward to Pakistan becoming one of the greatest nations of the world."

The President then read the goodwill message he had received from the United States of America which hoped that the Constitution which the Pakistan Assembly would present to the world would reflect the steadfast devotion of its leaders to the principles of democracy and peace.

NATIONAL FLAG

Moving the resolution on the National Flag of Pakistan, Mr. Liaquat Ali Khan said that it was three fourth green with inset of Crescent and Star, and one fourth white at mast end. He then unfurled it before the House saying that it would stand for freedom, liberty and equality. "This flag will protect and defend the integrity of the State. We have been exploited for the last two hundred years and we should be the last people to use our flag for the purpose of exploiting other nations. Therefore, this flag of freedom will not only be for the people of Pakistan; this flag will be an emblem of peace to help in maintaining the peace of the world."

Then the West Punjab Congress member, Mr. Bhim Sen Sachar, asked the President whether he would be permitted to address the House in Hindustani. The President ruled that the language of the House was English, unless any member was unable to express himself adequately in English. Speaking in English, Mr. Sachar suggested a Committee of seven members to determine the design of the flag and report by next morning as the flag presented to the House by Mr. Liaquat Ali Khan did not have the previous approval of the minorities concerned.

The mover Mr. Liaquat Ali Khan, explained that as they had to have a flag on Pakistan Dominion Day (August 14) and as the time factor was important, he could not consult all members including even Muslim members. He pointed out that the white portion stood for the minorities. He asked the mover not to press his amendment. The mover however pressed the amendment which was negatived. The original motion on the flag was then accepted.

The President nominated the following members on the panel of Chairmen: Mr. Tamizuddin Khan, Dr. Omar Hayat Malik, Khan Sardar Bahadur Khan and Kiran Shanker Roy.

No division was called during the session.

COMMITTEES

The following members were elected to serve the Committee on Rules of Procedure:

Mr. M. H. Gazdar, Mr. Dhirendranath Datta, Khan Sardar Bahadur Khan, Mr. Tamizuddin Khan, Mr. Nur Ahmed, Mr. Nazir Ahmed Khan and Lala Avatar Narain Gujral. The Hon'ble Mr. Ismail Chundrigar was appointed Chairman of the Committee.

The Assembly then resolved to appoint the following Committee to advise the Assembly on Fundamental Rights of Citizens of Pakistan and on matters relating to the minorities with powers to the President to nominate not more than seven other members who need not be members of the Constituent Assembly.

Sardar Abdur Rab Nishtar, Dr. Mahmood Hussain, Mr. Bhim Sen Sachar, Mr. M. A. Khuhro, Sheikh Karamat Ali, Prof. Rajkumar Chakravarty, Hon'ble Ghazanfarali Khan, Mr. Prem Nari Barma, Hon'ble Fazlur Rahman, Begum Shah Nawaz, Mr. Bhirat Chandra Mandal, Dr. Ishtiaq Hussain Quereshi, Mr. Abdul Kasim Khan and the Hon'ble Jogendra Nath Mandal.

The Assembly passed a resolution moved by Sardar Abdur Rab Nishtar authorising the President to set up a Committee in such a manner as he may from time to time determine for the purposes of negotiating with representatives of Indian States, Tribal Areas, Excluded Areas and Partially Excluded Areas, regarding their participation and representation in the Constituent Assembly.

KING'S MESSAGE

On August 14, the Governor-General of India, Lord Louis Mountbatten, having arrived in procession with the President of the Constituent Assembly of Pakistan, Quaid-e-Azam Jinnah took his seat. His Excellency read out His Majesty the King's message which stated.

"I send you my greetings and warmest wishes on this great occasion when the new Dominion of Pakistan is about to take its place in the British Commonwealth of Nations. In thus achieving your independence by agreement, you have set an example to all freedom loving people throughout the world.

"I know that I can speak for all sections of opinion within the British Commonwealth when I say that their support will not fail you in upholding democratic principles. I am confident that the statesmanship and spirit of co-operation which have led to the historic developments you are now celebrating, will be the best guarantee of your future happiness and prosperity.

"Great responsibilities lie ahead of you and your leaders. May the blessing of the Almighty sustain you in all your future tasks. Be assured always of my sympathy and support as I watch your continuing efforts to advance the cause of humanity."

LORD MOUNTBATTEN'S PLEA

His Excellency Lord Mountbatten said: "Tomorrow two new sovereign states will take their place in the Commonwealth; not young nations but heirs of old and proud civilisations: fully independent states whose leaders are statesmen already known and respected throughout the world, whose poets and philosophers, scientists and warriors have made their imperishable contributions to the service of mankind; not immature governments or weak, but fit to accept their great share of responsibility for the peace and progress of the world."

"The birth of Pakistan is an event in history", added His Excellency, and went on to pay a tribute to Quaid-e-Azam Jinnah, the Pakistan Governor-General. He said: "All this has been achieved with toil and sweat. I wish I could say also without tears and blood, but terrible crimes have been committed. It is justifiable to reflect however that far more terrible things might have happened if the majority had not proved worthy of the high endeavour of their leaders, or had not listened to that great appeal which Mr. Jinnah and Mahatma Gandhi together made and which the respective future governments reiterated in a statement in Partition Council. The two governments declared that it is their intention to safeguard the legitimate interests of all citizens irrespective of religion, caste or sex. Both Governments further undertook that there shall be no discrimination against those who, before August 15, may have been political opponents. The honouring of these words will mean nothing less than a charter of liberty for a fifth of the human race."

Striking a touching note, Lord Mountbatten said: "This is a parting between friends who have learned to honour and respect one another, even in disagreement. It is not an absolute parting, I rejoice to think, not an end of comradeship. Many of my countrymen for generations have been born in this country, many lived their lives here; and many have died here. Some will remain for trade and commerce; and others in Government service, and in the Armed Forces who count it an honour they have been invited to serve you. During the centuries that British and Indians have known one another, the British mode of life, customs, speech and thought have been profoundly influenced by those of India, more profoundly than has often been realised".

AKBAR'S RULE

His Excellency then reminded the audience of Akbar's rule whose reign was marked by perhaps as great a degree of religious and political tolerance as has ever been known before or since. "Akbar's tradition has not always been consistently followed by British or Indians, but I pray for the world's sake, that we will hold fast, in the years to come, to the principles that this great ruler taught us. May Pakistan prosper always. May her citizens be blessed with health and happiness. May learning and the arts of peace flourish in her boundaries, and may she continue in friendship with her neighbours and with all nations of the world," Lord Mountbatten concluded.

The President requested the Governor-General to convey to His Majesty the King an assurance of the goodwill and friendship of Pakistan for the British nation and His Majesty as the crowned head of the British Government.

"I thank your Excellency for your expressions of goodwill and good wishes for the future of Pakistan," said the Quaid-e-Azam. "It will be our constant effort to work for the welfare and well-being of all communities in Pakistan. The tolerance and goodwill that the great Emperor Akbar showed to all the non-Muslims is not of recent origin. It dates back thirteen centuries ago when our Prophet not only by words but by deeds treated the Jews and Christians handsomely after he had conquered them. He showed to them the utmost tolerance and regard and respect for their faith and beliefs. The whole history of Muslims, wherever they ruled, is replete with those humane and great principles which should be followed and practised by us."

FRAMING OF CONSTITUTION

Although preliminary preparations have been made, the Pakistan Constituent Assembly has not yet undertaken the actual framing of the Dominion constitution despite the fact that it is eight months since Pakistan was established.

Two unexpected developments have caused delay; firstly, preoccupation of both the Government and the people with the many-sided problems of rehabilitation and resettlement of refugees; and secondly, the unsettled condition involved in the mass exchange of population between the two Dominions.

Quaid-e-Azam Jinnah, Pakistan's Governor-General at a function held in honour of the Prophet's birthday at the end of January 1948, indicated that the future constitution of Pakistan would be based on Islamic principles and minorities would be treated justly, fairly and even generously. Speaking again at the Royal durbar at Sibi on February 14, the Quaid-e-Azam revealed that "It may take 18 months or two years before the final constitution of Pakistan, framed by the Constituent Assembly, can come into operation."

Meanwhile, in order to enable the Pakistan Governor-General to run the administration and meet emergencies, the Pakistan Assembly at its last session passed a bill amending the Indian Independence Act providing for extension of the period of adaptation which ended in March this year by a further period of one year.

During the three-day session when the Assembly met as a constitution-making body on February 24, 25 and March 2, it passed the report of the Committee on rules of procedure. The Committee made several departures from the Indian Central Assembly rules which however formed

the basis of its report. It was decided to have no Speaker but only a Deputy President as Quaid-e-Azam was already President. Mr. Tamizuddin Khan, a former Minister of undivided Bengal and a politician of vast parliamentary experience was elected by the House unanimously as its Deputy President.

REDISTRIBUTION OF SEATS

The second important decision taken during the session was in regard to redistribution of seats in the Assembly necessitated by the mass exchange of population that had taken place since the June 3 plan was announced. The composition of the present Assembly, which has a seat for every million of population, is as follows: East Bengal including Sylhet 44 seats (31 Muslim and 13 general); West Punjab 17 seats (12 Muslim, 3 general and 2 Sikh); Sind 4 (3 Muslim, and 1 general); North-West Frontier 3 (all Muslim); and Baluchistan 1 (Muslim) making a total 69 seats.

Since the last session, a majority of non-Muslims of the West Punjab have migrated followed by their representatives in the Pakistan Assembly. Mr. Jairamdas Daulatram elected from the Sind general seat resigned from the Assembly last September. In East Bengal, Mr. Kiran Shanker Roy, leader of the Congress party in Pakistan, resigned his seat and went to West Bengal. There has been an unprecedented exodus of non-Muslims from Western Pakistan and, moreover, the Muslim population in the West Punjab has increased by two millions, according to official estimates. On March 11, the Quaid-e-Azam issued an order which enabled former members of the Punjab Assembly belonging to East Punjab becoming members of the West Punjab Assembly.

The Pakistan Constituent Assembly appointed a committee with Mr. Ghazanfarali Khan, Pakistan Minister for Refugees, as Chairman and Begum Shah Nawaz, Kwaja Shahbuddin, Mr. M. A. Khuhro (Sind Premier) and Congressman Mr. Dhirendranath Datta as members to consider the question of addition and/or redistribution of seats in the Assembly and report their conclusions by April 1, 1948. Meanwhile, the Pakistan Government took a census of the population also. A questionnaire was also issued asking the public to suggest how best representatives of refugees could be chosen without violating the principle of the British Cabinet Mission's plan on which the present Assembly is based. The public was asked in the course of the questionnaire whether after necessary modifications in the existing rules, the representatives of refugees should be nominated by the Quaid-e-Azam.

While the position of Hindu and Sikh representatives has become anomalous with the migration of most of their constituents in West Punjab and Sind, the Pakistan Assembly Committee has to consider whether some representation should not be given to other smaller but influential minorities like the Parsis, the Anglo-Indians or Indian Christians. If each of these minorities cannot get a seat by strength of number, the Committee has to find a device whereby they could separately or jointly get representation.

While it is impossible to forecast the nature of the recommendations, it is obvious that Western Pakistan will get much more Muslims representation than it has at present in the Assembly.

Another important step by the Pakistan Assembly during the budget session was to amend the Government of India Act in order to transfer certain items (including the sales tax) from provincial schedule to the Centre. This was necessary as the Pakistan Government, after consulting Provincial Governments, has decided to share the revenue from the sales tax among themselves.

COMMITTEES

The Constituent Assembly has also appointed a number of committees to deal with tribal areas, States acceding to Pakistan, fundamental rights and rights of minorities in order to prepare the ground for constitution-making as early as possible.

According to Pakistan's interpretation of the British Cabinet Mission plan, all the States whatever their geographical position or the character of their population were given the option to accede to either of the Dominions. This is the main reason why Pakistan approved of the accession to Pakistan of Junagadh, which is situated in Kathiawar, and has a Hindu majority and Muslim ruler. Both Junagadh and Manavadar are expected to get a seat. Other States which have joined are Bahawalpur, Khairpur, Dhir, Swat, Chitral, Kharan, Las Bela and Kalat, but the method and manner of their representation has to be determined by the committee appointed for the purpose of negotiating with tribal areas and people.

The following are the personnel of the States Negotiating Committee, the Tribal Areas Negotiating Committee and the Fundamental Rights Committee respectively:

STATES: Mr. Liaquat Ali Khan (Chairman), Mr. Ghazanfarali Khan, Sardar Abdur Rab Nishtar, Kwaja Shahabuddin and Pir Illahibaksh.

TRIBAL AREAS: Mr. Liaquat Ali Khan (Chairman), Sardar Abdur Rab Nishtar, Sardar Aurangzeb Khan, Sardar Bahadur Nawab Mohamad Khan Jogezai, Prof. L. K. Hyder, Pir Sahib of Manki Sharif and Kwaja Nazimuddin.

FUNDAMENTAL RIGHTS AND MINORITIES RIGHTS COMMITTEE: C. E. Gibbon (Anglo-Indian leader in Pakistan), Dewan Bahadur S. P. Singha (Indian Christian leader), Sir Mohamad Zafrullah (Pakistan Minister for Foreign Affairs), Mr. Jamshed Nusserwanji (leader of Parsi community in Karachi), Chaudhri Nazir Ahmed Khan, Kwaja Shahbuddin and Babu Phani Bhushan Barua (members of the Pakistan Constituent Assembly).

TRIBUTES TO MAHATMA

Meeting for the first time since the establishment of Pakistan as legislative body, the Pakistan Assembly held 12 sessions from February 23 to March 12 during which it considered and passed the first budget of the new Dominion, passed six official bills, appointed 17 advisory committees and asked 218 questions.

On the opening day, with the Quaid-e-Azam in the chair, the Assembly made brief references to the passing away of Mahatma Gandhi which members said was an irreparable loss to India and Pakistan at the present juncture. Mr. Liaquat Ali Khan, leader of the House, said that Gandhiji was one of the greatest men of our times and the prominent place which the Congress Party enjoyed was due mostly if not entirely to him. He hoped that Gandhiji's mission of establishment of peace and communal harmony which could not be realised in his life-time would be achieved after his death.

The Premiers of Eastern Pakistan, Sind and the Finance Minister of West Punjab and the leader of the Congress Party in the Pakistan Assembly also paid their tributes to Gandhiji. The President, Quaid-e-Azam who shared the sorrow associated himself with the tributes paid to his greatness said: "Mr. Gandhi was a man of principle and died a noble death in the discharge of his duty."

PAKISTAN'S FIRST BUDGET

On February 28, the Pakistan Finance Minister Mr. Ghulam Mohamad presented the budget to Parliament. The budget included the railway income and expenditure as follows:

	(in lakhs Rs.) 1947–48	1948–49
GROSS REVENUE:		
Principal heads of revenue ..	17,37	31,20
Railways and Posts and Telegraphs	20,10	36,89
Other heads	5,32	11,48
TOTAL ..	42,79	79,57
GROSS EXPENDITURE:		
Defence Services	34,24	37,11
Railways and Posts and Telegraphs	22,15	37,15
Other Expenditure ..	9,81	15,42
TOTAL ..	66,20	89,68
DEFICIT	—23,41	—10,11
Effect of taxation proposals	+ 40	+10,16
FINAL POSITION ..	—23,01	+ 5

During the current year, the loss on Pakistan railways was estimated at Rs. 150 lakhs but next year there would be a small surplus.

Lack of industrial development (a legacy of the past), two million refugees in excess of evacuees from Pakistan, disruption of banking and insurance, disproportionately heavy burden of defence expenditure and loss on working of strategic railways and heavy responsibility of maintaining proper defence arrangements on a long frontier were some of the factors which the Finance Minister had to take into account in the preparation of his budget.

Striking a note of optimism, the Finance Member emphasized: "Our future lies in tapping the vast natural resources of Pakistan which are simply waiting to be harnessed. We have been endowed by Nature with abundant resources and it is now up to us to exploit these resources and to use them for the happiness and welfare of our people. The development of industry offers vast possibilities both in view of Pakistan's natural resources as also the existence of a large and ready demand for consumers goods."

The Finance Minister revealed that Pakistan would go to the outside world to obtain substantial capital, capital goods and adequate technical skill as that was the only way in which Government could effectively reconstruct the economic and financial life of Pakistan.

FINANCES

The Finance Minister said that India had paid Rs. 50 crores out of Rs. 55 crores of Pakistan's share of cash balances. He hoped that the balance and other aspects of Indo-Pakistan financial agreement would be implemented. He also referred to Anglo-Pakistan sterlings balances settlement as a result of which Pakistan started its carrier with £20 million as her share of releases up-to-date. He thought that £3.3 million set apart for conversion to dollar and other hard currencies fell short of Pakistan's requirements and so he had to cut down their imports from hard currency countries.

The Finance Minister also revealed the proposal for the establishment of a State Bank for Pakistan with a total paid-up capital of Rs. 3 crores of which 51 per cent would be taken out by the State and 49 per cent. would be open to public subscription. He said that the State Bank would be open as soon as negotiations now being conducted with India are completed.

Other features of the budget speech were: a provision of Rs. 10 crores for loan to Provincial Governments in the estimates for 1948-49; grant of 1.5 crores to Sind, West Punjab and North-West Frontier for refugee relief; setting up of a refugee rehabilitation corporation with a capital of Rs. 3 crores of which the Centre would subscribe Rs. 1 crore; revision of the allocations of revenue between Centre and Provinces in the light of the new set-up; setting up of an industrial finance corporation to assist industry; grant of five lakhs for scheduled classes' education, and Rs. 10 lakhs for tribal areas and one lakh for an academy to be named after Sir Mohamad Iqbal.

NEW TAXES

The Finance Minister also hinted at a rational readjustment of the entire tax structure. He also referred to the appointment of a Pay Commission for Pakistan to fix scales of pay for all cadres of Pakistan Government servants in the light of the requirements of the State and commensurate with the revenues of the Dominion.

The following were the new taxation proposals announced by the Finance Member to cover the deficit:

(1) Central sales tax (after giving a share to the provinces) Rs. 375 lakhs; (2) Cotton export duty at Rs. 60 per bale yielding Rs. 2 crores; (3) 10 per cent *ad valorem* export duty on hides and skins to yield Rs. 80 lakhs; (4) 10 per cent *ad valorem* export duty on cotton seeds to yield Rs. 30 lakhs; (5) Increased import duty on sugar (Rs. 20 per cwt.) and sugar-candy (Rs. 21 per cwt.), increased import duty on boots and shoes (40 per cent), further surcharge on duties on beer, wines and spirits, tobacco, cigars and cigarettes, motor cars, wireless sets, with higher charges on more expensive goods, altogether yielding Rs. 135 lakhs; (6) Import and excise duty on kerosene to be raised from three annas to four annas per gallon, and immediate increase in petrol tax from 12 annas to 15 annas per gallon, (this may go up to Rs. 1-2-0 per gallon but combined provincial and central taxes will not exceed Rs. 1-2-0) together expected to yield Rs. 50 lakhs; (7) Increase in Hookah tobacco excise duty from 3 annas to 6 annas per pound, biri tobacco from nine annas to 12 annas per pound, and betul nut duty two annas per pound, all these duties yielding Rs. 120 lakhs; (8) Post card to cost nine pies instead of half an anna, postal packets to cost one anna instead of nine pies for the first five tolas and 6 pies instead of 3 pies for additional 2½ tolas, airmail fees raised from one anna to one and half anna per tola on letters and six pies to nine pies on post cards, all yielding Rs. 26 lakhs.

The Finance Minister said that prospects of estate duty on both agricultural and non-agricultural property were being explored.

CONCESSION TO INDUSTRY

Announcing his concessions to new industries to give a fillip to industrialisation in Pakistan, Mr. Ghulam Mohamad said that for five years new industrial undertakings would be exempt from direct taxation on profits not exceeding 5 per cent. In order to attract new industries from abroad, he said that besides initial depreciation of 15 per cent on new buildings, a special depreciation of 20 per cent for another five years would be permitted on machinery and plant brought into use for the first time in Pakistan even if it had been previously used elsewhere.

When the general debate took place on March 1, Mr. Ghulam Mohamad was congratulated on presenting the State's first budget which far from being a deficit one actually showed a surplus. By March 6, only 14 demands out of 63 had been voted and so the rest of the grants had to be passed by guillotine.

The budget was finally passed on March 8, and the bill to give effect to the financial proposals as from April 1, 1948 were also passed into law. In the same session the Finance Minister introduced a Bill to further amend the Income-tax, Excess Profits Tax and Business Profits Tax Acts.

The first division in the Pakistan Parliament took place over a resolution of the Commerce Minister, Mr. Ismail Chundrigar, to extend for a year the Pakistan Government's control over eight essential commodities. As only the Congress Party opposed it, it was passed by 19 votes against 6. There was however strong criticism from all parts of the House on the way controls were being administered in Pakistan resulting in alleged corruption, profiteering and black-marketing. The Commerce Member admitted that the controls were considered irksome by all and that he would shortly convene a conference of Provincial Government representatives and non-officials connected with trade to decide which of the articles could be freed from restrictions. He assured the House that controls would not be maintained a day longer than necessary.

The House also passed the Sales Tax Bill and a Bill to amend the Railways Transport of Goods Act of 1947 on March 11. The last day of the session saw the members voting an allowance for themselves at the rate of Rs. 45 per diem for days each of them attended the session or committees.

The House then adjourned *sine die* after appointing the following committees for association with administrative departments concerned such as Standing Advisory Committee for the Ministry of Law and Labour; Standing Committee on Pilgrimage to Hejaz; Advisory Committee for the Ministry of Interior, Information and Education; Committee to review organization, structure, and the level of expenditure of Ministries, and Departments, etc. (See personnel for a full list of the Committees).

AREA, POPULATION AND RESOURCES

The Dominion of Pakistan comprises two stretches of territory one situated to north-west of the Indian Union and the other in the east of it, separated from each other by a distance of over 1,000 miles. The total area of Pakistan is 233,000 square miles approximately, or 14.7 per cent of former British India plus the Indian States.

The area of Western Pakistan comprising West Punjab, North-West Frontier Province, Sind and Baluchistan is 179,000 square miles, while the area of Eastern Pakistan comprising Eastern Bengal and the district of Sylhet, amalgamated to it as a result of the Radclyffe Award, is 54,100 square miles.

The population of Pakistan, as it existed on August 15, 1947, was 65.6 millions of which 47.8 millions are Muslims. Western Pakistan had 23.8 millions of which 18.2 millions were Muslims, while Eastern Pakistan had 41.8 millions of which 29.6 millions were Muslims. As a result of mass exchange of populations in the two parts of the Punjab and the continued exodus from Sind, North-West Frontier, Baluchistan and East Bengal of Hindus, the whole population complexion has changed since the Dominion was established. In the West Punjab, for instance, there are today 2 million more Muslims than there were before the partition of that province while practically 2 million Sikhs and considerable percentage of the Hindu population have migrated from there to East Punjab. In Sind also, out of a population of 14 lakhs of Hindus, over 6 lakhs have left that province for India and it is expected that the majority of Hindus will leave Sind. From East Bengal, about 40 lakhs of Hindus are reported to have migrated to West Bengal. Thus the Sikh and Hindu percentage has been substantially reduced while that of Muslim in all these provinces has proportionately increased.

The Pakistan Constituent Assembly appointed a committee with the Pakistan Refugee Minister, Mr. Ghazanfarali Khan as chairman, to study the nature and complexion of the existing population, on the basis of census figures collected by the Pakistan Government recently, and report to the Assembly by April as to how redistribution of seats in the Assembly should be effected so as to do justice to the areas as well as communities concerned. According to the Cabinet Mission's plan, there should be a seat for every million of population. Although the final conclusions of this committee cannot be anticipated, Punjab's Muslim strength in the Constituent Assembly would definitely be increased as a result of any consequent change in the composition of the Assembly.

AN AGRICULTURAL COUNTRY

Pakistan is essentially an agricultural country. According to 1938-39 figures, the total sown area in Pakistan was 43.9 million acres as against 209.4 million acres sown in British India. The percentage of the Pakistan area to that of India was 20.9.

Food Crops.—The two main food crops of Pakistan are wheat and rice and cash crops cotton and jute. Rice is the staple food of East Bengal while wheat is the staple food of Western Pakistan. Wheat is cultivated mostly in Western Pakistan and rice in almost all parts of the Dominion. The total area under rice in 1944-45 was 25.6 million acres as against 78.8 million acres in India. Pakistan produced 8.9 million tons of rice which is 33.7 per cent of the total Indian yield. Sind produces 5 lakhs tons of rice of which in normal years it can export 200,000 tons. West Punjab has an exportable surplus of about 150,000 tons of the total production of 430,000 tons. In 1944-45, the total rice yield in Eastern Pakistan was 79,00,000 tons.

The wheat area in 1944-45 was 9.9 million acres as against 26.9 million acres in British India. Pakistan areas yielded in the same period 35,00,000 tons of wheat against a total production of 85,00,000 tons in British India.

Other cereals produced in Pakistan are gram, barley, jowar and bajra. Sind and West Punjab export about 128,000 tons of gram every year and 20,000 tons of other cereals.

In both East Bengal and West Punjab perennial rivers feed the cultivable land through a network of canals. Eastern Pakistan has also considerable rainfall. In Sind, where rainfall is scanty cultivable area is being extended by building barrages across the Indus river. Already with the Sukkur (Lloyd) Barrage system, about six million acres of waste land have been brought under cultivation; two more barrages, one in Lower Sind and the other in Upper Sind would bring six more million acres under cultivation when they are completed, although it would take at least five more years before cultivation can start. It is therefore clear that from the point of view of food, Pakistan is not only self-sufficient but will be able to export considerable portion of its food grain. Pakistan has also oilseeds, the 1944-45 yield being 245,500 tons.

Jute and Cotton.—The golden fibre of Bengal, raw jute, is largely produced in Eastern Pakistan. According to 1946-47 figures, the area under jute in Pakistan is 1,358,800 acres out of a total of 1,880,000 acres in India, which means that just over 72 per cent of Indian jute is produced in the new Pakistan Dominion. The present yield of raw jute is estimated at 7,000,000 bales (one bale being equal to 400 lbs.) forming 75 per cent of world production. Pakistan's main handicaps have been lack of presses as jute mill industry is mostly located in Calcutta and its suburbs, and the limited capacity of Chittagong, but both these handicaps are being overcome by immediate procurement of presses and topmost priority being given to the expansion and development of Chittagong as a major port of Pakistan.

Pakistan's cotton comes from West Punjab and Sind, and also from North-West Frontier Province to some extent. The area under cultivation in Western Pakistan in 1944-45 was 20,50,000 acres and the yield 1,210,000 bales. Sind which produced only 50,000 bales in 1934 increased its share to 460,000 bales in 1944. In 1946-47, the total yield of cotton in Pakistan was 1.7 million bales. The best varieties of Indian cotton like the Sind and Punjab, American are produced in Pakistan. These are long staple cottons with staple one inch long, but Pakistan also produces medium variety. The total value of cotton produced during 1946-47 is about Rs. 45 crores. As a result of dislocation and disruption of rural economy in Sind and West Punjab due to the exodus of Hindus who mainly controlled this business, full benefit of these cash crops could not obviously be realised in the first year of Pakistan's existence, but when things become normal, the authorities hope to produce much more cotton and get better revenue.

Out of the exportable surplus of Pakistan cotton, India would normally require about a million bales of Americans for its cotton mills. Till Pakistan establishes its own cotton mills, most of this would be available for India.

Tea and Tobacco.—According to the 1944 figures, the area in Eastern Pakistan under tea cultivation was 80,000 acres yielding 4,199,000 lbs. After taking into consideration Pakistan's future productive capacity, it is estimated that Pakistan can export about 30 million lbs. of tea every year.

The latest figures for cotton are not available. In 1938-39 Pakistan produced about 156,000 tons of tobacco.

INDUSTRIES

Pakistan is essentially an agricultural country, but its Government is determined to develop the country industrially too. At the time of partition 16 textile mills, 9 sugar mills, 5 cement factories

4 glass factories and one woollen factory were located in Pakistan territory. The Industries Conference which was held in the second week of December under the chairmanship of the Commerce Minister, Mr. Ismail Chundrigar, selected 27 industries which should be under the Centre for development. Among these the armament industry, the railways, the posts and telegraphs, and broadcasting and hydro-electric power would be State-owned. The Minister said that the question of state ownership of the coal industry, of the road and air transport and waterways services would also have to be considered, but air transport would for the time being be under private enterprise with partial government control and supervision. All mineral and oil rights must vest in the State.

An Industrial Financing Corporation is being set up to assist industries. The Pakistan Finance Minister has formulated his taxation plans in his first Dominion budget in such manner as to induce capitalists to come forward and establish factories in Pakistan. He also made it clear that Pakistan would have to go to the outside world for getting substantial capital and technical skill in order to carry out these industrial schemes. Employment of foreign capital in industries will be controlled only to secure some participation of Pakistan nationals both in capital structure and management.

The Sind Government have established an industrial trading estate in Karachi estimated to cost over 12 crores of rupees in the West Wharf area. They have sanctioned Rs. 25 lakhs this year for its initial development and among the industries to be established there are a shipbuilding yard, textile mills and factories for making small steel tools and chemicals. Similar estates would be established at Hyderabad and Sukkur. These are based on British industrial estates which were established in the United Kingdom after the first world war to fight depression and unemployment.

MINERALS

Pakistan's mineral resources are stated to be considerable although they still have to be developed. Petroleum is known to exist in West Punjab, Sind, Baluchistan and parts of East Bengal. There are two large petroleum refineries in West Punjab.

Large deposits of salt and gypsum are to be found in West Punjab, while coal, sulphur, chromite and other minerals are also stated to exist. At present, Pakistan suffers from deficiency in coal. During 1944 the coal production of the area now included in Pakistan was 230,000 tons. Coal was discovered in Chittagong and Peshawar some time ago and their quality is being investigated by experts. In 1944, Punjab produced 5,100 tons of saltpetre. In the same year, petroleum amounted to 15,157,100 gallons from the two producing zones in West Punjab. In Sind investigations by the Burma Oil Concessions are in full swing at Lakhra in the interior and in Karachi district. There is a big salt factory at Khewra which has a producing capacity of 92,000 tons a year.

TRADE

Karachi and Chittagong are the main ports of trade for Pakistan. The port of Chittagong is being developed to handle a vast jute trade. During the year 1946-47, goods to the value of 42 crores were exported through Karachi which included cotton, wheat, rice, hides and skins, and oilseeds. Among the importing countries were Great Britain, the United States, China, Afghanistan, Belgium, Italy, Iran and Canada. During the same period the total value of imports entering through Karachi was Rs. 48.8 crores. Peshawar is the post for export and import to Afghanistan.

SIR A. ROWLANDS' VIEW

This review of the area and resources of Pakistan would not be complete without some reference to the report which Sir Archibald Rowlands, former Finance Member of undivided India, submitted to Quid-e-Azam Jinnah, after three months' study.

Sir Archibald expressed great optimism about the economic future of Pakistan. He said: "Pakistan is an agricultural country. But so was Canada, Australia, Argentina, and even the United States at one time. Pakistan has great natural resources which can be developed in the same way as other western countries have done. Pakistan starts on its career with four great advantages. Firstly, it has an active and robust people. It has a compact and stable political structure which, unlike many other neighbouring countries in similar position, is free from fissiparous tendencies. It has plenty of food for its people. It has a favourable balance of trade."

Referring to Pakistan's handicaps, Sir Archibald said: "It has no industries. Though it produced 73 per cent of the total jute crop of India, it had not a single jute mill. Similarly though Pakistan produced one-third of the Indian cotton—a lot of long staple too—it had only one-thirtieth of total textile mills in the Indian sub-continent. In hides and skins again, though Pakistan's share of raw products was very high, it had no tanneries. Besides the absence of other industries, the capital resources were limited because of its agricultural character. There was then shortage of skilled labour, lack of managerial experience as well as lack of political experience. All this leeway had to be made up."

He said that the safest base on which future industrial economy of the country could be built was round its natural resources. Jute mills, textile mills and tanneries were the obvious industries which could be started fruitfully immediately. The secondary industries would follow. The country could attract sufficient foreign capital for industrialisation.

Declaring that the value of national currency was determined by internal purchasing power and balance of international trade, Sir Archibald Rowlands said that both these factors were in favour of Pakistan. Pakistan moreover with its surplus raw products was assured of a favourable position for a long time to come.

Emphasizing the need for industrialisation again, Sir Archibald said "Pakistan has to industrialise itself and industrialise it must, if it wants to survive." Till the country was sufficiently industrialised to bring in additional sources of revenue, he added, Government would have to tap agricultural sources.

It may be mentioned that much of Sir Archibald Rowlands' suggestions have been in some way or other utilised by the Pakistan Government in their administrative policy, and even the first budget was prepared with Sir Archibald Rowlands' report as its background.

PAKISTAN GOVERNMENT AT WORK

Soon after the decision to establish the Pakistan capital at Karachi was taken by Quaid-e-Azam Jinnah in response to the invitation of the Sind Government, a batch of engineers arrived from New Delhi in the middle of July last year and prepared the lay-out of the Central Pakistan Secretariat. The Sind Government shifted their offices to the militray barracks in the outskirts of the city in order to make room for the Pakistan Central Government offices. It was decided that these offices should be distributed in the main Sind Assemby building, the Chief Court building facing it and the P.W.D. building further behind; and in order to supplement accommodation, a number of hutments were built with lightning speed adjacent to these main offices. The first team to reach Karachi from New Delhi was the staff of the Pakistan Constituent Assembly who had to get ready for the opening of the Assembly on August 13, 1947.

Quaid-e-Azam Jinnah took his residence at Government House, former residence of the Sind Governor. A few special trains brought from Delhi Pakistan personnel with their records in the following week. Mr. Liaquat Ali Khan was in charge of the arrangements both for running the administration and for conducting the business of the Constituent Assembly smoothly and efficiently.

ORIGINAL CABINET

As has been mentioned before Mr. Jogendra Nath Mandal, the Scheduled Castes leader in Pakistan, presided over the historic opening session of the Pakistan Constituent Assembly on August 13. Later Quaid-e-Azam Jinnah was unanimously elected President of the Constituent Assembly.

On August 14, both Quaid-e-Azam and Lord Mountbatten arrived in procession to the Assembly when the transfer of power was implemented. In conveying the King's message to Pakistan and its people, Lord Mountbatten wished all peace, progress and prosperity to them. The next day, Quaid-e-Azam was sworn-in as the Governor-General of Pakistan at Government House by the Chief Justice of the Lahore High Court, the Hon'ble Mr. Justice Abdul Rashid. Thereafter Quaid-e-Azam swore-in his first Cabinet of ministers as follows:

Mr. Liaquat Ali Khan, *Prime Minister in Charge of Foreign Affairs, Commonwealth Relations and Defence.*

Mr. Ismail Chundrigar, *Minister for Commerce, Industry and Works.*

Mr. Ghulam Mohammad, *Minister of Finance.*

Sardar Abdur Rab Nishtar, *Minister of Communications.*

Mr. Ghazanfarali Khan, *Minister of Food, Health and Agriculture.*

Mr. Jogendranath Mandal, *Minister of Law and Labour.*

Mr. Fazlur Rahman *Minister of Interior, Information and Education.*

Simultaneously with the ceremony at Government House in Karachi, the following Governors of provinces were also sworn-in in their respective capitals:

Mr. Ghulam Hussain Hidayatullah, *Governor of Sind.*

Sir Francis Mudie, *Governor of West Punjab.*

Sir George Cunningham, *Governor of North-West Frontier Province.*

Sir Frederic Bourne, *Governer of East Bengal.*

Taking the earliest opportunity after the birth of Pakistan to enunciate the new Dominion's foreign policy, Mr. Liaquat Ali Khan said that it would be governed by "unreserved co-operation with the United Nations in every possible way in the great task of stabilising world peace."

A week later, the Boundary Commission under the Chairmanship of Sir Cyril Radcliffe published their award regarding partition of the Punjab and Bengal and marking the new frontiers of Pakistan and India. Serious repercussions occurred scarcely two days after this historic announcement. Although the Prime Ministers of Pakistan and India had jointly issued a statement that whatever the cost, peace and order would be restored, mass murders took place in the Punjab on an unprecedented scale. Quaid-e-Azam Jinnah himself flew to Lahore thirteen days after he assumed the leadership of the new State to study the situation on the spot. A series of inter-Dominion conferences took place at Lahore, but the communal poison had gone so deep that murder, arson, rape, loot and lawlessness went on for days together. Undaunted both the Governments struggled hard and succeeded in effecting as peaceful a mass exchange of population as was possible under the circumstances.

THE SECRETARIAT

Meanwhile a Cabinet Secretariat was being built up at Karachi with Mr. Mohamad Ali as the Secretary-General. As it was impossible to transport the urgently needed Pakistan personnel by train across the stricken Punjab, the Pakistan Government decided to bring by air the most essential among them. The British Overseas Airways Corporation carried out this unique operation so efficiently that India too sought their help for a similar mission of mercy. About 7,000 Pakistan personnel including their families were brought in British aircraft from New Delhi to Karachi.

Accommodation being limited, the Government of Sind had to requisition some of the buildings to house officers of the Pakistan Central Secretariat. A number of colonies also sprang up in

the outskirts of the city for accommodating clerks and other lower grade staff. Still many are forced to live even to this day either in public institutions or tents.

With the Prime Minister's preoccupation with the inter-Dominion conferences at Lahore and New Delhi, two far-reaching developments necessitated the expansion of the Pakistan Cabinet at the end of the year. The accession to Pakistan of Junagadh, a small state in the heart of Kathiawar with a Muslim ruler, in October, led to a controversy about the conditions in which Indian States could accede to either of the Dominions. The other problem was that of rehabilitation and resettlement of refugees, a problem which had assumed gigantic proportions. Sir Mohamad Zafrullah, who had returned from the United Nations after representing Pakistan at the discussion of the proposal to partition Palestine, was called upon to take over the portfolio of Foreign Affairs and Commonwealth Relations. Mr. Ghazanfarali Khan was given exclusive charge of refugees, while Pirzada Abdus Sattar of Sind became the Minister of Food, Health and Agriculture.

KASHMIR

Meanwhile, trouble was brewing in Kashmir. The Maharajah found himself confronted with an uprising in Poonch which had the support of turbulent tribesmen from the Frontier. Earlier the Quaid-e-Azam Jinnah had advised the Maharajah of Kashmir to meet him to discuss the whole situation, but the Ruler turned to India for military aid to repel the invaders. In the event Kashmir also acceded to India. The war in Kashmir threatened to widen the gulf between the two Dominions; for Pakistan considered the accession of Kashmir, a state with a Muslim majority to India as improper and unjust. Pakistan, however, repudiated any responsibility for the invasion by the tribesmen although it declared that its sympathy lay with the anti-Government forces fighting what it called Dogra tyranny. Inter-Dominion parleys over the States question led to no concrete results and India ultimately decided to refer the dispute to the United Nations—a proposal which the Prime Minister of Pakistan claimed he had made to India earlier. When India placed the question before the United Nations Pakistan claimed that there were other points of disagreement between the two Dominions which if not solved in time might result in open war. And so Sir Zafrulla Khan went on to put the case of Junagadh before the United Nations.

Even other agreements which were reached between the two Dominions out of court including the one on all outstanding financial issues seemed to be in peril when India refused to pay Pakistan's share of cash balances because of Kashmir. Pakistan fought its financial case with India through correspondence and at last succeeded in persuading the latter to pay Rs. 50 crores. Meanwhile India, Pakistan and Britain concluded mutually acceptable interim agreements on the sterling balances.

Inter-Dominion differences spread to the economic field too. Following India's decontrol of cotton textiles, Pakistan imposed an export duty of Rs. 20 on cotton which she trebled by March 1948 and declared India a foreign country for purposes of export. Pakistan also imposed a land export duty on jute when India refused to share customs revenue on Pakistan's terms. Later, Pakistan set up a customs cordon when India declared Pakistan foreign territory on the lapse of the standstill agreement on customs on February 29, 1948.

There were other fields, however, in which amicable relations prevailed. Both the Governments for instance agreed upon a compromise formula for the exchange of Pakistan cotton with Indian cloth. On the food front too, there was good understanding on both sides and the terms of the agreement were faithfully implemented by both the Dominions.

Quaid-e-Azam Jinnah visited Sibi in the second week of February when he announced at a Royal durbar the appointment of a Governor-General's Advisory Council for Baluchistan to prepare that most backward of the Pakistan provinces for provincial autonomy under the new constitution. The Pakistan Governor-General also discussed the question of Kalat's accession to Pakistan with the Ruler who after prolonged negotiations decided to accede. Some of the States in and adjoining Pakistan like Bahawalpur, Khairpur and the tiny frontier States of Dhir, Chitral and Swat also expressed their willingness to accede to Pakistan.

The Pakistan Governor-General paid a visit to Eastern Pakistan in the last week of March.

The following paragraphs give a detailed account of activities of various Ministries since the Pakistan Dominion was established.

1. MINISTRY OF FOREIGN AFFAIRS

The Ministry of Foreign Affairs handles also questions of Commonwealth Relations and the States which have acceded to Pakistan. A few weeks after its birth, Pakistan joined the United Nations. Pakistan has also established diplomatic offices at Washington, London, New Delhi, Cairo and Teheran. Where Pakistan has no representative, British diplomatic missions are looking after its interests for the time being.

Pakistan sent a delegation to Canberra to attend the preliminary Commonwealth conference on the Japanese treaty. In September, 1947, Sir Mohammad Zafrullah, who later became the Foreign Minister, led the Pakistan delegation to the United Nations when the Palestine issue was discussed. Pakistan also sent a team to the International Trade and Employment Conference held at Havana, the second session of the Economic Commission for Asia and the Far East at Baguino in the Philippines, the Regional I.L.O. conference at Delhi, and the Special Committee on the Balkans at Salonika. The most important of these delegations is the one sent to the United Nations this year when the Indo-Pakistan dispute on Kashmir and allied questions were considered.

The Foreign Ministry is directly responsible for the administration in the tribal areas of the Frontier, and for Baluchistan, the status of which has been enhanced as already stated by the appointment of an Advisory Council.

Pakistan and Afghanistan have exchanged special envoys to discuss issues outstanding between them, particularly with regard to trade and the tribal areas.

The Foreign Ministry is located in the Mohatta Palace at Clifton, a sea side suburb of Karachi.

2. MINISTRY OF DEFENCE

The Pakistan Prime Minister, Mr. Liaquat Ali Khan, holds the portfolio of Defence and he is the most hard-worked Minister of the State. Not only had he had to attend the inter-Dominion conferences held from time to time at Lahore and Delhi, but also look into all important affairs of the State, particularly its defence problems.

The armed forces of Pakistan are now being reconstituted and reposted in conformity with new strategic and geographical considerations. For the time being, Rawalpindi is the head quarters for the Defence Forces, but it is intended to shift it to Karachi when the accommodation problem becomes easier. The main task of the Army hitherto has been to maintain law and order and protect and escort refugees from East Punjab to Pakistan.

A far-reaching decision taken by the Pakistan Government was the withdrawal of its Army from Frontier out posts as it was felt that there should be a change of policy towards the tribesmen. It also meant considerable saving in military expenditure, while troops became available for deployment elsewhere. The withdrawal took place in December 1947 and the Defence Minister took the earliest opportunity which was a fortnight later to tour the tribal areas and explain to the people the historic and moral significance of the withdrawal of troops from Waziristan.

At a press conference held in Karachi on December 31, 1947, the Pakistan Defence Minister gave a picture of Pakistan's defences. He said that nationalisation would be completed in about three years' time. On August 15, 1947, the number of British officers in the Pakistan Army was 1,600. On January 1, 1948, out of a total of 3,371 officers in the army, 2,790 were Pakistani and 584 British. Out of 673 British officers who volunteered to serve Pakistan, 355 were selected on varying terms not exceeding three years. Efforts were now being made to secure the balance of 229 British officers. The Pakistan Army had now 11 Major-Generals of whom 6 were British and 5 Muslims, 32 Brigadiers, 17 of whom were British and 15 Muslim and 4 Area Commanders, 3 Muslim and 1 British.

A military academy is being established at Kakur in the Hazara district of the Frontier Province where officers will be trained. In the Pakistan Air Force, there are 232 Muslim and 27 British officers. One of the Air Commodores is a Muslim. The Air Force has two fighter squadrons and a few transport aircraft being Pakistan's share of the defence forces of undivided India. In the Pakistan Navy, of which Rear Admiral J. W. Jefford is the chief, only 27 British officers are being taken as Pakistan has 104 commissioned officers and 70 warrant officers.

Pakistan has three main shore establishments—the gunnery school, and the senior and junior boys' training schools. A naval depot is being established in Eastern Pakistan where a part of the Navy will be based. Pakistan has a fleet of nine ships which she received as her share of undivided India's naval forces. Government is negotiating with His Majesty's Government for the purchase of two destroyers.

An ordnance factory is to be established in Pakistan to produce small arms, explosives and ammunition. Mr. Newton Booth (until recently Chief Mechanical Engineer of Royal Woolwich Arsenal) and Mr. B. Farley (director of Machine Tools in the British Ministry of Supply) have arrived from the U.K. and are studying Pakistan's requirements in this field.

Pakistan is also to raise an unlimited volunteer force under the control of the Army called the Pakistan National Guards. A women's wing is also being created. This will be a second line of defence. Pakistan's defence expenditure for the first seven and a half months was Rs. 34.24 crores and in 1948-49 the expenditure is expected to rise to Rs. 37.11 crores. This is apart from the capital outlay of over two crores for both the periods.

3. MINISTRY OF FINANCE

Pakistan's Ministry of Finance has a band of trained and experienced officers. Its very first work on setting its department in motion was to negotiate a financial agreement with India on all outstanding issues. Complete agreement was reached and Pakistan got as its share of cash balances Rs. 55 crores. In view of strained Indo-Pakistan relations over Kashmir, India at first refused to pay the sum immediately, but after prolonged negotiations conducted on behalf of Pakistan by Mr. Gulam Mohammad India agreed to make a first payment of Rs. 50 crores out of Rs. 55 crores. The payment has already been made and the balance is the subject of negotiations.

Another success for the Pakistan Finance Ministry was the agreement reached with the British Government and India over the next interim six-month release of sterling balances. Pakistan will have in her account £ 20 million while £ 3·3 million would be made available for her for conversion into hard currency.

Pakistan made her first venture into the money market a few days before the first budget was presented by floating four loans on February 14, 1947. They were kept on tap without any limit to subscription. At the time of writing, about Rs. 10 crores were subscribed, according to reports published.

Pakistan's first budget had to be prepared with great care and skill. Pakistan's lack of industry, the general dislocation of economic life due to communal disorders, the exodus of Hindus and Sikhs who had till then controlled the trade, a disproportionate defence expenditure and the loss of strategic railways were the main odds against which the Finance Minister had to wrestle in preparing his budget. But the Finance Minister not only succeeded in

balancing his budget but was also able to show a surplus of Rs. 5 lakhs. The budget estimated Pakistan's gross revenue at Rs. 79.57 crores and expenditure at Rs. 89.68 crores in 1948-49. The deficit was made up by a number of taxes. Most of the taxation is levied on the foreign buyer of Pakistan's raw materials and on the importers of luxury goods. With a view to giving a fillip to industrialisation, tax concessions were granted to factory owners.

4. MINISTRY OF COMMERCE

This Ministry includes industries and works also. A skeleton staff started the work of the Office of the Chief Controller of Imports and Exports. Pakistan recently announced its import policy for the first half of 1948. A large number of articles which were prohibited are now being allowed to be imported freely under open general licence. The object of the new policy is to encourage expansion and flow of trade. Pakistan's export policy is in process of formulation and will be announced when it is decided upon. Import and export controls will however continue so long as the necessity to conserve Pakistan's foreign exchange exists.

Owing to misunderstanding with India over the Partition Council decisions, Pakistan had to get her jute to Chittagong and also impose excise duty on raw jute at Rs. 3 per maund if it passed through India. As regards cotton, Pakistan had to revise its entire policy. The export duty which was doubled from Rs. 20 to Rs. 40 was further increased to Rs. 60 per bale of 400 lbs. India, for purposes of export, was made a foreign country and ceilings and floors were also abolished. Pakistan explained that this was an inevitable consequence of India's decontrol of cotton and cotton textiles.

An organisation for statistics and commercial intelligence has also been set up. A weekly statement and weekly index of wholesale prices in Karachi, a fortnightly account of trade enquiries received from firms in and outside Pakistan, and a periodical review of the cotton market are being regularly published. Plans to publish a statistical digest of Pakistan on lines of the "Indian Trade Journal" are also under consideration.

Karachi and Chittagong, the premier ports of Pakistan, have been declared ports of registry for all ships. Now, Indian seamen, most of whom belong to Pakistan, can register themselves in ports nearer their home and independent shipping offices will shortly be opened.

Industries Division.—This department looks into the question of procurement and distribution of cotton textiles, coal, paper, iron and steel. The first Pakistan Industries Conference was held in Karachi in December 1947. The conference surveyed the problems confronting Pakistan and made a number of recommendations in respect of cotton textile mills, generation of hydro-electric power and heavy chemical industry. Sir Henry Howard, Adviser on hydro-electric power to the Madras Government, was specially deputed to study development of hydro-electric power and his report is under Government's consideration. More than a score of industries have been chosen for central control including arms and ammunition, shipbuilding and manufacture of locomotives, and jute. The conference recommended establishment of additional presses in East Bengal to enable Pakistan to handle jute export to the extent of 30 lakhs bales a year by 1949-50, and a total loomage of 15,000 during next 20 years.

The conference recommended the procurement of one million spindles for the cotton textile industry to be distributed for allocation in different provinces and States as the target during the first five years and another 1.5 million spindles during the next five year period. A cotton committee was also established for improvement, marketing and manufacture of Pakistan cottons.

Prominent among the trade delegations which visited the Pakistan capital in the last six months were one from Egypt seeking jute and the other from Transjordan. The Indo-Pakistan cotton negotiations were also carried on in the early part of 1948; and later a comprehensive agreement was arrived at.

5. MINISTRY OF COMMUNICATIONS

One of the biggest Ministries this, under Sardar Abdur Rab Nishtar, and combines the three departments of railways, posts and telegraphs, and transport.

General disorganisation of the railways consequent on partition and the communal disorders and inadequate supplies of coal from India necessitated drastic curtailment of passenger and goods traffic for some weeks, but the position improved early this year. The railway rates have been increased approximately by 22 per cent over the previous rates since January 1948.

Following the initial loss sustained by Government due to ticketless travel to the tune of over three crores of rupees in the first two months of administration, vigorous measures were taken to check the evil at all stations as a result of which normal revenue is being recovered.

Since August 15, 1947, about 83,500 employees who opted for Pakistan had to be transported to their respective posts of duty. Over 7,000 hands were found to be surplus in view of the limits of the Pakistan railway system. Alternative employment has to be found for them, and Government is doing their best in this direction.

Pakistan civil aviation is still in its infancy. Orient Airways are operating most of the feeder and trunk services. A bilateral air pact has been concluded between India and Pakistan. Private enterprise would continue and would be permitted, if it could, to run air services to the Middle East, East Africa, Ceylon and Burma. An air training centre is being established at Karachi.

Karachi continues to be the fulcrum of Empire air communications and as many as a dozen international air services including the B.O.A.C., Pan-American Airways, the K.L.M. and Air. France run their regular services across Pakistan to various countries of the world.

The Posts and Telegraphs which suffered owing to shortage of stores is improving in its organisation and efficiency. A wireless link between Karachi and Chittagong was established within a few weeks after the establishment of Pakistan. Karachi is now linked with almost all foreign countries by cable. A telegraph workshop is also being organised.

Pakistan inherited an efficient system of meteorological service set up during war-time at Karachi. They provide regular weather charts for public information (as at Poona) and help fliers with all necessary particulars.

The Communications Ministry is located in the old Sind P.W.D. buildings behind the Chief Court buildings, while the Minister himself works in his chamber in the main Secretariat building. A number of hutments nearby accommodate overflowing sections of this department.

6. MINISTRY OF FOOD

Besides food, this Ministry under the youngest of Pakistan Ministers, Pirzada Abdus Sattar, controls departments of Health and Agriculture. It suffered from neglect in the early stages when Mr. Ghazanfarali Khan had too many portfolios to carry, but much headway is now being made.

Pakistan is normally surplus in food, but owing to the necessity of feeding millions of refugees in Western Pakistan and due to the havoc caused by floods in Eastern Pakistan, there was acute wheat shortage. Fortunately the Indo-Pakistan agreement saved the situation from reaching famine stage. Pakistan got from India 28,000 tons of wheat, partly in return of loan, 12,000 tons of barley and 15,000 tons of sugar and gave India in turn 49,000 tons of rice. The whole agreement was implemented by the end of March this year.

Following decontrol of sugar and foodgrains in India, there was an agitation for similar action in Eastern Pakistan, but the Pakistan Central Government stood firm and refused to decontrol. But it was explained that the long-term policy was one of progressive decontrol.

In order to improve agriculture, the Pakistan Government held a conference at Lahore in October 14, 1947, when important decisions for mechanisation of agriculture and intensifying food production were taken. A 'grow-more-food' campaign has also been launched. Forest and soil conservation and animal husbandry are also being organised.

7. MINISTRY OF INTERIOR

The Ministry comprises the departments of Home, Education and Information. In the Home division, Government have organised a system of internal security and national reconstruction.

An All-Pakistan Educational Conference was held at Karachi at the end of last year when decisions for reorientation of education in accordance with Islamic principles and for further expansion of education were taken. The Pakistan Government have also appointed technical and advisory boards of education. A Pakistan National Academy will also be established in due course.

As for broadcasting, there are already radio stations functioning at Lahore, Peshawar and Dacca. Pakistan will install two short wave 50 kilowatt transmitters at Karachi, one for centralised news service and the other for external broadcasts. In Sind, two 10 kilowatt sets would be installed at Karachi and Hyderabad respectively for local needs. A 7.5 kilowatt short wave transmitter will be installed at Dacca, which will connect Eastern and Western Pakistan.

The Press Information department is built on the same lines as the one existing in India. Great attention is paid particularly to foreign publicity and the provinces are linked with the Central Department in the matter of exchange of information.

8. MINISTRY OF LAW AND LABOUR

Silently, this department is working under the Law and Labour Minister, Mr. Jogendra Nath Mandal, who is also the leader of Scheduled Castes in Pakistan. A nucleus of Pakistan Federal Court has already started functioning and very soon judges would be appointed.

In the Labour section Pakistan became a member of the International Labour Organisation from October 1947. There are a number of Bills affecting labour welfare which are awaiting passage through the Dominion Legislature.

The Ministry successfully settled through its conciliation machinery labour disputes in Karachi, a railway dispute at Dacca and a dockworkers' dispute at Chittagong. The Government of Pakistan set up an industrial tribunal under Mr. Muhammad Wasim, Pakistan's Advocate-General, for the adjudication of industrial disputes.

9. MINISTRY OF REFUGEES

The portfolio of refugees was originally held by the Information Minister, Mr. Fazlur Rahman, but since Mr. Ghazanfarali Khan, who hails from the Punjab, had to do most of the work on the spot, it was transferred to him. The problem assumed such gigantic proportions that ultimately one full-time Minister had to be appointed. Mr. Ghazanfarali Khan then shifted his headquarters to the Punjab. He set up his secretariat at Lahore and as the mass exchange of population took place, Muslim refugees who poured into the West Punjab by foot and train, were distributed systematically over different camps before they were resettled on land abandoned by non-Muslims in Western Pakistan. The Minister had also to see that a similar movement of non-Muslim convoys were safely transported into East Punjab. Such movement was rendered difficult by outbreak of communal riots in the whole of the Punjab area, but it is a tribute to both Governments that they were able to save millions of refugees from wholesale slaughter.

The problem of rehabilitation and resettlement has lain heavily on the financial resources of West Punjab. According to its Finance Minister, the province had to absorb two million more people than those who left West Punjab; over five crores of rupees have already been spent.

It would require another Rs. 7 crores in the coming year. Sind has also absorbed lakhs of refugees and incurred considerable expenditure. The Central Government of Pakistan have sanctioned one and a half crores of rupees in the current budget for provinces towards refugee rehabilitation expenditure. The entire land tenure had to be revised so as to make an equitable distribution of land among refugees in West Punjab and similar measures would be necessary in other parts of Pakistan.

Side by side, humanitarian and moral problems like the recovery of abducted women and allied issues are engaging the attention of both the Dominions. Common lines of policy and programme will also be decided upon by India and Pakistan in regard to such matters as the settlement of abandoned property belonging to the people who had migrated.

10. MINISTRY OF ECONOMIC AFFAIRS

This Ministry was created as a result of criticism made during the budget session of the Dominion Parliament held in March this year. A Cabinet Committee has been appointed with the Premier, Mr. Liaquat Ali Khan as the President and Ministers of Finance, Commerce, Communications and Agriculture as members to take high-level decisions on issues submitted to it by two other subsidiary bodies—the Development Board and the Planning Advisory Board.

The Development Board with the Commerce Minister, Mr. Ismail Chundrigar as Chairman has as members Secretaries of all the Ministries mentioned above. The main functions of this body are firstly to co-ordinate central and provincial projects, secondly serve as a clearing house of information, thirdly remove bottlenecks and difficulties that obstruct smooth progress, and finally make periodical reports to the Cabinet Committee on the progress made. The Planning Advisory Board is a bigger organisation which comprises the Cabinet Committee and Development Board and two representatives from each of the Pakistan provinces and States and ten persons nominated by Government to represent special interests like trade, banking, insurance, health and education. This body advises Government on all aspects of planning and development.

The Development Board with Mr. Nazir Ahmed as Secretary has been functioning for some months past and has done all the necessary spade-work for the proper economic planning and development of the resources and potentialities of Pakistan.

The Ministry is now under the supervision of the Finance Minister, Mr. Ghulam Mohammad, but very soon a full-fledged Cabinet Minister will take charge of this most vital department of the Dominion administration.

CONSTITUENT ASSEMBLY OF PAKISTAN

President.—H. E. Quaid-e-Azam Mohammad Ali Jinnah.

Secretary.—M. B. Ahmad.

Deputy Secretaries.—S. G. Hasnain; K. Ali Afzal.

Assistant Secretary.—Hasan Mohammad Khan.

EAST BENGAL

Muslim.—Abdul Masud Abdul Hamid; Abdulla Almahmood; Maulana Md. Abdullahel Baqui; Abul Kasam Khan; Maulana Md. Akram Khan; Azizuddin Ahmad; Moulavi Ebrahim Khan; A. K. Fazlul Huq; The Hon'ble Mr. Fazlur Rahman; Ghyasuddin Pathan; The Hon'ble Mr. Hamidul Huq Chowdhury; H. S. Suhrawardy; Professor Ishtiaq Husain Qureshi; The Hon'ble Mr. Liaquat Ali Khan; Mafizuddin Ahmad; Dr. Mahmud Husain; Dr. A. M. Malik; Martuza Raza Chowdhury; Mohammad Ali; The Hon'ble Mr. Muhammad Habibullah Bahar; The Hon'ble Khwaja Nazimuddin; Nur Ahmed; The Hon'ble Mr. Nurul Amin; Serajul Islam; Maulana Shabbir Ahmad Osmani; Khwaja Shahabuddin; Begum Shaista Suhrawardy Ikramullah; Tamizuddin Khan; Abdul Matin Chaudhury; The Hon'ble Mr. Abdul Hamid.

General.—The Hon'ble Mr. Jogendra Nath Mandal; Prem Hari Barma; Dhirendra Natu Datta; Kiran Sanker Roy; Professor Raj Kumar Chakravarty; Sris Chandra Chattopadhyaya; Bhupendra Kumar Dutta; Jnanendra Chandra Majumdar; Birat Chandra Mandal; Dhananjoy Roy; Sachindra Narayan Sanyal; Harendra Kumar Sur; Akshay Kumar Das.

WEST PUNJAB

Muslim.—Mian Muhammad Iftikhar-ud-Din; Chaudhri Nazir Ahmad Khan; Malik Mohammad Firoz Khan Noon; Mian Mumtaz Muhammad Doultana; Sheikh Karamat Ali; Dr. Imar Hayat Malik; Begum Jahan Ara Shah Nawaz; The Hon'ble Sardar Shaukat Hyat Khan; The Hon'ble Mr. Ghazanfar Ali Khan; The Hon'ble Sardar Abdur Rab Khan Nishtar; His Excellency Quaid-i-Azam Mohammad Ali Jinnah; The Hon'ble Khan Iftikhar Hussain Khan of Mamdot.

General.—Lala Avatar Narain Gujral; Bhim Sen Sachar; Rai Bahadur Ganga Saran.

Sikh.—Sardar Kartar Singh; Sardar Ujjal Singh.

SIND

Muslim.—The Hon'ble Pirzada Abdus Satar Abdul Rahman, J.P.; Alhajj Muhammad Hashim Gazdar, J.P.; M. A. Khuhro.

NORTH-WEST FRONTIER PROVINCE

Muslim.—Khan Abdul Ghaffar Khan; Khan Sardar Bahadur Khan.

BALUCHISTAN

Sardar Bahadur Nawab Mohammad Khan Jogezai.

Government of Pakistan Personnel

GOVERNOR-GENERAL OF PAKISTAN

His Excellency Quaid-e-Azam Mahommad Ali Jinnah.

PERSONAL STAFF OF THE GOVERNOR-GENERAL

Private Secretary.—S. M. Yusuf.

Assistant Private Secretary.—Farrukh Amin.

Personal Secretary.—K. H. Khurshid.

Military Secretary.—Col. G. Knowles.

Assistant Secretary.—K. B. Mohammad Latif Qureshi, I.S.O.

Comptroller.—Mir Karimullah.

Aide-de-Camp.—Lt.-Comdr. S. M. Ahsan, D.S.C., R.P.N.

Aide-de-Camp.—Captain S. A. Hussain.

Aide-de-Camp.—F/Lt. Aftab Ahmad, R.P.A.F.

Honorary Personal Physician.—Col. Dr. A. Rahman, M.B., Ch. B. (Edin.).

THE CABINET



The Hon'ble Mr. Liaquat Ali Khan
Prime Minister

Prime Minister and Minister of Defence.—The Hon'ble Mr. Liaquat Ali Khan.

Minister of Foreign Affairs and Commonwealth Relations.—The Hon'ble Sir Muhammad Zafrulla Khan.

Minister of Finance.—The Hon'ble Mr. Ghulam Mohammad.

Minister of Commerce, Industries and Works.—The Hon'ble Mr. Ismail Chundrigar.

Minister of the Interior, Information and Education.—The Hon'ble Mr. Fazlur Rahman.

Minister of Communications.—The Hon'ble Sardar Abdur Rab Nishtar.

Minister of Food, Agriculture and Health.—The Hon'ble Pirzada Abdus Sattar.

Minister of Law and Labour.—The Hon'ble Mr. Jogendra Nath Mandal.

Minister of Refugees and Rehabilitation.—The Hon'ble Raja Ghazanfar Ali Khan.

[The Hon'ble Mr. Ismail Chundrigar and The Hon'ble Raja Ghazanfar Ali Khan have now been appointed as Ambassadors to Afghanistan and Iran respectively.]

CABINET SECRETARIAT

[C = Cabinet; E = Establishment; P = Partition.]

Secretary to Cabinet and Secretary-General to Government of Pakistan, Mohammad Ali.

Deputy Secretary (C), S. Osman Ali.

Deputy Secretary (E), H. P. Goodwyn.

Under-Secretary (C), A. Rashid Ibrahim.

Under-Secretary (P), Vaqar Ahmad.

Assistant Secretary (E), Abdulla Jan.

Assistant Secretary (E), G. A. Parwez.

DEVELOPMENT BOARD

Secretary, Development Board, Dr. Nazir Ahmad.

Research Officer, A. P. Hassumani.

JOINT CIPHER BUREAU

Officers-in-Charge, T. H. Gould, Capt. I. A. Malik.

PAKISTAN PUBLIC SERVICE COMMISSION

Member, S. Suhrawardy.

Secretary, H. P. Goodwyn.

Assistant Secretary, Sardar Ahmad.

Private Secretary to P. M., A. A. Hamid.

Personal Assistant to P.M., M. I. Sufi.

MINISTRY OF FOREIGN AFFAIRS AND COMMONWEALTH RELATIONS

P = Protocal; F = Frontier; S = States; C = Conference; G = General; A = Accounts.

Minister, The Hon'ble Sir Muhammad Zafrulla Khan.
Secretary, M. Ikramullah, C.I.E.
Joint Secretary (P), T. B. Creagh Coen, C.I.E.
Joint Secretary (F), Major A. S. B. Shah, O.B.E.
Officer on Special Duty, Lt.-Col. E. W. Fletcher.
Deputy Secretary (S), Akhtar Hussain.
Deputy Secretary (F), Major M. G. Dixon.
Deputy Secretary (P), A. Hilaly.
Deputy Secretary (C), Khan Bahadur S. Itaat Hussain.
Deputy Secretary, Nasim Husain.
Under Secretary (S), Khan Sahib Z. H. Burney.
Assistant Secretary (P), M. Y. Butt.
Assistant Secretary (G), Khan Sahib Taj-ud-Deen.
Assistant Secretary (A), S. H. Feroze.
Assistant Secretary, K. S. Sufi Ghulam Qudir.
Assistant Protocal Officer, S. Zafar Ali.

MINISTRY OF DEFENCE

Minister, The Hon'ble Mr. Liaquat Ali Khan.

AT KARACHI

Secretary, Lt.-Col. Iskandar Mirza, C.I.E., O.B.E.
Joint Secretary, A. T. Naqvi, O.B.E.
P.S. to Secretary, M. Ahmed.
Under-Secretary, S/L. Abdul Ghayur.
Under-Secretary, Major L. H. Basden.
Private Secretary to H. M., Wazir Ali.

AT RAWALPINDI

Deputy Secretary, S. I. Haque.
Deputy Secretary, W/C. R. Milroy-Hayes, O.B.E.
Under-Secretary, Khan Sahib Fazal-ud-Din.
Assistant Secretary, Abdul Rabb.
Assistant Secretary, S. M. Matin.
Director of Lands and Cantonments, Ex-Officio Under-Secretary, Mohammad Ashraf, M.B.E.
Assistant Secretary, C. Mills.
Chief Administrative Officer, C. W. Ayton.
Deputy Chief Administrative Officer, H. U. Butt.
Security Officer, K. S. Rashid Ahmed Khan.
Administrative Officers, (Assistant Secretaries).—Azizul Haq, Akhtar Ali Khan, Nasirul Haq, R. M. Massingham, J. W. Jackson.

ARMY HEADQUARTERS, RAWALPINDI

Commander-in-Chief, Gen. Sir Douglas Gracey, C.B., C.B.E., M.C.
Private Secretary, Major J. M. E. Wainwright.
Military Assistant, Major M. H. Khan.
Aide-de-Camp, Capt. H. F. Hamilton Dalrymple.
Aide-de-Camp, Capt. Aziz Ullah Khan.
Chief of Staff, Major-General R. C. MacCay, C.B., C.B.E., D.S.O.
Deputy Adjutant General, Major-General J. B. Dalison, C.I.E., O.B.E.
Deputy Quarter-Master-General, Major-General F. J. Walsh, C.B.E.

AT KARACHI

Deputy Chief of Staff, Major-General N. G. Gane, O.B.E.

NAVAL HEADQUARTERS, KARACHI

Flag Officer Commanding Royal Pakistan Navy, Rear Admiral J. W. Jefford, O.B.E.
Chief of Staff, Captain H. M. S. Choudhri, M.B.E., R.N.R.
Civil Liaison Officer, R. W. Reeve.

AIR HEADQUARTERS, PESHAWAR

Air Commanding, Air Vice-Marshal A. L. A. Perry Keen, C.B., O.B.E.
Staff Officer, Administration, G/Capt. M.K. Janjua.

MINISTRY OF FINANCE

Minister, The Hon'ble Mr. Ghulam Mohammad.
Private Secretary to the Hon'ble the Finance Minister, M. M. Niaz.
Secretary, Sir Victor A. C. Turner, C.S.I., C.I.E., M.B.E., I.C.S.
Officer on Special Duty, C. W. St. John Turner.

ESTABLISHMENT AND EXPENDITURE DIVISION

Joint Secretary, M. Hashim.
Deputy Secretary, M. A. Mozaffar.
Deputy Secretary, V. H. Mumford.
Under-Secretary, A. H. Qarni.
Assistant Secretaries, Shamoon Ahmad, Hafiz Hasan, Ghulam Sarwar.
Finance Officers, A. A. Ansari, E. A. Naik, M. M. Ali.
Superintendents, Shamsul Islam, M. Mujtaba, Ghulam Sadiq.

BUDGET AND FINANCE DIVISION

Joint Secretary, Abdul Qadir.
Officer on Special Duty, Mumtaz Hasan.
Deputy Secretary, Anwar Ali.
Officer on Special Duty, Dr. L. Nemenyi.
Assistant Secretaries, Nawab Ali, Nasirud Din.
Finance Officer, Altaf Husain Gauhar.
Superintendents, B. Zaman, Ahmad Hussain.

REVENUE DIVISION (CENTRAL BOARD OF REVENUE)

Joint Secretary and Member, Central Board of Revenue, J. B. Shearer, O.B.E., I.C.S.
Deputy Secretary and First Secretary, Central Board of Revenue, A. A. Burney.
Under-Secretary and Second Secretary, Zafrullah.
Under-Secretary and Third Secretary, K. S. Rahim Bakhsh.
Officers on Special Duty, Walayat Hussain, L. G. O'Leary.

COMMUNICATIONS DIVISION

Financial Adviser, Communications, K. Ubaidullah.
Joint Financial Adviser, Communications, Mushtaq Ahmad.
Deputy Financial Adviser, Communications, Hafeez Ahmad.

DEFENCE DIVISION (MINISTRY OF FINANCE)

Financial Adviser, M. Shoaib.
Joint Financial Adviser, Mumtaz Mirza.
Assistant Financial Advisers, Zahirud-Din, M. Yaqub.
Assistant Financial Adviser (Navy), K. S. H. Abdus Salam.
Assistant Financial Advisers, G. A. M. Smith, Qazi Mohd. Ashraf, Ghulam Hussain, Shahid Ahmed.
Deputy Assistant Financial Advisers, Ausaf Ali Khan, Mohd. Shafi.
Deputy Economic Adviser, Dr. Anwar Iqbal Qureshi.

PAKISTAN SAVINGS CENTRAL BUREAU

Central National Savings Officer, H. B. Kazi.

(REVENUE DIVISION)

Member of the Board and Joint Secretary, John Burt Shearer, C.I.E., O.B.E.
First Secretary to the Board and Deputy Secretary, Ashfaq-i-Azim Burney.
Second Secretary to the Board and Under-Secretary, Zafar Ullah.
Third Secretary to the Board, Khan Sahib Rahim Bakhsh.
Officer on Special Duty (Excess Profit Tax), Walayat Hussain.
Officer on Special Duty (Income-Tax), Lionel Geoffrey O'Leary.
Departmental Representative, Income-Tax Appellate Tribunal, Bashir Hussain Khan.
Superintendent, Mohammad Riaz Shah.

AUDITOR GENERAL OF PAKISTAN, KARACHI

Auditor General, Yaqub Shah.
Deputy Auditor General, I, S. A. Siddiqi.
Deputy Auditor General, II, S. M. Raza.
Assistant Auditor General (Personal), S. Alim Ali Rizvi.
Assistant Auditor General (Accounts), Abdur Rahman.
Accountant General, Pakistan Revenues, Karachi, S. Mushtaq Ahmad.
Accountant General, West Punjab, Lahore, Mohd. Bashir Ahmad.
Accountant General, East Bengal, Dacca, Said Hassan.
Comptroller, N.-W.F.P., Peshawar, Mohd. Fazli Haque.
Chief Auditor, N.W.R., Lahore, S. M. Jamil.
Chief Auditor, E. B. Rly., Chittagong, F. T. Castells.
Accountant General, Military, Rawalpindi, Mian Ghulam Abbas.
J. C. M. A., Lahore Cantt., Ataullah Kalim.
D. C. M. A., Admn. & Navy, Sind, Karachi, Fahimuddin.
D. C. M. A., Eastern Pakistan, Dacca, S. S. Iqbal Husain.

PAKISTAN MINT, BAGHBANPURA, LAHORE

Mint Master, C. G. Hoyle, M.B.E.
Works Manager, D. A. MacDonald.

MINISTRY OF COMMERCE, INDUSTRIES AND WORKS

Minister, The Hon'ble Mr. I. I. Chundrigar.
Secretary (Commerce & Works), A. MacFarquhar.
Secretary (Industries), Khan Bahadur G. Faruque.
Joint Secretary, S. A. Hasnie.
Joint Secretaries, A. Khaleeli, Karamatullah.
Deputy Secretaries, M. Ayub, Mohd. Nasrullah, A. A. Said, B. W. Budd.
Under-Secretaries, Abdul Hakim, K. A. Waheed, Q. U. Shahab, Capt. Nasrullah Khan, Dr. I. H. Usmani.
Assistant Secretaries, M. A. Ghani, Azizul Haq, Siddiq Hassan.
Under-Secretary, N. N. A. Kureshi.

CHIEF CONTROLLER OF IMPORTS & EXPORTS, KARACHI

Officiating Chief Controller, M. Ismail.
Deputy Chief Controllers, K. F. Khalil, A. M. Khan.
Assistant Economic Adviser, Syed Muneerul Huda.

EXPORT TRADE CONTROLLER, PESHAWAR

Asstt. Export Trade Controller, Sardar Mohd. Aslam.

MERCANTILE MARINE DEPARTMENTS, KARACHI

Principal Officer, Commander (E) W. F. Ellis.
Nautical Surveyor and Deputy Shipping Master, T. R. V. Bird.

SPECIAL OFFICER, WAR RISK INSURANCE, LAHORE

Special Officer, War Risk Insurance, K. B. Mirza Abdul Rab.

NAUTICAL SURVEYOR, MERCANTILE MARINE DEPT., CHITTAGONG

Nautical Surveyor, Mercantile Marine Dept., M. Zakaullah.
Engineer and Ship Surveyor, M. I. Kidwai.

SEAMEN'S WELFARE DIRECTORATE, KARACHI

Deputy Director, K. S. Mahmud.
Seamen's Welfare Officer, M. A. Huq.

COAL COMMISSIONER, KARACHI

Coal Commissioner, E. Dixon.
Assistant Coal Commissioners, M. M. Ahmad, Y. Ahmad, S. Moizuddin.

REGIONAL OFFICE

Asstt. Regional Coal Controller, Baluchistan, Quetta, Mohd. Tayab.
Asstt. Regional Coal Controller, West Punjab, Lahore, S. B. A. Kazmi.
Asstt. Regional Coal Controller, East Bengal, Chittagong, Abas Raza.

IRON & STEEL CONTROLLER, KARACHI

Officiating Iron & Steel Controller, M. Siddiqi.
Asstt. Iron & Steel Controllers, F. M. Afzal, Mohd. Ali, N. M. Beg.

SUPPLY & DEVELOPMENT DEPARTMENT, KARACHI

Director-General, Khan Bahadur A. G. Khan.
Deputy Director-General, W. J. Tallon.
Director of Inspection, E. D. V. Ellison.
Director of Administration and Co-ordination, Ch. Bashir Ahmad.
Director of Supplies, S. M. Nazir.
Director of Inspection, M. N. Ahmad.
Development Officer, Ali Ahmad.
Assistant Director, Nawab-ud-din.

DIRECTOR OF SUPPLIES, KARACHI

Director of Supplies, M. A. Rafee.

DIRECTOR OF DISPOSALS, KARACHI

Directors of Disposals, Z. A. Khan, Majid Ali Khan, A. Saleem Khan, Col. F. S. Wahid Uddin.
Deputy Directors, Hamza Ali, N. A. Khan, M. R. Amjad.

CONTROLLER OF INSPECTION

Controller of Inspection, Karachi, Z. D. Sheikh.
Controller of Inspection, Lahore, Mian M. A. Rahman.

TEXTILE COMMISSIONER

Textile Commissioner, A. B. Habibullah.
Deputy Directors, M. N. Dallas, J. D. Qureshi.

CHIEF ENGINEER, PAKISTAN PUBLIC WORKS DEPARTMENT

Chief Engineer, Pakistan P.W.D., Saiyed Ali Amir.
Superintending Engineers, Khan M. Azam, Malik A. H. Noon, P. J. Henly.
Executive Engineers, Mumtaz Ahmad, M. H. Rahimtoola, Bashir Ahmad.
Elect. Engineers, K. S. Mohd. Hyat, S. A. Sadiq.
Executive Engineers, A. I. Patel, M. Y. Mughal, M. G. Siddiqi.
Architect, R. G. Will.
Planning Officer, Mohd. Shafi.

CONTROLLER OF PRINTING AND STATIONERY

Controller, N. H. Khandker.
Assistant Controllers, Abdul Aziz, N. Alam.

ESTATE OFFICE

Estate Officer, H. H. S. Feldman.
Joint Estate Officer, I. S. Murad.

CENTRAL TECHNICAL POWER BOARD AND ELECTRICAL COMMISSIONER

Electrical Commissioner, M. R. Probett.

CENTRAL WATERWAYS, IRRIGATION AND NAVIGATION COMMISSION

Project Officer, S. M. A. Butt.

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D. S. P., Karachi, Khan Sher Hassan Khan.

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Deputy Port Health Officer, Dr. Mohammad Abdul Majid Chowdhry.
Port Health Officer, Chittagong, Dr. Mohd. Ibrahim.
Airport Health Officer, Karachi, Dr. M. U. Hayat.
Deputy Airport Health Officer, Dr. Mohammad Ilyas.
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Supervising Officer, F. A. Shah.
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Administrative Officer, Mutmain Ali.
Asstt. Plant Protection Entomologist, Ch. Ghulamullah.
Asstt. Entomologist, Food Storage, Sadiq Husain.

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Asstt. Quarantine Entomologist, Mumtaz Ali.

LOCUST WARNING ORGANISATION

Locust Entomologist, Haroon Khan.
Asstt. Locust Entomologist, S. M. Tagi Ahsan.
Locust Technical Officer, Hafiz Manzoor Abbas.
Asstt. Locust Entomologist, Rashid Ahmed.

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Deputy Chief Resettlement Officer (Exchanges), A. F. Zia-ud-Din Ahmed.
Resettlement Officer (Training), S. M. Ibrahim.
Resettlement Officer (Exchanges), Captain Nazir Ahmed.
Resettlement Officer (Advice), S. F. Ahmed.
Assistant Resettlement Officer (Exchanges), Rahmat Ali.
Assistant Resettlement Officer (Statistics), Mohammad Yasin.
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Asstt. Director of Employment Exchanges, (West Punjab) Lahore, Major Saadat Ali Khan.
Asstt. Director of Employment Exchanges, West Punjab, Lahore, Mohd. Aslam Khan.
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Manager, Central Employment Exchange, Karachi, Capt. Nazeer Ahmed.

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Personal Assistant to H.M., A. M. Khan.
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Refugee Commissioner, E. de. V. Moss.
Deputy Refugee Commissioner, Brig. H. L. C. Robertson.
Deputy Secretary I, Major R. K. M. Saker.
Deputy Secretary II, P. H. Myane.
Under Secretary, L. H. Spinks.
Assistant Secretary, S. A. Kirmani.
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Assistant Economic Adviser, Syed Munirul Huda.
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Research Officers (Industrial Statistics Section), M. S. Siddiqi.
Economic Investigator, Mujibur Rahman.
Statistical Investigators, Mumtaz Ali, M. R. Abbasy.
Technical Officer (Photostat Section), S. Mohammad Mian.
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Accountant Member, Syed-uz-Zuman.
Registrar, K. Salahuddin.

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Committee to advice Government on the formation of the Refugee Rehabilitation Finance Corporation.—Abdul Matin Chaudhary, The Honourable Mr. M. A. Khuhro, Mian Muhammad Iftikhar-ud-Din.

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Assam

THE pre-Partition Province of Assam covered a total area of 67,334 sq. miles, excluding Tribal territory. It enclosed States with an area of 12,320 sq. miles. The net area of the territory was 55,014 sq. miles. The Province is formed of the Assam or Brahmaputra Valley, and the Surma Valley and portions of the hills which surround these valleys on the North, East and South or separate the valleys from one another. To the West lie the plains of Bengal.

Population—The total population of the Province in 1941 was 10,204,733, of which nearly 4¼ millions were Hindus, over 3½ millions Muslims, 2½ millions belonged to tribal peoples.

With the partition the whole of the District of Sylhet except four thahas became part of East Bengal. Hence the area as well as the population have been correspondingly reduced. The following is a rough estimate of the present position; area in square miles 49,599.29; total population 7,4,04094 out of which 3,9,23,750 are males and 3,4,80,344 are females. The number of Hindus is 2,9,47,989, of Muslims 1,7,10,423, of Sikhs 3,742, of Christians 35,724. The density of the population is 149.53.

43 per cent of the population were recorded as speaking Bengali, 21 per cent Assamese. Other languages spoken in the province are Hindi, Uriya, Mundari, Nepali and a great variety of languages classified under the general heading of the Tibeto-Burman languages.

Agricultural Products—The river basins are naturally fertile and present in the main few difficulties to the cultivator. Rice is the staple food crop, nearly 5,4,67,959 acres in 1946-47 being devoted to this crop. Rainfall being high, the problem in general is to dispose of the surplus water and to control the action of floods rather than irrigation in the usual sense. Tea and jute are the most important crops grown for export. The area under tea was 442,072 acres in 1946-47. About 56,060 acres are devoted to sugar-cane. A good deal of short staple cotton is grown in the hills.

Meteorological Conditions—Rainfall is everywhere abundant, and ranges from 50 to 258 inches a year leaving aside the highest recorded rainfall in this part of India with the maximum reached at Cherrapunji in the Khasi Hills (569·50); this is one of the wettest places in the world. Temperatures are moderate. Earthquakes of considerable severity have taken place, by far the worst being that which occurred in 1897.

Accounts of the petroleum occurrences in Assam have been published in the memoirs of the Geological Survey of India. The petroleum localities in this province are confined to a curved belt of country along the basins of the Brahmaputra and the Surma. This belt is traceable over a distance of some 800 miles from N. E. Assam through Cachar and Chittagong to the Arakan coast, where it has a S. S. E. trend.

Mines and Minerals—The only minerals in Assam worked on a commercial scale are coal, limestone and petroleum oil. Petroleum output during 1946-47 was 6,48,77,535 gallons; coal output 3,22,942 tons; and limestone output 9,84,677 tons. The most extensive coal measures hitherto worked are in the Naga Hills and the Lakhimpur districts. Important deposits also exist in the Garo Hills. Limestone is quarried



H. E. Sir Akbar Hydari

in the Khasi and Jaintia Hills. Petroleum is worked only in Lakhimpur and Cachar, and has only been refined in Lakhimpur.

MANUFACTURES AND TRADE

Silk is manufactured in the Assam valley, also cotton weaving as a cottage industry, women playing a predominant part. In this valley there are no caste weavers but in the Surma Valley they carry on a brisk manufacture on commercial scale. These handloom products find ready market on account of the great scarcity of mill made goods. Tea is of course the main industry, but there is a large petroleum mining concern and also some coal mines. There is a cement factory at Sylhet called Parker Cement Factory and a big match manufacturing concern at Dhubri. Boat-building, brass and metal and earthenwares, and limestone burning, cane and bamboo work, furniture making, sola hat, smithy, brick making, mustard oil pressing, rice and saw mills and other industries but agriculture employs about 80 per cent. of the population. Assam carries on a considerable trade with the adjoining hill tribes and countries.

Communications—Much of the trade of Assam is carried by river. The extensive system of river communications makes the province less dependent upon roads than other parts of the sub-continent but there has been much advance in recent years in road communication. A fleet of steamers maintained by the India General Navigation Company and the Rivers Steam Navigation Company plies on the rivers

in both Valleys. An alternate day service of passenger-boats runs between Tezpur and Neamati.

There are two trunk roads on either bank of the Brahmaputra most of which are metalled or gravelled. There are excellent metalled roads from Shillong to Gauhati, Shillong to Sylhet, Shillong to Cherrapunji, and also between Dimapur, on the Bengal and Assam Railway (A. B. zone) and Imphal, the capital of the Manipur State. The Government of Assam had in 1928 carried out a considerable programme of road improvement and another programme which aimed at the improvement of nearly 300 miles of road either by metalling or gravelling and the construction of 12 big bridges was also quickly completed. In September, 1937, a further road improvement programme totalling Rs.1,05, 25,000 was drawn up, from which 22 schemes costing to Rs. 41,11,054 were selected as priority class. The Government of India had approved a programme under which 15 of these priority class schemes costing Rs. 32,00,000 were financed from the Road Fund. The work on these projects is already completed. Besides, the Government of India have asked the Government of Assam to prepare another road improvement programme totalling Rs. 35 lacs, a programme which envisages improvement of 115 miles of roads.

Kutcha roads are being maintained by means of mechanical plant which has proved successful in maintaining, throughout the year, a surface fit for motor vehicles. Motor traffic has increased on all sides and the demands for better roads have been insistent.

The open mileage of railway has also shown a steady improvement and several branch lines to the Bengal Assam Railway (A. B. zone) system have been added in recent years. The main Bengal Assam Railway (A.B. zone) line runs from Chittagong Port, in East Bengal, through the North Cachar Hills to Tinsukia, a station on the Dibru-Sadiya Railway, and connects the Surma and Brahmaputra Valleys. A branch of the line runs from Badarpur to Silchar at the Eastern end of the Surma Valley and another runs west down the Assam Valley from Lumding to Pandu where it effects a junction with the Bengal Assam Railway (A. B. zone). The Bengal Assam Railway (E. B. zone) connects Assam with the Bengal system *via* the Valley of the Brahmaputra. Railhead is now at Rangapara north of Tezpur. Both Assam Bengal Rly. and Eastern Bengal Rly. have been amalgamated from 1st January 1942 and have been named Bengal Assam Rly.

Since August 15, 1947 the Bengal Assam Railway has been divided into two separate sections. The section within Assam has been called Assam Railway with headquarters at Pandu. The Government of India are taking steps to link up Assam with the rest of India by railway without touching the Dominion of Pakistan.

The first direct link by air between Calcutta and Gauhati was established on December 14, 1947. This air service was originally on a non-scheduled basis but very soon it became a daily service which has since been extended to Dibrugarh on a frequency of three days a week.

The Assam Government have undertaken an experiment in communication with the nationalisation of motor transport on a 75-mile long road connecting Gauhati and Nowgong.

ROAD IMPROVEMENT

Post-war road improvement programme envisages an expenditure of Rs. 5 crores over a period of 5 years. It covers not only construction of new roads but also includes improvement of existing roads to a higher and better standard. The scheme also embraces a large bridging programme.

Roughly the 5 years programme covers 405 miles of District roads and 1341 miles of village roads. Over 15 roads covering a mileage of 675 were taken up during 1946-47 while 21 roads covering a mileage of about 200 have been taken up during 1947-48.

The road programme has its special significance in that it is being designed with a view to making Assam self-sufficient in the matter of having its export and import to and from other parts of the Indian Dominion transported quickly without having to pass through the Pakistan Dominion. At the same time communications within the province have also been improved by provision of necessary feeder roads from and to the arterial road system of the Province with a view to securing good market for the surplus produce of certain localities.

ADMINISTRATION

The province of Assam was originally formed in 1874 in order to relieve the Lieutenant-Governor of Bengal of part of the administration of the huge territory then under him. In 1905, as the result of further deliberations, it was decided to add to the small Province of Assam the eastern portion of its unwieldy neighbour and to consolidate those territories under a Lieutenant-Governor. The Province of Eastern Bengal and Assam as then constituted was again broken up on the 1st of April, 1912; the Eastern Bengal Districts were united with the Bengal Commissionerships of Burdwan and the Presidency to form the Presidency of Bengal under a Governor-in-Council, Bihar, Chota-Nagpur and Orissa were formed into a separate province, while the old Province of Assam was reconstituted under a Chief Commissioner.

Under the Indian Reforms Act of 1919 the Province was raised in status to that of administration by a Governor-in-Council and was thereby ranked with the older major provinces of India.

With Independence the Province is administered according to the Government of India Act of 1935 as modified by subsequent Governors' ordinances under the Indian Independence Act.

The capital is Shillong, which has for a number of years been growing rapidly and is now in parts overcrowded. The town has grown up on somewhat rustic lines in very beautiful country on the slopes of the Shillong Range which rises to a height of 6,450 feet above the sea. It was destroyed in the earthquake of 1897 and was rebuilt with methods of construction more fitted to withstand the shocks of earthquake.

THE FINANCES OF ASSAM

In common with the other Provinces of India, Assam secured substantial financial autonomy under the Reform Act of 1935. The present financial position for 1948-49 is set out in the following table:—

Heads of Revenue.	Budget Estimate for 1948-49. (*In thousands of Rupees*)
A—Principal Heads of Revenue—	
I—Customs	6,68
IV—Taxes on Income other than Corporation Tax	1,37,83
VII—Land Revenue	1,60,00
VIII—Provincial Excise	56,03
IX—Stamps	12,95
X—Forests	40,00
XI—Registration	1,91
XII—Receipts under the Motor Vehicles Taxation Act	10,00
XIII—Other taxes and duties	16,48
Total A	4,42,48
B—Railway Revenue Account—	
XV-A.—State Railways	....
XVI—Subsidised companies	....
Total B	....
C—Irrigation—	
XVIII-B—Navigation, Embankment, etc.	....
E—Debt Services—	
XX—Interest	54
Total E	54
F—Civil Administration—	
XXI—Administration of Justice	2,38
XXII—Jails and Convict Settlements	54
XXIII—Police	3,69
XXIV—Ports and Pilotage	1
XXVI—Education	3,22
XXVII—Medical	1,59
XXVIII—Public Health	6,62
XXIX—Agriculture	2,17
XXX—Veterinary	55
XXXI—Co-operation	20
XXXII—Industries	6
XXXVI—Miscellaneous Departments	51
Total F	21,18
H—Civil Works and Miscellaneous Public Improvements—	
XXXIX—Civil Works	19,46
Total H	19,46
J—Miscellaneous—	
XLIV—Receipts in aid of Superannuation	1,05
XLV—Stationery and Printing	73
XLVI—Miscellaneous	5,36
Total J	7,14

Heads of Expenditure.	Budget Estimate for 1948-49. (*In thousands of Rupees*)
A—Direct Demands on the Revenue—	
4. Taxes on income other than Corporation Tax	50
7. Land Revenue	23,00
8. Provincial Excise	8,79
9. Stamps	49
10. Forests	28,11
11. Registration	1,18
12. Charges on account of the Motor Vehicles Taxation Act	5,68
13. Other Taxes and duties	95
B—Railway Revenue Account—	
15A. State Railways	....
15C. Subsidised companies	....
15D. Miscellaneous Railways expenditure.	....
BB—Railway capital outlay charged to Revenue—	
16. Construction of Rlys.	....
C—Revenue account of Irrigation, Navigation, Embankment and Drainage Works—	
18B. Navigation, Embankment & Drainage Works	9,40
E—Debt Services—	
22. Interest on debt and other obligations	13,85
23. Appropriation for reduction or avoidance of debt	4,23
F—Civil Administration—	
25. General Administration	50,36
27. Administration of Justice	10,49
28. Jails and Convict Settlements	9,61
29. Police	1,14,10
30. Ports and Pilotage	2
36. Scientific Department	10
37. Education (European)	93
Ditto (other than European)	86,69
38. Medical	23,09
39. Public Health	21,39
40. Agriculture	11,38
41. Veterinary	3,50
42. Co-operation	3,12
43. Industries	3,93
47. Miscellaneous Dept.	2,46
H—Public Works and Public Improvements—	
50. Civil Works	88,11
J—Miscellaneous—	
54A.—Famine Relief	1,08
55. Superannuation Allowances and Pension	31,44
56. Stationery and Printing	5,33
57. Miscellaneous	46,93
M—Extraordinary Items—	
63. Extraordinary charges	4,54
63B. Expenditure on post-war development	8,47,36
64A. Transfer to Revenue Reserve Fund	....
64B. Civil Defence	....
Total expenditure from Revenue.	14,61,21

Heads of Revenue.	Budget Estimate for 1948-49.	Heads of Expenditure.	Budget Estimate for 1948-49.
	(In thousands of Rupees.)		*(In thousands of Rupees.)*
I.—Contributions and Miscellaneous adjustment between Central and Provincial Governments—	•	Total expenditure from revenues	14,61,21
		CAPITAL EXPENDITURE.	
XLIX—Grants-in-aid from Central Government	3,000	Revenue Expenditure from Statement B.	14,61,21
L—Miscellaneous adjustments between Central and Provincial Governments ..	1	83—Payment of commuted value of pensions not charged to Revenue	—13
LI—Extraordinary receipts	7,90,81	85—Payment of Retrenched Personnel	10
LIIB—Civil Defence ..	....	68B—Navigation, Embankments and Drainage Works	17
Total L ..	8,20,82	85A—Capital Outlay on Provincial Schemes of State Trading ..	—20,90
Total Receipts from Revenue heads	13,11,62	72—Capital Outlay on Industrial Development	3,00,00
CAPITAL RECEIPTS		Total ..	2,79,24
Revenue Receipts from Statement A.	13,11,62	Debt raised in India—	
Debt raised in India—	....	Permanent debt—	....
Permanent debt	....	Floating debt—	....
Loan from Central Govt. ..	3,00,00	Treasury Bills	....
Floating debt—		Other floating loans	2,00,00
Treasury Bills	....	Loan from Central Govt. ..	7,67
Other floating loans ..	2,00,00	Total ..	2,07,67
Total ..	5,00,00	Unfunded debt—	
Unfunded Debt—		State Provident funds	15,71
State Provident Funds ..	16,02	Deposits not bearing interest—	
Deposits not bearing interest—		Appropriation for reduction or avoidance of debt	4,23
Appropriation for reduction or avoidance of debt	4,23	Sinking Fund Investment Account	....
Sinking and Depreciation Fund	....	Depreciation Reserve Fund—	
General Police Fund	....	Government Presses.. ..	....
Reserve Fund—Post-War Reconstruction Fund ..	....	General Police Fund	....
Depreciation Reserve Fund—		Reserve Fund-Post-war Reconstruction fund	....
Government Presses ..	2	Total deposits not bearing interest	4,23
Total Deposits not bearing interest	4,25	Deposit of Local Funds—	
Deposits of Local Funds—		District funds	50,00
District Funds	50,00	Other funds	11,00
Other Funds	11,00	Departmental and Judicial deposits	1,24,47
Departmental and Judicial Deposits	1,33,97	Other accounts..	2,38
Other accounts..	2,38	Advances	32,48
Advances	32,85	Suspense	4,55
Suspense	25,60	Miscellaneous	....
Miscellaneous	....	Total deposits of local funds	2,24,88
Total deposits of local funds	2,55,80	Loans and advances by Provincial Governments ..	10,87
Loans and advances by the Provincial Government ..	4,14	Remittances—	
Remittances—		Remittances within India ..	3,48,00
Remittances within India ..	3,48,00	Total Capital Expenditure	10,90,60
Total Capital Revenues ..	11,28,21	Total Expenditure ..	25,51,81
Total Receipts ..	24,39,83	Closing balance	2,08,93
Opening balance	3,20,91	Grand Total ..	27,60,74
Grand Total	27,60,74		
Excess of Revenue over Expenditure from Revenues	....	Excess of expenditure charged to Revenue over Revenue ..	1,49,59

GOVERNOR

His Excellency Sir Muhammad Saleh Akbar Hydari, K.C.I.E., C.S.I., I.C.S.

PERSONAL STAFF OF HIS EXCELLENCY THE GOVERNOR.

Adviser to the Governor for Tribal and Excluded Areas and States, N. K. Rustomji, I.C.S.

Assistant to the Adviser for Excluded Areas and States, M. C. Bhorali, B.A.

Secretary to the Adviser for Tribal Areas, H. Dutta, M.A.

Military Secretary, Major R. Yussuf Ali, The Rajput Regiment.

Private Secretary, B. C. Bhuyan, B.L.

Aide-de-Camp, Lieut. J. C. Dhamija, IND. SIGS.

Honorary Aide-de-Camp, Lt.-Col. J. Turnbull, M.C., E.D.

Honorary Aide-de-Camp, Sardar Bahadur Subedar-Major Nainsing Mall, Bahadur, I.D.S.M., O.B.I.

Honorary Aide-de-Camp, Subedar Sundar Sing. Chhatri.

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Hon'ble Maulana Md. Tayyebulla, B.L.

Hon'ble Srijut Lakshesvar Borooah, B.L., Speaker.

Mrs. Bonily Khongmen, B.A., Dy. Speaker.

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Chief Secretary, S. P. Desai, I.C.S.

Secretary, Appointment Department, D. C. Das, I.C.S.

Secretary to Government, Finance and Revenue Departments, S. J. Duncan.

Secretary to Government, Education and Local Self-Government Departments, S. L. Mehta, I.C.S.

Secretary to Government in the Judicial Department and Legislative Department, S. M. Lahiri, M.A., B.L.

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Under-Secretary to Government, Finance Department, Rai Sahib Dilip Chandra Das.

Deputy Secretary to Government in the Education and Local Self-Government Departments,

Secretary to the Legislative Assembly, Annada Kanta Barua, B.A.

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Joint Secretary to Government in the Home Department, J. E. Reid, O.B.E., E.D., I.P.

Under-Secretary to Government in the Departments, under the Chief Secretary, S. C. Kagti, B.Sc., A.C.S.

Under-Secretary to Government in the Education and Local Self-Government Departments, Anwar Hussain, B.A., A.C.S.

Director of Publicity, S. C. Bhattacharjee.

Under-Secretary to Government in the P.W.D., Rai Sahib Bidhu Bhusan Chaudhuri.

Parliamentary Secretaries, Srijut Mahendra Mohan Chaudhury, B.L., Srijut Siddhi Nath Sarma, B.L., Srijut Bimalaprasad Chaliha, Srijut Pwenananda Chetia, B.A.

Deputy Director of Supply (Accts.), Rai Sahib K. M. De.

Under-Secretary to Govt. in the L.S.G. (Industries—Textile) Dept., M. E. St. John Perry.

Under-Secretary to the Govt. in the Department of Supply (Ex-officio), Jnanendra Kuar Dutta

Registrar, Assam Secretariat (Civil), K. K. Chaudhuri, *(Offg.)*.

Registrar, Assam Secretariat (P.W.D.), M. Ahmed *(Offg.)*.

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Members, Maulavi Sayidur Rahman, M.A., B.L.; Josingh Rynjah, B.A.

Superintendent, P. N. Deb Goswami, B.A.

Advocate-General, F. A. Ahmed, Bar-at-Law.

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Director of Land Records & Surveys, I. G. Registration, etc., K. L. Majumdar.

Director of Industries and Registrar of Co-operative Society & Village Authorities, T. T. S. Hayley, I.C.S.

Director of Agriculture, B. C. Woodford, O.B.E.

Director, Veterinary Department, A. K. Mitra, M.R.C.V.S., P.G.

Conservator of Forests (Senior), Assam, P. D. Stracey, M.A.

Conservator of Forests (Junior), Assam, M. C. Jacob, B.A.

Commissioner of Excise, Registrar of Joint-Stock Companies, Assam, Maulavi A. N. M. Saleh, M.A.

Superintendent and Remembrancer of Legal Affairs and Administrator-General, S. M. Lahiri, M.A., B.L.

Inspector-General of Police, J. E. Reid, O.B.E., E.D., I.P.

Director of Public Instruction P. C. Sanyal, M.B.E., M.A.

Inspector-General of Civil Hospitals, Col. A. N. Chopra, O.B.E., M.B.B.S., D.T.M. (Liv.), D.P.H. (Eng.), I.M.S.

Director of Public Health, Col. A. N. Chopra, O.B.E., M.B.B.S., D.T.M. (Liv.), D.P.H. (Eng.), I.M.S.

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Comptroller (Govt. of India), S. Gupta, M.Sc.

GOVERNORS

Sir Nicholas Dodd Beatson Bell, K.C.S.I., K.C.I.E., 1921.
Sir William Sinclair Marris, K.C.S.I., K.C.I.E., 1922.
Sir John Henry Kerr, K.C.S.I., K.C.I.E., 1925.
Sir William James Reid, K.C.I.E., C.S.I., 1925.
Sir John Henry Kerr, K.C.S.I., K.C.I.E., 1927.
Sir Egbert Laurie Lucas Hammond, K.C.S.I., C.B.E., 1927.
Sir Michael Keane, K.C.S.I., C.I.E., 1932.
Sir Abraham James Laine, K.C.I.E., 1935.
Sir Michael Keane, K.C.S.I., C.I.E., 1935.
Sir Robert Niel Reid, K.C.S.I., K.C.I.E., I.C.S., 1937.
Sir Gilbert Pitcairn Hogg, K.C.I.E., C.S.I., 1938.
Henry Joseph Twynam, C.S.I., C.I.E., 1939.
Sir Robert Niel Reid, K.C.S.I., K.C.I.E., I.C.S., 1939.
Sir Andrew Gourlay Clow, K.C.S.I., C.I.E., I.C.S., 1942.
Mr. Frederick Chalmers Bourne, C.S.I., C.I.E., I.C.S., 1946. (Offg.)
Sir Henry F. Knight, K.C.S.I., C.I.E., I.C.S., 1946. (Offg.)
Sir Muhammad Saleh Akbar Hydari, K.C.I.E., C.S.I., I.C.S., 1947.

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Deputy Speaker: Mrs. Bonily Khongmen, B.A.

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Bihar

BIHAR lies between 20°-30′ and 27°-30′ N. latitude and between 82°-31′ and 88°-26′ E. longitude and includes the provinces of Bihar and Chota Nagpur, and is bounded on the north by Nepal and the Darjeeling district of West Bengal; on the east by West Bengal and the Bay of Bengal; on the South by the province of Orissa; and on the west by the United Provinces of Agra and Oudh and the Central Provinces.

The area of the territories which constitute the Governorship of Bihar is 69,348 square miles. The Province comprises the valley of the Ganges from the spot where it issues from the territories of the Governor of the United Provinces of Agra and Oudh till it enters west Bengal near Rajmahal. South of Bihar lies Chota Nagpur. Following the main geographical lines there are four Civil Divisions with headquarters at Patna, Muzaffarpur (for Tirhut), Bhagalpur and Ranchi (for Chota Nagpur). The headquarters of Government are at Patna. The new capital which lies between the Military Cantonment of Dinapore and the old civil station of Bankipore is known as "Patna," the old town being called "Patna City."

Recently the States of Seraikela and Kharswan have been incorporated into the Province after prolonged dispute with Orissa. Bihar has also put forward claims along with C.P. to two other States, Sarguja and Jashpur.

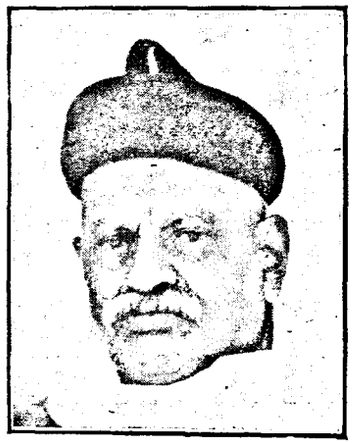
THE PEOPLE

The Province has a population of 36,340,151 persons. Even so with 521 persons per square mile, Bihar is more thickly populated than Germany. There are only four towns, which can be classed as cities, namely, Patna, Gaya, Jamshedpur and Bhagalpur. During the last ten years the population of Patna has been steadily increasing. Hindus form an overwhelming majority of the population. Though Muslims form about one-tenth of the total population they constitute more than one-fifth of urban population of the province. Animists account for 5·7 per cent. These are inhabitants of the Chota Nagpur plateau and the Santal Parganas, the latter district being a continuation of the plateau in a north-easterly direction.

INDUSTRIES

Although there is a great deal of mineral wealth in Chota Nagpur and important industries are developing in connection with it, still for the bulk of the population of the province agriculture continues to be the basic occupation. Over 80 per cent. of the population depends wholly on agriculture, while only 7·8 depends on industries.

The soil throughout the whole of that portion of the Indo-Gangetic plain lying within the provincial boundaries is extremely fertile, particularly in North Bihar, in parts of which the density of the population is more than 900 people to the square mile. The province occupies a transitional position between Ganges delta with its damp climate so suitable for the paddy crop and the provinces to the north and west where large irrigation schemes have had to be provided to enable the soil to produce its bounty. As in the delta of the Ganges, rice is by far the most important crop as it occupies normally an area of approximately 12 million acres or about 52 per cent. of the net cropped area of the province. The area under rice is about 9,300,000 acres. As canal irrigation is available only in the Sone valley and to a moderate extent in Champaran district, the importance of the south-west monsoon to the province of Bihar cannot be over-estimated.



H.E. Madhao Shrihari Aney

In addition to the rice crop, however, other grain crops are grown on a tolerably large scale. Of the monsoon cereals, maize is grown in a normal area of about 16 lakhs of acres while in the cold weather wheat and barley are extensively grown and occupy approximately 13 lakhs of acres. The cultivation of oilseeds like castor, mustard and linseed forms a large and important part of the agriculture of Bihar, the normal area under spring oilseeds being estimated at more than 17 lakhs of acres. The areas under maize, wheat, barley and spring oilseeds are about 1,513,100 acres, 1,220,800 acres, 1,279,100 acres and 1,504,300 acres respectively.

After the United Provinces, Bihar is the most important white sugar area in India, some 26 per cent. of the total production of white sugar in the country being turned out in Bihar factories. The importance of the agricultural aspect of the industry cannot be overestimated. In 1942-43, for instance, 4 crore of rupees were paid to the growers for cane purchased and crushed by the factories. Apart from this numbers of young graduates and a large labour force find employment at the factories from year to year. The number of factories in the province has risen from 12 in 1931-32 to 31 at the present time.

Jute is also an important crop and is confined almost entirely to the Purnea district on the West Bengal border where about 95 per cent. of the total crop in the province is produced. The total area under jute crop is about 202,200 acres but little of the produce is manufactured within the province.

Tobacco is a crop of increasing importance in the province and one which is likely to expand in importance. The area under the crop is about 110,000 acres. There are two factories at present in the province.

MANUFACTURES

Opium was formerly, with indigo; the chief manufactured product of Bihar, but in consequence of the agreement with the Chinese Government the Patna Factory was closed. At Monghyr the Peninsular Tobacco Company have erected one of the largest cigarette factories in the world and as a result tobacco is being grown much more extensively. The Tata Iron and Steel Works at Jamshedpur in Singhbhum district are also one of the largest in the world and numerous subsidiary industries are springing up in their vicinity. The most important of these are the Tinplate Company of India, Agricultural Implements, Ltd., Enfield Cable Company of India, Enamelled Ironware, Limited, and Indian Steel Wire Products. The population of Jamshedpur has passed the 100,000 limit and it consumes 1¼ million tons of coal annually. This part of the province has also some of the richest and most extensive iron mines in the world and supplies the iron and steel works in both West Bengal and Bihar with raw materials, but the raising of coal is still the most important of the mineral industries in the province. The coalfields in the Manbhum District have undergone an extraordinary development in the past twenty years, while valuable new fields are being developed at Ramgarh, Rokaro and Karanpura in Hazaribagh. This same district is the most important mica mining centre in the world both on account of the quality as well as the size of its output. Manbhum, Palamau, Ranchi, the Santal Parganas and Gaya are also the chief centres for the production of lac and the manufacture of shellac, the latter of which is exported from India to the value of ten crores annually. Cement is the other important industry of the province which is produced from the limestones available in Palamau and Shahabad.

ADMINISTRATION

The Province on first constitution was administered by a Lieutenant-Governor-in-Council, thus being unique in India as the only Lieutenant Governorship with a Council. It was raised to the status of a Governorship, with an Executive Council and Ministers under the Reform Act of 1919. The principles of the provincial administration are fully explained elsewhere.

PUBLIC WORKS

The Public Works Department in the Province of Bihar consists of two separate branches, viz.:—(1) the Buildings and Roads which includes Railways, and Public Health Engineering Branches and (2) Irrigation and Electric Branches. There are two Chief Engineers. Chief Engineer I is in charge of the Buildings and Roads. Chief Engineer II is in charge of the Irrigation and Electric Branches of the P. W. Dept. In addition to this, there is another Deputy Secretary to Government (communications) and a Deputy Secretary to Government and also a non-technical Assistant Secretary in the Irrigation and Electric Branch. The Electrical work of the Province is carried out by an Electric Inspector and Electrical Engineer and a staff of subordinates; while the Public Health Engineering works are looked after by the S. E. Public Health Engineering Department who is in charge of the P. H. Engineering Department and a staff of subordinates.

The whole organization of the P. W. and Irrigation Departments is now under a non-technical Secretary to Government with C.E.'s for Buildings and Roads, Irrigation, P. H. E. and Electrical working as Heads of Departments.

JUSTICE

The administration of justice is controlled by the High Court of Judicature at Patna. In the administration of civil justice below the High Court are the District Judges as Courts of Appeal, the Subordinate Judges and the Munsiffs. The jurisdiction of a District Judge or Subordinate Judge extends to all original suits cognizable by the Civil Courts. It does not, however, include the powers of a Small Cause Court, unless these be specially conferred. The ordinary jurisdiction of a Munsif extends to all suits in which the amount or value of the subject matter in dispute does not exceed Rs. 1,000 though the limit may be extended to Rs. 4,000. On the criminal side the Sessions Judge hears appeals from Magistrates exercising first class powers while the District Magistrate is the appellate authority for Magistrates exercising second and third class powers. The District Magistrate can also be, though in point of fact he very rarely is, a court of first instance. It is usual in most districts for a Joint Magistrate or a Deputy Magistrate to receive complaints and police reports, more important or complicated cases being referred to the District Magistrate who is responsible for the peace of the district. In the Santal Parganas and in the Chota Nagpur Division the Deputy Commissioners and their subordinates hear rent suits. In the Santal Parganas the Deputy Commissioner and his subordinates also exercise civil powers.

LAND TENURE

The whole of the land tenure system will be completely changed by the passage of the Bihar State Acquisition of Zamindaris Bill which was passed by the Bihar Legislative Assembly on April 20 and by the Legislative Council on May 11. The Bill seeks to provide for the transference to the crown of interests of proprietors and tenure holders in land and of mortgagees and lessees of such interests, including their interests in trees, forests, fisheries, "jalkars", ferries, "hats", "bazars", mines and minerals.

In regard to compensation, the Congress Working Committee to whom the Zamindars went in deputation has made the following suggestions to the Bihar Government: 1. The compensations should be paid in 40 equal instalments. 2. It should be paid in negotiable bonds bearing a uniform rate of interest of 2½ per cent. per annum. 3. In calculating the income of a proprietor or tenure holder the average of 10 years actual realization of rent should be taken in order that a deduction may be made on account of unrealizable arrears.

It is understood that Government have fixed September 1 as the dead-line for the completed liquidation of the Zamindari system.

At present almost the whole of the province of Bihar is covered by the permanent Settlement of 1793. A number of estates are held direct by Government, having come into the direct management of Government in various ways. Other estates are managed temporarily by the Board of Revenue under the Court of Wards Act, while in Chota Nagpur a number of estates are managed by Managers appointed under the Chota Nagpur Encumbered Estates Act. There are two Tenancy Acts in force in the Province:—In Bihar the Bihar Tenancy Act is in force. This is the same as the Bengal Tenancy Act, 1885, with a number of important differences consequent on recent amendments of the Act. In Chota Nagpur, which is largely inhabitated by aboriginal peoples, the Chota Nagpur Tenancy Act, 1908, an Act specially adopted to their requirements, is in force. It has also recently undergone several important amendments beneficial to the people of Chota Nagpur. There is a third tenancy system in the Santal Parganas where the tenancy law is contained in Regulation III of 1872 and II of 1886 and the record-of-rights prepared in the settlement. Finally in a small part of South Bihar where there is a large aboriginal population a special chapter of the Bihar Tenancy Act designed to prevent alienation of land by aborigines is in force.

Throughout the province a system of periodic settlements is in vogue. In these settlements the maps and cadastral ledgers are revised and fair rents settled. In many districts the settlement records are now out of date and in one or two it is nearly 40 years since the last settlement was undertaken.

In the greater part of the Santal Parganas and in many parts of Chota Nagpur the headmen system prevails. The usual practice is that the headmen are responsible for the collection of the rents and their payment to landlords after deduction of a percentage as their remuneration. Special steps have been taken in the settlements to record the rights and duties of the headmen, and the special rights and privileges of certain privileged classes of tenants among the aboriginals.

POLICE

The Departments of Police, Prisons and Registration are each under the general direction of Government, supervised and inspected by an Inspector-General with a staff of assistants. The Commissioner of Excise and Salt is also Inspector-General of Registration.

Under the Inspector-General of Police are three Deputy Inspectors-General and 24 Superintendents. There are also 24 Assistant Superintendents of Police and 48 Deputy Superintendents. The force is divided into the District Police, the Railway Police and the Military Police. There is a college for the training of officers and two Schools for the training of recruit constables. Both the institutions have selected Police officers on their staff. A Criminal Investigation Department has also been formed for the collection and distribution of information relating to professional criminals and criminal tribes whose operations extend beyond a single district and to control, advise, and assist in investigations of crime of this class and other serious action which its assistance may be invoked. Under this department three Bureaus are working, *i.e.*, Finger Print Bureau, Photo Bureau and the Handwriting Bureau. There are 11 companies of Unmounted Military Police and seven troops of Mounted Military Police which are maintained as reserves to deal with serious and organised disturbances and perform no ordinary civil duties. The Unmounted Military Police is under the charge of a commandant who is an officer of S.P.'s rank.

EDUCATION

Implementation of important post-war educational schemes has been entrusted to the Director of Public Instruction with a special staff. The Province has made notable progress in the development of Basic education.

The mass literacy movement launched in 1938 is being further expanded under an Adult Education Board with its publication and publicity sections working in co-operation with various Departments of Government. The percentage of literacy is 9.2 according to the 1941 census.

The Province has one University, the University of Patna.

INSTITUTIONS

	1936–37.	1941–42.	1946–47.
Number of arts and science colleges ..	9	16	23
Number of high schools	208	294	409
Number of middle schools	776	1,260	1,542
Number of upper primary schools ..	3,082 + 13*	3,845 + 13*	4,114 + 13*
Number of lower primary schools ..	17,695	18,418	16,133

* European schools.

SCHOLARS

There has been likewise a rapid increase in the number of pupils reading in these institutions except primary schools, as table below indicates :

	1936-37.	1941-42.	1946-47.
Number of scholars in arts and science colleges	3,620	6,497	12,767
Do in high schools	59,639	85,120	1,40,904
Do in middle schools	1,01,810	1,53,443	2,02,504
Do in primary schools	7,58,231	9,07,970	9,06,396

PERCENTAGE

The percentage of pupils attending schools to the total population has correspondingly increased as the table below will show :

Percentage of pupils to the total population.	1936-37.	1941-42.	1946-47.
Male	5·12	5.66	6·17
Female	·69	·86	·88
Total	2·91	3·24	3·54

EXPENDITURE

The direct expenditure from all sources has also increased as will appear from the figures given below:

	1936-37.	1941-42.	1946-47.
	Rs.	Rs.	Rs.
In arts colleges	10,51,347	13,44,624	20,66,766
In high schools	26,57,375	33,62,825	55,47,223
In middle schools	18,82,587	26,47,296	40,13,028
In primary schools	49,04,881	54,56,903	83,07,424

PUBLIC FUNDS

The net expenditure from public funds, unlike the previous quinquennium, appreciably increased during the present quinquennium as figures below show :

	1936-37.	1941-42.	1946-47.
	Rs.	Rs.	Rs.
Expenditure from Government funds	84,48,179	85,30,094	1,14,94,447
Expenditure from Boards' own funds	20,87,692	20,57,275	42,38,629
Total public funds	1,05,35,871	1,05,87,369	1,57,33,076

WOMEN'S EDUCATION

The rate of progress in girls' education has been rather slow during the quinquennium as will be clear from the following figures :

	1936-37.	1941-42.	1946-47.
Number of institutions for girls	2,091	2,395	2,110
Total number of girls reading in all institutions for boys and girls	1,11,942	1,56,130	1,59,297
Percentage of girls receiving education to total female population of the province	·69	·86	·88

EXPENDITURE

The table below gives the average expenditure per pupil per year for all kinds of institutions :

	1931-32.	1936-37.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.
	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Expenditure, per pupil per year	16 12	17 13	16 1	18 3	20 3	18 9	22 8	23 4

MEDICAL

The Medical Department is under the control of the Inspector-General of Civil Hospitals. Under him there are 16 Civil Surgeons who are responsible for the medical work of the districts at the headquarters of which they are stationed. 57 hospitals & Dispensaries are maintained by Government in addition to 632 Dispensaries maintained by Local Bodies, Railways, private persons, etc. About 7,000,000 patients including 1,20,000 in-patients are treated in all the dispensaries every year. The total expenditure on the dispensaries maintained by Government and Local Bodies including that of the private aided institutions amounts to about 40,00,000 a year.

There is a large mental hospital for Europeans at Ranchi receiving patients from Assam, Bihar, W. and E. Bengal, Baluchistan, the C. P., the N.W.F.P., Orissa, W. and E. Punjab and the United Provinces and another similar institution for Indians for the treatment of mental patients from Bihar, Orissa and W. and E. Bengal. A sanatorium has been established at Itki in the district of Ranchi for the treatment of tuberculosis. There is a Medical College at Patna with a large and well equipped hospital attached to it including an institute for Radium treatment. There is a Medical School at Darbhanga which also has a large hospital attached to it. Centres for anti-rabic treatment have been opened at Patna and other suitable places in the province.

The province has a laboratory for the preparation of cholera-phage and bacterio-phage which are supplied to other provincial Governments for use in the prevention of epidemics.

PUBLIC HEALTH

The Public Health Department aims at the promotion of the well being and the health of the people by the prevention of the epidemic diseases, improvement in sanitation, and nutritional state of the people. All factors that have bearing on health come within the purview of this department. The department is under the control of the Director of Public Health, Bihar. For purposes of efficient public health administration the province has been divided into three circles, known as North Bihar, South Bihar and Chota Nagpur Circle with their headquarters at Muzaffarpur, Patna and Ranchi. The Assistant Directors of Public Health act as reporting and inspecting officers of Government on matters pertaining to the health and sanitation of their respective circles. They also inspect and supervise the working of the public health administration under the local bodies.

There are sixteen districts in the province, each one of them is provided with a Health Officer, who is in direct charge of the Health Administration of the district. Local bodies are responsible for health administration in their own areas. Out of fifty-four Municipalities, eight are provided with Health Officers.

A senior Officer of this department known as Senior Executive Medical Officer is placed incharge of the flood affected areas of the Kosi where a special scheme of medical and Public Health relief has been introduced.

The other public health services, maintained by the department are the offices of the Chemical Analyst, Nutrition Department, Bacterio-phage and that of Excise Chemist, which are all located in Public Health Laboratory.

All supplies of vaccine lymph are manufactured at the Vaccine Institute, Namkum. The department maintains two depots, main one at Patna and the Sub-depot at Ranchi where anti-malarial drugs, vaccines, disinfectants and equipments are stocked for supply to local bodies in the province. The department takes special measures for control of epidemics, malaria, kala-azar and plague.

For the medical inspection of schools, four School Medical Officers, one in charge of each of the four divisions of the province are maintained. A lady school Medical Officer for the inspection of girl schools is also employed.

The Department carry out Public Health Propaganda by means of leaflets, pamphlets, posters, health exhibitions, slides and films.

The budget of the Public Health Department is about rupees forty lacs every year.

FINANCE

The total revenue of the Province is 17.93 crores (Revised 1947-48) and 21.57 crores (Budget 1948-49) and the total expenditure on the revenue account is 16.90 crores (Revised 1947-48) and 20·09 crores (Budget 1948-49).

I. The main heads of revenue are as follows :-

	Tax (Revised 1947-48).
(i) Taxes on Income other than Corporation	3.29.24
(ii) Land Revenue	1.35.00
(iii) Provincial Excise	4.50.00
(iv) Stamps	1.76.00
(v) Other Taxes and Duties	1.09.92
(vi) Extraordinary Receipts	2.81.32

II. The main heads of expenditure on beneficient Departments :—

	Tax (Revised 1947-48).
(i) Education	1.25.01
(ii) Medical	56.85
(iii) Public Health	1.08.21
(iv) Agriculture	70.55
(v) Veterinary	9.40
(vi) Corporation	18.06
(vii) Industries	31.36

ADMINISTRATION

GOVERNOR.

His Excellency Sri Madhao Shrihari Aney.

PERSONAL STAFF.

Secretary to Governor, K. S. V. Raman, I.C.S.

Military Secretary to Governor, Major B. G. Deoskar.

Honorary A. D. Cs., Risaldar Major and Hony. Capt. Abdul Latif, Khan Bahadur, O.B.I., I.D.S.M., late 2nd Royal Lancers (Gardener's Horse).

CABINET MINISTERS.

Prime Minister for Home Affairs, The Hon'ble Mr. Sri Krishna Sinha.

Minister of Finance, Labour and Supply and Price Control, The Hon'ble Mr. Anugrah Narayan Sinha.

Minister for Development and Transport, The Hon'ble Dr. Saiyid Mahmud.

Minister for Public Health, The Hon'ble Mr. Jaglal Chaudhury.

Minister for Irrigation, Public Health (Engineering), Electrification and Legislative, The Hon'ble Mr. Ramcharitar Singh.

Minister of Education and Information, The Hon'ble Mr. Badri Nath Verma.

Minister for Revenue, Forest and Excise, The Hon'ble Mr. Krishna Ballabh Sahay.

Minister of L. S. G. and Medical, The Hon'ble Mr. Binodanand Jha.

Minister for P.W.D. (Roads and Buildings) and Cottage Industries, The Hon'ble Mr. Abdul Qaiyum Ansari.

SECRETARIAT.

Chief Secretary to Government, Political and Appointment Departments, V. K. B. Pillai, I.C.S.

Secretary to Government, Finance Department, L. P. Singh, I.C.S.

Secretary to Government, Supply & Price Control Dept., B. D. Pande, I.C.S.

Secy. to Govt. Rev. and Labour Dept., K. Raman, I.C.S.

Secretary to Government, Judicial Department, T. G. N. Ayyar, I.C.S.

Chief. Eng. to Government, P.W.D., M. L. Bahl, I.S.E.

Secretary to Govt. P.W.D., T. P. Singh, I.C.S.

Second Chief Engineer & Addl. Secy. to Govt., P.W.D., S. D. Khangar, I.S.E.

Dy. Chief Engineer and Dy. Secy. to Govt. (Communications), H. K. Nivas, I.S.E.

Dy. Chief Engineer, and Dy. Secy. to Govt., Irrigation, D. Mehta, I.S.E.

Secretary to Government, Education Department, S. K. Aikat.

Secretary to Government, Local Self-Government Department, Pandey Ramchandra Saha.

Secretary to Government, Legislative Department, Khalilur Rahman.

Public Service Commission (for Bihar, C.P. and Berar and Orissa), Rajandhari Sinha, O.I.E.; *Chairman*: R. K. Ratho, M.A., LL.B. and Dr. H. C. Seth, M.A., Ph.D. (Lond.), *Members*; V. Das, B.A. (Hons.), Dip.-in-Edn., *Secretary*.

Secretary to Govt., Dev. Dept., Qamrul Huda.

Secretary to Govt., Welfare Dept., Pushkar Thakur.

GOVERNORS OF BIHAR

Lord Sinha of Raipur, P.C., K.C. ..	1920	Sir Thomas George Rutherford, K.C.S.I., K.C.I.E., I.C.S.	1943
Sir Henry Wheeler, K.C.S.I., K.C.I.E., I.C.S.	1921	Sir Robert Francis Mudie, K.C.I.E., C.S.I., O.I.E., O.B.E., I.C.S.	1943
Sir Hugh Lansdown Stephenson, K.C.S.I., K.C.I.E.	1927	Sir Thomas George Rutherford, K. C. S. I., K.C.I.E., I.C.S.	1944
Sir James David Sifton, K.C.S.I., K.C.I.E., I.C.S.	1932	Sir Hugh Dow, K.C.S.I., C.I.E., I.C.S. ..	1946
Sir Maurice Garnier Hallett, C.C.I.E., K.C.S.I., I.C.S.	1937	Sri Jairamdas Daulatram	1947
Sir Thomas Alexander Stewart, K.C.I.E., K.C.S.I., I.C.S.	1939		

BIHAR LEGISLATIVE COUNCIL

President: The Hon'ble Sir Rajivaranjan Prasad Sinha, Kt., M.A.

Deputy President: Shyama Prasad Sinha.

Deputy Secretary: Raghu Nath Prashad, M.A., B.L.

Deputy Secretary: Shri Chand Lall, B.A. (Cal.), B.A. Hons. (Lond.), Dip.-in-Edn. (Lond.), Bar-at-Law.

Assistant Secretary: Bisheswar Prasad.

The Hon'ble Sir Rajivaranjan Prasad Sinha, Kt., M.A. (*North Patna Division General*); Sooraj Narain Sinha (*Gaya General*); Jayadeva Narain Sinha (*Saran cum Champaran General*); Rai Bahadur Maheshwar Prasad Narayan Singh (*Muzaffarpur General*); Ganga Nand Singh (*Darbhanga General*); Ramjiwan Himat Singka (*Monghyr cum Santal Parganas General*); Naresh Mohan Thakur (*Bhagalpur cum Purnea General*); Satis Chandra Sinha (*Hazaribagh cum Manbhum General*); Rai Sahib Nalini Kumar Sen (*Ranchi and Palamau cum Singhbhum General*); Muhammad Mahmood (*Patna cum Shahabad Muhammadan*); Saiyid Muhammadad Mehdi (*Gaya cum Chota Nagpur Division Muhammadan*); Saiyid Mobarak Ali (*Tirhut Division Muhammadan*); Jamilur Rahman (*Bhagalpur Division Muhammadan*); Vacant (*Bihar European*); Rai Brijraj Krishna (*Elected by the Bihar Legislative Assembly*); Shyama Prasad Sinha (*Elected by the Bihar Legislative Assembly*); Gajindra Narayan Singh (*Elected by the Bihar Legislative Assembly*); Puneydeo Sharma (*Elected by the Bihar Legislative Assembly*); Shah Muhammad Umair (*Elected by the Bihar Legislative Assembly*); Radha Govind Prashad (*Elected by the Bihar Legislative Assembly*); Devendra Nath Samanta (*Elected by the Bihar Legislative Assembly*); Boniface Lakra (*Elected by the Bihar Legislative Assembly*); Shah Ozair Muhammad Munim; Abdul Malik (*Elected by the Legislative Assembly*); H. B. Chandra (*Elected by the Legislative Assembly*); Srimati Saraswati Devi (*Elected by the Legislative Assembly*); Vacant (*Nominated*); Mrs. Nayama Khatoon Haider (*Nominated*); Chandrika Ram (*Nominated*); Jaideva Prasad (*Nominated*).

BIHAR LEGISLATIVE ASSEMBLY

Speaker: The Hon'ble Mr. Vindhyeshwari Prasad Varma, B.A., B.L.

Deputy Speaker: Deva Saran Singh.

Secretary: Raghu Nath Prashad, M.A., B.L.

Deputy Secretary: Shri Chand Lall, B.A. (Cal.), B.A. Hons. (Lond.), Dip.-in-Edn. (Lond.), Bar-at-Law.

Asstt. Secretary: Bisheswar Prasad.

Sarangdhar Sinha (*Patna City General Urban*); Jagat Narain Lal (*Patna Division General Urban*); Murli Manohar Prasad (*Tirhut Division General Urban*); Gauri Shankar Dalmia (*Bhagalpur Division General Urban*); Amiyo Kumar Ghosh (*Chota Nagpur Division General Urban*); Deva Saran Singh (*Central Patna General Rural*); Shyam Nandan Singh (*Dinapur General Rural*); Jagadish Narain Sinha (*Bihar General Rural*); Vacant (*East Bihar General Rural*); Mahabir Ram (*East Bihar General Rural, Reserved*); Birendra Bahadur Sinha (*South Gaya General Rural*); Sakti Kumar (*South Gaya General Rural, Reserved*); The Hon'ble Mr. Anugrah Narayan Sinha (*Aurangabad General Rural*); Jamuna Prashad Singh (*Nawada General Rural*); Chetu Ram (*Nawada General Rural, Reserved*); Mosaheb Sinha (*North Gaya General Rural*); Hargobing Misra (*Buxar General Rural*); Guptanath Singh (*Bhabhua General Rural*); Sardar Harihar Singh (*North-East Shahabad General Rural*); Deo Narayan Singh (*East Central Shahabad General Rural*); Jagjivan Ram (*East Central Shahabad General Rural, Reserved*); Jagarnath Singh (*Sasaram General Rural*); Pandit Girish Tewari (*West Saran Sadr General Rural*); Ram Binod Sinha (*East Saran Sadr General Rural*); Jhulan Sinha (*North-East Siwan General Rural*); Mahamaya Prasad Sinha (*South-West Siwan General Rural*); Prabhunath Sinha (*East Gopalganj cum Mashrak and Marhowrah General Rural*); Phulan Prasad Varma (*West Gopalganj General Rural*); Ram Basawan Ram (*West Gopalganj General Rural, Reserved*); Ganesh Prasad Sah (*North-West Champaran Sadr General Rural*); Pandit Prajapati Misra (*East Champaran Sadr General Rural*); Harivans Sahay (*South-West Champaran Sadr General Rural*); Jaynarayan Prasad (*South Bettiah General Rural*); The Hon'ble Mr. Badri Nath Verma (*North Bettiah General Rural*); Yamuna Ram (*North Bettiah General Rural, Reserved*); Mahesh Prashad Sinha (*East Muzaffarpur Sadr General Rural*); Shiva Nandan Ram (*East Muzaffarpur Sadr General Rural, Reserved*); The Hon'ble Mr. Vindheswari Prasad Varma (*West Muzaffarpur Sadr General Rural*); Dip Narayan Sinha (*East Sitamarhi cum Katra and Minapur General Rural*); Rameshwar Prasad Sinha (*South-West Hajipur General Rural*); Bir Chandra Patel (*North-East Hajipur General Rural*); Ramasis Thakur (*North Sitamarhi General Rural*); Thakur Giaga Nandan Singh (*West Sitamarhi General Rural*); Pandit Dhanraj Sharma (*North Madhubani General Rural*); Harinath Mishra (*South Madhubani General Rural*); Jai Narayan Vinut (*East Madhubani cum Bakera General Rural*); Radhakant Choudhary (*Darbhanga Sadr General Rural*); Ramghulam Choudhary (*Darbhanga Sadr General Rural, Reserved*); Rajeshvar Prasad Narin Sinha (*North-West Samastipur*

General Rural); Ramcharan Sinha (*South-East Samastipur General Rural*); Sunder Mahto Pasi (*South-East Samastipur General Rural, Reserved*); The Hon'ble Mr. Sri Krishna Sinha (*South Sadr Monghyr General Rural*); Dr. Raghunandan Prasad (*South Sadr Monghyr General Rural, Reserved*); Kamleshwari Prasad Jadab (*North Sadr Monghyr General Rural*); The Hon'ble Mr. Ramcharitra Sinha (*West Begusarai General Rural*); Sarjoo Prasad Sinha (*East Begusarai General Rural*); Kalika Prasad Singh (*Jamui General Rural*); Rash Bihari Lal (*South Bhagalpur Sadr General Rural*); Shivadhari Singh (*North Bhagalpur Sadr cum Kishanganj General Rural*); Hari Kishore Prasad (*Banka General Rural*); Rajendra Misra (*Supaul General Rural*); Shivanandan Prasad Mandal (*Madhipura General Rural*); Bhagwat Prasad (*Madhipura General Rural, Reserved*); Basudeva Prasad Sinha (*North-West Purnea General Rural*); Dr. Kishori Lal Kundu (*East Purnea General Rural*); Lakshmi Narayan Singh "Sudhansu" (*South-West Purnea General Rural*); Bhola Pasawan (*South-West Purnea General Rural, Reserved*); The Hon'ble Pandit Binodanand Jha (*Deoghar cum Jamtara General Rural*); Pandit Budhinath Jha (*Godda General Rural*); Lambodar Mookherjee (*Santal Paryanas Sadr General Rural*); Bariar Hembrom (*Santal Parganas Sadr General Rural, Reserved*); Brijlal Dokania (*Pakaur cum Rajmahal General Rural*); Jairam Murmu (*Pakaur cum Rajmahal General Rural, Reserved*); The Hon'ble Mr. Krishna Ballabh Sahay (*Central Hazaribagh General Rural*); Khara Manjhi (*Central Hazaribagh General Rural, Reserved*); Sukhlal Singh (*Giridih cum Chatra General Rural*); Mangar Dhobi (*Giridih cum Chatra General Rural, Reserved*); Deoki Nandan Prasad (*Ranchi Sadr General Rural*); Soma Bhagat (*Ranchi Sadr General Rural, Reserved*); Nagar Mal Modi (*Gumla cum Simdega General Rural*); Rai Sahib Bundi Ram Oraon (*Gumla cum Simdega General Rural, Reserved*); Dr. Purna Chandra Mitra (*Kinti General Rural*); Raj Kishore Singh (*North-East Palamau General Rural*); Jitu Ram (*North-East Palamau General Rural, Reserved*); Jadubans Sahay (*South-West Palamau General Rural*); Sagar Mahto (*South Manbhum General Rural*); Tika Ram Manjhi (*South Manbhum General Rural Reserved*); Sris Chandra Banerjee (*Central Manbhum General Rural*); Nakul Chandra Sahis (*Central Manbhum General Rural, Reserved*); Purushottam Chohan (*North Manbhum General Rural*); Kishori Mohan Upadhyay (*Singhbhum General Rural*); Dansrdan Aldo Ho (*Singhbhum General Rural*); Sidui Hembrom (*Singhbhum General Rural, Reserved*); Saiyid Jafar Imam (*Patna City Muhammadan Urban*); Muhammad Nauman (*Patna Division Muhammadan Urban*); Muhammad Abdul Ghani (*Tirhut Muhammadan Urban*); Ali Ahmad Buland Akhtar (*Bhagalpur Division Muhammadan Urban*); Khan Sahib Saiyid Mazhar Imam (*Chota Nagpur Muhammadan Urban*); Sharfuddin Husain (*West Patna Muhammadan Rural*); Mehdi Hasan (*East Patna Muhammadan Rural*); Khaja Gulam Ahmad (*East Gaya Muhammadan Rural*); Latifur Rahman (*West Gaya Muhammadan Rural*); Gulam Mohiuddin (*Shahabad Muhammadan Rural*); Nur Hasan Mian (*Saran Sadr Muhammadan Rural*); Muhammad Qasim (*Siwan Muhammadan Rural*); Moinuddin Ahmad Khan (*Gopalganj Muhammadan Rural*); The Hon'ble Dr. Saiyid Mahmud (*North Champaran Sadr Muhammadan Rural*); Khan Sahib Saiyid Mazhar Saiyid Baduddin Ahmad (*South Champaran Sadr Muhammadan Rural*); Khan Sahib Saiyid Mazhar Alam (*Bettiah Muhammadan Rural*); Tajamul Husain (*Muzaffarpur Sadr Muhammadan Rural*); Badrul Hassan (*Hajipur Muhammadan Rural*); Zahid Hussain (*Sitamarhi Muhammadan Rural*); Abdul Ahad Muhammad Noor (*North-East Darbhanga Muhammadan Rural*); Muhammad Parid (*North-West Darbhanga Muhammadan Rural*); Dr. Ghulam Rasul Khan (*Central Darbhanga Muhammadan Rural*); Muhammad Khalil (*South Darbhanga Muhammadan Rural*); Nawab Muhammad Nazirul Hassan (*North Monghyr Muhammadan Rural*); Saiyid Muhammad Abu Zaffar (*South Monghyr Muhammadan Rural*); Saiyid Maqbul Ahmad (*Bhagalpur Sadr cum Banka Muhammadan Rural*); K. B. Mobarak (*Madhipura cum Supaul Muhammadan Rural*); Ziaur Rahman (*Araria Muhammadan Rural*); Muhammad Shafiqul Haque (*South Kishanganj Muhammadan Rural*); Muhammad Khan Sahib Muhammad Fazlur Rahman (*North-West Kishanganj Muhammadan Rural*); Muhammad Islamuddin (*North-East Kishanganj Muhammadan Rural*); Muhammad Raziuddin (*South-East Purnea Sadr Muhammadan Rural*); Muhammad Tahir (*North Purnea Sadr Muhammadan Rural*); Muhammad Yasin (*South Santal Parganas Muhammadan Rural*); Burhanuddin Khan (*North Santal Parganas Muhammadan Rural*); Muhammad Yasin (*Hazaribagh Muhammadan Rural*); The Hon'ble Mr. Abdul Qaiyum Ansari (*Ranchi cum Singhbhum Muhammadan Rural*); Ramzan Ali (*Palmaau Muhammadan Rural*); Saiyid Amin Ahmad (*Manbhum Muhammadan Rural*); Srimati Sunder Devi (*Patna General Urban Women's*); Srimati Bhagwati Kuer (*Muzaffarpur Town General Urban Women's*); Mrs. Zohra Ahmad (*Patna City Muhammadan Urban Women's*); M. Morris (*Anglo-Indian*); A. J. K. Richards (*Patna and Tirhut cum Bhagalpur European*); G. W. Hogg (*Chota Nagpur European*); Ignace Beck (*Indian Christian*); Hira Lal Saraf (*The Bihar Chamber of Commerce*); Rai Bahadur Syamnandan Sahaya (*The Bihar Planters' Association*); Munindra Nath Mookherjee (*The Indian Mining Federation*); W. Forest (*The Indian Mining Association*); Rameshwar Prasad Singh, C.B.E. (*Patna Division Landholders*); Chandreshwar Prasad Narain Sinha (*Tirhut Division Landholders*); Taranand Sinha (*Bhagalpur Division Landholders*); Raja Bahadur Kamakshya Narayan Singh (*Chota Nagpur Division Landholders*); Prabhat Chandra Bose (*Trade Union Mining Labour*); Michael John (*Jamshedpur Factory Labour*); Nirapada Mukharji (*Monghyr cum Jamalpur Factory Labour*); Dr. Sachchidananda Sinha (*University*); The Hon'ble Mr. Jaglal Chaudhuri.

Bombay

THE Bombay Province stretches along the west coast of India, from Gujerat in the north to Kanara in the south. It has an area of 76,443 square miles and a population of 20,849,840. Geographically included in the Province but under the Government of India is the first-class State of Baroda, with an area of 8,176 square miles and a population of 2,855,010. There are no States in political relations with the Government of Bombay, as they are all now under the Government of India. With the merger of 16 Deccan states the area of the Province has increased by more than 7,000 sq. miles, the total population by over a million and a half and the provincial revenue by about 2 crores. When the Gujerat States merge with Bombay (and this is now only a question of time) the area, the population and the revenue will increase still further.



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The Province embraces a wide diversity of soil, climate and people. In the Province there are the rich plains of Gujerat, watered by the Nerbudda and the Tapti, whose fertility is so marked that it has long been known as the Garden of India. South of Bombay City the Province is divided into two sections by the Western Ghats, a range of hills running parallel to the coast. Beyond the Ghats are the Deccan Districts; south of these come the Karnatic districts. On the sea side of the Ghats is the Konkan; a rice-growing tract, intercepted by creeks which make communication difficult.

THE PEOPLE

The population varies as markedly as soil and climate. Gujerat has remained true to Hinduism although long under the domination of powerful Muslim kings. Here there is an amplitude of caste divisions, and the people, who although softened by prosperity, are amongst the keenest trading races in the world. The Deccan peasant has been seasoned by adversity; the saying goes that the Deccan expects a famine one year in every three, and gets it. The population of the Deccan is much more homogeneous than that of Gujerat thirty per cent. being Mahrattas. The Karnatic is the land of the Lingayets, a Hindu reforming sect of the twelfth century, and in the Konkan there is a large proportion of Christians. Three main languages are spoken. Gujerati, Mahrathi and Kannada with Hindustani a rough *lingua franca* where English has not penetrated. The main castes and tribes number about five hundred.

The following figures give the distribution of population according to communities:

Scheduled Castes	18,55,148
Other Hindus	14,7,00,242
Sikhs	8,011
Jains	2,66,231
Buddists	1,433
Muslims	19,20,368
Christians	3,75,486
Zoroastrians	86,270
Jews	14,741
Tribals	16,14,298
Others	7,882

INDUSTRIES

The principal industry is agriculture, which supports sixty-four per cent. of the population. In Gujerat the soils are of two classes; the black cotton soil, which yields the famous Broach cottons, the finest in India, and alluvial, which under careful cultivation in Ahmedabad and Kaira makes, splendid garden land. The dominant soil characteristic of the Deccan is black soil, which produces cotton, wheat, gram and millet and in certain tracts rich crops of sugar-cane. The Konkan is a rice land, where the crop is grown under the abundant rains of the submontane regions, and in the south the Dharwar cotton vies with Broach as the best in India. There are no great perennial rivers suitable for irrigation, and the harvest is largely dependent upon the seasonal rainfall; supplemented by well irrigation. A chain of irrigation works, consisting of canals fed from great reservoirs in the region of unfailing rainfall in the Ghats, is gradually being completed, and this will ultimately make the Deccan immune to serious drought.

More than any other part of India the Bombay Province has been scourged by famine and plague. The evils have not been unmixed, for tribulation has made the people more self-reliant, and the rise in the values of all produce, synchronising with a certain development of industry, has induced a considerable rise in the standard of living. The land is held on what is known as the ryotwari tenure, that is to say, each cultivator holds his land direct from

Government under a moderate assessment, and as long as he pays this assessment he cannot be dispossessed.

MANUFACTURES

Whilst agriculture is the principal industry, others have no inconsiderable place. The mineral wealth of the Province is small and is confined to building stone, salt extracted from the sea, and a little manganese. But the handicrafts are widely distributed. The handloom weavers produce bright-coloured saris, and to a diminishing extent the exquisite kincobs of Ahmedabad and Surat. Bombay silverware has a place of its own, as well as the brass work of Poona and Nasik.

But the tendency is to submerge the indigenous handicrafts beneath industry organised on modern lines. Bombay is the great centre in India of the textile trade. This is chiefly found in the provincial capital Bombay, and in Ahmedabad.

Number of looms in Bombay Island.	65,948
Number of spindles in Bombay Island.	28,32,530
Number of hands employed in the Textile Industry in Bombay Island (daily average)	1,96,554
Consumption of Cotton by the Mills in Bombay Island (in candies of 784 lbs.)	6,81,243
Number of Spindles in Ahmedabad.	18,26,795
Number of Looms in Ahmedabad	43,421
Number of Spindles in Sholapore Dist.	2,90,040
Number of Looms in Sholapore Dist.	6,980
Number of Spindles in the Bombay Province (excluding Bombay Island and Ahmedabad)	12,86,886
Number of Looms in the Bombay Province (excluding Bombay Island and Ahmedabad)	25,043

ADMINISTRATION

With the introduction of Provincial Autonomy on April 1, 1937, the administration of the province has been largely altered at the top. Except in unusual circumstances, there is now a Governor and a council of ten Ministers to aid and advise him in all matters. The executive power of the province extends to all matters in which it may legislate.

In the legislative sphere the Governor is assisted by two Chambers, known as the Bombay Legislative Assembly and the Bombay Legislative Council. The Council is a permanent body. One-third of the members retire every three years and the Assembly, unless sooner dissolved, lasts for five years. The strength of the Assembly is 175 members of whom 30 are Muslims, 3 Indian Christians, 2 Anglo-Indians, 3 Europeans, 2 Landholders, 7 Commerce and Industry, 7 Labour, 1 University and the remaining 120 are Hindus including 15 Scheduled Castes and 7 Mahrathas. There are also six women.

The Legislative Council contains not less than 29 and not more than 30 members of whom not less than three and not more than four are nominated by the Governor. Twenty are elected by general constituencies, 5 by Muslims and 1 by Europeans.

The senior of the Civilian Secretaries is entitled the Chief Secretary.

The Government is in Bombay from November to the end of May; and in Poona from June to November: but the Secretariat always remains in Bombay.

Under the Local Government the Province is administered by three Commissioners, namely, the Commissioner for the Northern Division, with the headquarters at Ahmedabad, the Central Division with the headquarters at Poona, and the Southern Division with the headquarters at Belgaum. Each District is under a Collector usually a covenanted Civilian, who has under him one or more Civilians, as Assistant Collectors, and one or more Deputy Collectors. A collectorate contains on an average from eight to ten talukas, each consisting of from one to two hundred villages whose whole revenues belong to the State. The village officers are the patel, who is the head of the village both for revenue and police purposes; the talati or kulkarni, clerk and accountant; the messenger and the watchman. Over each taluka or group of villages is the mamlatdar, who is also a subordinate magistrate. The charge of the Assistant or Deputy Collector contains three or four talukas. The Collector and Magistrate has jurisdiction over the whole District. The Commissioners exercise general control over the Districts in their Divisions.

JUSTICE

The administration of justice is entrusted to the High Court sitting in Bombay, and comprising a Chief Justice, who is a barrister, and ten puisne judges, either Civilians, Barristers, or Indian lawyers and three additional judges. Of the lower civil courts, the court of the first instance is that of the Subordinate Judge recruited from the ranks of the local lawyers. The Court of first appeal, is that of the District or Assistant Judge, or of a first-class subordinate judge with special powers. District and Assistant Judges are Indian Civilians, or members of the Provincial Service or the Bar. In cases exceeding Rs. 5,000 in value an appeal from the decision of the Subordinate or Assistant Judge and from the decision of the District Judge in all original suits lies to the High Court. District and Assistant Judges exercise criminal jurisdiction throughout the Province but original criminal work is chiefly disposed of by the Executive District Officers and Resident and City Magistrates. Capital sentences are subject to confirmation by the High Court.

In some of the principal cities Special Magistrates exercise summary jurisdiction (Bombay has six Presidency Magistrates, as well as Honorary Magistrates exercising the functions of English Justices of the Peace) and a Court of Small Causes, corresponding to the English County Courts.

LOCAL GOVERNMENT

Local control over certain branches of the administration is secured by the constitution of local boards and municipalities, the former exercising authority over a District or Taluka, and the latter over a city or town. These bodies are composed of members either nominated by Government or elected by the people, who are empowered to expend the funds at their disposal on education, sanitation, the construction of roads and tanks, and general improvement. Their funds are derived from cesses on the land revenue, the toll, ferry funds and local taxes. The tendency in recent years has been to increase the elective and reduce the nominated element, to allow these bodies to elect their own chairmen, whilst larger and larger grants are made from the general revenues for water-supply and drainage.

The Bombay Municipal Boroughs Act of 1925 made further advance in the matter of local Self-Government in the Province. The Act provided more adequate basis for Municipal Administration in the larger cities of the Bombay Province. The larger municipalities are now styled as Municipal Boroughs and are 27 in number. The executives of these Borough Municipalities are invested with larger powers than before. Another important change introduced by the Act was the extension of municipal franchise to occupiers of dwellings or buildings with annual rental values of Rs. 12 or with capital value of not less than Rs. 200.

Mention must be made here of a Bill to amend the Bombay Village Panchayats Act. A feature of the Bill is the recognition of the fact that villages are entitled to a share in the land revenue collection. It is now proposed to hand over to the village panchayats 15 per cent of land revenue collected in the respective villages provided the panchayat levied one or the other of a list of specified taxes. It is also proposed to widen the powers of the nyaya panchayats which dispense justice to villagers. The hope underlying the Bill is that in the next few years 5,000 self-sufficient and self-reliant village panchayats would come into being to play their proper role in the life of the nation.

A shift in the control of primary education which has vitally affected the powers of local authority has also to be noted. This came about through some of the provisions of the Primary Education Bill which was passed by the Assembly at its Poona Session in 1947. The new legislation divests district local boards of responsibility for administering primary education in the rural areas because competent authorities hold these local bodies to be incapable of bearing the financial burden and would in any case be inefficient in the administration of education. Although there is a strong case for Government taking complete control of primary education a compromise was agreed to by which local bodies have been asked to elect school boards the chairman of which would be associated with the [illegible]ration of primary education.

X Fo[illegible]

XI Reg[illegible]

XII Recei[illegible] Greater Poona and endow Vehi[illegible]a Municipal Corporation

XIII Other Ta[illegible]ose of the Bombay

This is a recommendation of a Committee set up for the purpose and a draft bill providing for such a reconstitution of the Poona area has also been prepared. The Committee has recommended the amalgamation of the areas now included within the limits of the Poona City Municipality, the Poona Suburban Municipality, the Poona Cantonment Board and the villages of Hingne, Badruk, Kothrud, Pashan, Aundh, Dapodi, Bopodi, Yervada, Ghorpadi, Vanvdi, Kondhwa, Manjri and Parvati.

The Committee has also recommended that a master plan should be prepared for the whole area within a radius of 10 miles from the Poona City Post Office to facilitate a systematic reconstruction of the already built-up areas in Greater Poona and orderly development of the open lands therein as well as beyond it where expansion is likely to take place in years to come.

The constitution will consist of three co-ordinate authorities, namely the municipal corporation with 85 councillors, a standing committee of twelve members and a Municipal Commissioner to be appointed by Government. Besides the Commissioner, the Corporation will have a Deputy Commissioner, a Chief Engineer, a Health Officer and Education Officer, a Secretary and a Chief Auditor.

PUBLIC WORKS

The Public Works Department is under the control of a Chief Engineer who acts as Secretary to the Government. Under him are Superintending Engineers in charge of Circles and Executive Engineers in charge of divisions, and the Electrical Engineer.

There is a chain of protective irrigation works; originating in reservoirs in the Ghat regions. The principal works are the Nira Canals fed by Lake Whiting impounded by the Lloyd Dam at Bhatgar, the Pravara Canals fed by Lake Arthur Hill, impounded by Wilson Dam at Bhandardara, the Mutha canals fed by Lake Fife at Khadakvasla, the Godavari Canals fed by Lake Beale at Nandur Madhmeshwar and the Gokak Canal.

The Mutha Canals and the Gokak Canal were completed in 1896-97, the Nira Left Bank Canal in 1905-06, the Godavari Canals in 1915-16 and the Pravara Canals in 1926-27. The Nira Right Bank Canal which has been under construction since 1912 is practically complete. The Wilson Dam at Bhandardara, the second highest yet constructed by engineers the world over, was opened in 1926. The Lloyd Dam at Bhatger which is 5,333 feet in length, 190 feet in height and 124 feet in width was opened in 1928. It cost Rs. 172 lakhs. It is remarkable as being the largest Dam in volume hitherto constructed and contains 21¼ million cubic feet of masonry. The Assuan Dam in Egypt is popularly supposed to be the largest Dam in existence but that contains only 19 million cubic feet. It costs also nearly 50 per cent. more than the Lloyd Dam. An idea of the magnitude of the Lloyd Dam can be gathered from the fact that if a wall 6 feet high and 15 inches thick were constructed from the masonry in the Dam it would stretch to a distance of 520 miles, say from Bombay to Nagpur. These projects will irrigate certain tracts most liable to famine.

POLICE

The Police Force is divided into 3 categories, *viz.*, District Police, Railway Police and the Bombay City Police. The District and Railway Police in the Province proper are for the purpose of control under the Inspector-General of Police who is assisted by three Deputy Inspectors-General, of whom two are in charge of Ranges and the third is in charge of the Criminal Investigation Department and the Finger Print Bureau. The executive management of the Police in each district and on Railways in the Province proper is vested in a Superintendent of Police under the general direction of the Magistrate of the District concerned except in the case of the Railway Police.

For purposes of effective supervision over the investigation and prevention of crime, some of the larger districts are divided into one or more sub-divisions each under a Sub-Divisional Officer who is either an Assistant Superintendent of Police, or an Inspector of Police, or a Deputy Superintendent of Police, Sub-Inspectors are the officers in charge of Police Stations and are primarily responsible under the law, for the investigation of offences reported at their Police Stations. Officers appointed directly to the posts of Assistant Superintendents of Police, Deputy Superintendents of Police, Inspectors and Sub-Inspectors undergo a course of training at the Central Police Training School at Nasik before being posted to Districts for executive duty. The Bombay City Police is a separate force under the Commissioner of Police who is directly responsible to Government.

A sort of voluntary auxiliary police force to help in the maintenance of law and order during a difficult time has been formed in several places in the Bombay Presidency, particularly in the City of Bombay and in Ahmedabad. This force is popularly known as Home Guards. During the communal disturbances towards the end of 1946 and the early months of 1947 it was found that the normal strength of the police was not sufficient to cope with the situation, and to permanently enlarge the force would mean placing a heavy burden on the revenues of the province. The answer to the situation appeared to be the formation of a voluntary body who can be called upon to help the police in moments of grave disorder. Thus the Home or Civic Guards organization was formally constituted in November 1947 in Bombay with headquarters at Churchgate Reclamation, 'E' Road. The strength of the Home Guards in Greater Bombay is about 2,500.

HOME GUARDS

In April 1947 platoons of the Home Guards were on duty in riot-affected areas of Bombay for the first time for a period of 9 days. The number of officers and men on duty was 350 and the average daily attendance was 130. They gave every co-operation to the police and were particularly useful in the search for suspects and hidden arms.

To encourage recruitment to the Home Guards, Government have directed that regular members of the Home Guards should be given preference in the recruitment to posts in the local police and also that membership of the Home Guards should be regarded as an additional qualification for recruitment to all posts in Government service.

Here are more particulars about Home Guards:

Home Guards have been formed in Ahmedabad, Broach, Panch Mahals, Kaira, Surat, Thana, Ahmednagar, East Khandesh, West Khandesh, Nasik, Poona, Satara, Sholapur, Belgaum, Bijapur, Dharwar, Kanara, Kolaba and Ratnagiri.

Some of the top men in the organization are N. M. Kamte, Founder Commandant; U. H. Rana, Second Commandant; M. J. B. Maneckji, the present Commandant for Greater Bombay.

Freshers' training (drill without arms, P.T., 2 parades a week) lasts 3 weeks.

Recruits training (foot drill, drill with arms and signals, 1½ hours daily) lasts 15 working days.

Advance stage training (weapon training drill, bayonet training, range miniature and long) lasts 24 working days.

Special camp training (P.T., foot drill, drill with arms, guard mounting and weapon training, Rifle and Sten Gun) lasts 14 days.

In addition the Home Guards are taught first aid, police law, ju-ju-tsu, and how to control traffic. It is also proposed to give them training in wireless and general instruction by means of documentary films.

There are special camps under expert military authorities for officers only. This facility is offered only to Bombay Home Guards and nowhere else.

Apart from patrolling during the riots the Home Guards help the police in controlling traffic, bringing to book anti-social elements like *satta* gamblers, and generally keeping *bandobast* on festivals or other occasions.

Three minor developments which have to be noted are: (1) the establishment of police posts at the Victoria Terminus, the Bombay Central and the Poona and Ahmedabad Railway stations to afford assistance to the travelling public; (2) the establishment in Ahmedabad of an Advisory Committee of leading citizens to advise the police in the administration of the city. This committee is to meet every three months when the Superintendent of Police will acquaint the members with the work done to help the public and to receive suggestions from the Committee; and (3) the starting of crime detection bureaus on the British model, the first of which is to be set up in Ahmedabad. There will be photograph and finger-print departments attached to the bureau.

Two other points of general interest which will bear mention are: (1) the appointment for the first time in India of a woman sub-inspector to supervise the work of the 40 women constables who are an integral part of the Bombay City Police force. She will be attached to the Vigilance Branch of the C.I.D. and her duties will be mainly connected with personal search and supervision of women pri[illegible]; (2) the issuing of a new type of unifo[illegible] of blue drill coats with clo[illegible] blue drill shorts, blue woo[illegible] tops, a leather waist bel[illegible] Field service caps of th[illegible]

EDUCATION

Education is imparted partly through direct Government agency, and partly through the medium of grants-in-aid. Government maintain Arts Colleges at Bombay, Andheri, Ahmedabad and Dharwar. Other Colleges maintained by Government are the Grant Medical College, the Poona College of Engineering, the Agriculture College, Veterinary College, School of Art, Law College and the Sydenham College of Commerce. Most of the secondary schools are in private hands. The primary schools are maintained by Local Authorities, with a grant-in-aid. The Bombay Municipality is responsible for primary education in Bombay City (*q. v.*, Education).

The total number of institutions at the end of the year 1946-47 was 23,991. The total number of pupils in recognised institutions was 2,091,145. The recognised institutions consisted of 32 Arts and Science Colleges including the University School of Economics and Sociology, 24 Professional Colleges, 1,181 Secondary Schools and 18,992 Primary Schools.

There are 21,657 towns and villages in this Province. Of these, 13,433 possessed schools. The area served by a town or village with school was 5.7 square miles.

Altogether there were 2,114,905 pupils under instruction at the end of the year 1946-47. The percentage of pupils in recognised institutions to the total population of the Province was 5.79 as against 5.59 in the preceding year.

The total expenditure on public instruction was Rs. 960.1 lakhs. Out of this amount 46 per cent. was met from Provincial Revenues, 14·8 per cent. from Local Funds, 28·3 per cent. from fees and 10·9 per cent. from other sources.

The Educational Department is administered by a Director, with an Inspector in each Division and a Deputy or Assistant Inspector in each district.

Higher education in the Province is controlled by the Bombay University which was established in 1857. The constitution of the University underwent considerable changes in virtue of the Bombay University Act of 1928. This Act altered the whole constitution of the University so as to make it adequately representative with a view to bringing it into closer association with the public, and the industrial, and commercial and civic life of the people of the Province, to enable it to provide greater facilities for higher education in all branches of learning including Technology and to undertake on a larger scale than hereto for post-graduate teaching and research, while continuing to exercise dual control over the teaching given by colleges affiliated to it from time to time.

The new University Department of Chemical Technology was started in 1933. The authorities of the University, as now constituted, are chiefly the Chancellor, the Vice-Chancellor, the Syndicate, the Academic Council and the Senate. The Senate consisting of fellows is the supreme governing body of the University. The number of fellows is 144 of whom 40 are nominated by the Chancellor and 11 are ex-officio. The Academic Council consisting of educational experts deals with all purely academical questions. This body works in collaboration with the Syndicate which is the principal executive of the University.

MEDICAL

The Medical Department is in the charge of a Surgeon-General who is a member of the I. M. S., and Public Health in that of a Director of Public Health, who is usually a non-I.M.S. Officer. Civil Surgeons stationed at each district headquarters are responsible for the medical work of the district; whilst sanitation is entrusted to one of the Assistant Directors of Public Health.

Four large hospitals are maintained by the Government in Bombay, and the accommodation in them has been recently increased. The total number of beds available in all the hospitals and dispensaries in the Province including private Institutions is 8,000 roughly. Well-equipped hospitals exist in all important up-country stations. The Province contains 5 lunatic asylum and 14 institutions for the treatment of lepers. Vaccination is carried out by a staff under the direction of the Director of Public Health. Sanitary work has received an immense stimulus from the large grants made by the Government from time to time.

Two important schemes have been recently sanctioned for providing medical relief in rural areas.

The first relates to the extension of a formal scheme for subsidising medical practitioners in six selected rural centres. Government have now decided to open, in all, 330 centres for medical aid in the Province by giving subsidies to private medical practitioners. The subsidy will be given to allopathic medical practitioners and to some Ayurvedic and Unani practitioners.

Estimated Revenue for 1948-49—(in thousands of Rupees).

PRINCIPAL HEADS OF REVENUE.		Rs.
IV	Taxes on Income other than Corporation tax	7,57,26
VII	Land Revenue.. ..	3,68,55
VIII	Provincial Excise ..	6,70,00
IX	Stamp—	
	A. Non-Judicial ..	2,45,27
	B. Judicial.. ..	79,02
X	Forest	1,95,61
XI	Registration	28,18
XII	Receipts under Motor Vehicles Acts ..	77,54
XIII	Other Taxes and Duties	8,61,38
	Total ..	32,73,81

Irrigation, Navigation, Embankment, and Drainage Works.		Rs.
XVII	Works for which Capital Accounts are kept ..	34,99
XVIII	Works for which no Capital Accounts are kept	8,57
	Debt Service.	
XX	Interest..	76,20

Estimated Revenue for 1948-49—(in thousands of Rupees)—*contd.*

		Rs.
	Civil Administration.	
XXI	Administration of Justice	43,74
XXII	Jails and Convict Settlements	8,33
XXIII	Police	20,8[illegible]
	Ports & pilotage ..	5
XXVI	Education	36,50
XXVII	Medical	43,89
XXVIII	Public Health	39,33
XXIX	Agriculture	12,55
XXX	Veterinary	5
XXXI	Co-operation	6,50
XXXII	Industries	8,90
XXXVI	Miscellaneous Departments	61,09
	Total ..	3,72,23
	Civil Works.	
XXXIX	Civil Works	21,53
XL	Bombay Development Scheme	16,49
XLI	Receipts from Electricity Schemes	95
	Total ..	38,97

		Rs.
	Miscellaneous.	
XLIII	Transfers from Famine Relief Fund ..	3,28
XLIV	Receipts in aid of Superannuation ..	7,36
XLV	Stationery and Printing	4,93
XLVI	Miscellaneous	12,28
	Receipts on Nationalisation of Road Transport Scheme	1,00
	Total ..	28,85
L	Miscellaneous adjustments between Central and Provincial Governments	5
LI	Extraordinary Receipts	3,04,75
LII-B.	Civil Defence	....
	Grand Total ..	41,38,42
	Excess of Revenue over expenditure on revenue account ..	....
	Debts heads :—	
	Debt, Deposits and advances; Loans and advances by Provincial Government, etc. ..	2,55,83,45
	Total Receipts ..	2,97,21,87
	Add:—	
	Opening Balance	43,18
	Grand Total ..	2,97,65,05

Estimated Expenditure for 1948-49—(in thousands of Rupees).

	DIRECT DEMANDS ON THE REVENUE.	Rs.
7.	Land Revenue	97,45
8.	Provincial Excise	94,92
9.	Stamps	3,85
10.	Forest	1,01,87
11.	Registration	10,07
12.	Charges on account of Motor Vehicles Act	51,04
13.	Other Taxes and Duties ..	16,63
	Total ..	3,75,83
	Irrigation, Revenue Account.	
17.	Interest on works for which Capital Accounts are kept—Irrigation Works	43,92
18.	Other Revenue Expenditure financed from Ordinary Revenues—Works for which no Capital Accounts are kept	97,20
	Total ..	1,41,12

		Rs.
18(1).	Other Revenue Expenditure Financed from Famine Relief Funds	.....
19.	Capital Accounts of Irrigation, Navigation and Drainage Works charged to Revenue	.....
		....
	Debt Services.	
22.	Interest on Debt and other obligations	73,21
23.	Appropriation for reduction or avoidance of debt ..	2,73,66
	Total ..	3,46,87

Estimated Expenditure for 1948-49—(in thousands of Rupees)—*contd.*

		Rs.
	Civil Administration.	
25.	General Administration ..	1,91,88
27.	Administration of Justice ..	1,03,80
28.	Jails and Convict Settlements	40,70
29.	Police	5,93,63
30.	Ports and Pilotage	5
36.	Scientific Departments ..	2,31
37.	Education	7,93,70
38.	Medical	1,56,98
39.	Public Health	1,40,37
40.	Agriculture	2,48,90
41.	Veterinary	18,94
42.	Co-operation	63,42
43.	Industries	66,30
47.	Miscellaneous Departments ..	2,19,37
	Total ..	26,43,35
	Civil Works.	
50.	Civil Works	3,83,25
51.	Bombay Development Scheme.	11,72
52-A.	Other Revenue Expenditure connected with Electricity Schemes.	99
53.	Capital Outlay on Electricity Schemes met out of Revenue.	....
	Total ..	39,03,13
	Miscellaneous.	
54.	Famine Relief	12,00
55.	Superannuation Allowances and Pensions	....
56.	Stationery and Printing ..	1,64,96
57.	Miscellaneous	2,85,35
	Total ..	4,97,95

		Rs.
63.	Extraordinary items ..	....
64-A.	Transfer to the Revenue Reserve (Post-war Reconstruction) Fund ..	....
64-B.	Civil Defence	....
	Total ..	91
	Total Expenditure charged to Revenue	44,01,99
	Capital Expenditure not charged to Revenue.	
68.	Construction of Irrigation, Navigation, Embankment and Drainage Works ..	1,09,61
70.	Capital Outlay on Improvement of Public Health ..	27,70
70-A.	Capital Outlay in Industrial Development	25,00
80.	Bombay Development Scheme	—3,12
83.	Payments of commuted value of Pensions	—2,76
81.	Capital Account of Civil Works outside the Revenue Account	2,05,14
81-A.	Capital Outlay on Electricity Schemes	1,43,98
85-A.	Capital Outlay on Provincial Schemes connected with the War, 1939	—98,23
	Total ..	52,13,08
	Debts, Deposits and Advances (Total of debt heads) ..	2,45,09,25
	Total Disbursements ..	2,97,22,33
	Closing balance ..	4,27,11,00
	Grand Total ..	2,97,65,05

THE ADMINISTRATION

Governor

His Excellency Raja Sir Maharaj Singh

Personal Staff.

Private Secretary to H.E. The Governor—L. M. Nadkarni, B.A. (Hons.) (Bom.), M.Sc. (Econ.) (Lond.), I.C.S.

Comptroller of the Household of H.E. The Governor—Major R. J. Pavri, 3/5 Royal Gurkha Rifles.

Hon. Surgeon—Dr. S. B. Cooper, F.R.C.S. (England).

Aides-de-Camp—Lt. K. N. Bahl, R.I.N., Rusi S. Modi.

Hon. Aides-de-Camp—D. G. Moore, Capt. Sardar Raja Shahu Pratapsinh *alias* Balasaheb Bhonsle, L. A. Paddon Row, I. P., J. P.

COUNCIL OF MINISTERS.

B. G. Kher, *Prime Minister in charge of the Portfolios of Political, Services and Education.*

Morarji R. Desai, *Minister for Home and Revenue.*

M. D. D. Gilder, *Minister for Health and Public Works.*

L. M. Patil, *Minister for Excise and Reconstruction.*

Dinkarrao N. Desai, *Minister for Legal and Civil Supplies.*

Vaikunth L. Mehta, *Minister for Finance, Co-operation and Village Industries.*

G. D. Vartak, *Minister for Local Self-Government.*

Gulzarilal Nanda, *Minister for Labour.*

M. P. Patil, *Minister for Forest and Agriculture.*

G. D. Tapase, *Minister for Industries, Fisheries and Backward Class Department.*

Parliamentary Secretaries: Y. B. Chavan, Miss Indumati C. Sheth, D. K. Kunte, S. N. Mane, K. F. Patil, P. K. Sawant, D. N. Wandrekar, S. P. Gaonkar.

SECRETARIES TO GOVERNMENT

Chief Secretary, Political and Services Department.—M. D. Bhatt, C.I.E., I.C.S.

Home Department.—V. T. Daheja, I.C.S.

Revenue Department.—V. N. Sardesai, I.C.S.

Health & Local Govt. Dept.—D. R. Bodhan, I.C.S.

Edu. & Ind. Department.—D. S. Joshi, I.C.S. (Jt. Secry.).

Finance Department.—B. Venkatappiah, M.A., I.C.S., J.P.

Legal Department and Remembrancer of Legal Affairs.—P. M. Lad, I.C.S.

Public Works Department.—N. P. Gurjar, B.E. (Irrigation); B. S. Vyas, B.E., M.I.E. (Ind.), (Roads & Bldgs.).

Civil Supplies Department.—A. L. Dias, I.C.S., (Jt. Secry.).

Legislative Deptt. Secretary.—S. K. Sheode, B.A., LL.B.

Public Services Commission for the Province of Bombay

Chairman.—Y. A. Godbole, C.I.E., I.C.S. (Retd.).

Members.—P. G. Shah, C.I.E., A. A. A. Fyzee, M.A. (Cantab.), LL.B., Bar-at-Law.

Secretary.—K. B. H. D. Warden, B.A., B.Sc., J.P.

MISCELLANEOUS APPOINTMENTS

Commissioner of Income-Tax.—Dewan Bahadur R. Varadachari, B.A., J.P.

Director of Veterinary Services.—Rai Bahadur P. N. Nanda, M.R.C.V.S.

Advocate-General.—C. K. Daphtary, B.A. (Cantab.), Bar-at-Law.

Inspector-General of Police.—N. M. Kampte, M.B.E., B.A., G.(H.S.).

Director of Public Instruction.—D. C. Parte, M.A. (Cantab.).

Surgeon-General.—Dr. B. B. Yodh, M.B.B.S. (Bom.), M.R.C.S., (Eng.), M.R.C.P. (Lon.), D.T.M. & H. (Eng.).

Oriental Translator.—J. H. Dave, M.A.

Chief Conservator of Forests.—E. T. C. Vas, M.A., B.Sc. (Edin.).

Inspector-General of Registration and Director of Land Records.—T. T. Kothawala, C.I.E., M.A., B.Sc., J.P.

Director of Agriculture (Extension).—V. Iswaran.

Director of Argicultural, Engineering.—W. X. Mascarenhas, B.E., M.I.E., (India).

Director of Agriculture (Research and Education) and Principal Agricultural College, Poona.—Dr. B. N. Uppol, M.B.E., Ph.D. (Iowa, U.S.A.), F.N.I.

Registrar of Co-operative Societies and Director of Agriculture, Marketing & Rural Finance.—S. M. Ikram, M.A. (Punjab), I.C.S.

Municipal Commissioner, Bombay.—B. K. Patel, I.C.S.

Vice-Chancellor, the Bombay University.—Moha Mahopadhyaya P. V. Kane.

Registrar, Bombay University.—S. R. Dongerkery, B.A., LL.B.

Commissioner, of Police Bombay.—J. S. Barucha, I.P.

Director of Public Health.—K. A. Gandhi, D.P.H.

Accountant-General.—B. C. Dutt. M.A., J.P.

Inspector-General of Prisons.—Lt.-Col. R. T. Advani, M.B.B.S. (Bom.), I.M.S.

Post Master General.—Lt.-Col. K. J. Thouless, M.A.

Collector of Customs.—V. G. Matthews, I.C.S.

Collector of Central Excise.—K. G. Jacobs, M.A.

Commissioner of Excise.—M. D. Bhansali, M.A., LL.B. (Cantab.), Bar-at-Law, J.P.

Consulting Surveyor to Government.—Habibullah Khan, F.S.I., A.I.A.A. (Lond.), A.I.I.A. (Ind.).

Registrar of Companies.—Byramji M. Modi, B.Com., F.S.A.A., R.A.

Director of Publicity.—S. A. Ayer.

Commissioner of Labour.—S. V. Joshi, B.A. (Cantab.), J.P.

Labour Officer, Bombay.—A. S. Iyengar, B.A., LL.B., J.P.

Sheriff.—M. L. Dahanukar.

GOVERNORS OF BOMBAY

Sir Abraham Shipman	1662
Died on the island of Anjediva in Oct.	1664
Humfrey Cooke	1665
Sir Gervase Lucas	1666
Died, 21st May 1667.	
Captain Henry Garey (*Officiating*) ..	1667
Sir George Oxenden	1668
Died in Surat, 14th July 1669.	
Gerald Aungier	1669
Died in Surat, 30th June 1677.	
Thomas Rolt	1677
Sir John Child, Bart.	1681
Bartholomew Harris	1690
Died in Surat, 10th May 1694.	
Daniel Annesley (*Officiating*)	1694
Sir John Gayer	1694
Sir Nicholas Waite	1704
William Aislabie	1708
Stephen Strutt (*Officiating*)	1715
Charles Boone	1715
William Phipps	1722
Robert Cowan	1729
Dismissed.	
John Horne	1734
Stephen Law	1739
John Geek (*Officiating*)	1742
William Wake	1742
Richard Bourchier	1750
Charles Crommelin	1760
Thomas Hodges	1767
Died, 23rd February 1771.	
William Hornby	1771
Rawson Hart Boddam	1784
Rawson Hart Boddam	1785
Andrew Ramsay (*Officiating*)	1788
Major-General William Medows	1788
Major-General Sir Robert Abercromby, K.C.B. (*a*).	1790
George Dick (*Officiating*)	1792
John Griffith (*Officiating*)	1795
Jonathan Duncan	1795
Died, 11th August 1811.	

George Brown (*Officiating*)	1811
Sir Evan Nepean, Bart.	1812
The Hon. Mountstuart Elphinstone ..	1819
Major-General Sir John Malcolm, G.C.B.	1827
Lieut.-General Sir Thomas Sidney Beckwith, K.C.B.	1830
Died, 15th January 1831.	
John Romer (*Officiating*)	1831
The Earl of Clare	1831
Sir Robert Grant, G.C.H.	1835
Died, 9th July 1838.	
James Farish (*Officiating*)	1838
Sir J. Rivett-Carnac, Bart.	1839
Sir William Hay Macnaghten, Bart. (*b*) . ..	
George William Anderson (*Officiating*) ..	1841
Sir George Arthur, Bart., K.C.H.	1842
Lestock Robert Reid (*Officiating*) ..	1846
George Russell Clerk	1847
Viscount Falkland	1848
Lord Elphinstone, G.C.H., P.C.	1850
The Right Hon. William Robert Seymour Vesey FitzGerald.	1862
Sir George Russell Clerk, K.C.B. (2nd time)	1863
Sir Henry Bartle Edward Frere, K.C.B.	1867
Sir Philip Edmond Wodehouse, K.C.B. ..	1872
Sir Richard Temple, Bart., K.C.S.I. ..	1877
Lionel Robert Ashburner, C.S.I. (*Acting*)..	1880
The Right Hon. Sir James Fergusson, Bart., K.C.M.G.	1880
James Braithwaite Reile, C.S.I. (*Acting*)..	1885
Baron Reay	1885
Baron Harris	1890
Herbert Mills Birdwood, C.S.I. (*Acting*) ..	1895
Baron Sandhurst	1895
Baron Northcote, C.B.	1900
Sir James Monteath, K.C.S.I. (*Acting*) ..	1903
Baron Lamington, G.C.M.G., G.C.I.E. ..	1903
J. W. P. Muir-Mackenzie, C.S.I. (*Acting*).	1907
Sir George Sydenham Clarke, G.C.M.G., G.C.I.E. (*c*).	1907
Baron Willingdon, G.C.I.E.	1913
Sir George Ambrose Lloyd, G.C.I.E., D.S.O.(*d*)	1918
Sir Leslie Orme Wilson, P.C., G.C.I.E., G.M.G., D.S.O.	1923
Sir Henry Staveley Lawrence, K.C.S.I., I.C.S., acted for two months and twenty-two days for Sir Leslie Wilson.	
Sir Frederick Hugh Sykes, P.C., G.C.I.E., G.B.E., K.C.B., C.M.G.	1928
Sir Ernest Hotson, K.C.S.I., O.B.E., I.C.S., acted for six months for Sir F. H. Sykes.	
The Rt. Hon. Michael Herbert Rudolf Knatchbull, Lord Brabourne, G.C.I.E., M.C.	1933
Sir Robert Bell, K.C.S.I., C.I.E., I.C.S., acted for four months for Lord Brabourne.	
Sir Lawrence Roger Lumley, G.C.I.E., T.D.	1937
Sir John Colville, G.C.I.E., T.D.	1943
Sir Andrew Clow, K. C. S. I., C. I. E., I. C. S., acted for 3 months for Sir John Colville.	

(*a*) Proceeded to Madras on duty in Aug. 1793 and then joined the Council of the Governor-General as Commander-in-Chief in India on the 28th Oct. 1793.

(*b*) Was appointed Governor of Bombay by the Honourable the Court of Directors on the 4th Aug. 1841, but, before he could take charge of his appointment, he was assassinated in Cabul on the 23rd Dec. 1841.

(*c*) Afterwards (by creation) Baron Sydenham.

(*d*) Afterwards (by creation) Baron Lloyd.

Sir Vepa Ramamurthi acted for Sir John Colville, 19th May 1947— 2nd June 1947.

BOMBAY LEGISLATIVE COUNCIL

President: The Hon'ble Mr. Ramchandra Ganesh Soman.

Deputy President: Shantilal Harjiwan Shah, B.A., LL.B.

Sir Abdul Latif Haji Hajrat Khan (*Central Division, Muhammadan Rural*); Dattatraya Venkatesh Belvi, B.A., LL.B. (*Sholapur cum Belgaum cum Bijapur, General Rural*); Madhavrao Gopalrao Bhosle (*East Khandesh cum West Khandesh, General Rural*); Sir Currimbhoy Ebrahim, Bart. (*Bombay City cum Bombay Suburban District, Muhammadan Urban*); Vishnu Vaman Dandekar (*Thana cum Nasik cum Ahmednagar, General Rural*); Professor Sohrab R. Davar, Bar-at-Law, J.P. (*Bombay City cum Bombay Suburban District, General Urban*); Narsingrao Shriniwasrao Desai (*Dharwar cum Kanara, General Rural*); V. S. Dongre, B.A., Bar-at-Law (*Nominated*); Ratilal Mulji Gandhi (*Bombay City cum Bombay Suburban District, General Urban*); F. D. Ghodke (*Nominated*); Mahableshwar Ganapatibhat Gopi (*Dharwar cum Kanara, General Rural*); Dr. K. A. Hamied, B.Sc., M.A., Ph.D. (Berlin), A.I., F.R.C.S. (London), (*Bombay City cum Bombay Suburban District, Muhammadan Urban*); Nagappa Bandappa Kadadi (*Sholapur cum Belgaum cum Bijapur, General Rural*); Sir Behram Naorosji Karanjia (*Bombay City cum Bombay Suburban District, General Urban*); Kashinath Mannalal (*Thana cum Nasik cum Ahmednagar, General Rural*); Aziz Gafoor Kazi (*Southern Division, Muhammadan Rural*); Dr. Ganesh Sakharam Mahajani, M.A., Ph.D. (*Poona cum Satara, General Rural*); Ramchandra Narayan Mandlik (*Kolaba cum Ratnagiri, General Rural*); Mrs. Hansa Jivraj Mehta (*Bombay City cum Bombay Suburban District, General Urban*); Alibhai Esabhai P. Patel (*Northern Division. Muhammadan Rural*); Maganlal Bhikhabhai Patel (*Ahmedabad cum Kaira, General Rural*); Sonusing Dhansing Patil (*East Khandesh cum West Khandesh, General Rural*); Chandulal Surajmal *alias* Bhikhabhai Satia (*Ahmedabad cum Kaira, General Rural*); Shantilal Harjiwan Shah, B.A., LL.B. (*Broach and Panch Mahals cum Surat, General Rural*); The Hon'ble Mr. Ramchandra Ganesh Soman (*Poona cum Satara, General Rural*); Vasantrao Madhavrao Vedak (*Kolaba cum Ratnagiri, General Rural*); Mrs. Violet Alva, M.A., LL.B. (*Nominated*); V. S. Dongre, B.A., Bar-at-Law (*Nominated*).

BOMBAY LEGISLATIVE ASSEMBLY

Speaker: **The Hon'ble Mr. Kundanmal Sobhachand Firodia.**

Muhammadhusen Abdulsattar (*Sholapur District, Muhammadan Rural*); **Ahmedmiya Sharumiya** (*Ahmedabad District, Muhammadan Rural*); Chenbassappa Jagadevappa Ambli (*Bijapur South, General Rural*); Shanmukhappa Ningappa Angadi (*Belgaum South, General Rural*); Dr. Krishna Bhimrao Antrolikar (*Sholapur City, General Urban*); Muhammad Mohsin Muhammad Bhaiji (*Kolaba District, Muhammadan Rural*); Prabhakar Kondaji Bhapkar (*Ahmednagar South, General Rural*); Shaligram Ramchandra Bhartiya (*West Khandesh East, General Rural*); Laxman Babaji Bhingardeve (*Sholapur North-East, General Rural*); Dattatray Malhar Bidkar (*Nasik East, General Rural*); Sitaram Hirachand Birla (*East Khandesh West, General Rural*); Sayad Manzur Husain Mubaraksha Bukhari (*East Khandesh District, Muhammadan Rural*); B. B. Chakranarayan (*Poona cum Ahmednagar, Indian Christian*); Chunnusing Kalyansing Chandele (*Sholapur City, Textile Labour*); Bhau Govind Chaudhari (*West Khandesh West, General Rural*); Yeshwant Balvant Chavan, B.A., LL.B. (*Satara South, General Rural*); Fulsinhji Bharatsinhji Dabhi (*Kaira District, General Rural*); Ningappa Badhur Dalvai (*Belgaum South, General Rural*); Shripad Amrit Dange (*Bombay City and Suburban Textile Unions, Labour*); Krishnaji Abaji Dawoor (*Kolaba District, General Rural*); The Hon'ble Mr. Dinkerrao Narbheram Desai (*Broach Sub-Division, General Rural*); Hariprasad Vrajrai Desai (*Ahmedabad City, General Urban*); Khandubhai Desai (*Ahmedabad Textile Unions, Labour*); The Hon'ble Mr. Morarji Ranchhodji Desai (*Surat District, General Rural*); Bhagvantrao Damodar Deshmukh (*East Khandesh East, General Rural*); Dattu Appaji Deshmukh (*Ahmednagar North, General Rural*); Govind Hari Deshpande (*Nasik West, General Rural*); Dewa Bhikha (*Surat District, General Rural*); Sidramappa Basappa Dhumma (*Sholapur North-East, General Rural*); Andaneppa Jnanappa Doddameti (*Dharwar North, General Rural*); Dr. Joseph Alban D'Souza (*Bombay City, Indian Christian*); K. B. Dundur (*Dharwar North, General Rural*); Haji Hassanally P. Ebrahim (*Bombay City South, Muhammadan Urban*); The Hon'ble Mr. Kundanmal Sobhachand Firodia (*Ahmednagar South, General Rural*); Baburao Parasharam Gaikwad (*Poona East, General Rural*); Abdul Satar Abdul Wahed Gandhi, B.A., LL.B., Advocate (*Surat District, Muhammadan Rural*); Maneklal Maganlal Gandhi (*Panch Mahals West, General Rural*); Sannappa Parmeshwar Gaonkar, B.A. (*Kanara District, General Rural*); Keshav Raghunath Garud (*Ahmednagar North, General Rural*); Ramchandra Sambhaji Gavale (*Thana South, General Rural*); Abdulmajeed Abdulkadar Gheewale (*Belgaum District, Muhammadan Rural*); Ramchandra Balwant Ghorpade (*Poona City, General Urban*); The Hon'ble Dr. Manchersha Dhanjibhai Dorabji Gilder (*Bombay City, Byculla and Parel, General Urban*); P. V. Gillespie (*Presidency, Anglo-Indian*); Ramchandra Bhagwant Girme (*Ahmednagar North, General Rural*); Purshottam Pandurang Gokhale, B.A. (*Satara South, General Rural*); Raziuddin Hatelsab Goodwala (*Dharwar District, Muhammadan Rural*); Mrs. Sumatibai Narayan Gore (*Poona City, Women's, General Urban*); Dattatray Krishna Gosavi (*Satara North, General Rural*); Bhalchandra Maheshwar Gupte (*Poona West, General Rural*); Khan Saheb Abdul Rahim Baboo Hakeem (*Nasik District, Muhammadan Rural*); S. M. Hasan, Bar-at-Law (*East Khandesh District, Muhammadan Rural*); Hajisa Ibrahimsa Hattiwale (*Bijapur District, Muhammadan Rural*); Babu Rama Hujare (*Bijapur North, General Rural*); Ramarao Shrinivasrao Hukkerikar (*Dharwar North, General Rural*); Khan Saheb Allisaheb Nabisaheb Ilkal (*Bijapur District, Muhammadan Rural*); Miss Indumati Chimanlal (*Ahmedabad City, Women's, General Urban*); Sayad Madomed Ismail (*Ahmednagar District, Muhamaden Rural*); Bhikaji Ramchandra Jadhav (*Nasik West, General Rural*); Madhavrao Laxmanrao Jadhav (*Nasik East, General Rural*); Tulsidas Subhana Jadhav (*Sholapur North-East, General Rural*); Ganesh Waman Joshi, B.A., LL.B., Advocate (*Sholapur South-West, General Rural*); Moreshwar Dinkar Joshi (*Ratnagiri South, General Rural*); Narayan Sadoba Kajrolkar (*Bombay City-Byculla and Parel, General Urban*); Hiralal Indal Kalyani (*East Khandesh East, General Rural*); Shivaningappa Rudrappa Kanthi, B.A., LL.B. (*Bijapur South, General Rural*); Shivram Laxman Karandikar (*Ratnagiri North, General Rural*); Khwaja Bashiruddin Khwaja Moinuddin Kazi (*West Khandesh District, Muhammadan Rural*); Abdul Kadir Abdul Aziz Khan (*Poona District, Muhammadan Rural*); Ganpat Sambhaji Kharat (*Poona West, General Rural*); Sudkoji Baburao Khedekar (*Ratnagiri North, General Rural*); Ramchandra Annaji Khedikar (*Railway Unions, Labour*); The Hon'ble Mr. Bal Gangadhar Kher (*University*); Bhavanji Arjun Khimji (*Bombay City-Fort, Mandvi, Bhuleshwar and Girgaum, General Urban*); Vasudev Vishnu Kirtane (*Thana North, General Rural*); A. A. Kittur Vakil (*Dharwar District, Muhammadan Rural*); Marutirao Kondiba Kudale (*Sholapur South-West, General Rural*); Raghvendra Annaji Kulkarni, B.A., LL.B. (*Belgaum North, General Rural*); Dattatraya Kashinath Kunte (*Kolaba District, General Rural*); Sadashiv Bapusaheb Kutre (*Belgaum South, General Rural*); Prof. Ellis Phillip Kuvel, M.A., B.T. (*Thana cum Bombay Suburban District, Indian Christian*); Abdul Razak Mohamed Azim Kuwari (*Thana District, Mohammadan Rural*); Dr. Balkrishna Chintaman Lagu (*Poona East, General Rural*); Bhogilal Dhirajlal Lala (*Ahmedabad City, General Urban*); Lallubhai Makanji (*Surat District, General Rural*); Maganlal Ranchhoddas (*Ahmedabad North, General Rural*); Shripad Sadashiv Mahajan (*Ratnagiri South, General Rural*); Shankerlal Purshottamdas Makwana (*Kaira District, General Rural*); Shantaram Nanasaheb Mane, B.A., Bar-at-Law (*Belgaum North, General Rural*); Meherban Sardar Mansinhji Bhasaheb, Thakore Saheb of Kerwada (*Gujarat Sardars and Inamdars, Landholders*); Chhotubhai Bhaidas Marfatia (*Surat and Rander Cities, General Urban*); Sidney James McCann (*Bombay Chamber of Commerce and Bombay Presidency Trades Association, Commerce and Industry*); The Hon'ble **Mr. Vaikunth Lallubhai Mehta** (*Bombay City North and Bombay Suburban District, General Urban*);

Madhavrao Narayanrao Memane (*Poona East, General Rural*); Akhtar Hasan Mirza (*Trade Union of Seamen and Dock Workers, Labour*); Mrs. Tarabai Modak (*Bombay City, Girgaum, Women's General Urban*); Sukdeo Totaram More (*West Khandesh East, General Rural*); Wamanrao Sitaram Mukadam (*Panch Mahals West, General Rural*); D. W. Mulloek (*Bombay Chamber of Commerce and Bombay Presidency Trades Association, Commerce and Industry*); Mrs. Lilavati Kanhayalal Munshi (*Bombay City-Bhuleshwar, Women's, General Urban*); Vasant Narayan Naik (*Nasik West, General Rural*); Ramchandra Manohar Nalawde (*Ahmednagar South, General Rural*); The Hon'ble Mr. Gulzarilal B. Nanda (*Ahmedabad Textile Unions, Labour*); Jayant Ganpat Natwadkar (*West Khandesh West, General Rural*); Dr. Moreshwar Narayan Natu, B.Sc., M.B.B.S. (*Deccan Sardars and Inamdars, Landholders*); Timmappa Rudrappa Nesvi (*Dharwar North, General Rural*); Haji Noormohamed Ahmed (*Bombay City North and Bombay Suburban District, Muhummadan Urban*); Purshottam Vasudev Paranjpe (*Thana South, General Rural*); Homi Rustomji Pardiwala (*Bombay City-Fort, Mandvi, Bhuleshwar and Girgaum, General Urban*); Chandulal Pitamberdas Parikh (*Ahmedabad Millowners' Association, Commerce and Industry*); Wajihuddin Ahmed Parkar, B.A., LL.B. (*Ratnagiri District, Muhammadan Rural*); Hari Vinayak Pataskar (*East Khandesh West, General Rural*); Ahmed Adam Suleman Patel (*Broach Sub-Division, Muhammadan Rural*); Khan Saheb Dr. Alibhai D. Patel (*Broach Sub-Division, Muhammadan Rural*); Babubhai Jashbhai Patel (*Kaira District, General Rural*); Chhotabhai S. Patel (*Indian Merchants' Chamber, Commerce and Industry*); Dr. Chhotalal Jivabhai Patel (*Ahmedabad North, General Rural*); Morarbhai Kasanbhai Patel (*Surat District, General Rural*); Jaitu Namaji Patil (*Thana South, General Rural*); Kallangowda Fakirgowda Patil, B.A. (*Dharwar South, General Rural*); The Hon'ble Mr. L. M. Patil (*Ahmednagar North, General Rural*); Madhav Gotu Patil (*East Khandesh West, General Rural*); The Hon'ble Mr. Malagauda Pangauda Patil, B.A., LL.B. (*Belgaum North, General Rural*); Nawal Ananda Patil (*West Khandesh East, General Rural*); Sajan Ragho Patil (*Nasik East, General Rural*); Supdu Bhadu Patil (*East Khandesh West, General Rural*); Vyankatrao Pirajirao Pawar, B.A., LL.B. (*Satara South, General Rural*); Shantaram Laxman Peje (*Ratnagiri North, General Rural*); Ramnath A. Podar (*East India Cotton Association, Commerce and Industry*); Virangowda Veerabasangowda Police-Patil (*Dharwar South, General Rural*); Ramchandra Mukund Prabhu, B.A., LL.B. (*Kanara District, General Rural*); Stanley Henry Prater (*Bombay City cum Bombay Suburban District, Anglo-Indian*); Mohamed Umar Rajab (*Bombay City North and Bombay Suburban District, Muhammadan Urban*); Shivram Rango Rane (*East Khandesh East, General Rural*); Amritrao Dhondiba Rankhambe (*Nasik West, General Rural*) Rajaram Balkrishna Raut (*Kolaba District, General Rural*); Khan Saheb Abdulla Haji Sadwa (*Panch Mahals Sub-Division, Muhammadan Rural*); Gurupadappa Sidlingappa Sajjan, B.A., LL.B. (*Bijapur North, General Rural*); Sir Sorabji Dorabji Saklatvala (*Bombay Millowners' Association, Commerce and Industry*); Mrs. Yallawa Dharmappa Sambrani (*Dharwar District, Women's, General Rural*); Nilkanth Ganesh Sane (*East Khandesh East, General Rural*); Mukund Jivan Sankhe (*Thana North, General Rural*); Parsharam Krishnaji Sawant (*Ratnagiri South, General Rural*); Maganlal Hirachand Shah (*Bijapur North, General Rural*); Popatlal Ramchand Shah (*Poona West, General Rural*); Abdul Kadar Mohamad Shaikh (*Surat and Rander Cities, Muhammadan Urban*); Jukaku Hussein Shamshuddin, B.A., LL.B. (*Kanara District, Muhammadan Rural*); C. R. Sharp (*Bombay Chamber of Commerce and Bombay Presidency Trades Association, Commerce and Industry*); Shivrao Shivram Shastri, B.A., LL.B. (*Kanara District, General Rural*); Bajirao *alias* Babasaheb Jagdeorao Shinde (*Satara North, General Rural*); Rajaram Nagesh Shinde (*Ratnagiri North, General Rural*); Shivbishalsing Harpalsing (*Railway Unions, Labour*); Laxmidas Mangaldas Shrikant (*Panch Mahals East, General Rural*); Sayaji Laxman Silam (*Bombay City, Fort, Mandvi, Bhuleshwar and Girgaum, General Urban*); Gaurihar Eaknath Sinhasane (*Satara North, General Rural*); Savalaram Gundaji Songavker (*Bombay City North and Bombay Suburban District, General Urban*); Sitaram Murari Subhedar (*Ratnagiri South, General Rural*); Syed Dadamiya Syed Ibrahim (*Satara District, Muhammadan Rural*); Dattatraya Maloji Jalgaonkar (*Kolaba District, General Rural*); Venkreddi Shiddareddi Teumareddi (*Belgaum North, General Rural*); The Hon'ble Mr. Ganapati Devaji Tapase (*Satara North, General Rural*); Mrs. Khadija Shuffi Tayabji (*Bombay City-Girgaum, Women's, Muhammadan Urban*); Maneklal Chhunilal Vakil (*Ahmedabad South, General Rural*); Shivshanker Chhaganlal Vakil (*Broach Sub-Division, General Rural*); The Hon'ble Mr. Govind Dharmaji Vartak (*Thana North, General Rural*); Chhotalal Anupram Vyas (*Kaira District, General Rural*); Dattatraya Nathoba Wandrekar (*Bombay City North and Bombay Suburban District, General Urban*); Abdulla Muhamad Yamni (*Ahmedabad City, Muhammadan Urban*); **Fazleabbas Tyeball Zamindar** (*Kaira District, Muhammadan Rural*).

The Central Provinces and Berar

THE Central Provinces and Berar compose a great triangle of country midway between Bombay and Bengal. Their area is 1,18,710 sq. miles, of which 80,766 are Indian Dominion proper, 17,809 (*viz.* Berar) held on perpetual lease from H.E.H. the Nizam and the remainder held by Feudatory Chiefs. The total population is 16,813,584. Various parts of the Central Provinces passed under British control at different times in the wars and the tumults in the first half of the 19th century and the several parts were amalgamated after the 1861 upheaval into the Chief Commissionership of the Central Provinces. Berar was, in 1853, assigned to the East India Company as part of a financial arrangement with H.E.H. the Nizam for the maintenance of the Hyderabad Contingent, and was leased in perpetuity to the Central Provinces in 1903, as the result of a fresh agreement with H.E.H. the Nizam.

With the taking over of the 14 Chhatisgarh States the area of the Province has increased by about 35,000 sq. miles, the population by about 4 million and the revenue by about 1½ crores.

THE COUNTRY

The Central Provinces may roughly be divided into three tracts of upland, with two intervening ones of plain country. In the north-west, the Vindhya plateau is broken country, covered with poor and stunted forest. Below its precipitous southern slopes stretches the rich wheat growing country of the Nerbudda valley. Then comes the high Satpura plateau, characterised by forest-covered hills and deep water-cut ravines. Its hills decline into the Nagpur plain, whose broad stretches of "deep" black cotton soil make it one of the most important cotton tracts of India and the wealthiest part of the C. P. proper. The Eastern half of the plain lies in the valley of the Waingan-ga and is mainly a rice growing country. Its numerous irrigation tanks have given it the name of the "lake country" of Nagpur. Farther east is the far-reaching rice country of Chhatisgarh, in the Mahanadi basin. The south-east of the C. P. is again mountainous, containing 24,000 square miles of forest and precipitous ravines, and mostly inhabited by jungle tribes. The States of Bastar and Kanker lie in this region. Berar lies to the south-west of the C. P. and its chief characteristic is its rich black cotton-soil plains.

THE PEOPLE

The population of the province is a comparatively new community. Before the advent of the Aryans, the whole of it was peopled by Gonds and other primitive tribes and these aboriginal inhabitants fared better from the Aryans than their like in most parts of India because of the rugged nature of their home. But successive waves of immigration flowed into the province from all sides. The early inhabitants were driven into the inaccessible forests and hills, where they form nearly a quarter of the whole population of the Central Provinces being found in large numbers in all parts of the province, particularly in the south-east. The main divisions of the new-comers are indicated by the language divisions of the province. Hindi brought in by the Hindustani-speaking peoples of the North, prevails in the North and East, Marathi in Berar and the West and centre of the Central Provinces. Hindi is spoken by 56 per cent. of the population and is the *lingua franca*. Marathi by 31 per cent. and Gondi 7 per cent.



H. E. Mangaldas Mancharam Pakvasa

The effects of invasion are curiously illustrated in Berar, where numbers of Muslims have Hindu names, being descendants of former Hindu officials who on the Muslim invasion adopted Islam rather than lose their positions. The last census shows that a gradual Brahmanising of the aboriginal tribes is going on. The tribes are not regarded as impure by the Hindus and the process of absorption is more or less civilising.

INDUSTRIES

When Sir Richard Temple became first Chief Commissioner of the C. P., the province was land locked. The only road was that leading in from Jubbulpore to Nagpur. The British administration has constructed roads in all directions, the two trunk railways between Bombay and Calcutta run across the province and in the last few years a great impetus has been given to the construction of subsidiary lines. These developments have caused a steady growth of trade and have led to vigorous progress in every department of life.

The prime industry is, of course, agriculture, which is assisted by an agricultural department which is now receiving additional strength by a phenomenal growth of the co-operative credit movement. The land tenure is chiefly on the malguzari, or landlord system, ranging with numerous variations, from the great feudatory chiefships, which are on this basis

to holdings of small dimensions. A system of land legislation has gradually been built up to protect the individual cultivator. Berar is settled on the Bombay raiyatwari system.

16,086 square miles of the C. P. is Government Reserved forest; in Berar the forest area is about 3,335 square miles, the total forest area being one-fifth of the whole Province. The rugged nature of the greater part of the country makes forest conservation difficult and costly. Excluding forest and waste, 67 per cent. of the total land is under cultivation; for the two most advanced districts in the Central Provinces, the proportion averages 81 per cent., while the average figure for the Berar Districts is 73 per cent. The cultivated area has extended almost continuously except for the temporary checks caused by bad seasons. Rice is the most extensive single crop of the Central Provinces, covering nearly 34 per cent. of the cropped area. Wheat comes next with over 14 per cent., then pulses and other cereals used for food and oil-seeds with nearly 49 per cent., and cotton nearly 3 per cent. In Berar cotton is 35 per cent. and juar 35 per cent., respectively. And then come pulses and other cereals and oil-seeds of the cropped area. More than half the working population engaged in agriculture is female.

COMMERCE AND MANUFACTURES

Industrial life is only in its earliest development except in one or two centres, where the introduction of modern enterprise also on the railway routes has laid the foundations for great future developments of the natural wealth of the province. Nagpur is the chief centre of a busy cotton spinning and weaving industry. The Empress Mills, managed by Messrs. Tata Sons Ltd., were opened there in 1877 and the general prosperity of the cotton trade has led to the addition of many mills here and in other parts of the province.

The largest numbers engaged in any of the modern industrial concerns are employed in manganese mining which in 1942 employed 29,398 persons and raised 6,43,773 tons. Then follows coal mining with an output of 18,36,522 tons and 17,350 persons employed, the Jubbulpore marble quarters and allied works, the limestone quarries and the mines for pottery clay, soapstone, etc.

The total number of factories of all kind legally so described was 1208 and 1,217 in 1944 and 1945 respectively the latest period for which returns are available and the number of people employed in them 1,00,850 and 1,10,263 respectively. The same economic influences which are operative in every progressive country during its transition stage are at work in the C. P. and Berar, gradually sapping the strength of the old village industries, as communications improve, and industries are fading away, a large development of trade has taken place.

After the introduction of Food Controls, the movements of food crops under the Government of India's Basic Plans, were as under. Exports are indicated (—) and the imports (+). The figures are in tons:—

Year 1st April-31st March.	Rice	Juar	Wheat
1943-44 ..	—145,000	—7,000	+34,000
1944-45 ..	—214,000	—69,000	+80,000
1945-46 ..	—204,000	—49,000	+46,000
1946-47 ..	—75,000	+400	+48,000

ADMINISTRATION

The administration of the Central Provinces and Berar is conducted by a Governor who is appointed by the Crown. He is assisted by eight Secretaries and six Under-Secretaries. Under the provisions of the Government of India Act, 1935, the administration is conducted by a Governor with a council of ministers, chosen and summoned by him and sworn as members of the council.

This Province, which has a unicameral Legislature, consists of 111 members distributed as follows:—

Class of constituency or constituencies—		
General Urban	10	No. seats.
General Rural	74	84
Muhammadan Urban	2	
Muhammadan Rural	12	
Women	3	
Anglo-Indian	1	seat.
Backward areas & Tribes.. ..	1	,,
Commerce	2	seats.
Landholders	3	,,
Labour	2	,,
University	1	seat.

Of the 84 General seats 20 seats are reserved for members of the Scheduled castes.

Till the 15th of August 1947 the Legislative Assembly of the Province consisted of 112 elected members but since the 15th of August it consists of 111 members, the European constituency having been abolished as a result of constitutional changes.

The C. P. are divided for administrative purposes into three divisions. Berar constituting a division by itself. Each of these is controlled by a Commissioner. The divisions are subdivided into districts, each of which is controlled by a Deputy Commissioner, immediately subordinate to the Commissioner. The principal heads of Provincial departments are the Commissioner of Settlements and Director of Land Records, the Chief Conservator of Forests, the Inspector-General of Civil Hospitals, the Director of Public Health, the Inspector-General of Police, the Inspector-General of Prisons, the Director of Public Instruction, the Excise Commissioner and Superintendent of Stamps and Inspector-General of Registration, and Registrar-General of Births, Deaths and Marriages, the Director of Agriculture, the Registrar of Co-operative Societies, the Director of Industries, the Legal Remembrancer, the Director of Veterinary Services and a Chief Engineer, Public Works Department, Buildings and Roads and Irrigation Branches, Commissioner of Food Supplies.

The Deputy Commissioners of districts are the chief revenue authorities and District Magistrates and they exercise the usual powers and functions of a district officer. The district forests are managed by a forest officer, over whom the Deputy Commissioner has certain powers of supervision, particularly in matters affecting the welfare of the people. Each district has a Civil Surgeon (except Mandla, Drug and Balaghat where there are Assistant Surgeons), who is generally also Superintendent of the District Jail except at Central Jails at Nagpur and Jubbulpore and District Jails at Raipur, Narsinghpur and Akola where there are whole time Superintendents and whose work is also in various respects supervised by the Deputy Commissioner. The Deputy Commissioner is also the Marriage Registrar and manages the estates of his district which are under the Court of Wards. In his revenue and criminal work the Deputy Commissioner is assisted by (*a*) one or more Assistant Commissioners, or members of the Indian Civil Service; and Indian Administration Service; (*b*) one or more Extra Assistant Commissioners, or members of the Provincial Civil Service, including a few Anglo-Indians and (*c*) by Tahsildars and Naib Tahsildars, or members of the Subordinate service.

The district is divided for administrative purposes into tahsils, the average area of which is 1,500 square miles. In each village a lambardar or representative of the proprietary body is executive headman.

JUSTICE

The High Court of Judicature at Nagpur, which was established in January 1936, is the highest court of appeal in civil cases, and also the highest court of criminal appeal and revision for the Central Provinces and Berar including proceedings against European British subjects and persons jointly charged with European British subjects.

Subordinate to the High Court are the District and Sessions Judges (9 in number) each of whom exercises civil and criminal jurisdiction in a Civil and Sessions district comprising one or more Revenue districts. The civil staff below the District and Sessions Judge consists of civil Judges of the first and second class.

LOCAL SELF-GOVERNMENT

Municipal Administration was first introduced under the Punjab Municipal Act and the Municipality of Nagpur dates from 1864. Several revising Acts extend its scope and the C. P. Municipalities Act passed towards the end of the year 1922 has considerably increased the powers of the Municipal Committees. The C. P. Municipalities Act has also been extended to Berar. Viewed generally, municipal self-government is considered to have taken root successfully. The larger towns have municipalities, there being 82 such bodies in the Province. It is proposed to establish Municipal Corporations at Nagpur and Jubbulpore and the bill for this purpose has been placed before the Legislature.

Under the Central Provinces Local Self-Government Act passed in 1920 as amended in 1931 there is a local board for each tehsil and a district council for each district excepting Hoshangabad, Chhindwara and Saugor districts each of which has two district councils. The local board consists of elected representatives of circle. The constitution of the district council is a certain proportion of elected representatives of local boards, and of members selected by those representatives. If the members elected on the local board or the district council do not include a Muslim, a Harijan and a woman, the elected members of the local board of the district council as the case may have or select a Muslim, a Harijan or a woman as may be required to be a member, and if they fail to do so the Provincial Government can appoint a Muslim, a Harijan or a woman as may be required. The system of local Self-Government is proposed to be overhauled to secure the following objectives:—

(1) decentralisation of Governmental functions so that representatives of the people are associated more intimately with the administration and it is consequently made more responsible and responsive, (2) intensive supervision and control in regard to Governmental functions in the district, (3) efficient and expert administrative staff for the due discharge of responsibilities of the district administration, (4) improvement in the resources of local Self-Government institutions and (5) enlargement of franchise.

A bill for this purpose has been framed and is under the scrutiny of a special committee appointed by Provincial Legislature.

The district councils in the Central Provinces have power of taxation within certain limits and local boards derive their funds in allotments from the District Councils. The new Central Provinces Local Self-Government Act has also been applied to Berar. The office-bearers of all the district councils, and with few exceptions of local boards, also are non-officials.

Rural education, sanitation, medical relief and rural communications are among the primary objects to which these bodies direct their attention, while expenditure on famine relief is also a legitimate charge upon the District Council funds.

The Central Provinces and Berar Village Panchayats Act, 1920 has now been repealed and its place taken by the Central Provinces and Berar Panchayats Act, 1946 (I of 1947). Under this Act the Village Panchayat is designed to be made a centre of all social, economic and development activities. 5,500 Gram Panchayats and 1,300 Nyaya Panchayats are to be established in the whole province. In the place of Village Panchayat Officer the Director of Panchayats, C. P. and Berar has been appointed with effect from the 10th October 1947.

PUBLIC WORKS

The Public Works Department, which comprises Buildings and Roads and Irrigation Branches, is under the control of the Chief Engineer. There are two Superintending Engineers who between them supervise the work of both branches. The Province is fairly well served by a network of roads, but in a number of cases they are not fully bridged and are therefore impassable to traffic at times during the rains.

State irrigation was introduced early in the present century mainly as a result of the recommendations of the Irrigation Commission (1901-03). During the last forty-five years a sum of Rs. 7.23 crores has been expended on the construction of irrigation works, of which the more important are the Wainganga, Tandula-Mahanadi, Kharung and Maniari canals.

Three works, *viz.*, the Mahanadi and Wainganga Canals and the Asola Mendha tank, were sanctioned originally as productive works and the remainders were all sanctioned as unproductive works. The three works sanctioned as productive all failed to justify their classification in that category and were transferred to the unproductive list. The conditions in the province are such that irrigation works cannot be expected to be productive and their construction is justified only on account of their value as a protection against famine. The normal area of annual irrigation is at present about 7,66,000 acres, mainly rice and the income from these works covers more than the expenditure incurred on their maintenance and management.

POLICE

The police force was constituted on its present basis on the formation of the Province, the whole of which including the Cantonments and the Municipalities, is under one force. The strength is equal to one man per 5·3 square miles of area. The superior officers comprise an Inspector-General, whose jurisdiction extends to Berar, three Deputy Inspectors-General, for assistance in the administrative control and supervision of the Police force, including the Criminal Investigation Department, and the usual cadre of District Superintendents of Police, Assistant and Deputy Superintendent and subordinate officers.

On railways, special Railway Police are employed under the control of two Superintendents of Railway Police with headquarters at Raipur and Hoshangabad. There is a Police College under the control of a Superintendent of Police at Saugor and Constables' Schools under the control of Deputy Superintendents at Nagpur and Jubbulpore. A special Armed Force of 3,595 men is distributed over the headquarters of eight districts, for use in dealing with armed disturbers of the peace in whatever quarter they may appear. There is a small force of Mounted Police consisting of 1 Head Constable and 7 Constables for the escort of His Excellency the Governor.

The Central Provinces has no rural police as the term is understood in other Parts of India. The village watchman is the subordinate of the village headman and not a police official and it is considered very desirable to maintain his position in this respect.

During the war there was an expansion of the District Police and the special Armed Force and the formation of a battalion of special armed constabulary.

EDUCATION

The Education Department of the Central Provinces and Berar is administered by a Director of Public Instruction assisted by (*i*) a Personal Assistant, (*ii*) two Deputy Directors of Public Instruction—one for Primary and Secondary education and the other for Technical Education, the former being assisted by two Technical Assistants, (*iii*) an Officer on Special Duty for Post-War Reconstruction Scheme, (*iv*) an Officer-in-charge of Muslim Education, (*v*) six Divisional Superintendents of Education each assisted by a Personal Assistant, (*vi*) nineteen District Inspectors of Schools assisted by eighty-seven Assistant District Inspectors of Schools, and (*vii*) two Inspectresses of Schools, assisted by six District Inspectresses of Schools and five Assistant District Inspectresses of Schools.

The Director of Public Instruction is no longer the Secretary to Government in the Education Department. The Education Department has now an I.C.S. Secretary like other Departments of Government and an officer of the Education Department acts as Under Secretary.

Schools.—Schools are divided into (*a*) schools for general education and (*b*) schools for special education. The latter are schools in which instruction is given in a special branch of technical or professional education. The main division of schools for general education is into Primary and Secondary. In the Primary Schools teaching is conducted wholly in recognised Indian languages of the province and these schools are known as Primary Schools. The Secondary Schools are divided into Middle and High Schools. The former may be either Middle Schools in which instruction is given (*a*) wholly in a recognised Indian language or (*b*) mainly in a recognised Indian language with the option of English as an additional language, or Indian English Middle Schools in which instruction is given in a recognised Indian language but English is a compulsory subject. In the High School classes instruction has been and is being given through the recognised Indian language since 1922 but for the convenience of pupils whose mother tongue is not a recognised Indian language of the locality as also for those who otherwise desire to learn through English, a few English medium sections are still maintained.

Primary Education is mostly under the Control of District Councils, Municipal Committees and Notified Area Committees. The Primary Education Act empowers local authorities to introduce compulsion and this is in force in several areas.

Technical Education.—Among the schools for special education are the Government Engineering School, Nagpur, and three Government Schools of Handicraft and twelve aided Industrial Schools. The Engineering School teaches upto the diploma standard in Civil, Mechanical and Automobile Engineering and is affiliated to the Nagpur University. The Schools of Handicrafts Industrial Schools have recently been transferred to the Education Department from the Commerce and Industry Department and teach carpentry, blacksmithy, tailoring, shoe-making, cotton-weaving, carpet and durrie making, toy making and lacquer work, cane and basket manufacturing. They are under the administrative control of the Director of Public Instruction, who is assisted by an Inspector of Industrial Schools.

Higher Education is under the control of the Nagpur University of which the following are constituent colleges:—at Nagpur: Morris College, National College, College of Science, Hislop College, Laxmi Narayan Technological Institute, City College, Agriculture College (under the Agriculture Department), University College of Law, Central College for Women; and University Training College (for teachers); at Jubbulpore: Robertson College, Hitkarini City College, Spence Training College (for teachers) and Hitkarini Law College; at Amraoti: King Edward College; at Wardha: Commerce College; at Akola: Berar Arts College; at Raipur: Chhattisgarh Arts College and at Bilaspur, Sheo Bhagwan Rameshwar Lal Arts College. There is also a Medical School at Nagpur under the Medical Department.

Secondary Education is under the control of the Board of High School Education, on which the University is represented. The Director of Public Instruction is the *Ex-officio* Chairman of the Board and is assisted by a Secretary. The High School Certificate awarded by the Board qualifies for entrance to the University.

MEDICAL

The Medical and Public Health Services of the Province are respectively controlled by the Inspector General of Civil Hospitals and Director of Public Health. The Medical Department has made some progress since the year 1911. A striking advance has been made in recent years with urban sanitation and the opening of a Medical School at Nagpur in 1914 supplies a long felt need. The principal medical institutions are the Mayo Hospital at Nagpur (opened in 1874) with accommodation for 222 in-patients; the Victoria Hospital at Jubbulpore (opened in 1886) with accommodation for 173 in-patients; the Daga Memorial (Dufferin) Hospital and the Mure Memorial Hospital at Nagpur and the Lady Elgin Hospital and the Crump Children's Hospital at Jubbulpore, these last four being for women and children and can together accommodate 341 in-patients In addition to these, hospitals for women exist at Chhindwara, Gondia, Saugor, Khandwa, Amraoti, Murtizapur, Shegaon and Khamgaon and at all district headquarters where no separate women's hospitals exist, sections have been opened at the main hospitals for the treatment of women by women doctors.

The Mayo Hospital at Nagpur was provincialised in 1923, the Irwin Hospital at Amraoti in 1925, the Victoria Hospital at Jubbulpore in 1926 and the Silver Jubilee Hospital at Raipur in 1928. In accordance with recent policy 178 out of 251 local fund dispensaries have been transferred to the administrative and executive control of local bodies. With the object of bringing medical relief within easy reach of the rural population, Government has sanctioned (*i*) subsidising 22 medical practitioners (allopathic) one in each district council (4); (*ii*) subsidising 83 vaidyas and hakims, one in each tahsil (28); (*iii*) establishment of 83 Ayurvedic and Unani dispensaries in each tahsil (58). (The figures in brackets indicate the number in actual operation at present). The Province has one Mental Hospital at Nagpur. Four tuberculosis clinics have been opened at Nagpur, Jubbulpore, Raipur and Amraoti during the year 1937 and 40 beds have been reserved at the Pendra Road Sanitorium for the treatment of patients sent by Government.

There is a great deal of eye disease in the province and the problem is receiving special attention. The Central Provinces and Berar Blind Relief Association and the Sant Parmanand Blind Relief Mission, Delhi is doing propaganda work and helping the blind. So far 25 assistant medical officers have been given training in eye work for six months at the Mayo Hospital, Nagpur. These specially trained officers are posted to eye centres in the Province. Anti-rabies treatment is now available at 14 centres in the province, *viz.*, Nagpur, Jubbulpore, Raipur, Akola, Wardha, Hoshangabad, Saugor, Chanda, Chhindwara, Khandwa, Yeotmal Amraoti, Mungeli and Bilaspur. A new medical college at Nagpur was started on July 15, 1947 with accommodation for 110 students. In order to reserve stocks of medicines, dressings, clothings or blankets for use in the hospitals of the Province, a Provincial Medical Store Depot was also established at Nagpur in April 1947. Nurses training schools exist in 11 hospitals in the Province and these are being enlarged and improved as fast as staff permits.

PUBLIC HEALTH

The Public Health services of the province are controlled by the Director of Public Health. In 1939, a separate cadre of Sub-Assistant Health Officers was sanctioned by the Government. An appreciable advance has been made in rural sanitation. The principal institutions working under the Department are:—

1. The Central Provinces Vaccine Institute which was founded in the year 1913. Here, small-pox vaccine lymph is manufactured for the whole province and the neighbouring feudatory states. Vaccinators are also trained at the Institute.
2. Public Health Institute established in the year 1928 undertakes the examination both chemical and bacteriological, of samples of water and food stuffs under the Food Adulteration Act. Facilities also exist for the examination of pathological specimen and clinical material of indigent cases of infectious diseases free of charge.
3. There is a Health School at Nagpur, where Health Visitors are trained.
4. The problem of leprosy is being energetically tackled in the province and the department has a leprosy specialist who is in charge of treatment, propaganda and survey work. There are 27 leprosy Assistant Health Officers who are running 56 leprosy centres. Of these, 6 centres are run by the British Empire Leprosy Relief Association (Provincial Branch). Recently the Provincial Government has taken over the Leprosy Home and Hospital at Raipur formerly run by the Raipur Mission to Lepers.

5. There are 82 Assistant Health Officers in charge of epidemic dispensaries (One in each Tahsil).
6. One mechanised travelling dispensary in charge of an Assistant Health Officer with a trained compounder is working under the department. This dispensary visits roadside villages and renders medical aid to the aboriginals.
7. A scheme for eradicating the disease of Yaws is in operation in Chanda and Bilaspur districts where the incidence of Yaws is high. The results are satisfactory.
8. A Nutrition Officer has been appointed. The first task of this Officer is to carry out diet surveys on standard lines, gauge the extent of mal-nutrition and to tackle other problems concerning Nutrition. In addition he has been appointed temporarily as medical supervisor to carry out industrial surveys with a view to improving the health of the industrial concerns in the Province.
9. The following sections have been opened as post-war measures:—
   (*i*) Maternity and Child Welfare Section under Assistant Director of Public Health (M. & C.W.) to reduce infant and maternal mortality in the Province.
   (*ii*) Malaria Section under A.D.P.H. (Malaria) to reduce the incidence of Malaria in the Province by carrying out malaria surveys and control measures. Four anti-malaria units are now operating in highly malarious parts in the Province.
   (*iii*) Public Health Engineer Section to assist municipalities in prepairing water drainage, town planning and housing schemes and the district councils with regard to the provision of adequate water supply in rural areas.

Training classes for Stockmen-cum-Health Assistants have been opened at Wardha with a view to enabling the trained personnel to render both veterinary and medical first aid in rural areas. In addition they will be carrying certain Public Health Duties like vaccination, inoculation, disinfection of water supply and collection of vital statistics.

Vaccination is compulsory in 105 towns and 16,843 villages out of a total of 119 towns and 38,985 villages respectively.

1948-49 BUDGET

The revenue is estimated at Rs. 15,29.50 lakhs, which includes Rs. 230.30 lakhs, half the estimated expenditure on development and "Grow More Food" schemes, as a grant from the Centre. The expenditure is estimated at Rs. 15,74.44 lakhs.

It is proposed to withdraw Rs. 45 lakhs from the Post-War Reconstruction and Development Fund in order to balance the Budget. There will then be a nominal surplus of Rs. 6,000.

No new taxes are being levied, but step will be taken to place on the Statute Book permanently the exchanges on court fees and stamps.

Provision has been made for the continuance of Government grants for raising the salaries of primary school teachers and for the payment of the enhanced cost-of-living allowance to secondary school teachers.

Referring to the Rs. 66-crore development plan, the Finance Minister in the course of his budget speech said the financial position was now not so pessimistic, as they could depend upon the Centre to the extent of at least Rs. 14 crores.

In addition to purely irrigation projects, Government have been examining the possibilities of multi-purpose development of the principal river valleys of the Province. It has been decided to ask the Central Waterways, Irrigation and Navigation Commission for permission to undertake an irrigation-cum-power project near Bagri. The scheme is estimated to cost Rs. 6.25 crores for making available 25,000 k.w. of power and the irrigation of 130,000 acres.

By another scheme at a cost of Rs. 33.55 crores the Province would be able to secure 250,000 k.w. of power and to irrigate one million acres near Warsa. Detailed investigation of this scheme has been authorised.

Education Grants.—It is proposed to give grants to Saugor University, to a scheme for the compulsory military education of students seeking university degrees, to the Science College at Kamgaon, to the Central College for women at Nagpur and the Science College proposed to be started at Nagpur by the Nagpur Shikshan Prasarak Mandal.

Government plan to open eight new rural dispensaries and to construct a tuberculosis clinic and ward at the Irwin Hospital, Amraoti

In the sphere of agriculture, provision has been made for continuing the various schemes for the subsidised distribution of good seed and fertilisers and liberal provisions of taccavi and subsidies for the construction of field embankments.

New schemes are also proposed for repairs to village tanks for irrigation purposes, and for bringing under the plough a large area of fallow land.

As to the veterinary department, more dairy units in towns are being established. This is linked to a scheme of the Rural Development Department for improving cattle in villages.

It is proposed to introduce a plan for the encouragement of Khadi next year. An experiment is being made in the formation of labour co-operative societies.

1947-48 Budget

ESTIMATED REVENUE FOR 1947-48.

Principal Heads of Revenue.

	Rs.
Taxes on Income other than Corporation Tax	1,75,80,000
Land Revenue	2,58,47,000
Provincial Excise	1,81,35,000
Stamps	65,27,000
Forest	1,20,96,000
Registration	13,60,000
Receipts under Motor Vehicles Act	17,19,000
Other Taxes and Duties	87,93,000
Total	9,20,57,000

Irrigation.

Irrigation, Navigation, Embankment and Drainage Works for which no Capital Accounts are kept	15,83,000

Debt Services.

Interest	13,76,000

Civil Administration.

Administration of Justice	10,38,000
Jails and Convict Settlements	2,39,000
Police	4,79,000
Education	10,66,000
Medical	1,84,000
Public Health	2,95,000
Agriculture	16,36,000
Veterinary	3,10,000
Co-operation	1,05,000
Industries	1,29,000
Miscellaneous Departments	84,000
Total	55,65,000

Civil Works.

Civil Works	12,37,000

Miscellaneous.

Transfers from Famine Relief Fund	6,000
Receipts in aid of Superannuation	1,51,000
Stationery and Printing	64,000
Miscellaneous	18,24,000
Total	20,45,000

Miscellaneous Adjustments between Central and Provincial Governments	4,000
Extraordinary Items	2,65,51,000
Extraordinary Receipts	1,00,02,739
Tota Provincial Revenue	13,04,18,000

Debt Heads.	Rs.
Debt, Deposits and Advances—	
Permanent Debt	....
Floating Debt	2,00,00,000
Loans from Central Govt.	43,78,000
Unfunded Debt	27,00,000
Appropriation for Reduction or Avoidance of Debt	24,61,000
Famine Relief Fund	1,78,000
Post-War Reconstruction and Development Fund	....
Depreciation Reserve Fund—	
Government Presses	28,000
Deposits of Local Funds	2,10,00,000
Civil Deposits	3,12,51,000
Other Accounts	12,25,000
Advances Repayable	81,16,000
Permanent Advances	2,000
Accounts with the Reserve Bank.	14,000
Account with the Government of Burma	5,000
Suspense Accounts	40,30,000
Cheques and Bills	1,41,00,000
Cash Balance Investment Account	3,00,00,000
Departmental and Similar Accounts	2,00,000
Loans and Advances by Provincial Governments	98,91,000
Remittances within India—	
Other local remittances	12,92,91,000
Total Debt Heads	27,88,70,000
Total Revenue and Receipts	40,92,88,000
Opening Balance	2,40,55,000
Grand Total	43,33,43,000

ESTIMATED EXPENDITURE FOR 1947-48.

Direct Demands on the Revenue.

	Rs.
Land Revenue	34,24,000
Provincial Excise	14,28,000
Stamps	2,16,000
Forest	82,49,000
Registration	2,78,000
Charges on Account of Motor Vehicles Acts	1,98,000
Other Taxes and Duties	66,000
Total	1,38,59,000

Irrigation.

Revenue Account of Irrigation, Navigation, Embankment and Drainage Works—	
Other Revenue Expenditure financed from Ordinary Revenues	20,00,000
Total	20,00,000

ESTIMATED EXPENDITURE FOR 1947-48—*contd.*

	Rs.
Debt Services.	
Interest on Debt and other obligations	21,49,000
Appropriation for Reduction or Avoidance of Debt	23,24,000
Total	44,73,000
Civil Administration.	
General Administration	1,17,53,000
Administration of Justice	33,00,000
Jails and Convict Settlements	16,10,000
Police	1,54,73,000
Scientific Departments	64,000
Education	1,48,30,000
Medical	36,31,000
Public Health	19,57,000
Agriculture	54,65,000
Veterinary	15,67,000
Co-operation	8,73,000
Industries	7,29,000
Aviation	21,000
Miscellaneous Departments	4,34,000
Total	6,17,07,000
Civil Works.	
Civil Works	2,21,22,000
52-A. Other revenue expre. connected with Electricity	5,24,000
Miscellaneous.	
Famine—A.—Famine Relief	6,000
Superannuation Allowances and Pensions	61,61,000
Stationery and Printing	9,21,000
Miscellaneous	35,54,000
Total	1,06,42,000
Extraordinary Items—	
Expenditure connected with, Post-War Planning and Development	2,53,000
Transfers to the Revenue Reserve (Development) Fund	....
Extraordinary Charges	1,000
Total Expenditure on Revenue Account	11,55,81,000
Capital Expenditure.	
Capital Expenditure—	
Principal Revenue heads—	
Forest and other Capital outlay not Charged to Revenue—	
Capital Account of Civil Works outside the Revenue Account.	19,55,000
Capital outlay on Electricity Schemes, Thermo-electric Schemes	2,88,39,000
Miscellaneous—Capital Account not Charged to Revenue—	
Payments of Commuted Value of Pensions	—40,000
Capital-outlay on Provincial Schemes of State Trading	—1,18,49,000
Total	1,89,85,000

Debt Heads.	Rs.
Debt, Deposits and Advances—	
Floating Debt	2,00,00,000
Loans from the Central Government	50,47,000
Unfunded Debt	25,00,000
(Appropriation for Reduction or Avoidance of Debt)	19,73,000
Sinking Fund Investment Account	9,61,000
Famine Relief Fund	18,000
Depreciation Fund—Government Presses	76,000
Post-War Reconstruction and Development Fund	....
Deposits of Local Funds	2,05,00,000
Civil Deposits	3,14,77,000
Other Accounts	12,66,000
Advances Repayable	77,25,000
Permanent Advances	10,000
Accounts with the Reserve Bank	14,000
Account with the Government of Burma	5,000
Suspense Accounts	40,00,000
Cash Balance Investment Account.	....
Cheques and Bills	1,41,00,000
Departmental and Similar Accounts	2,00,000
Loans and Advances by Provincial Governments	96,60,000
Remittances within India—	
Other local remittances	12,92,91,000
Total Debt Heads	24,88,23,000
Total Capital & Debt Heads	26,78,08,000
Total Expenditure and Disbursements	38,33,89,000
Closing Balance	4,99,54,000
Grand Total	43,33,43,000
Revenue Surplus	+1,48,37,000

Administrative Personnel

Governor.

His Excellency Mr. Mangaldas Mancharam Pakvasa.

Honourable Ministers.

Hon'ble Pandit Ravi Shankar Shukla, *Prime Minister and Minister of Home Affairs.*

Hon'ble Pandit Dwarka Prasad Mishra, *Minister of Local Self-Government.*

Hon'ble Mr. Durga Shankar Kripa Shankar Mehta, *Minister of Finance.*

Hon'ble Mr. Sambhaji Vinayak Gokhale, *Minister of Education.*

Hon'ble Mr. Ramrao Krishnarao Patil, *Minister of Food.*

Hon'ble Dr. Waman Sheodas Barlingey, *Minister of Law.*

Hon'ble Mr. Rameshwar Agnibhoj, *Minister of Public Works.*

Hon'ble Mr. Baba Anandrao Deshmukh, *Minister of Excise.*

Financial Commissioner.

T. C. S. Joyorohrore, I.C.S. (Offg.).

S. W. G. Olpherts-Fresk, I.C.S., *Secy. to Governor, C. P. & Berar.*

Secretariat.

Chief Secretary, P. S. Rau, I.C.S.

Financial Secretary and Secretary, K. Radhakrishnan, I.C.S.

Local Self-Government Secretary, B. L. Pandey.

Revenue Secretary, N. P. Shivastav.

Settlement Secretary, L. B. S. Singh, I.C.S.

Legal Secretary, P. D. Deshmukh.

Education Secretary, N. Ganguli.

Secretary, Development and Resettlement Department, M. K. Kher.

Secretary to Govt., Food Dept., R. C. V. P. Noronha, I.C.S.

Public Service Commission (of C. P. and Berar, Bihar and Orissa), Chairman, Rajandhari Sinha, I.C.S.

Secretary, W. Das, B.A. (Hon.), Dip in. Ed.

Heads of Departments.

Commissioner of Settlements, Director of Land Records, Registrar-General of Births, Deaths and Marriages and Inspector-General of Registration, L. R. S. Singh, I.C.S.

Chief Conservator of Forests, G. B. Bakshi.

Excise Commissioner and Superintendent of Stamps, L. R. S. Singh.

Commissioner of Income-tax, P. D. Swaminadhan.

Postmaster-General, Lt.-Col. J. W. C. Lincoln Gordon.

Accountant-General, B. N. Sen Gupta.

Inspector-General of Prisons, Garewal, I.M.S.

Inspector General of Police, P. C. Saxena, I.P.

Director of Public Instruction, V. S. Jha.

Lord Bishop, The Revd. A. O. Hardy, M.A.

Inspector-General of Civil Hospital, Lt.-Col. A. S. Garewal, I.M.S.

Director of Public Health, Lt.-Col. A. S. Garewal.

Director of Agriculture, P. D. Nair.

Registrar, Co-operative Societies, G. C. Muktuar.

Chief Engineer, C. B. Roy, B.Sc.

Director of Industries, Dr. K. A. N. Rao, D.S.O.

Director of Veterinary Services, H. B. Shahi, M.R.C.V.S., D.T.V.M.

Chief Commissioners.

Colonel E. K. Elliot	1861	J. H. Morris, C.S.I.	1879
Lieut.-Colonel J. K. Spence (*Officiating*)	1862	W. B. Jones, C.S.I.	1883
R. Temple (*Officiating*)	1862	C. H. T. Crosthwaite (*Officiating*)	1884
Colonel E. K. Elliot	1863	**Confirmed 27th January 1885.**	
J. S. Campbell (*Officiating*)	1864	D. Fitzpatric (*Officiating*)	1885
R. Temple	1864	J. W. Neill (*Officiating*)	1887
J. S. Campbell (*Officiating*)	1865	A. Mackenzie, C.S.I.	1887
R. Temple	1865	R. J. Crosthwaite (*Officiating*)	1889
J. H. Morris, C.S.I. (*Officiating*)	1867	Until 7th October 1889.	
G. Campbell	1867	J. W. Neill (*Officiating*)	1890
J. H. Morris, C.S.I. (*Officiating*)	1868	A. P. MacDonell, C.S.I.	1891
Confirmed 27th May 1870.		J. Woodburn, C.S.I. (*Officiating*)	1893
Colonel R. H. Keatinge, V.C., C.S.I. (*Offg.*)	1870	**Confirmed 1st December 1893.**	
J. H. Morris, C.S.I.	1872	Sir C. J. Lyall, C.S.I., K.C.I.E.	1895
C. Grant (*Officiating*)	1879	The Hon'ble Mr. D. C. J. Ibetson, C.S.I.	1898
		,, Sir A. H. L. Fraser, K.C.S.I. (*Officiating*)	1899

Confirmed 6th March 1902.	
The Hon'ble Mr. J. P. Hewett, C.S.I., C.I.E. (*Officiating*)	1902
Confirmed 2nd November 1903.	
The Hon'ble Mr. F. S. P. Lely, C.S.I., K.C.I.E. (*Officiating*)	1904
Confirmed 23rd December 1904.	
The Hon'ble Mr. J. O. Miller, C.S.I.	1905
S. Ismay, C.S.I. (*Officiating*)	1906
Until 2nd October 1906.	
F. A. T. Phillips, I.C.S. (*Officiating*)	1907
Until 24th March 1907. Also from 20th May to 21st November 1909.	
The Hon'ble Sir R. H. Craddock, K.C.S.I., I.C.S.	1907
,, Mr. H. A. Crump, C.S.I., I.C.S.	1912
Sub. *pro tem* from 26th January 1912 to 16th February.	
The Hon'ble Mr. M. W. Fox-Strangways, C.S.I., I.C.S. (Sub *pro tem*)	1912
,, Sir B. Robertson, K.C.S.I., C.I.E., I.C.S.	1912
,, Mr. H. A. Crump, C.S.I., I.C.S. (*Officiating*)	1914
,, Sir B. Robertson, K.C.S.I., I.C.S.	1914
,, Sir Frank George Sly, K.C.S.I., I.C.S.	1919

Governors.

H. E. Sir Frank Sly, K.C.S.I., I.C.S.	1920
H. E. Sir Montagu Butler, K.C.S.I., C.B., C.I.E., C.V.O., C.B.E., I.C.S.	1925
H. E. Mr. J. T. Marten, C.S.I., I.C.S. (*Officiating*)	1927
H. E. Sir Montagu Butler, K.C.S.I., C.B., C.I.E., C.V.O., C.B.E., I.C.S.	1927
H. E. Sir A. E. Nelson, K.C.I.E., O.B.E., I.C.S. (*Officiating*)	1932
H. E. Sir Montagu Butler, K.C.S.I., C.B., C.I.E., C.V.O., C.B.E., I.C.S.	1932
H. E. Sir Hyde Gowan, K.C.S.I., C.I.E., V.D., I.C.S.	1933
H. E. Mr. E. Raghavendra Rao, Barat-Law (*Officiating*)	1936
H. E. Sir Hyde Gowan, K.C.S.I., C.I.E., V.D., I.C.S.	1936
H. E. Sir Hugh Bomford, C.I.E., I.C.S.	1936
H. E. Sir F. V. Wylie, K.C.S.I., C.I.E., I.C.S.	1938
H. E. Sir H. J. Twynam, K.C.S.I., C.I.E., I.C.S.	1940
H. E. Mr. F. C. Bourne, C.S.I., C.I.E., I.C.S. (*Offg.*)	1945
H. E. Sir H. J. Twynam, K.C.S.I., C.I.E., I.C.S.	1945
H. E. Sir Frederick Chalmers Bourne, K.C.S.I., C.S.I., C.I.E., I.C.S.	1946
H. E. Mr. Mangaldas Mancharam Pakvasa	1947

CENTRAL PROVINCES AND BERAR LEGISLATIVE ASSEMBLY

Speaker: The Hon'ble Mr. Ghanshyam Singh Gupta.

Deputy Speaker: D. L. K. Shastri.

S. T. Dharmadhikari (*Nagpur City*); H. J. Khandekar (*Nagpur City, Reserved Seat*); Capt. K. D. Paranjape (*Nagpur-Bhandara*); Satyanarayan Rukhmanand Bajaj, Agarwal (*Chanda-Wardha*); K. Dube (*Jubbulpore City*); B. Jain (*Jubbulpore-Saugor-Seoni*); N. Singh (*Hoshangabad-Nimar-Chhindwara*); Harisingh Vaghji Bhai (*Raipur-Bilaspur-Drug*); The Hon'ble Mr. Sambhaji Vinayak Gokhale (*East Berar*); D. L. K. Shastri (*West Berar*); R. B. Kumbhare (*Nagpur-Umrer*); Lalendra R. Wasnik (*Nagpur-Umrer, Reserved Seat*); B. L. Chandak (*Katol-Saoner*); The Hon'ble Dr. W. S. Barlingey (*Ramtek*); J. Ganpat Kadam (*Arvi*); G. N. Kale (*Hinganghat-Wardha*); S. V. Sonavane (*Hinganghat-Wardha, Reserved Seat*); R. W. Kathade (*Chanda-Brahmapuri*); T. C. Sakhare (*Chanda-Brahmapuri, Reserved Seat*); The Hon'ble Mr. R. K. Patil (*Warora*); R. R. Pathak (*Sironcha-Garchiroli*); T. M. Singh (*Betul-Bhainsdehi*); B. D. Patel (*Multai*); A. B. Sisodia (*Chhindwara-Sausar*); M. G. Mahar (*Chhindwara-Sausar, Reserved Seat*); The Hon'ble Mr. D. K. Mehta (*Seoni*); N. Gupta (*Amarwara-Lakhnadon*); The Hon'ble Pandit Dwarka Prasad Mishra (*Jubbulpore-Patan*); M. C. Mehra (*Jubbulpore-Patan, Reserved Seat*); K. P. Pande (*Sehora*); Randamansingh (*Murwara*); S. S. Selot (*Saugor-Khurai*); G. M. Kabirpanthi (*Saugor-Khurai, Reserved Seat*); Swami Krishnanand Ramcharan (*Rehli-Banda*); P. L. Dhagat (*Damoh-Hatta*); Jagan Chinte Charmkar (*Damoh-Hatta, Reserved Seat*); G. S. Agnihotri (*Mandla*); Gokul Singh (*Niwas-Dindori*); S. Pagare (*Hoshangabad-Sohagpur*); Lala Arjunsingh (*Harda-Seoni-Malwa*); Shankarlal Dube (*Narsinghpur-Gadarwara*); The Hon'ble Mr. Rameshwar Agnibhoj (*Narsinghpur-Gadarwara, Reserved Seat*); B. A. Mandloi (*Khandwa*); M. R. Mujumdar (*Burhanpur-Harsud*); Dr. K. C. Baghel (*Raipur*); Sukchain Satnami (*Raipur, Reserved Seat*); M. Laxminarayandas (*Dhamtari*); The Hon'ble Pandit Ravi Shankar Shukla (*Baloda Bazar*); Mahant Naindas (*Baloda Bazar, Reserved Seat*); Jiwangir Gosai (*Mahasamund*); H. N. Bajpai (*Bilaspur*); M. A. D. Satnami (*Bilaspur, Reserved Seat*); R. Tiwari (*Mungeli*); A. A. G. Satnami (*Mungeli, Reserved Seat*); Dr. J. P. Chandulal (*Katghora*); T. Chhedilal (*Janjgir*); B. L. S. Ramnami (*Janjgir, Reserved Seat*); The Hon'ble Mr. Ghanshyam Singh Gupta (*Drug*); Mahant

Posudas (*Drug, Reserved Seat*); P. R. Dongaonker (*Bemetara*); K. L. Gomashta (*Sanjari*); Kanhaiyalal (*Balaghat-Baihar*); S. R. Tiwari (*Waraseoni*); A. M. Makade (*Bhandara-Sakoli*); H. I. Gajabhiye (*Bhandara-Sakoli, Reserved Seat*); C. Jasani (*Gondia*); Raghunathmal S. Kochar (*Chandur*); R. A. Belsare (*Morsi*); P. K. Deshmukh (*Amraoti*); Dr. A. G. Sonar (*Ellichpur-Daryapur-Melghat*); K. N. Khandare (*Ellichpur-Daryapur-Melghat, Reserved Seat*); G. B. Deshmukh (*Akola-Balapur*); M. C. More (*Akola-Balapur, Reserved Seat*); S. B. Bhople (*Akot*); The Hon'ble Mr. B. A. Deshmukh Rohanekar (*Murtizapur-Mangrulpir*); N. V. Patel (*Basim*); R. J. Patil (*Yeotmal-Darwha*); D. L. Khadse (*Yeotmal-Darwha, Reserved Seat*); G. S. Mukhare (*Pusad*); K. R. Patil (*Kelapur-Wun*); P. S. Patil (*Chikhli-Mehkar*); R. P. Jadhao (*Chikhli-Mehkar, Reserved Seat*); S. V. Kharate (*Malkapur*); P. G. Ekbote (*Khamgaon-Jalgaon*); K. S. Karimuddin (*East Berar*); A. S. Khan (*West Berar*); A. S. Faruqi (*Nagpur*); Abdul Wahab (*Wardha-Chanda*); Abdul R. Khan (*Hoshangabad-Chhindwara-Betul*); Maulana Burhan-ul-Haq (*Jubbulpore-Mandla*); Zamiruddin Ahmed (*Saugor-Narsinghpur*); Hifazat Ali (*Nimar*); S. W. A. Rizvi (*Raipur-Bilaspur-Drug*); Dewan Najaf Ali Khan (*Bhandara-Balaghat-Seoni*); Hidayat Ali (*Amraoti*); H. M. Abdulla (*Akola*); Syed A. R. Shah (*Yeotmal*); M. Abdur-Rahman Khan (*Buldana*); Mrs. Vimalabai Deshpande (*Nagpur City*); Mrs. Subhadra Kumari Chauhan (*Jubbulpore*); Major P. Bernard (*Anglo-Indian*); Thakur Phul Bhanu Shah (*Backward Tribes*); A. M. Taherali (*Central Provinces, Commerce*); S. Singi (*Berar Commerce*); Beohar Rajendra Sinha (*Central Provinces, Northern Landholders*); Lt.-Col. Raje P. Rao Bhosle (*Central Provinces, Southern Landholders*); B. M. Bhandari (*Berar Landholders*); R. S. Ruikar (*Trade Union Labour*); V. R. Kalappa (*Factory Labour*); Dr. Syed Minhajul Hasan (*University*); Radha Devi Goenka (*Amraoti-Akola*).

EAST BENGAL

[Details appear towards end of book]

East Punjab

THE East Punjab is the western-most province of the Indian Union. It is in fact the Union's frontier province. Created in the middle of August 1947 it came into being as a result of the partition of the Punjab. The old Punjab was the land of the five rivers. East Punjab is the land of the two rivers, Sutlej and Beas.



H. E. Sir Chandulal Trivedi

BOUNDARIES

On the north, the boundary starts at the point where the west branch of the Ujh river enters the Punjab Province from the State of Kashmir. The boundary follows the line of that river down the western boundary of Pathankot tehsil to the point where the Pathankot, Shakargarh and Gurdaspur tehsils meet. From this junction of the three tehsils, the boundary follows the line of the Ujh river to its junction with the river Ravi and therefore in line of the river Ravi along the boundary between the tehsils of Batala and Shakargarh, the boundary between the tehsils of Batala and Narowal, the boundary between the tehsils of Ajnala and Narowal and boundary between the tehsils of Ajnala and Shahdara to the point on the river Ravi, where the district of Amritsar is divided from Lahore.

From this point the boundary turns southwards following the boundary between the tehsils of Ajnala and Lahore and then the tehsils of Tarn Taran and Lahore to the point where the tehsils of Kasur, Lahore and Tarn Taran meet. The line then turn south-westward along with the boundary between the tehsils of Lahore and Kasur to the point where that boundary meets the north-east corner of village Theh Jharolian. It then runs along the eastern boundary of that village to its junction with village Chatianwala, turns along the northern boundary of that village and then runs down its eastern boundary to its junction with village Waigal. It then runs along the eastern boundary of village Waigal to its junction with village Kalia and then along the southern boundary of village Waigal to its junction with village Panhuwan. The boundary then runs down the eastern boundary of village Panhuwan to its junction with a village Gaddoke. The line then runs down the eastern border of villages Gaddoke, Katluni Kalan, to its junction with villages Kals and Mastgarh.

It then runs along the southern boundary of Katuli Kalan and then western boundary of village Kals to its junction with village Khem Karan. The line then runs along the western and southern boundaries of village Khem Karan to its junction with village Maewala. It then runs down the western and southern boundaries of village Maewala proceeding eastward along the boundaries between village Mahaidpur on the north and villages Sheikhupura Kuhua, Kamalpuran, Fatehwala and Mahewala. The line then turns northward along the western boundary of village Sajhra to its junction with villages Mahaidpur and Machhike. It then turns north-westward along the boundaries between villages Machhike and Sajhra and then proceeds along the boundary between villages Ratoke and Sajhra to the junction between villages Ratoke, Sajhra and Mabbuke. The line then runs north-east between the villages Ratoke and Mabbuke to the junction of villages Ratoke, Mabbuke and Gajjal. From that point the line runs along the boundary between villages Mabbuke and Gajjal, and then turns south along the eastern boundary of village Mabbuke to its junction with villages Nagar Aimanpur. It then turns along the north-eastern boundary of village Nagar Aimanpur and runs along its eastern boundary to its junction with village Masteke. From there it runs along the eastern boundary of village Masteke where it meets the boundary between the tehsil of Kasur and Ferozepore.

The line then runs in a south westerly direction down the Sutlej river on the boundary between the districts of Lahore and Ferozepore to the point where the districts of Ferozepore, Lahore and Montgomery meet. It continues along the boundary between the districts of Ferozepore and Montgomery to the point where this boundary meets the border of Bahawalpur State. The district boundaries and not the actual course of the Sutlej river in each case constitutes the boundary between the East and West Punjab.

Jammu and Kashmir State lies to the north of the East Punjab province and it extends to the west of the river Jamna enclosed by Rajputana to the south.

East Punjab now includes Jullundur and Ambala Divisions and the Amritsar District of Lahore Division and part of Gurdaspur and Lahore Districts. Altogether it contains 13 districts as compared with 29 in the old undivided Punjab. The names of the Districts are (in the Ambala Division) as follows: Hissar, Rohtak, Gurgaon, Karnal, Ambala and Simla and in

the Jullundur Division Kangra, Hoshiarpur, Jullundur, Ludhiana, Ferozepur, Gurdaspur (excluding Shakargarh Tehsil) and certain portions of Kasur Tehsil have also been allotted to East Punjab.

The territory is not homogeneous. In the north-east lie the hill ranges of Shivalak and the Kangra Valley. The Jullunder division contains rich alluvial soil while parts of Ambala Division or Hariana Prant are dry and waterless tracts. Linguistically too the Province is not homogeneous. Punjabi, Western Hindi, Pahari and Rajasthani are all spoken in the different parts of the Province.

The total area of East Punjab is about 35,600 sq. miles and the total population according to the 1941 census figures is 1,24,09,924. These figures do not, of course, take into account the recent migrations between East and West Punjab. Broadly speaking, however, as many Muslims have left East Punjab as non-Muslims have come in, so that on balance the relative population remains unchanged.

The main languages of the Province are, as already mentioned, Punjabi and Western Hindi. that is to say, Hindustani with an accent. Punjabi is spoken in the whole of the Jullundur Division and part of Ambala District while 'Western Hindi' is the chief language in the Ambala Division. Two minor languages are 'Eastern Pahari' spoken in the hill tracts of Gurdaspur, Kangra and Simla and Rajasthani spoken in the Western parts of Hissar District bordering on Rajputana. All States in East Punjab have acceded to the Indian Union. Some States have merged into the Province. With the inauguration of the Dominion the offices of Residents in the States and of Agent to the Governor-General, Punjab States have been abolished.

The thirteen districts of East Punjab offer tremendous possibilities of development. It has been estimated that in the field of agriculture the famine-stricken areas of Rohtak, Hissar and Gurgaon will be turned into thriving and flourishing canal colonies with the construction of the Bhakra Dam at Bhakra on the Sutlej in Bilaspur State. In addition to irrigation the project will also generate electric power. The Bhakra and Nangal schemes will open up the south east parts of the Province and provide scope for new industries.

A word about the capital of the new Provinces will not be out of place here. The provisional capital is, of course, Jullundur. The permanent capital, however, it has been decided, will be located in the sub-mountainous area between Rupar and Chandigarh.

The selected site is about 20 miles from Ambala Cantonment on the south of the road which connects Panchkoola with Kharar, a tehsil headquarters.

The nearest railway station is Chandigarh, at a distance of three miles on the Ambala-Kalka section of the East Punjab railway.

According to an expert engineer, the completion of the capital will take about three years.

The climate of East Punjab is one of extremes. The rainfall in most districts ranges from 15 inches to 25 inches and it is usually sufficient for cultivation without recourse to artificial irrigation. But in the greater part of Ambala Division the margin is so small that except where artificial means exist any material reduction in rainfall means famine.

AGRICULTURE

With the exchange of population, it is not possible to state what percentage of the population depends on Agriculture. Similarly the position regarding the ownership, etc., of the land cannot be indicated unless definite decision is arrived at about the lands vacated by Muslims. The area preserved as forest land in the hills and elsewhere has been reduced to a large extent, being about 7.5 lakh acres as against 12 lakh acres in West Punjab.

Despite many changes due to partition, agriculture continues to be the staple industry of the Province, affording the main means of subsistence to a large proportion of the population of the population. Of the crops grown, wheat is the most important so far as production is concerned. Next in importance to wheat in the matter of total yield is gram.

The area of the land (excluding Patti subtehsil of Amritsar district for which figures are not yet available) in 1945-46 was 22,756,900 acres, and its classification under various heads was as follows :—

	Acres
Forests	768,700
Not available for cultivation ..	6,130,000
Other uncultivated lands excluding current fallows	2,392,800
Current fallows	729,000
Net area sown during the year ..	12,736,400

The total area of crop sown in the province was 16,365,700 acres (irrigated 5,132,800 and unirrigated 11,232,900) acres. The area and outturn of principal crops was as shown below :—

	Area in acres.	Outturn in tons.
Rice	431,600	175,000
Wheat	3,312,200	1,043,400
Barley	515,100	105,400
Jowar	445,100	43,700
Bajra	2,212,500	293,900
Maize	856,500	296,000
Gram	4,105,400	726,600
Rabi Oil Seeds ..	341,200	53,600
Sugarcane	300,600	370,900
Cotton Cleaned—		
Desi	274,100	100,600
American ..	91,300	39,900

The area irrigated by various sources was as follows :—

Government canals 2,694,500; private canals 421,100; tanks 7,100; wells 1,931,200 and other sources 20,200.

The development of irrigation on the completion of Bhakhra Dam is expected to lead to a great expansion of the area under wheat. Other important crops are bajra, maize, barley, rice, jowar, oil-seeds (sarson, taramira, toria, groundnut and sesamum) cotton and sugarcane. The short staple indigenous varieties predominate in East Punjab, the American cotton covering only about 1/3rd of the total area under cotton.

LAND TENURE

The great mass of the landed property in the Punjab is held by small proprietors, who cultivate their own land in whole or part. The chief characteristic of the tenure generally is, that these proprietors are associated together in village communities, having, to a greater or lesser extent, joint interest; and under the present system of cash payments, limited so as to secure a certain profit to the proprietors, jointly responsible for the payment of the revenue assessed upon the village lands. It is almost an invariable incident of the tenure, that if any of the proprietors wishes to sell his rights, or is obliged to part with them in order to satisfy demands upon him, the other members of the same community have a preferential right to purchase them at the same price as could be obtained from outsiders.

2. In those communities with partial or entire separation of prop ietary title, the measure of the rights and liabilities of the proprietors vary very much. It sometimes depends solely upon original acquisition and the operation of the laws of inheritance; in other cases definite shares in the land of a village or sub-division, different from those which would result from the law of inheritance, have been established by custom; in yet other cases, reference is made not to shares in lands, but to shares in a well or other source of irrigation; and there are also many cases in which no specified shares are acknowledged but the area in the separate possession of each proprietor is the sole measure of his interest.

3. In the Simla hills and in the more mountainous portions of Kangra district the present village communities consist of numerous small hamlets, each with its own group of fields and separate lands, and which had no bond of union until they were united for administrative purposes at the time of the Land Revenue Settlement.

4. In some cases the village communities, while holding and managing the land as proprietors, are bound to pay a quit rent to superior proprietors under whom they hold. The Settlement is made according to circumstances, either with the superior proprietor, who collects the Government revenue as well as his quit rent from the communities, or with the communities in actual possession of the land, who pay the land revenue to Government and the quit rent to the superior proprietor. In either case the amount which the superior proprietor is entitled to collect is determined at Settlement as well as the amount of land Revenue demand.

5. There are sometimes also proprietors holding lands within the estates of village communities, but who are not members of the communities, and are not entitled to share in the common profit nor liable for anything more than the revenue of their own lands. They are called "Malikan Qabza". They pay village charges as well as quit rent if any to the proprietary body of the village. The most common examples of this class are the holders of plots at present or formerly revenue free, in which the assignees were allowed to get proprietary possession in consequence of having planted gardens or made other improvements or because they had other claims to consideration in the part of the village community,

The official classification of village tenure is as below :—

(1)	Zamindari	(*a*) Landlord (Khalis or Wahid).
		(*b*) Communal (Mushtarka).
(2)	Pattidari	(*a*) Perfect (Mukamil).
		(*b*) Imperfect (Ghair Mukamil).
(3)	Bhaichara	(*a*) Perfect (Mukamil).
		(*b*) Imperfect (Na-Mukamil).

The Province being preponderantly agricultural, a considerable proportion of the wealth of the people lies in livestock. Large profits are derived from the cattle and dairy trades and wool is a staple product in Kangra district and throughout the plains generally. Though the trade in hides and skins has a bright future, for the Punjab as a whole the industry is not likely to flourish in the new set-up.

INDUSTRY

The industrial structure of the province is pyramidal in character, with a very wide and durable base of cottage industries, a fair sized body of small scale and organised industries. Another striking feature of the industrial pattern is uneven distribution of industrial activity as is shown in the following table :—

	District.	No. of factories.	No. of operatives.
1.	Amritsar	177	17,421
2.	Gurdaspur	46	4,281
3.	Ferozepore	40	4,981
4.	Jullundur	56	3,005
5.	Ludhiana	65	3,240
6.	Hoshiarpur ..	9	209
7.	Kangra	13	218
8.	Ambala	47	5,445
9.	Simla	3	528
10.	Karnal	13	647
11.	Rohtak	5	156
12.	Hissar	27	3,868
13.	Gurgaon	8	760
	Total..	509	44,759

It will be seen that there is a concentration of industry in the districts of Amritsar, Gurdaspur and Ferozepore, which touch the Radcliff border. Over half of the registered factories and about 60 per cent of workers engaged in organised industry are in these three districts. In the south-eastern districts of Gurgaon and Rohtak and the hilly district of Simla there is hardly any industry.

Perennial Factories:—Another notable feature of the industrial fabric of the province is that 75 per cent of the registered factories are perennial. Amongst the perennial factories, textile and hosiery mills, foundries and engineering workshops, paper and glass factories, flour mills and chemicals are most important. The Dhariwal Mills is one of the two biggest woollen mills in India, which manufactures about half of the woollen fabrics made in the whole country. Ludhiana is the centre of hosiery industry and still occupies the premier position in the whole of the Indian Dominion.

The other industrial concerns of note in the province are embroidery mills, absorbent cotton and antiseptic dressing factories, glass and several carpet factories at Amritsar, metal foundries at Batala and Jullundur, paper and pulp mill, a starch factory and a sugar mill at Abdullahpur, a plywood factory at Ludhiana, factories manufacturing nuts and bolts at Jullundur and Ludhiana, steel rolling mills at Amritsar, Khanna and Ludhiana, tanneries at Jullundur, factories for the manufacture of scientific apparatus at Ambala and Amritsar, fruit preservation at Pathankot and Ambala and chemicals at Amritsar.

Cottage Industries:—The small scale and cottage industries are quite numerous and varied. Handloom weaving, including manufacture of blankets and rugs, at Panipat, hosiery industry at Ludhiana, utensil making at Rewari and Jagadhri, tanning and wood working in Jullundur and Hoshiarpur, rank probably the foremost amongst the cottage industries. The sericulture industry is expanding gradually and a large number of agriculturists in the sub-montane tracts are increasingly taking to it.

The disturbances that followed the partition of the province have adversely affected its industrial life however. At present most of the industries are not working to their full capacity. Raw materials are in short supply, skilled labour is not easily available, markets have been dislocated and banks are not functioning properly. It will take sometime before normal working is resumed.

MEDICAL

The Medical Department is controlled by the Inspector-General of Civil Hospitals, Punjab. He is assisted by an Assistant Inspector-General of Civil Hospitals, Punjab, and an officer on Special Duty, who are Officers of the Provincial Civil Medical Service of the rank of a Civil Surgeon; and a Personal Assistant of Gazetted rank.

PUBLIC HEALTH

The following personnel of the Punjab Public Health Deptt., are responsible for the control of disease and for the carrying out of work designed to improve the health of the people:—

***Headquarters staff*:—**

Director of Public Health, Assistant Director of Public Health, Malariology, Provincial Public Analyst, Provincial Leprosy Officer, Entomologist, Statistical Officer, Inspectress, Health Centres.

Public Health work is organised in 2 "Ranges" each in charge of an Assistant Director of Public Health. The 13 districts of Punjab are included in these Ranges.

The basic public health staff for a District is:—
1 District Medical Officer of Health, 4 Sanitary Inspectors, 1 Superintendent of Vaccination, 16 Vaccinators.

The basic district staff is reinforced from the following cadres organised for special work:—

A Public Health Corps concerned primarily with the control of epidemic disease and sanitation in villages.

There are 12 units in the corps each consisting of—
1 Sub-Assistant Health Officer, 1 Sanitary Inspector, 2 Sanitary Supervisors, 12 Sanitary Patrols (Labourers).

One such unit is normally attached to each district.

An anti-malaria organisation of 6 units, each consisting of:—
1 Sub-Assistant Health Officer, 1 Entomological Assistant, 5 Anti-malaria Supervisors, 25 Anti-malaria Patrols.

Problems relating to nutrition are investigated by specially trained staff which includes:—
1 Nutrition Officer, 1 Lady Doctor, 1 Sub-assistant Health Officer, 2 Sanitary Inspectors.

Increasing effort is being directed towards ensuring that food-stuffs sold throughout the Province are of good quality. Sixteen Government Food Inspectors are employed, in addition to those appointed by local bodies, who regularly sample wholesale and retail stocks. Samples are examined at a Headquarters Laboratory at Ambala.

Government has recently expanded maternity and child welfare work. There are now throughout the Province 60 maternity and child welfare centres staffed by fully trained lady health visitors, who supervise the training and work of indigenous dias. About 37 additional centres are being formed.

Hookworm:—A special organisation for the prevention and treatment of Hookworm disease is in operation in the areas in which this disease is prevalent.

The following personnel carry out the work:—
Consisting of 2 Sanitary Inspectors, Eight units each consisting of:—
1 Sub-Asstt. Surgeon, 1 Dispenser.
1 Entomologist, 2 Sub-Assistant Health Officers, 1 Field Assistant, 6 Sanitary Supervisors, 12 Sanitary Patrols, 2 Laboratory Assistants, 2 Laboratory Attendants.

An Anti-leprosy cadre consisting of:—
1 Provincial Leprosy Officer, 1 Assistant Leprosy Officer, for Kangra, 1 Assistant Leprosy Officer, for Kulu, 1 Nurse Dai.

Leprosy surveys are undertaken and measures instituted for the control of the disease.

Whole-time Municipal Medical Officers of Health are employed in the following towns:—
Amritsar, Ferozepore, Jullundur, Ludhiana.

All District & Municipal Medical Officers of Health are Inspectors under the Factory Act and are responsible for ensuring that the rules laid down for safeguarding the health of workers are observed.

There is a Public Health Branch of the Public Works Deptt., which is concerned with the planning and carrying out of work in connection with the provision of water-supplies and drainage and sewerage schemes in towns and villages. This organisation consists of a Chief Engineer who is a Secretary to Government, 2 Superintending Engineers and the following additional personnel:—

Executive Engineers, Sub-Divisional Officers, Subordinates.

EDUCATION

Rapid strides have been made in education in East Punjab. The advance has not been confined to any one form of education but is spread over all grades and varieties. In addition to Institutions maintained in all parts of the province by private enterprise, Government itself maintains 7 arts colleges, (including 2 for women) 2 training colleges, one for males and the other for females. One normal school for males, 3 training classes and combined institutions for females, 70 secondary schools for boys and girls and 17 centres for vocational training. Apart from these institutions for general education, Government maintains one higher grade professional institution, *viz.*, Glancy Medical College, Amritsar. In addition there are several technical and industrial schools scattered over the province.

The Department of Education is in the charge of the premier who is assisted in the work of administration by the Director of Public Instruction.

POLICE

The Police force is divided into District Police, Railway Police, Criminal Investigation Department and Provincial Additional Police. The combined force is under the control of the Inspector-General, who is a member of the gazetted force has under him two Deputy Inspectors-General in charge of ranges comprising several districts. The Criminal Investigation Department is controlled by the Asst. Inspector-General, who is also in charge of the Finger Print Bureau at Phillaur. There is a Police Training School at Phillaur in charge of a Principal of the rank of Superintendent of Police. The Railway Police is under an Assistant Inspector-General. The Provincial Armed Police is controlled by a commandant. The District Police are controlled by Superintendents each of whom is in charge of a district and has under him one or more Assistant Superintendents or Deputy Superintendents.

As a Security Measure the creation of National Volunteer Corps has also been effected. It is under the control of an Assistant Inspector-General of Police.

JUSTICE

The administration of Justice is entrusted to a High Court, which is the highest court in East Punjab and Delhi in civil cases, final appellate authority in criminal cases, and has powers of original criminal jurisdiction in cases where European British subjects are charged with serious offences and orginal civil jurisdiction in special cases.

The Court sits at Simla and is composed of a Chief Justice, five puisne Judges and one additional Judge (either Civillans or Barristers or Advocates). Subordinates to the High Court are the District and Sessions Judges (10 in number) each of whom exercises civil and criminal jurisdiction in a civil and session division comprising one or more districts.

THE REFUGEE PROBLEM

No review of East Punjab will be complete without a reference to the refugee problem. This problem has been dealt with in greater detail in another section for, in a sense it is an All-India problem though East Punjab is more immediately affected.

About 4 million Hindus and Sikhs left West Punjab for East and about the same number of Muslims left East Punjab for West. This upheaval presents three main problems, evacuation, relief and rehabilitation. The present position may be summarized as follows: There are now about 700,000 Hindus and Sikhs staying in refugee camps at Amritsar, Cheharta, Gurdaspur, Ferozepore, Jullundur, Ludhiana, Hoshiarpur Hissar, Rohtak, Ambala, Karnal, Panipat, Shahabad. Kurukshetra and Gurgaon. The largest camp is at Kurukshetra and is being directly run by the Central Government. Shelter was provided wherever possible. All schools and colleges were closed upto February 29, 1948 and all available living space requisitioned. Tents too have been put up. Adequate arrangements have been made for feeding the refugees and the following scale of ration has been fixed; Atta or rice 10 oz.; dal 1oz.; vegetables 1 oz.; oil or vegetable ghee ½oz.; gur or sugar ½oz.; salts and condiments ½oz.; milk per day for children below five 1 lb.; fruit, milk and vitamin tablets and other special items are issued on medical advice. In addition, nursing and expectant mothers and the certified sick get 1 lb. of milk a day. Then the refugees are provided with clothing and medical relief when necessary. Vaccination and inoculation are also undertaken to prevent spread of disease. Altogether the East Punjab Government expect to spend a little over Rs. 7 crores on refugee relief and rehabilitation.

THE BUDGET

A deficit of Rs. 6.69 crores was revealed by Dr. Gopichand Bhargava, Premier and Finance Minister, presenting to the East Punjab Assembly the first annual budget of the Province for the year 1948-49. The Premier estimated the revenue receipts at Rs. 11.13 crores and the revenue expenditure at Rs. 17.82 crores.

A feature of the budget is the enhancement of excise duty on country spirit, Indian-made foreign spirit, onium and *bhang*, which is estimated to yield an additional revenue of Rs. 33 lakhs.

The Premier disclosed that, out of a total expenditure of Rs.4.81 crores on civil administration, the police alone accounted for Rs. 2.69 crores with the result that, whereas in joint Punjab the expenditure on police was about 14 per cent. of the total revenue expenditure in East Punjab.

Referring to the food situation, Dr. Bhargava said that with the incoming of the new crop it was proposed to decontrol food grains and withdraw rationing.

Dealing with refugees and rehabilitation, the Premier revealed that during the next year the department expected to spend a little over seven crores of rupees.

The Premier announced the following taxation proposals designed to supplement the revenues to a little over Rs. 1 crore.

(1) The sales tax exemption limit is to be raised from Rs. 10,000 to Rs. 19,999 and to levy the tax at a uniform rate of Rs. 1/9 per cent. in case of annual turnovers of Rs. 20,000 and above.

(2) Petrol tax which is levied at the rate of one anna six pies per Imperial gallon is proposed to be raised to three annas per Imperial gallon.

(3) The Government propose to raise the rate of property tax also from 7-1/2 to 10 per cent. per annum.

THE FINANCES OF THE EAST PUNJAB

Heads of Account.	Budget Estimate, 15-8-47 to 31-3-48	Heads of Account.	Budget Estimate, 15-8-47 to 31-3-48
Revenue Receipts	*(In thousands of Rupees.)*	**Expenditure Charged to Revenue**	*(In thousands of Rupees.)*
Principal Heads of Revenue		*Direct demands on the Revenue*	
IV—Taxes on Income other than Corporation Tax.	1,00,00	7—Land Revenue	26,12
		8—Provincial Excise	6,96
VII—Land Revenue (gross)..	75,00	9—Stamps	77
Deduct—Portion of Land Revenue due to Irrigation	—8,65	10—Forests	19,43
		11—Registration	42
Net Land Revenue ..	66,35	12—Charges on account of Motor Vehicles Acts	1,50
		13—Other Taxes and Duties ..	3,94
VIII—Provincial Excise ..	1,24,21		
IX—Stamps	30,00	Total ..	59,14
X—Forests	36,90		
XI—Registration	5,28	*Irrigation Revenue Accounts*	
XII—Receipts under Motor Vehicles Acts	2,00	17—Interest on Irrigation Works for which Capital Accounts are kept	43,88
XIII—Other Taxes and Duties	27,42		
		18—Other Irrigation Expenditure financed from ordinary revenues	23,34
Total ..	3,92,16		
		Total ..	67,22
Irrigation			
XVII—Irrigation—Works for which Capital Accounts are kept—		*Debt Services*	
Direct Receipts ..	1,09,40	22—Interest on Debt and other Obligations..	—65,61
Indirect credits (Land Revenue due to Irrigation)	8,65	23—Appropriation for Reduction or Avoidance of Debt ..	..
Gross amount	1,18,05	Total ..	—65,61
Deduct—Working Expenses.	—73,62		
Net XVII—Irrigation Receipts ..	44,43	*Civil Administration*	
		25—General Administration ..	71,29
XVIII—Irrigation—Works for which no Capital Accounts are kept ..	68	27—Administration of Justice ..	20,37
		28—Jails and Convict Settlements	17,89
Total ..	45,11	29—Police	1,56,64
		47—Miscellaneous Departments..	2,03
Debt Services		Total ..	2,68,22
XX—Interest	6,75		
Total ..	6,75	*Beneficent Departments*	
		36—Scientific Departments ..	..
Civil Administration		37A—Education	86,55
XXI—Administration of Justice	5,11	38—Medical	26,34
XXII—Jails and Convict Settlements ..	17	39—Public Health	19,43
XXIII—Police	3,40	40—Agriculture	24,18
XXXVI—Miscellaneous Departments	1,30	41—Veterinary	17,77
		42—Co-operation	13,14
Total ..	9,98	43—Industries	15,61
		Total ..	2,03,02
Beneficent Departments			
XXVI—Education	6,85	*Civil Works and Miscellaneous Public Improvements*	
XXVII—Medical	4,83	50—Civil Works	76,52
XXVIII—Public Health	57	52—Interest on Capital Outlay on Electricity Schemes ..	26,15
XXIX—Agriculture	10,01	52A—Other Revenue Expenditure connected with Electricity Schemes	4
XXX—Veterinary	1,30		
XXXI—Co-operation	58	Total ..	1,02,71
XXXII—Industries	1,31		
Total ..	25,45		

Heads of Account.	Budget Estimate, 15-8-47 to 31-3-48	Heads of Account.	Budget Estimate. 15-8-47 to 31-3-48.
	(In thousands of Rupees.)	*Miscellaneous*	*(In thousands of Rupees.)*
Civil Works and Miscellaneous Public Improvements		54—Famine	1,50
		55—Superannuation Allowances and Pensions	—1,57
XXXIX—Civil Works	3,43	56—Stationery and Printing ..	7,88
XLI—Receipts from Electricity Schemes (gross) ..	33,56	57—Miscellaneous—	
		(a) Miscellaneous	1,15,95
Deduct—(1) Working Expenses (Other than Establishment)	—8,53	Total ..	1,23,76
(2) Depreciation Fund Deposit ..	—3,34	*Contributions and Miscellaneous adjustments between Central and Provincial Governments*	
(3) Establishment Charges and Other Miscellaneous Expenditure	—8,73	62—Miscellaneous adjustments between the Central and Provincial Governments ..	....
Net XLI—Electricity Schemes	12,96	Total Revenue Expenditure charged to Revenue	7,58,46
		Extraordinary Items	
Total ..	16,39	63—Extraordinary charges ..	....
		63-A—Expenditure on Post-War Reconstruction and Planning	....
Miscellaneous		63-B—Expenditure on Post-War Development Schemes ..	61,61
		Total ..	61,61
XLIII—Transfers from Famine Relief Fund.. ..	..	**Capital Accounts Charged to Revenue, *i.e.*, met from Extraordinary Receipts**	
XLIV—Receipts in aid of Superannuation ..	1,39	19—Construction of Irrigation, etc., Works	....
XLV—Stationery and Printing	77	43-A—Capital Outlay on Industrial Development ..	....
XLVI—Miscellaneous	30,00	50-A—Capital Outlay on Civil Works	22,85
Total ..	32,16	53—Capital Outlay on Electricity Schemes	....
		55-A—Commutation of Pensions .	....
Contributions and Miscellaneous Adjustments between Central and Provincial Governments		Total Capital Accounts charged to Revenue, *i.e.*, met from Extraordinary Receipts	22,85
L—Miscellaneous adjustments between the Central and Provincial Governments ..	15	Total Expenditure charged to Revenue	8,42,92
		Capital Expenditure not charged to Revenue	
Total Revenue Receipts ..	5,28,15	68—Construction of Irrigation Works	1,63,59
		72—Capital Outlay on Industrial Development	25,00
Extraordinary Items		81—Civil Works outside the Revenue Account ..	42,52
LI—Extraordinary Receipts	60,00	81-A—Capital Outlay on Electricity Schemes	69,24
Total Revenue ..	5,88,15	82—Capital Account of other Provincial Works outside the Revenue Account ..	3,95
		83—Payments of Commuted value of Pensions..	....
		85-A—Capital Outlay on Schemes connected with the war, 1939..	50
		Total Capital Accounts not charged to Revenue ..	20,50
			3,25,30

Receipts.	Budget 15-8-47 to 31-3-48	Disbursements.	Budget 15-8-47 to 31-3-48
	Public Debt		
	(In thousands of Rupees.)		*(In thousands of Rupees.)*
Permanent Debt	..	Permanent Debt (Discharged) ..	..
Floating Debt	1,00,00	Floating Debt	..
Loans from the Central Government	..	Loans from the Central Government—Repayments	..
Total ..	1,00,00	Total ..	..

Receipts.	Budget 15-8-47 to 31-3-48.	Disbursements.	Budget 15-8-47 to 31-3-48
	UNFUNDED DEBT		
	(*In thousands of Rupees.*)		(*In thousands of Rupees.*)
State Provident Funds	15,16	Provident Funds	10,29
Total Unfunded debt	15,16	Total Unfunded debt	10,29
	DEPOSITS AND ADVANCES.		
Appropriation for Reduction or Avoidance of Debt—		Appropriation for Reduction or Avoidance of Debt—	
Sinking and Depreciation Funds for loans raised in the market.	..	Sinking and depreciation Funds for loans raised in the market.	..
Other appropriations	..		
Famine Relief Fund	..	Famine Relief Fund	..
Motor Transport Reserve Fund ..	6	Motor Transport Reserve Fund ..	..
Depreciation Reserve Fund—		Depreciation Reserve Fund—	
Electricity	5,12	Electricity	1,78
Depreciation Reserve Fund— Motor Transport	62		
Depreciation Reserve Fund for Government Presses	..	Depreciation Reserve Fund for Government Presses	..
Deposits of Local Funds	1,08,42	Deposits of Local Funds	1,05,71
Civil Deposits	1,90,90	Civil Deposits	1,90,03
Road Development Fund ..	1,48	Road Development Fund ..	1,48
Research Fund	..		
Advances not bearing interest—		Advances not bearing interest—	
Advances Repayable	17,32	Advances repayable	20,07
Permanent Advances	1	Permanent Advances	15
Accounts with Burma Government	28	Accounts with Burma Government	28
Accounts with Reserve Bank ..	8	Accounts with Reserve Bank ..	8
Suspense—		Suspense—	
Suspense Accounts	1,27,92	Suspense Accounts	1,33,47
Cheques and Bills	1,94,82	Cheques & Bills	1,94,64
Departmental & Similar Accounts—		Departmental & Similar Accounts—	
Civil Departmental balances ..	3,19	Civil Departmental balances ..	3,48
Miscellaneous—		Miscellaneous—	
Government Account	..	Government Account	..
Total ..	6,50,31	Total ..	6,51,17
LOANS AND ADVANCES BEARING INTEREST		LOANS AND ADVANCES BY PROVINCIAL GOVERNMENT	
Loans to Municipalities and Advances to Cultivators, etc. ..	197	Loans to Municipalities and Advances to Cultivators, etc. ..	88,50
Loans to Government Servants ..	36	Loans to Government Servants ..	63
Total ..	233	Total ..	89,13
	REMITTANCES		
Cash Remittances and adjustments between officers rendering accounts to the same Accountant-General	11,97,82	Cash Remittances and adjustments between officers rendering accounts to the same Accountant-General	11,94,62
Reserve Bank of India Remittances	3,49,12	Reserve Bank of India Remittances	3,49,12
Adjusting accounts between Central & Provincial Governments	59,82	Adjusting accounts between Central & Provincial Governments	59,82
Adjusting accounts with Railways.	2,39	Adjusting accounts with Railways	2,39
Inter-Provincial suspense account.	1,36	Inter-Provincial suspense account	1,36
Total ..	16,10,51	Total ..	16,07,31
Total Provincial Receipts ..	29,66,46	Total Provincial Disbursements..	35,26,12
Opening Balance	99,66	Closing Balance	4,60,00
and Total ..	30,66,12	Grand Total ..	30,66,12

GOVERNMENT

Prior to the amendment of the Government of India Act in 1919 the head of the administration was a Lieutenant-Governor, drawn from the ranks of the Indian Civil Service. Under the Act of 1919 the province was raised to the status of a Governorship, with an Executive Council and Ministers, the Governor-in-Council being in charge of the Reserved Subjects and the Governor with his Ministers of the Transferred Subjects. With the introduction of part III of the Government of India Act, 1935, this Executive Council has been substituted by a Council of Ministers and the Legislative Council by an enlarged Legislative Assembly with wide powers of legislation and control. With the passing of the Indian Independence Act of 1947, the Province was partitioned and thus the new Province of East Punjab came into existence,

The business of Government as before is carried on through the usual Secretariat which consists of five Secretaries, designated (1) Chief, (2) Home, (3) Finance, (4) Medical and Local Government and Industries and (5) Civil Supply Department; four Under-Secretaries, and two Assistant Secretaries. In the Public Works Department, there are five Chief Engineers two in the Buildings and Roads Branch, one in the Electricity Branch and two in the Irrigation Branch while the Legal Remembrancer is also the Secretary to Government in the Legislative Department. The head of the Police Department is Joint Secretary and of the Education Department a Secretary to Government. Under the Governor the province is administered by two Commissioners for Jullundur and Ambala divisions, who exercise general control over the 13 Deputy Commissioners in districts.

The principal heads of Department in the province are given below.

ADMINISTRATION

GOVERNOR, H. E. SIR CHANDULAL MADHAVLAL TRIVEDI, K.C.S.I., C.I.E., O.B.E., I.C.S.

PERSONAL STAFF

Secretary, N. K. Mukarji, I.C.S.
Military Secretary, A.R.N. Davies.
Aide-de-Camp, Captain P. S. Mehta.

COUNCIL OF MINISTERS

Premier—The Hon'ble Mr. Gopi Chand Bhargava.

Minister for Law and Order, Justice, Jails, Land Revenue, Irrigation and Electricity—The Hon'ble Sardar Swaran Singh.

Minister for Public Works, Civil Supplies and Transport—The Hon'ble Captain Ranjit Singh.

Minister for Relief and Rehabilitation—The Hon'ble Sardar Pratap Singh.

Minister for Forests, Agriculture, Veterinary and Co-operation—The Hon'ble Giani Kartar Singh.

Minister for Finance, Local Self-Government and Industries—The Hon'ble Choudhry Krishna Gopal Dutt.

Minister for Labour and Excise—The Hon'ble Shree Prithvi Singh Azad.

CIVIL SECRETARIAT

Chief Secretary—M. R. Sachdev, C.I.E., O.B.E., I.C.S.

Secretary, Medical, Local Government and Labour Departments—M. R. Bhide, I.C.S.

Secretary, Industries Department—J. M. Shrinagesh, C.I.E., I.C.S.

Secretary, Civil Supplies Department—M. R. Sachdev, C.I.E., O.B.E., I.C.S.

Secretary, Finance Department—K.S. Malhotra, I.A. & A.S.

Home Secretary and Provincial Transport Controller—Nawab Singh, I.C.S.

Additional Secretary, Civil Supplies Department—E. N. Mangat Rai, I.C.S.

Finance Commissioner, Revenue and Development Departments—P. K. Kaul, I.C.S.

Financial Commissioner, Refugees & Rehabilitation Departments—P. N. Thapar, C.I.E., I.C.S.

PUBLIC WORKS DEPARTMENT

Irrigation Branch

Secretary—(*Canals*), R. B. Shri Gita Ram Garg.
Secretary—(*Projects*), S. B. Saider Sarup Singh.

Buildings and Roads Branch.

Secretary—(1) R. B. Brij Mohan Lal, I.S.E.
Secretary—(2) P. L. Varma, I.S.E.

MISCELLANEOUS DEPARTMENTS

Director of Agriculture—S. B. S. Lal Singh.
Director of Land Records—Pandit Lakshmi Chander Vashishta, P.C.S.
Director of Public Instruction—G. C. Chatterji, M.A., I.E.S.
Inspector-General of Police—S. Sant Parkash Singh, I.P.
Chief Conservator of Forests—J. Singh, M.B.E., I.F.S.
Inspector-General of Civil Hospitals—Col. B. S. Nat.
Director of Public Health—Dr. A. R. Mehta, D.P.H.
Inspector-General of Prisons—R.B.B.P.Katoch.
Accountant-General—R. C. Khanna.
Post Master-General—R. S. L. Dhanpat Rai.

PUBLIC SERVICES COMMISSION

Chairman—Ram Chandra, C.E.I., M.B.E., I.C.S.

Members—S. S. Sant Singh, P.C.S.; Ch. Bhara Singh, B.A., LL.B.

LIEUTENANT-GOVERNORS OF THE PUNJAB

Sir John Lawrence, Bart., G.C.B..	1856
Sir Robert Montgomery, K.C.B	1859
Donald Friell McLeod, C.B.	1865
Major-General Sir Henry Durand, K.C.S.I., C.B., died at Tonk, January 1871.	1870
R. H. Davies, C.S.I.	1871
R. E. Egerton, C.S.I.	1877
Sir Charles U. Aitchison, K.C.S.I., C.I.E..	1882
James Broadwood Lyal	1887
Sir Dennis Fitzpatrick, K.C.S.I.	1892
William Macworth Young, C.S.I... ..	1897
Sir C. M. Rivaz, K.C.S.I.	1902
Sir D. C. J. Ibbetson, K.C.S.I., resigned 22nd January 1908.	1907
T. G. Walker, C.S.I. (Offg.)	1907
Sir Louis W. Dane, K.C.I.E., C.S.I... ..	1908
James McCrone Doule (Offg.)	1911
Sir M. F. O'Dwyer, K.C.S.I.	1913
Sir Edward Maclagan, K.C.I.E., C.S.I. ..	1919

LIEUTENANT GOVERNORS OF THE PUNJAB *Contd.*—		
Sir Edward Maclagan, K.C.I.E., C.S.I. ..		1920
Sir Malcolm Hailey, K.C.S.I., C.I.E. ..		1924
Sir Geoffrey de Montmorency, G.C.I.E., K.C.S.I., K.C.V.O., C.B.E.		1928
Sir Herbert William Emerson, G.C.I.E., K.C.S.I., C.I.E., C.B.E., I.C.S.		1933
Sir Henry Duffield Craik, Bart., G.C.I.E., K.C.S.I., I.C.S.		1938
Sir Bertand James Glancy, G.C.I.E., K.C.S.I., K.C.I.E.		1941
Sir Evan Meredith Jenkins, K.C.S.I., K.C.I.E., I.C.S		1946
Sir Chandulal Madhavlal Trivedi, K.C.S.I., C.I.E., I.C.S.		1947

EAST PUNJAB LEGISLATIVE ASSEMBLY

Speaker.—Sardar Kapoor Singh, B.A., LL.B.

Secretary.—Sardar Abnasha Singh, Barrister-at-Law.

Hon'ble Dr. Gopi Chand Bhargava (*University*); Hon'ble Sardar Swaran Singh, B.A., LL.B. (*Jullundur West, Sikh Rural*); Hon'ble Mr. Chaudhri Lehri Singh, B.A., LL.B. (*Rohtak, North, General Rural*); Hon'ble Sardar Partap Singh, M.A. (*Amritsar South, Sikh Rural*); Hon'ble Sardar Ishar Singh Majhail (*Amritsar North, Sikh Rural*); Hon'ble Captain Ranjit Singh (*Hissar South, General Rural*); Hon'ble Shri Prithvi Singh Azad (*Ambala and Simla, Reserved Seat*); Sardar Bachan Singh (*Ludhiana Central, Sikh Rural*); Badlu Ram Chaudhri (*Rohtak Central, General Rural*); Thakur Beli Ram, B.A., LL.B. (*Kangra East, General Rural*); Pandit Bhagat Ram Sharma, B.A., LL.B. (*Kangra West, General Rural*); Lala Bhagwan Dass (*East Punjab, Commerce and Industry*); Dalip Singh Thakur (*Kangra South, General Rural*); Pandit Durga Chand, Kaushish (*Ambala Division, Landholders*); Seth Ganga Saran (*Trade Union, Labour*); Sardar Gurbachan Singh (*Ferozepur West, Sikh Rural*); Master Gurbanta Singh (*Jullundur, General Rural, Reserved Seat*); Sardar Inder Singh (*Eastern Towns, Sikh Urban*); Chaudhri Jagdish Chander (*Karnal North, General Rural*); Sardar Jagjit Singh Mann (*Jullundur Division, Landholders*); Pandit Jiwan Lall (*South-East Gurgaon, General Rural*); Sardar Kabul Singh (*Jullundur East, Sikh Rural*); Sardar Kehar Singh (*Jagraon, Sikh Rural*); Lala Kedar Nath Sehgal (*Amritsar, General Rural*); Chaudhri Mangoo Ram (*Hoshiarpur West, General Rural, Reserved Seat*); Chaudhri Mattu Ram (*Ludhiana and Ferozepur, General, Reserved Seat*); Chaudhri Mehr Chand (*Hoshiarpur West, Reserved Seat*); Pandit Mohan Lal (*Una, General Rural*); Mohar Singh Rao (*North-West Gurgaon, General Rural*); Sardar Narotam Singh (*South-East Punjab, Sikh Rural*); Pancham Chand Thakur, B.A., LL.B. (*Kangra North, General Rural*); Dr. Shrimati Parkash Kaur (*Amritsar, Sikh Women*); Sardar Piara Singh (*Hoshiarpur South, Sikh Rural*); Prabodh Chandra (*Gurdaspur, General Rural*); Chaudhri Prem Singh (*South-East Gurgaon, General Rural, Reserved Seat*); Mehta Ranbir Singh (*Ludhiana and Ferozepur, General Rural*); Chaudhri Rattan Singh Tabib (*Ambala and Simla, General Rural*); Sardar Rattan Singh (*Ferozepur North, Sikh Rural*); Sardar Rattan Singh (*Ferozepur East), Sikh Rural*); Chaudhri Sahib Ram (*Hissar North, General Rural*); Sardar Sajjan Singh (*Patti, Sikh Rural*); Chaudhri Samar Singh (*Karnal South, General Rural*); Dr. Sant Ram Seth (*Amritsar City, General, Urban*); Sant Ram (*Jullundur, General, Reserved Seat*); Sardar Sarmukh Singh (*Ambala North, Sikh Rural*); Shrimati Shanno Devi Shegal (*South-Eastern Towns, General Urban*); Chaudhri Sher Singh (*Jhajjar, General Rural*); Sardar Shiv Singh (*Gurdaspur North, Sikh Rural*); Sardar Shiv Saran Singh (*Kangra and Northern Hoshiarpur, Sikh Rural*); Pandit Sri Ram Sharma (*Southern Towns, General Urban*); Sudarshan Seth (*Eastern Towns, General Urban*); Chaudhri Sundar Lal (*Karnal North, General Rural, Reserved Seat*); Chaudhri Suraj Mal, B.A., LL.B. (*Hansi, General Rural*); Sardar, Sardar Sahib Tara Singh (*Ferozepur South, Sikh Rural*); Sardar Udham Singh (*Amritsar Central, Sikh Rural*); Sardar Waryam Singh (*Batala, Sikh Rural*); Sardar Ajit Singh (*Ex-member, South-West Punjab, Sikh Rural*); Lala Behari Lal Chanana (*Ex-member, West Punjab Assembly representing South-East Multan Division, General Rural*); Shri Sachar, Bhim Sen, B.A., LL.B. (*Ex-member, West Punjab Assembly representing Lahore City, General Urban*); Sardar Dalip Singh Kang (*Ex-member, West Punjab Assembly representing Lyallpur East, Sikh Rural*); Shri Dev Ra Sethi (*Ex-member, West Punjab Assembly representing Lyallpur and Jhang, General Rural*); Pandit Faqir Chand (*Ex-member, West Punjab Assembly representing West Lahore Division, General Rural*); Sardar Gurbachan Singh Bajwa (*Ex-member, West Punjab Assembly representing Sialkot, Sikh, Rural*); Chaudhri Harbhaj Ram (*Ex-member, West Punjab Assembly representing Lyallpur and Jhang, General Rural, Reserved Seat*); Sardar Jaswant Singh Dugal (*Ex-member, West Punjab Assembly representing North-West Punjab, Sikh Rural*); Sardar Joginder Singh Mann (*Ex-member, West Punjab Assembly representing Gujranwala and Shahdara, Sikh Rural*); Sardar Kartar Singh (*Ex-member, West Punjab Assembly representing Lyallpur West, Sikh Rural*); Chaudhri Krishna Gopal Dutt (*Ex-member, West Punjab Assembly representing North Eastern Towns, General Urban*); Dr. Lehna Singh Sethi (*Ex-member, West Punjab Assembly representing North-Western Towns, General Urban*); Sardar Man Singh Jathedar (*Ex-member, West Punjab Assembly representing Sheikhupura West, Sikh Rural*); Sant Narider Singh (*Ex-member, West Punjab Assembly representing Montgomery East, Sikh Rural*); Mahant Prem Singh (*Ex-member, West Punjab Assembly representing Gujrat and Shahpur Sikh Rural*); Sardar Sardul Singh, (*Ex-member, West Punjab Assembly representing Lahore West, Sikh Rural*); Shrimati Sita Devi (*Ex-member, West Punjab Assembly representing Lahore City, General Women Urban*); Chaudhri Sunder Singh (*Ex-member, West Punjab Assembly representing Amritsar and Sialkot, General Rural, Reserved Seat*); Professor Tilak Raj Chadha (*Ex-member, West Punjab Assembly representing Western Towns, Sikh Urban*); Shri Virendra (*Ex-member, West Punjab Assembly representing West Division, Multan, General Rural*).

Madras

THE Madras Presidency occupies the whole southern portion of the Peninsula, and, excluding the States, all of which have now acceded to the Government of India, has an area of 124,363 square miles. It has on the east, on the Bay of Bengal, a coast line of about 1,250 miles; on the south, on the Arabian Sea, a coast line of about 450 miles. In all this extent of coast, however, there is not a single natural harbour of any importance; the ports, with the exception of Madras, and perhaps of Cochin and Vizagapatam are merely open roadsteads. A plateau, varying in height above sea-level from about 1,000 to about 3,000 feet and stretching northwards from the Nilgiri Hills, occupies the central area of the Presidency; on either side are the Eastern and the Western Ghats, which meet in the Nilgiris. The height of the western mountain-chain has an important effect on the rainfall. Where the chain is high, the intercepted rain-clouds give a heavy fall, which may amount to 150 inches on the seaward side, but comparatively little rain falls on the landward side of the range. Where the chain is low, rain-clouds are not checked in their westward course. In the central tableland on the east coast the rainfall is small and the heat in summer excessive. The rivers, which flow from west to east, in their earlier course drain rather than irrigate the country; but the deltas of the Godavari, Kistna and Cauvery are productive of fair crops even in time of drought and are the only portions of the east coast where agriculture is not dependent on a rainfall rarely exceeding 40 inches and apt to be untimely.

POPULATION

The population of the Presidency was returned at the census of 1941 as 49,840,564, an increase of 5,181,826 over the figure of 1931. The increase was not uniform. The districts which had suffered most in 1921 tended to show large increases in 1931—Bellary and Agencies were marked illustrations. As a natural corollary to an increase in population the Presidency density has risen. Hindus account for 86.7 per cent. of the Madras population, Muslims 7 per cent. and Christians 4 per cent. The actual number in other communities is inconsiderable. The vast majority of the population is of the Dravidian race and the principal Dravidian languages, Tamil and Telugu are spoken by 19 and 18 million persons respectively. 40 per cent. of the population talk Tamil, 37¼ per cent. Telugu, 7·9 per cent. Malayalam, Oriya, Kanarese, Hindustani, Tulu follow in that order with percentages above 1.

The executive authority of the Province is exercised on behalf of His Majesty by the Governor who is aided by a Cabinet of 13 Ministers.

AGRICULTURE AND INDUSTRIES

The principal occupation of the province is agriculture engaging about 68 per cent. of the population. The principal food crops are rice, cholam, ragi and cumbu. The Industrial crops are cotton, sugarcane and groundnut. Agricultural education is rapidly progressing in the Presidency. The activities of the Agricultural Department in matters educational consist in the running of two colleges, one at Coimbatore affiliated to the University of Madras, and another at Bapatla in the Guntur District affiliated to the Andhra University, four farm labourers and schools, and numerous demonstration farms. Short practical courses in farm management and allied subjects have been instituted at the Agricultural College.



H. E. Sir Archibald Nye

While paddy which is the staple food of the population, occupies the largest cultivable area, cotton and sugarcane are by no means inconsiderable crops of the province and are receiving close attention at the hands of the local agricultural authorities. The area under cotton irrigated and unirrigated was 1,566,530 acres in 1946-47 and, as in the case of paddy, efforts are being made to produce better strains of cotton suited to different localities by means of both selection and hybridization. From existing good staple areas, improved varieties have been systematically introduced.

A special feature of the agricultural activities in the Presidency is the large industry which the planting community have built up, contributing substantially to the economic development of the province. They have organised themselves as an unregistered, body under the title of "The United Planters' Association of South India," on which are represented coffee, tea, rubber and a few other minor planting products.

The aggregate value of the seaborne trade of the Presidency was Rs. 82.58 crores in 1936-37,

Rs. 88.49 crores in 1937-38, Rs. 79.04 crores in 1938-39, Rs. 82.89 crores in 1939-40, Rs. 75.48 crores in 1940-41, 76.34 crores in 1941-42 and 66.51 crores in 1942-43. As in other provinces, the forest resources are exploited by Government. There are close upon 18,778 square miles of reserved forests.

Sixty-seven spinning and weaving mills were at work during 1945-46 with 8,887 looms and 15,15,794 spindles. The number of jute mills at work was four. At the close of the year 1946 the number of the other factories in the Presidency was 1,762. These consisted of oil-mills, rope works, tile works, etc. Tanning is one of the principal industries of the Presidency. Exports of tanned hides, amounted to 5,229 tons valued at Rs. 214.66 lakhs during 1945-46. The manufacturing activities which are under the direction of the Department of Industries are mainly confined to the production of filature silk soap and shark liver oil. There are a number of indigenous match factories run on cottage lines. It is slowly becoming recognised that the Madras Presidency is one of the most suitable parts of India for sugarcane cultivation and that the several deep-rooted varieties of cane which have been evolved at Coimbatore and require very little water are especially suited for the conditions which obtain in several areas of the Presidency where they grow better than in the north. The departments of Industries and Agriculture assist the development of the sugar industry by demonstration of the methods of manufacture of white sugar by centrifugals by getting trained sugar technologists, by the award of scholarships and by investigating schemes for starting sugar factories.

EDUCATION

There were at the end of the official year 1945-46 about 37,470 public institutions, ranging from village primary schools to arts and professional colleges, their total strength being about 3,719,190. Special efforts are being made to provide education for boys belonging to the communities eligible for help by the Labour Department. The total expenditure of the Province on education is in the neighbourhood of Rs. 1,027 lakhs.

The principal educational institutions in the province are the Madras, Andhra and Annamalai Universities, the Presidency College, the Christian College, the Loyola College, the Pachaiyappa's College, the Law College, the Queen Mary's College for Women and the Government Muhammadan College, Madras; the St. Joseph's College, Trichinopoly; the American College, Madura; the St. Aloysius' College, Mangalore; the Government College, Kumbakonam; the Ceded Districts College, Anantapur; the Government College, Rajahmundry; the Victoria College, Palghat; the Government College, Mangalore; the Government Brennen College, Tellichery; the Government College, Coimbatore; the Agricultural College, Coimbatore; the Veterinary College, Madras; the Madras Medical College; the Stanley Medical College, Rayapuram (Madras); the Andhra Medical College, Vizagapatam; the Engineering College at Madras (Guindy); the Teachers' College, Saidapet; the Lady Willingdon Training College for Women, Madras; the Government Training College, Rajahmundry; C. R. R. College, Ellore; Bhimavaram College, Bhimavaram; Veerasaiva College, Bellary; the Devasthanam College, Tirupati; Agricultural College at Bapatla; Andhra University College of Law, Masulipatam; the Arthur Hope College of Technology, at Coimbatore. The percentage of literacy in the Presidency is 7.5.

CO-OPERATION

The year 1945-46 was one of marked progress. The number of societies increased from 15,724 to 16,068, their membership from 17,43,000 to 18,82,000, the working capital from Rs. 3,415.97 lakhs to Rs. 3,862.4 lakhs, the loans issued from Rs. 2,430.9 lakhs to Rs. 2,904.22 lakhs and the divisible profits from Rs. 25.37 lakhs to Rs. 27.36 lakhs. The collections by Central Banks were very good and the percentage of overdues was 6.22 as against 6.99 in 1944-45 which was itself the lowest for three decades. There was an increase in the loan business of Land Mortgage Banks, agricultural credit societies and sale societies.

The activities of the Co-operative Stores continued to expand. The sales turnover of both the primaries and the wholesales reached the peak figure of Rs. 26.24 crores. There were 1,346 primary stores with 989 branches or depots. Their purchases and sales amounted to Rs. 1,266.54 lakhs and Rs. 1,357.55 lakhs as against Rs. 1,099.24 lakhs and Rs. 1,176.86 lakhs, respectively in the previous year. The trade of the wholesale stores also recorded a striking increase, the purchases and sales amounting to Rs. 1,148.8 lakhs and Rs. 1,266.58 lakhs against Rs. 975.18 and Rs. 963.17 lakhs respectively in 1944-45. Some of the important features of the working of the stores were their participation in schemes of statutory rationing and procurement, their sales to non-members (66 per cent), formation of stores societies for the benefit of industrial labourers and extension of the consumers movement in rural areas.

The total deposits and borrowings of the Madras Provincial Co-op. Bank increased from Rs. 280.32 lakhs to Rs. 350.97 lakhs in common with all other banks in the country. There was a decrease in its loan business (from Rs. 148.04 lakhs to Rs. 142.88 lakhs) mainly due to the inflow of deposits in most central banks which were able to finance societies in an increasing measure with their own resources. By virtue of its position as the apex bank, the Provincial Bank continued to guide, supervise and control the financial policy of central banks. The working capital of central banks increased from Rs. 850.33 lakhs to Rs. 997.52 lakhs. Their total profits increased from Rs. 6.27 lakhs to Rs. 6.56 lakhs. The Madras Co-op. Central Land Mortgage Bank Ltd. made a rapid recovery in its loan business which increased from Rs. 24.78 lakhs in 1944-45 to Rs. 42.78 lakhs in 1945-46. The maximum amount for which the Government have guaranteed the debentures of the Bank is Rs. 400 lakhs. The value of debentures in circulation at the end of 1945-46 was Rs. 324.8 lakhs. A new series of debentures for 32.5 lakhs was issued by the Bank during the year. Government continued to give short-term advances to the Bank, whenever required.

LAW AND ORDER

The Superior Court for Civil and Criminal Judicial work in the Presidency is the High Court at Madras, which consists of a Chief Justice and fifteen puisne judges of whom two are temporary. The existing order provides for a maximum of 15 puisne Judges. For the administration of criminal justice there are 34 Sessions Judges in the Mufassal (including 6 for agency tracts), Additional and Assistant Sessions Judges being provided to assist Courts in which the work is heavy. Then there are the District Magistrate, the Subordinate Magistrates and Honorary Magistrates. The administration of civil justices carried on by 26 District Judges, and 37 Subordinate Judges and 140 District Munsiffs. In the Presidency Town there are a City Civil Court consisting of two Judges and a Small Cause Court consisting of a Chief Judge and two other Judges. Madras is a litigious province and the records show one suit for every 226 persons in 1946.

The Police department is under an Inspector-General who has six deputies, four in charge of ranges of the Presidency, one in charge of the Railway Police and the Criminal Investigation Department and one in charge of the Madras City Police as Commissioner of Police. A Superintendent is stationed at each district. The sanctioned strength of the Permanent Police Force is 36,810 excluding the Malabar Special Police.

MADRAS BUDGET

MAJOR HEADS.	Budget Estimates, 1947-48.
PRINCIPAL HEADS OF REVENUE.	Rs.
IV.—Taxes on Income other than Corporation Tax	6,23,50,000
VII.—Land Revenue	5,61,87,000
VIII.—Provincial Excise ..	9,58,86,900
IX.—Stamps	4,32,55,500
X.—Forest	1,42,87,300
XI.—Registration	76,04,000
XII.—Receipts under Motor Vehicles Acts ..	1,16,28,700
XIII.—Other Taxes and Duties.	8,14,35,800
Total ..	37,26,35,200
Irrigation, Navigation, Embankment and Drainage Works.	
XVII.—Irrigation, Navigation, Embankment and Drainage Works for which Capital Accounts are kept—Gross Receipts ..	1,99,16,600
Deduct—Working Expenses	—73,40,700
Net Receipts ..	1,25,75,900
XVIII.—Irrigation, Navigation, Embankment and Drainage Works for which no Capital Accounts are kept ..	1,03,98,500
Total ..	2,29,74,400
Debt Services.	
XX.—Interest	77,56,500
Total ..	77,56,500
Civil Administration.	
XXI.—Administration of Justice	47,93,500
XXII.—Jails and Convict Settlements	15,97,400
XXIII.—Police	13,18,000
XXVI.—Education	16,89,900
XXVII.—Medical	16,11,400

MAJOR HEADS.	Budget Estimates, 1947-48.
DIRECT DEMANDS ON THE REVENUE.	Rs.
7.—Land Revenue ..	28,88,400
8.—Provincial Excise ..	62,03,400
9.—Stamps	16,12,700
10.—Forest	78,21,100
11.—Registration	45,41,100
12.—Charges on account of Motor Vehicles Acts.	95,27,400
13.—Other Taxes and Duties	69,70,200
Total ..	3,95,64,300
Revenue Account of Irrigation, Navigation, Embankment and Drainage Works.	
17.—Irrigation—Interest on works for which Capital Accounts are kept	99,73,000
18.—Irrigation—Other Revenue Expenditure financed from Ordinary Revenues.	68,99,200
19.—Construction of Irrigation, Navigation, Embankment and Drainage Works ..	2,44,100
Total ..	1,71,16,300
Debt Services.	
22.—Interest on Debt and other Obligations ..	—75,08,700
23.—Appropriation for Reduction or Avoidance of Debt ..	56,23,600
Total ..	18,85,100
Civil Administration.	
25.—General Administration.	5,92,16,100
27.—Administration of Justice	1,43,56,500
28.—Jails and Convict Settlements	66,44,200
29.—Police	3,98,74,400
30-B.—Ports and Pilotage ..	10,44,300
36.—Scientific Departments.	1,31,200
37.—Education	6,99,62,900
38.—Medical	2,17,45,100
39.—Public Health	90,96,800
40.—Agriculture	1,16,86,500

MAJOR HEADS.	Budget Estimates, 1947-48.
PRINCIPAL HEADS OF REVENUE—*contd.*	Rs.
Civil Administration—*contd.*	
XXVIII.—Public Health	4,57,100
XXIX.—Agriculture	18,35,700
XXX.—Veterinary	2,59,600
XXXI.—Co-operation	6,67,800
XXXII.—Industries	55,88,800
XXXVI.—Miscellaneous Departments	12,66,600
Total ..	2,10,34,800
Civil Works and Miscellaneous Public Improvements.	
XXXIX.—Civil Works	42,08,400
Total ..	42,08,400
Electricity Schemes.	
XLI.—Receipts from Electricity Schemes—	
Gross Receipts ..	1,38,72,900
Deduct—Working Expenses	—68,07,000
Total—I. (Net Receipts) ..	70,65,900
Miscellaneous.	
XLIV.—Receipts in aid of Superannuation ..	4,46,400
XLV.—Stationery and Printing.	12,79,200
XLVI.—Miscellaneous	63,08,200
Total ..	80,33,800
Contributions and Miscellaneous Adjustments between Central and Provincial Governments.	
L.—Miscellaneous Adjustments between Central and Provincial Governments ..	13,600
Total ..	13,600
Extraordinary Items.	
LI—Extraordinary Receipts ..	3,86,94,400
LII-A. Transfer from Revenue Reserve Fund	1,49,00,000
LII-B. Civil Defence ..	21,400
Total ..	5,36,15,800
Total—Revenue ..	49,73,38,400
Excess of Expenditure over Revenue or Deficit ..	....
Grand Total ..	49,73,38,400

MAJOR HEADS.	Budget Estimates, 1947-48.
DIRECT DEMANDS ON THE REVENUE.	Rs.
Civil Administration—*contd.*	
41.—Veterinary	30,99,700
42.—Co-operation	61,70,700
43.—Industries	1,17,72,400
43-A.—Capital Outlay on Industrial Development ..	....
44.—Aviation	....
44-A.—Capital Outlay on Civil Aviation	....
47.—Miscellaneous Departments	96,35,800
Total ..	26,44,36,600
Civil Works and Miscellaneous Public Improvements.	
50.—Civil Works	6,47,02,600
Total ..	6,47,02,600
Electricity Schemes.	
52.—Interest on Capital Outlay on Electricity Schemes..	56,42,300
52-A.—Other Revenue Expenditure connected with Electricity Schemes..	— 1,27,700
Total ..	55,14,600
Miscellaneous.	
54.—Famine	3,64,600
55.—Superannuation Allowances and Pensions ..	1,63,67,800
55-A.—Commutation of Pensions financed from Ordinary Revenues ..	9,53,000
56.—Stationery and Printing	45,76,200
57.—Miscellaneous	1,12,41,400
Total ..	3,35,03,000
Extraordinary Items.	
63.—Extraordinary Charges.	7,20,50,100
64A.—Transfer to Revenue Reserve Fund ..	....
64-B.—Civil Defence	22,78,700
Total ..	7,43,28,800
Total—Expenditure on Revenue Account	49,72,81,100
Excess of Revenue over Expenditure or Surplus ..	+ 57,300
Grand Total ..	49,73,38,400

Major and Minor Heads.	Budget Estimates, 1947-48.	Major and Minor Heads.	Budget Estimates, 1947-48.
Receipts.	**Rs.**	**Disbursements.**	**Rs.**
Excess of Revenue over Expenditure (from Statement B) ..	+ 57,300	Excess of Expenditure over Revenue (from Statement A)	....
Public Debt Incurred—		Capital Accounts outside the Revenue Account—	
I.—Permanent Debt ..	....	68. Construction of Irrigation, Navigation, Embankment and Drainage Works ..	1,87,48,300
II.—Floating Debt—		72. Capital Outlay on Industrial Development	1,38,46,200
Treasury Bills	2,50,00,000	81. Capital Account of Civil Works outside the Revenue Account	99,24,800
Other Floating Loans..	2,50,00,000	81A. Capital Outlay on Electricity Schemes	4,72,60,900
III.—Loans from the Central Government ..	....	82. Capital Account of other Provincial Works outside the Revenue Account ..	100
Total ..	5,00,00,000	83. Payments of Commuted Value of Pensions ..	100
Unfunded Debt—		85A. Capital Outlay on Provincial Schemes of State Trading .	100
State Provident Funds.	71,55,000	Total ..	8,97,80,500
Total ..	71,55,000	Public Debt Discharged—	
Deposits and Advances—		I.—Permanent Debt	....
I.—Deposits Bearing Interest—		II.—Floating Debt—	
Deposits of depreciation reserve of Government Commercial concerns	64,900	Treasury Bills	2,50,00,000
II —Deposits not bearing Interest—		Other Floating Loans ..	2,50,00,000
Appropriation for Reduction or Avoidance of Debt	61,77,600	III.—Loans from the Central Government	7,66,200
Sinking Fund—		Total ..	5,07,66,200
Investment Account.	....	Unfunded Debt—	
Famine Relief Fund ..	2,97,100	State Provident Funds ..	54,30,000
Fund for the Development of Rural Water-supply ..	....	Total ..	54,30,000
Provincial Road Fund—		Deposits and Advances—	
Other Account ..	....	I.—Deposits Bearing Interest—	
Revenue Reserve Fund.	1,68,74,000	Deposits of Depreciation Reserve of Government Commercial Concerns ..	300
Depreciation Reserve Fund—Electricity ..	17,25,600	II.—Deposits not bearing Interest—	
Special Reserve Fund—		Appropriation for Reduction or Avoidance of Debt (Sinking Funds)	....
Electricity	6,80,500	Sinking Fund—	
		Investment Account ..	....
		Famine Relief Fund ..	4,00,000
		Fund for the Development of Rural Water-supply ..	....
		Provincial Road Fund—	
		Other Account	3,19,800
		Revenue Reserve Fund—	
		Investment Account.. ..	1,49,00,000
		Fund for village Reconstruction and Harijan Uplift (Madras)	3,39,76,000
		Depreciation Reserve Fund—	
		Electricity	17,34,000

Major and Minor Heads.	Budget Estimates, 1947-48.	Major and Minor Heads.	Budget Estimates, 1947-48.
Receipts—*contd.*	**Rs.**	**Disbursements—*contd.***	**Rs.**
Deposits and Advances—*contd.*		Deposits and Advances—*contd.*	
II.—Deposits not bearing Interest—*contd.*		II.—Deposits not bearing Interest—*contd.*	
Depreciation Reserve Fund—Government Presses	72,000	Special Reserve Fund—Electricity	6,81,000
Deposits of Local Funds —District Funds ..	7,50,81,000	Depreciation Reserve Fund—Government Presses ..	48,600
Municipal and Other Funds ..	4,38,27,000	Deposits of Local Funds—District Funds	7,50,72,000
Departmental and Judicial Deposits—Civil Deposits	31,75,20,000	Municipal and Other Funds..	4,24,73,000
Other Accounts—		Departmental and Judicial Deposits—	
Subventions from Central Road Fund ..	19,89,000	Civil Deposits	28,15,21,000
Deposit Account of grants for Economic Development and Improvement of Rural Areas	....	Other Accounts—	
Deposit Account of the grant made by the Indian Central Cotton Committee	83,800	Subventions from Central Road Fund	19,89,000
Deposit Account of the grant by the Imperial Council of Agricultural Research ..	1,62,700	Deposit Account of grants for Economic Development and Improvement of Rural Areas	6,500
Deposit Account of contributions for Cattle Improvements ..	53,000	Deposit Account of the grant made by the Indian Central Cotton Committee	83,800
Deposit Account of grants from the Central Government for the Development of Sericultural Industry ..	....	Deposit Account of the grant by the Imperial Council of Agricultural Research	1,62,700
Deposit Account of grants from the Central Government for the Development of Handloom Industry.	....	Deposit Account of contributions for Cattle Improvements	53,000
Deposit Account of grants from the Sugar Excise Fund ..	10,300	Deposit Account of grants from the Central Government for the Development of Sericultural Industry.	....
Deposit Account of Grants from the Indian Central Sugarcane Committee ..	23,500	Deposit Account of grants from the Central Government for the Development of Handloom Industry	....
Deposit Account of grants for the Relief of groundnut cultivators.	8,300	Deposit Account of grants from the Sugar Excise Fund	10,300
Deposit Account of Grant from the Central Government for grant of bonus for Growing food crops in lieu of cotton	59,900	Deposit Account of grants from the Indian Central Sugarcane Committee ..	23,500
Deposit Account of grant made by the Indian Central Coconut Committee ..	3,800	Deposit Account of grants for the Relief of groundnut cultivators	8,300

Major and Minor Heads.	Budget Estimates, 1947-48.
Receipts—*contd.*	Rs.
Deposits and Advances—*contd.*	
III.—Advances not bearing Interest—	
Advances Repayable ..	62,86,900
Permanent Advances ..	24,000
Accounts with the Government of Burma	....
Accounts with the Reserve Bank ..	61,000
IV.—Suspense—	
Cash Balance Investment Account ..	15,00,00,000
Other Suspense Accounts	30,05,000
Cheques and Bills ..	5,08,00,000
Departmental and Similar Accounts.. ..	4,03,000
V.—Miscellaneous—	
Miscellaneous—Government Account ..	....
Total ..	67,52,93,900
Loans and Advances by the Provincial Government—	
Loans to Municipalities, Port Funds, Cultivators, etc.	1,15,65,700
Loans to Government Servants	41,300
Total ..	1,16,07,000
Remittances—	
Cash Remittances ..	69,02,18,000
Reserve Bank of India Remittances ..	.....
Adjusting Account with Railways	....
Adjusting Account between Central (Non-Railways) and Provincial Governments	....
Inter-Provincial Suspense Account ..	....
Total ..	69,02,18,000
Total—Receipts ..	**1,43,43,31,200**
V.—Opening Cash Balance ..	**55,73,441**
Grand Total ..	**1,43,99,04,641**

Major and Minor Heads.	Budget Estimates, 1947-48.
Disbursements—*contd.*	Rs.
Deposits and Advances—*contd.*	
Deposit Account of grant from the Central Government for grant of Bonus for growing food crops in lieu of cotton	59,900
Deposit Account of grants made by the Indian Research Fund Association.	....
Deposit Account of grant made by the Indain Central Coconut Committee ..	3,800
III.—Advances not bearing Interest—	
Advances Repayable ..	62,92,300
Permanent Advances ..	53,000
Accounts with the Government of Burma	....
Accounts with the Reserve Bank	66,000
IV.—Suspense—	
Cash Balance Investment Account	6,20,00,000
Other Suspense Accounts ..	28,05,000
Cheques and Bills	5,06,00,000
Departmental and Similar Accounts	6,03,000
V.—Miscellaneous—	
Miscellaneous—Government Account	35,62,600
Total ..	57,95,08,400
Loans and Advances by the Provincial Government—	
Loans to Municipalities, Port Funds, Cultivators, etc. ..	1,86,44,000
Loans to Government Servants	2,07,000
Total ..	1,88,51,000
Remittances—	
Cash Remittances	69,00,82,000
Reserve Bank of India Remittances	....
Adjusting Account with Railways	....
Adjusting Account between Central (Non-Railways) and Provincial Governments..	....
Inter-Provincial Suspense Account	....
Total ..	69,00,82,000
Total—Disbursements ..	**1,43,44,18,100**
V.—Closing Cash Balance ..	**54,86,541**
Grand Total ..	**1,43,99,04,641**

1948-49 BUDGET

The following is an abstract (in thousands of Rupees) of the Revenue, expenditure Capital Liabilities, and Assets shown in the Madras Budget for 1948-49:—

REVENUE AND EXPENDITURE ACCOUNT

	Accounts, 1946–7	Budget Estimate, 1947–8	Revised Estimate, 1947–8	Budget Estimate, 1948–9
Revenue	56,99.53	49,73.38	55,19,17	55,94,31
Expenditure	56,98,89	49,72,81	55,18,76	55,93,60
Surplus	64	57	41	71

The surplus in the 1948-49 Budget is achieved by the transfer of Rs. 562 lakhs for the Revenue Reserve.

TRANSACTIONS OUTSIDE THE REVENUE ACCOUNT

	Accounts, 1946-7	Budget Estimate, 1947-8	Revised Estimate, 1947-8	Budget Estimate, 1948-9
Receipts (Open market loans and loans from the Central Government) ..	4,09,30	..	6,00,00	..
Excess of Disbursements over Receipts	1,13,76	1,43	1,39,21	—15,86
Opening Balance	3.10,09	55.73	1,96,97	58,17
Closing Balance	1,96,97	54,87	58,17	74,74

CAPITAL LIABILITIES AND ASSETS

	Budget Estimate		Revised Estimate
	On Mar. 31, 1947	On Mar. 31, 1948	On Mar. 31, 1949.
Liabilities	78,53,78	85,75,06	76,96.34
Assets	95,94,24	1,03.82.75	94,69,68
Excess of Assets over Liabilities	17,40,46	18,07,69	17,73,34

A.—EXPENDITURE ON REVENUE ACCOUNTS

And the following figures show the estimates of expenditure and compare the demands in 1947-48 and 1948-49.

Services.	Budget Estimate, 1947–48	Revised Estimate, 1947–48	Budget Estimate, 1948–49	
	Rs.	Rs.	Rs.	
1. Land Revenue	28,88,400	28,78,400	29,24.300	
2. Provincial Excise	62,03,400	60,05.100	59.57,000	
3. Stamps	16,12,700	19,81,600	20.13,100	
4. Forest	78.21,100	88,05.400	83,56,900	
5. Registration	45.41,100	49,38,800	50,76,700	
6. Motor Vehicles Acts	95,27,400	95,96,800	5,13.500 (+charged 95,51,400)	
7. Other Taxes and Duties ..	69.70,200	90,94,000	1,11,25,400	
8. Irrigation	2,07,09,400	2,79,19,100	2,12,86,900 (+charged 1,08,33,000)	
9. Heads of Provinces, Ministers and Headquarters staff	67,44,100	71,53,900	53,71.800 (+charged 14,83,000)	
10. Legislative Bodies	8,65,400	9,84,500	11,26,900	
11. District Administration and Miscellaneous	5,16,00,600	6,31,29,800	6,23,08,100 (+charged 2,27,100)	
12. Administration of Justice ..	1,43,56,500	1,46,47,400	1,36,28,500 (+charged 18,65,500)	

1948-49 BUDGET—*contd.*

Services.	Budget Estimate, 1947-48	Revised Estimate, 1947-48	Budget Estimate, 1948-49.	
A.—EXPENDITURE ON REVENUE ACCOUNTS—(*contd.*)				
13. Jails	66,44,200	69,72,500	70,28,100	
14. Police	3,98,74,400	5,73,40,200	6,40,49,900	
15. Education	7,00,94,100	7,28,31,700	8,21,77,900	(+charged 14,200)
16. Medical	2,17,45,100	2,34,54,200	2,50,66,700	(+charged 21,300)
17. Public Health	90,96,800	1,91,60,500	82,82,600	
18. Agriculture	1,16,85,500	2,18,44,700	1,68,78,600	(+charged 3,300)
19. Veterinary	30,99,700	33,07,500	37,74,500	
20. Co-operation	61,70,700	45,66,900	37,95,000	
21. Industries	79,35,200	80,80,700	1,08,86,100	(+charged 38,900)
22. Chinchona & Fisheries	42,37,200	48,53,100	45,71,200	(+charged 2,87,000)
23. Miscellaneous Departments	96,35,800	1,31,58,100	1,07,17,000	
24. Civil Works—Works	4,70,83,400	4,14,88,900	4,97,55,400	(+charged 2,94,100)
25. Civil Works—Establishment and Tools and Plant	1,69,35,400	1,93,09,400	1,64,69,900	
26. Civil Works—Grants-in-aid	40,67,200	37,49,800	58,61,700	
27. Electricity	1,23,21,600	1,56,65,400	1,33,36,700	(+charged 70,37,600)
28. Famine	3,64,600	10,00,000	5,00,000	
29. Pensions	1,73,20,800	1,58,14,500	1,53,69,900	
30. Stationery and Printing	45,76,200	64,66,900	52,18,900	(+charged 3,85,100)
31. Miscellaneous	8,43,35,800	6,68,83,300	6,74,20,500	(+charged 4,500)
32. Civil Defence	22,78,700	20,93,500	50,500	
B.—OTHER EXPENDITURE				
33. Capital Outlay on Irrigation	2,11,56,800	1,87,48,300	3,75,02,900	
34. Capital Outlay on Industrial Development	1,38,46,200	53,42,900	85,03,900	
35. Civil Works outside the Revenue Account	99,24,800	24,35,000	91,88,200	
36. Capital Outlay on Electricity Schemes	4,72,60,900	4,71,67,900	4,93,72,700	
37. Other Provincial Works Outside the Revenue Account	100	70,51,100	100	
38. Commuted value of pensions	100	..	100	
39. Capital Outlay on Provincial Schemes of State Trading	100	..	100	
C.—DISBURSEMENTS OF LOANS AND ADVANCES				
40. Interest-Free Advances	9,56,300	19,38,100	16,87,500	
41. Loans and Advances Bearing Interest	1,88,51,000	6,44,49,800	4,85,28,500	

GRAND TOTAL:
Budget Estimate for 1947-48—Charged Rs. 3,76,98,900 ; Voted Rs. 58,33,17,700

Budget Estimate for 1948-49—Charged Rs. 3,15,34,600 ; Voted Rs. 70,41,51,600

ADMINISTRATION

THE GOVERNOR

H. E. Lt. Genl. Sir Archibald Edward Nye, G.C.S.I., G.C.I.E., K.C.B., M.C.

THE GOVERNOR'S PERSONAL STAFF

Military Secretary, Lieut.-Col. Leslie Thomas Wilcock, 18th K.E.O. Cavalry.

Surgeon to His Excellency the Governor, Major William Henry Grist Reed, I.M.S.

Indian Armoured Corps, Poona Horse, Aide-de-Camp, Major Edward William Withfield.

Aide-de-Camps, Captain William Kemmis Buckley, Welsh Guards and Captain Rajkumar D. E. Doraiswamy, Maharatta Light Infantry.

Indian Aide-de-Camp, Risaldar C. Narayanaswamy, late of His Excellency the Governor's Body Guard.

Honorary Aide-de-Camp, I. D. S. M. Sardar Bahadur, O.B.I., late of the Q.V.O. (Madras) Sappers and Miners.

Honorary Aide-de-Camps, I. D. S. M. Sardar Bahadur, O.B.I., late of the Q.V.O. (Madras) Sappers and Miners; Major Subadar Major (Honorary Lieutenant-Colonel) Sidney-Smith, E.D.S.I. Ry. Bn. A.F. (1); Khan Bahadur Y. Muhammad Roshan Khan Sahib, Madras Police.

THE MINISTRY

The Prime Minister; Public (Excluding Law and Order, Elections, Excluded Areas and Partially Excluded Areas), Hindu Religious Endowments, Khadi and Firka Development and Cottage Industries, Home, Police, Law, The Hon. Sri O. P. Ramaswamy Reddiar.

Food, Resettlement of Ex-soldiers and Resettlement Directorate, The Hon. Dr. T. S. S. Rajan.

Public Works and Information and Broadcasting, The Hon. Sri M. Bhaktavatsalam.

Finance, Commercial Taxes, Public (Elections and Excluded and Partially Excluded Areas), The Hon. B. Gopala Reddy.

Khadi, Firka Development, Cottage Industries, Dr. S. Gurupadam.

Industries, Planning and Development, News Print Control, Paper Control, and Mines and Mineral Companies and Labour, C.D.E.D. Board, The Hon. Sri H. Sitarama Reddy.

Local Administration and Co-operation, The Hon. Sri K. Chandramouli.

Education, The Hon. Sri T. S. Avinashilingam Chettiar.

Agriculture, Forests, Veterinary and Prisons, Madras Suppression of Immoral Traffic Act, The Hon. Sri. M. Madhava Menon.

Land Revenue, The Hon. Sri Kala Venkata Rao.

Public Health and Medicine, The Hon Sri A. B. Shetty.

Harijan Uplift, Fisheries, Chinchona and Rural Development, Posts and Telegraphs, The Hon. Sri V. Kurmayya.

Chief Secretary to Government, Mr. K. Ramunni Menon, C.I.E., I.C.S.

Private Secretary to His Excellency the Governor, Mr. P. Govindan Nair, I.C.S.

Private Secretary to Honourable Premier, Mr. A. Alagiriswamy.

Secretary, Home Department, Mr. O. Pulla Reddy, I.C.S.

Secretary, Finance Department, Dr. D. W. Dodwell, C.I.E. I.C.S.

Secretary, Revenue Department, Mr. G. Venkateswara Iyer, O.B.E., I.C.S.

Secretary, Local Administration Department, Sri Rao Shaib R. D. Paul.

Secretary, Education and Public Health Department, Mr. M. V. Subramaniam, I.C.S.

Secretary, Public Works Department, Mr. T. A. Varghese, I.C.S.

Secretary, Development Department, Mr. K. G. Menon, M.B.E., I.C.S.

Secretary, Food Department, Sri Rao Bahadur M. A. Kuttalalingam Pillai.

Secretary, Legal Department, Mr. P. V. Balakrishna Iyer, I.C.S.

Secretary, Firka Development Department and Principal Secretary to Honourable Premier, Sri Rao Sahib M. S. Jayannayakulu Nayudu.

Presidents and Governors of Fort St. George in Madras

William Gyfford	1684
Elihu Yale	1687
Nathaniel Higginson	1692
Thomas Pitt	1698
Guiston Addison	1709

Died at Madras, 17 Oct., 1709.

Edmund Montague (*Acting*)	1709
William Fraser (*Acting*)	1709
Edward Harrison	1711
Joseph Collet	1716
Francis Hastings (*Acting*)	1720
Nathaniel Elwick	1721
James Macrae	1725
George Morton Pitt	1730
Richard Benyon	1735
Nicholas Morse	1744
John Hinde	...
Charles Floyer	1747
Thomas Saunders	1750
George Pigot	1755
Robert Palk	1763
Charles Bourchier	1767
Josias DuPre	1770
Alexander Wynch	1773
Lord Pigot (Suspended)	1775
George Stratton	1776
John Whitehill (*Acting*)	1777
Sir Thomas Rumbord, Bart.	1778
John Whitehill (*Acting*)	1780
Charles Smith (*Acting*)	1780
Lord Macartney, K.B.	1781

Governors of Madras

Lord Macartney, K.B.	1785
Alexander Davidson (*Acting*)	1785
Major-General Sir Archibald Campbell, K.B.	1786
John Hollond (*Acting*)	1789
Edward J. Hollond (*Acting*)	1790
Major-General William Medows	1790
Sir Charles Oakeley, Bart.	1792
Lord Hobart	1794
Major-General George Harris (*Acting*)	1798
Lord Clive	1799
Lord William Cavendish Bentinck	1803
William Petrie (*Acting*)	1807
Sir George Hilaro Barlow, Bart, K.B.	1807
Lieut.-General the Hon. John Abercromby.	1813
The Right Hon. Hugh Elliot	1814
Major-General Sir Thomas Munro, Bart., K.C.B. Died 6 July, 1827.	1820
Stephen Rumbold Lushington	1822
Henry Sullivan Grœme (*Acting*)	1827
Lieut.-General Sir Frederick Adam, K.C.B.	1832
George Edward Russell (*Acting*)	1837
Lord Elphinstone, G.C.H., P.C.	1837
Lieut.-General the Marquess of Tweeddale, K.T., C.B.	1842
Henry Dickinson (*Acting*)	1848
Major-General the Right Hon. Sir Henry Pottinger, Bart., G.C.B.	1848
Daniel Elliott (*Acting*)	1854
Lord Harris	1854
Sir Charles Edward Trevelyan, K.C.B.	1859
William Ambrose Morehead (*Acting*)	1860
Sir Henry George Ward, G.C.M.G. Died at Madras, 2 August, 1860.	1860
William Ambrose Morehead (*Acting*)	1860
Sir William Thomas Denison, K.C.B. (Acting Viceroy and Governor-General, 1863 to 1864.)	1861
Edward Maltby (*Acting*)	1863
Lord Napier of Merchistoun, Kt. (*a*) (Acting Viceroy and Governor-General, 1872).	1866
Alexander John Arbuthnot, K.C.S.I., C.I.E. (*Acting*).	1872
Lord Hobart Died at Madras, 27 April, 1875.	1872
Sir William Rose Robinson, K.C.S.I., C.S.I. (*Acting*).	1875
The Duke of Buckingham and Chandos, G.C.S.I., C.I.E.	1875
W. P. Adam, P.C., C.I.E. Died at Ootacamund, 24 May, 1881.	1880
William Hudleston, C.S.I. (*Acting*)	1881
M. E. Grant Duff, G.C.S.I., C.I.E., P.C.	1881
Robert Bourke, P.C. Lord Connemara, 12 May, 1887 (by creation.)	1886
John Henry Garstin, C.S.I. (*Acting*)	1890
Baron Wenlock, G.C.S.I., G.C.I.E., K.C.B.	1891
Sir Arthur Elibank Havelock, G.C.M.G.	1896
Baron Ampthill, G.C.S.I., G.C.I.E. (Acting Viceroy and Governor-General, 1904).	1900
Sir James Thomson, K.C.S.I., C.S.I. (*Acting*)	1904
Sir Gabriel Stokes, K.C.S.I., C.S.I (*Acting*)	1906
Hon. Sir Arthur Lawley, G.C.S.I., G.C.I.E., K.C.M.G.	1906
Sir Thomas David Gibson-Carmichael, Bart., G.C.S.I., G.C.I.E., K.C.M.G. (*b*). 1912 Became Governor of Bengal, 1 April.	1911
Sir Murray Hammick, K.C.S.I., C.I.E. (*Acting*).	1912
Baron Pentland, P.C., G.C.S.I., G.C.I.E.	1912
Sir A. G. Cardew, K.C.S.I. (*Acting*)	1919
Baron Willingdon, G.C.S.I., P.C., G.C.M.G., G.C.I.E., G.B.E. (*c*).	1919
Sir Charles Todhunter, K.C.S.I. (*Acting*)	1924
Viscount Goschen, P.C. and G.C.S.I., G.C.I.E., C.B.E. (*Acting* Viceroy and Governor-General, 1929).	1924
Sir Norman Marjoribanks, K.C.S.I., K.C.I.E. (*Acting*)	1929
Lieut.-Col. the Right Hon'ble Sir George Frederick Stanley, P.C., G.C.I.E., C.M.G. (Acting Viceroy and Governor-General, 1934).	1929
Khan Bahadur Sir Muhammad Usman, Sahib Bahadur K.C.I.E., (*Acting*).	1934
Lord Erskine, G.C.I.E.	1934
Rai Bahadur Sir Kurma Venkata Reddi Naydu, K.C.S.I. (*Acting*)	1936
Lord Erskine, G.C.I.E.	1940
Sir Arthur Hope, G.C.I.E., M.C.	1940
Sir Henry Foley Knight, K.C.S.I., C.I.E., I.C.S. (*Acting*).	1946
Lt.-Genl. Sir Archibald Edward Nye, G.C.I.E., K.C.B., K.B.E., M.C.	1946

(*a*) Afterwards (by creation) Baron Napier of Ettrick.

(*b*) Afterwards (by creation) Baron Carmichael of Skirling.

(*c*) Afterwards Earl of Willingdon.

MADRAS LEGISLATIVE COUNCIL

President :—The Hon'ble Rai Bahadur Ramakrishna Rajulungaru.

Dy. President :—K. Venkataswami Nayudu.

S. Md. Abdul Huq Sahib (*Madras North, Muhammadan*); Abdul Latif Farookhi Sahib (*Madras North, Central, Muhammadan*); S. B. Adityan, M.A., Bar-at-Law (*Nominated*); K. T. M. Ahmed Ibrahim Sahib, B.A., B.L. (*Madras South, Muhammadan*); B. Bhima Rao, B.A., B.L. (*Bellary General*); Mrs. M. N. Clubwala, M.B.E. (*Nominated*); Adusumilli Gopal krishnayya (*Kistna, General*); A. Govindacharyulu (*West Godavari, General*); V. Hameed Sultan Maricair Sahib (*Madras South, Central, Muhammadan*); Mrs. M. Hensman, M.B.E. (*Nominated*); H. M. Jaganatham (*Nominated*); S. Jayaram Reddy, B.A. (*Ramnad, General*); Dr. V. K. John (*Indian Christian*); Rao Bahadur D. Krishnamurti (*Nominated*); Medai Dalavoi Kumaraswami Mudaliyar (*Tinnevelly, General*); Diwan Bahadur Dr. Sir A. Lakshmanaswamy Mudaliyar, M.D., LL.D., D.SC., F.R.C.O.G., F.A.C.S. (*Nominated*); The Hon'ble Sri Kozhipurath Madhava Menon, B.A. B.L. (*Malabar, General*); D. Manjaya Hegde (*South Kanara, General*); K. Manathunainatha Desigar (*Tanjore, General*); C. N. Muthuranga Mudaliyar (*Chingleput, General*); V. Vr. N. Ar. Nagappa Chettiyar (*Ramnad, General*); M. Narayana Menon (*Malabar, General*); Mothey Narayana Rao (*West Godavari, General*); B. Narayanaswami Nayudu (*Kistna, General*); K. Natarajan, B.A., B.L. (*Tanjore, General*); C. Perumalswami Reddiyar (*North Arcot, General*); A. R. L. Pathy (*Nominated*); Thuraga Purshotham (*East Godavari, General*); The Hon'ble Dr. T. S. S. Rajan, Leader (*Trichinopoly, General*); Nadimpalli Ramabhadraraju (*East Godavari, General*); M. K. Sundararama Iyer (*Madura, General*); R. Ramakrishna Nayudu (*Coimbatore cum Nilgiri, General*); The Hon'ble Rai Bahadur Ramakrishna Rajulungaru (*Chittor, General*); S. A. S. Rm. Ramanatham Chettiyar (*Tanjore, General*); Dr. U. Rama Rau (*Madras City, General*); The Hon'ble Sri O. P. Ramaswami Reddiyar (*South Arcot, General*); N. Ranga Reddi (*Cuddapah, General*); J. L. P. Roche Victoria (*Indian Christian*); A. S. T. F. Rodriguez (*Indian Christian*); N. Sankara Reddi (*Kurnool, General*); S. K. Satagopa Mudaliyar (*Salem, General*); P. R. K. Sarma (*Nominated*); S. K. Shaik Rowther Sahib (*Madras, West Coast, Muhammadan*); L. Subbarama Reddi (*Nellore, General*); Maddi Sundarsanam (*Guntur, General*); R. Suryanarayana Rao (*Nominated*); Dr. Syed Tajuddin Sahib (*Madras South, Central, Muhammadan*); K. Uppi Sahib (*Madras West Coast, Muhammadan*); Colluru Veerabhadra Rao (*Vizagapatam, General*); P. Veerabhadraswami (*Vizagapatam, General*); Bikkina Veeraswami (*East Godavari, General*); N. Venkatachalamaji (*Vizagapatam, General*); G. Venkata Reddi, B.A. B.L. (*Anantapur, General*); K. Venkataswami Nayudu (*Madras City, General*).

MADRAS LEGISLATIVE ASSEMBLY

Speaker : The Hon'ble Sri J. Sivashanmukham Pillai.
Deputy Speaker : Srimathi C. Ammanna Raja.
Secretary : D. K. V. Raghava Varma, B.A., B.L.
Deputy Secretary—Secretary to the Council : M. Surya Rao, B.A., B.L.
Assistant Secretary : T. Hanumanthappa, B.A. (Hons.), B.L.

Alladi Aaron Rao (*Guntur cum Nellore, Indian Christian*); Khan Sahib Abdul Hameed (*Kurnool, Muhammadan, Rural*); M. S. Abdul Majeed Sahib, B.A. (*Chingleput cum South Arcot, Muhammadan, Rural*); Haji K. M. Ahmad Kutty Sahib (*Malappuram, Muhammadan, Rural*); Srimathi C. Ammanna Raja (*Ellore Town, Women, General, Rural*); K. Ananda Nambiar (*Railway Trade Union, Labour*); B. Ananthachar (*Hospet, General, Rural*); Srimathi Anjalai Ammal (*Cuddalore, Women, General, Rural*); N. Annamalai Pillai (*Tiruvannamalai, General, Rural*); T. S. Arunachalam (*Trichinopoly cum Srirangam Towns, General, Urban*); M. S. Ataullah Sahib (*Salem cum Coimbatore cum the Nilgiris, Muhammadan, Rural*); The Hon'ble Sri T. S. Avanashilingam Chettiar (*Palladam, General, Rural*); S. C. Balakrishnan (*Palani, General Rural, Scheduled Castes*); M. Bapineedu, B.Sc. (Cornell), M.Sc. (California) (*Ellore, General, Rural*); The Hon'ble Sri M. M. Bhaktavatsalam (*Tiruvallur, General, Rural*); B. W. Batchelor (*European Commerce, The Madras Chamber of Commerce and the Madras Trades Association*); Begum Sultan Mir Amiruddin, B.A. (Hons.) (*Madras City, Women, Muhammadan, Urban*); K. Bhashyam (*University*); Srimathi Bhupathiraju Bangarayya (*Bhimavaram, General, Rural*); K. Bokkai Gowder (*The*

Nilgiris, General, Rural); Kasu Brahmanandam Reddi (*Narasaraopet, General, Rural*); A. Chandu (*Calicut, General, Rural*); The Hon'ble Sri K. Chandramouli (*Tenali, General, Rural*); O. Chengam Pillai (*Tiruvallur, General, Rural, Scheduled Castes*); S. Chidambara Ayyar (*Villupuram, General, Rural*); M. P. Damodaran (*Kottayam, General, Rural*); The Hon'ble Mr. Daniel Thomas (*Tinnevelly, Indian, Christian*); A. Devanayakayya (*Cuddalore, General, Rural*); M. Doraikannu (*Tiruttani, General, Rural, Scheduled Castes*); D. Dorairaja Pandyan (*Tinnevelly, General, Rural*); M. A. Easwaran (*Erode, General, Rural*); M. Ebrahim Coonhee (*Chirakkal, Muhammadan, Rural*); W. J. Fernandez (*Anglo-Indian*); H. O. Fowler (*Anglo-Indian*); The Hon'ble Sri B. Gopala Reddi (*Kavali, General, Rural*); D. Govinda Das (*Bellary, General, Rural, Scheduled Castes*); P. Govinda Menon (*Malappuram, General, Rural*); C. K. Govindan Nayar (*Kurumbranad, General, Rural*); P. Govindan Nair (*Ponnani, General, Rural*); S. K. Govindaraju Nayagar (*Saidapet, General, Rural*); N. Govindaswami Nayudu (*Textile Workers Trade Union, Madras, Labour*); Saketi Guruvulu (*Chicacole, General, Rural, Scheduled Castes*); Puthiya Pommani Hassan Koya Sahib (*Calicut, Muhammadan, Rural*); H. S. Hussain Sahib (*Mangalore, Muhammadan, Rural*); M. V. Hydross (*Palghat, Muhammadan, Rural*); S. A. F. Ibrahim Sahib Sinna Kajiyar Haji Moulvi (*Madura, Muhammadan, Rural*); K. Ishwara (*Coondapoor, General, Rural, Scheduled Castes*); Jaffar Mohideen Sahib (*Anantapur, Muhammadan, Rural*); Mrs. Jebamoney Masilamoney (*Tinnevelly cum Palamkottah cum Tuticorin Towns, Women, Indian Christian, Urban*); Allu Jogi Nayudu (*Vizianagram, General, Rural*); A. K. Kaderkutti Sahib (*Kottayam, Muhammadan, Rural*); D. Kadirappa (*Penukonda, General, Rural Scheduled Castes*); P. Kakkan (*Ariyalur, General, Rural, Scheduled Castes*); A. Kaleswara Rao (*Bezwada cum Masulipatam Towns, General, Urban*); K. Kamaraj Nadar (*Sattur, General, Rural*); K. P. Kamakshi Chettiyar (*Palni, General, Rural*); Annapragada Kameswara Rao (*Guntur cum Tenali Towns, General, Urban*); P. R. Kandaswami Gounder (*Pollachi, General, Rural*); P. Kandaswamy Pillai (*Salem Town, General Urban*); V. T. Kannappa Mudaliyar (*Gudiyattam, General, Rural*); M. Kanniyappan (*Madras City Dock and Factory Labour Excluding Textile and Railway Labour, Labour*); K. R. Karanth, B.A., LL.B. (*Puttur, General, Rural*); L. S. Karayalar (*Koilpathi, General, Rural*); K. T. Kosalarama Nadar (*Tuticorin, General, Rural*); K. Koti Reddi (*Cuddapah General, Rural*); C. M. Kothari (*Madras Planters*); K. S. V. Krishnan (*Tindivanam, General, Rural*); S. Krishnan (*Pollachi, General, Rural, Scheduled Castes*); A. Krishnaswami Vandiar (*Kumbakonam, General, Rural*); K. Kulasekara Doss (*Tindivanam, General, Rural, Scheduled Castes*); Sri Sarvagna Kumarakrishna Yachendra Bahadur Varu of Venkatagiri (*Northern Central, Landholders*); M. Kumaran (*Chirakkal, General, Rural*); Garemella Kumaraswami (*Chicacole, General, Rural*); P. S. Kumaraswami Raja (*Srivilliputtur, General, Rural*); K. T. Kunhi Kammaran Nambiyar (*West Coast, Landholders*); A. Kuppuswami Nayudu (*Conjeevaram General, Rural*); R. Kuppuswami (*Textile Workers, Non-Union, Labour*); The Hon'ble Sri V. Kurmayya (*Bander, General, Rural Scheduled Castes*); Srimathi A. V. Kuttimalu Amma (*Tellicherry cum Calicut Women, General, Urban*); P. Lakshmanaswami (*Amalapuram, General, Rural, Scheduled Castes*); Srimathi K. Lakshmi Ammal (*Dindigul Women, General, Rural*); Srimathi V. Lakshmi Ammal (*Sernadevi, General, Rural*); Sreemathi R. Lakshmipathi (*Madras City, Women General, Urban*); K. Linga Raju (*Rajahmundry, General, Rural*); Mahboob Ali Baig Sahib, B.A., B.L. (*West Godavari cum Kistna, Muhammadan, Rural*); Mahin Schamnad Sahib (*Puttur, Muhammadan, Rural*); U. Padmanabha Mallayya (*Mangalore, General, Rural*); B. S. Mallikarjuna Rao (*Vizagapatam cum East Godavari, Dock and Factory Labour, Labour*); R. S. Manickam (*Sattur, General, Rural, Scheduled Castes*); M. Marimuthu (*Tanjore, General, Rural, Scheduled Castes*); Mohamed Rafeeudin Ahmad Ansari Sahib (*Nellore, Muhammadan, Rural*); P. K. Mohideen Kutty (*Palghat, Muhammadan, Rural*); John Moses Wilson (*Northern Circars, Indian Christian*); Mohamed Abdul Salam Sahib (*Guntur, Muhammadan, Rural*); Haji Mohammad Ismail Sahib, B.A., B.L. (*Bellary, Muhammadan, Rural*); N. Muhammad Anwar Sahib (*North Arcot, Muhammadan, Rural*); Muhammad Hussain Sahib (*Tinnevelly, Muhammadan. Rural*); M. A. Muhammad Ibrahim Sahib (*Tanjore, Muhammadan, Rural*); V. S. Muhammad Ibrahim Sahib (*Trichinopoly, Muhammadan, Rural*); Muhammad Ismail Sahid (*Vizagapatam cum East Godavari, Muhammadan, Rural*); M. Muhammad Ismail Sahib (*Madras City, Muhammadan, Urban*); Muhammad Raza Khan Sahib (*Chittoor, Muhammadan, Rural*), V. I. Muniswami Pillai (*Tirukoilur, General, Rural, Scheduled Castes*); B. S. Murti (*Cocanada, General, Rural, Scheduled Castes*); U. Muthuramalinga Tevar (*Ramnad, General, Rural*); Kumararaja Sir M. A. Muthiah Chettiar of Chittinad (*The Nattukottai Nagarathars' Association*); K. A. Nachiyappa Gounder (*Omalur, General, Rural*); R. Nadhamuni Reddi (*Madanapalle, General, Rural*); S. Nagappa (*Kurnool, General, Rural, Scheduled Castes*); N. Nagaraja Ayyangar (*Namakkal, General, Rural*); S. Nagaraja Manigar (*Hosur, General, Rural*); Meduri Nageswara Rao (*Guntur, General, Rural*); S. Nagayya (*Cuddapah, General, Rural,*

Scheduled Castes); P. L. Narasimharaju (*Vizianagram, General, Rural*); Guntur Narasimha Rao (*Madras City North, General, Urban*); K. B. Narayana Reddi (*Rajampet, General, Rural*); M. G. Natesa Chettiyar (*Dharmapuri, General, Rural*); P. Natesan (*Southern India Chamber of Commerce*); L. C. Pais (*West Coast, Indian Christian*); V. C. Palaniswami Goundar (*Coimbatore, General, Rural*); M. Pallam Raju (*Cocanada, General, Rural*); S. Paramananda Rayar (*Chidambaram, General, Rural*); B. Parameswaran, B.A. (*Chingleput General, Rural, Scheduled Castes*); A. Y. S. Parisutha Nadar (*Tanjore cum Madura cum Ramnad, Indian Christian*); M. S. Pattabirama Iyer, (*Dindigul, General, Rural*); T. S. Pattabhiraman (*Tiruchengode, General, Rural*); S. K. Paliya Kudumbar (*Koilpatti General, Rural, Scheduled Castes*); M. P. Periyaswami (*Namakkal, General, Rural, Scheduled Castes*); Perumalla Nayudu (*Kandukur, General, Rural*); Pillalamani Venkateswarulu (*West Godavari cum Kistna cum Guntur, Factory Labour, Labour*); B. Pocker Sahib (*Calicut cum Cannanore Tellicherry Towns, Muhammadan, Urban*); Ponnambala Goundar (*Trichinopoly, General, Rural*); V. Ponnuswami Gounder (*Tiruppattur, North Arcot, General, Rural*); A. Ponnuswami Mudaliyar (*South Arcot cum Trichinopoly cum Salem cum Coimbatore, Indian Christian*); T. Prakasam (*Madras City, South Central, General, Urban*); K. Raghavan (*Malappuram, General, Rural, Scheduled Castes*); R. Raghava Menon (*Palghat, General, Rural*); V. Raghavayya (*Nellore, General, Rural*); Rajagurunatha Chettiar Zamindar of Elampalli (*Southern Central, Landholders*); G. Rajamannar Chetty (*Madras City, North Central, General, Urban*); K. Rajaram Naidu (*Tirumangalam, General, Rural*); Dr. D. S. Ramachandra Rao (*Madras cum Chingleput, Indian Christian*); Rokkam Ramamurthy (*Tekkali, General, Rural*); R. Ramanujalu Reddiyar (*Cheyyar, General, Rural*); V. M. Ramaswamy Mudaliyar (*Vellore, General, Rural*); N. P. Ramiah (*Musiri, General, Rural*); N. Rangaswamy (*Mayavaram, General, Rural*); D. V. Ramaswami (*Vizagapatam, General, Rural*); P. Ratnavelu Tevar (*Trichinopoly, General, Rural*); A. Rayappa (*Gooty, General, Rural*); A. Sivaprakasa Srinajananda (*Chidambaram, General, Rural, Scheduled Castes*); S. K. Sami Goundar (*Gobichettipalayam, General, Rural*); Dr. M. J. Samuel (*Central Districts, Indian Christian*); Palavalasa Sangam Naidu (*Palakonda, General, Rural*); Neelam Sanjeeva Reddi (*Anantapur, General, Rural*); V. S. Sankarasubrahmanya Mudaliyar (*Tinnevelly cum Palamcottah Towns, General, Urban*); Geddam Sanyasi Rao (*Sarvasidhi, General, Rural*); Alluri Satyanarayana Raju (*Narasapur, General, Rural*); Bhupatiraju Satyanarayana Raju (*Viravalli, General, Rural*); Gona Seetharamaswami, (*Bobbili, General, Rural*); K. M. Seethi Sahib (*Malappuram, Muhammadan, Rural*); Shah Alam Khan Savoi Sahib (*Cuddapah, Muhammadan, Rural*); K. Shanmugam (*Gudur, General, Rural, Scheduled Castes*); Raja Sri R. Shanmuga Rajeswara Sethupathi of Ramnad (*Southern Landholders*); The Hon'ble Sri A. B. Shetty (*Coondapoor, General, Rural*); Srimathi Vallabhaneni Sitamahalakshmamma (*Bandar, General, Rural*); The Hon'ble Sri H. Sitarama Reddi (*Bellary, General, Rural*); The Hon'ble Sri J. Sivashanmukham Pillai (*Madras City, South Central, General, Urban, Scheduled Castes*); P. R. Srinivasa Padayachi (*Tirukkoyilur, General, Rural*); W. S. Srinivasa Rao (*Ramipet, General, Rural*); K. K. Subbana Gounder (*Gobichettipalayam, General, Rural*); N. M. R. Subbaraman (*Madura Town, General Urban*); Kallur Subbarao (*Penukonda, General, Rural*); P. Subbiah (*Ongole, General, Rural, Scheduled Castes*); R. Subba Iyer (*Chingleput, General, Rural*); The Hon'ble Dr. P. Subbarayan (*Dharapuram, General, Rural*); Dr. S. Subrahmanya Ayyar, M.B., B.S. (*Tiruppattur, Ramnad, General, Rural*); A. Subrahmanyam (*Salem, General, Rural*); K. Subrahmanyam (*Coimbatore Town, General, Urban*); Srimathi Allum Sumangalamma (*Bellary, Women, General, Rural*); Kollipara Surayya (*Bezwada, General, Rural*); Raja Rao Venkata Mahipati Gangadhara Rama Rao Bahadur, The Yuvarajah of Pithapur (*Northern Landholders I*); R. V. Swaminathan (*Sivaganga, General Rural*); M. R. P. Syed Muhammad Sahib (*Ramnad, Muhammadan, Rural*); R. Thangavelu (*Thiruvannamalai, General, Rural, Scheduled Castes*); T. K. T. N. R. Tatachari (*Chandragiri, General, Rural*); Thiagoo Voikkarar (*Mannargudi General, Rural, Scheduled Castes*); A. E. Thompson (*European Commerce, the Madras Chamber of Commerce and the Madras Trades Association*); M. D. Thyagaraja Pillai (*Negapatam, General, Rural*); G. Thyagaraja Sholagar (*Tanjore, General, Rural*); A. Vaidyanatha Ayyar (*Melur, General, Rural*); K. Varadachari (*Tiruttani, General, Rural*); N. S. Varadachari (*Madras City, South, General, Urban*); A. Vedaratnam Pillai (*Mannargudi, General. Rural*); Kankipatti Veeranna Padal (*Backward areas and tribes*); Nukala Veeraraghavalu (*Bezwada, General, Rural*); P. M. Velayudapani (*Ranipet, General, Rural, Scheduled Castes*); P. S. Veluswami Gounder (*Periakulam, General, Rural*); G. Venkanna (*Ellore, General, Rural, Scheduled Castes*); B. Venkatachalam Pillai (*Ariyalur, General, Rural*); Pyndah Venkatanarayana (*Cocanada Town, General, Urban*); B. Venkatanarayana Reddi (*Gudur, General, Rural*); B. Venkataratnam (*Rajahmundry, General Rural*); Gopavaram Venkata Reddi (*Nandyal, General, Rural*); Reddivari Venkatareddi (*Chittoor. General, Rural*); Ammapet P. Venkatarama Ayyar (*Tanjore cum Kumbakonam Town, General, Urban*); M. Venkataraju (*Ongole, General, Rural*); The Hon'ble Sri Kala Venkata Rao (*Amalapuram, General, Rural*); Nivarthi Venkata Subbayya (*Kurnool, General, Rural*); T. Viswanathan (*Vizagapatam Town, General. Urban*); H. B. Walford (*European Commerce, the Madras Chamber of Commerce and the Madras Trades Association*); Rao Bahadur Meka Venkataramiah Appa, Zamindar of Mirzapuram (*Northern Landholders II*).

North-West Frontier Province

THE North-West Frontier Province, as its name denotes, is situated on the north-west frontier of the Indian sub-continent. It is an irregular strip of country lying north by east and south by west and may generally be described as the tract of country, north of Baluchistan, lying between the Indus and the Durand boundary line with Afghanistan. To the north it extends to the mountains of the Hindu Kush. From this range a long broken line of mountains runs almost due south, dividing the province from Afghanistan, until the Sulaiman Range eventually closes the south of the Province from Baluchistan.



H.E. Sir Ambrose Dundas

The greatest length of the Province is 408 miles, its greatest breadth 279 miles and its total area about 39,276 square miles, a little more than half of Bombay Province, or more than three-fifths of the size of England without Wales. The territory falls into three main geographical divisions: the Cis-Indus district of Hazara; the narrow strip between the Indus and the Hills containing the Districts of Peshawar, Mardan, Kohat, Bannu and Dera Ismail Khan, and the rugged mountainous regions on the north and west between those districts and the border line of Afghanistan. Hazara and the five districts in the second division contain 14,290 square miles.

The mountain regions, north and west, are occupied by tribes subject only to the political control of the Governor in his capacity as Agent to the Governor-General. The area of this tract is roughly 24,986 square miles and in it are situated from north to south, the political agencies severally known as the Malakand, Khyber, Kurram, North Waziristan and South Waziristan Agencies.

Each of the Deputy Commissioners of the six administered districts is responsible for the management of political relations with certain tribes or sections of the tribes across the frontier. A few hundred miles of the trans-border territory are internally administered by the Political Agents, but the bulk of the trans-border population is free from any internal interference, so long as offences are not committed and the tribes observe the conditions on which allowances are paid to many of them.

The key to the history of the people of the N.-W. F. P. lies in the recognition of the fact that the valley of Peshawar was always more closely connected politically with Eastern Iran than with India, though in pre-Muslim times its population was mainly Indian by race. Early history finds the Iranians dominating the whole Indus valley. Then came the Greek invasion under Alexander the Great, in B.C. 327, then the invasions of the Sakas, and of the White Huns and later the two great waves of Muslim invasion. Last came the Sikh invasion beginning in 1818.

The Frontier Territory was annexed by the British in 1849 and placed under the control of the Punjab Government. Frequent warfare occurred with the border tribes. The most serious phases of these disturbances were the war provoked by the aggression of Afghanistan in 1919 and the protracted punitive operations against the Waziris and Mahsuds in 1919-1920. These resulted in the establishment at Razmak, a position dominating the Mahsud Waziri country, of a permanent garrison of 10,000 troops drawn mostly from stations lying in the plains immediately below the hills. A circular road from Bannu, through Razmak to Sararogha, Jandola and back to the Derajat provided communications and transport with this force and facilitated its mobility. The effect of this measure was a marked improvement in the internal peace of the Tribal area.

The separation of the Frontier Province from the Punjab aimed at achieving the double object of securing closer and more immediate control and supervision of the Frontier by the Supreme Government and of making such alterations in the personnel and duties of frontier officials as would tend to the establishment of improved relations between the local British representatives and the independent tribesmen. The province was eventually removed from the control of the Punjab administration in 1901. To it was added the political charge of Dir, Swat and Chitral, the Political Agent of which had never been subordinate to the Punjab. The new Province was constituted under a Chief Commissioner and Agent to the Governor-General, with headquarters at Peshawar, in direct communication with the Government of India in the Foreign and Political Department.

In April 1932 the Province was constituted a Governor's Province. In political questions there is no intermediary between the Governor and the local officer; an arrangement designed

to secure both prompt disposal of references and the utilisation of the expert knowledge of frontier conditions for which the head of the administration is selected.

The advisability of re-uniting the Province with the Punjab was much discussed in certain Indian political circles and as a result of the views expressed upon the matter in the Legislative Assembly the Government of India in 1922 appointed a Committee of officials and non-officials to investigate it. The Committee, presided over by D. de S. Bray, the then Joint Foreign Secretary, toured the Frontier Province and the Punjab and heard numerous witnesses. Its members were Messrs. Raza Ali, M.C.S., T. Rangachariar, Chaudhri Shahabuddin, N. M. Samarth and K. B. Abdur Rahim Khan, then members of the Legislative Assembly, H. N. Bolton, I.C.S. (Foreign Dept.) and A. H. Parker, I.C.S. (Punjab). The inquiry developed practically into a contest between Muslims and Hindus on communal lines. The Hindus, allied in sympathy with their co-religionists in the Punjab, demanded the reunion of the administered districts of the Province with the Punjab or, if that were not attainable then the placing of the judicial administration of the Province under the Punjab High Court at Lahore. The Muslims on the other hand claimed the right of their Province to a status corresponding with that enjoyed by other Provinces of India and to immediate reforms initiating and providing for progress along that line. The Hindus argued that a separate Pathan Province on the Frontier would cause a dangerous sentimental division from the rest of India, with leanings towards the allied racial elements outside British India. The answer to that was that a contented Pathan Province would be a valuable buttress against hostile feeling across the Border.

The Committee's deliberations ended in disagreement, the two Hindu members writing each a separate report favourable to the Hindu viewpoint already explained, and the majority of the Committee, comprised of all its other members, recommending advance on a Provincial basis. Their principal recommendations were for—

Retention of the Settled Districts and Tribal Tracts as a separate unit in charge of a minor administration under the Government of India;

Early creation of a Legislative Council for the Settled District and appointment of Member of Council and Minister;

Appointment of a second Judicial Commissioner which was later sanctioned and reform of the judicial administration in various directions, including interchange of officers with the Punjab, so that the members of the Service in the smaller Province should have the advantage of experience in the larger one.

"If (concluded the Majority) the Pathan nationality is allowed self-determination and given scope for that self-development within the Indian Empire under the Reforms Scheme after which it is now striving, we are assured that with a contented Frontier population India can face with calm resolution the future that the Frontier has in store for her."

Under the Government of India Act of 1935, N-W.F.P. became a full-fledged Governor's Province; and on the division of the Indian Sub-Continent into India and Pakistan the people of the Frontier Province in a referendum voted for joining the latter and so the Province now forms part of Pakistan.

THE PEOPLE

The total population of the N.-W.F.P. (1941 census) 5,415,666, made up as follows:—

Hazara	..	..	796,230
Trans-Indus Districts	..	..	2,241,837
Trans-Border Area	..	..	2,377,599

This last figure also includes estimated population for these parts of the Agencies and district tribal territory where no census was taken.

There are only 632.3 females per 1,000 males in the towns and 887.6 females per 1,000 males in rural areas. This disproportion of the sexes cannot at present be explained in the N.-W.F.P. any more than in other parts of Northern India where also it appears. The discrepancy is greater here than in any other Province of India. Both the birth and death-rates of the Province are abnormally low. The birth-rate in the administered districts, according to the last available official reports (1945) is 16.74 and the death-rate 11.14.

The dominant language of the Province is Pushtu and the population contains several lingual strata. The most important sections of the population, both numerically and by social position, are the Pathans. They own a very large proportion of the land in the administered districts and are the ruling race of the tribal area to the west. There is a long list of Pathan, Baluch, Rajput and other tribal divisions. The Muslim tribes constitute almost the whole population and before partition Hindus amounted to only 5 per cent of the total and Sikhs to a few thousands. This percentage has further decreased owing to the migration of Hindus and Sikhs to the Indian Union since the establishment of Pakistan. The occupational cleavage of the population confuses ethnical divisions.

Under the Muslim Personal Law (Shariat Act) Application Act VI of 1935 Shariat or Muslim Law governs all questions regarding succession, special property of females, betrothal, marriage, divorce, dower, guardianship, minority, bastardy, family relations, wills, legacies, gifts or any religious usage or institution including Waqf (trust and trust property) in cases, where the parties are Muslims, except in so far as such Law has been altered or abolished by legislative enactment or is opposed to the provisions of the North-West Frontier Province Law and Justice Regulation, 1901.

In cases where the parties are Hindus the rule of decision applicable in such matters is usually custom or in the absence of custom the Hindu Law (*see* Section 27 of the North-West Frontier Province Law and Justice Regulation, 1901). The total number of civil suits instituted was 13,302 and the total number of offences reported was 52,417 in 1945.

The climatic conditions of the N.-W.F.P., which is mainly the mountainous region, but includes the Peshawar Valley and the river in tracts of the Indus in Dera Ismail Khan District, are extremely diversified. The latter district is one of the hottest areas of the Indian sub-continent, while on the mountain ranges the weather is temperate in summer and intensely cold in winter. The air is generally dry and hence the annual ranges of temperature are frequently very large. The Province has two wet seasons, one the S. W. Monsoon, when moisture is brought up from the Arabian Sea and the Bay of Bengal; the other in winter, when storms from Mesopotamia, Persia and the Caspian Districts bring widespread rain and snowfall. Both sources of supply are precarious and not infrequently either the winter or the summer rainfall falls almost entirely.

TRADE AND OCCUPATIONS

The population derives its subsistence almost wholly from agriculture. Wheat covered 10,87,525 acres of land in 1944-45 of which the area under irrigation was 398,019 acres. The total area of the province under maize was 4,47,561 acres, and the total area under sugarcane 96,000 acres. The Province is practically without manufactures. There is no considerable surplus of commercial products for export. Any commercial importance which the province possesses it owes to the fact that it lies across the great trade route which connects the transborder tribal territories and the marts of Afghanistan and Central Asia with India, but the influence of railways is diminishing the importance of these trading interests. The new roads in Waziristan are already largely utilised by the Tribal inhabitants for motor traffic. Prices of agricultural produce have in recent years been high, but the agriculturists, owing to the poor means of communication, have to some extent been deprived of access to outside markets and have therefore been unable to profit by the rates prevailing. On the other hand, high prices are a hardship to the non-agricultural classes. The effects of recent extensions of irrigation have been important. Land tenures are generally the same in the popularly administered districts as in the Punjab. The cultivated area of the land amounts to 25 per cent. and uncultivated 75 per cent.

The work of civilisation made steady progress, both by the improvement of communications and otherwise. Relations with the tribes generally improved, trade advanced, free medical relief was vastly extended, police administration was reformed and the desire of people for education was judiciously and sympathetically fostered, though in this respect there was complaint against the limitations imposed by financial embarrassments. In the popularly administered districts the total percentage of male scholars to the total male population is 6.2 and that of female scholars to the total female population is 1.7 for the year 1944-45. 25 per cent males and 7 per cent females of the total population are returned as literates. The figures for males denote a very narrow diffusion of education even for the sub-continent. Those for females are not notably low, but they are largely affected by the high literacy amongst Sikh women, of whom 13.3 per cent are returned as literate. Most of these women have probably left the province. The inauguration of a system of light railways throughout the Province, apart from all considerations of strategy, must materially improve the condition of the people and also by that means strengthen the hold of the administration over them. The great engineering project of the Upper Swat River Canal, and the lesser work of the Paharpur canal, completed a few years ago, are bringing ease and prosperity to a number of peasant homes.

The number of hospitals and dispensaries in 1946 was 199 and the total expenditure Rs. 14,50,976. The total number of doctors was as under: I.M.S. officers 6; W.M.S. officers 2; I.M.D. officer 1; Assistant Surgeons 32 and sub-assistant Surgeons 101.

ADMINISTRATION

The administration of the North-West Frontier Province is conducted by H. E. the Governor and Agent to the Governor-General with the Council of three ministers as follows:—

(1) Hon'ble Abdul Qayum Khan (Chief Minister).
(2) Hon'ble Mohd. Abbas Khan (Revenue, Civil Supplies).
(3) Hon'ble Mian Jaffer Shah (Education).

(1) Officers of the old Indian Political Service.
(2) Officers of the old Indian Civil Service.
(3) Members of the Provincial Executive and Judicial Service.
(4) Members of the Subordinate Civil Services
(5) Superintendents and Assistant Superintendents of Police.
(6) Officers recruited for the service of departments requiring special knowledge—Militia, Engineering, Education, Medicine and Forestry.

The cadre posts reserved for officers coming under the 1st head above are:—

Administration ..	Chief Secretary, Revenue and Divl. Commr.	4
	Secretary, Development Departments.	
	Home Secretary.	
	Dy. Commissioners 6 Political Agents .. 5	11
	Asst. Commissioners and Asst. Political Agents.	14
Hon'ble the Judicial Commissioners' Court & District Judges.	The Judge.	8
	The Hon'ble Judicial Commissioner's Court.	
	Three District and Sessions Judges.	
	Two Additional District and Sessions Judges.	
	One Senior Sub-Judge, Peshawar.	

The districts under the Deputy Commissioners are divided into two to three sub-collectorates in charge of tahsildars, who are invested with criminal and revenue powers, and are assisted by naib-tahsildars, who exercise similar powers. Some sub-divisions are in charge of Assistant or Extra Assistant Commissioners. The village community characteristic of some parts of the Indian sub-continent is not indigenous among the Pathans. Its place as a social unit is to some extent taken by the tribe, which is held together by the ties of kinship and ancient ancestry, real or imaginary.

Modern municipal local government has been introduced into the towns. There are also district boards. The district is the unit for police, medical and educational administration and the ordinary staff includes a District Superintendent of Police, a Civil Surgeon, the Superintendent of Jail and a District Inspector of Schools. The Province forms a single educational circle and only possesses two forest divisions, that of Hazara and of Kohat. The P.W.D. of the Province carries out duties connected with both Irrigation and Buildings & Roads. It is organised in two circles (in all seven Divisions) under a Chief Engineer, P.W.D., who is also *ex-officio* Secretary to H.E. the Governor. The administration of the civil police force of the districts is vested in an Inspector-General. There is a special force of Frontier Constabulary. Of the Agencies only Kurram and Tochi Valley pay land revenue to the Government. The revenue administration of all six administered districts is controlled by the Revenue and Divisional Commissioner. For the administration of civil and criminal justice there are three Civil and Sessions Judges and two additional District and Sessions Judges and several Magistrates and sub-judges. The court of the Judicial Commissioner which consists of the Judicial Commissioner and another judge is the controlling authority in the Judicial branch of the administration and is also the highest criminal and civil tribunal in this Province.

FINANCES

In order to meet the excess in expenditure over the income of the Provinces a subvention of Rs. one crore per annum is given by the Government of Pakistan out of Central Revenues.

Revenues are expected to reach a figure of Rs. 4,20,22,000 and expenditure Rs. 4,17,99,000, giving a surplus of Rs. 2,23,000 for the year 1947-48. The Central Pakistan Government will continue to pay the usual subvention of one crore of rupees. The sales tax on cloth has been raised from six pies to one anna. A cess of six pies per maund has been imposed on sugar-cane. Sales tax has been levied on cement and ice. The Province is to go dry as early as possible.

ADMINISTRATIVE PERSONNEL

The principal officers in the present Administration are:—H. E. the Governor and Agent to the Governor General.—

H. E. Sir Ambrose Dundas.

Secy. to the Governor—E. J. M. Dent.

Judl. Commissioner—Hon. K. B. Muhd. Ibrahim Khan, B.A., LL.B.

Judge, Judl. Commrs. Court—Hon'ble Sheik Mohammed Shafi.

Rev. & Divl. Commr.—Lt.-Col. V. M. H. Cox.

Under Secy., Rev.—K. B. Mohammed Amir Shah, B.A. (officiating Under Secy., Local Self Govt.).

Ch. Secy.—Major Dring, A.J., C.I.E.

Commr. & Secy. to Govt., Dev. Depts—Abdul Hamid Sheikh.

Director of Civil Supplies and Jt. Secretary—Abdul Hamid Khan; K. S. Sheikh, B.A., LL.B.

Home Secretary—Hidayatullah Khan, K.B., M.A.

Financial Secretary—Haily, Major, P.C., O.B.E.

Adv. General and Secy. to Govt., Leg. Dept.—Malik Khuda Bakhsh Khan, B.A., LL.B.

Director of Information & Under Secretary, Dept. of Information—A. K. Quereshi.

Asstt. Secy., Finance—Abdul Jalil.

Asst. Secretary (Poll.)—M. R. Gallyot.

Indian Personal Asst. to H. E. the Govr.—K. S. Ghulam Sarwar Khan.

Registrar, Civil Secretariat, N.-W.F.P.—P. W. Martin.

Secretary, Public Works Dept.—Col. W. G. Lang-Amderson, O.B.E., R.E.

Inspector-General, Civil Hospitals—Col. A. K. Sahib-Zada, O.B.E., I.M.S.

Inspector-General of Police—O. G. Grace, C.I.E., O.B.E., I.P.

Commandant, Frontier Constabulary—H. F. Scroggie, O.B.E., I.P.

Director of Public Instruction—Mohammed Aslam Khattak, M.A. (Oxon.), Bar-at-Law.

Superintendent, Archæological Survey—Dr. M. Nazim, M.A., Ph.D. (Cantab.).

Dist. and Sessions Judge—K. B. Muhd. Safdar Khan, B.A., LL.B.

Addl. Dist. and Sessions Judge—K. S. Abdul Ghafur Khan, B.A.

2nd Addl. Dist. and Sessions Judge, Peshawar—Khan Habib Ullah Khan, B.A., LL.B.

Dist. and Sessions Judge, D. I. Khan—Arbab Taj Mohammed Khan, B.A., LL.B.

Dist. and Sessions Judge, Hazara—Khan Abdul Latif Khan.

Resident and Political Agents.

Lt.-Colonel Khurshid, S. M., Political Resident in N.-W.F.P.

K. B. Nawab Sh. Mahbub Ali Khan, O.B.E., Dir., Swat and Chitral.

Lt.-Col. R. N. Bacon, O.B.E.

Atta-Ullah Jan Khan, K. S., B.A., LL.B.

P. T. Duncan.

Lt.-Col. W. C. Leeper, O.B.E.

Deputy Commissioners.

K. B. Arbab Ahmad Ali Jan.

K. S. Ghulam Sarwar Khan, B.A., LL.B.

Captain Allah Dad Khan.

Hony. Lt. K. S. Sher Afzal Khan, M.C.I., D.S.M.

K. S. Abdur Rashid Khan, M.A., LL.B.

Lt.-Col. W. C. Leeper, O.B.E., Mardan.

Former Chief Commissioners.

The Hon'ble Lieutenant-Colonel Sir Harold Deane, K.C.S.I., from 9th November 1901 to 3rd June 1908. Died 7th July 1908.

The Hon. Lieutenant-Colonel Sir George Roos-Keppel, G.C.I.E., K.C.S.I., from 4th June 1908 to 9th September 1919.

The Hon'ble Sir Alfred Hamilton Grant, K.C.S.I., K.C.I.E., from 10th September 1919 to 7th March 1921.

The Hon'ble Sir John Loader Maffey, K.C.V.O., C.S.I., C.I.E., I.C.S., from 8th March 1921 to 6th July 1923.

The Hon'ble Sir Horatio Norman Bolton, K.C.I.E., C.S.I., I.C.S., from 7th July 1923 to 30th April 1930.

The Hon'ble Sir Steuart Pears, K.C.I.E., C.S.I., I.C.S., from 10th May 1930 to 9th September 1931.

The Hon'ble Lieut.-Col. R. E. H. Griffith, C.I.E., from 10-9-30 to 17-4-32.

Former Governors.

H. E. Sir Ralph Griffith, K.C.S.I., C.I.E., from 18th April 1932 to 1st March 1937.

H. E. Sir George Cunningham, G.C.I.E., K.C.S.I., K.C.I.E., O.B.E., from 2nd March 1937 to 2nd March 1946.

H. E. Sir Olaf Caroe, March 1946.

H. E. Sir George Cunningham, Aug. 1947—April 1948.

NORTH-WEST FRONTIER PROVINCE LEGISLATIVE ASSEMBLY

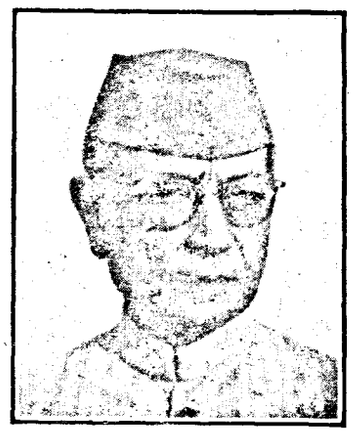
Speaker.—The Hon'ble Nawabzada Allah Nawaz Khan, Bar-at-Law (*D. I. Khan, South Mohammadan Rural*).

Deputy Speaker.—L. Girdhari Lal Puri (*Peshawar East, General Rural*).

The Hon'ble Khan Abdul Qayum Khan, Bar-at-Law (*Peshawar City, Mohdn. Urban*): The Hon'ble Khan Mohd. Abas Khan (*Mansehra North, Mohdn. Rural*); Khan Abdul Aziz Khan (*Utmannama, Mohdn. Rural*); Khan Abdullah Khan (*D. I. Khan North, Mohdn. Rural*); Khan Abdul Latif Khan (*Lakki West, Muhdn. Rural*); Khan Abdul Qayum Khan, B.A., LL.B. (*Upper Pakhli, Mohdn. Rural*); Arbab Abdur Rahman Khan (*Doaba Doudzai, Mohdn. Rural*); Malik Akbar Ali Khan (*Bannu West, Mohdn. Rural*); Khan Amin Jan Khan-Khalils (*Mohdn. Rural*); K. S. Asadullah Jan Khan (*Kulachi, Mohdn. Rural*); Khan Ali Gohar Khan (*Power Pakhli, Mohdn. Rural*); Qazi Ataullah Khan, B.A., LL.B. (*Ammazai, Mohdn. Rural*); L. Bhanju Ram Gandhi, B.A., LL.B. (*D. I. Khan Town, General Urban*); K. S. Sultan Hassan Ali Khan (*N. W. F. P. Landlords*); Sardar Ishar Singh, Bar-at-Law (*Hazara Mardan, Sikh Rural*); Mian Jaffar Shah (*Nowshera South, Mohdn. Rural*); K. B. Khan Jalal-ud-Din Khan (*N. W. F. P. Towns*); L. Kanwar Bhan (*D. I. Khan, General Rural*); Mehta Madan Lal, B.A., LL.B. (*Peshawar West, General Rural*); L. Mehr. Chand Khanna (*Peshawar Cantonment, General Urban*); L. Kewal Ram, B.A., LL.B. (*Bannu Town, General Urban*); L. Kotu Ram, B.A., LL.B. (*Bannu, General Town*); Dr. Khan Sahib (*Hashtnagar South, Mohdn. Rural*); L. Mohan Lal Gulati (*Kohat, General Rural*); Khan Mohd. Ishaq Khan (*Kamalzai, Mohdn. Rural*); Khan Mohd. Aslam Khan (*Teri North Mohdn. Rural*); Khan-Mohd. Farid Khan (*Tanawal, Mohdn. Rural*); Arabab Mohd. Sharif Khan (*Bara-Mohmands, Mohdn. Rural*); Khan Mohd. Yaqub Khan (*Bannu East, Mohdn. Rural*); Syed Mohd. Yaqub Shah (*Nowshera North, Mohdn. Rural*); K. B. Mohd. Zaman-Khan (*Haripur North, Mohdn. Rural*); Khan Mohd. Zarin Khan (*Baizai, Mohdn. Rural*); Khan Munfiatullah Khan (*Hazar, Mohdn. Rural*); K. B. Mian Musharaf Shah (*Peshawar Landlords*); S. Partab Singh (*Peshawar, Sikh Rural*); Pir Shahinshah (*Kohat, Mohdn. Rural*); S. Qaim Shah, B.A., LL.B. (*Hashtnagar North, Mohdn. Rural*); Nawab Qutab-ud-Din Khan (*Tank, Mohdn. Rural*); Sardar Ram Singh (*Southern Districts, Sikh Rural*); Khan Sahib Gul Khan (*Teri South, Mohdn. Rural*); Khan Sardar Bahadur Khan, B.A., LLB. (*Harpur Central, Mohdn. Rural*); Captain Zain Mohd. Khan, S. B., O.B.I. (*Abbottabad West, Mohdn. Rural*); Khan Yahya Jan Khan, M.A. (*Peshawar City, Mohdn. Urban*).

Orissa

LIKE Sind, Orissa was constituted a separate Province on April 1, 1936, by the Government of India (Constitution of Orissa) Order, 1936. Whereas Sind was a separate geographical, ethnological and linguistic unit inside the administrative boundary of the Bombay Presidency, the new Province of Orissa is the result of partial amalgamation of various



H. E. Asaf Ali

Oriya speaking peoples who had till then belonged to three separate Provinces, viz., Madras, Bihar and Orissa and Central Provinces.

HISTORY

The Oriyas trace their traditions as far back as the days of Mahabharata when there was a kingdom of Utkal embracing a wide territory. Through successive conquests and annexations in the historical period, the kingdom of Kallinga, the later name of Utkal, extended in the 12th century from the River Ganga in the north to the River Godavari in Madras Presidency in the south. Besides, there were kingdoms in the far south upto the banks of the River Cauvery which bore allegiance to the Kings of the Ganga dynasty of Orissa.

Tradition says that the Oriyas of those days were a great race whose maritime traders established colonies in Java, Bali and Sumatra, etc., in the East Indies and on the Martaban coast in Burma. There are ruins of Orissa architecture in these places which fully bear out the tradition.

The art, architecture and literature of the period also were of a very high order. The temples of Lord Jagannath at Puri, of Sun-God at Konarak and that of Siva at Bhubaneswar and the stone embankments of the Rivers Mahanadi and Kathjori at Cuttack are still considered to be marvels of engineering skill surpassed by none either in the ancient or the modern world. Puri still remains among the greatest spiritual centres of the Hindu world.

Orissa lost its independence in 1565 A.D. and the kingdom was broken up. The dismembered people under alien rule gradually lost race consciousness, although common language and literature continued to act as a link to bind them together.

Orissa ceded to the Mahrattas by Alivardi Khan in 1751, was conquered by the British in 1803. In 1804, a Board of two Commissioners was appointed to administer the Province but in the following year it was designated the District of Cuttack and was placed in charge of a Collector, Judge and Magistrate. In 1823 it was split up into three regulation districts of Cuttack, Balasore and Puri. The non-regulation Tributary States continued to be administered by their own chiefs under the aegis of the British Government. Angul, one of these Tributary States, was annexed in 1847 and with the Khondmals, ceded in 1835 by the Tributary chief of the Baudh State, constituted a separate non-regulation district. Sambalpur was transferred from the Central Provinces to Orissa in 1905. These districts formed an outlying tract of the Bengal Presidency till 1912 when they were transferred to Bihar constituting one of its divisions under a Commissioner. Thus as we already stated Orissa proper, considered as a linguistic and cultural whole, was long divided between Bihar, Central Provinces and Madras.

Race consciousness was, however, revived with the spirit of education under the British regime and after the great famine of 1866, Sir Stafford Northcote suggested the separation of Orissa from Bengal. The proposal was turned down but the patriotic fervour underlying the new move persisted and gave rise to a series of fresh demands.

AMALGAMATION WITH BIHAR

The first stage of success was achieved in 1912 when the Orissa portion separated from Bengal together with the district of Sambalpur separated from Central Provinces, was amalgamated with Bihar to form what came to be known as the Province of Bihar and Orissa. Although the position of the Oriyas and of the States of Orissa improved the formation of the new Province of Bihar and Orissa, it fell far short of the expectations of Oriyas; and the advocates of Oriya unity continued to press their claim for the formation of Orissa into a distinct administrative unit. E. S. Montague and Lord Chelmsford saw the reasonableness of this claim and generally favoured the redistribution of Provinces on a linguistic basis for the success of responsible Government. They left it, however, to the Provincial Governments concerned to formulate opinion and make concrete proposals after the advent of the Montford constitution in 1920.

The Bihar and Orissa Legislative Council was opposed to a change in the *status quo* while the debate in Madras Council proved inconclusive. The Madras Government, however, was against the surrender of any of its territory while the Central Provinces Government had an open mind.

The Government of India then appointed what is called the Phillip-Duff Committee to make local inquiries with a view to ascertaining the attitude of the Oriya-speaking people in the north of the Madras Presidency on the question of union with Orissa. Messrs. C. L. Phillip and A. C. Duff reported that there was "a genuine, long-standing and deep-seated desire on the part of the educated Oriya classes of the Oriya-speaking tracts for amalgamation of these tracts with Orissa under one administration."

The next stage came with the appointment of the Simon Commission which recommended the creation of a separate administrative unit for Orissa, agreeing with the Oriyas' contention that under the autonomous conditions proposed by the Commission, the Oriyas would be an ineffective minority in Madras, Bengal, Bihar and Orissa and Central Provinces.

SEPARATE PROVINCE

When the idea of a federation of autonomous units was put forward at the first Round Table Conference, the Oriyas' demand was presented in a well-reasoned statement by the Maharaja (then Raja) of Parlakimedi who asked for a separate Province for Orissa. "We want a separate Province of our own on the basis of language and race," he said. "So that we can be a homogeneous unit with feelings of contentment and peace to realise, and be benefited by, the projected reforms and look forward to the day when the United States of India will consist of small federated states based on common language and race."

The Oriyas' demand derived adventitious support from the strength of the Muslim claim for the constitution of Sind as a separate Province. Those who supported the case of Sind at the Round Table Conference could not oppose the Oriyas' claim, which, therefore, came to be recognised as valid.

In Sept., 1931, the Government of India appointed the O'Donnel Committee to examine and report on the financial and other consequences of setting up a separate administration for Orissa and to make recommendations regarding the boundaries in the event of separation. The Committee recommended the creation of a new Province including the Orissa division, Angul, the Khariar Zamindari of the Raipur district and the greater part of the Ganjam district and the Vizagapatam agency tract. According to the Committee, the new Orissa Province was to have an area of 32,681 sq. miles and a population of about 8,174,000. On the question of financial and other consequences of separation, the Committee made recommendations generally on the lines of the Sind Committee.

In January, 1936, an Order-in-Council was issued by His Majesty's Government constituting Orissa as a separate Province to be brought into line with other Provincial units on the inauguration of provincial autonomy on April 1, 1937.

POPULATION

The area of the Province proper is 32,198 sq. miles with a total population of 8,728,544 (1941 Census). The figures of the classification of the population by community were: Hindus (excluding Scheduled Castes) 5,594,535; Scheduled Castes 1,238,171; Muslims 146,301; Christians (including Anglo-Indians and Europeans) 27,690; Buddhists 454; Sikhs 232, Jains 139; Parsees 13; Jews 3 and the tribes 1,721,006. With the recent integration of the Eastern India States with the Province the total area under the administrative control of the province has increased to 60,436 (Mayurbhanj State has not amalgamated) and the population to13,973,512 of which the total tribal population is 36,19,349.

The principal language of the Province is Oriya, though Bengali in the north and Telegu in the south are understood. The principal occupation of the people is agriculture. Though the Oriyas are becoming more and more industrial-minded, at present less than 10 per cent. of the population is engaged in industries most of which are of the cottage type.

CONGRESS GOVERNMENT

Sir John Austen Hubback, K.C.S.I., I.C.S., was appointed the first Governor of the infant province. He held the governorship from April 1, 1936 to March 31, 1941, when Sir William Hawthorne Lewis succeeded him. The third Governor, Sir Chandulal Madhavlal Trivedi, K.C.S.I., I.C.S., held office from April 1, 1946 till Dr. Kailas Nath Katju, M.A., LL.D., was appointed as the Governor on 15th August, 1947 under the new constitution.

The first general elections under the constitution which established Orissa as a separate Province resulted in a clear majority for the Congress Party. Out of 56 elective seats in the Assembly (four are nominated, making a total of 60) the Congress counted 36 as its adherents. The Governor thereupon summoned the leader of the Congress Party to form a ministry but the latter, under directions from party headquarters, declined to do so unless he was given certain assurances by the Governor in regard to the Governor's special powers, etc. After prolonged negotiations this point was amicably settled and the Congress Party leader formed a cabinet and took over the administration.

Late in 1937, the Legislature decided that the capital of the Province should be located at Cuttack-Choudwar.

The working of responsible Government in the infant Province was threatened with interruption twice in 1938—once early in the year and next sometime about the middle. The first of the two crises did not relate directly to Orissa but the second did. Briefly the facts were as follows. Sir John Hubback the Governor wished to go on leave for reasons of health. Someone had to take his place while he was away and the man chosen to fill the post was the Revenue Commissioner of the same Province. The appointment was, of course, in keeping with tradition as the Chief Commissioner was the senior most Civilian in the Province. But the situation was unusual as there was a responsible ministry in office. Naturally the Prime Minister opposed the appointment on the ground that it was wrong in principle and insulting to his sense of self-respect to ask a Minister to work under a Governor who only the other day took his orders from the self-same minister and would continue to do so on reversion to his former post after the Governor's return. The Premier's complaint was finally taken up by the Congress and Mahatma Gandhi and at one time it looked as though the whole question would assume all-India dimensions. Fortunately however a crisis was averted through the public-spiritedness and sense of self-sacrifice of Sir John Hubback who offered to stay on and postpone his leave.

SECTION 93 RULE

Thus assured of a period of peaceful progress, the Province continued to be administered by the Congress Ministry for some months when in the autumn of 1939 its career was suddenly cut short by the political crisis which overtook all the Congress administered Provinces. The Orissa ministry resigned along with other Congress cabinets and there being no prospect of formation of an alternative Government with any reasonable chance of stability, the Governor, as in other similarly situated Provinces, assumed charge of the entire Province under section 93 of the Government of India Act, 1935. By a resolution in Parliament in April, 1940, this act of emergency was approved and the period of its operation extended by a year. In the absence of a ministry, the Governor administered the province with the aid of an Adviser.

With the object of replacing the Governor's rule by a popular administration for the purpose of organising an all out effort against the Axis-powers the Opposition party led by the Maharaja of Parlakimedi joined with a number of seceders from the Congress Party and formed a ministry which assumed office on November 24, 1941. The Government at once came up against strong opposition including several motions of non-confidence. The purely political difficulties however disappeared when the majority of the Congress M.L.A.'s were arrested and detained in August 1942. But the Government encountered trouble of a different nature. There was an India-wide shortage of foodgrains; free trade in grain which was established by the Central Government led to such heavy drain of foodstuffs from surplus Provinces that deaths due to malnutrition and starvation began to occur in large numbers. The privation and distress which followed were just as acute and wide-spread as in Bengal though they created much less stir in the country.

SECOND CONGRESS GOVERNMENT

In the summer of 1944, the United Nationalist Party's coalition ministry broke up and the Province once again came under section 93 of the Government of India Act, 1935, and was administered by two Advisers, viz., S.L. Marwood, C.I.E., I.C.S., and B. K. Gokhale, C.I.E., I.C.S. The Advisers' rule terminated after 1½ years when the second general elections under the new constitution took place after all the Congress M.L.A.'s had been released. As a result of the new elections, the Congress Party captured 40 out of 56 elective seats (including 4 seats for Scheduled Castes), in a House of 60 members.

The most notable occurrence during the present regime is the merger of 25 so-called Orissa States with the Governor's Province.

It had all along been a dream of the Oriya-speaking people to become united under a single administration. Both the Rulers of the Oriya States and the people realised this as a historical necessity with the result that for the first time all the Oriya people have been brought together under a single administration and their political unity secured.

EDUCATION

The percentage of literacy in the Province of Orissa as per census figures of 1941 is 9.6.

The Utkal University is an affiliating and examining University. During the year Government opened a second grade College at Jeypore in the district of Koraput with a view to spreading higher education among the hill tribes of the district. A second grade Arts College at Jajpur in the district of Cuttack was also started by private enterprise. Thus the number of Colleges in the province rose from 13 to 15, of which 11 are Arts Colleges, 2 Oriental Colleges and 2 Professional Colleges (Medical and Education). Of the 11 Arts Colleges 8 are first grade including a Women's College and 3 second grade Colleges.

Of these, six degree Colleges including the Women's College, two professional Colleges and a second grade College are maintained by Government and the rest by private agencies. During the year Government have taken over the management of the Maharaja's College at Parlakimed as a temporary measure. The Ravenshaw College at Cuttack has Law Classes attached to it and the Sambalpur College is affiliated up to the degree stage in Commerce.

With a view to improving the standard of education among the hill tribes, Government have taken over the management of the Board High School at Rayagada in the district of Koraput with effect from the school session 1947-48 so that it may serve as a model for the other high schools in that district.

Secondary Education.—The number of Secondary Schools increased from 328 to 362. The status of many middle and primary schools has been raised to that of high and middle schools respectively during the year. On account of these changes, there were at the beginning of the year 89 high schools (83 for boys and 6 for girls) and 273 Middle schools (253 for boys and 20 for girls) as against 70 (64 for boys and 6 for girls) and 258 (239 for boys and 19 for girls) respectively last year.

The number of primary schools for boys rose from 6,298 to 6,409, but the number of schools for girls decreased from 216 to 206. The number of special schools for boys rose from 145 to 147 and that for girls remained stationary at 4. These special schools consist of 17 training schools including 3 for women, one medical school, one engineering school, 7 technical and Industrial schools including one for women, 2 commercial schools, one deaf and dumb school, one Gymnasium, 116 tols and 5 Madrasas.

Besides these, there are 826 unrecognised institutions (822 for males and 4 for females) as against 777 (775 for males and 2 for females) of last year.

To encourage female education in the Province, education is made free for girls up to the Middle School stage and it is also made free for 5 years as an experimental measure in the High School and College stages for girls whose parents do not pay income-tax. And girls whose parents do pay income-tax are charged only half the prescribed fees.

PUBLIC HEALTH

The Health organisation under local bodies have been provincialised. The headquarters staff have been strengthened by the appointment of one more Assistant Director of Public Health. The Existing Provincial Malaria Unit attached to the Public Health Directorate has been expanded by the appointment of an Entomologist and some other subordinate staff. An inter-departmental committee to co-ordinate nutrition activities in the Province has been set up. Sufficient quantity of milk powder and multi-vitamin tablets have been obtained for distribution to expectant and nursing mothers through maternity centres.

Steps are taken for the distribution of anti-malarial drugs to the rural people. Anti-mosquito and anti-malaria measures are taken extensively. Two control units have been established and arrangements are nearing completion to establish another four. Schemes for provision of drainage and water-supply are also being considered by Government. A training school is held every year for training of Health Inspectors. In order to take prompt and timely measures to deal with any epidemic and to reduce the loss of life to a minimum, Government have established mobile field hygiene units in each district for operation in rural areas.

Besides the Orissa Medical College Hospital at Cuttack, there are State hospitals in the District Headquarters and sub-divisional headquarters which have been recently provincialised.

Orissa Medical College.—There was a Medical School at Cuttack started in 1885 which was preparing students for the L.M.P. Diploma. In 1944 the Medical School was converted into a Medical College with a 5 years degree (M.B.B.S.) course. The College is affiliated to the Utkal University. Recently a condensed M.B.B.S. course has been introduced in the college for affording facilities to the licentiates to qualify themselves for the M.B.B.S. degree.

A Midwifery Training School at Berhampur has been established. It is now proposed to expand it. The question of establishing a Health School is also under consideration.

The training of technicians and laboratory assistants has also been undertaken in addition to the compoundership and dressership training at the Orissa Medical College. Training of *dais* under the auspices of the Victoria Memorial Scholarship Fund has also been started. A refresher course has also been organised for practising *dais*.

Government have detailed a number of their officers for advance training in various branches of Medicine to foreign countries, and also to various places in India.

Medical Relief Centres.—There are maternity and child-welfare centres at Cuttack, Puri, Balasore, Berhampur and Sambalpur managed by local committees with Government aid. The question of provincialising these centres is under active consideration. One of them in fact has already been provincialised.

In addition to this it is proposed to open 6 similar centres in each District of the province in the rural areas except in Koraput where only 5 are considered to be enough.

All the District Headquarters Hospitals of the Province have since been taken over by Government. Steps are being taken to provide them with (1) efficient and adequate staff, (2) adequate accommodation, (3) X-ray, ambulance and laboratory facilities, (4) air-conditioned operation theatre, (5) properly organised out-door department, (6) clinics for (*a*) tuberculosis, (*b*) venereal diseases, (*c*) leprosy, (7) six beds for Tuberculosis patients, (8) incinerators and (9) properly equipped maternity sections.

An infectious diseases Hospital has already been established at Puri.

There is no separate tuberculosis hospital or sanatorium in this Province, the establishment of which is under the active consideration of Government.

Orissa has no separate mental hospital of its own either but shares it at Kanke with Bihar and Bengal.

Sufficient amount is being spent for the treatment of venereal diseases cases.

LOCAL SELF-GOVERNMENT

Local self-government in the Province has not yet a uniform pattern everywhere; three northern coastal districts for instance follow the Bihar and Orissa laws. In south Orissa districts the Madras Laws, and in the western district of Sambalpur, the Sambalpur L.S.G. Act, 1939 and Bihar and Orissa Municipal Act, 1922 are in force. This lack of uniformity has resulted in a great deal of confusion in the sphere of local self-government. Plans are however included in the post-war five-year programme to remodel and improve the general condition of the local bodies and unify the L.S.G. Laws.

IRRIGATION AND PUBLIC WORKS

More than half of the Orissa coastal plains is formed by the combined deltas of the rivers Mahanadi, Brahmini and Baitarani, with their numerous branches and this area is partly exposed to damage through floods which are frequent. A flood protection policy has been carefully worked out by Government and is being gradually implemented. Orissa inherited a canal system, constructed in the latter half of the nineteenth century by a private company for combined navigation and irrigation purposes. The demand for water for cultivation is not so great as was anticipated at the time and the canal system has a very slight margin of profit now that the capital debt has been taken over by the Government of India. From the point of national food resources and famine insurance, however, it is most important.

Under the Grow More Food scheme many small irrigation projects have been put through in the Province with partial financial assistance from the Centre.

In the post-war five-year Plan an ambitious scheme has been prepared for a multi-purpose reservoir on the Mahanadi river at Hirakud near Sambalpur. This reservoir will control excess flooding in the Mahanadi delta, provide electric power and also be used for the irrigation of a considerable area. Further projects on the control and utilization of the Mahanadi river on the model of the Tennessee Valley authority are the two multi-purpose reservoirs further downstream.

Hirakud Dam near Sambalpur is expected to cost about Rs. 47·81 crores; work has been started and will be carried out by C.W.I.N.C. (on behalf of Orissa Government).

The 1937 proposal to establish the new Capital of Orissa in Cuttack was revised in 1946 and it is now decided that the new Capital will be constructed in a new and spacious site, north of Bhubaneswar, the famous Hindu shrine. Survey work and jungle clearance has been started and construction work is expected to begin in 1948. The new capital site will be connected with Orissa and the rest of India by the conversion of the existing old trunk road into a National High-way with bridges over the present unbridged rivers. The construction of the new bridges and the improvement of existing roads up to the new road standard of National High-ways, Provincial High-ways, Major District Roads, etc., has already started under the first of two five-year programmes so that in 10 years time all the important towns and villages in the Province will have all-weather communications.

AGRICULTURE AND INDUSTRY

Even after the formation of a separate Province on the 1st of April, 1936, the Agricultural Department of Orissa remained under the control of the Revenue Commissioner till November, 1936, when it was taken over by a Director of Development, who remained in charge of the Department upto the end of March, 1945. Due to increased work in the Agricultural Department brought about by the introduction of a large scale production campaign, a separate post of Director of Agriculture was created for Orissa on 1st April, 1945, and Dr. P. Parija, O.B.E., D.Sc., M.A. (Cantab.), I.E.S. (Retd.), was appointed to the post.

The Director of Agriculture is assisted on the Food Production side by three Agricultural Engineers including one Drilling Engineer, one Biochemist, an Assistant Director of Agriculture for multiplication of improved seeds, Fruit Development Officer, Assistant Fruit Technologist attached to the Headquarters office and District Food Production Officers in the Districts. These officers attend to the subsidised distribution of seeds and manure, including hiring out of improved agricultural machines and implements to cultivators and sinking of tube-wells and also to general propaganda work. A nucleus field staff of one Overseer or Sub-overseer and two fieldmen is maintained at every Police Station.

The minor irrigation programme of the Food Production campaign is in charge of Agricultural Engineers, who are attached to the office of the Director of Agriculture. Advancing of cash loans under the L.I. Loans Act and Agricultural Loans Act, is done by a Special Deputy Collector at the District Headquarters and Sub-Deputy Collectors at the Sub-divisional Headquarters under the direct supervision of District Officers.

On the research and experimental side there is a Deputy Director of Agriculture, an Economic Botanist, one Horticulturist, a Mycologist, an Entomologist and an Agricultural Chemist.

The cultivation of rice is the principal occupation of nearly 80 per cent of the population. A small quantity of jute is produced. Cereals and sugar-cane are grown for local consumption. Tumeric is extensively cultivated in the uplands of the district of Ganjam and practically the whole of it is exported.

One textile mill at Chowdwar and one Vegetable Ghee plant at Berhampur are in the process of establishment as part of the post-war development programme.

1947-48 BUDGET

The estimated revenue of the Province for the year was Rs. 4,05,87,000, principal items being Income-tax, 39 lakhs; Land Revenue, 51 lakhs; Excise, 81 lakhs; Stamps, 23 lakhs; Forest, 16 Lakhs; Industries, 7 lakhs; Works, 5 lakhs; Subvention from the Centre, 40 lakhs; and extraordinary receipts, 1,14 lakhs.

Receipts other than Revenue receipts, *e.g.*, Loan money, Civil Deposits, Reserve Bank Remittances and Inter-Provincial suspense accounts were calculated at Rs. 13,68,01,000. This together with the opening balance of Rs. 37,50,000 made up a total of Rs. 18,11,38,000 for budget purposes.

Against this the total expenditure charged to revenue was estimated at Rs. 4,55,39,000 for the year, the main items of which are detailed below in lakhs of rupees.

Land Revenue, 4.5; Excise, 13.5; Forest, 11.2; Registration, 2.3; Appropriation for reduction of debt, 17.1; General Administration, 50.6; Justice, 8.7; Jails, 7.5; Police, 45.5; Education, 66.9; Medic l, 26.7; Public Health, 11.8; Agriculture, 25; Veterinary, 8; Co-operation, 4.4; Industries, 11; Miscellaneous, 6.8; Civil Works, 62.9 and Pensions, 13.8.

The total expenditure not charged to revenues was estimated at Rs. 13,32,09,000.

Of the total sum of Rs. 1,88,81,789 included as new expenditure in the Budget, a sum of Rs. 1,13,83,085 represented expenditure in connection with the execution of post-war schemes.

The Budget thus revealed a deficit of Rs. 49,52,000.

1948-49 BUDGET

The estimates for 1948-49 reveal a revenue deficit of Rs. 69,60,000. The total revenue for the year 1948-49 is estimated at Rs. 6,81,55,000 compared with the revised estimate of Rs. 6,49,67,000 of 1947-48 and expenditure charged to revenue at Rs. 7,51,15,000 in 1948-49 compared with Rs. 6,03,57,000, of the revised estimate of 1947-48.

The Province's share from surplus income-tax is increased from two per cent. to three per cent. Actually, it is contended that the Province has a good case for a considerably higher percentage now that the size of the province has increased by 75 per cent. and its population by 50 per cent.

A small reform in the revenue department is the abolition of *sarbarakari* system in the Government estates in Khurda, Banki and Angul with effect from April 1, 1948 and the collection of Government revenues by paid officials. It has been decided to reorganise and strengthen the military police. A wireless training class has been opened in Cuttack.

ADMINISTRATION

Governor.—His Excellency Asaf Ali.

Secretary to His Excellency the Governor.—Rai Sahib Bhabagrahi Misra.

Aid-de-Camp.—Captain G. N. Katju.

Prime Minister and Minister for Home, Finance, Planning and Reconstruction.—Sri Harekrishna Mahtab.

Development, Law, Commerce.—Hon'ble Sri Nityananda Kanungo.

Revenue, Supply, Transport.—Hon'ble Sri Naba Krishna Choudhury.

Education, Health, Local Self-Government.—Hon'ble Sri Lingaraj Mishra.

Labour, Public Works, Backward Classes Welfare.—Hon'ble Sri Radhakrishna Biswasray.

[Mr. Choudhury and Mr. Biswasray have resigned.]

SECRETARIES.

Chief Administrator and Special Commissioner.—N. Senapati, I.C.S.

Revenue Commissioner.—Rai Bahadur Samuel Das.

Chief Secretary (Home, P., R. and Finance).—B. C. Mukharji, I.C.S.

Secretary, Revenue Department.—Rai Bahadur P. C. Das.

Secretary, Development, Commerce and Labour Department.—V. Ramanathan, I.C.S.

Secretary, Education and Health and L.S.G. Department.—Rai Bahadur Somanath Mohapatra.

Secretary, Law Department.—R. L. Narasimham, I.C.S.

Secretary, Supply and Transport Department.—B. Sivaraman, O.B.E., I.C.S.

Secretary, Public Works Department (Irrigation).—R. R. Handa, I.S.E.

Secretary, Public Works Department (R. & B.).—K. C. Wadia, B.E., A.M.I.C.E.

Secretary, Legislative Assembly.—Giridhari Dhal.

It may be noted here that Orissa maintains a joint cadre with Bihar in respect of officers of All-India Services.

Orissa Legislative Assembly

Orissa has a single chamber and has no Legislative Council. The Assembly consists of a House of 60 members of which four are nominated, one is labour, two are landholders, one is Indian Christian, one is Commerce, four are Muslims, two are women and the remaining 45 are general seats.

ORISSA LEGISLATIVE ASSEMBLY

Speaker :—The Hon'ble Mr. Lalmohan Patnaik.

Dy. Speaker :—Mrs. A. Lakshmi Bai.

Gouranga Charan Das (*West Cuttack Sadr. General*); Bijoyananda Patnaik (*Central Cuttack Sadr. General*); Bhairab Chandra Mohanty (*North Cuttack Sadr. General*); Kanhu Charan Das (*North Cuttack Sadr. General*); Sarangadhar Das (*East Cuttack Sadr. General*); The Hon'ble Sri Nityananda Kanungo (*South Cuttack Sadr. General*); Dinabandhu Sahu (*Central Kendrapara General*); The Hon'ble Sri Nabakrushna Choudhury (*North Kendrapara General*); Rajakrishna Bose (*East Kendrapara General*); Gadadhar Datta (*East Jajpur General*); Santanu Kumar Das (*East Jajpur General*); Dwarikanath Das (*West Jajpur General*); Madan Mohan Patnaik (*North Jajpur General*); Hrushikesh Tripathy (*Angul District General*); Jayakrishna Mohanty (*East Puri Sadr. General*); Lokanath Misra (*South Puri Sadr. General*); The Hon'ble Sri Lingaraj Mishra (*North Puri Sadr. General*); Purnananda Samal (*North Puri Sadr. General*); Banamali Patnaik (*East Khurda General*); Satyabadi Nanda (*West Khurda General*); Surendra Nath Das (*Central Balasore Sadr. General*); Kailash Chandra Mohanty (*South Balasore Sadr. General*); Karunakar Panigrahi (*North Balasore Sadr. General*); The Hon'ble Sri. Harekrishna Mahatab (*East Bhadrak General*); Bhagabat Sahu (*West Bhadrak General*); Brundaban Chandra Das (*West Bhadrak General*); Mohan Singh (*Sambalpur Sadr. General*); Lall Ranjit Singh (*West Bargarh General*); Lakshminarayan Misra (*East Bargarh General*); Bisi Bibhar (*East Bargarh General*); Lall Rudramadhab Deo (*Khariar General*); Dinabandhu Behera (*Ghumsur General*); Jagannath Mishra (*Kudala General*); Narayan Panda (*Chaturpur General*); Madhu Sudan Mohapatra (*Aska Surada General*); Iswar Naiko (*Aska Surada General*); Uma Charan Patnaik (*Berhampur General*); Somanath Panda (*Berhampur General*); Narayanmurty Gade (*Berhampur General*); Narayan Patra (*Balliguda Khondmals General*); Ananta Tripathy (*Parlakimedi General*); Sadasiba Tripathy (*Nowrangapur General*); Radhamohan Sahu (*Jeypore Malkangiri General*); The Hon'ble Sri Radhakrishna Biswasroy (*Koraput General*); Maulavi Muhammad Yusuf (*Cuttack Sadr. Muhammadan*); Maulavi Sayed Fazle Haque (*North Cuttack-cum-Angul Muhammadan*); Maulavi Muhammad Khan (*Balasore-cum-Sambalpur Muhammadan*); Maulavi Latifur Rahaman (*South Orissa Muhammadan*); Srimati Priyambada Devi (*Cuttack Town Women's*); Ghanashyam Das Thirani (*Orissa Commerce and Industry*); Sailendra Narayan Bhanj Deo Tikayat (*East Orissa Landholders*); Rai Bahadur Lokanath Misra (*West Orissa Landholders*); Baidyanath Rath (*Orissa Labour*); Lakshminarayan Sahu; Miss Anne Catherine Munro; Antarjami Mallick; Godavarthi Ramadas;

Sind

WITH the division of the Indian sub-continent on the basis of the Indian Independence Act, 1947 the province of Sind was constituted a part of the Dominion of Pakistan.

Sind is one of the two provinces created in 1936, the other being Orissa. Unlike the latter, which has been carved out on a linguistic basis from three older provinces, Sind was a compact unit and was considered a province within a province even before its separation. From the point of view of geography, ethnology and language, Sind has greater affinity to the Punjab than to Bombay. Nevertheless it has been attached to the Bombay Presidency administratively ever since its conquest by Sir Charles Napier in 1843.

The demand for its separation into a distinct political entity is of comparatively recent origin. It was only about twenty years ago that Muslim leaders started the demand that Sind, where the Muslims are in an overwhelming majority, should have separate administrative machinery under the next reformed constitution. What was started as a bargaining point in inter-communal negotiations has now become an accomplished fact.

The Muslim delegation at the first Round Table Conference put forward the demand in London in the winter of 1930. The question was referred to a committee which accepted the principle of separation, suggested an expert inquiry to ascertain the financial aspect of the separation, and threw the burden of proving the feasibility of separation on those who asked for it. An expert inquiry was held and it drew a gloomy picture of the financial future of Sind. Its findings can best be summarised by its remark, "There is thus obviously no question of Sind standing surety for the Barrage—the problem is whether the Barrage can stand surety for Sind."

DEMAND FOR SEPARATION

A conference of representatives of the people of Sind met in 1932 to devise measures to meet the financial objections to the separation. Wide divergence of opinion prevailed at this conference, whose chairman eventually submitted a report according to which the annual deficit of the new province for the first six years of its life would be Rs. 80 lakhs, the revenue from the Barrage being eaten up by interest charges. Roughly from 1945 onwards, there would be a surplus from the Barrage to help the province. Based on this assumption the authorities set about perfecting the administrative machinery in preparation for the inauguration of the new regime.

With the stage set for the advent of the new province, an Order-in-Council was issued in January, 1936, announcing that the new province would start on its career on April, 1, 1936, and creating transitional machinery for the conduct of government till provincial autonomy is inaugurated in accordance with the provisions of the Government of India Act, 1935.

Of a permanent character were those provisions of the Order-in-Council which sever Sind from Bombay and settle the liabilities of the parent and the infant in respect of development loans incurred during the joint family period. Lands, forests, buildings, property, etc., would pass to the province where they were situated. Arrears of taxes would belong to the province where the taxed property was situated or the taxed transactions took place. Of the outstanding Bombay Irrigation Debt incurred before April 1, 1921, Rs. 2,74,96,384, including Rs. 73,687 of the debt on account of the Lloyd Barrage and Canals system, would be borne by Sind, and the rest by Bombay.



H. E. Sir Ghulam Hussain Hidayatullah

Of the debt incurred on account of the Lloyd Barrage and Canals system, all except the portion relating to the Nasirabad section (which is chargeable neither to Bombay nor to Sind) would be borne by Sind. The outstanding Bombay debt on account of the Bombay Development Scheme would be the debt of Bombay alone. Other loan works would be chargeable to the province where the works were located.

It was also understood that the Central Government would have to come to the rescue of Sind by providing the funds to meet the deficit in the first few years. In order to make arrangements for such a subvention to Sind and Orissa and for other weak provinces and generally to adjust the financial relations between the Central and the provinces under the provincial autonomy scheme, Sir Otto Niemeyer, a financial expert, was asked to conduct an inquiry. He completed his investigations and submitted his

report, according to which Sind got a cash subvention of Rs. 105 lakhs for a period of ten years, after which the aid would be progressively decreased. According to the Niemeyer recommendations, Sind would get after the first five years of provincial autonomy 2 per cent., of the distributable portion of the income-tax revenue.

POPULATION

Sind has an area of 48,136 sq. miles and a population of 4,535,008 (1941 census). Of this, the Hindus (including Scheduled castes) numbered 1,229,926 and the Muslims 3,208,325. As a result of the recent upheaval nearly 8 lakhs of Hindus including 20,000 Sikhs have migrated to India since August 1947. There has been a corresponding migration of Muslims into Sind as a result of which the Muslim population has increased by about a million. The rest of the population is made up of 20,209 Christians; 31,011 Sikhs; 3,687 Jains; 3,838 Parsis; 1,082, Jews and 36,930 others.

According to the census of 1941, 389,333 males and 90,020 females in the Province of Sind are literate, representing 15.6 per cent. and 4.4 per cent. female population respectively. 138,249 Muslim males and 16,416 Muslim females; 231,869 Hindu males and 64,498 Hindu females are literate.

The language of the Province, Sindhi, though it bears many marks of Arabic and Persian influence and is written in Perso-Arabic script, is nearer the original Sanskrit than any other Indian language. The Hindus are far more advanced than the Muslims and in the pre-Partition days enjoyed a virtual monopoly of the trade of the province. As against 263 Hindu literate males per 1,000 only 44 Muslims per 1,000 were literate; 51 per 1,000 literate Hindu females compared against five literate Muslim females. The number of those literate in English are 119 per 10,000—186 per 10,000 males and 34 per 10,000 females.

On March 31, 1947 there were 3,778 educational institutions of all kinds in Sind out of which 5.37 were for girls. There were ten colleges in the province with 4,236 students on the rolls. There were 235 secondary schools for boys with 41,922 students on the rolls, and 38 for girls with 9,251 students. There were 2,511 primary schools for boys with 168,937 students on the rolls and 426 schools for girls with 41,735 students.

Out of every 100 workers in Sind 59 are engaged in agriculture and animal husbandry. Ten per cent. are engaged in manufacturing industries, most of which are, however, of the cottage type, there being very few factories in Sind.

The cultivable area of the province is mostly commanded by the Sukkur Barrage and Sind canals, which, with other canals and the Indus river itself, supply water to 7,500,000 acres. The Barrage works have cost nearly 24 crores of rupees.

LLOYD BARRAGE

The Barrage owes its existence largely to the zeal of Lord Lloyd, an ex-Governor of Bombay, whose name it bears. Started in July 1923, it was completed in January 1932. It was the completion of the dream of many an engineer and an almost incredible boon to the cultivator, who formerly carried on his agricultural operations in a haphazard manner, being unable to depend on the proverbial vagaries of the Indus. What it means to the Sindhi, the Sindhi alone knows, for the Barrage has converted a waterless desert into a smiling garden flowing with milk and honey.

The Lloyd barrage is a huge water regulator consisting of 66 spans, each sixty feet wide, the openings being regulated by steel gates, each weighing fifty tons. The Barrage is about a mile long, about five times the length of London Bridge. Thousands of miles of new channels were excavated varying in width from 346 feet in the case of main canals to only two or three feet in the case of water courses. The total length of Government channels which were excavated was over 6,000 miles, and that of water courses over 30,000 miles. The total length is thus some 36,000 miles, which means about 1½ times the circumference of the earth.

The total quantity of earthwork involved, excluding that for the watercourses was 628 crores cubic feet of earthwork which means a solid column measuring 100 feet by 100 feet extending to a height of over 115 miles.

The function of the Barrage is to head up the river at Sukkur and from that to distribute it all the year round according to requirements of cultivators. The distribution is made through seven great canals, regulated through regulators on both banks of the river—four on the left bank, three on the right. Those on the left bank are Rohri, the Eastern Nara, the Khairpur Feeder East and the Khairpur Feeder West. Those on the right bank are the North Western Canal, the Rice Canal and the Dadu Canal.

The total number of openings in all the canal Head Regulators is 55, each being of 25 feet span and each opening being equipped with three electrically operated gates. The total discharge of water into all the canals is approximately 45,763 cusecs or 285,100 gallons per second. The total length of all irrigation channels including old and new watercourses is 54,300 miles. To accomplish this staggering feat, excavation of earthwork to the extent of 7,500,000,000 cubic feet was involved, as much as would fill a drain 14 feet wide and four feet deep, dug round the equator. It was estimated that the ultimate area of annual cultivation on the scheme would be over 5,000,000 acres and this would be under various crops approximately as follows:

Wheat 2,440,000 acres; cotton 850,000 acres; rice 625,000 acres; *jawari, bajri,* etc., 635,000 acres; and oilseeds 410,000 acres.

This denoted in produce would mean the following approximate quantities:

Wheat 1,133,000 tons; cotton 549,000 bales; rice 447,000 tons; *jawari, bajri;* etc., 271,000 tons; and oilseeds 117,000 tons.

The area irrigated in Sind by the Barrage canals and other capital work during 1943-44 was 5.21 million acres.

With the construction of the Barrage the area under cotton cultivation has increased from the pre-barrage figure of 253,232 acres to 878,627 acres in 1943-44. The area under wheat increased from 480,000 in the pre-barrage period to 1,259,212 acres in 1943-44. The area under rice cultivation in 1943-44 was 1,385,825 acres.

FINANCES

The Sind Government have already started preliminary work connected with building of another barrage across the Indus river in Lower Sind involving a total cost of 23.57 crores. The project consists of a barrage to be constructed above Kotri, a quarter mile below the Jamshoro regulator of the Fuleli Canal, a feeder on the right bank of the Indus. The barrage is designed to be strong and big enough to pass a flood of 7,50,000 cusecs as against a maximum in the last 40 years of 6,13,000 reduced by future Punjab and Upper Sind withdrawals. The barrage, when completed in 1953 is expected to irrigate 22.5 lakhs acres.

Sind has, for some years, enjoyed a fair share of Indian prosperity as reflected in the provincial budgets. On the eve of partition, Sind wiped off all her debts to the undivided Government of India and thanks to war boom, built up her finances through large land sales and sale of foodgrains, apart from war-time benefits from the Allied operations.

After a series of surplus budgets, Sind returned a deficit of 257 lakhs (revenue 805 lakhs, expenditure 1,062 lakhs) in 1947-48 (revised), and Rs. 52 lakhs deficit (revenue 843 lakhs and expenditure 895 lakhs) in 1948-49.. The Sind Premier decided to convert this deficit into a surplus of Rs. 3 lakhs by taxation to the tune of Rs. 55 lakhs.

Sind's most remarkable enterprise in the last few months is the development of industrial trading estates at Karachi, Hyderabad and Sukkur, on the lines of those established in Great Britain after the depression of 1931. The Karachi Industrial Estate has already made a beginning and the Government have sanctioned Rs. 25 lakhs towards the expenses. Preparations are in full swing for the construction of a textile mill, a chemical factory and a big shipbuilding yard to be built with the technical help of the famous British ship-builders, John, Brown and Co., who built the "Queen Elizabeth". The estate will be situated near West Wharf.

KARACHI

No account of Sind will be complete without a reference to Karachi. It is a comparatively new town, for according to known facts it was as recently as 1729 that a few traders of the neighbouring State of Kalat migrated to the "Kalachi" the land of the sand-dunes It was several years later that its potentialities as a harbour were realised by the British—Sir Charles Napier, the Conqueror of Sind, is said to have forecast that Karachi would some day become the "Glory of the East." Developments during the last fifteen years have only served to fulfil these hopes, for with the growth of aviation, Karachi, which is on the main line of Imperial aerial communication between London and Australia right across India, has become a vital airport. In addition to being the capital of Sind, Karachi is the outlet for the products of the Punjab.

It has been decided that Karachi, which was originally intended to be the temporary capital of Pakistan, would continue to be so permanently. As the Pakistan Premier recently pointed out, Karachi is considered the most suitable city in Pakistan to be the permanent capital of the Dominion. As a result of this decision, a committee with representatives of both the Sind and Central Governments was appointed in February to go into the administrative details arising out of this decision. Karachi continues to be the Sind Government's headquarters but a final decision is expected to be taken after the submission of the report of the above committee.

The establishment of the Pakistan capital has expanded the area of the city and a scheme is now under preparation by Lt.-Col. Swayne-Thomas, Adviser to the Sind Government, for the planned and scientific development of the city so as to link a number of suburbs with a network of railway communications.

LEGISLATIVE ASSEMBLY

The Sind Legislative Assembly, which has a strength of 58 members, had its first session under the new political dispensation from January 26 to February 20. The Sind Premier, Mr. M. A. Khuhro, presented the budget on February 7 and general discussion and voting on grants took about a week of the session. The Assembly passed a number of legislative measures including a bill to rehabilitate the economic life of Sind necessitated by the exodus of non-Muslims who had monopolised trade and commerce and the ingress of Muslim refugees into the province.

Throughout the session, there was no division as out of 20 members of the Congress Party, only six Hindu members attended the session, the rest including the leader, Prof. Ghanshyam Jethanand, having either resigned or migrated to India.

The proposed move to separate Karachi from the province of Sind aroused strong opposition and the House gave a mandate to the Sind Government to resist such a move when and if taken.

The Assembly also passed a resolution at the outset mourning the tragic death of Mahatma Gandhi.

ADMINISTRATION

GOVERNOR

H. E. Shaik Ghulam Hussain Hidayatullah.

PERSONAL STAFF OF THE GOVERNOR

Secretary: S. H. Raza.
Personal Secretary: J. Codeiro.
Military Secretary: Capt. F. R. Mc. F. Kernan.
A.D.C.: Capt. Sher Ali.

MINISTERS AND PORTFOLIOS

Prime Minister and Minister In-charge of Political Services and General Administration, Home, Legal and Education: The Hon'ble Pir Illahi Baksh.
Minister In-charge, Revenue and Public Works Departments: The Hon'ble Mir Ghulamali.

Minister In-charge, Finance, Refugees Rehabilitation and Rent Control, Local Self-Govt. and Public Health Departments : The Hon'ble Syed Miran Mohammed Shah.

Minister In-charge, Food and Civil Supplies, Agriculture and Industries Dept. : The Hon'ble Mr. Mohammed Azam.

PERSONAL STAFF OF MINISTERS

Parliamentary Secretaries to the Chief Minister : Mohammad Azam Khan, M.L.A.; Mrs. J. G. Allana, M.L.A.; Mohammad Mujtaba Kazi, M.L.A.

Secretary to Hon'ble the Chief Minister : Agha Shahi.

Personal Assistants to Hon'ble the Chief Minister : G. N. Pandhiani; Pereira.

Parliamentary Secretary to Hon'ble Minister for Education, etc. : Mohammad Akhbar Kazi, M.L.A.

Personal Assistants to Hon'ble Minister for Education, etc. : Mohammad Moshan; G. D. Memon.

Parliamentary Secretary to Hon'ble Minister for Agriculture, etc. : Mir Ahmad Khan Talpur, M.L.A.

Personal Assistants to Hon'ble Minister for Agriculture, etc. : Ijaz Ali Talpur: Murad Ali Talpur.

Parliamentary Secretary to Hon'ble Minister for Revenue, etc. : Noor Mohammad Shah, M.L.A.

Personal Assistant to Hon'ble Minister for Revenue, etc. : Mohammad Amin Zuberi.

SECRETARIES TO GOVERNMENT

Chief Secretary and Secretary, Political, Services & General Administration : J. Booth.

Revenue Secretary and Revenue Commissioner, S. Ridley.

Home Secretary : N. A. Faruqui.

Secretary, Public Works Deptt. & Chief Engineer, Sind : S. G. Mustafa.

Secretary, Public Works Deptt., Lower Sind Barrage and Chief Engineer, Lower Sind Barrage : T. A. W. Foy.

Finance Secretary : D. R. C. Halford.

Secretary, Agriculture, Industries & Labour Departments : K. S. G. S. Kehar.

Secretary, Legal : Mohammad Bakhsh Memon.

Secretary, Education, Health & Local Self-Government : K. S. Yar Mohd. A. Memon.

Secretary, Food & Civil Supplies : R. R. Pearce.

Secretary, Sind Legislative Assembly : Zafarali Shaikh.

HEAD OF DEPARTMENTS, ETC.

Development Commissioner and Labour Commissioner : J. Booth.

Revenue Commissioner : S. Ridley.

Inspector-General of Police : A. W. Pryde.

Additional Inspector-General of Police : S. Kazim Raza.

Inspector-General of Prisons : Dr. B. Baluch.

Chief Conservator of Forests : Khan Bahadur Abdul Rahim.

Deputy Commissioner of Excise, Sind : Capt. Jafferali Khan G. Agha.

Director of Public Instruction : Shamsul Ulma Dr. U. M. Daudpota.

Director of Public Health : Dr. O. M. Akbani, M.B.B.S., D.Ph.

Inspector-General of Civil Hospitals : Dr. A. M. Abbassi, M.B. B.Sc., D.Ph.

Director of Agriculture : A. M. Mustafa.

Director of Industries : R. L. Sethi.

Director of Fisheries : Dr. M. Ram Swami Naidu, B.A., Ph.D.

Director of Veterinary Services : M. Mohey-Deen, M.R., C.V.S.

Registrar, Co-operative Societies : Mohammad Azam Abdul Khalik Awan.

Superintendent, Government Press : I. H Siddiqi.

HEADS OF DEPARTMENTS—CENTRAL

Commissioner of Income-Tax and Collector of Central Excise and Salt : L. W. Thompson.

Collector of Customs, Sind and Baluchistan : Ilmuddin.

Director of Posts & Telegraphs, Sind and Baluchistan Circle : S. Nusrat Ali, M.B.E.

Deputy Central Intelligence Officer : Abdullah Fateh Din.

D.S.P., Special Police Establishment : Khan Sher Hasan Khan.

JUDGES OF THE CHIEF COURT OF SIND

Chief Judge : The Hon'ble Mr. Justice H. B. Tayabji.

Judges : The Hon'ble D. N. O'Sullivan; The Hon'ble V. T. Thadani; The Hon'ble G. B. Constantine; The Hon'ble H. G. Agha.

Registrar : B. J. Desa.

PUBLIC SERVICES COMMISSION

Members : H. B. Hingorani; N. M. A. Siddiki.

Secretary : K. S. Qazi Abdal Ghani Faiz Mohammad.

SIND LEGISLATIVE ASSEMBLY

[At the time of partition of India and establishment of Pakistan, the Sind Legislative Assembly had 60 members but the representation of the European community was reduced from three seats to one. After the budget session of the Assembly, held in the last week of February 1948, eight members of the Congress Party resigned from the Legislature. In the by-election caused by the elevation of the Hon'ble Mr. Ghulam Hussain Hidayatullah as the Governor of the province, Mr. Ghulam Nabi Khan Pathan was elected. The Congress members who have submitted their resignations so far are; Prof. Ghanshyam Jethanand, leader of the Congress Party, Swami Krishnanand, N. R. Malkani, Nevandram Vishindas, Nihchaldas G. Vazirani, P. V. Tahilramani, R. K Sidhwa and Vishnu Nenuram Sharma.]

Speaker :—Syed Miran Mohammed Shah.

Deputy Speaker :—Badruddin Aga.

Secretary : Zafar Ali Shaikh.

Members :—Abdus Sattar Abdul Rahman Pirzada; Mir Ahmed Khan Abdullah Khan Talpur; Aliakbarshah Ahmed Shah Sayed; Haji Allmahomed Attamahomed Mari; Ali Gohar Khan Haji Khan Mahar; Pir Ali Shah Bhawanshah; Agha Badruddin Ahmed Shamsuddin Khan Durani; Anwar Hussein Ghulam Hussein Hidayatullah; Mir Bandehali Khan Talpur; Choithram T. Valecha; Haji Fazul Mahomed Khan Laghari; Fazullulah Ubeidullah Kazi; Mir Ghulam Ali Khan Talpur; Ghulam Nabi Khan Pathan; Makhdum Ghulam Hyder Zahiruddin Qureshi; Ghulam Muhammad Muhummad Hashim Wassan; Ghulam Nabi Muhammad Ibrahim Dehraj; Haji Ghulam Rasool Khan Jatoi; Dr. Gobindram D. Punjabi; Haridas Lalji; Holaram H. Keswani; Lt.-Col. W. B. Hossack; Mir Haji Husseinbaksh Khan Talpur; Hon'ble Pir Illahi Baksh Nawazali; Issardas Varindmal; Jaffer Khan Taj Mahomed Khan Jamali; Mrs. Jenubai G. Allana; Miss Jethi T. Sipahimalani; Sardar Kaisar Khan Gulmahomed Khan Bozdar; Madhowdas Shivalomal; Mahmood Abdullah Haroon; Menghumal Perumal; Miran Muhammad Shah Zainulabdin Shah, Sayed; K. B. Haji Moulabakhsh Muhammad Umer Soomro; Dr. Muhammad Akbar Abdul Qayoom Kazi; Muhammad Ayub Shah Muhammad Khan Khuhro; Muhammad Azam Muhammad Ibrahim; Muhammad Khan Nawab Ghaibi Khan Chandio; Haji Muhammad Hashim Gazdar; Muhammad Mujtaba Muhammad Mustafa Kazi; Sardar Nabibakhsh Illahibakhsh Khan Bhutto; Nur Muhammad Khan Sher Muhammad Khan Bijarani; Nur Muhammad Shah Muradali Shah Partabrai Khaisukndas; Rahimbakhsh Allahbakshsh Khan Soomro; Sardar Khan Dilmurad Khan Khoso; Sirumal Kirpaldas; Sirumal Vishindas Tahilram Tekchand; Togachi Mir Mahomed Nohari.

The United Provinces

THE United Provinces lies in practically the centre of Upper India. It is bounded on the north by Tibet, on the north-east by Nepal, on the east and south-east by Bihar, on the south by two of the Chota-Nagpur States of the Central India Group and the Saugor district of the Central Provinces, and on the west by the States of Gwalior, Dholpur, Bharatpur, Sirmoor, and Jubbal, and by the provinces of Delhi and East Punjab. Its total area amounts to 106,247 square miles, to which may be added the area of the three Indian States of Rampur, Tehri-Garhwal and Benares with a total area of 6,276 square miles, giving a total of 112,523 square miles. The total population according to the 1941 census is 56,346,456.

The Province, originally termed the North-Western Provinces and so amalgamated in 1877, was named the United Provinces of Agra and Oudh in 1902 and received its present designation on April 1, 1937. It includes four distinct tracts of country: portions of the Himalayas, including the Kumaon division which consists of three hill districts, two of which are entirely in the hills and one partly in the submontane belt; the sub-Himalayan tract; the great Gangetic plain; and portions of the hill systems of Central India including Bundelkhand. The Gangetic plain is protected by an extensive canal system, which though somewhat liable to run short of water in extremely dry years, of great benefit in all ordinary years and years of limited drought.

The first two of these tracts are infertile and support a very sparse population and the Central Indian plateau is almost equally infertile, though better populated. The soil of the Gangetic plain, however, possesses an extreme fertility and here the density of population varies from 542 persons per square mile in the west to 555 in the centre and 753 in the east, which gives the Province as a whole a greater population pressure on the soil than any other part of the sub-continent save Delhi and the Bengal area. In the south there are low rocky hills, broken spurs of the Vindhya mountains, covered with stunted trees and jungle, and in the north the lower slopes of the Himalayas, clothed with dense forest, affording excellent big and small game shooting, and rising beyond in a tangled mass of ridges, ever higher and higher, until it reaches the line of the eternal snows, but the greater part of the province consists of level plain, teeming with highly-cultivated fields and watered by three rivers—the Ganga, Jumna and Gogra.

ADMINISTRATION

The Province was until the close of 1920 administered by a Lieutenant-Governor chosen from the ranks of the Indian Civil Service. Under the Reform scheme the Province was raised to the status of a Governor's province, the Governor being assisted by two members of the Executive Council in charge of the Reserved Subjects and two Ministers in charge of the Transferred Subjects. With effect from April 1, 1937, provincial autonomy was inaugurated in this Province and a Cabinet of 6 Ministers to assist the Governor was formed, under the G. I. Act of 1935. This Ministry remained in office from July 17, 1937 to November 3, 1939. But after the outbreak of the European War it resigned and the powers of administration were assumed by the Governor under section 93 of the G. I. Act of 1935. He appointed 3 Advisors on November 4, 1939, and a fourth one on September 14, 1943, to assist him in the administration of the Province.



H.E. Mrs. Sarojini Naidu

The medium for the transaction of public business is the Secretariat, the staff of which consists of Secretaries (including Chief Secretary), and Deputy Secretaries including one Deputy Legal Remembrancer who is *ex-Officio* Deputy Secretary in the Judicial Department. There are also Under-Secretaries including one Assistant Deputy Legal Remembrancer who is *ex-Officio* Under-Secretary in the Judicial Department and one Secretary, Council of Physical Culture who is *ex-Officio* Under-Secretary in the Education Department and Assistant Secretaries.

The Board of Revenue is the highest court of appeal in revenue and rent cases lying within its jurisdiction, being the chief revenue authority in the province. There are forty-nine districts, thirty-seven in Agra and twelve in Oudh, average area 2,213 square miles and average population a million. Each district in charge of a District Officer, termed a Magistrate and Collector in Agra, a Deputy Commissioner in Oudh and Kumaon and Superintendent in Dehra Dun district. The districts are grouped together in divisions. Each division is under a Commissioner, except the Kumaon division, the charge of which is held by the Deputy Commissioner, Naini Tal, in addition to his duties.

There are ten divisions having an average area of nearly 10,600 square miles and an average population of nearly 5 millions. The districts are sub-divided into *Tahsils*, with an average area of 518 square miles and an average population of 236,000. Each *Tahsil* is in charge of a *Tahsildar*, who is responsible for the collection of revenue, and also exercises judicial powers. *Tahsils* are divided into *parganas* which are units of importance in the settlement of land revenue. Subordinate to the *Tahsildars* are *naib tahsildars* and *kanungos*. Ordinarily there are three *kanungos* and one *naib tahsildar* to a *tahsil*. The *Kanungos* supervise the work of the *patwaris*, or village accountants, check their papers and make such inquiries as may be entrusted to them by superior Officers.

For judical purposes (revenue and criminal), the District Officer assigns a sub-division, consisting of one or more *tahsils*, as the case may be to each of his subordinates, who may be covenanted civilians (Joint and Assistant Magistrates and Assistant Collectors) or members of the Provincial Service (Deputy Collectors and Magistrates).

MANUFACTURES

The province is not rich in minerals. Iron and copper ore are found in the Himalayan districts. There were mines of importance there formerly, but owing to high cost of production and inaccessibility, most of them have been closed. Coal fields exist in the district of Mirzapur in Tehsil Sanghrauli on the border of Rewa State. Gold is found in minute quantities by washing the sands in some of the rivers in the hills. Limestone is found in the Himalayas and in the districts of Etawah and Banda, and stone is largely quarried in the Mirzapur district. Other kinds of stone quarried, though in small quantities, are kankar and slates.

Cottage and artistic industries, however, abound in U.P. Cotton is ginned and spun throughout the Western districts of the province as a home industry: and weaving by means of handlooms is carried on in most districts. Chief handloom weaving centres are Tanda (Fyzabad), Benares, Mau (Azamgarh), Mubarakpur, (Azamgarh), Mau Aima (Allahabad), Gorakhpur, Maghar (Basti), Khalilabad (Basti), Bará Banki, Sandila (Hardoi), Etawah, Amroha (Moradabad), Meerut, Sikandrabad (Bulandshahr). Deoband (Saharanpur), Sikandrarao (Aligarh), and Dhampur (Bijnor). Kanpur is the chief centre for cotton spinning and weaving mills. According to the latest figures available, 2,650 persons are employed in cotton ginning, cleaning and pressing factories and 56,010 in spinning and weaving mills. The number of actual handloom weavers is about 250,000. Natural and artificial silk weaving used to be confined to Benares (where the famous 'kimkhab' brocade is made), Sandila, Mau (Azamgarh) and Bisalpur (Pilibhit). Embroidery work is done at Lucknow, where the noted 'Chikan' work of cotton on muslins is produced, and in Benares where gold and silver work is done on silk, velvet, crepe and georgette. Benares uses local gold thread for embroidery work and 'Kimkhab' weaving. Gorakhpur has lately specialised in the manufacture of crepe and turkish towels.

Glass Industry.—The glass industry is important at Bahjoi, Balawali, Sasni, Hathras, Haranpur, Shikohabad, Makhanpur Naini (Allahabad), Ghaziabad and Benares State. Firozabad is the chief centre of manufacturing glass bangles in India.

There are in all about forty hollow-ware factories, and eighty glass bangle factories in the Province. Out of the forty hollow-ware factories nine are large scale factories and the others are comparatively small. The total value of the goods produced in these hollow-ware factories is estimated at 15,000 tons per year valuing at 1·2 crores of Rupees per year. The eighty bangle factories at Firozabad produce about 9,000 tons of bangles per year, valuing at at Rs. 2·7 crores per year.

Besides, cottage small phial industry exists in the District of Bijnor. There are about 120 cottage workshops having a total production amounting to rupees 15 lacs per year. Recently the glass bead industry has been developed in the Province due to the efforts of the Glass Technology Section, Department of Industries, U.P., and at present about 50 cottage workshops are engaged in this trade producing goods to the total value of 2·3 lacs per year. The total labour engaged in the glass industry and cottage industry is estimated at 50,000 to 55,000.

Moradabad is noted for its lacquered brass work, Benares for brassware engraving and repousse; Farrukhabad, Pilkhawa (in Meerut district) and Muttra for their calico prints and Agra for its durries and marble and alabaster articles; porcelain wares are now made at Kurja and glazed pottery at Chunar and Meerut; Clay figures of men and fruits at Lucknow; woollen carpets at Mirzapur and Bhadohi (Benares State) and cotton carpets at Shahjahanpur and leather goods in Kanpur, Agra, Lucknow and Meerut.

The making of brass utensils at Mirzapur Farrukhabad, Hathras, Moradabad, Shamli (Muzaffarnagar), Benares, Bahraich and Oel (District Kheri), the carving and inlay work of Nagina and Saharanpur; the art silk industry of Tanda (Fyzabad), the lock and brass fittings industry at Aligarh, Cutlery at Kaimganj and Hathras, the copper utensil industry of Almora, the durries of Khairabad (Sitapur), Kanpur, Agra and Bareilly, the pottery at Nizamabad (District Azamgarh) and the ivory work of Lucknow and manufacture of scissors at Meerut also deserve mention.

As a result of World War II blanket making has developed on a large scale in the districts of Muzaffarnagar, Meerut, Najibabad (Bijnor), Mirzapur and Bhadohi (Benares State) and the manufacture of locks, safety and split pins and other miscellaneous iron articles at Aligarh. The weaving of tweeds has developed as a new industry in Almora district.

Trade Centres.—Important trade centres are Kanpur, Allahabad, Mirzapur, Benares, Lucknow, Meerut, Aligarh, Hathras, Mathura, Agra, Farrukhabad, Moradabad, Chandausi, Bareilly, Saharanpur, Muzaffarnagar, Ghaziabad, Khurja, Gorakhpur, Ghazipur, Pilibhit, Shahjahanpur and Hapur.

Kanpur is the chief industrial centre. It has tanneries, leather goods factories, soap factories, oil mills, cotton, woollen and jute mills, engineering workshops, aluminium utensil factories,

hosiery factories, plastic products, starch factories, glue refinery, chemical and pharmaceutical works, ordnance factories and other mills. The Kanpur Woollen Mills is the largest in India. Lucknow possesses an important paper-mill and also a cotton mill. There are cotton, ginning and pressing factories at Aligarh, Meerut, and Bareilly and cotton mills at Agra, Hathras, Benares, Kanpur, Moradabad and Aligarh. There are now 73 Sugar Factories in the province producing sugar by vacuum process. They are situated in Gorakhpur, Rohilkhand, Meerut, Lucknow, Fyzabad, Benares and Allahabad divisions. A certain amount of sugar is also made by the open pan process and a large quantity of gur is made in the villages. Excellent furniture is made at Bareilly mostly on cottage lines.

Sodium Silicate is manufactured at Firozabad, Kanpur, Benares and Allahabad. Electroplating is carried on at Moradabad, Aligarh and Kanpur. Anodisation is done at Benares. Hydrogen peroxide is manufactured at Kanpur. Super Phosphate is made at Aligarh, glue at Kanpur and Hapur, and refined glue and gelatine at Kanpur. Casein is made at Aligarh, Dayalbagh and Firozabad. Starch is made at Kanpur, Rampur and Nawabganj. Methylated and rectified and potable spirits are made at Kanpur, Unao, Rosa, Lucknow, Saharanpur, Meerut, Mansurpur, Nawabganj (Gonda), Daurala and Rampur.

There is a paper factory, a strawboard factory and a cigarette factory at Saharanpur. *Attars* and perfumes are made at Lucknow, Kanauj, Jaunpur and Naini. Dayalbagh (Agra) has a tannery, a leather goods factory, a textile factory, a hosiery factory, a dairy, a chemical and soap factory and a factory for manufacturing doors, bolts, lanterns, electrical goods, fountain-pens, chemical balances, etc. Fountain-pens are made in Kanpur, Lucknow and Benares, Shoe laces and elastics are made in Kanpur. Scientific balances and instruments are made at Benares and Dayalbagh (Agra).

There is a plywood factory at Sitapur, a strawboard factory at Meerut, a bonemeal at Magarwara (Unao) and at Hapur (Meerut), a turpentine and rosin factory, a match factory, a catechu factory and a bobbin factory at Clutterbuckganj (Bareilly); brushes are manufactured in Kanpur, Agra and Meerut; cardboard boxes at Kanpur and Lucknow. Acids are manufactured at Agra, Ghaziabad and Kanpur and power-alcohol at Meerut. Chemical and pharmaceutical works are at Kanpur, Amausi (Lucknow) and Benares. Vegetable ghee is manufactured at Kanpur, Begamabad and Ghaziabad (District Meerut).

Oils.—There are four factories manufacturing vegetable ghee with a capacity of about 150 tons per day. The oil crushing industry is well developed in the Province since U. P. produces 2 crore maunds of oil-seeds. There are over 140 big oil mills registered under factories Acts and over 200 small oil mills working with power. Refining of oils has been started by four big oil mills. Oil crushing by bullock driven wooden ghanis is also well developed in the villages. There are about 20 big soap factories besides a large number of small manufacturers. Paints and varnishes industry is beginning to be developed with the coming into existence of 3 paints and varnishes factories. Boiled oil is already being manufactured by some firms. Allied industries like some textile auxiliaries and toilets are being manufactured at some places. Tin canisters are made at Agra and Ghazibad. There are 65 sugar factories, the total sugar produced being 525,800 tons and molasses 171,800.

AGRICULTURE

The chief industry is agriculture, which is the principal source of livelihood of a little over 70 per cent of the population and a subsidiary source of income to a further 8 per cent. The soils of the province fall into three groups; the valley soils of the Himalayas, the main alluvium and the Central Indian alluvium. The chief characteristic soil or the Central Indian alluvium is the black soil, with a lighter variant, though here also there are light loams and gravel. The Himalayan soils are of local origin and vary with the nature of the rock from which they have been formed, whilst the main alluvium soils are sand, clay and loam, the loam being naturally the most productive. The soil generally yields excellent crops of rice, millet, maize, linseed, mustard, cotton, wheat, barley, gram, sugarcane, pulses and potatoes, rice being grown mostly in low-lying heavy clays, and potatoes on the higher valleys.

The greater part of the Province is highly cultivated. The rainfall varies from 50 to 70 inches in the hills to 40 to 50 inches in the Benares and Gorakhpur Divisions, while the Agra Division receives only about 25 to 30 inches annually. Drought seriously affected Bundelkhand and the Agra Divisions in the past; betterd rainage and irrigation facilities have effected considerable improvements. In the latter area, however, shortage of water in the canals and the general lowering of the water level still continue to react against full agricultural returns. Steps are being taken to increase the amount of water passing down the canals.

The price of rice rose more or less steadily till September, 1946, when the maximum price was attained, followed by slight decline. The maximum price of wheat was attained during February and declined thereafter till May, gradually to rise again attaining the maximum of the year in December. As regards barley and gram, the prices showed slight variations in the early part of the year, but steadily rose from May when barley attained its maximum in October with again a steady fall, but gram continued to rise to attain its maximum in December. The price of *arhardal* rose more or less steadily throughout the year and attained the maximum in December.

There was some decrease in the area under wheat as compared with the corresponding figures for the preceding year, the average outturn being more or less the same. Although there was a slight increase in the area under rice there was some slight decrease in the total outturn and thus the average outturn was slightly less. There was a decrease in the area under cotton but the area under sugar-cane increased slightly as compared with the corresponding figures for the previous year. The average outturn for cotton and sugar-cane decreased slightly.

Land is held on Zamindari tenure in Agra and Taluqdari tenure in Oudh. The principal land owners in Oudh are the Taluqdars, some of whom own very large estates. The area held in Taluqdari tenure amounts to 54 per cent of the total area in Oudh.

The Provincial Legislative Assembly passed on August 8, 1946 a resolution accepting the principle of abolition of Zamindari system in the Province and requested Government to appoint a Committee. In pursuance of this resolution, Government appointed a Committee in October 1946, to prepare a scheme for abolition of zamindari system in the Province. Though the report of the Committee is still awaited it is gathered that the Committee has arrived at certain tentative conclusions in regard to the amount of compensation to be paid.

THE PEOPLE

The population is mainly Hindu. The 1941 census has disclosed slight variations in the communal percentages. The Hindus were 83·27 per cent as against 84·4% in 1931, the Muslims numbering 15·28% as against 15% at the previous census. The total of all other communities was 1·44% comprising of Indian Christians, Anglo-Indians, other Christians, Sikhs, Jains, Parsees, Buddhists, Jews, Tribes other than scheduled castes and of persons who declared themselves as belonging to no caste or religion. Among the Hindus are included scheduled castes, caste Hindus and Arya Samajists.

The three main physical types are Dravidian, Aryan and Mongoloid, the latter being confined to the Himalayan and sub-Himalayan districts and the former to South Mirzapur and Bundelkhand, whilst the high caste Aryans are frequent in the western district of the Province. Most of the people, however, show a mixed Arya-Dravidian origin.

The spoken language of the Province is Hindustani, written in Nagri and Persian characters. There are distinct literatures in Hindi and Urdu languages respectively and a certain proportion of residents in urban areas, irrespective of their religion, speak and write in Urdu which has a close relationship with Persian and Arabic. But Hindi is the language of the vast majority of the people and Government have made Hindi written in the Devanagari script the State language of the Province.

LOCAL SELF-GOVERNMENT

The main units of local self-government are the district and municipal boards, which have non-official Chairmen. Most of the municipal boards having an annual income of Rs. 50,000 or over have executive officers to whom certain administrative powers are reserved. The administrative functions of the municipal and district boards are performed by the Chairman and Executive Officer or the Secretary, but the boards themselves are directly responsible for most of the administration. The constitution of Municipal and District boards is now being liberalised, with direct election of chairman, widened franchise and joint electorate with reservation of seats for minorities as the main features of the reform.

The district boards obtain 50.68 per cent. of their income from Government grants. The other chief sources of income are the local rate levied from the land owners and the tax on circumstances and property imposed by some of the boards. The United Provinces Motor Vehicles Taxation Act came into force with effect from January 1st, 1936. The tax realised under this Act is also utilized in the payment of grants to local authorities for purposes of expenditure on the construction, maintenance and improvement of roads. The chief source of municipal income is the octroi or terminal tax and toll which is an octroi in modified form. Local opinion is strongly in favour of indirect as opposed to direct taxation for municipal purposes.

JUSTICE

Justice is administered by the High Court of Judicature at Allahabad in the portion of the province known as Agra and by the Chief Court sitting at Lucknow in the portion of the province known as Oudh. They are the final appellate authorities in both criminal and civil cases. The former consists of a Chief Justice and ten permanents, and additional Judges, one of whom is a European and the latter consists of a Chief Judge and three permanent and two additional Judges, one of whom is an Anglo-Indian. There are 30 posts of district and sessions judges of which nine are held by officers not belonging to the Indian Civil Service as they have been listed to the provincial service and the bar. Usually they exercise appellate jurisdiction in civil and criminal cases and in certain conditions in cases under the United Provinces Tenancy Act. The High Court has extraordinary original jurisdiction. The Chief Court's original jurisdiction was abolished in 1939 by an Act of the Provincial Legislature.

District Officers and their assistants including tahsildars, preside in criminal courts as magistrates and as collectors and assistant collectors, in rent and revenue courts and dispose of a good deal of the work. Honorary magistrates and honorary assistant collectors who function in all the districts also deal with criminal, revenue and rent cases. Stipendiary Revenue officers have been appointed temporarily all over the Province to assist in the disposal of rent and revenue case work, and judicial officers have been similarly appointed temporarily to assist in the disposal of criminal cases. Kumaon was brought under the Civil Jurisdiction of the High Court in 1926. The deputy and assistant commissioners exercise inferior civil powers in this division which has no separate civil courts. In the rest of the province there are civil judges, Judges of small cause courts and Munsiffs who dispose of a large number of civil suits. The jurisdiction of a civil judge extends to all original suits without pecuniary limit and a Munsiff can hear cases ordinarily of a value not exceeding Rs. 2,000 and if specially empowered up to Rs. 5,000.

Some civil judges in the Province have been invested with powers of Assistant Sessions judge to try Sessions cases of lesser importance and some munsiffs have been invested with magisterial powers for trying criminal cases.

Appeals from munsiffs always lie to the district judge while those from the civil judges go to the High Court or the Chief Court, except in cases of a value of Rs. 5,000 or less which are heard by the district judge. Small cause court judges, ordinarily try suits to the value of Rs. 500 but the Senior Judges of Small Cause are empowered to try suits of a civil nature of which the value does not exceed Rs. 1,000. There are also honorary munsiffs whose jurisdiction is limited to Rs. 200, and village munsiffs whose jurisdiction is fixed at Rs. 20.

PUBLIC WORKS DEPARTMENT

The Public Works Department (Buildings Roads and Irrigation Branches), is under the Hon'ble Minister for Public Works and Irrigation and the post of Secretary to Government is held by a member of the Indian Civil Service.

The Buildings and Roads Branch is administered by three Chief Engineers, two on the Administrative side and one for Post-War Planning. The Province is divided into 7 circles and 27 divisions. Each circle is in the charge of a Superintending Engineer and each division is under an Executive Engineer. This Branch of P.W.D. is entrusted with the maintenance of all Provincial metalled and unmetalled roads and the construction of all departmental buildings (except those of Irrigation Branch) each costing more than Rs. 7,500.

The Buildings and Roads Branch has increased to more than thrice its size since the outbreak of the war and has now undertaken an extensive programme of Road and Building construction.

COMMUNICATIONS

The road construction scheme is proposed to be spread over 10 years in two phases of 3 and 7 years respectively and would cost nearly 69 crores. Roads have been classified into 4 classes. (1) National Highways—These would traverse several Provinces or States and would be of National importance. (2) Provincial Highways—These would be main roads running along and across the length of the Province, (3) Major District Roads—These would mainly serve the needs of each district and are being taken over from District Boards for reconstruction, (4) Village and other District Roads—These would serve the villages and will put each village within reach of at least 5 to 6 miles of a pucca road. On the completion of first phase of the programme (1946-49) which is estimated to cost 15.5 crores the province will have 9,631 miles of metalled roads 5,611 miles of unmetalled roads and 508 miles of cement concrete tracks. On completion of the second phase of the programme, the Province will have 15,160 miles of metalled roads, 19,000 miles of unmetalled roads and 3,000 miles of cement concrete tracks.

BUILDINGS

In the Post War Building Scheme 410 buildings costing about 3 crores are proposed to be constructed throughout the Province during 1946-47. The important buildings to be taken up for construction are mostly of Medical, Animal Husbandry, Agricultural and Educational Departments, *i.e.* (1) new Medical College at Agra, (2) extension of Medical College at Lucknow (3) Veterinary College at Fyzabad, (4) Nurses Training Centre at Kanpur (5) Colonization Scheme, (6) Town and Village Housing Schemes, (7) Residences for councillors at Lucknow, (8) Construction of certain Head of Departments' offices at Lucknow.

The Buildings and Roads Branch has recently started Research and Town Planning sections. Research section deals with Soil Stabilization and researches in Cement concrete and low cost houses. Town planning section deals with the development and expansion of the urban areas in the Province.

IRRIGATION BRANCH

The Irrigation branch is administered by three Chief Engineers. The province is divided into circles and divisions.

The Irrigation Branch administers the various Irrigation works in the province as well as the Ganges Canal Hydro-Electric Grid, the Tube-well irrigation scheme, and the Fyzabad Electricity and Gogra Pumping Schemes. The Ganges, the Eastern Jumna, and the Agra Canals are administered by the Chief Engineer (West) while the Sarda Canal, and Gogra pumping schemes, the Bundelkhand Canals and the Tube-wells are administered by the Chief Engineer (East). The Project Circle, Irrigation Works, the Sarda Power House Construction Circle, the Hydro-circle, the Ganges Canal Hydro-Electric Grid and the Fyzabad Electricity scheme are under the administration of the Chief Engineer (Development).

The Canals and Tube-wells, administered by the Irrigation Branch in the United Provinces irrigate over 59 lakhs acres annually.

The Sarda Canal, was opened in 1928 for introducing irrigation into Oudh. In November 1941 an extension, which includes 350 miles of new irrigating channels, was formally opened, making the total length of the main canal and branches, including distributaries, drainage cuts and escapes at on the system, 7,286 miles. The area irrigated is over 12 lakhs of acres annually including over 2 lakhs acres sugar-cane.

Tha Ganges Canal—Upper and Lower. The head works of the former are situated at Hardwar in the Saharanpur district and of the latter at Narora in the Bulandshahr district. The Upper Ganges Canal came into operation in the year 1855-56, and its total mileage of channels is 5,958 miles. The area irrigated annually is about 14¼ lakhs of acres. The Lower Ganges Canal was opened in 1879-80 and the total mileage of its channels is 5,124 miles. This system irrigates nearly 12 lakhs of acres.

In connection with the Grow More Food Campaign a number of channels have been remodelled and improved, with a view to increasing their water supplies and thereby enabling them to irrigate larger areas. Projects for the construction of about 800 miles of new channels on the Sarda Canal and about 400 miles on the Upper Ganges, Lower Ganges, Eastern Jumna, Betwa, Dhasan and Gogra Canals, have been prepared. Of these new channels approximately three-fourths have been completed and opened for irrigation. The additional yield of food grains on this account will be about 75,000 tons per annum.

The Ganges Canal Hydro-Electric Grid supplies power for domestic, industrial and agricultural purposes to 14 districts in the west of the province, and to Shahdara in Delhi province. Seven of the ten available falls have been harnessed for generating electric energy and a stand-by steam power station has been constructed at Chandausi and Harduaganj of 9,000 and 8,000 K.W's. respectively, capacity, making a total of 35,900 K.W's. available on the Grid. Besides supplying energy for lights and fans and minor industries to about 93 towns, the Grid provides power for irrigation pumping from rivers, tube-wells and open wells. Another Hydro-power station at Mohammadpur designed to generate about 9,000 K.W's. is at present under construction. Additional boilers for Harduaganj steam station have also been obtained which, when installed, will raise the generating capacity of the station to 15,000 K.W's.

A large project for the construction of Hydro-power station at Pathri which would give an additional output of 5,100 K.W's. to the Ganga Grid is under consideration.

A large project for the extension of the transmission system of the Grid, which will enable the power generated at Mohammadpur power station to be utilised is under consideration. This supply of cheap power from over 2,000 sub-stations in the Grid is already having an important bearing on the economic disposal of crops and the development of industries in the urban and rural areas of the Grid zone.

The steam power station at Sohwal has a capacity of 2,500 Kilowatts. It supplies energy to the towns of Fyzabad and Ajudhia and for pumping 180 cusecs of water from the Gogra at Raunahi into a canal system 129 miles long, designed to irrigate 43,000 acres. To increase the generating capacity at Sohwal, two 1,000 K.W's. generating sets have been ordered.

The United Provinces Government have various irrigation and power projects under consideration for the post-war period. Brief details of these projects on which investigations have advanced sufficiently are given below :—

Sarda Canal Hydro-Electric Scheme : It is proposed to reconstruct 12½ miles of the Sarda Main Canal to combine the present falls on the existing channels into one drop of 59 ft. for generating 20,000 K.W's. minimum at one power station with an installed capacity of 41,000 K.W's. The station would, in the first instance, be linked with the Ganges Canal Hydro-thermal system in which it will inject 10,000 K.W's. Transmission lines will also be run into Pilibhit, Bareilly, Naini Tal, Shahjahanpur, Kheri, Sitapur, Lucknow, Barabanki, Unnao and Rai Bareli Districts where energy will be made available for domestic, agricultural and industrial purposes. Investigations with regard to this scheme have been completed. 40 per cent of the work has been completed with excavation of power channel. It is anticipated that power from this power station will be available for consumption by 1950-51. The total cost of the generation part of the scheme will be Rs. 289.14 lacs and that of transmission system Rs. 2,66,81,000. Hundreds of miles of transmission route have been surveyed.

Nayar Dam Project : It is proposed to impound 1.4 million acre feet gross in the valley of the Nayar, a tributary of the Ganges 50 miles above Hardwar, by building a dam 600 ft high across the gorge in the river near village Marora in Garhwal district. This Dam will be almost equal in size and height to the Boulder Dam in the U.S.A. so far the highest Dam in the world. Another small Dam 190 ft. high will also be constructed at Byasghat where the Nayar meets the river Ganga. The stored flood waters will irrigate a new area of 2,38,000 acres and will improve irrigation service to 1,068 000 acres of land, at present irrigated by Upper Ganges Canal system. The gross storage capacity of the lake, which will be formed by this Dam, will be 45,000 million Cubic Feet. It is estimated that approximately 23,200 additional maund of food grains, 150.000 additional maunds of sugar and 60.000 additional maunds of Cotton will be produced. Hydro-electric plant proposed to be installed on the project will have a capacity of 200,000 K.W's. at Marora Dam and 320.000 K.W's. at Bya ghat. The scheme will generate 908,700.000 K.W.H. annually at a cost of less than 2 pies per unit. Extensive exploration of the Dam foundations are now complete and the project is ready. The scheme is estimated to cost Rs. 24·0 crores out of which Rs. 16·70 crores will be debited to power generation and Rs. 7·3 crores to irrigation. The project will take some seven years to complete.

Rihand Dam Project : It is proposed to impound 9 million acre feet gross in the Rihand basin in Singhrauli Pargana, Mirzapur district by a 280 feet high, 3.000 feet long dam across a gorge near Pipri village. Power will be generated by the artificial head created by the storage dam at the power station situated immediately below it. The power of the installed plant is expected to be 3,00,000 horse power. The United Provinces Government are carrying on the investigation with regard to this site pending formation of the Sone Valley Corporation, the formation of which is under consideration at present. This scheme will also make the river Sone navigable at its confluence with the Rihand river and the Rihand river up to the dam site. The dam will control floods in the Rihand and the Sone, and provide a huge lake for breeding fish for food. The project estimate is ready and work to begin with shortly.

In order to meet the growing demand for irrigation facilities in the Eastern Districts, Government proposed to construct canals from Rapti and Kuana rivers which would serve Domariaganj, Basi, Basti, Khalilabad and the tehsils of Basti District and Bangaon Tehsil of Gorakhpur district, and from the Rohia and Danda rivers which will serve the areas bounded by Douri Nadi in the east, Rohin Nadi in the west, Lakimpur in the south, and Rohin Nadi and Railway line from Nautanwan to Nai Ket respectively. Nine pumps have also been purchased for installation at various places in Amgarh District and a pumping scheme is under investigation from Gokta river near Sanawa which will serve Barabanki

Fyzabad, Sultanpur, Partabgarh, Jaunpur and Benares. The channels on the existing Gogra canal system are also being extended by 50 miles. It is also proposed to construct 100 tube-wells in the Basti and Gorakhpur districts, which would irrigate 24,000 acres of Rabi, 12,000 acres of sugar-cane and 6,000 acres of rice giving and additional yield of 210,000 maunds of food grains. The project estimate for Gorakhpur 100 tube-wells and Danda canal have since been sanctioned by Government. The work on the former is to begin shortly in right earnest while the construction of the latter is nearing completion.

The following schemes are under investigation by the Development administration :—

Ramganga Dam Scheme : It is proposed to store 96,000 million cubic feet of the flood waters in the valley of the Ramganga by building an earth and rock fill Dam about 340 feet high above the river bed across a gorge about 2 miles up stream from the Kalagarh Forest Rest House in the Garhwal district. The Dam will be one of the highest earth and rocks dams in the world.

During the dry weather the water stored in the lake formed by the Dam, will be released to flow down the river to Bijnor District 15 miles down stream. Here it will be diverted by a river into 50 miles long feeder across the Doab into the Ganga River near Garmukhteshwar. This will supplement the inadequate supplies at present available to Lower Ganges canal. Approximately 800,000 acres of crop will be irrigated.

60,000 K.W's. power will also be available from the scheme during the irrigation period. The scheme is expected to cost Rs. 14.0 Crores. New irrigation canals and extensions of existing channels will cost a further Rs. 8.0 Crores. The project is under detailed investigation.

Kothri Dun Dam : This will impound 7,800 million cubic feet of water and out of this 4,000 million cubic feet will be available for irrigation. It is a dual purpose scheme and will generate 4,000 K.W's. peak power as well. The cost is estimated to be approximately Rs. 3·0 crores. The project is under preparation.

Yamuna Hydro-Electric Scheme : This scheme will utilize for the generation of power, the total drop of approximately 750 ft. available in Rivers, Tons and Yamuna, from the site of the proposed Kishan Dam about 14 miles upstream of the confluence of River Tons with Yamuna, to Proute Sahib on the river Yamuna.

The development will be carried out in two stages and will comprise the construction of 7 miles of limits, 14 miles of concrete lined open channel, two weirs across the River Tons, one weir across River Yamuna at Kalsi bridge and four hydro-electric power stations. This scheme will make available 48 million units (K.W.H.). The two stages of the scheme are expected to cost Rs. 6.49 crores and 7.63 crores respectively and the corresponding power plant installations will be 96,000 K.W's. and 60,000 K.W's. respectively.

Pindar Hydro-Electric Development : The possibility of developing hydro-electric power from Pindar River, a tributary of the Ganga, which it meets at Karanprayag, District Garhwal, is under investigation. Preliminary reconnaissance indicates that by the construction of two Dams 250 ft. and 500 ft. high, 1¼ miles and 10½ miles respectively upstream from Karanprayag, 40,000 K.W's. of firm power and 50,000 K.W's. of seasonal power could be generated. If the construction of these two Dams are found feasible on detailed investigation, it will supply cheap power for the development of Upper Garhwal, Almora and Naini Tal Districts. Preliminary investigations are in progress.

Besides the Eastern districts it is proposed to construct two Dams one on Shahzad river near Lalitpur in Jhansi District and the other on Karamnasa river near Silhot.

These dams are as below :—

Lalitpur Dam : This will give approximately 3,000 million Cubic feet of water to the Betwa Canal System. It is expected that the Dam will be completed during 1948 Monsoon and will cost Rs. 27,30,000. The work on the Dam has already started. It will irrigate 30,000 additional acres of Rabi Crop.

Nagwa Dam : Work on this scheme, which will cost Rs. 32½ lakhs is in progress. The Dam will augment water-supplies in the Garai and Ghagar Canal Systems where nice irrigation is to be developed.

The following two projects are also under consideration :—

Saprar Dam : Government have under consideration a project for the construction of an earthen Dam on Saprar River with a gross capacity of 2,800 million cubic feet at Man Ranipur in Jhansi District. The estimated cost is Rs. 41,05,492. The schemes will help in irrigating 24,800 acres which may produce 6,200 tons additional food annually.

Piprai Dam : The project provides for the construction of earthen Dam 100 ft. high on Narayan River in the border of U.P. and C.P. at the Southern tip of Jhansi District. The storage is 11,600 cu. ft. and estimated cost is Rs. 185, 92,000. New irrigating channels 460 miles in length will be constructed in Jhansi Hamirpur and Jelaun Districts. Irrigated area is 77,000 acres in Rabi and 39,000 acres in Kharif. The scheme will help to produce 30,000 tons additional food grains annually.

A project for Power Development on the Betwa river has been prepared and is under the consideration of Government. It provides in the first stage for a power house at Dhukwan with an installed capacity of 10,000 K.W's. It will make electricity available at Orai, Kalpi, Jhansi and a few other towns in Jhansi and Jalaun Districts.

The Ganges Valley State Tube-well Scheme which originally comprised 1,656 tube-wells is now being extended by the construction of 600 more additional tube-wells to help the Grow More Food Campaign. These tube-wells are spread over the districts of Moradabad, Bijnor, Budaun, Muzaffarnagar, Saharanpur, Meerut, Bulandshahr, Aligarh, and parts of Etah and Bareilly introducing irrigation on the volumetric system over approximately an area of 19,80,858 acres, under the ultimate development scheme, hitherto without any source of irrigation.

The Irrigation Branch also maintains a Research Section which deals with problems of flowing water, silting troubles, scouring action below pucca works channel losses, model experiments of existing and proposed Canal works, etc. The Research organisation is being expanded and Government have sanctioned the establishment of a Research Institute at Roorkee under a Director.

POLICE

The Police Force is administered by an Inspector-General, with six Deputy Inspectors-General, including one Deputy Inspector-General now known as D. I. G., Headquarters and Railways, and two temporary Officers and two Assistants to I. G. of Police, 48 Superintendents including one S. P., Railways and additional Superintendent of Police, 41 Assistant Superintendents and 88 Deputy Superintendents. There is a Police Training College at Moradabad under a Superintendent of Police as Principal. There is a C. I. D. forming a separate department with a Deputy Inspector-General (temporary) in charge and three Superintendents of Police. In place of the Military Police, there is now a Provincial Armed Constabulary which has been reorganised and expanded to constitute 11 battalions. It is under the command of an Assistant Inspector-General. 10 Commandants of the rank of Superintendent of Police, and 21 Assistant Commandants of the rank of Deputy Superintendent of Police. A Superintendent of Police is now in charge of the Anti-Corruption Department and is assisted by two Superintendents of Police and six Deputy Superintendents of Police. The administration of the Jail Department is in charge of an Inspector-General of Prisons, who is a retired member of the Indian Medical Service.

EDUCATION

Education is maintained in part by the State and partly by means of grants-in-aid. There are five Universities, the four residential Universities of Allahabad, Lucknow, Aligarh (Muslim) and Benares (Hindu) and the affiliating University of Agra. The last named was established in 1927 besides eleven affiliated colleges situated outside the United Provinces. Agra University consists of twelve colleges, some of which were formerly associated with the Allahabad University on its external side. These colleges are the Agra and St. John's Colleges at Agra, Christ Church, D.A.V. and Sanatan Dharma Colleges. Cawnpore; the Meerut College, Meerut; the Bareilly College, Bareilly; St. Andrew's College, Gorakhpur; The Balwant Rajput College, and the Agra Medical College, Agra; The Amar Singh K.E.M. Jat College, Lakhoti; and the Agricultural College, Cawnpore. There are Intermediate Colleges and Anglo-Hindustani high and middle schools which prepare boys for the High School and Intermediate Examinations conducted by the Board of High School and Intermediate Education, which prescribes courses for high school and intermediate education.

There are 49 Government High Schools for boys and 13 for girls and 8 Government Intermediate Colleges for boys and one for girls; the remainder are under private management and are aided by Government.

The Isabella Thoburn College and the Mahila Vidyalaya College at Lucknow, and the Women's College at Aligarh, impart University education to Indian girls. The Basant College for women at Benares, the Gokuldas Hindu Girls' Intermediate College, Moradabad, Balika Vidyalaya Intermediate College, Kanpur, Crosthwaite Girls' Intermediate College, Allahabad, Raghunath Girls' Intermediate College, Meerut, Prem Vidyalaya Girls' Intermediate College, Dayalbagh, Agra, Karamat Hussain Girls' Intermediate College, Lucknow, Mahadevi Kanya Pathshala, Dehra Dun, Kishori Raman Girls' Inter College, Muttra, Tika Ram Girls' Intermediate College, Aligarh, Seksaria Theosophical Girls' College, Sitapur and Dwarka Prasad Girls' Intermediate College, Allahabad, teach upto the Intermediate stage. In addition to these there are High Schools, English Middle and Hindustani Lower Middle Schools and Primary Schools throughout the Province for the education of Indian girls. The St. George Inter College, Mussoorie, The St. Joseph's College, Naini Tal, Sherwood Inter College, Naini Tal and La Martiniere College, Lucknow, are well known institutions for European and Anglo-Indian children in the province which teach upto the Intermediate stage. All Saints' Diocesan College, Naini Tal has a Teacher's Training Department for Women Teachers and also a Cambridge Higher Certificate Class. Besides these, there are many excellent educational institutions for European boys and girls both in the hills and plains which are attended by students from all over India. Government maintain Training Colleges for Male Teachers in Lucknow, Allahabad and Agra, and a Training Department is attached to the Lucknow Christian College. There are Training Departments attached to the Aligarh Muslim University and the Benares Hindu University. Government also maintains a Training College for Women Teachers at Allahabad. The Allahabad University has started a course leading to the M.Ed. degree but this is confined to those who have already obtained the diploma of L.T. or B.T. elsewhere.

Technical Education.—There is a Department of Mining and Metallurgy in the Benares Hindu University where four years' courses of training are provided, leading to degrees in the two subjects. This is the only University in India where training in these two industrial subjects is available. There is a Technical Institute known as the Harcourt Butler Technological Institute and a Central Textile Institute at Kanpur; a school of Arts and Crafts at Lucknow; three Government Technical Institutes at Lucknow, Gorakhpur and Jhansi respectively; one Polytechnic Institute at Srinagar (Garhwal); five carpentry schools, one known as Central Wood Working Institute, Bareilly; others are at Allahabad, Fyzabad, Naini Tal and Dehra Dun; six weaving schools, one known as Central Weaving Institute at Benares, others at Mau (Azamgarh), Kairabad (Sitapur), Amroha (Moradabad), Muzzaffarnagar, and Bulandshahr and one Metal Working School at Aligarh; two Leather Working Schools at Kanpur and Meerut, one Tanning School at Fatehpur; and one Brassware School at Benares known as Batuk Prasad Khatri Industrial Institute. There is also a Technical College and Leather Working School at Dayalbagh, Agra.

There is a Government Engineering College at Roorkee known as Thomason College and a school of Arts and Crafts in Lucknow. There are two Civil Engineering Schools at Lucknow. At the Benares Hindu University there is a five years' course in Electrical and Mechanical Engineering.

There is an Agricultural College at Kanpur and three Agricultural Schools at Gorakhpur, Bulandshahr and Ghazipur. There is also a Non-government Agricultural Institute at Allahabad and a Non-government Degree College in Agriculture at Agra and Lakhaoti (District Bulandshahr) and an Intermediate College in Agriculture at Baraut (District Meerut).

Law, Medical.—Education in Law is given at four residential Universities and at the Agra and Meerut Colleges and at the Dayanand Anglo-Vedic and Sanatan Dharma Colleges at Kanpur, and at the Bareilly College. Instruction in Commerce for the B. Com. degree of the Agra University is given in the Sanatan Dharma and the D.A.V. Colleges at Kanpur and in the St. John's College at Agra, Bareilly College, Bareilly, and Balwant Rajput College, Agra. A Commerce Department for the B.Com. degree is also attached to Allahabad, Benares and Lucknow Universities.

The King George's Medical College, Lucknow, which is managed by the Lucknow University prepares candidates for the M.B.B.S. and higher degrees of the Lucknow University. There is also a Government Medical College at Agra which is affiliated to the Agra University. There is also a college of Ayurveda attached to the Benares Hindu University and a college of Unani Tib attached to the Muslim University, Aligarh. The Board of Indian Medicine, U.P. established by Government in 1926, prescribes courses and holds examinations for Ayurvedic and Unani Colleges affiliated to it. The Takmillut-Tib College and the State aided Unani Medical College at Lucknow, the Unani Medical College at Allahabad, the Rishikul Ayurvedic College, Hardwar, the Bundelkhand Ayurvedic College, Jhansi, the Kanya Kubja Ayurvedic College and the Mool Chand Rastogi Trust Ayurvedic College, Lucknow, the Darshanand Ayurvedic College, Benares, and the Lalit Hari Ayurvedic College, Pilibhit, are affiliated to it.

MEDICAL

The Medical Department is in charge of an Inspector-General of Civil Hospitals who is assisted by two Deputy Inspectors-General of Civil Hospitals one of whom is specially in charge of women's hospitals and women doctors' services, and one personal assistant. The Deputy Inspector-General of Civil Hospitals (Women) is also the Secretary of the Provincial Committee of the Countess of Dufferin Fund. A Civil Surgeon is in charge and is responsible for the medical work of each district and in a few of the larger stations he has an assistant. In two stations (Ranikhet and Roorkee) Medical Officers in military employ hold collateral civil charge. There are about 100 Provincial Medical Service Officers in charge of important dispensaries and on the reserve list and a large number of Provincial Subordinate Medical Service Officers. Women's hospitals are in charge of P.M.S. (W.) or P.S.M.S. (W.) Officers. Government have also instituted Provincial Nursing Service and a Sisters' and Nurses' Service which are controlled by a Superintendent of Nursing Services who work under the I.G.C.H. These services have been established with a view to providing trained nurses in the ratio of one nurse to five beds in district headquarters hospitals.

A new 'P.M.S. II', which also has a gazetted status, has been created. This will eventually replace the P.S.M.S. Medical Licentiates with satisfactory war service are being appointed to it at present and in future only medical graduates will be appointed to this service.

The best equipped hospitals for Indian patients are the Thomason Hospital at Agra, King George's Hospital and the Balrampur Hospital at Lucknow, the newly-constructed Hallett Hospital, Cawnpore, the Prince of Wales Dispensary and the Ursula Horsman Memorial Hospital, Cawnpore, King Edward VII Hospital, Benares, and the Civil Hospital at Allahabad (for Europeans, Anglo-Indians and Indians living in European style). The Ramsay Hospital for Europeans at Naini Tal is a first-class institution and there are also the Dufferin and Women's Hospitals at various places for rendering medical aid to women. The King George's Medical College, Lucknow, and the Agra Medical College, Agra, are two of the best equipped colleges, in the country, with a staff of highly efficient professors and the hospitals attached to the colleges are the best equipped hospitals in the Province. The Queen Mary's Hospital for women and children is also attached to the King George's Medical College and provides clinical material for the instruction of students in midwifery and gynæcology. At Agra this is done at the Lady Lyall Hospital. There are sanatoria for British soldiers in the hills. The King Edward VII Sanatorium at Bhowali in the district of Naini Tal is an up-to-date and well-equipped institution for the treatment of European and Indian consumptives. There is also a Government T.B. Clinic at Allahabad. An up-to-date T.B. Clinic is also attached to the King George's Hospital, Lucknow.

Ayurvedic, Unani.—Arrangements have been made for about 232 Ayurvedic and 68 Unani dispensaries to work in villages, under the charge of qualified Vaids and Hakims under the Rural Development programme. A compounder has been engaged to assist. Forty-eight fixed and sixteen travelling allopathic dispensaries are also working under the Rural Development programme at suitable places in the countryside. The duty of the medical officer appointed to the Rural Development Dispensaries is not only to provide medical aid in villages but also to inculcate habits of cleanliness and carry on propaganda to ensure personal hygiene and health. Government have also appointed two Unani and four Ayurvedic Inspectors to look to the proper working of the indigenous dispensaries. These Inspectors work under the Chief Inspector of Indigenous Dispensaries, U.P.

The aim which has been kept in view in opening rural indigenous and allopathic dispensaries is to make available medical aid in villages situated in the interior of the districts.

Government also sanction every year grants for the treatment of eye diseases at certain centres in rural areas. A good number of patients suffering from cataract and other diseases have received treatment under the scheme.

There were about eighty subsidized dispensaries and thirty subsidized medical practitioners working at the end of December 1945.

Facilities for the training of Indian girls as nurses and midwives have been provided at almost all important hospitals in the Province.

The Government have established a Hospitals Fund to improve Medical facilities. A sum of rupees one crore and sixteen lakhs has so far been allotted to this fund. Applications for grants out of this fund are considered and sanctioned by Government from time to time but it is in the main being conserved for post-war developments, when articles of equipment and building materials will be much cheaper.

A systematic campaign has been undertaken and large funds allotted to bring the hospitals at District Headquarters and the Dufferin Hospitals to a direct level.

Drug Factory.—To tide over the difficulty of getting imported drugs a new pharmacopœa of indigenous drugs was introduced at hospitals and dispensaries and an Indigenous Drugs Factory was started at Agra. The factory is making good progress. Arrangements have also been made with the Director-General, Indian Medical Service, to obtain supplies of medical stores from the Medical Stores Department. A scheme was sanctioned to train 90 compounders every year for hospitals and dispensaries in the Province and it is in operation now.

A scheme for the provincialisation of district headquarters hospitals (both men's and women's) was started by Government in 1944-45. Almost all hospitals at District Headquarters except Mainpuri, Lucknow and Deoria have now been provincialised. These too will be provincialised soon.

The Board of Indian Medicine, U.P., established by Government in 1926, has been established as a statutory body with the enforcement of the U.P. Indian Medicine Act, 1939 (x—y,1939), with effect from October 1, 1946 and now functions in accordance with the provisions of that Act. It conducts Ayurvedic and Unani examinations of students studying at its affiliated Ayurvedic and Unani Colleges and awards diplomas to successful candidates and maintains a register of qualified vaids and hakims. It distributes grants aggregating to Rs. 46,000 to Ayurvedic and Unani dispensaries and practitioners every year. Government give aid to subsidised Ayurvedic and Unani dispensaries and practitioners in rural and urban areas out of an allotment of Rs. 79,000. Government also give grants aggregating to Rs. 1,67,000, every year to Ayurvedic and Unani Colleges. Government's object is to render medical aid through a system in which villagers have confidence.

A Blood Bank scheme has also been started. It is getting quite a good response.

Particular care has been taken in recent years to provide X-rays and cold storage plants at important hospitals at the expense of the Provincial Government.

THE FINANCES OF THE UNITED PROVINCES

Statement of the Revenue and Expenditure of the Government of the United Provinces.

HEADS OF REVENUE.	Budget Estimates, 1947-48.	HEADS OF EXPENDITURE.	Budget Estimates, 1947-48.
	Rs.		Rs.
Principal Heads of Revenue.		***Direct Demands on the Revenue.***	
IV.—Taxes on Income other than Corporation tax.	5,27,40,000	7.—Land Revenue	1,50,30,000
		8.—Provincial Excise	48,58,900
		9.—Stamps	3,62,400
VII.—Land Revenue ..	6,68,46,200	10.—Forest	74,12,400
VIII.—Provincial Excise ..	5,25,06,000	11.—Registration	8,25,500
		12.—Charges on account of Motor Vehicles Acts	22,01,200
IX.—Stamps	2,10,00,000		
X.—Forest	1,78,23,100	13.—Other Taxes and Duties ..	1,18,100
XI.—Registration	15,50,000	***Irrigation Revenue Account.***	
XII.—Receipts under Motor Vehicles Acts ..	21,91,500	17.—Interest on works for which Capital Accounts are kept	1,54,30,700
XIII.—Other Taxes and Duties	1,46,42,000	18.—Other Revenue expenditure financed from Ordinary Revenues	51,26,400
Irrigation, Etc.		***Irrigation Capital Account (Within the revenue account).***	
XVII.—Works for which Capital Accounts are kept—		19.—Construction of Irrigation Works—	
Receipts	4,99,59,600	B—Financed from Ordinary Revenues	1,14,84,900
Less—Working Expenses ..	3,01,69,700	***Debt Services.***—	
Net ..	1,97,89,900	22.—Interest on debt and other obligations..	—27,13,900
XVIII.—Works for which no Capital Accounts are kept..	1,80,700	23.—Appropriation for reduction or avoidance of debt—	
Debt Services.		(i) Sinking Funds	90,44,600
XX.—Interest	22,64,300	(ii) Other Appropriations ..	5,88,100
		Civil Administration.—	
Civil Administration.		25.—General Administration {10	78,65,500
		{11	1,83,07,700
XXI.—Administration of Justice	27,35,800	27.—Administration of Justice ..	1,04,02,500
		28.—Jails and Convict Settlements	79,92,500
XXII.—Jails and Convict Settlements ..	15,32,800		
		29.—Police	4,99,08,300
XXIII.—Police	61,47,500	36.—Scientific Departments ..	87,300
XXVI.—Education	20,59,600	37.—Education	4,16,36,700
XXVII.—Medical	12,50,000	38.—Medical	1,50,07,400
XXVIII.—Public Health ..	8,52,900	39.—Public Health	99,16,000
XXIX.—Agriculture	37,08,800	40.—Agriculture	2,53,91,000
XXIXA.—Rural Development .	27,600	40A.—Rural Development ..	50,12,100
XXX.—Veterinary	31,84,400	41.—Veterinary	88,96,300

HEADS OF REVENUE.	Budget Estimates, 1947-48.	HEADS OF EXPENDITURE.	Budget Estimates, 1947-48.
	Rs.		Rs.
Civil Administration—contd.		*Civil Administration*—contd.	
XXXI.—Co-operation	2,17,800	42.—Co-operation	25,36,600
		43.—Industries	98,06,000
XXXII.—Industries	32,90,300	44.—Aviation	3,51,700
		47.—Miscellaneous Departments .	20,50,800
XXXVI.—Miscellaneous Departments	2,91,500	***Civil Works and Miscellaneous Public Improvements.***—	
Civil Works and Miscellaneous Public Improvements.		50.—Civil Works.—	
		(*a*) Provincial expenditure.	1,94,25,800
XXXIX.—Civil Works.—		(*b*) Improvement of Communications from Central Road Fund Accounts	3,24,900
(*a*) Ordinary	29,34,200	50A.—Capital outlay on civil works met from extra-ordinary receipts ..	5,17,64,300
(*b*) Transfer from Central Road Fund ..	3,24,900	***Miscellaneous.***—	
Miscellaneous.—		54.—Famine Relief.—	
XLIII.—Transfers from Famine Relief Fund.	1,08,000	A.—Famine Relief	1,08,000
XLIV.—Receipts in aid of superannuation ..	1,57,900	B.—Transfers to Famine Relief Fund	....
XLV.—Stationery and Printing	13,26,200	55.—Superannuation Allowances and Pensions	1,34,66,000
XLVI.—Miscellaneous ..	34,60,300	56.—Stationery and Printing ..	33,94,700
		57.—Miscellaneous Charges ..	1,09,31,000
Contributions and Miscellaneous Adjustments between Central and Provincial Governments.—		***Extraordinary Items.***	
		63.—Extraordinary charges ..	2,12,24,100
		63A.—Expenditure connected with Post-war planning and development	1,40,000
XLIX—Grants-in-aid from Central Government ..	....	64A.—Transfers to the Revenue Reserve Fund	75,000
L.—Miscellaneous Adjustments between Central and Provincial Governments ..	15,000	64B.—Civil Defence	....
		Total, Expenditure met from Revenue	40,60,46,500
Extraordinary Items.—		***Capital accounts outside the revenue account.***	
LI.—Extraordinary Receipts		68A.—Construction of Irrigation works	3,95,51,600
(*a*) Subvention from the Central Government for Post-war Development Schemes	7,50,00,000	68C.—Capital outlay on Hydro-Electric works	6,03,80,400
(*b*) Other items	1,60,86,200	71.—Capital outlay on Schemes of Agricultural Improvement and Research	64,20,000
LII-A.—Transfers from the Revenue Reserve Fund	2,50,00,000	81.—Civil works not met from revenue	1,26,73,800
		82A.—Capital outlay on Rail Road Co-ordination Scheme ..	1,33,11,900
LII-B.—Civil Defence ..	75,000	83.—Payments of commuted value of pensions	—3,100
		85A.—Capital outlay on provincial schemes of State Trading	—1,66,51,800
Total, Revenue ..	40,13,20,400	Total, Capital Accounts, etc. ..	15,85,21,400

Heads of Revenue.	Budget Estimates, 1947-48	Heads of Expenditure.	Budget Estimates, 1947-48.
	Rs.		Rs.
Debt, Deposits and Remittance Heads.		***Debt, Deposits and Remittance Heads.***	
N.—PUBLIC DEBT.		**N.—PUBLIC DEBT.**	
A.—Debt Raised in India.		**A.—Debt Raised in India.**	
1.—Permanent Debt—		I.—Permanent Debt—	
(i) Provincial Loans bearing interest—		(i) Provincial Loans bearing interest—	
2½ per cent. U.P. Loan 1961 ..	....	United Provinces Encumbered Estates Acts Bonds ..	20,00,000
3 per cent. U.P. Loan, 1960 ..	....	5 per cent. U.P. Loan, 1944 ..	1,00,000
United Provinces Encumbered Estates Act Bonds ..	60,00,000	3 per cent, United Provinces Loan, 1961-1966.. ..	....
NEW LOAN.		3 per cent. U.P. Loan, 1952 ..	....
		3 per cent. United Provinces Loan, 1958	....
(ii) Loans not bearing Interest	....	3 per cent. United Provinces Loan, 1960	....
II.—Floating Debt—		(ii) Loans not bearing interest.	
Treasury Bills ..	5,00,00,000	6 per cent. United Provinces Development Loan.	1,000
Other Floating Loans	50,00,000	II.—Floating Debt—	
III.—Loans from the Central Government..	....	Treasury Bills	....
Loans for Post-war development schemes	5,50,00,000	Other Floating Loans ..	50,00,000
Total, N ..	14,10,00,000	III.—Loans from the Central Government—	
		Repayment of Consolidated Debt	16,54,300
O.—UNFUNDED DEBT.		Total, N ..	87,55,300
State Provident Funds—	....	**O.—UNFUNDED DEBT.**	
General Provident Fund { Rupee Branch ..	56,00,000	**State Provident Funds—**	
General Provident Fund { Sterling Branch..	2,30,000	General Provident Fund { Rupee Branch ..	45,00,000
Indian Civil Service Provident Fund { Rupee Branch ..	2,40,000	General Provident Fund { Sterling Branch..	88,000
Indian Civil Service Provident Fund { Sterling Branch..	2,50,000	Indian Civil Service Provident Fund { Rupee Branch ..	30,000
Indian Civil Service (Non-European Members) Provident Fund { Rupee Branch ..	55,000	Indian Civil Service Provident Fund { Sterling Branch..	3,30,000
Indian Civil Service (Non-European Members) Provident Fund { Sterling Branch..	....	Indian Civil Service (Non-European Members) Provident Fund { Rupee Branch ..	5,000
Contributory Provident Fund { Rupee Branch ..	1,10,000	Indian Civil Service (Non-European Members) Provident Fund { Sterling Branch..	....
Contributory Provident Fund { Sterling Branch..	15,000	Contributory Provident Fund { Rupee Branch ..	50,000
Other Miscellaneous Provident Funds { Rupee Branch ..	....	Contributory Provident Fund { Sterling Branch..	....
Other Miscellaneous Provident Funds { Sterling Branch..	....	Other Miscellaneous Provident Funds { Rupee Branch ..	....
		Other Miscellaneous Provident Funds { Sterling Branch..	....
Total, O ..	65,00,000	Total, O ..	50,03,000

Heads of Revenue.	Budget Estimates, 1947-48.	Heads of Expenditure.	Budget Estimates, 1947-48.
	Rs.		Rs.
P.—DEPOSITS AND ADVANCES.		**P.—DEPOSITS AND ADVANCES.**	
(A.) *Deposits Bearing Interest.*		**(A.) *Deposits Bearing Interest.***	
Reserve Funds—		Reserve Funds—	
Depreciation Reserve Fund Irrigation (U.P.)—		Depreciation Reserve Fund—	
Reserve Fund	17,25,000	Irrigation (U.P.)	....
Deposits Not Bearing Interest.		Reserve Fund	6,74,200
(A) Sinking Funds—		Reserve Fund Investment Account	....
Appropriation for Reduction or Avoidance of Debt—		***Deposits Not Bearing Interest.***	
Sinking Funds—		(A) Sinking Funds—	
5 per cent. United Provinces Loan, 1944, Sinking Fund	....	Appropriation for Reduction or Avoidance of Debt—	
3 per cent. United Provinces Loan, 1961-66, Sinking Fund (Depreciation)	2,55,000	Sinking Funds—	
3 per cent. United Provinces Loan, 1952, Sinking Fund (Depreciation)	3,08,800	5% United Provinces Loan, 1944, Sinking Fund	1,00,000
3 per cent. United Provinces Loan, 1958, Sinking Fund (Depreciation)	5,25,000	3 per cent. United Provinces Loan, 1961-66, Sinking Fund (Depreciation)	....
3 per cent. United Provinces Loan, 1960, Sinking Fund (Depreciation)	3,76,900	3 per cent. United Provinces Loan, 1952, Sinking Fund (Depreciation)	....
2½ per cent. U.P. Loan, 1961 (Depreciation)	3,78,900	3 per cent. U.P. Loan, 1958, Sinking Fund (Depreciation)	....
3 per cent. United Provinces Loan, 1952, Sinking Fund (Liquidation)	13,90,400	3 per cent. United Provinces Loan, 1960, Sinking Fund (Depreciation)	....
3 per cent. United Provinces Loan, 1958, Sinking Fund (Liquidation)	16,08,600	2½ per cent. United Provinces Loan, 1961, Sinking Fund (Depreciation)	....
3 per cent. United Provinces Loan, 1960, Sinking Fund (Liquidation)	9,21,500	3 per cent. United Provinces Loan, 1952 (Liquidation) ..	....
2½ per cent. United Provinces Loan, 1961, (Liquidation) ..	40,50,000	Sinking Fund Investment Account—	
Other Appropriations	5,88,100	3 per cent United Provinces Loan, 1952, Sinking Fund (Liquidation)	13,90,400
Sinking Fund Investment Account—		3 per cent. U. P. Loan, 1958, Sinking Fund (Liquidation) ..	16,08,600
5 per cent. U.P. Loan, 1944 ..	....	5 per cent. United Provinces Loan, 1960, Sinking Fund (Liquidation)	9,21,500
(B) Reserve Funds—		2½ per cent. United Provinces Loan, 1961, Sinking Fund (Liquidation)	40,50,000
A—Famine Relief Fund—		(B) Reserve Funds—	
Transfers from the Revenue Account	....	A—Famine Relief Fund—Transfers to the Revenue Account..	1,08,000
Interest Receipts	1,95,200	Transfers to General Balances for repayment of Debt	1,00,000
Recoveries of famine expenditure	....	United Provinces Sugarcane Compensation Fund	16,000
United Provinces Sugarcane Compensation Fund	....	United Provinces Road Fund ..	13,46,500
United Provinces Road Fund ..	22,00,000	Hospitals Fund (U.P.)	2,70,000
Hospitals Funds	....	Magh Mela Fund, United Provinces	8,06,700
Magh Mela Fund, U.P.	8,06,700	Revenue Reserve Fund—	
Revenue Reserve Fund—		Transfer to the Revenue Account	2,50,00,000
Transfers from the Revenue Account	75,000	Investment Account	....
Interest and other Receipts ..	16,66,000	Depreciation Reserve Fund—	
Depreciation Reserve Fund—		Government Central Press ..	1,11,200
Government Central Press ..	42,500	Nazul Fund, Lucknow ..	3,88,100
Nazul Fund, Lucknow ..	1,75,400	Supply Schemes Stabiliasation Funds	....
Supply Schemes Stabilization Fund—		Fund for encouragement of Hindustani Literature	50,000
Transfer from Revenue Account	....		
Fund for encouragement of Hindustani Literature ..	50,000		

Heads of Revenue.	Budget Estimates, 1947-48.	Heads of Expenditure.	Budget Estimates, 1947-48.
	Rs.		Rs.
(C) Other Deposit Accounts—		(C) Other Deposit Accounts—	
Deposits of Local Funds—		Deposits of Local Funds—	
District Funds	3,00,42,000	District Funds	3,00,42,000
Municipal Funds	1,21,12,000	Municipal Funds	3,21,12,000
Other Funds	17,15,000	Other Funds	1,17,15,000
Departmental and Judicial Deposits.		*Departmental and Judicial Deposits.*	
Civil Deposits—		Civil Deposits—	
Revenue deposits	1,56,09,000	Revenue deposits	1,54,25,000
Civil Court deposits	1,25,02,000	Civil Court deposits	1,15,28,000
Criminal Court deposits ..	7,51,000	Criminal Court deposits ..	5,68,000
Personal deposits	4,92,25,000	Personal deposits	4,92,25,000
Forest deposits	62,68,000	Forest deposits	50,32,000
Public Works deposits ..	83,97,000	Public Works deposits ..	67,31,000
Trust Interest Funds	3,47,000	Trust Interest Funds	3,00,000
Deposits of Cotton Cess Fund..	3,000	Deposits of Cotton Cess Fund..	3,000
Deposits for work done for public bodies or individuals ..	12,74,000	Deposits for work done for public bodies or individuals..	10,89,000
Unclaimed deposits in the General Provident Fund	....	Unclaimed deposits in the General Provident Fund	....
Deposits of fees received by Government servants for work done for private bodies	1,81,000	Deposit of fees received by Government servants for work done for private bodies.	95,000
His Excellency the Governor's War Purposes Fund ..	....	His Excellency the Governor's War Purposes Fund	....
His Excellency the Viceroy's War Purposes Fund ..	....	His Excellency the Viceroy's War Purposes Fund.. ..	....
Stores Purchase Deposits ..	4,85,000	Stores Purchase Deposits ..	2,15,000
Indian Red Cross Society Deposits	2,000	Indian Red Cross Society Deposits.	2,000
St. Dunston's Home for blind Soldiers	....	St. Dunston's Home for blind Soldiers	....
Deposits on Account of Collective Subscriptions towards defence Savings Drive ..	....	Deposits on Account of Collective Subscriptions towards Defence Savings Drive ..	10,00,000
Deposit on Account of Purchase of Government of India Defence Bonds	....	Deposits on Account of Purchase of Government of India Defence Bonds	....
Interest received on account of deposits with Central Government	2,52,000	Transfer of Collective Subscriptions to the Central Government	....
Tranafers from Famine Relief Fund for repayment of debt..	1,00,000	Deposits of interest realized on Collective subscriptions transferred to the Central Government	2,52,000
Other Accounts.		*Other Accounts.*	
Subventions from Central Road Fund	5,72,000	Subventions from Central Road Fund	5,72,000
Deposit account of grants from the Central Government for Economic Development and Improvement of Rural Areas—		Deposit account of grants from the Central Government for Economic Development and Improvement of Rural Areas—	
Woollen Industry	....	Woollen Industry	....
Deposit account of the grant made by the Indian Central Cotton Committee	4,800	Deposit account of the grant made by the Indian Central Cotton Committee	4,800
Deposit account of grant made by the Imperial Council of Agricultural Research	2,24,500	Deposit account of grant made by the Imperial Council of Agricultural Research	2,24,500
Deposit account of grants from the Central Government for the development of hand-loom industry	....	Deposit account of grants from the Central Government for the development of hand-loom Industries	....
Deposit account of grants from Sugar Excise Fund	1,50,000	Deposit account of grants from Sugar Excise Fund	1,50,000
Deposit by the Defence Department for Vegetable Scheme ..	....	Advances not bearing interest—	
Advances not bearing interest—		Advances Repayable	1,02,25,000
Advances Repayable	85,62,000	Permanent Advances	20,000
Permanent Advances	10,000	Account with the Govt. of Burma	....

Heads of Revenue.	Budget Estimates, 1947-48.	Heads of Expenditure.	Budget Estimates, 1947-48.
Other Accounts—contd.	Rs.	*Other Accounts*—contd.	Rs.
Account with the Government of Burma	....	Account with the Reserve Bank..	47,000
Account with the Reserve Bank..	47,000	Suspense—	
Suspense—		Suspense Account	1,99,98,000
Suspense Account	3,38,86,000	Cheques and Bills	1,61,32,000
Cheques and Bills	1,61,32,000	Departmental and similar Accounts—	
Departmental and similar Accounts—		Civil Departmental Balances ..	12,81,000
Civil Departmental Balances ..	10,29,000	Miscellaneous—	
Miscellaneous—		Government Account	....
Government Account	1,00,000	Total, P. ..	22,09,29,500
Total, P. ..	21,73,21,300		
R. LOANS AND ADVANCES BY PROVINCIAL GOVERNMENT.		R. LOANS AND ADVANCES BY PROVINCIAL GOVERNMENT.	
Loans to Municipalities, etc.		*Loans to Municipalities, etc.*—	
Loans to Municipalities	15,00,000	Loans to Municipalities	1,00,00,000
Loans to District and other Local Fund Committees	1,10,000	Loans to District and other Local Fund Committees	....
Loans to landholders and other notabilities	....	Loans to landholders and other notabilities	....
Advances to Cultivators	16,00,000	Advances to Cultivators ..	50,00,000
Advances under Special Laws—		Advances under Special Laws ..	....
Advances under the Bundelkhand Encumbered Estate Act ..	....	Advances under the Bundelkhand Encumbered Estate Act ..	....
United Provinces Encumbered Estates Act Bonds	22,00,000	United Provinces Encumbered Estates Act Bonds	60,00,000
Miscellaneous Loans and Advances	90,000	Miscellaneous Loans and Advances	50,71,000
Loans to Government Servants.		*Loans to Government Servants.*	
House building advances ..	15,000	House building advances ..	50,000
Advances for purchase of motor cars	50,000	Advances for purchase of motor cars	1,25,000
Advances for purchase of other conveyances	7,000	Advances for purchase of other conveyances	10,000
Passage advances	400	Passage advances	1,000
Other advances	....	Other advances	500
Total, R. ..	55,72,400	Total, R. ..	2,62,57,500
S. Remittances.		*S. Remittances.*	
Remittances within India—		Remittances within India—	
P. W. Remittances	14,21,00,000	P. W. Remittances	7,40,00,000
Other Local Remittances and Adjustments	48,90,00,000	Other Local Remittances and Adjustments	48,90,00,000
Remittances by Bills	....	Remittances by Bills	....
Adjusting account between the Central and Provincial Governments	....	Reserve Bank of India Remittance	....
		Adjusting account between the Central and Provincial Governments	....
Inter-Provincial Suspense Account	....	Adjusting accounts with Rlys. ..	....
		Inter-Provincial Suspense Account	....
Total, S. ..	63,11,00,000	Total, S. ..	63,11,00,000
Total, Debt and Deposit Heads, etc.	1,20,14,93,700	Total, Debt and Deposit Heads, etc.	89,20,45,300
Total Receipts ..	1,40,28,14,100	Total Disbursements ..	1,45,66,13,200
Opening Balance	6,43,02,522	Closing Balance	1,05,03,422
Grand Total ..	1,46,71,16,622	Grand Total ..	1,46,71,16,622

1948-49 BUDGET

Receipts	Rs. 4,587	lakhs
Expenditure	,, 5,057	lakhs
Deficit	,, 470	lakhs
Sales tax and Agriculture Income-tax estimated to yield ..	,, 5	crores
Final Surplus	,, 80	lakhs.

The Finance Minister estimated receipts at Rs. 4.587 lakhs and expenditure at Rs. 5,057 lakhs leaving a deficit of Rs. 470 lakhs to be bridged by the above two taxes which are expected to yield Rs. 5 crores.

The Minister explained that to meet this deficit there will be a general sales tax on a turnover of Rs. 12,000 or more per annum and will be levied at the rate of three pies per rupee on all goods except food grains, milk, electrical energy, gur and sugar on which tax will be levied only at the rate of one pie per rupee.

The rates of tax on agricultural income will be the same as the rates of income-tax payable to the Central Government but a super-tax is proposed to be levied at half the Central Government rates.

The Minister attributed this large deficit to increased expenditure on all development activities of the Government and partly to the general revision of salaries of Government employees.

The main items of expenditure are : Nation-building activities or economic welfare Rs. 2,401 lakhs ; relief and rehabilitation of refugees —Rs. 216 lakhs ; general administration : police, jail and justice—Rs. 1,223 lakhs.

Some of the highlights of the budget are :—

(1) Extension of the Government's prohibition policy by declaring Kanpur and Unao districts also dry (so far seven districts only have been declared dry) and by enhancing excise duties on country spirits, ganja and opium.

(2) Provision for opening of 4,400 primary schools, introduction of military training in schools and colleges and compulsory education in all urban areas.

(3) Opening of 105 Allopathic and 72 Ayurvedic and Unani dispensaries in rural areas and establishment of a tuberculosis sanatorium at Kanpur.

(4) Provision for implementing a jute development scheme, mechanization of cattle-breeding farms and a big tank-digging drive throughout the province.

(5) Provision for constructing more airfields, development of cottage industries and primary surveys of large-scale industries, Harijan uplift and extension of the Government bus services to new routes in the province.

ADMINISTRATION

Governor.—Her Excellency Srimati Sarojini Naidu.

STAFF OF HER EXCELLENCY THE GOVERNOR.

Secretary to the Governor.—Captain C. S. Bhatnagar.

(*Also Secretary, Provincial Sailors', Soldiers' and Airmen's Board.*)

Assistant Secretary. Office Secretary to the Governor.—Prem Ballabh Pande.

Personal Assistant to H.E. the Governor.—K. R. Nagappa, B.A.

Superintendent, Office of Secretary to the Governor.—Govind Ballabh Pant.

COUNCIL OF MINISTERS.

The Hon'ble Pandit Govind Ballabh Pant, B.A., B.L., Premier and Minister for General Administration. (Appointed April 1, 1946.)

The Hon'ble Shri Hukum Singh, B.A., LL.B., Minister for Revenue and Justice.

The Hon'ble Mr. Nisar Ahmed Sherwani, Minister for Agriculture and Animal Husbandry.

The Hon'ble Hafiz Muhammad Ibrahim, B.A., LL.B., Minister for Communications.

The Hon'ble Sri Sampurnanand, B.Sc., Minister for Education and Labour.

The Hon'ble Shri Atma Ram Govind Kher, B.A., LL.B., Minister for Local Self-Government

The Hon'ble Shri Shri Krishna Datta Paliwal, Minister for Finance and Information.

The Hon'ble Shri Chandra Bhanu Gupta, Minister for Food and Civil Supplies.

The Hon'ble Shri Lal Bahadur, Minister for Police and Transport.

The Hon'ble Shri Keshava Deva Malaviya, Minister for Development and Industries.

Mohammad Wasim, Bar-at-Law, Advocate-General. (Appointed August 1, 1946.)

The Hon'ble Shri Girdharilal, Minister for Excise, Jails, Registration and Stamps.

U. P. PUBLIC SERVICE COMMISSION.

Chairman.

Dr. Amarnath Jha, M.A., D. Litt., F.R.S.L.

Members.

Mohammad Ahmad, M.A., LL.B., Gopinath Srivastava and Satish Chandra Chatterji, M.A.

Secretary.

Ali Ameer, M.A., LL.B., F.R.S.

Assistant Secretary.

Gorakh Prasad Sinha, B.A.

Superintendent.

Ram Naresh Lal, M.A., LL.B.

CIVIL SECRETARIAT

SECRETARIES

B. N. Jha, I.C.S.	*Chief Secretary (Offg.).*
P. A. Gopalakrishnan, I.C.S.	*Finance Secretary.*
J. Nigam, I.C.S.	*Revenue Secretary.*
Mukat Bihari Lal Dar, M.Sc., LL., M.B.A.S.	*Secretary, Local Self Government and Public Health.*
V. Bhargava, I.C.S.	*Judicial Secretary and Legal Remembrancer.*
A. N. Sapru, I.C.S.	*Secretary, Education, Economics, Statistics and Information Deptts.*
S. S. Hasan, I.C.S.	*Secretary, Public Works Deptt.*
R. Dayal, I.C.S.	*Secretary, Home Deptt.*
T. Swaminathan, I.C.S.	*Secretary, Labour Industries and Excise Deptt.*
A. N. Jha, I.C.S.	*Secretary, Agriculture (Tempy.).*
Bhagwan Sahay, I.C.S. (ex-Officio) ..	*Secretary, Food and Civil Supplies Deptts. (Tempy.).*

JOINT SECRETARIES

K. P. Bhargava, I.C.S.	*Chief Secretary's Branch (Tempy.).*
B. G. Rau, I.C.S.	*Finance Deptt. (Tempy.).*
Dr. L. N. Misra, M.A., B.Sc., LL.B., Ph.D.	*Judicial, Civil and Legislative Departments and ex-Officio Jt. Legal Remembrancer to Govt., U.P. (Tempy.).*

DEPUTY SECRETARIES

Kehar Singh, B.A. (Hons.)	*Appointment Department.*
C. W. Longman, B.A.	*General Administration Deptt. (Tempy.).*
Vidya Prasad Shukla, B.A.	*Revenue Deptt. (Tempy.).*
Sri Prakash Pande, M.A.	*Local Self Govt. and Public Health Branch (Tempy.).*
Munishwar Prasad Tripathi, M.A., LL.B.	*Public Works Deptt. (Tempy.).*
Jagdish Prasad	*Public Works Deptt. (Addl.) (Tempy.).*
Jagbans Kishore Tandon, B.A., LL.B. (ex-Officio)	*Judicial Branch.*
Raghunath Prasad Verma, B.A., LL.B. (ex-Officio)	*Judicial Civil Deptt. (Addl.).*
Ram Nath Sharma, M.A., LL.B. (ex-Officio)	*Judicial Civil Deptt. (Addl.).*
Nehpal Singh, B.A., I.E.S.	*Education Deptt. (Tempy.).*
Chatur Behari Lal Dube, M.Sc. ..	*Home Deptt (Tempy.).*
Kuldip Narayan Singh, B.A., F.R.C.S. ..	*Industries Deptt. (Tempy.).*
Ganga Narayan Bhargava, B.A. ..	*Industries Deptt. (Addl.).*
Muhammad Mujtaba Siddiqi, B.Sc., LL.B.	*Food and Civil Supplies Deptt. (Tempy.).*
Raghubir Saran Das, M.A., LL.B. ..	*Refugees Deptt. (Tempy.).*

UNDER SECRETARIES

Rizwan-ul-Hasan, M.Sc.	*Agriculture Department (Tempy.).*
Amba Dat Pande, M.Sc.	*Industries Deptt. (Tempy.)*
Brij Lal Chak, M.A.	*Public Works Deptt. (Tempy.).*
Hira Ballabh Joshi, B.Sc.	*Finance Deptt (Tempy.).*
Dr. Rajeshwar Nath Mathure, M.Sc., Ph.D.	*Agriculture Deptt. (Tempy.) (Addl.).*
Daya Krishna Joshi, B.Sc.	*Finance Deptt. (Tempy.).*

LAW OFFICERS TO GOVERNMENT

V. Bhargava, I.C.S.	*Legal Remembrancer and Judicial Secretary.*
Dr. L. N. Misra, M.A., B.Sc., LL.B., Ph.D.	*Joint Secretary, Judicial, Civil and Legislative Deptts. and ex-Officio Joint Legal Remembrancer to Govt., U.P. (Tempy.).*
Jagbans Kishore Tandon, B.A., LL.B. ..	*Deputy Legal Remembrancer and ex-Officio Deputy Secretary, Judicial Branch.*
Raghunath Prasad Verma, B.A., LL.B.	*Addl. Legal Remembrancer and ex-Officio Addl. Deputy Secretary, Judicial (Civil) Deptt. (Tempy.).*
Ram Nath Sharma, M.A., LL.B.	*Addl. Legal Remembrancer and ex-Officio Addl. Deputy Secretary, Judicial (Civil) Deptt. (Tempy.).*

OFFICERS ON SPECIAL DUTY

Mrs. H. C. Joshi	*Education Deptt. (Tempy.).*
Prakash Narain Mathur, B.A.	*Education Deptt. (Tempy.).*
Bhagwat Narain Bhargava	*Municipal Deptt (Tempy).*
M. C. Corbett	*Incharge Colonisation and Resettlement Schemes (Tempy.).*

OTHER OFFICERS

Bhagwan Sahay, I.C.S.	*Commissioner, Food and Civil Supplies, U.P. and ex-Officio Secretary, Food and Civil Supplies Deptt. (Tempy.).*
S. N. Mitra, I.C.S.	*Deputy Commissioner, Deptt. of Food and Civil Supplies, U.P. (Tempy.).*
Manna Lal Tiwari, B.A. LL.B.	*Deputy Commissioner (Procurement), Deptt. of Food and Civil Supplies, U.P. (Tempy.).*
Shri Pat, M.A., LL.B.	*Asstt. Commissioner, Distribution Deptt. of Food and Civil Supplies, U.P. (Tempy.).*
Bindeshwari Prasad Joshi, B.A.	*Asstt. Commissioner, Deptt. of Food and Civil Supplies, U.P. (Tempy.).*
Abdur Rauf, B.A., LL.B.	*Deputy Director, Food and Civil Supplies, U.P. (Tempy.).*
Muhammad Azizullah, B.A.	*Deputy Director, Food and Civil Supplies, U.P. (Tempy.).*
Shri Ram Singh	*Provincial Marketing Officer, Deptt. of Food and Civil Supplies, U.P.*
Dalel Singh Chowdhry	*Deputy Provincial Marketing Officer, Deptt. of Food and Civil Supplies, U.P. (Tempy.).*
K. B. Bhatia, I.C.S.	*Development Commissioner at the Headquarters of Govt. U.P. and Registrar, Co-operative Societies (Tempy.),*
Nar Singh Pandey, M.A., B.A. (Hons.)	*Assistant Development Commissioner at the headquarters of Govt., U.P. (Tempy.).*
J. K. Pande, M.A.	*Economic Adviser and Director of Statistics, U.P.*
Ameer Raza, M.A.	*Secretary to the Abolition of Zamindari Committee, U.P. (Tempy.).*
Midhat Kamil Qidwai, B.A.	*Director of Information, U.P. (Tempy.).*
Rias-Uddin Ahmad Khan	*Government Estate Officer (Tempy.).*
L. C. Bingham	*Industrial Adviser to Govt., U.P. (Tempy.).*

LIEUTENANT-GOVERNORS OF THE NORTH-WESTERN PROVINCES.

Sir C. T. Metcalfe, Bart., G.C.B.	1836
The Right Hon. the Governor-General in the North-Western Provinces (Lord Auckland).	1838
T. C. Robertson	1840
The Right Hon. the Governor-General in the North-Western Provinces (Lord Ellenborough).	1842
Sir G. R. Clerk, K.C.B.	1843
James Thomson. Died at Bareilly	1843
A. W. Begbie, *In charge*	1853
J. R. Colvin. Died at Agra	1853
E. A. Reade, *In charge*	1857
Colonel H. Fraser, C.B., Chief Commissioner, N.-W. Provinces.	1857
The Right Hon'ble the Governor-General administering the N.-W. Provinces (Viscount Canning).	1858
Sir G. F. Edmonstone	1859
R. Money, *In charge*	1863
The Hon. Edmund Drummond	1863
Sir William Muir, K.C.S.I.	1868
Sir John Strachey, K.C.S.I.	1874
Sir George Couper, Bart., C.B.	1876

LIEUTENANT-GOVERNORS OF THE NORTH-WESTERN PROVINCES AND CHIEF COMMISSIONERS OF OUDH.

Sir George Couper, Bart., C.B., K.C.S.I.	1877
Sir Alfred Comyns Lyall, K.C.B.	1882
Sir Auckland Colvin, K.C.M.G., C.I.E.	1887
Sir Chas. H. T. Crosthwaite, K.C.S.I.	1892
Alan Cadell (*Officiating*)	1895
Sir Antony P. MacDonnell, K.C.S.I. (*a*)	1895
Sir J. J. D. La Touche, K.C.S.I. (*a*)	1901

(*a*) [afterwards (by creation) Baron MacDonnell.]

LIEUTENANT-GOVERNORS OF THE UNITED PROVINCES OF AGRA AND OUDH.

Sir J. J. D. La Touche, K.C.S.I.	1902
Sir J. P. Hewett, K.C.S.I., C.I.E.	1907
L. A. S. Porter, C.S.I. (*Officiating*)	1912
Sir J. S. Meston, K.C.S.I. [afterwards (by creation) Baron Meston].	1912
Sir Harcourt Butler, K.C.S.I., C.I.E.	1918

GOVERNORS OF THE UNITED PROVINCES.

Sir Harcourt Butler, K.C.S.I., C.I.E.	1920
Sir William Marris, K.C.I.E.	1921
Sir Samuel Perry O'Donnell, K.C.I.E., C.S.I. (*Officiating*)	1926
Sir Alexander Muddiman, K.C.S.I., C.I.E. Died at Naini Tal.	1928
Major Nawab Muhammad Ahmad Said Khan of Chhatari, K.C.S.I., K.C.I.E., M.B.E., LL.D. *In charge.*	1928
Sir Malcolm Hailey, G.C.S.I., G.C.I.E.	1928
Sir George Bancroft Lambert, K.C.S.I. (*Offg.*).	1930
Sir Malcolm Hailey, G.C.S.I., G.C.I.E.	1931
Major Nawab Sir Muhammad Ahmad Sa'id Khan of Chhatari, K.C.S.I., K.C.I.E., M.B.E., LL.D.	1933
Sir Malcolm Hailey, G.C.S.I., G.C.I.E. [afterwards (by creation) Baron Hailey.]	1933
Sir Harry Graham Haig, K.C.S.I., C.I.E.	1934
Sir Maurice Garnier Hallett, G.C.I.E., K.C.S.I. (*Offg.*).	1938
Sir Harry Graham Haig, K.C.S.I., C.I.E.	1939
Sir Maurice Garnier Hallett, G.C.I.E., K.C.S.I.	1939
Sir Francis Verner Wylie, K.C.S.I., C.I.E.	1945
Srimati Sarojini Naidu	1947

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Mukerjee (*Industrial Factory Labour in Lucknow, Aligarh and Allahabad*).

* Scheduled castes.

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West Bengal

ACCORDING to the Radcliffe Award the newly constituted Province of West Bengal consists of the whole of the Burdwan Division and part of the Presidency Division of old undivided Bengal, District-wise, the whole of Burdwan, Birbhum, Bankura, Hooghly, Howrah, Midnapore, Calcutta 24-Parganas, Murshidabad, and Darjeeling Districts and parts of Nadia, Malda, Jalpaiguri and Dinajpur Districts are in West Bengal. The 24-Paganas District includes the two P. S. of Jessore, Bongaon and Gaighata, that is 10.94 per cent of the area and 7.28 per cent of the population of Jessore. Of Nadia District 47.75 per cent of the population and 52.34 per cent of the area, of Malda 68.50 per cent of the population and 69.41 per cent of the area, of Jalpaiguri 77.62 per cent of the population and 81.57 per cent of the area, and of Dinajpur 30.28 per cent of the population and 35.14 per cent of the area are in West Bengal.

Besides these there are the two States of Cooch Behar and Tripura.

The total population and the relative figures of Hindus, Muslims and others are given by the following table :



H. E. Kailashnath Katju

	Total	Population			Percentage		
		Hindus	Muslims	Others	Hindus	Muslims	Others
West Bengal ..	21,196,453	14,330,960	5,301,696	1,563,827	67.61	25.01	7.38
States	1,153,852	742,700	366,254	44,898	64.37	31.74	3.89
Total ..	22,350,305	15,073,630	5,667,950	1,608,725	67.44	25.36	7.20

According to the Census figures of 1931, Bengali is spoken by about 83 per cent of the population of West Bengal and Hindi and Urdu by about 8.3 per cent.

AGRICULTURE

The great majority of the people are engaged in agriculture, pasture and raising dairy produce. The principal crops are rice and jute. During 1943-44 the area under rice in West Bengal was 8,159,342 acres and the total cropped area nearly 10,300,635 acres, i.e., the area under rice was approximately 79 per cent. of the total cropped area. In 1946-47 area under rice was about 9,999,600. The area under jute is given by the following figures :—

	1946–47	1947–48
West Bengal	151,915 acres	229,175 acres
States ..	36,825 ,,	48,210 ,,
Total ..	188,740 ,,	277,385 ,,

Other crops include barley, wheat, pulses and oil-seeds. Sugar is produced both from sugar-cane and date palm and tobacco is grown for local consumption in nearly every district. The area under tea in 1943-44 (the latest available figures) was 195,000 acres, the number of gardens in 1946 was 286 and the picked number of workers attending 223,000

INDUSTRY

Agriculture is the principal industry of West Bengal. In addition to this there are the jute mill industry, the tea industry (confined to the districts of Jalpaiguri including the Dooars and Darjeeling), the coal mining industry and the sugar industry. The jute mills in and around Calcutta and in the riparian tracts of the districts of Howrah and Hooghly constitute the principal manufacturing industry of the Province.

Prior to the outbreak of war raw jute prices showed considerable fluctuation and the demand for jute goods also increased; so the Ordinance restricting working hours was withdrawn only to be replaced soon after by a voluntary restriction agreement among the mills as wartime shipping restrictions made themselves felt and first European, and later Far Eastern, markets were lost. Once again raw jute production started to exceed demand, and only a further agreement between the mills and the undivided Bengal Government whereby the former undertook to purchase a stipulated quantity at minimum rates, and a slight increase in demand for Middle East operations during 1941 helped to stave off another difficult situation.

On the whole 1942 was a more prosperous year despite the difficulties of transport and increasing war demands on the industry, but in 1943 two other problems were added to these—food for labour and shortage of coal, while the increasing value of food crops also lead to short sowing of jute. Large orders from America helped to offset the otherwise poor year which might have been expected, but it was apparent that some form of rationalisation or still more agreement would be necessary to restore the balance. The jute industry played a big role in World War II—all mills working to full capacity. Post-war prospects are good, the first quarter of 1946 brought large orders to Bengal.

The following table gives the value of imports and exports of principal articles in the port of Calcutta during pre-war and post-war periods.

Value in (000) Rs. R. C. of

	Pre-War 1938–39	Post-War 1946–47†	Variation
Imports ..	429,534	668,149	55.55*
Exports ..	708,857	1,850,877	161.11*

* Excluding the values of "other items."
† Compiled from unpublished Records.

EDUCATION

Educational institutions in West Bengal are controlled by the Department of Education, the University of Calcutta district boards, municipalities, district school boards and a number of religious and philanthropic societies. The control of general education as also of engineering education is ultimately vested in the Minister of Education, whereas medical education is controlled by the Department of Local Self-Government, and agricultural, technical and industrial education by the Department of Agriculture and Industries.

The Director of Public Instruction is the executive head of the Department, assisted by an Assistant Director, three Special Officers for Primary, Scheduled Caste and Secondary Education and a Reader and Secretary, Text Book Committee. Each division is in charge of a Divisional Inspector assisted by a certain number of Additional or Second Inspectors according to the requirements of the several divisions. Similarly the administrative charge of the primary education of each district is in the hands of a District Inspector assisted by Sub-Divisional Inspectors and Sub-Inspectors of Schools, the latter class of officers being in some instances helped by officers of humbler status called Assistant Sub-Inspectors and Inspecting Pandits and Maulvis.

The University of Calcutta established in 1857 is administered by the Chancellor (the Governor of Bengal), the Vice-Chancellor (appointed by Government) and a number of ex-officio, elected and nominated fellows. The University of Calcutta maintains a Law College, called University Law College, Calcutta. Calcutta University is mainly an examining body, but has now made itself responsible for advanced teaching for which purpose it employs an agency which is mainly distinct from the staffs of the affiliated Colleges.

The Education of Europeans is mainly conducted by private agency, assisted by Government grants. Government however maintain a special Inspector, and also a school for boys and a school for girls (both residential) at Kurseong.

The following table gives some relevant statistics in regard to education :—

Category	Number of Schools			Number of Students						Total Number of Students		
				Boys Schools			Girls Schools					
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Primary Schools ..	12,868	653	13,521	831,272	125,915	957,187	1,656	37,825	39,481	832,928	163,740	996,668
Middle English Schools ..	866	108	974	94,799	14,070	108,869	793	14,921	15,714	95,592	28,991	124,583
Madrasha Schools ..	183	5	188	14,111	1,204	15,315	42	434	476	14,153	1,638	15,791
Middle Vernacular Schools ..	6	—	6	477	166	643	—	—	—	477	166	643
High English Schools ..	650	68	718	232,051	1,102	233,153	702	23,577	24,279	232,753	24,679	257,432
Tols and Special Schools ..	1,296	3	1,299	36,164	1,810	37,974	—	210	210	36,164	2,020	38,184
Total ..	15,869	837	16,706	1,208,874	144,267	1,353,141	3,193	76,967	80,160	1,212,067	221,234	1,433,301

The following table shows the classification of different types of Colleges and Institutions in West Bengal 1947 :—

Types	Classification	Number
*Art College ..	Government ..	9
	Aided	10
	Unaided ..	34
Total	.. .. ..	53
Training College	Government ..	2
	Aided	2
	Unaided ..	2
Total	.. .. ..	6
Professional College	Government ..	4
	Private ..	3
Total	.. .. ..	7
Professional (special Institutions)	Government ..	2
Total	.. .. ..	2
Grand Total ..	.. .. ..	68

JUSTICE

The administration of justice is entrusted to the High Court of Calcutta. Below the High Court are the District and Additional Judges, the Small Causes Court and Subordinate Judges and Munsifs. Of these officers, the District and Additional Judges and a certain number of Subordinate Judges are also endowed with the powers of a Criminal Court while the remainder have jurisdiction in Civil matters only.

Criminal Justice is administered by the High Court, the Courts of Session and the Courts of the various classes of Magistrates. On its appellate side, the High Court disposes of appeals from the order of a Court of Session, and it also confirms, modifies or annuls sentences of death passed by Sessions Courts. One of the Presidency Magistrates in Calcutta is in charge of the Children's Court and is helped by Hony. Women Magistrates. It has also two Municipal Magistrates and it possesses a Court of Small Causes with Judges who dispose of cases of the class that are usually heard in County Courts in England.

In addition a number of Union Benches and Courts have been established in selected rural areas for the disposal by honorary agency of petty criminal cases and civil disputes.

LOCAL SELF-GOVERNMENT

By Bengal Act III of 1884, and its subsequent amendments, which hitherto regulated municipal bodies in the interior, the powers of Commissioners of municipalities were increased and the elective franchise was extended. Bengal Act III of 1884 was repealed by Act XV of 1932 by which material changes have been introduced, *e.g.*, the franchise of the electors has been further widened, women have been enfranchised, the proportion of elected commissioners has been increased and the term of office of the Commissioners has been extended from three to four years. Municipal expenditure now comprises a large number of objects, including water-supply, public works, maintenance of hospitals, dispensaries and educational institutions, veterinary institutions, employment of health officers, vaccinators and sanitary inspectors, the training and employment of female medical practitioners, the provision of model dwelling houses for the working classes, the holding of industrial, sanitary and health exhibitions and the improvement of breed of cattle. The Commissioners also have large powers in regard to the water-supply and the regulation of buildings.

The Municipal Government of Calcutta is governed by Act III of 1923. This Act, which replaces Act III of 1899, makes the Corporation paramount in matters relating to municipal administration. The Act provides for the appointment of a Mayor, who replaces the Chairman of the old Act, a Deputy Mayor, an Executive Officer, and two Deputy Executive Officers, all elected by the Corporation. The appointments of the Chief Executive Officer and the six other principal officers of the Corporation are subject to the approval of Government. In order to improve the insanitary and congested areas of the city, the Calcutta Improvement Trust has been created with extensive powers.

In the mofussil, district and local boards exercise considerable powers, with regard to public works, education and medical relief.

Bengal Act V of 1919 introduces the new system of self-government by the creation of village authorities vested with the powers and duties necessary for the management of village affairs and entrusted with powers of self-taxation. The new village authority, called the union board, replaces gradually the old chaukidari panchayats and the union committees and deals with the village police, village roads, water-supply, sanitation, primary schools and dispensaries. The Act also empowers Government to create out of the members of the union boards, village benches and courts for the trial of petty criminal and civil cases arising within the union. The Act has been extended to all districts in the Province.

PUBLIC WORKS

The Public Works Department consists of Public Works and Railway Departments and is under the charge of the Secretary to Government in the Department of Communications and Works and Buildings.

The Public Works Department deals with questions regarding the construction and maintenance of public buildings and also regarding roads, bridges, etc.

The Railway Department deals with questions regarding acquisition of lands required by the several Railways, the alignment of new lines of Railways, and with Tramway projects.

There is a Chief Engineer who is the principal professional adviser to Government.

MARINE

The Marine Department deals with questions connected with the administration of the port of Calcutta and inland navigation, including the control and administration of Government launches except the police launches.

IRRIGATION

The Irrigation Department deals with irrigation, navigation, flood protection by means of embankments and drainage, the latter including relief from congestion of drainage by regulating the available supplies of water to suit the requirements of agriculture combined with the supply of water for irrigation in cases in which a supply is available.

POLICE

The West Bengal Police force comprises the Military Police, the District Police and the Railway Police. The West Bengal Police are under the control of the Inspector-General of Police, the present Inspector-General being a member of the Imperial Police Service. Under him are Deputy Inspectors-General for the Presidency range and the Burdwan range and also one Deputy Inspector-General in Charge of the C.I.D. and the Intelligence Branch.

Each district is in charge of a Superintendent, and some of the more important districts have one or more Additional Superintendents. The Railway Police is divided into three distinct charges, each under a Superintendent. The cadre comprises Assistant Superintendents, Deputy Superintendents, Inspectors, Sub-Inspectors, Sergeants, Assistant Sub-Inspectors, Head Constables and Constables. There is also a Village Police, composed of daffadars and chowkidars, who receive a monthly salary which is collected from the villages or unions by the Panchayat or Union Board. The Calcutta City Police is a separate force maintained by Government under a Commissioner who is responsible direct to Government. The Commissioner has under him Deputy Commissioners, Assistant Commissioners, Inspectors, Sub-Inspectors, Sergeants, Assistant Sub-Inspectors, Head Constables and Constables. A school for the training of recruits for the Calcutta Police force has been established at Calcutta. The annual cost of the Police is over 366 lakhs.

PUBLIC HEALTH

The head of the Medical Directorate is the Director of Health Services Government of West Bengal. In the districts the Civil Surgeons are responsible for medical work. According to the latest statistics available there are 59 hospitals and dispensaries in Calcutta, 11 of which are supported by the Government and 1,514,528 persons were treated at these institutions of whom 174,668 were in-patients. The Governments of West Bengal have sanctioned 48 lakhs for expenditure in connection with Public Health in Budget-estimates for 1948-49.

THE FINANCES

The Government of undivided Bengal had a succession of deficit budgets during the last few years and their budget for the year 1947-48 left an uncovered gap of 6 crores between revenue and expenditure. The Account of the late Government of Bengal with the Reserve Bank on the date of Partition showed a debit balance of a little over 5 crores. This debit balance, was, by direct negotiation between Pakistan and the Indian Union in Delhi, allocated in equal proportions to East and West Bengal.

The Government of West Bengal accordingly started with a debit balance of 2½ crores in the Reserve Bank partly counterbalanced by the cash balance in Treasuries amounting to about half a crore. In other words, it started with a net negative opening balance of 2 crores. West Bengal's share of the debit balance in the Reserve Bank (viz., 2½ crores), was liquidated with the help of a special advance of an equivalent amount obtained from the Government of India. A further Ways and Means advance of 2 crores was taken by West Bengal from the same source to enable the Province to carry on till sufficient revenue had been collected for the purpose of a reasonable working balance. The Ways and Means advance of 2 crores has since been fully repaid. The terms of repayment of the other advance of 2½ crores have not yet been finally settled.

ESTIMATED REVENUE FOR 1948-49.
(The figures are in Thousands of Rupees.)

Heads of Revenue.	Revised Estimate 15-8-47 to 31-3-48.	Budget Estimate 1948-49
	Rs.	Rs.
Customs	50,00	1,00,00
Taxes on Income ..	3,85,00	4,00,00
Land Revenue	1,36,78	1,83,54
Provincial Excise ..	3,59,22	5,88,20
Stamps	1,40,00	2,40,00
Forest	22,51	35,81
Registration	18,88	32,00
Receipts under Motor Vehicles-Taxation Acts	22,66	36,36
Other Taxes and Duties ..	3,38,68	5,26,81
Subsidised Companies ..	92	92
Irrigation, Navigation, Embankment and Drainage Works for which Capital Accounts are kept	6,20	—5,60
Irrigation, Navigation, Embankment and Drainage Works for which no Capital Accounts are kept	2,23	2.95
Interest	16,45	18,47
Administration of Justice.	14,98	22,14
Jails and Convict Settlements	4,01	6,65
Police	5,63	10,08
Ports and Pilotage ..	29	47
Education	6,02	10,80

ESTIMATED REVENUE FOR 1948-49—*contd.*
(The figures are in Thousands of Rupees).

Heads of Revenue.	Revised Estimate 15-8-47 to 31-3-48.	Budget Estimate 1948-49.
	Rs.	Rs.
Medical	11,53	16,46
Public Health	3,34	2,68
Agriculture	56,15	1,32,99
Veterinary	76	1,07
Co-operation	1,30	2,60
Industries	47,57	38,53
Miscellaneous Departments	1,27	1,94
Civil Works	9,67	22,96
Receipts in aid of Superannuation	44	64
Stationery and Printing	1,54	2,41
Miscellaneous	1835	1897
Miscellaneous Adjustments between Central and Provincial Governments	5	8
Extraordinary receipts..	2,05,83	6,67,59
Total Revenue Receipts.	18,88,26	31,18,52
Debt raised in India ..	22,00,00	35,00,00
Loans from the Central Government.. ..	5,34,91	5,23,24
State Provident Fund ..	25,00	35,00
Famine Insurance Fund . Depreciation Reserve Fund — Government Presses	8,80	14,28
Fund for promotion of Education, among the backward classes ..	54	76
District Funds	6,38	10,36
Other Funds	38,00	55,00
Civil Deposits	72,06	1,08,10
Other Accounts	13,63,30	16,65,20
Advances	7,58	20,05
Accounts with Reserve Bank	14,55	17,40
Suspense Accounts ..	60	80
Cheques and Bills ..	2,00,00	2,50,00
Departmental and Similar Accounts	8,00,00	10,00,00
Loans and Advances by the Provincial Governments	2,00	3,00
Total Receipts ..	63,43	63,20
Opening Balance ..	72,30,41	1,04,04,91
GRAND TOTAL ..	—2,06,12	2,54,22
	70,24,29	1,06,59,13

ESTIMATED EXPENDITURE FOR 1948-49.
(The figures are in Thousands of Rupees.)

Heads of Expenditure.	Revised Estimate 15-8-47 to 31-3-48.	Budget Estimate 1948-49.
	Rs.	Rs.
Taxes on Income other than Corporation Tax ..	1,27	2,48
Land Revenue	17,20	29,48
Provincial Excise ..	17,84	33,34
Stamps	3,47	5,81
Forest	17,74	27,52
Registration	7,57	14,22
Charges on account of Motor Vehicles Taxation Acts	2,25	4,50
Other Taxes and Duties..	6,73	12,09
Interest on works for which Capital Accounts are kept	11,67	14,19
Other Revenue Expenditure financed from Ordinary Revenues ..	40,64	77,09
Interest on Debts and Other Obligations ..	8,02	9,54
General Administration..	92,67	1,72,43
Administration of Justice.	51,23	99,77
Jails and Convict Settlements	37,42	62,71
Police	1,91,07	3,66,57
Ports and Pilotage ..	1,67	1,75
Scientific Departments ..	39	41
Education	1,09,58	2,14,53
Medical	69,97	1,06,69
Public Health	28,14	48,94
Agriculture	1,07,58	2,31,12
Veterinary	5,69	10,45
Co-operation	9,31	12,97
Industries	66,15	70,01
Miscellaneous Departments	8,75	16,56
Civil Works	89,46	1,72,32
Famine Relief	56,95	81,12
Superannuation Allowances and Pensions ..	48,05	77,99
Stationery and Printing .	20,09	36,87
Miscellaneous	1,02,54	1,47,47
Extraordinary Charges in India	2,14,25	3,78,08
Commutation of Pensions financed from Ordinary Revenues	2,20	5,00
Expenditure on Post-War Development Schemes..	1,99,42	6,57,43
Total Revenue Expenditure	16,46,98	31,96,45

ESTIMATED EXPENDITURE FOR 1948-49—*contd.*

(The figures are in Thousands of Rupees.)

Heads of Expenditure.	Revised Estimate 15-8-48 to 31-3-48.	Budget Estimate 1948-49.
	Rs.	Rs.
Construction of Irrigation, Navigation, Embankment and Drainage Works	39,48	85,30
Outlay on Schemes of Agricultural Improvement and Research	2,50	11,30
Civil works not charged to Revenue ..	17,65	1,33,24
Outlay on Industrial Development	11,80	79,18
Outlay on Provincial Schemes of State Trading not charged to Revenue..	1,45,41	86,58
Capital Account of other Provincial Works, outside the Revenue Account ..	25	1,70,00
Debt Raised in India ..	22,00,00	36,00,00
State Provident Fund ..	18	25,00
Famine Insurance Fund ..	8	13,98
Loans from the Central Government	2,00,00	12,71
Depreciation Reserve Fund for Government Presses..	1,05	34
Fund for promotion of Education among the backward classes ..	5,26	11,48
Deposits of Local Funds—		
District Funds	40,00	60,00
Other Funds	67,26	1,02,96
Civil Deposits	13,05,10	16,49,95
Other Accounts	7,58	20,05
Advances	16,07	20,25
Accounts with Reserve Bank	60	80
Suspense	2,00,00	2,50,00
Cheques and Bills ..	8,00,00	10,00,00
Departmental & Similar Accounts	2,00	3,00
Loans and Advances by the Provincial Governments ..	34,58	50,27
Total Expenditure ..	67,70,07	1,05,84,24
Closing Balances ..	2,54,22	74,89
GRAND TOTAL ..	70,24,29	1,06,59,13

ADMINISTRATION

The present form of administration in Bengal dates from 15th August, 1947. In 1912 the Government of the Province underwent an important change, when in accordance with the Proclamation of His Majesty the King-Emperor at Delhi, the Province was raised from the status of a Lieutenant-Governorship to that of a Governor-in Council, thus bringing it into line with the Presidencies of Madras and Bombay. In 1921, under the Reform Scheme, the Local Government was reconstituted, certain of the departments being placed under the control of Ministers appointed from among elected members of the Legislative Council. There were normally four members of the Executive Council in charge of the "reserved subjects," and three Ministers, who were in charge of the "transferred subjects."

With the enforcement of the Government of India Act of 1935 on April 1, 1937, complete provincial autonomy came into being. The entire administration vested in the Governor assisted by a Council of Ministers holding office during his pleasure but answerable to a wholly elective legislature comprising two houses. Except in regard to his special responsibilities, the Governor corresponded to a constitutional monarch. The services no longer found a place in the legislatures and were subordinate to the Ministers. Dyarchy disappeared and there was complete responsible Government.

As from 15th Aug. 1947 two independent Dominions known as India and Pakistan were set up in India under the provisions of the Indian Independence Act, 1947.

The Province of Bengal, as constituted under the Government of India Act, 1935 ceased to exist from that day and in lieu thereof two new Provinces—East Bengal and West Bengal were constituted of which only the latter came under the Dominion of India. Pending the framing of the new constitution of India by its Constituent Assembly, the Legislature of the new Province of West Bengal was made unicameral by an order of the Governor-General issued under the provisions of the Indian Independence Act. 1947. The administration of this Province is at present carried on under the Government of India Act, 1935 as adapted by orders of the Governor-General issued from time to time under the provisions of the said Independence Act. Under the adapted Government of India Act, the special responsibilities of the Governor as well as his discretionary powers have ceased to exist.

The unit of administration is the District Magistrate and Collector. As Collector he supervises the gathering of the revenue and is the head of all the Departments connected with it, while as District Magistrate he is responsible for the administration of criminal justice in the district. The immediate superior of the District Magistrate is the Divisional Commissioner. Commissioners are the channels of communication between the local officers and the Government. In certain revenue matters they are, in their turn, subject to the Board of Revenue in Calcutta; in other matters they are under the district control of Government.

PERSONNEL

GOVERNOR.

His Excellency Kailashnath Katju.

MINISTRY.

Prime Minister, The Hon'ble Dr. Bidan Chandra Roy.

Home Minister, The Hon'ble Kiran Sankar Roy (*also of L. Assembly Depts.*)

Finance, Commerce & Industries, The Hon'ble Nalini Ranjan Sarkar.

Civil Supplies, The Hon'ble Prafulla Chandra Sen.

Education Dept., The Hon'ble Rai Harendra Nath Chaudhuri.

Works, Bldgs. and Communications, The Hon'ble Bimal Chandra Sinha.

Judicial & Legislative Depts., The Hon'ble Niharendu Dutt Majmudar.

Land & Land Revenue Dept., The Hon'ble Mohini Mohan Barman.

Labour, The Hon'ble Kalipada Mookherji.

Forests & Fisheries Dept., The Hon'ble Hemchandra Naskar.

Irrigation & Waterways Dept., The Hon'ble Bhupati Mazumdar.

C.C. & R. Dept., The Hon'ble Nikunja Behary Maity.

Agriculture Dept., The Hon'ble Jadabendra Nath Panja.

NOTE: On May 6 the Cabinet was reconstucted with 9 out of the 12 old members The new Cabinet is as follows: Dr. B C. Roy, N. R. Sarkar, K. S. Roy, K. P. Mookherji, Rai H. N. Cha dhuri, P. C. Sen, N. Dutt-Majmudar, N. B. Maity, J. Panja, B. C. Sinha.

H. E. THE GOVERNOR'S PERSONAL STAFF.

Secretary, S. N. Roy, I.C.S.

Assistant Secretary, P. B. Sen Gupta.

Private Secretary, S. Krishna Murti.

Assistant Private Secretary,

Military Secretary, Lt.-Col. B. B. Chatterji.

Hony. Physician, Dr. Amal Kumar Roy Choudhuri, M.D.

Hony. Surgeon, L. M. Banji, M.S. (Cal.), F.R.C.S. (Eng.)

Hony. Ophthalmic Surgeon, T. Ahmed, M.B. (Dors.), F.R.C.S. (Eng.)

Hony. Dental Surgeon, Dr. Benkim Mukherji, L.D.S., R.C.S. (Eng.)

Hony. Surgeon in Darjeeling, Dr. S. N. Chowdhury, M.B.

AIDE-DE-CAMP.

M. Singaravelu (*Madras Police*), S/Lieut. H. Bhattacharyya, R.I.N.V.R., Lieut. M. L. Devender Singh, I.A.

HONY. AIDE-DE-CAMP.

Subedar Major and Hony. Captain, Lal Bahadur Sunwar, Sardar Bahadar, M.B.E., O.B. (Late of 10th Gurkha Rifles).

HOME DEPARTMENT.

Chief Secy., S. Sen, I.C.S.

Jt. Secys., M. A. T. Ivengar, I.C.S.; S. S. Ross; R. S. Krishnaswamy I.C.S. (*Ex-Officio and Special Officers, Home Dept.*)

Secy., Home Dept., Ranjit Gupta, I.C.S.

Provincial Transport Commissioner, Ex-Officio, S. Sen, I.C.S.

Deputy Secys., Dhirendra Mohan Gupta; S. C. Dutt; Purna Chandra Achaya.

Deputy Provincial Transport Commissioner and Ex-officio. A. K. Ghosh, I.C.S.

Additional Special Officer, S. M. Goswami.

Special Officer, Evacuees Department, Benod Behari Sarkar.

Under Secy., Ranajit Ghosh.

Asst. Secy. Home (Police) Dept., Shyama Chowan Chatterji.

Asst. Secy., Home (Poll.) Dept., Viresh Chandra Dutt.

Asst. Secy., Home (G.T.) Dept., Kiran Chandra Mitra.

Asstt. Secy., Home (Jails) Dept., Gadahar Singh Roy.

Asstt. Provincial Transport Commissioner and Ex-officio Asst. Secy., Home (Transport) Dept., B. K. Sen.

Registrar, Home Department, L. A. D'Costa.

Asst. Secy., Home (Publicity) Dept., Ekkari Basu.

Asst. Secy., Home (Development) Dept., Brindaban Chandra De.

Asst. Secy., Home (Press) Dept., Nripendra Narayen Som.

Special Officer, Home (Transfer) Dept., Narendra Krishna Pal.

Organisation and Methods Officers, Sachchidananda Kar and A. C. Banerji.

HEALTH AND LOCAL SELF-GOVT. AND JAILS DEPT.

Secretary, Sheribal Kumar Gupta, I.C.S.

Deputy Secys., Janab A. Zaman, I.C.S.; B. B. Ghosh; Niranjan Mohan Badhan.

Registrar, Harendra Nath Das Gupta.

Asst., Bisweswar Prasad Basu.

CIVIL SUPPLY DEPARTMENT.

Food and Civil Supply Commissioner, K. C. Basan, I.C.S.

Addl. Commissioner, Ex-officio Secretary, A. D. Khan, I.C.S.

Dy. Secy., E. G. Creek, I.C.S.

Director of Rationing, Bengal, D. K. Ghosh.

Asst. Secy., Sudhansu Ranjan De.

3rd Asst. Secy., Monoranjan Sarkar.

Registrar, Debendra Nath Biswas.

JUDICIAL AND LEGISLATIVE DEPARTMENTS.

Secy., B. K. Guha, I.C.S.
Dy. Secy. Kasi Ashar Ali.
Asst. Secy., Nirmal Chandra Chatterji.
Asst. Secy., Promod Kisor Ray.

LAND AND LAND REVENUE DEPARTMENT.

Member, Board of Revenue, West Bengal and Ex-officio Secy., Land and Land Revenue, S. M. Banerji, I.C.S.
Secy., Board of Revenue and Ex-officio, S. Chatterji.
Asst. Secy., A. K. Chakrabarti.
Registrar, Narendra Nath Mitra.

AGRICULTURE, FOREST AND FISHERIES DEPARTMENT.

Secy., S. K. Dey, I.C.S.
Addl. Secy., S. Dutt, I.C.S.
Dy Secy., P. M. Das Gupta.
Special Officer, Rai Bahadur U. N. Ghokh.
Addl. Asst. Secy., Nihar Chandra Chakravarti.

EDUCATION DEPARTMENT.

Secy., Dr. D. M. Sen.
Asst. Secy., Brajendra Prasad Neogi.
Special Officer, H. C. Sen.

IRRIGATION AND WATERWAYS DEPT.

Secy., S. K. Dey, I.C.S.
Dy. Secy., Bhupendra Krishna Sinha.

WORKS & BUILDINGS DEPT.

Secy., S. K. Chatterji, I.C.S.
Dy. Secy., S. K. Marundar.
Registrar, S. Bhattacharya.

FINANCE DEPARTMENT.

Secy., B. B. Das Gupta.
Deputy Secys., H. N. Roy, I.C.S.; B. B. Das Gupta.
Asst. Secys., B. K. Sen; P. B. Banerji.
Registrar, Satish Chandra Ghosh.

COMMERCE, LABOUR AND INDUSTRIES DEPARTMENT.

Secy. S. K. Chatterji, I.C.S.
Dy. Secy., Durgasive Prosad Mukherji.
Asst. Secy., Suresh Chandra Das Gupta.

CO-OPERATION, CREDIT AND RELIEF DEPARTMENTS.

Jt. Secy., A. B. Ganguly, I.C.S.
Director, Relief and Rehabilitation, Bengal and Ex-Officio Jt. Secy., Dept. of Co-operation, Credit and Relief, T. G. Davies.
Asst. Dir. of Relief and Rehabilitation, J. N. Sanyal.
Asst. Secys., Muhammad Abdul Gani; M. B. Iyer.

MISCELLANEOUS APPOINTMENTS.

Inspector-General of Police, S. Gupta, I.P.
Commissioner, Calcutta Police, S. N. Chatterji, I.P.
Director of Health Services, Major-General A. C. Chatterji.
Collector of Customs, Calcutta, S. C. Satyawadi, I.C.S.
Accountant-General, P. N. Rajagopal.
Inspector-General of Prisons, Lt.-Col. M. A. Singh, I.M.S.
Postmaster-General, S. Smith, M.B.E.
Inspector-General of Registration, B. R. Das Gupta.
Director of Agriculture, M. M. Basu, I.C.S.
Director of Industries, D. N. Ghose.
Asst. Director of Fisheries, Dr. K. C. Saha.
Protector of Emigrants, D. C. Mukherji.
Superintendent, Royal Botanic Garden, Calcutta, Kalipada Biswas, M.A.
Curator of Herbarium, Royal Botanic Gardens, S. K. Mukerjee, M.Sc., Ph. D.

LIEUTENANT-GOVERNORS OF BENGAL.

Frederick J. Halliday	1854
John P. Grant	1859
Cecil Beadon	1862
William Grey	1867
George Campbell	1871
Sir Richard Temple, Bart., K.C.S.I.	1874
The Hon. Ashley Eden, C.S.I.	1877
Sir Steuart C. Bayley, K.C.S.I. (*Offg.*)	1879
A. Rivers Thompson, C.S.I., C.I.E.	1882
H. A. Cockerell, C.S.I. (*Officiating*)	1885
Sir Steuart C. Bayley, K.C.S.I., C.I.E.	1887
Sir Charles Alfred Elliott, K.C.S.I.	1890
Sir A. P. MacDonnell, K.C.S.I. (*Offg.*)	1893
Sir Alexander Mackenzie, K.C.S.I. Retired 6th April 1898.	1895
Charles Cecil Stevens, C.S.I. (*Offg.*)	1897
Sir John Woodburn, K.C.S.I. Died, 21st November 1902.	1898
J. A. Bourdillon, C.S.I. (*Officiating*)	1902
Sir A. H. Leith Fraser, K.C.S.I.	1903
Lancelot Hare, C.S.I., C.I.E. (*Offg.*)	1906
F. A. Slacke (*Officiating*)	1906
Sir E. N. Baker, K.C.S.I. Retired 21st September 1911.	1908
F. W. Duke, C.S.I. (*Officiating*)	1911

The Office of Lieutenant-Governor of Bengal was abolished on April 1st, 1912, when Bengal was raised to a Governorship.

GOVERNORS OF THE PRESIDENCY OF FORT WILLIAM IN BENGAL.

The Rt. Hon. Baron Carmichael of Skirling, G.C.I.E., K.C.M.G.	1912
The Rt. Hon. Earl of Ronaldshay, G.C.I.E.	1917
The Rt. Hon. Lord Lytton	1922
The Rt. Hon. Sir Stanley Jackson, P.C., G.C.I.E.	1927
The Rt. Hon. Sir John Anderson, P.C., G.C.B., G.C.I.E.	1932
The Rt. Hon. Lord Brabourne, G.C.I.E., M.C.	1937
Sir John Ackroyd Woodhead, K.C.S.I. (Temporary)	1939
The Rt. Hon. Sir John Arthur Herbert, G.C.I.E.	1939
Sir Thomas Rutherford, K.C.S.I., C.I.E. (Temporary)	1943
The Rt. Hon .R .G. Casey, P.C., C.H., M.C., D.S.O.	1944
The Rt. Hon. Sir Frederick John Burrows, G.C.I.E.	1946
Mr. C. Rajagopalachari, 15, Aug.	1947
Sir B. L. Mitter (acting), 11, Oct.	1947
Mr. C. Rajagopalachari 26, Nov.	1947

WEST BENGAL LEGISLATIVE ASSEMBLY

Speaker : The Hon'ble Shri Iswar Das Jalan.

Deputy Speaker : Ashutosh Mallick.

Hemanta Kumar Basu (*Calcutta North, General*); The Hon'ble Shri Kalipada Mookerjee (*Calcutta East, General*); The Hon'ble Shri Iswar Das Jalan (*Calcutta West, General*); Basantlal Murarka (*Calcutta Central, General*); J. C. Gupta (*Calcutta South Central, General*); Satish Chandra Bose (*Calcutta South, General*); The Hon'ble Shri Bhupati Majumdar (*Hooghly cum Howrah Municipal, General*); Nikumja Behari Maiti (*Burdwan Division North Municipal, General*); Bepin Behari Ganguli (*24-Parganas Muncipal, General*); Satish Chandra Chakravarty (*Northern Districts Municipal, General*); Jadabendra Nath Panja (*Burdwan Central, General*); Annadaprasad Mandal (*Burdwan North-west; General*); The Hon'ble Dr. P. C. Ghosh (*Birbhum, General*); Shri Kanai Lal De (*Bankura West, General*); The Hon'ble Shri Kamal Krishna Ray (*Bankura East, General*); Charu Chandra Mahanty (*Midnapore Central, General*); The Hon'ble Shri Annada Prosad Chowdhury (*Jhargram cum Ghatal, General*); Rajani Kanta Pramanik (*Midnapore East, General*); Pramatha Nath Bandopadhyaya (*Midnapore South-west, General*); Iswar Chandra Mal (*Midnapore South-east, General*); Dhirendra Narayan Mukherji (*Hooghly North-east, General*); Sukumar Dutta (*Hooghly South-west, General*); Shri Susil Kumar Banerjee (*Howrah, General*); Bimal Chandra Sinha (*24-Parganas South-east, General*); The Hon'ble Shri Charu Chandra Bhandari (*24-Parganas North-west, General*); Shyamapada Bhattacharyya (*Murshidabad, General*); Khagendra Nath Das Gupta (*Jalpaiguri-cum-Siliguri, General*); Damber Singh Gurung (*Darjeeling, General*); Kanailal Dass (*Burdwan Central, General*); Shri Bankubehari Mandal (*Burdwan North-west, General*); Nishapati Majhi (*Birbhum, General*); Ashutosh Mallick (*Bankura West, General*); Krishna Prasad Mandal (*Midnapore Central, General*); Harendra Nath Dolui (*Jhargram-cum-Ghatal, General*); Radha Nath Das (*Hooghly North-east, General*); Arabinda Gaven (*Howrah, General*); The Hon'ble Shri Hem Chandra Naskar (*24-Parganas South-east, General*); Ardhendu Sekhar Naskar (*24-parganas North-west, General*); Kubar Chand Haldar (*Murshidabad, General*); The Hon'ble Shri Mohini Mohan Barman (*Jalpaiguri-cum-Siliguri, General*); Jajneswar Roy (*Jalpaiguri-cum-Siliguri, General*); Muhammad Rafique, J.P. (*Calcutta North, Muhammadan*); K. Nooruddin (*Calcutta South, Muhammadan*); Muhammad Sharif Khan (*Hooghly-cum-Howrah Municipal, Muhammadan*); Muhammad Qumruddin (*Barrackpore Municipal, Muhammadan*); Abdul Hashem (*Burdwan, Muhammadan*); Maulvi Mudassir Hossain (*Birbhum Muhammadan*); Dr. Syed Muhammad Siddique (*Bankura, Muhammadan*); Serajuddin Ahammad (*Midnapore, Muhammadan*); Abdul Wahid Sarkar (*Hooghly, Muhammadan*); Muhammad Idris (*Howrah, Muhammadan*); Jasimuddin Ahmed (*24-Parganas, South, Muhammadan*); Ilias Ali Molla (*24-Parganas Central, Muhammadan*); A. F. M. Abdur Rahman (*24-Parganas North-east, Muhammadan*); Molla Mohammad Abdul Halim (*Navadwip, Muhammadan*); Md. Khuda Bukhsh (*Berhampore, Muhammadan*); Sahibzada Kawan Jah Saiyid Kazim Ali Mirza (*Murshidabad South-west, Muhammadan*); Hassan Ali (*West Dinajpur, Muhammadan*); Md. Sayeed Mia (*Malda, Muhammadan*); Nawab Musharruff Hossain Khan Bahadur (*Jalpaiguri-cum-Darjeeling, Muhammadan*); Miss Bina Das (*Calcutta Women, General, Urban*); Husan Ara Begum, (*Calcutta, Muhammadan, Urban*); Mrs. Edna May Ricketts (*Anglo-Indian*); L. R. Pentony (*Anglo-Indian*); R. E. Platel (*Anglo-Indian*); G. C. D. Wilks (*Anglo-Indian*); Daniel Gomes (*Calcutta-cum-Presidency Division, Indian Christian*); A. K. Ghose, (*Bengal National Chamber of Commerce*); Bimal Comar Ghose (*Bengal National Chamber of Commerce*); Debi Prosad Khaitan (*Indian Chamber of Commerce*); Anandilall Poddar (*Marwari Association*); Abdur Rahman Siddiqi (*Muslim Chamber of Commerce*); Sir Uday Chand Mahtab, Maharajadhiraj Bahadur of Burdwan (*Burdwan Landholders*); Jyoti Basu (*Railway Trade Union, Labour*); The Hon'ble Dr. Suresh Chandra Banerji (*i*) Calcutta and Suburbs (*Registered Factories, Labour*); (*ii*) Barrackpore Registered Factories, Labour); Nibarendu Dutt Mazumdar (*Barrackpore Registered Factories, Labour*); Sibnath Banerjee (*Howrah Registered Factories, Labour*); A. M. A. Zaman (*Hooghly-cum-Serampore Registered Factories, Labour*); Devendranath Sen (*Colliery (coal mines), Labour*); Ratamlal Brahmin (*Darjeeling Sadar Tea Garden Labour*).

West Punjab

WEST Punjab Province was formed after the partition of August 15, 1947. It comprises the whole of the Rawalpindi and Multan Divisions, the Districts of Gujranwala, Sialkot, Sheikhupura, Lahore minus half the Kasur Tehsil (180 villages out of 353 in this tehsil having been assigned to East Punjab) and the Shakargarh Tehsil of the Gurdaspur District.

There is no authentic record indicating the population figures of West Punjab Province. But here is a rough estimate.

Area: 62,012 sq. miles.
Density: 302.
Population: 18,746,000.
Males: 10,123,000.
Females: 8,623,000.
Muslims: 18,319,000.
Christians: 426,000.
Others: 1,000.

AGRICULTURE

Nearly 50 per cent. of the total area is under arable farming, over 3 per cent. under forests, and 28 per cent. and 19 per cent. respectively, lying as 'culturable' and 'unculturable' wastes. 33 per cent. of the cultivated area depends upon rain and the rest is irrigated from a network of canal system and by surface percolation wells, tube-wells, etc.

The Lower Jhelum, the Lower Chenab, the Sutlej Valley and the Haveli Canals, respectively, command 3.3, 3, 1.3 and 1.3 million acres. A new project, known as the Thal, when completed, will irrigate 2 million acres. Thus, the total canal irrigated area of the Province will be nearly 11 million acres.

Of the crops grown, wheat, rice, cotton and sugar-cane are the most important and cover about 53.2 per cent. of the total area sown. Improved varieties of long-staple cotton, suitable for different tracts, cover about 1.6 million acres or about 85 per cent. of the area under cotton. Indigenous cotton meant for home-consumption is grown over only a small area. Other crops of the province are the millets oil-seeds and pulses. A fairly large varieties of fruit cover well over 50,000 acres. The most important fruit crop of the Province is citrus.

Livestock is important from the agricultural as well as food and commercial points of view. The bovine population aggregates to nearly 9 million heads. Large profits are derived from cattle and dairy trades. The productions of hide and skin are also important industries.

INDUSTRIES

The industrial and commercial life of the Province was completely paralysed owing to the partition. It would take a long time to reconstruct the industry so that it can be an asset to the country. The number of factories registered under the Factories Act, 1934 amounts to 830, which can be divided into two categories seasonal and perennial. Cotton ginning and pressing factories form more than 90 per cent. of the total number of seasonal factories, the remaining are engaged in rice husking, sugar and fruit canning. Among the perennial factories the most important are textile mills, foundries and engineering workshops, cement factories, flour mills, glass and rubber factories, chemicals including turpentine, matches, paints and varnishes, petroleum refineries, sports and surgical goods. The two largest textile mills are situated at Lyallpur and Okara respectively. Sialkot enjoys international fame on account of its sports goods and surgical instruments. Other industrial concerns of note in the Province are a turpentine and rosin factory at Jallo; a factory for the hydrogenation of vegetable oils at Lyallpur; cement factories at Wah and Dandot; tanneries at Wazirabad and Sialkot; factories for the manufacture of electrical apparatus at Lahore and Rawalpindi and for the manufacture of sewing machines at Lahore.



H. E. Sir Francis Mudie

Small scale and cottage industries have also suffered a lot due to communal disturbances. These industries form a heterogenous group comprising industries of a most varied character and of different sizes and forms of organisation. Some cottage industries are of considerable importance such as the manufacture of iron safes at Gujranwala; veterinary and surgical instruments at Sialkot and Lahore, pottery making at Gujrat; Ivory carving at Chiniot; cutlery at Nizamabad and Wazirabad and utensils at Gujranwala. There is a big factory of footwear near Lahore. The manufacture of cycle parts has been taken up at Lahore and Sialkot. The sericulture industry has to make almost a fresh start as it has only one silkworm rearing station at Murree but a large number of agriculturists in submontane tracts are taking an increasing interest in silkworm rearing and reeling operations. There is an Arts and Crafts Depot at Lahore which provides a market for artistic wares and helps to secure improvement in design and workmanship.

The oil industry has a big future. The Attock Oil Company is engaged in extracting and refining mineral oils in Rawalpindi District.

COMMUNICATIONS

The P.W.D. Buildings and Roads Branch looks after the communications in the West Punjab. The mileage so far metalled and maintained is as under:—

P.W.D.	2,812 miles.
District Boards	317 miles.

In addition to this, it has been proposed to construct the following categories of roads for the post-war period in the first five-year Programme:—(*a*) Arterial Roads, 2,361 miles; (*b*) District Minor Roads, 847 miles; (*c*) Village Roads (soil stabilized) 1,115 miles.

The Department hopes to complete the above programme by the end of 1951-52 when the mileage available for traffic in the West Punjab will be as follows:—

Metalled roads	6,337 miles.
Village roads (soil stabilized)	1,115 miles.

In addition to the above existing and proposed road mileage, the Department looks after 11,114 miles of unmetalled roads and controls through the District Boards, a mileage of 11,832 of unmetalled roads, thus bringing the total of unmetalled class II and class III roads to 12,946 miles, partly bridged and partly unbridged.

ADMINISTRATION

Prior to the amendment of Government of India Act in 1919 the head of the administration was a Lieutenant-Governor, drawn from the ranks of the Indian Civil Service. Under the Act of 1919 the Province was raised to the status of a Governorship, with an Executive Council and Ministers, the Governor-in-Council being in charge of the Reserved Subjects and the Governor with his Ministers of the Transferred Subjects. With the introduction of part III of the Government of India Act 1935, this Executive Council was substituted by a Council of Ministers and the Legislative Council by an enlarged Legislative Assembly with wide powers of legislation and control. After the establishment of Pakistan, the Provincial Government is carried on according to the provisions of the Government of India Act, 1935, as modified by the Pakistan (Provisional Constitution) order 1947. The business of Government is carried on through the usual Secretariat which consists of six Secretaries, designated as (1) Chief, (2) Home, (3) Finance, and (4) Industrial and Medical, (5) Civil Supplies, (6) Refugees and Rehabilitation Secretaries, three Deputy Secretaries, one additional Deputy Secretary, three Under-Secretaries, and two Assistant Secretaries. Seven Assistant Directors in the Civil Supplies Department are also Under-Secretaries. In the Public Works Department, there are five Chief Engineers (Secretaries of Branches), one in the Buildings and Roads Branch, one in the Electricity Branch and three in the Irrigation Branch while the Legal Remembrancer is also the Secretary to Government in the Legislative Department. The two Financial Commissioners are also Secretaries to Government in Revenue and Development Departments. The head of the Police Department is Joint Secretary and of the Education Department a Secretary to Government. The Headquarters of the Government is at Lahore. Under the Governor, the province is administered by three Commissioners (for Lahore, Rawalpindi and Multan) who exercise general control over the Deputy Commissioners—16 in number—each of whom is in charge of a district.

The principal heads of Department in the Province are the two Financial Commissioners (who are the highest Court of Revenue jurisdiction, and heads of the Departments for Land Revenue, Agriculture and the Court of Wards), the five Chief Engineers, the Inspector-General of Police, the Director of Public Instruction, the Inspector-General of Prisons, the Inspector-General of Civil Hospitals, the Director of Public Health, the Chief Conservator of Forests, the Directors of Agriculture and Industries, the Inspector-General of Registration, the Registrar of Co-operative Credit Societies and Joint Stock Companies, the Deputy Commissioner of criminal tribes and the Legal Remembrancer.

JUSTICE

The administration of justice is entrusted to a High Court, which is the final appellate authority in civil and criminal cases, and has powers of original criminal jurisdiction in cases where European British subjects are charged with serious offences and original civil jurisdiction in special cases. The Court sits at Lahore and is composed of a Chief Justice and four Puisne Judges and three additional Judges, (either civilians or barristers). Subordinate to the High Court are the District and Sessions Judges (12 in number) each of whom exercises civil and criminal jurisdiction in a civil and session division comprising one or more districts. In districts in which the Frontier Crimes Regulation is in force the Deputy Commissioner on the finding of a Council of Elders (Jirga) may pass sentence up to seven years' imprisonment.

LOCAL GOVERNMENT

Local Government is secured in certain branches of the administration by the constitution of District Boards, each exercising authority over a district, of a Corporation at Lahore or of Municipal, Town, and Notified Area Committees each exercising authority over an urban area, and of Panchayats, each exercising authority over a revenue estate or a compact group of revenue estates. The funds of District Boards are derived from a cess on the land revenue of the district supplemented by Government grants, professions and other taxes and miscellaneous fees, and those of the Lahore Corporation and Municipal, Town, and Notified Area Committees from octroi or terminal tax and other forms of taxation, from Government grants and from rents and miscellaneous fees. The Panchayat

system is an attempt to revive the traditional village community organisation, the elected committee or Panchayat possessing certain powers in respect of taxation, local option, civil and criminal justice, the abatement of nuisances and other matters. In order to modernise the towns of the province, the Punjab Town Improvement Act, 1922, which provides for the constitution of Improvement Trusts, has been extended to five important towns.

POLICE

The Police force is divided into District Police, Railway Police, Criminal Investigation Department, Provincial Additional Police and Border Police. The combined force is under the control of the Inspector-General of Police, who is a member of the gazetted force and has under him four Deputy Inspectors-General three in charge of ranges comprising several districts, one in charge of the Criminal Investigation Department and of the Finger Print Bureau at Lahore. The Railway Police is under an Assistant Inspector-General. The Provincial Additional Police and Border Police are controlled by their commandants. The District Police are controlled by Superintendents each of whom is in charge of a district and has under him one or more Assistant Superintendents or Deputy Superintendents.

The Border Police is a new addition and was raised on account of danger to border.

EDUCATION

Rapid strides have been made in education in West Punjab during the last two decades. The advance has not been confined to any one form of education but is spread over all grades and varieties. In addition to institutions maintained in all parts of the province by private enterprise, Government itself maintains eleven arts colleges (including one for Europeans and two for Women), five normal schools for males, six training classes, and combined institutions for fomales, one hundred and eight secondary schools for boys and girls and thirty-seven centres for vocational training. Apart from these institutions for general education, Government maintains nine higher grade professional institutions, *viz.*, the King Edward Medical College, de Montmorency College of Dentistry and Veterinary College at Lahore, the Agricultural College at Lyallpur, the College of Engineering and Technology at Moghalpura, the Central Training College, Lahore, the Lady Maclagan Training College for Women, Lahore, and the Chelmsford Training College at Ghoragali and one school, *viz.*, the Engineering School at Rasul.

The Department of Education is in the charge of the Minister for Education who is assisted in the work of administration by the Director of Public Instruction.

MEDICAL

The Medical Department of West Punjab is controlled by the Inspector-General of Civil Hospitals, West Punjab, who is an officer of the Indian Medical Service holding the rank of Colonel. He is assisted by an Assistant Inspector-General of Civil Hospitals, West Punjab, who is an Officer of the rank of a Civil Surgeon; a Lady Assistant Inspector-General of Civil Hospitals, West Punjab, who is senior Member of the Women's Provincial Medical Service and a Personal Assistant of Gazetted rank.

PUBLIC HEALTH

The following personnel of the West Punjab Public Health Deptt., are responsible for the control of communicable disease and for the carrying out of work designed to improve the health of the people :—

Headquarters staff :—

Director of Public Health; Assistant Director of Public Health, Vaccination; Officer-in-Charge, West Punjab Epidemiological Bureau; Officer-in-Charge, Anti-malaria Operations; Nutrition Officer; Provincial Public Analyst Inspectress of Health Centres and two Assistant Inspectresses; the Principal, Punjab Health School; and a Woman Assistant.

Public Health work is organised in 3 "Ranges" each in charge of an Assistant Director of Public Health. The Assistant Director of Public Health, Lahore Range, also acts as Personal Assistant to the Director of Public Health.

Sixteen districts fell to West Punjab and to man the health services the Public Health Department was left with only 8 District Medical Officers of Health. Consequently, one officer had to be placed in charge of two districts.

A Refugee Section has recently been organised in the Department under an Assistant Director of Public Health (Refugees) after the partition of the province. To make up the deficiency in officers on account of the lack of properly qualified District Medical Officers of Health, sanction of Government was obtained for 15 posts of Assistant Medical Officers of Health, one for each district of the Province with the exception of Lahore, and 24 posts of Sub-Assistant Health Officers, so that, sanitary work in general and refugee problem in particular may be properly attended to.

The basic public health staff for each District is :—

1 District Medical Officer of Health, 1 Assistant Medical Officer of Health, 1 Sub-Assistant Health Officer, 4 Sanitary Inspectors, 1 Superintendent of Vaccination, 16 Vaccinators.

The basic district staff is reinforced from the following cadres organised for special work :—

A Public Health Corps concerned primarily with the control of epidemic disease and sanitation in rural areas.

There are 16 units in the corps each consisting of—

1 Sub-Assistant Health Officer, 1 Sanitary Inspector, 2 Sanitary Supervisors, 12 Sanitary Patrols (Labourers).

Besides the above, there are 3 additional Public Health Corps Units, one for each Range, meant for work in any district within the Range wherever emergency may arise.

An Anti-malaria Organisation under the Control of the Officer-in-Charge, Anti-malaria Operation, consists of 8 units, each consisting of:—

1 Sub-Assistant Health Officer, 1 Entomological Assistant, 5 Anti-malaria Supervisors, 25 Anti-malaria Patrols, 1 Mistry, 2 Laboratory Assistants (Junior Grade).

These units are detailed for duty in the malarious areas of the Province.

Problems relating to nutrition are investigated by specially trained staff which includes:—

1 Nutrition Officer, 1 Lady Doctor, 1 Sub-Assistant Health Officer, 2 Sanitary Inspectors.

Increasing effort is being directed towards ensuring that food-stuffs sold throughout the Province are of good quality. 24 Government Food Inpectors are employed, in addition to those appointed by local bodies, who regularly sample wholesale and retail stocks. Samples are examined at the Headquarters Laboratory and also at the two Divisonal Laboratories at Multan (functioning for the present at Lahore, and Rawalpindi.

Government has recently expanded maternity & child welfare work. There are now throughout the Province 77 maternity & child welfare centres staffed by fully trained lady health visitors, who supervise the training and work of indigenous dias. Sixty-three additional centres are being added in due course as soon as the arrangements are completed.

A special organisation for the prevention and treatment of hookworm disease is in operation in the areas in which this disease is prevalent.

The following personnel carry out the work :—

2 Sanitary Inspectors, and 5 units, each consisting of 1 Sub-Assistant Surgeon and 1 Dispenser.

A field Epidemiological Unit for the investigation of outbreaks of epidemic and other diseases is functioning in the Province and includes the following personnel :—

2 Sub-Assistant Health Officers, 6 Sanitary Supervisors, 12 Sanitary Patrols, 1 Laboratory Assistant (Junior Grade).

RURAL DISPENSARIES

The nature of the disease is determined by the collection and examination of pathological material; and the Unit also makes an endeavour to trace the disease to its source and then advice is given regarding appropriate preventive measures.

There is also a Malaria Field Epidemiological Research Station consisting of an Entomological Assistant, a Field Assistant; a Laboratory Attendant and a Clerk. Its main object is to work out biological methods for dealing with the common transmitters of malaria in the Province, especially in the water-logged areas.

The following institutions contribute to the control of disease and the training of health personnel :—

The Epidemiological Bureau—Baeteriological & Pathological Laboratories. Training of Sanitary Inspectors and Sanitary Supervisors.

The West Punjab Vaccine Institute—Training of Sanitary Inspectors, Sanitary Supervisors, Lady Health Visitors, Lady Welfare Workers, Medical Students and Vaccinators, Production of Vaccine Lymph.

The Punjab Health School—Training of lady health visitors.

An altogether new departure in the Public Health Policy has been made in recent years by the taking over by the Public Health Department of a number of rural dispensaries which formerly were under the control of the Medical Department. Eighty-nine dispensaries are working at present under the control of the Public Health Department. The idea that curative and preventive medicine should go hand in hand, has thus been given a practical shape.

In addition to the curative work that these dispensaries are required to perform, such useful Public Health Work has been achieved through the staff of these dispensaries. The doctors in charge of these dispensaries are required to tour within five miles radius of their dispensaries and in addition to attending to the sick in their homes, are now responsible for carrying out preventive health work under the supervision of the Public Health Department.

Whole-time Municipal Medical Officers of Health are employed in the following towns :—

Lahore, Rawalpindi, Multan, Sargodha, Lyallpur, Sialkot and Kasur.

All District & Municipal Medical Officers of Health are Inspectors under the Factory Act and are responsible for ensuring that the rules laid down for safeguarding the health of workers are observed.

There is a Public Health Branch of the Public Works Deptt., which is concerned with the planning and carrying out of work in connection with the provision of water-supplies and drainage and sewerage schemes in towns and villages. The Branch functions under an expert in Sanitary Engineering who has the status of a Superintending Engineer and is assisted by a number of Executive Engineers, Sub-Divisonal Officers and Subordinates.

1948-49 BUDGET

The following are the figures of revenue and expenditure :—The Budget year—1948-49. Revenue receipts (estimated) Rs. 1,209 lakhs. Revenue expenditure (estimated) Rs. 1,882 lakhs. Deficit Rs. 673 lakhs.

The Finance Minister, proposed new taxation measures to yield Rs. 383 lakhs which, coupled with an expected rehabilitation grant of Rs. 130 lakhs from the Pakistan Government reduces the deficit for the coming year to Rs. 160 lakhs.

The proposed taxation measures include a new tax on agricultural income on a graduated scale, an increase in the urban immovable property tax from 7½ per cent. to 10 per cent. on annual rental value, the doubling of copying fees in courts and in revenue record rooms, an increase in the tobacco vendor's licence fees, and an increase in the entertainment duty.

ADMINISTRATION

Governor, H. E Sir Francis Mudie, K.C.S.I., K.C.I.E., O.B.E.

PERSONAL STAFF

Secretary, S. Ghias Uddin Ahmed, I.C.S.

Military Secretary, Lt.-Col. R. F. Crasster, O.B.E.

Aide-de-Camp, Captain J. N. B. Baillie-Hamilton.

MEMBERS OF THE COUNCIL OF MINISTERS

The Hon'ble Khan Iftikhar Hussain Khan of Mamdot (*Premier*).

The Hon'ble Mian Mumtaz Muhammad Khan Daultana (*Finance Minister*).

The Hon'ble Sardar Shaukat Hyat Khan (*Minister of Revenue*).

The Hon'ble Sheikh Karamat Ali (*Minister of Education*).

[Later Mr. Daultana and Mr. Shaukat Hayat Khan resigned and three new Ministers were appointed: Mian Nur Ullah, Sardar Abdul Hameed Dasti and Major Mubarak Ali Shah].

CIVIL SECRETARIAT

Chief Secretary, H. A. Majid, I.C.S.

Secretary, Medical and Industries, S. M. Hassan, I.C.S.

Secretary, Civil Supplies Department, I. U. Khan, I.C.S.

Secretary, Finance Department, H. A. Majid, I.C.S.

Home Secretary, S. F. Hassan, O.B.E., I.C.S.

Financial Commissioners, Akhtar Hussain, O.B.E., I.C.S. (*Revenue*); J. W. Hearn, C.S.I., C.I.E. (*Development*).

PUBLIC WORKS DEPARTMENT

Irrigation Branch.

Secretary (Irrigation Branch), K. B. M. A. Hamid.

Secretary (Northern Canals), K. B. A. Karim, I.S.E.

Secretary (Western Canals), E. L. Protheroe, I.S.E.

Buildings and Roads Branch.

Secretary and Chief Engineer, Sheikh Abdul Qadir, I.S.E.

PUBLIC SERVICES COMMISSION

Chairmen, K. B. Mian, M. Afzal Hussain, I.A.S. (Retd.).

Member, Ch. Nazir Hussain, B.A., LL.B.

Member from N.-W.F.P., Khan Mohd. Akbar Khan.

Secretary, S. G. Khaliq, P.E.S.

MISCELLANEOUS DEPARTMENTS

Director of Agriculture, H. G. Sadik, I.A.S.

Director of Land Records, Nawabzada Fatehullah Khan, P.C.S.

Director of Public Instruction, K. B. S. M. Sharif, M.A.

Inspector-General of Police, Khan Qurban Ali Khan, I.P.

Chief Conservator of Forests, Mian Allah Bux, I.F.S.

Inspector-General of Civil Hospitals, Lt.-Col. S. M. K. Malik, M.B., D.P.H., M.R.C.P., I.M.S.

Director of Public Health, Dr. P. H. K. B. M. Yacob.

Inspector-General of Prisons, Major M. H. Mahmud, I.M.S.

Accountant-General, M. Bashir Ahmad, I.A. & A.S.

Postmaster-General, M. A. Majid, B.A. (Oxon.), Bar-at-Law.

LIEUTENANT-GOVERNORS OF THE PUNJAB

Sir John Lawrence, Bart., G.C.B...	1856
Sir Robert Montgomery, K.C.B... ..	1859
Donald Friell McLeod, C.B.	1865
Major-General Sir Henry Durand, K.C.S.I.,C.B., died at Tonk, January 1871.	1870
R. H. Davies, C.S.I.	1871
R. E. Egerton, C.S.I.	1877
Sir Charles U. Aitchison, K.C.S.I., C.I.E...	1882
James Broadwood Lyal	1887
Sir Dennes Fitzpatrick, K.C.S.I.	1892
William Macworth Young, C.S.I... ..	1897
Sir C. M. Ravaz, K.C.S.I.	1902
Sir D. C. J. Ibbetson, K.C.S.I., resigned 22nd January 1908.	1907
T. G. Walker, C.S.I. (Offg.)	1907
Sir Louis W. Dane, K.C.I.E., C.S.I. ..	1908
James McCrone Douie (Offg.)	1911
Sir M. F. O'Dwyer, K.C.S.I.	1913
Sir Edward Maclagan, K.C.I.E., C.S.I. ..	1919

GOVERNORS OF THE PUNJAB

Sir Edward Maclagan, K.C.I.E., C.S.I. ..	1920
Sir Malcolm Hailey, K.C.S.I., C.I.E. ..	1924
Sir Geoffrey de Montmorency, G.C.I.E., K.C.S.I., K.C.V.O., C.B.E.	1928
Sir Herbert William Emerson, G.C.I.E., K.C.S.I., C.I.E., C.B.E., I.C.S.	1933
Sir Henry Duffield Craik, Bart., G.C.I.E., K.C.S.I., I.C.S.	1938
Sir Bertand James Glancy, G.C.I.E., K.C.S.I., K.C.I.E.	1941
Sir Evan Meredith Jenkins, K.C.S.I., K.C.I.E., I.C.S.	1946

GOVERNORS OF WEST PUNJAB

Sir Francis Mudie, K.C.S.I., K.C.I.E., O.B.E.	1947

WEST PUNJAB LEGISLATIVE ASSEMBLY

***Speaker.*— The Hon'ble Diwan Bahadur S. P. Singha, M.A., LL.B. (*West Central Punjab, Indian Christian*).**

MINISTERS

The Hon'ble Nawab Iftikhar Hussain Khan of Mamdot (*Premier*); The Hon'ble Mian Nurl Ullah; The Hon'ble Sardar Abdul Hameed Dasti; The Hon'ble Mubarak Ali Shah; The Hon'ble Sheikh Karamat Ali, B.A., LL.B. (*Minister of Education, North East Towns, Muhammadan Urban*).

MEMBERS

Chaudhri Abdul Ghafur (*Shakargarh, Muhammadan Rural*); Mian Abdul Haq (*Okara, Muhammadan Rural*); Rana Abdul Hamid Khan, B.A., LL.B. (*Pakpattan, Muhammadan Rural*); Khan Sahib Abdul Hameed Khan (*Muzaffargarh Sadar, Muhammadan Rural*); Khan Abdul Sattar Khan (*Mianwali North, Muhammadan Rural*); Sardar Ajit Singh (*South West Punjab, Sikh Rural*); K. B. Nawab Malik Sir Allah Bakhsh Khan Tiwana, M.B.E. (*Sargodha, Muhammadan Rural*); Rai Anwar Khan (*Jaranwala, Muhammadan Rural*); Khan Sahib Captain Chaudhri Asghar Ali, (*Gujrat East, Muhammadan Rural*); Syed Ashiq Hussain (*Dipalpur, Muhammadan Rural*); Sardar Atta Muhammad Khan, B.A., LL.B. (*Dera Ghazi Khan North, Muhammadan Rural*); Chaudhri Aziz Din (*Lyallpur, Muhammadan Rural*); Sardar Bahadur Khan Dreshak, M.B.E. (*Dera Ghazi Khan South, Muhammadan Rural*); Chaudhri Bahawal Bakhsh (*South-East Gujrat, Muhammadan Rural*); Sardar Barkat Hyat Khan (*North Punjab, Labour*); Lala Behari Lal Chanana (*South-East Multan Division, General Rural*); Bhim Sen Sachar, B.A., LL.B., (*Lahore City, General Urban*); Pir Budhan Shah (*Khanewal, Muhammadan Rural*); Sardar Dalip Singh Kang (*Lyallpur East, Sikh Rural*); Dev Raj Sethi (*Layallpur and Jhang, General Rural*); Shaikh Faiz Muhammad Khan Bahadur, B.A., LL.B., M.B.E. (*Dera Ghazi Khan Central, Muhammadan Rural*); Pandit Faqir Chand (*West Lahore Division, General Rural*); Sheikh Fazal Haq Piracha Khan Bahadur (*Bhalwal, Muhammadan Rural*); Chaudhri Fazal Ilahi (*Gujrat North, Muhammadan Rural*); Fazal Ilahi (*East Central Punjab, Indian Christian*); Syed Ghulam Muhammad Shah (*Jhang East, Muhammadan Rural*); Sayed Ghulam Mustafa Shah Jilani, Makhdum (*Lodhran, Muhammadan Rural*); Chaudhri Ghulam Rasul (*South-West Gujrat, Muhammadan Rural*); Sardar Gurbachan Singh Bajwa, B.A., LL.B. (*Sialkot, Sikh Rural*); Chaudhri Harbhaj Ram (*Lyallpur and Jhang, Reserved Seat*); Chaudhri Jahan Khan (*North-West Gujrat, Muhammadan Rural*); Begum Jahan Ara Shah Nawaz, M.B.E. (*Outer Lahore, Muhammadan Women Urban*); Sardar Jaswant Singh Dugal (*North-West Punjab, Sikh Rural*); Sardar Joginder Singh Mann, M.B.E. (*Gujranwala and Shahdra, Sikh Rural*); Raja Kale Khan (*Rawalpindi East, Muhammadan Rural*); Sardar Kartar Singh (*Lyallpur West, Sikh Rual*); Raja Khair Mehdi Khan (*Jhelum, Muhammadan Rural*); Mehr Khan Muhammad Khan Khatia (*Montgomery, Muhammadan Rural*); Malik Sir Khizar Hayat, K.C.S.I., O.B.E. (*Khushab, Muhammadan Rural*); Chaudhri Krishna Gopal Dutt (*North-Eastern Towns, General Urban*); Dr. Lehna Singh Sethi (*North-Western Towns, General Urban*); Sardar Man Singh Jathedar (*Sheikhupura West, Sikh Rural*); Rai Mir Muhammad Khan (*Samundri, Muhammadan Rural*); Khan Sahib Mir Muhammad Abdullah Khan (*Mianwali South, Muhammadan Rural*); Khan Muhammad Arif Khan (*Jhang West, Muhammadan Rural*); Malik Sir Muhammad Feroz Khan Noon (*Rawalpindi Division Towns, Muhammadan Urban*); Mian Mohammad Ghulam Jilani Gurmani (*Muzaffargarh North, Muhammadan Rural*); Mian Muhammad Hayat Khan Nanjana (*Rawalpindi Division, Land holders*); Sardar Muhammad Hussain (*Chunian, Muhammadan Rural*); Chaudhri Muhammad Hussain, Chhatha, B.A., LL.B. (*Shikhupura, Muhammadan Rural*); Mian Muhammad Ibrahim Basq (*Alipure, Muhammadan Rural*); Mian Muhammad Iftikharud-Din, B.A. (Oxon.) (*Kasur, Muhammadan Rural*); Sir Muhammad Jamal Khan Legharl, Khan Bahadur Nawab (*Tumandars*); Lt.-Col. Sir Sardar Muhammad Nawaz Khan, K.C.I.E. (*Attock Central, Muhammadan Rural*); Mian Muhammad Nur Ullah (*Toba Tek Singh, Muhammadan Rural*); Mian Muhammad Rafiq (*Outer Lahore, Muhammadan Urban*); Syed Muhammad Raza Shah, Jeelani Haji Makhdumzada (*Shujabad, Muhammadan Rural*); Chaudhri Muhammad Sarfraz Khan (*Sialkot Central, Muhammadan Rural*); Raja Muhammad Sarfraz Ali Khan (*Chakwal, Muhammadan Rural*); Sayed Moiy-ud-Din Lal Badshah (*Attock South, Muhammadan Rural*); Major Sayed Mubarik Ali Shah (*Jhang Central, Muhammadan Rural*); Sardar Mumtaz Ali Khan, BA.LL.B. (*Attock North, Muhammadan Rural*); Nawab Sir Muzaffar Ali Khan Qizalbash (*Lahore, Muhammadan Rural*); Sant Narindar Singh (*Montgomery East, Sikh Rural*); Chaudhri Nasar Din, B.A., LL.B. (*Sialkot North, Muhammadan Rural*); Syed Nau Bahar Shah (*Kabirwala, Muhammadan Rural*); Malik Nazar Husain (*Pind Dadan Khan*); Mahant Prem Singh (*Gujrat and Shahpur, Sikh Rural*); Chaudhri Raj Muhammad Khan Tarrar (*Hafizabad, Muhammadan Rural*); Chaudhri Roshan Din, Khan Bahadur (*Shahdara, Muhammadan Rural*); Sajjan Singh, Sardar Margindpuri (*Kasur, Sikh Rural*); Chaudhri Salah-ud-din (*Gujranwala North, Muhammadan Rural*); Sardar Sardul Singh (*Lahore West, Sikh Rural*); Raja Said Akbar Khan, B.A., LL.B. (*Gujar Khan, Muhammadan Rural*); Rai Shahadat Khan (*Nankana Sahib, Muhammadan Rural*); Shrimati Sita Devi (*Lahore City, General Women Urban*). Mian K.B. Sultan Ali Nangiana, (*Shahpur, Muhammadan Rural*); Chaudhri Sundar Singh (*West Lahore Division General Reserved Seat*) Begum Tasadaq Hussain (*Inner Lahore, Muhammadan Women Urban*); Professor Tilak Raj Chadha M.A. (*Rawalpindi Division, General Rural*); Sardar Ujjal Singh (*Western Towns, Sikh Urban*); Mr. Virendra (*West Multan Division, General Rural*); Malik Wazir Muhammad (*Inner Lahore, Muhammadan Urban*); Chaudhri Zafar-ul-Haq (*Rawalpindi Sadar, Muhammadan Rural*); Chaudhri Zafarullah Khan (*Gujranwala East, Muhammadan Rural*).

Chief Commissioners' Provinces

Delhi

THE transfer of the capital of India from Calcutta to Delhi was announced at the Delhi Durbar on December 12, 1911. It had long been recognised as necessary, in the interests of the whole of India, to de-provincialise the Government of India, but this ideal was unattainable as long as the Government of India were located in one Province, and in the capital of that Province—the seat of the pre-partition Bengal Government—for several months in every year. It was also desirable to free the Bengal Government from the close proximity of the Government of India which had been to the constant disadvantage of that Province. To achieve these two objects the removal of the capital from Calcutta was essential: its disadvantages had been recognised as long ago as 1868, when Sir Henry Maine advocated the change.

Various places had been discussed as possible Capitals, but Delhi was by common consent the best of them all. Its central position and situation as a railway junction, added to its historical associations, told in its favour; and, as Lord Crewe said in his despatch on the subject, "to the races of India, for whom the legends and records of the past are charged with so intense a meaning, this resumption by the Paramount Power of the seat of venerable Empire should at once enforce the continuity and promise the permanency of British sovereign rule over the length and breadth of the country."

The foundation stone of the new capital was laid by the King Emperor on December 15, 1911, the finally selected site being on the eastern slopes of the hills to the south of Delhi on the fringe of the tract occupied by the Delhi, of the past. The land chosen is free from liability to flood, has a natural drainage, and is not manworm. It is not cumbered with monuments and tombs needing reverent treatment, and the site is near the present centre of the town of Delhi. A Committee consisting of Surgn.-General Sir C. P. Lukis, Mr. H. T. Keeling, C.S.I., A.M.I.C.E., and Major J. C. Robertson, I.M.S. was appointed to consider the comparative healthiness of the site, and of an alternative one to the north of the existing city. Their report, dated 4th March 1913, stated that "the Committee, after giving full consideration to the various points discussed in the above note, is bound to advise the Government of India that no doubt can exist as to the superior healthiness of the southern site, the medical and sanitary advantages of which are overwhelming when compared with those of the northern site."

Town Plan and Architecture.—A Town-Planning Committee, appointed to advise Government, submitted its report in March, 1913, with a plan of the lay out and work was begun in accordance with that Report. The central point of interest in the lay out, which gives the motif of the whole, is Government House and two large blocks of Secretariats. This Government centre was given a position at Raisina hill near the centre of the new city. Sir Edwin Lutyens is the architect for Government House and Sir Edward Baker for the Secretariats. The former building was estimated to cost approximately Rs. 140 lakhs and the latter groups were originally estimated to some Rs. 124 lakhs. The provision made in the design of the Secretariats for extensions in case if used has already partly been utilised. The Secretariat personnel has largely increased in the past few years and numerous additional rooms had to be provided to make room for Army Headquarters, which moved into the new capital at the end of the Simla season, 1929.

To the east of the forum, and below it, is a spacious forecourt defined by an ornamental wall and linked on to the great main avenue or parkway which leads to Indraprast. Across this main axis runs an avenue to the shopping centre. Other roads run in different directions from the entrance to the forum. The axis running north-east towards the Juma Masjid forms the principal approach to the new Legislative Chambers. They are officially described as the Council House and the road is named Parliament-street. The railway station for the new city finds its place about half way between the old and new cities off the road through Paharganj, which lies to the west of Old Delhi in the direction of The Ridge.

The main roads or avenues range from 76 feet to 150 feet in width with the exception of the main avenue east of the Secretariat buildings where a parkway width of 1,175 feet has been allowed. The principal avenues in addition to the main avenues are those running at right angles to the main east to west axis.

Enclave.—In October, 1912, by proclamation, there was constituted an administrative enclave of Delhi under a Chief Commissioner. This enclave was entirely taken from the Delhi district of the Punjab and its total area is 573 square miles. On the basis of the Census of 1911, the population of the area originally included in the Province was 398,269 and of the new area 14,552, or a total of 412,821. The population of the Municipal town of Delhi was 2,29,144.

The plans of the New Capital allow for a population within it of 70,000. Sites have been allotted for forty Ruling Princes and Chiefs to build houses for their own occupation during their visits to the Capital and several of these habitations have been erected.

There was, as regards architecture, a prolonged "battle of the styles" over Delhi. Finally, to use the language of the architect, it has been the aim "to express within the limit of the medium and of the powers of its users the ideal and the fact of British rule in India of which the New Delhi must ever be the monument." The inspiration of the designs is manifestly Western, as is that of British rule, but they combine with it distinctive Indian features without abandoning the architect's aim to avoid doing violence to the principles of structural fitness and artistic unity.

Cost of Scheme.—It was at first tentatively estimated that the cost of the new capital would be four million sterling and that sum was given in the original despatch of the Government of India on the subject. Various factors afterwards increased the amount, the chief of these being the immense rise in prices after the war, and the Legislative Assembly were informed by Government on 23rd March 1921, that the revised estimates then amounted to 1,307 lakhs of rupees. This amount included allowances for building new Legislative Chambers and Hostels for Members of the Indian Legislature, which were not allowed for in the earlier estimates.

The New Capital Enquiry Committee, in its report published in January, 1923, estimated the total expenditure at Rs. 1,292 lakhs including Rs. 42 lakhs for loss by Exchange. Actual expenditure upto approximately the end of 1929 was Rs. 14 crores. This may be taken as the figure for the completion of the main project.

The Project Estimate contains certain items such as land, residences, water supply, electric light and power, and irrigation on which recoveries in the form of rate or taxes will, in addition to meeting current expenditure, partially at any rate cover the interest on the capital outlay, whilst there are other items on which some return on account of the sale of leases, general taxes and indirect receipts is secured.

The project, after being completed and closed, was re-opened in 1933-34. This became necessary owing to the need to increase residential accommodation for officers and staff and was facilitated by a period of cheap money. Government utilised the occasion for extending the residential accommodation for visiting member of the Indian Legislature. The expenditure on the construction of New Delhi is Rs. 21,91,15,501 upto the end of 1945-46. The population of the new City is 93,733 according to the 1941 Census. Practically all the building sites within it (except in a small area where shortcomings in drainage are a handicap) are taken up and the time for extending the layout has almost arrived.

Progress of Work.—The construction of New Delhi was made at satisfactory speed, having regard to the curtailment of the Budget allotment in consequence of the First World War and the absence of officers and other establishments at the war. The Secretariats were so far advanced that there were transferred to them from Calcutta in October, 1924, the offices of the Accountant-General, Central Revenues, and the headquarters of the Royal Air Force in India were also housed in them in the winters of 1924-25 and 1925-26. The original programme of residential buildings for Government officers and staff of various grades were then nearly completed. The whole of the civil side of Government moved from Old Delhi into their quarters in the new Secretariats on coming down from Simla in November, 1926. All Government Departments, including the Army Departments and Army Headquarters and R. A. F. Headquarters, have their offices in the new Secretariats, of which the builders have already had to carry out the first section of the extension provided for in the architects' plans. The Viceroy took up his residence in the new Government House on December 23, 1929. The Viceroy until then had resided during the Delhi season at Viceregal Lodge in Old Delhi. The Government of India in 1927 devoted special consideration to the question whether their ordinary annual 5 months residence in Delhi should be extended each year to 7 months and early in 1928 decided in consultation with the India Office to endeavour to stay in Delhi for half of each year, the new order being introduced for trial in 1928 by keeping the Secretariat in New Delhi till mid-April and bringing it down from Simla again in mid-October. The experiment was not very successful and was not repeated till 1932-33, when Retrenchment Committees had strongly recommended a longer stay in Delhi in order to extract rent for a longer period from the seasonal official occupants of its residential buildings, the rents in Delhi being higher than those for residences in Simla. An early descent from Simla was postponed in the autumn of 1934 on account of a report by the Public Health Commissioner on the general unhealthiness of the Winter Capital in October. But various factors, including especially the increase in personnel in the Secretariat and consequential congestion of office and residential accommodation in Simla, are making the extension of the Delhi season unavoidable.

The provision of considerable further housing accommodation both for offices and residences has become imperative. The only question is whether this should be undertaken both in Delhi and in Simla or in Delhi only. Pressed by sharp financial stringency, arising partly out of the emergency created by the institution of the Constitutional Reforms, the Government of India appear decisively moving in the direction of making Delhi an all-the-year-round Capital. Certain Departments are already now kept in Delhi throughout the year. The office personnel of others are kept in Delhi throughout the year.

Anti-Malaria Measures.—There was in recent years an increase in malaria bearing mosquitoes and consequential fever in New Delhi. This led to a special inquiry in 1936. The inquiry showed that both Old and New Delhi were ringed about with prolific mosquito breeding places, one of the worst being the area utilized for sewage outfall. The water borne sewage of both Old and New cities is dealt with in a farm which, when the new city was built, was placed immediately outside its southern boundary. The Government of India after the 1926 inquiry were forced to adopt a new scheme for the removal of the farm to a more distant site and chose one some four miles further away from the city. Anti-malaria operations on a large scale, scientifically directed, were simultaneously undertaken, the estimate of their cost being Rs. 14 lakhs. Improvements in the water-supply of the new Capital with a view to a larger population being retained in it during the summer has also been effected.

When the residential buildings in New Delhi were, in the course of the original construction of the new city, about to be designed, the Government of India issued orders that they were to be "for cold weather occupation only." This rule was followed. The general principle embodied in the design of the houses was that of planning them to capture as much warmth from the sun as possible. Secretariat, residential bungalows and staff quarters are largely inappropriate for hot weather occupation.

Art Decorations.—The Government of India in 1927 approved a scheme for the encouragement of Indian artists by providing facilities for the decoration of certain buildings in New Delhi. The outlines of the scheme are briefly as follows. A certain number of domes and ceilings in the New Secretariat Buildings at Delhi suitable for decoration were selected. The various schools of art in India, as well as individual artists, were invited through local Governments, to send in by the beginning of March 1928 small scale designs for approval by a Committee. After approval by the Committee both as regards the design and colour the pictures were to be drawn out and painted to full size on canvas, and, if finally approved by the Committee, fixed according to the marouflage process *in situ*. Other techniques, such as fresco or tempera, were optional. Artists or schools of art, who sent in small scale drawings, had to bear the initial expense of preparing them. When these were approved by the Committee, the out-of-pocket expenses paid in addition to a suitable honorarium Government undertook to pay for the finished pictures done from approved sketches but give no guarantee that the finished paintings will permanently be preserved. Government intimated that historical or allegorical subjects would be given preference over religious ones and English artists living in India were barred from competition, the work being strictly reserved to Indian artists. Numerous artists submitted designs, especially those of Western India, and with such satisfactory results that the specially appointed Expert Committee approved of nearly all. A great deal of painting has now been completed and the work was continually progressing until the world-wide depression in recent years dried up funds.

All-India War Memorial.—H. R. H. the Duke of Connaught on 10th February, 1921, laid the foundation stone of an All-India War Memorial at the southern end of the Central Vista. The place chosen is a fine position in the centre of the circular Princes' Park and the construction of the building was for economy's sake proceeded with slowly. The memorial was formally inaugurated by Lord Irwin in February, 1931, in the presence of representatives of every unit of the army in India, of the Royal Air Force and of a large concourse of official and other spectators.

It was decided in 1936 to erect a memorial statue to the King-Emperor George V, in Princes' place, the large park-like area lying between the All-India War Memorial and the Purana Qila. The origin of this proposal was a movement started among the Ruling Princes, some time previously, to erect a white memorial statue to the King in the new city and this scheme had made considerable progress when he died. The matter was then considered in a broader light and in consultation between the Princes and the Earl of Willingdon, the Princes agreed to merge their scheme in a larger one for an All-India memorial to the King. The Viceroy issued an appeal for subscriptions to the major scheme and he and the Countess of Willingdon opened the general subscription list with a donation of Rs. 5,000. Sir Edwin Lutyens was invited to submit a design for a memorial and the statue was eventually unveiled by the then Viceroy, Lord Linlithgow, on November 14, 1939.

Public Institutions.—It was proposed during 1914 that a higher college for Chiefs should be established at Delhi and in this connection a conference of Chiefs and Political Officers was held at Delhi at which the Viceroy presided. The proposal is still "under consideration." To implement it would require an estimated capital outlay of Rs. 12½ lakhs.

The Government of India further in 1922 introduced and carried a Bill for the establishment of a unitary, teaching and residential University of Delhi, the buildings for which would be erected in the new capital. The plan was to provide a local university on the model recommended for Dacca University by the Calcutta University Commission. The provision of funds for the complete realisation of the university being a matter of time it was decided to commence work with the existing colleges in their present buildings and to permit them gradually to modify their organisation. The initial work of organisation was quickly effected by the Executive Council. Unfortunately the inability of the Government of India to allot considerable funds was a severe handicap. It was hoped that the Viceroy would be able to lay the foundation stone of the university buildings in November, 1922, but this proved impracticable. The general question of the finances of the University was in 1927 the subject of inquiry by a special committee appointed by Government. For the time being the University was housed in the temporary buildings in old Delhi occupied by the Civil Secretariat until 1929 and in 1931 the old Viceregal Lodge was allocated to it for its future home. The Government of India have also allotted free land to various colleges in Old Delhi.

H. H. the Maharaja of Bhavnagar having offered Rs. 5,00,000 for the provision of some amenity in the new city, the Government of India decided to utilize the sum for the provision of a Stadium. The ground which they took for this was a large area lying immediately below the western walls of the Purana Qila, *i.e.*, between them and Princes' place. This area was originally marked by Sir Edward Lutyens, in his plan, to be an ornamental lake. Practical consideration led to its abandonment for that purpose and the area was laid out as a park. A large proportion of the Maharaja's Rs. 5,00,000 was utilized for the provision of a huge brick grandstand overlooking the central portion of the park taken for the Stadium.

Inaugural Ceremony.—The New City was the scene of notable and elaborate inauguration ceremonies in February, 1931. The first of these was the unveiling of four "**Dominion Columns**" suitably placed about the great place between the two Secretariat blocks. The columns are of red stone, surmounted each by a gilded merchantman of the old style in full sail. The columns are designed to resemble the historic ones erected in various parts of the land by Asoka and were presented by Canada, Australia, New Zealand and South Africa. The first two and fourth of these Dominions sent their own representatives to perform the ceremony of unveiling. New Zealand nominated a Member of the Government of India to act in her behalf for the same purpose.

City Extension.—The main direction for the future extension of the new city is southward, where for some three miles beyond the limits of present development, Government have land in their possession and have placed it at the disposal of the City administration. The New Delhi Civil Aerodrome lies immediately southward of the existing new City boundary on the southern side and the Earl of Willingdon in February 1936, opened alongside the high road there a fine new Willingdon Air Station, which is furnished with the most modern equipment for day and night flying. Building has already taken place in the same neighbourhood.

A New Delhi Municipal Committee with its own permanent official Chairman and Secretariat was established in 1932.

The Improvement Trust was instituted in 1937, its duties being to provide for the expansion of the new capital, including both old and new cities and urgently to deal with the insanitary overcrowding of the old city, a problem arising from the rapid increase of population there since Delhi again became capital of India.

Chief Commissioner.—Sahibzada Khurshid, C.I.E., I.C.S.

Financial Adviser.—P. K. Basu.

Registrar to the Chief Commissioner.—P. H. B. Wilkins.

MAGISTERIAL AND EXECUTIVE

Deputy Commissioner.—M. S. Randhawa, I.C.S.

Addl. District Magistrate.—F. H. D. Teal and Rai Sahib Shantilal Ahuja

City Magistrate and Secretary, Notified Area Committee.—Kanwar Mohinder Singh Bedi.

JUDICIAL

District and Sessions Judge.—S. S. Dulat, I.C.S.

Senior Sub-Judge.—Des Raj Pahwa.

POLICE

I. G. of Police—T. G. Sanjevi, M.B.E., I.P.

D.I.G. of Police.—Div Mehra, M.B.E., I.P.

S. P. C.I.D. Delhi—L. Rikhi Kesh.

Addl. S. P.—S. G. Button.

S. P. New Delhi—L. Amar Nath Bhatia.

Superintendent of Police, New Delhi.—S. C. Terry.

JAIL

Supdt. of Jail—K. K. Muttoo.

MEDICAL

Director of Health Services.—Lt.-Col. Barkat Narain.

Chief Medical Officer and Civil Surgeon, Delhi.—Lt.-Col. P.A. Dargan.

Civil Surgeon New Delhi.—Lt.-Col. D. P. Bhargava.

Medical Superintendent Irwin Hospital, New Delhi.—Lt.-Col. B.L. Toneja.

Deputy Medical Superintendent, Irwin Hospital.—Major D. R. Mendiratta.

Additional Civil Surgeon, Irwin Hospital, New Delhi.—Dr. S. K. Sen, F.R.C.S.E.

EDUCATION.

Superintendent of Education.—L. R. Sethi, M.A.

Deputy Superintendent of Education.—Dr. A. N. Banerji, M.A., Ph.D.

Assistant Superintendent of Education.—Rai Sahib Niamat Rai.

Assistant Superintendent of Female Education.—Mrs. I. H. Kumar.

DELHI IMPROVEMENT TRUST.

Chairman, Delhi Improvement Trust.—Sir Arthur Dean, C.I.E., M.C., E.D.

Executive Officer.—Rao Bahadur Chaudhri Ghasi Ram, P.C.S.

Lands Officer.—A. R. Melhotra, P.C.S.

Tahsildar.—Gosain Anand Sarup.

AJMER-MERWARA

Ajmer-Merwara is an isolated Province in Rajputana, administered by a Chief Commissioner under the Government of India. The Province is divided into the Subdivisions of Ajmer and Kekri and Beawar with a total area of 2,400 square miles and a population of 5,83,693. At the close of the Pindari War Daulat Rao Scindia, by a treaty, dated June 25, 1818, ceded the district to the British. Sixty-two per cent. of the population are supported by agriculture, the industrial population being principally employed in the cotton, hosiery, soap and goat industries. The principal crops are maize, millet, barley, cotton, oilseeds, wheat, bajara, jeera, sugar-cane, chillies and onions. Mining of mica, beryl-ore, felspar, limestone, and soapstone is also carried on. The chief imports include cotton and woollen cloth, sugar, gur, foodgrains, pulses, toilets, machinery, cotton seeds and brass pots; and the

exports mica, beryl-ore, felspar, quartz, jeera, cattle, goats, sheep and wool.

Chief Commissioner,—Shankar Prasad, I.C.S.

COORG

Coorg is a small Province in Southern India, west of the State of Mysore. Area 1,593 square miles; population 168,726. Coorg came under the direct protection of the British Government during the war with Tippu. In May 1834, owing to misgovernment, it was annexed. The Province is directly under the Government of India and administered by a Chief Commissioner, whose headquarters is at Mercara. A Legislative Council consisting of 15 elected members and five nominated members was created in 1924. The chief wealth of the country is agriculture and especially the cultivation of coffee.

Chief Commissioner, Coorg.—Dewan Bahadur K. Chengappa, C.I.E.

ANDAMAN AND NICOBAR ISLANDS

The Andaman Islands lie in the Bay of Bengal, 120 miles from Cape Negrais in Burma, and 780 and 740 miles from Calcutta and Madras respectively. Five of the larger Islands are closely grouped together and are called the Great Andaman; and to the south is another Island called Little Andaman. There are some 204 Islets in all, the two principal groups being the Ritchie Archipelago and the Labyrinth Islands.

The total area is about 2,508 square miles. The Great Andaman group is about 219 miles long and, at the widest, 32 miles broad.

The group, densely wooded, contains many valuable trees, the best known of which is Padauk or Andaman Redwood. The Islands also possess a number of harbours and safe anchorage, notably Port Blair, Port Cornwallis and Bonington. The aborigines 62 (25 males and 37 females) in number according to the 1941 census, live in small groups over the Islands; some of them are savages of low Negrito type.

The total population of the Andaman Islands (excluding the aborigines) is 16,000 (11,450 males and 4,550 females). Communication with the mainland is through wireless telegraphs and a Mail Steamer plying between Port Blair and Calcutta and Madras.

The Islands were used as a penal settlement for life and long term convicts from 1858 to 1945 when the penal settlement was abolished. They were occupied by the Japanese in March 1942 and reoccupied by the Allied Forces in October 1945; and plans are now being prepared for the development of the Island's resources.

The chief produce of the Islands are timber and coconut which are exported to the mainland. The mineral resources of the Islands are unknown as no survey has yet been held. Foodstuffs, machinery and consumer goods are imported from the Indian mainland.

The Andaman Islands are administered by the Governor-General acting through a Chief Commissioner.

The Nicobar Islands are situated to the south of the Andamans, 75 miles from Little Andaman. There are 19 Islands in all, 7 of which are uninhabited. The total area is 635 square miles. The Islands are usually divided into 3 groups (Southern, Central and Northern), the chief Islands in each being respectively, Great Nicobar, Camotra with Nankauri and Car Nicobar. There is a fine land locked harbour between the Islands of Camotra and Nankauri, known as Nankauri Harbour. The Nicobarese inhabitants number 11,000.

The Islanders are known to have pursued the coconut trade for at least 150 years. The coconut is exported to the mainland after being converted into copra.

The Government is represented by an Assistant Commissioner at Car Nicobar. The Islands are attached to the Chief Commissionership of the Andamans and Nicobars.

Chief Commissioner.—I. Majid.

Baluchistan

Baluchistan is an oblong stretch of country occupying the extreme western corner of Pakistan. It is divided into three main divisions: (1) British Baluchistan with an area of 9,476 square miles consisting of tracts assigned to the British Government by a treaty signed in 1879; (2) Baluchistan Leased and Tribal areas with an area of 44,345 square miles composed of tracts which have, from time to time, been acquired by lease or otherwise brought under control and placed directly under British officers; and (3) the States of Kalat, Las Bela and Kharan with an area of 79,546 square miles.

The whole Province embraces an area of 134,002 square miles and according to the census of 1941 it contains 857,835 inhabitants.

The country, which is almost wholly mountainous, lies on a great belt of ranges connecting the Safed Koh with the hill system of Southern Iran. It thus forms a watershed the drainage of which enters the Indus on the east and the Arabian Sea on the south while on the north and west it makes its way to the inland lakes which form so large a feature of Central Asia. Rugged, barren sun-burnt mountains, rent by high chasms and gorges, alternate with arid deserts and stony plains, the prevailing colour of which is a monotonous sight. But this is redeemed in places by level valleys of considerable size in which irrigation enables much cultivation to be carried on and rich crops of all kinds to be raised.

The political connection of the British Government with Baluchistan commenced from the outbreak of the First Afghan War in 1839; it was traversed by the Army of the Indus and was afterwards occupied until 1842 to protect the British lines of communication. The districts of Kachhi, Quetta and Mastung were handed over to the Amir of Afghanistan and Political Officers were appointed to administer the country. After the First Afghan War, the British withdrew and these districts were assigned to the Khan of Kalat.

The founder of the Baluchistan Province as it now exists was Sir Robert Sandeman who broke down the close border system and welded the Baluch and Brahui Chiefs into a close confederacy. In the Afghan War of 1879 Pishin, Shorarud, Sibi, Zawara Valley and Thal-Chotiali were handed over by Yakub Khan to the British Government and retained at Sir Robert Sandeman's strenuous insistence.

INDUSTRIES

Baluchistan lies outside the monsoon area and its rainfall is exceedingly irregular and scanty. Shahrig, which has the heaviest rainfall, records no more than 14.72 inches in a year. In the highlands few places receive more than 10 inches and in the plains the average rainfall is about 5 inches, decreasing in some cases to 3.

The majority of the indigenous population are dependent for their livelihood on agriculture, care of animals and provision of transport. The majority of the Afghan and the Baluch, as a rule, cultivate their own lands. The Brahuis dislike agriculture and prefer a pastoral life. Previous to the advent of the British, life and property were so insecure that the cultivator was fortunate if he reaped his harvest. The establishment of peace and security has been accompanied by a marked extension of agriculture which accounts for the increase in the numbers of the purely cultivating classes.

The Mekran Coast is famous for the quantity and quality of its fish and the industry is constantly developing. Fruit is extensively grown in the highlands and the export is increasing.

Coal is mined at Sharigh and Harnai on the Sind-Pishin Railway and in the Bolan Pass also in Sur Range in Quetta-Pishin District. Chromite is extracted in the Zhob District near Hindubagh. Limestone is quarried in small quantities. Gypsum is mined in the Sibi District near Spintangi Railway Station.

Education is imparted in public schools of all kinds. There is a widespread desire for education amongst the more enlightened headmen round about Quetta and other centres; but on the whole education or the desire of it has made little or no advance in the outlying districts.

ADMINISTRATION

The head of the local administration is the officer styled Agent to the Governor-General, and Chief Commissioner. Next, in rank comes the Revenue Commissioner who controls the revenue administration and exercises the functions of a High Court as Judicial Commissioner of the Province.

The keynote of administration in Baluchistan is self-government by the tribesmen, as far as may be, by means of their Jirgas or Councils of Elders along the ancient customary lines of tribal law, the essence of which is the satisfaction of the aggrieved and the settlement of the feud, not retaliation against the aggressor or the vindictive punishment of a crime. The district levies play an unobtrusive but invaluable part in the work of the civil administration not only in watch and ward and the investigation of crime, but also in the carrying of the mails, the serving of processes and other miscellaneous work. In addition to these district levies there are ordinarily three Irregular Corps in the Province; the Zhob Militia, the Mekran Levy Corps and the Chagai Levy Corps. Fundamentally the Province is not self-supporting, the deficit being met from Central funds.

BALUCHISTAN AGENCY

Agent to the Governor-General and Chief Commissioner in Baluchistan.—The Hon'ble Mr. A. D. F. Dundas, C.S.I., C.I.E., I.C.S.

Revenue and Judicial Commissioner.—C. A. G. Savidge, M.B.E., I.C.S.

Secretary to the Agent to the Governor-General, Resident and Chief Commissioner.—Major R. C. Murphy.

Under-Secretary to the Agent to the Governor-General, Resident and Chief Commissioner.—Khan Bahadur Malik Bashir Ahmed Khan.

Secretary to the Agent to the Governor-General in the Public Works Department.—Colonel N. Boddington, O.B.E.

Director of Food Supplies and Dy. Secy., Revenue, to the Baluchistan Administration.—Major G. W. Wooldridge, I.P.S.

Dy. Director of Food Supplies.—R. S. Pandit Chiranjir Lal.

Political Agent and Deputy Commissioner in Quetta-Pishin.—A. R. Khan, I.C.S.

Assistant Political Agent and Assistant Commissioner in Quetta-Pishin.—Lt.-Col. Philip Edwards, I.P.S.

Political Agent in Chagai.—K. B. Sher Zaman Khan.

Political Agent and Deputy Commissioner, Sibi.—B. M. Bacon, I.C.S.

Assistant Political Agent and Colonization Officer, Nasirabad.—K. S. Said Alikhan.

Political Agent in Loralai.—K. B. Shah Zaman Khan, I.P.S.

Political Agent in Zhob.—Major D. G. Thornburgh.

Chief Medical Officer and Inspector-General of Prisons in Baluchistan.—Major H. A. Ledgard, I.M.S.

Civil Surgeon, Quetta-Pishin. Vacant.

Director of Agriculture in Baluchistan.—R. Zarbakut Khan, B.Sc. Agri. (Edin.), C.D.A. (Wye).

Mining Engineer and Assistant Regional Coal Controller in Baluchistan.—Mohd. Tayab.

ADVISORY COUNCIL

The two latest developments in regard to Baluchistan are the appointment of an Advisory Council by the Governor-General of Pakistan and the Governor-General's effort to persuade the Khan of Kalat along with the States of Las Bela and Kharan to accede to Pakistan.

The appointment of the Advisory Council for Baluchistan was made by the Governor-General at a meeting of the Shahi Durbar held at Sibi on February 14.

Explaining the functions of the Advisory Council, he said: "The members of the Council will, of course, be nominated, but let me assure you that it will not be a nominal body. It will have the power to advise the Governor-General on any matter which in its opinion is connected with the good of the province. Similarly, the Governor-General will refer any matter which may come before him through the Chief Commissioner for the opinion and advice of the Council. The budget of the province, for instance, will be checked and scrutinised first by the Advisory Council in all its details and it will be free to submit its recommendations to the Governor-General. All plans for the future political, economic, social and educational development will be prepared and submitted through the Advisory Council and it is for the Governor-General to see that these plans are implemented with consultation and advice of the Council. Thus in some ways you will be better off than other provinces of Pakistan.

It will contain people's representatives of the Administered Areas which used to be known as British Baluchistan and leased areas. It will also include representatives of tribal areas. It will also reflect the considered opinion of the members of the Shahi *Jirga* and the municipality of Quetta.

The setting up of the Advisory Council will not in any way detract from the status of these areas nor from the freedom of the inhabitants of these areas to mould their future constitution and to form administration in accordance with their own customs and traditions.

The Durbar was followed by a press conference at Sibi the following day. The Governor-General explained that he thought that Baluchistan would be better off as a Governor-General's Province for two reasons, first, he wanted to help Baluchistan in every possible way he could. Second, things would be done far more quickly than in the usual process of full-fledged parliamentary discussions. Further other provinces in Pakistan had gone through all the preliminary stages of parliamentary reforms and were now able to run parliamentary Governments. But for Baluchistan there was no other way in the present circumstances but to throw the whole burden on the Governor-General.

KALAT AFFAIR

Kalat acceded to Pakistan after some deliberation.

One of the reasons for the Governor-General's visit to Sibi was to settle the issue of Kalat's accession to Pakistan. At a meeting between the Khan of Kalat and the Governor-General the former was reported to have told the latter that he wanted the issue of accession to be settled by his legislature composed of Sardars, and that a definite reply would be sent before the end of February. Actually no reply was sent for a long time.

The Kalat Upper House decided to defer the issue for three months, while the Lower House expressed preference for some form of treaty covering defence, communications and foreign affairs to full-fledged accession. The Nationalists led by Khan Abdul Samad Khan who have a majority in the Lower House were prepared only for a treaty of alliance and friendship with Pakistan.

The Kalat affair was of course complicated with two side issues. Two smaller neighbouring States of Las Bela and Kharan refused to recognise Kalat's suzereignty and acceded to Pakistan independently. This was not to the liking of the Kalat ruler. The other question was about the future of territories like Quetta and the Bolan Pass, formerly leased to the British by the Khan of Kalat. But then the talks held both at Karachi and at Sibi between Pakistan's Governor-General and the Khan of Kalat brought about some understanding on all these issues except that of accession, which, as has been mentioned, the ruler wanted his legislature of Sardars to decide.

Obviously many forces are at work in and around Kalat State, including Afghan and Russian influences. In this connection attention is sometimes drawn to Afghanistan's transparent sympathy for the Pathans of the N.-W.F.P. some of whom aspire to full autonomy within Pakistan. It is because of Kalat's strategic position with common boundaries with Afghanistan and Persia that the Government of Pakistan was so very anxious for Kalat's accession, though Quaide-Azam Jinnah has often declared that the States are free to accede or not to accede.

Local Self-Government

THE entire aspect of local self-government in India has changed with the advent of national freedom. Much, of course, depends on the final shape of the Central and provincial constitutions as they emerge from the Constituent Assembly. In the meantime, however, many of the Provinces have already enacted legislation transferring quite a large measure of administrative power to local bodies after reconstituting them.

There is no quarrel with the idea as such, but many doubt the wisdom of entrusting the onerous functions of government to the care of a people who, for decades, have been accustomed to "spoon-feeding" in every walk of life. The introduction of adult franchise may, it is feared, lead to some confusion until the stage is reached when the electorate is in a position to exercise that franchise with knowledge and wisdom. This is a natural concommitant of education, which is still at a low percentage in India and Pakistan and a fuller realisation of civic responsibilities the lack of which has in the past resulted generally in many local bodies being reduced to the position of battlefields where petty personal and party feuds overshadowed primary responsibilities, and public interest suffered. A gross negligence of such duties or the incapacity to get together for the common good of the community has led to hundreds of local bodies being superseded. Moderate and Liberal schools of political thought have, therefore, been advocating the process of hastening slowly. Protagonists of the idea of decentralization of power, on the other hand, have held the view that unless a beginning is made to set the people on the road to full democracy they would never get started.

VILLAGE AUTONOMY

The idea of reviving the village panchayats was popularised by the Indian National Congress under Mahatma Gandhi's leadership, and he has strongly advocated the establishment of village republics from which the central administration will derive its power. There are 7,00,000 villages in the country which up to now have fallen under the following two groups: (1) the "severalty" or raiyatwari village where revenue is assessed on individual cultivators with no joint responsibility among the villagers. (2) the joint or landlord village of the type prevalent in the United Provinces, East and West Punjab and the Frontier Province. Here the revenue was formerly assessed on the village as a whole, its incidence being distributed by a body of superior proprietors. The proprietory body allowed residences to the tenantry, artisans, traders and others. The village government was originally by the panchayat or a group of heads of the wealthier families. Later, representatives of the whole community were added on to the panchayats.

A radical change in the character of the latter type of village is inevitable with the abolition of the zamindari and malguzari systems, the need for which has already been accepted, at least in principle, in most Provinces where they obtain. There will thus be a uniform type of village throughout the Indian Dominion, with the cultivator becoming master of himself free from the burden of sharing the yield of the land with the proprietor. The fact that he has now a stake in the country will naturally make the villager interested in the general welfare and administration of the village and eventually of the country as a whole.

VILLAGE PANCHAYATS

Most provinces have adopted village Panchayat Acts, under which local autonomy of different degrees has been conferred on the villages. The U.P. enactment, known as the Gram Hukumat Act, is claimed to be a model. The C.P. and Berar and Bombay Measures also go a long way in bestowing a large share of administrative responsibility on the villagers. Some of the compulsory functions so bestowed include village sanitation, medical relief and first aid, water-supply, street lighting, registration of births, deaths and marriages, measures to prevent the outbreak, spread or recurrence of infectious diseases, the construction and maintenance of roads, conducting crop experiments, the formation of multi-purpose co-operative societies, the imparting of education and the maintenance of law and order. Their optional duties include the relief of the destitute and the sick, improvement of agriculture, marketing of agricultural produce, cattle breeding, the establishment of granaries, promotion of agricultural credit and measures to relieve rural indebtedness and poverty generally.

The village judiciary or Nyaya Panchayat, formed by groups of four or five village panchayats will have power to try certain types of civil and criminal cases.

MUNICIPALITIES

The Presidency towns had some form of Municipal administration, first under Royal Charters and later under statute, from comparatively early times, but outside of them there was practically no attempt at municipal legislation before 1842. An Act passed in that year for Bengal, which was practically inoperative, was followed in 1850 by an Act applying to the whole of India. Under this Act and subsequent Provincial Acts a large number of municipalities was formed in all Provinces. The Acts provided for the appointment of commissioners to manage municipal affairs, and authorise the levy of various taxes, but in most Provinces the Commissioners were all nominated, and from the point of view of self-government, these Acts did not go far. It was not until after 1870 that much progress was made. Lord Mayo's Government, in their Resolution of that year introducing the system of provincial finance, referred to the necessity of taking further steps to bring local interest and supervision to bear on the management of funds devoted to education, sanitation, medical relief, charity, and local public works New municipal Acts were passed for the various Provinces between 1871 and 1874, which, among other things, extended the elective principle, but only in the Central Provinces was popular representation generally and successfully introduced.

In 1881-2 Lord Ripon's Government issued orders which had the effect of greatly extending the principle of local self-government. Acts were passed in 1883-4 that greatly altered the constitution, powers, and functions of municipal bodies, a wide extension being given to the elective system, while independence and responsibility were conferred on the committees of many towns by permitting them to elect a non-official as chairman. Arrangements were made also to increase municipal resources and financial responsibility, some items of provincial revenue suited to and capable of development under local management being transferred, with a proportionate amount of provincial expenditure, for local objects.

The general principles laid down in the Ripon Acts have continued to govern the administration of municipalities down to the present day. As the population of most of the towns rises, so does the number of municipalities increase. For the most part they display a lively interest in civic affairs and are actively engaged in improving the conditions under which their fellow-citizens live.

The status of the municipalities of Bombay, Calcutta, Madras, and Karachi were raised to that of Corporations and the Presidents of these bodies were designated Mayors. Nagpur and Jubbulpore are soon to be added to this list.

DISTRICT BOARDS

The duties and functions assigned to the municipalities in urban areas are in rural areas entrusted to district and local Boards. In almost every district of India and Pakistan save in the province of Assam, there is a board subordinate to which are two or more sub-district boards; while in East Bengal, West Bengal, Madras, Bihar and Orissa, there are also Union Committees.

As in the case of municipalities the tendency has been throughout India and Pakistan to increase the number of elected members at the expense of the nominated and the official members.

The most important item of revenue is provincial rates. The principal objects of expenditure are education which has come remarkably to the front in recent years and civil works such as roads and bridges. Medical relief also shares with education, though in a less degree, a big share of the available revenue.

The annual audit reports on the working of local self-government institutions in the various Provinces reveal on the whole a disappointing record. There is a general reluctance to increase local taxation and several municipalities are conspicuous for their negligence in recovering arrears. There are, of course, some honourable exceptions; in the Bombay Presidency, Ahmedabad and Sholapur furnish encouraging examples. In 1939 a Local Self-Government Committee was appointed by the Bombay Government under the chairmanship of Professor V. G. Kale. The Committee made several recommendations. To overcome the general reluctance to impose additional taxation the Committee suggested that taxation by local authorities was likely to be better appreciated if it were associated with specific services rendered to the people; the idea was to earmark yields of certain taxes for definite purposes. The Committee also laid down the principle that citizens generally should understand that amenities can be provided only if they are paid for; thus a compulsory education cess was suggested to finance ambitious educational schemes.

A revolutionary measure in local self-government, which will almost completely transfer the district administrations to what are called Janapada Sabas is about to be introduced in the Central Provinces and Berar. The present District Councils will then disappear and the newly elected bodies will be autonomous institutions with wide powers.

IMPROVEMENT TRUSTS

A notable feature in the recent sanitary history of India is the activity displayed by some of the great cities in the direction of social improvements. In Bombay, Calcutta, Lucknow, Allahabad, Lahore and Cawnpore the Improvement Trusts developed important activities. (In Bombay the work of the Improvement Trust is carried on by the Bombay Municipality). Other cities are beginning to follow the example of these great cities. The Government of India established an Improvement Trust in 1937 to attend to slum clearance in old Delhi City and to the general expansion of their winter capital. This body undertook an ambitious scheme, costing many lakhs of rupees, for the abolition of slums and the re-housing of dispossessed workers.

Laws and Administration of Justice

THE indigenous law of India and Pakistan is personal and divisible with reference to the two great classes of the population, Hindu and Muslim. Both systems claim divine origin and are inextricably interwoven with religion, and each exists in combination with a law based on custom. At first the tendency of the British was to make their law public and territorial, and on the establishment of the Supreme Court at Calcutta in 1773 and the advent of English lawyers as judges, they proceeded to apply it to Europeans and Indians alike. This error was rectified by the Declaratory Act of 1780, by which Parliament declared that as against a Hindu the Hindu law and usage, and as against a Muslim the laws and customs of Islam should be applied. The rules of the Shastras and the Koran have been in some cases altered and relaxed. Instances can be found in the Bengal Sati Regulation Act of 1829, the Indian Slavery Act, 1843, the Caste Disabilities Removal Act of 1850, the Hindu Widows' Remarriage Act, 1856, and some other Acts and Codes. To quote the Imperial Gazetteer, "A certain number of the older English statutes and the English common law are to a limited extent still in force in the Presidency Towns as applicable to Europeans, while much of the old Hindu and Muslim law is everywhere personal to their native fellow-subjects; but apart from these, and from the customary law, which is as far as possible recognised by the Courts, the law of British India is the creation of statutory enactments made for it either at Westminster or by the authorities in India to whom the necessary law-giving functions have from time to time been delegated.

CODIFICATION

Before the transfer of India to the Crown the law was in a state of great confusion. Sir Henry Cunningham described it as "hopelessly unwieldy, entangled and confusing." The first steps toward general codification were taken in 1833, when a Commission was appointed, of which Lord Macaulay was the moving spirit, to prepare a penal code. Twenty-two years elapsed before it became law, during which period it underwent revision from his successors in the Law Membership, and especially from Sir Barnes Peacock, the last Chief Justice of the Supreme Court of Calcutta. The Penal Code, which became law in 1860, was followed in 1861 by a Code of Criminal Procedure. Substantially the whole criminal law of India and Pakistan is contained in these two Codes. One of the most eminent lawyers who ever came to India, Sir James Stephen, said "The Indian penal code may be described as the criminal law of England freed from all technicalities and superfluities, systematically arranged and modified in some few particulars (they are surprisingly few) to suit the circumstances of British India. It is practically impossible to misunderstand the Code."

The Indian Penal Code has from time to time been amended. The rules of Civil Procedure have been embodied in the Code of Civil Procedure. The Code of Civil Procedure was remodelled in 1908 and the Code of Criminal Procedure in 1898. These Codes as amended from time to time are now in force. The years between 1870 and 1885 saw a great deal of legislative activity in British India, and important branches of the law, like Evidence, Contract, Transfer of Property, Trusts, Negotiable Instruments, etc., were codified in the form of Acts of the Indian Legislature applicable to the whole of British India. These, amended from time to time and supplemented by rules derived from English decisions, constitute the bulk of the law administered in India and Pakistan today.

EUROPEAN BRITISH SUBJECTS

Whilst the substantive criminal law is the same for all classes, certain distinctions of procedure have always been maintained in regard to criminal charges against European British subjects. Until 1872 European British subjects could only be tried or punished by one of the High Courts. It was then enacted that European British subjects should be liable to be tried for any offences by magistrates of the highest class, who were also Justices of the Peace, and by Judges of the Sessions Courts; but it was necessary in both cases that the magistrate or judge should himself be a European British subject. In 1883 the Government of India announced that they had decided "to settle the question of jurisdiction over European subjects in such a way as to remove from the Code at once and completely every judicial disqualification which is based merely on race distinctions."

This decision, embodied in the Ilbert Bill aroused a storm of indignation which is still remembered. The controversy ended in a compromise which is thus summarised by Mr. John Strachey ("India"). "The controversy ended with the virtual, though not avowed, abandonment of the measure proposed by the Government Act III of 1884; by which the law previously in force was amended cannot be said to have diminished the privileges of European British subjects charged with offences, and it left their position as exceptional as before. The general disqualification of native judges and magistrates remains; but if a native of India be appointed to the post of district magistrate or sessions judge, his powers in regard to jurisdiction over European British subjects are the same as those of an Englishman holding the same office. This provision, however, is subject to the condition that every European British subject brought for trial before the district magistrate or sessions judge has the right, however trivial be the charge, to claim to be tried by a jury of which not less than half the number shall be Europeans or Americans.....Whilst this change was made in the powers of district magistrates, the law in regard to other magistrates remained unaltered."

After a discussion on this subject in the Legislative Assembly in September 1921, the following motion was adopted:—"That in order to remove all racial distinctions between Indians and Europeans in the matter of their trial and punishment for offences, a committee be appointed to consider what amendments should be made in the provisions of the Code

of Criminal Procedure, 1898, which differentiate between Indians and European British subjects and American and Europeans who are not British subjects in criminal trials and proceedings and to report on the best methods of giving effect to their proposals." As a result of the recommendations of the Racial Distinctions Committee the law on the subject was further modified, and by the Criminal Law Amendment Act XII of 1923 in the place of the old Chapter XXXIII (sections 443-463) the new Chapter XXXIII (sections 443-449) with certain supplementary provisions were substituted. This has in some measure reduced the differences between the trials of European and of Indians under the Code. Since 1836 no distinction of race has been recognised in the civil courts throughout the sub-continent.

THE FEDERAL COURT

A Federal Court is, according to the Joint Parliamentary Committee's Report, a necessary element of any Federal Constitution. It is at once the guardian and interpreter of the Constitution, and arbiter of the disputes between the Federal Units. The Government of India Act of 1935 accordingly provided (Sections 200-218) for the Constitution of a Federal Court.

As a result of the Indian Independence Act of 1947 and the orders passed under that Act, India is now split up into two Dominions and provisions is made for the establishment of two separate Federal Courts for the two Dominions.

The Federal Court under The Government of India Act of 1935 continues to be the Federal Court of the Dominion of India. The Federal Court of the Dominion of Pakistan has not yet been established but will no doubt come into being very soon. The provisions for the two Federal Courts are on the same lines, the existing provisions of the Government of India Act of 1935 being adopted for this purpose with suitable modifications.

The Federal Court of India consists of the Chief Justice of India and such number of other Judges as the Governor-General may deem necessary; but the number of puisne judges is not to exceed six unless and until a resolution is passed by the Legislature of the Indian Dominion for an increase. Every judge of the Federal Court is to be appointed by the order of the Governor-General and is to hold office until he attains the age of 65 years. A Judge of the Federal Court is liable to be removed from office by an order of the Governor-General on the ground of misbehaviour or of infirmity of mind or body, if the Judicial Committee of the privy Council on a reference reports that the Judge ought on any such grounds to be removed. The Federal Court is a Court of Record. The Federal Court of India is to sit in Delhi and at such other place or places as the Chief Justice of India with the approval of the Governor-General, may from time to time appoint.

The Federal Court has exclusive original jurisdiction in any dispute between any two or more of the following parties, that is to say, the Dominion of India, any of the Provinces of India, or any of the Acceding States, if and in so far as the dispute involves any question (of law or of fact) on which the existence or extent of a legal right depends.

Certain restrictions are placed upon the Court's jurisdiction over disputes to which an Acceding State is a party. In the exercise of its original jurisdiction, the Court can pronounce only a declaratory judgment. The Court is invested with appellate jurisdiction over any judgment, decree or final order of a High Court, if the High Court certifies that the case involves a substantial question of law as to the interpretation of the Government of India Act or any Order-in-Council or Order passed thereunder, or as to the interpretation of the Indian Independence Act of 1947, or of any Order made thereunder. No direct appeal in such a case lies to His Majesty in Council either with or without special leave.

APPEALS

The Dominion Legislature is empowered to enlarge the appellate jurisdiction of the Federal Court in civil cases. Anda Bill to provide for its enlargement to the fullest extent permissible under Section 206 of the Government of India Act 1935, as now in force and for the abolition *pro tanto* as from February 1, 1948 of all direct appeals in such cases from High Courts to His Majesty in Council either with or without special leave was passed by the Dominion Legislature on December 11, 1947. Although appeals to the Privy Council cannot altogether be excluded by means of this Bill it will have the effect of stopping the further flow of direct appeals to the Privy Council in civil cases and prepare the way for the abolition in due course of all appeals to that) body. The Bill however, does not interfere with appeals which are pending before the Privy Council and the records of which have been transmitted to England by the High Court concerned, nor with appeals to the bringing of which special leave may have been granted by the Privy Council before the coming into force of this law.

An appeal also lies to the Federal Court from a High Court in an Acceding State on the ground that a question of law has been wrongly decided concerning the interpretation of the Government of India Act or of an Order-in-Council or Order made thereunder or concerning the interpretation of the Indian Independence Act of 1947 or of an Order made thereunder or concerning the extent of the legislative or executive authority vested in the Dominion by virtue of the Instrument of Accession of that State, or arising under an agreement made under Part VI of the Government of India Act in relation to the administration in that State of a law of the Dominion Legislature.

An appeal may be brought as of right to His Majesty in Council from a decison of the Federal Court in its original jurisdiction in any dispute which concerns the interpretation of the Government of India Act or of an Order-in-Council or Order made thereunder or which concerns the interpretation of the Indian Independence Act of 1947 or of an Order made thereunder or which concerns the extent of the legislative or the executive authority vested in the Dominion by virtue of the Instrument of Accession of a State or which arises under an agreement made under Part VI of the Government of India Act in relation to the administration in any State of a law of the Dominion Legislature. In other cases, an appeal may be brought to the Privy Council

where special leave is granted either by the Federal Court or by the Privy Council. All authorities civil and judicial throughout the Dominion are enjoined to act in aid of the Federal Court. All proceedings in the Federal Court are to be in the English Language and judgment must be pronounced in the open Court with the concurrence of the majority of the judges.

The provisions for the constitution of the Federal Court of Pakistan are as already stated, on the same lines. The seat of the Federal Court of Pakistan will be in Karachi.

The Federal Court was first established and commenced to function on 1st October 1937. The Court in the first instance consisted of a Chief Justice and two puisne judges. The Chief Justice receives a salary of Rs. 7,000 and each of the puisne judges Rs. 5,500 per month.

Sir Maurice Gwyer, K.C. was appointed to be the first Chief Justice of India, and Sir Shah Mahomed Sulaiman and Mr. M. R. Jayakar to be judges of the Federal Court.

Sir Maurice Gwyer, K.C. retired on 25-4-1943. Sir Srinivasa Vardachariar acted as Chief Justice from 25-4-1943 to 7-6-1943 when Sir Patrick Spens was appointed the Chief Justice. His two colleagues were Sir Mahomed Zafrulla Khan and Sir Harilal Kania.

On the 14th August 1947, Sir Patrick Spens resigned his office of the Chief Justice of India in order to take up the duty of the Chairman of the Arbitral Tribunal set up for the purpose of deciding questions arising out of the partition of India. On his resignation Sir Harilal Kania was appointed the Chief Justice of India and his two colleagues at present are Sir Syed Fazl Ali, Kt. and Mr. M. Patanjali Sastri.

HIGH COURTS

High Courts of Judicature were constituted by the Indian High Courts Act of 1861 for Bengal, Bombay and Madras, and later for the United Provinces and the Punjab superseding the old supreme and Sudder Courts. At present all the Provinces have High Courts except Orissa, Assam and Baluchistan. It now appears as if it was only a question of time before Orissa and Assam too had their own High Courts. The High Courts for Oudh and Sind are called Chief Courts. The principal legal tribunal in the N.-W.F.P. is known as the Court of the Judicial Commissioner.

The Judges are appointed by the Crown; they hold office until they attain the age of 60 years; formerly one-third of their number were barristers, one third were recruited from the judicial branch of the Indian Civil Service, the remaining places being available for persons who have held certain Judicial Offices in the sub-continent or are lawyers qualified in the sub-continent. This fixed proportion of Barrister and Civilian Judges has now been abolished by the Government of India Act, 1935. Trial by jury is the rule in original criminal cases before the High Courts, but juries are never employed in civil suits.

The High Courts are the Courts of appeal from the superior courts in the districts, criminal and civil, and their decisions are final except in cases in which an appeal lies to the Federal Court or to His Majesty in Council the latter being heard by the Judicial Committee of the Privy Council in England. The High Courts exercise supervision over all the subordinate Courts. Returns are regularly sent to them at short intervals and the High Courts are able, by examining the returns, by sending for proceedings, and by calling for explanations, as well as from the cases that come before them in appeal to keep themselves to some extent acquainted with the manner in which the Courts generally are discharging their duties.

LOWER COURTS

The Code of Criminal Procedure provides for the constitution of inferior criminal courts styled courts of session and courts of magistrates. Every Province, outside the Presidency towns, is divided into sessions divisions consisting of one or more districts, and every sessions division has a court of session and a sessions judge, with assistants if need be. These stationary sessions courts take the place of the English Assizes, and are competent to try all accused persons duly committed, and to inflict any punishment authorised by law; but sentences of death are subject to confirmation by the highest court of criminal appeal in the Province.

Magistrates' courts are of three classes with descending powers. Provision is made and largely utilised in the towns, for the appointment of honorary magistrates; in the Presidency towns Presidency magistrates deal with magisterial, cases and benches of Justices of the Peace or honorary magistrates dispose of the less important cases.

Trials before courts of session are either with assessors or juries. Assessors assist, but do not bind the judge by their opinions; on juries the opinion of the majority prevails if accepted by the presiding Judge. The Indian law allows considerable latitude of appeal. But there is no Court of Criminal Appeal, and as the Judicial Committee of the Privy Council has repeatedly disclaimed all Jurisdiction as a Court of Criminal Appeal, there is no adequate machinery for appeal or revision available to persons convicted of serious and even capital offences and sentenced by the High Courts in their original or appellate Criminal Jurisdictions. The prerogative of mercy was exercised by the Governor-General-in-Council and is now exercised by the Governor-General of India or Pakistan and the local Government concerned without prejudice to the superior power of the Crown.

The constitution and jurisdiction of the inferior civil courts varies. Broadly speaking one district and sessions judge is appointed for each district. As District Judge he presides in its principal civil court of original jurisdiction. His functions as Sessions Judge have been described. For these posts members of the Indian Civil Service are mainly selected though some appointments are made from the Provincial Service. Next come the Subordinate Judges and Munsiffs, the extent of whose original jurisdiction varies in different parts of India and Pakistan.

There are in addition a number of Courts of Small Causes, with jurisdiction to try money suits up to Rs. 500. In the Presidency towns, where the Chartered High Courts have original jurisdiction, Small Causes Courts dispose of money suits up to Rs. 2,000. As Insolvency Courts the Chartered High Courts of Calcutta Bombay and Madras have jurisdiction in the Presidency towns. In the mofussil similar powers were conferred on the District Courts by the Provincial Insolvency Act of 1920.

Coroners are appointed only for the Presidency Towns of Calcutta and Bombay. Elsewhere their duties are discharged by the ordinary staff of magistrates and police officers unaided by jurors.

LEGAL PRACTITIONERS

Legal practitioners in India and Pakistan are divided into Barristers-at-Law, Advocates of the Federal and the High Courts; Vakils and Attorneys (Solicitors) of High Courts and Pleaders, Mukhtiars and revenue agents. Advocates of the Federal Court are divided into two classes, senior Advocates and Advocates. The Federal Court maintains Rolls of senior Advocates and Advocates. All Advocates in the Federal Court must be instructed by Agents on the Rolls of the Federal Court Agents and no Senior can appear without a Junior. Barristers and Advocates are admitted by each High Court to practise in it and its subordinate courts; and they alone are admitted to practise on the original side of some of the Chartered High Courts. Vakils are persons duly qualified who are admitted to practise on the appellate side of the chartered High Courts and in the Courts subordinate to the High Courts. Attorneys are required to qualify before admission to practise in much the same way as in England. The rule that a solicitor must instruct counsel prevails only on the original side of the Bombay and Calcutta High Courts. Pleaders practise in the subordinate courts in accordance with rules framed by the High Courts. The Bar Councils Act of 1926 aims at abolishing the various grades of practitioners, and under it each of the High Courts maintains a roll of advocates entitled to practise within its jurisdiction.

The Government of India and Pakistan have their own law colleague in the Legal Member of the Cabinets of the two Dominions. All Government measures are drafted in this department after their substance is decided upon by the administrative departments concerned. Outside the Cabinet the principal law officer of the Government of India and of Pakistan are the Advocate General of India and Pakistan who are appointed by the Governor-General of India and Pakistan under section 16 of the Government of India Act, 1935 as applied to the two Dominions. At Bombay and Calcutta the Government of India have their own solicitors. Each of the Provincial Governments has its own Advocate-General appointed under Section 55 of the Government of India Act, 1935.

The Provincial Governments have usually their own Legal Remembrancers and professional lawyers as Government Advocates and Assistant Government Advocates.

Sheriffs are attached to the High Court of Calcutta, Madras and Bombay. They are appointed by Government, selected from non-officials of standing, the detailed work being done by deputy sheriffs, who are officers of Court.

LAW REPORTS

The official Provincial Law Reports are now as, published in eight series—Calcutta, Madras Bombay, Allahabad, Patna, Lahore Nagpur and Karachi under the authority of the Provincial Governments concerned. They contain cases determined by the High Court and by the Federal Court and the Judicial Committee on appeal from the High Courts. These appeals raise questions of very great importance and the Council of Law Reporting for England and Wales show their appreciation by printing the Indian Appeals in a separate volume and have also compiled a digest of Indian Appeals covering the period 1874-1923. The other provinces and States have series of reports issued under the authority either of the Judiciary or the State.

In addition to these reports a separate series is published under the authority of the Federal Court of India containing reports of the decision of that Court and of the Judicial Committee on appeal from the Federal Court.

Assam Judicial Department

Fakaruddin Ahmed, Ali., Bar-at-Law	Advocate-General, Assam and Secretary to Government in the Judicial and Legislative Departments and Secretary to the Assam Legislative Council, Superintendent and Remembrancer of Legal Affairs, Administrator-General and Official Trustee, Assam.
Rasul, I., B.L.	Judge, A.V.D.
Das, S. K., M.A., B.L.	Temp. Additional District and Sessions Judge, Assam Valley Districts.

Bombay Judicial Department

The Hon'ble Mr. M. C. Chagla	Chief Justice.
The Hon'ble Mr. Justice K. C. Sen	Puisne Judge.
The Hon'ble Mr. Justice Eric Weston	Do.
The Hon'ble Mr. Justice N. H. C. Coyajee	Do.
The Hon'ble Mr. Justice G. S. Rajadhyaksha	Do.
The Hon'ble Mr. Justice N. H. Bhagwati	Do.
The Hon'ble Mr. Justice R. S. Bavdekar	Do.
The Hon'ble Mr. Justice P. B. Gajendragadkar	Do.
The Hon'ble Mr. Justice Y. V. Dixit	Do.
The Hon'ble Mr. Justice S. R. Tendolkar	Do.
The Hon'ble Mr. Justice M. V. Desai	Do.
The Hon'ble Mr. Justice R. A. Jahagirdar	Additional Judge.
Rahimtoola, S. J., B.A., LL.B., J.P., Bar-at-Law	Prothonotary and Sr. Master.
Kirtikar, A. H., B.A., LL.B., Bar-at-Law	Master and Registrar in Equity and Commissioner for taking Accounts and Local Investigations.
Engineer, S. E., B.A., LL.B., Attorney-at-Law	1st Asstt. Master.
Ayyar, A. R. N.	2nd Asstt. Master.
Vakil, S. H. A., B.A., Bar-at-Law	Insolvency Registrar.
Daji, K. N., Advocate	Associate.
Dalvi, G. V., B.Sc. (Bom.), B.A. (Cantab.), Bar-at-Law ..	3rd Asstt. Master.
Vadigar, E. N., B.Com., LL.B., Advocate (O.S.)	Associate.
Eswaran, T. S.	Associate.
Jani, S. R., Bar-at-Law	Associate.
J. R. Cooper, B.Sc., LL.B., Advocate (O.S.)	Ag. Associate.
Sequeira, Armand F., B.A., LL.B., Advocate (O.S.) ..	Master and Registrar in Equity and Commissioner for taking Accounts and Local Investigator.
Mahadevia, G. G., M.A., LL.M., Advocate (O.S.)	Official Assignee.
Vaidya, G. A., B.A., LL.B., Attorney-at-Law	Dy. Official Assignee.
Mathalone, Reginald, B.A., LL.B. (Cantab.), Bar-at-Law	Court Receiver and Liquidator.
Desai, A. G., Bar-at-Law	1st Assistant to the Court Receiver and Liquidator.
Banaji, Dr. D. R., M.A., LL.B., D. Litt.	2nd Assistant to the Court Receiver and Liquidator.
Vimadalal, S. D., B.A., LL.B., Bar-at-Law	Clerk of the Crown.
Vesuvala, N. A., B.A., LL.B., Attorney-at-Law	Taxing Master.
Dastur, Khan Saheb K. K., B.A., LL.B., Advocate (O.S.)	Insolvency Registrar Master and Asstt. Prothonotary.
Dahanukar, M. L. (Bom.)	Sheriff of Bombay.
Nemazie, M. K., LL.B., J.P.	Dy. Sheriff of Bombay.
Naik, S. M., M.A., LL.B.	Registrar, High Court, Appellate Side.
S. H. Belavadi	Dy. Registrar & Sealer, High Court, Appellate Side.
Joshi, Y. S.	Asstt. Registrar, High Court, Appellate Side.
Daphtary, C. K., Bar-at-Law	Advocate-General.
Lad, P. M., I.C.S.	Remembrancer of Legal Affairs.
S. G. Patwardhan, B.A., B.Sc., LL.M.	Government Pleader, High Court.
Little & Co.	Government Solicitors.
Vachha, P. P., M.A., LL.B., Advocate (O.S.)	Editor, Indian Law Reports.
Rodrigues, Leo, LL.B., Advocate (O.S.), J.P.	Administrator-General & Official Trustee.

West Bengal Judicial Department.

Harries, The Hon'ble Sir Arthur Trevor, Barrister-at-Law.	Chief Justice.
Mitter, The Hon'ble Mr. Justice Rupendra Coomar, Kt., M.Sc., M.L.	Puisne Judge.
Edgley, The Hon'ble Mr. Justice Norman George Armstrong, Kt., I.C.S., Barrister-at-Law.	Do.
Mukerjea, The Hon'ble Mr. Justice Bijan Kumar, M.A., D.	Do.
Biswas, The Hon'ble Mr. Justice Charu Chandra, C.I.E. ..	Do.
Lodge, The Hon'ble Mr. Justice Ronald Francis, B.A., I.C.S.	Do.
Sen, The Hon'ble Mr. Justice Amarendra Nath, Barrister-at-Law.	Do.
Roxburgh, The Hon'ble Mr. Justice T. J. Y., C.I.E., I.C.S., Barrister-at-Law.	Do.
Blank, The Hon'ble Mr. Justice Abraham Lewis, I.C.S. ..	Do.

West Bengal Judicial Department—*contd.*

Das, The Hon'ble Mr. Justice Sudhi Ranjan, Barrister-at-Law.	Puisne Judge.
Sharpe, The Hon'ble Mr. Justice W. McC., D.S.O., I.C.S.	Do.
Chakrabatti, The Hon'ble Mr. Justice Phani Bhusan	Do.
Clough, The Hon'ble Mr. Justice J. A.	Do.
Mazumdar, The Hon'ble Mr. Justice J. N.	Do. Additional.
Das, The Hon'ble Mr. Justice Gopendra Nath	Do. do.
Bose, Sudhangsu Mohan, Barrister-at-Law, Kt.	Advocate-General.
Kaitan, K. P., Barrister-at-Law.	Standing-Counsel
Mukharji, P. B., Barrister-at-Law	Junior Standing-Counsel.
Vacant	Government Counsel.
Basu, S. M.	Government Solicitor.
Guha, B. K., I.C.S.	Superintendent and Remembrancer of Legal Affairs and Judicial Secretary to Government.
Sen, Nirmal Kumar, M.A., B.L., Advocate	Deputy Superintendent and Remembrancer of Legal Affairs (High Court).
Mookerjea, Rama Prasad	Senior Government Pleader.
Surajitch, Lahiri	Asst. Government Pleader.
Sen, Binod Chandra	Public Prosecutor, Calcutta.
Chaudhury, S. N., Attorney-at-Law	Junior Public Prosecutor, Calcutta.
Mitra, Sarat Kumar	Editor of Indian Law Reports.
Collet, A. L., O.B.E. (Solicitor)	Registrar (Original Side).
Banerjee, Sachindra Nath. M.B.E., M.A.B.L. (Advocate)	Master and Official Referee.
Mitra, Kanai Lal, B.L. (Attorney-at-Law)	Registrar in Insolvency.
Ghatak, Niraj Nath, B.L. (Barrister-at-Law)	Deputy Registrar.
Smith, Donald	Secretary to the Hon'ble Chief Justice and Head Clerk, Decree Department (on Probation).
Ahmad, O. U., M.A. (Cal.), LL.B. (Bel.), Barrister-at-Law.	Assistant Master & Referee.
Das-Gupta, Manmatha Bhusan, M.A., B.L. (Attorney-at-Law).	Assistant Registrar.
Dutt, Krishna Lall (Attorney-at-Law)	Do.
Banarji, S. K. (Attorney-at-Law)	Do.
Mukharji Kalipada	Do.
Hazra, Sukumar, Bar-at-Law	Do.
Gangali, Manoj, Barrister-at-Law	Do.
Bose, Sasanka Sekhar	Assistant Registrar (acting)
Lahiri, Kunja Lal	Special Officer.
Moses,, O., Barrister-at-Law	Clerk of the Crown for Criminal Sessions.
Das Gupta, K. C., M.A., I.C.S., Barrister-at-Law	Registrar & Taxing Officer, Appellate Side.
D'Abrew, P. A., M.B.E.	Deputy Registrar.
Mookerji, Rai Sahib Tarapada, B.A.	First Assistant Registrar.
Bhattacharji, Jnenandra Narayan, B.L.	Second Assistant Registrar.
Ghosal, Hari Prasad	Third Assistant Registrar.
Moore, C. T., Barrister-at-Law	Administrator-General & Official Trustee.
Vacant	Deputy Administrator-General and Official Trustee.
Meyer, S. C. H., Barrister-at-Law	Official Assignee.
Zoha, M. S., B.A., LL.B. (Irl.), Solicitor (Lond.)	Official Receiver.

Bihar and Orissa Judicial Department

Agarwala, The Hon'ble Sir Clifford Monmohan, Kt., Barrister-at-Law.	Chief Justice.
Lall, The Hon'ble Mr. Justice Manohar, M.A. (Cantab.), Barrister-at-Law.	Puisne Judge.
Meredith, The Hon'ble Mr. Justice Herbert Ribton, I.C.S.	Do.
Shearer, The Hon'ble Mr. Justice James Greig, I.C.S., Barrister-at-Law.	Do.
Sinha, The Hon'ble Mr. Justice Bhuvaneshvar Prashad	Do.
Reuben, The Hon'ble Mr. Justice David Ezra, I.C.S., Barrister-at-Law.	Do.
Imam, The Hon'ble Mr. Justice Saiyid Jafar, Barrister-at-Law.	Do.
Bennett, The Hon'ble Mr. Justice C. H. A., Bar-at-Law (on leave).	(On leave preparatory to retirement).
Beevor, The Hon'ble Mr. Justice Ralph Branthwayt, I.C.S.	Do. do. do.
Das, The Hon'ble Mr. Justice Sudhanshu Kumar, I.C.S.	Judge, Additional.

Bihar and Orissa Judicial Department—*contd.*

Raj, The Hon'ble Mr. Justice Bira Kishori	Additional
Mukherji, The Hon'ble Mr. Justice Abhay Pada, I.C.S.	Acting.
Ramaswami, The Hon'ble Mr. Justice Vaidyanathier, Bar-at-Law, I.C.S.	Additional.
Jamuar, B. P., Bar-at-Law	Registrar.
Kaukajya Singh	Deputy Registrar.
Anant Singh	Asstt. Registrar, High Court, Patna.
Narayan, K. S.	Commissioner for Oaths and Affidavits.
Ishwarchandra Misra	Assistant Registrar, Orissa Circuit Court and Additional Munsif of Cuttack in addition to his own duties.
Ayyar, T. G. N., M.A., I.C.S.	Secy. to Govt., Judicial Dept. and Supdt. and Remembrancer of Legal Affairs.
Prashad, Mahabir, Bar-at-Law	Advocate-General and also Secy. to Govt., Legislative Dept. and A.G.O.T., Bihar.
Mitra, S. K., Bar-at-Law	Government Advocate.
Lalnarayan Sinha	Government Pleader.

[A High Court for Orissa was established on 26 July, 1948, with Mr. B. K. Roy as Chief Justice.]

High Court of Judicature at Lahore

Abdul Rashid, The Hon'ble Sir	Chief Justice.
Sale, The Hon'ble Mr. Justice	Puisne Judge (on leave).
Muhammad Abdur Rahman, Kt., The Hon'ble Mr. Justice.	Do.
Muhammad Munir, The Hon'ble Mr. Justice	Do.
Marten The Hon'ble Mr. Justice	Do.
The Hon'ble Mr. Justice Mohammad Sharif	Do.
The Hon'ble Mr. Justice Cornelius	Do.
The Hon'ble Mr. Justice S. A. Rahman	Do.
The Hon'ble Mr. Justice Muhammad Jan A.	Do.
G. B. C. Eveunette, M.B.E.	Registrar (Officiating).
Major Taylor, H. O., M.B.E.	Deputy Registrar (Officiating) (on leave).
M. Mohammad Khalil	Deputy Registrar (Officiating).
S. J. Simons	Assistant Registrar (Officiating).

United Provinces Judicial Department.

HIGH COURT OF JUDICATURE AT ALLAHABAD.

Hon'ble Mr. Kamalakanta Verma, B.A., LL.B.	Chief Justice.
Hon'ble Mr. Justice Bidhubhusan Malik, M.A., (Bar-at-Law)	Puisne Judge.
Hon'ble Mr. Justice M. Wali-ullah, M.A., B.C.L., LL.D., (Bar-at-Law)	Do.
Hon'ble Mr. Justice Shiva Prasad Sinha, B.A., LL.B.	Do.
Hon'ble Mr. Justice O. H. Mootham, Bar-at-Law (E.D.).	Do.
Hon'ble Mr. Justice Girish Prasad Mathur, Rai Bahadur, B.A., LL.B.	Do.
Hon'ble Mr. Justice Sankar Saran, M.A. (Oxon.), Bar-at-Law	Do.
Hon'ble Mr. Justice Raghubar Dayal, M.Sc., I.C.S.	Do.
Hon'ble Mr. Justice Harish Chandra, M.Sc. (Bar-at-Law), I.C.S.	Addl. Puisne Judge.
Hon'ble Mr. Justice Prakash Narain Sapru, M.A., Bar-at-Law	Acting Puisne Judge.
Hon'ble Mr. Justice Kailash Nath Wanchoo, B.A., I.C.S.	Do.
Hon'ble Mr. Justice Bind Basni Prasad, Rai Bahadur, M.A., LL.B.	Acting Puisne Judge.
Dhatri Saran Mathur, C.E. (Hons.) (Roorkee), I.C.S.	Registrar.
Kripa Shankar Varma, B.A., LL.B.	Deputy Registrar.
Shambhu Nath Srivastava, B.A.	Assistant Registrar.
Dr. M. H. Faruqi, M.A., LL.B., Ph.D. (Bar-at-Law)	Government Advocate.
Kanhaiya Lal Misra, B.A. (Hons.), LL.B.	Deputy Govt. Advocate.
D. P. Uniyal, M.A., LL.B.	Asstt. Govt. Advocate.
M. Mukhtar Ahmad, B.A., LL.B.	Law Reporter.
J. C. Mukerji, B.A., LL.B.	Junior Law Reporter.
J. K. Srivastava, B.A., LL.B.	Administrator-General & Official Trustee.

Chief Court of Oudh at Lucknow

Ghulam Hasan, The Hon'ble Mr. Justice, B.A., LL.B.	Chief Judge.
Misra, The Hon'ble Mr. Justice Lakshmi Shankar, Bar-at-Law	Judge.
Kaul, The Hon'ble Mr. Justice Parduman Kishan, B.A., LL.B.	Do.

Chief Court of Oudh at Lucknow—*contd.*

Chandiramani, The Hon'ble Mr. Justice Santdas Bulchand, I.C.S.	Judge.
Walford, The Hon'ble Mr. Justice Henry Gordon, Bar-at-Law	Addl. Judge.
Kidwai, The Hon'ble Mr. Justice Mubashir Husain, Bar-at-Law	Do.
Hari Shankar Chaturvedi, B.A., LL.B.	Registrar.
Girdhari Krishana Narain	Dy. Registrar.
Ewaz Ali	Asstt. Registrar.
Nasirullah Beg, Bar-at-Law	Govt. Advocate.
Chaudhri. Pirthwi Nath, B.A., LL.B.	Asstt. Govt. Advocate.
Iftikhar Husain, B.A., LL.B.	Law Reporter.

Madras Judicial Department

Rajamannar, The Hon'ble Mr. P. V., B.A., B.L.	Chief Justice.
Lakshmana Rao, The Hon'ble Mr. Justice K. P., Diwan Bahadur, B.A., B.L. (on leave)	Judge.
Horwill, The Hon'ble Mr. Justice L. C., I.C.S., Bar-at-Law	Do.
Happell, The Hon'ble Mr. Justice A. C., I.C.S., M.A., Bar-at-Law	Do.
Bell, The Hon'ble Mr. Justice J. A., M.C., Bar-at-Law.	Do.
Kunhi Raman, The Hon'ble Mr. Justice C., Diwan Bahadur, B.A., B.L., Bar-at-Law	Do.
Chandrasekhara Ayyar, The Hon'ble Mr. Justice N., Rao Bahadur, B.A., B.L. (on leave)	Do.
Clark, The Hon'ble Mr. Justice R., Bar-at-Law	Do.
Govindarajachari, The Hon'ble Mr. Justice V., B.A., B.L.	Do.
Yahya Ali Sahib, The Hon'ble Mr. Justice Khan Bahadur, M.A., B.L.	Officiating.
Satyanarayana Rao, The Hon'ble Mr. Justice P.	Temp. Addl. Judge.
Govinda Menon, The Hon'ble Mr. Justice P.	Do.
Small, H. M., M.A., LL.B.	Government Solicitor.
Kuttikrishna Menon, K., B.A., B.L.	Government Pleader.
Chowdary, V. V., M.A., B.L., LL.D., Bar-at-Law	Law Reporter.
Rajagopalan, G., B.A., M.L.	Do.
Srinivasa Ayyanger, N., M.A., B.L.	Do.
Ethiraj, V. L., C.I.E., Bar-at-Law	Public Prosecutor.
Aingar, R. N., Rao Bahadur, Bar-at-Law	Editor, Indian Law Reports.
Ramaswami Ayyer, S., B.A., B.L.	Secretary, Rule Committee.
Ramaswami Nayadu, S.	Sheriff of Madras.
Murti (R. K.)	Under-Sheriff of Madras.
Raman Nair, P. T., I.C.S.	Registrar, High Court.
Srinivasa Ayyar, S., B.A., B.L.	Master (Ag.)
Jayaram Azyar, R., M.A., B.A.	Dy. Registrar (Ag.).
Nambiyar, K. C., B.A., B.L., Bar-at-Law	Official Referee.
Krishnaswami Ayyar, K., Rao Sahib, M.A., B.L.	1st Asst. Registrar, Original Side and Clerk of the Crown (Ag.).
Subbuswami, J., M.A., Bar-at-Law	Asst. Registrar, Appellate Side.
Kandaswami, V. T., Attorney-at-Law	2nd Asst. Registrar, Original Side.
Rao Saheb T. H. Raghothama Rao	Sub Assistant Registrar, Appelate Side.
Rao Saheb Radhakrishna Mudaliar, C.	Sub Assistant Registrar, Appelate Side.

Central Provinces and Berar Judicial Department

Grille, The Hon. Sir Frederick Louis, Kt., M.A. (Cantab.), Bar-at-Law, I.C.S.	Chief Justice.
Pollock, The Hon. Sir Ronald Evelyn, Kt., B.A. (Cantab.), Bar-at-Law, I.C.S.	Puisne Judge.
Bose, The Hon. Mr. Justice Vivian, B.A., LL.B. (Cantab.), Bar-at-Law.	Do.
Hemeon, The Hon'ble Mr. Justice Clarence Reid, I.C.S.	Do.
Sen, The Hon'ble Mr. Justice J. R., B.Sc., LL.B.	Do.
Hidayatullah, The Hon'ble Mr. Justice M., Bar-at-Law.	Do.
Padhye, The Hon'ble Mr. Justice R. N.	Do. (Additional)
Sheode, The Hon'ble Mr. Justice T. L.	Do. do.
Gupta, B. L., B.A., LL.B.	Advocate-General.
Ahmed, Khan Sahib Syed Matin, B.A., LL.B.	Registrar.
Razzaque, M. A., B.Sc., LL.B.	Deputy Registrar.
Trivedi, R. S., M.Sc., LL.B.	Do.
Deo, G. R., B.A., LL.B.	Editor for the Indian Law Reports, Nagpur Series.

N.-W. Frontier Province Judicial Department

Almond, The Hon'ble Sir James, Kt., L.C.S.	Judidcial Commissioner (on leave).
Mohammad Ibrahim Khan, The Hon'ble K. B., B.A., LL.B.	Acting Judicial Commissioner.
Khuda Bakhsh, The Hon'ble Mr. Justice Malik, B.A., LL.B.	Acting Judge, Judicial Commissioner's Court.
Fazal Rahman Khan, Mirza, K.S., B.A.	Registrar, Judicial Commissioner's Court.
Mohd Safdar Khan, M., K. B., B.A., LL.B.	District & Sessions Judge, Peshawar, Kohat and Mardan.
Taj Mohd. Khan, Arbab, B.Sc., LL.B.	District and Sessions Judge, D. I Khan.
Abdul Ghafoor Khan, M., K.S., B.A.	Additional District and Sessions Judge, Peshawar, Kohat and Mardan.
Abdul Latif Khan, K.S.	District and Sessions Judge, Hazara.
Habibullah Khan, M., B.A., LL.B.	Additional District and Sessions Judge, Peshawar, Kohat and Mardan.
Mohammad Nazir Khan, Raja	Senior Subordinate Judge, Peshawar.
Ram Chand, L., Gulatee, B.A.	Senior Subordinate Judge, D. I. Khan.
Birch, M.	Senior Subordinate Judge, Hazara.
Mohammad Daud Khan, M., B.A., LL.B.	Senior Sub. Judge, Bannu.
Mohammad Eusoph Hayat, M., B.A., LL.B.	Senior Sub. Judge, Mardan.
Ram Lal L. Kapur, B.A., LL.B.	Sub. Judge (on leave).
Shakirullah Jan, Mian, Bar-at-Law	Senior Sub. Judge, Kohat.
Haji Mohammad Khan, M., B.A., LL.B.	Sub. Judge, Peshawar.
Faizullah Khan, M., B.Sc., LL.B.	Sub. Judge, D. I. Khan.
Qaisar Khan, M., B.A., LL.B.	Sub, Judge, Charsadda.
Sher Bahadur Khan, M., B.A., LL.B.	Sub. Judge, Mansehra.
Abdul Hakim Khan, M., B.A., LL.B.	Sub. Judge, Abbottabad.
Abdullah Jan, Mirza, B.A., LL.B.	Sub. Judge, Peshawar.
Amirzada, M., B.A., LL.B.	Sub. Judge, Mardan.
Roidad Khan, M., B.A., LL.B.	Sub. Judge, Swabi.
Shah Nawaz Khan, M., B.A., LL.B.	Sub. Judge, Bannu.
Mohd. Hamayun Khan, M., M.A., LL.B.	Sub. Judge, Haripur.

East Punjab High Court at Simla

Ram Lall, The Hon'ble Dewan	Chief Justice.
Mahajan, The Hon'ble Mr. Justice Mehr Chand	Puisne Judge (on leave).
Teja Singh, The Hon'ble Mr. Justice	Do.
Bhandari, The Hon'ble Mr. Justice A. N.	Do.
Achhru Ram, The Hon'ble Mr. Justice	Do.
Khosla, The Hon'ble Mr. Justice G. D.	Puisne Judge (on deputation to the Government of India.)
Falshaw, The Hon'ble Mr. Justice D.	Additional Judge.
Haksar, S. N., I.C.S.	Registrar (on deputation as Deputy Commissioner, Refugees).
Narang, Ranjit Rai, B.A. (Hons.), LL.B., R.S.	Deputy Registrar Offg. as Registrar.

Chief Court of Sind

Tyabji, The Hon'ble Mr. H. B., Barrister-at-Law	Chief Judge.
O'Sullivan, The Hon'ble Mr. Justice D. N., Barrister-at-Law	Puisne Judge.
Thadani, The Hon'ble Mr. Justice T. V.	Do.
Constantine, The Hon'ble Mr. Justice G. B., B.A. (Oxon.), I.C.S.	Do.
Agha, The Hon'ble Mr. Justice H. G., B.A., LL.B.	Do.
DeSa, B. J., Barrister-at-Law	Registrar & Clerk of the Crown.
Chatpar, Sunderdas Jethanand, B.A., LL.B.	Official Assignee and Administrator-General and Official Trustee, for Sind, Karachi.
Ojha, B. C., Barrister-at-Law	Registrar, Original Side, Chief Court of Sind and Registrar of Firms and Companies for Sind.
Jiwatram, Ramchand, B.A., LL.B.	Official Commissioner.

Laws of 1946

1. Workmen's Compensation (Amendment) Act, 1946.—Under the Workmen's Compensation Act, 1923, workmen earning wages exceeding Rs. 300 a month are not entitled to compensation. The term "wages" includes dearness allowances. As a result, persons who would have ordinarily been entitled to the relief under the Act are being deprived of it when the total wages exceed Rs. 300 due to the addition of dearness allowances. To remedy this, Sec. 2 of Act VIII of 1923 has been amended by substituting therein the word "four" instead of the word "three" in sub-clause (ii) of clause (n) and introducing necessary amendments in Schedule 4 so as to mean that persons earning over Rs. 400 only shall not be entitled to compensation.

2. Indian Mines (Amendment) Act, 1946.—This Act introduces a sub-clause (bbb) in Sec. 30 of Act IV of 1923 by which a rule-making power is conferred upon the Central Government to require colliery owners to erect in their mines separate bathing places with shower-baths and separate locker-rooms, for men and women employed in the mines on a scale to be laid down by the rules and to maintain them at prescribed standards.

3. Code of Criminal Procedure (Amendment) Act, 1946.—The inability of a Sessions Judge to recall a case or appeal which he has once made over to an Additional Sessions Judge for hearing has been a frequent cause of delay in the disposal of criminal work. Hence after sub-sec. (1) of Sec. 528 of the Criminal Procedure Code, 1898, a new sub-sec. (1A) has been inserted providing that at any time before the trial of the case or the hearing of the appeal has commenced before the Additional Sessions Judge, any Sessions Judge may recall any case or appeal which he has made over to any Additional Sessions Judge. It is further provided that the Sessions Judge may after the case or appeal is recalled, either try or hear the same himself or make it over for trial or hearing, in accordance with the provisions of the Criminal Procedure Code to another Court.

4. Code of Criminal Procedure (Second Amendment) Act, 1946.—In a case before the Privy Council, it was held that a High Court possesses no power to grant bail to a person who has been sentenced to imprisonment and who has been granted special leave to appeal to His Majesty in Council. Their Lordships however expressed the opinion that it would be a proper and useful power to vest in a High Court of granting bail in such a case. As this could only be done by legislation, this Act introduces sub-sec. (2B) of Sec. 426 of the Criminal Procedure Code, 1898 to the effect that where a High Court is satisfied that a convicted person has been granted special leave to appeal to His Majesty in Council it may if it thinks fit order that pending the appeal, the sentence or order appealed against, be suspended and also if the said person is in confinement that he be released on bail.

5. Professions Tax Limitation (Amendment) Act, 1946.—When the Professions Tax Limitation Act (XX of 1941) was enacted, the intention of the Legislature was that the limitation of Rs. 50 prescribed under it should not be applicable to the tax on companies imposed by the Corporation of Madras under Sec. 110 of the Madras City Municipal Act. Doubts having arisen whether such tax would also apply to companies, this Act amends the Schedule to Act XX of 1941 by adding to it item No. 5 excluding the tax on companies imposed under Sec. 110 above. The amendment has been given retrospective effect.

6. The Insurance (Amendment) Act, 1946.—This Act makes several amendments to the Insurance Act IV of 1938 with the object of remedying certain undesirable features in the administration of insurance companies.

In Sec. 2 a "policy-holder" is described as including a person to whom the whole of the interest of the policy-holder in the policy is assigned once and for all but not as including an assignee whose interest is defeasible or limited.

Sub-sec. 4 of Sec. 3 provides for cancellation of the registration of an insurer if the insurer has failed to have the registration renewed or if the Superintendent of Insurance has reason to believe that any claim upon the insurer arising in India under any policy of insurance remains unpaid for three months after final judgment in regular course of law, or if the insurer fails to comply with an order under Sec. 3B. A new sub-sec. 7 is added to Sec. 3 empowering the Superintendent of Insurance on payment of a prescribed fee not exceeding Rs. 25 to issue a duplicate certificate of registration to replace a certificate lost, destroyed or mutilated or in any other case where he is of opinion that the issue of a duplicate certificate is necessary.

A new Sec. 3B has been added to Act IV of 1938 empowering the Superintendent of Insurance when it appears to him while considering an application for registration that the assurer's rates, advantages, terms, and conditions, offered in connection with life insurance business are not workable or sound, to require the insurer to submit a statement to an actuary for a report as regards the soundness of the terms. Sec. 4 has been amended by raising the minimum limit for annuities and other benefits secured by policies of life insurance from Rs. 50 to Rs. 100 and from a gross sum of Rs. 500 to Rs. 1,000 and this provision is also made applicable to a provident society or a mutual insurance company.

To Sec. 9, a sub-clause is added in connection with the refund of deposits where an insurer has ceased to carry on in British India any class of insurance business in respect of which a deposit has been made in the case where any insurance business is being carried on in an Indian State. In such a case the Court is empowered not to order the return of any deposits unless it is satisfied after giving notice to the Chief Insurance Authority of the particular State that the liabilities of the insurer to that State have been satisfied.

In Sec. 10 a new sub-sec. (2A) is added providing that no insurer carrying on life insurance business shall be entitled to be registered for any class of insurance business in addition to class or classes for which he has been registered, unless the Superintendent of Insurance is satisfied that the assets of the life insurance fund are adequate to meet all the liabilities on life insurance policies.

In Sec. 22 a provision is made empowering the Superintendent of Insurance while making an investigation or valuation to call upon the insurer to place at the disposal of the actuary approved by the Superintendent all the materials required by the actuary. A new sub-sec. (2A) has been added to Sec. 27 for increasing the amount of the investments where an insurer accepts reassurance in respect of any policies of life insurance issued by another insurer and maturing for payment in India and for decreasing the investments where the insurer cedes reassurance to another insurer.

In Sec. 29 a proviso is added for repayment of loans within 3 months granted in contravention of this section and in case of default provides that the director, manager, auditor or actuary shall cease to hold office.

In Sec. 31 a new sub-sec. is added that no insurer incorporated or domiciled in British India shall hold any of his assets kept in an Indian State otherwise than in the name approved by the State.

In Sec. 33 a further power is given to the Superintendent of Insurance while ordering inspection, to utilise the services of an auditor or actuary.

To sub-sec. 7 of Sec. 39 a proviso is added that where a nomination made in favour of the wife of the person who has insured his life or of his wife and children, is expressed as being made under this section, then Sec. 6 shall be deemed not to apply to the policy.

An amendment is introduced in Sec. 40 providing that references to an insurance agent shall be construed as including an individual soliciting or procuring insurance business exclusively in an Indian State and holding a valid licence as an insurance agent. To the same section a new sub-sec. (2A) is added providing that no insurance agent shall be paid a commission or remuneration in any form in respect of any policy not effected through him provided however that where a policy of life insurance has lapsed and another insurance agent effects the revival of the lapsed policy he may be paid commission for the same.

A new Sec. 48A is added prohibiting an insurance agent who solicits or procures life insurance business or any other person acting on behalf of an insurer who for the purpose of life insurance business employs insurance agents from becoming or remaining a director of any life insurance company.

A new Sec. 53A is added whereby it is provided that no account shall be taken of any assets of an insurer consisting of unpaid-up share capital.

To Sec. 58 a new sub-sec. (5) is added empowering the Court when making an order confirming a scheme for partial winding up of an insurance company to make such orders as it considers necessary for the disposal of a portion of the deposit of the company.

Sec. 65 is amended by raising the amount of Rs. 50 to 100 and the amount of Rs. 500 to 900 in connection with the business of a provident society.

An amendment is introduced in Sec. 70 empowering the Superintendent of Insurance to cancel the registration of a provident society if he has reason to believe that any claim upon the society under any policy of insurance remains unpaid for 3 months after final judgment. A further sub-sec. in Sec. 70 empowers the Superintendent of Insurance to issue a duplicate certificate of registration.

A new Sec. 71 is substituted for old Sec. 71 making the provisions of Secs. 20, 32, 46 and 53A applicable to a provident society as they are applicable to insurers.

A new Sec. 73A is added which prohibits a provident society from registering a name identical with that of an insurer or another provident society.

Sec. 85 which provides for investment of the funds of a provident society allows by a proviso to sub-sec. 3, loans to be made by a provident society to a banking company.

A new sub-sec. 5 is added to Sec. 87 empowering the Superintendent of Insurance by a notice in writing requiring a provident society to comply within a certain time with any directions he may issue to remedy defects disclosed by an inquiry into the insolvency of such society and if the society fails to comply with such directions the Superintendent of Insurance may apply to the Court for the winding up of the society.

A new Sec. 87A is added for the amalgamation and transfer of insurance business of a provident society with the insurance business of any other provident society in accordance with a scheme sanctioned by the Superintendent of Insurance.

A new sub-sec. (2) is substituted for the old sub-sec. (2) of Sec. 88 providing for further grounds for winding up a provident society in cases where registration of the society has been cancelled or where the society is found to be insolvent or where the continuance of the society is prejudicial to the interest of the policy-holders.

A new Sec. 98A is added which prohibits granting of loans by co-operative life insurance societies in the same way as loans are prohibited by Sec. 29 of the Act in the case of other insurers.

An amendment has been introduced in the Third Schedule to the Insurance Act of 1938 for keeping proper accounts of gross premium received and expenses of management.

7. Indian Finance Act, 1946.—This Act by Sec. 2 continues for one year the duty on salt manufactured in or imported by land into British India at the rate of one rupee and nine annas per standard maund.

Sec. 3 continues the existing rates of inland postage ; Sec. 5 continues the additional duties of customs on certain goods chargeable with a duty of customs under the First Schedule to the Indian Tariff Act, 1934 (XXXII of 1934) or under the said Schedule read with any notification of the Central Government for the time being in force, imposed by Sec. 6 of the Indian Finance Act, 1942, except in the case of wines in Item 22 (3) in the First Schedule of the Indian Tariff Act in which case additional duty of one-half instead of one-fifth of the amount of customs duty is imposed. By the same section all additional duty on betelnuts, cinematograph films not exposed and exposed, raw cotton, silver bullion and silver sheets and plates and gold bullion and gold sheets and plates which have undergone no process of manufacture subsequent to rolling, and silver and gold coins. Instead of the additional duty, Sec. 6 provides for the imposition and alteration of certain customs duty on the above mentioned articles.

Sec. 7 alters the duty of customs on kerosene and mineral oils in regard to which nine pies are taken off.

The duty of excise on motor spirit is changed by the substitution of the word "twelve" in place of the word "fifteen".

Sec. 9 alters the excise duty on betelnuts by reducing the duty from two annas to one anna.

Sec. 10 repeals Ordinance VIII of 1942 (The Cotton Fund Ordinance) whereby the duty of custom on raw cotton is withdrawn.

Sec. 11 deals with the imposition of income-tax and super-tax at the rates specified in the Schedule Parts I and II. No income-tax is payable on the first Rs. 1,500 income and no tax on a total income which does not exceed Rs. 2,000.

On the next Rs. 3,500 the income-tax is charged at one anna in the rupee.

On the next Rs. 5,000 of total income, the income-tax is charged at two annas in the rupee.

On the next Rs. 5,000 of total income, the rate is three and a half annas in the rupee while on the balance of the total income beyond Rs. 5,000 the rate is five annas in the rupee.

In the case of companies and local authorities the rate on the whole of the total income is fixed at five annas in the rupee.

As regards the rates of super-tax, they range after the first Rs. 25,000 from two annas in the rupee to ten and a half annas in the rupee ; while in the case of wholly unearned incomes the rate of super-tax ranges from three annas in the rupee to ten and a half annas in the rupee.

In the case of every local authority and certain societies the super-tax rate is only one anna in the rupee on the whole of total income.

In the case of companies the super-tax rate is also one anna in the rupee on the whole total income but in addition to that further tax is charged ranging from two annas in the rupee upto seven annas in the rupee where in respect of that part of the total income which does not exceed the amount of dividends, on the amount by which such part exceeds from 30 per cent to 60 per cent of the total income as so reduced.

8. The Indian Income-Tax (Amendment) Act, 1946.—Sub-sec. (3) of Sec. 4 of the Income-tax Act XI of 1922 provides for certain exemptions from the total income of a person. The present Act inserts clause (xii) to sub-sec. (3) of Sec. 4 of the Act of 1922 whereby the income received in respect of a building the erection of which is begun and completed between the "day of April 1946 and 31st March 1948, is exempted for a period of two years from the date of its completion from income-tax under the head "Income from Property".

Sec. 10 of the Income-Tax Act XI of 1922 provides for allowances in certain cases in regard to newly erected buildings and machinery or plant and also in the case of any building or machinery or plant which has been sold or discarded or demolished or destroyed.

It now further provides in newly added clauses (xii), (xiii) and (xiv) for allowances in respect of expenditure (not being in the nature of capital expenditure) laid out or expended on scientific research relating to a business or any sum paid to a scientific research association or any sum paid to a university, college or other institution used for scientific research.

9. Indian Oilseeds Committee Act, 1946.—India is one of the World's principal producers of oilseeds. In view of the importance of oilseeds in the national economy it became necessary to put oilseeds research, development and technology on a more permanent basis. This Act therefore sets up a committee on the lines of other committees in respect of similar commodity such as the Indian Central Cotton Committee. This Committee has representatives of all the important interests on it and is empowered to deal with problems connected with the production and marketing of oilseeds.

Sec. 3 of this Act imposes a cess on all oils extracted from oilseeds and on all oilseeds exported out of British India.

Sec. 4 provides for the constitution of the Indian Oilseeds Committee.

Sec. 5 makes the committee a body corporate.

Sec. 6 provides for filling vacancies in the appointments of the members.

Sec. 9 empowers the committee to apply the fund in the manner laid down.

Sec. 11 provides for the collection of duty of excise duty.

Sec. 13 provides for inspection of mills for oilseeds and taking copies of records and accounts.

Sec. 16 empowers the Central Government to dissolve the committee.

Sec. 17 empowers the Central Government to make rules for carrying out the objects of the Act.

Sec. 18 empowers the committee to make regulations.

10. The Factories (Amendment) Act, 1946.—Sec. 34 of the Factories Act, 1934 has been amended by providing for decrease of working hours in that no adult worker shall be allowed to work in a factory for more than 48 hours instead of 54 hours as originally fixed or where the factory is a seasonal one for more than 50 hours instead of 60 hours in any week.

Sec. 36 is also amended by restricting the hours of work per day in a factory for adult workers to 9 and 10 hours a day instead of 10 and 11 hours a day in a factory and in a seasonal factory respectively.

Sec. 38 is also amended providing that the periods of work of an adult worker in a factory shall be so arranged that along with his intervals for rest they shall not spread over more than ten and half hours or where the factory is a seasonal one eleven and half hours in any day.

Sub-sec. 4 of Sec. 44 of the Act of 1934 is amended so that the exemption given by the Provincial Government or the Chief Inspector exempting any or all adult workers in any factory from the limitation of working hours shall remain in force for a period not exceeding two months from the date of the notice given to the Manager of the factory provided however that the Provincial Government may extend the operation of such order for a period not exceeding six months at any one time. Sec. 45 is also amended by imposing restrictions on the employment of women and limiting the working hours to ten and a half hours or where the factory is a seasonal one, eleven and half hours between 6 a.m. and 7 p.m.

Sec. 47 which deals with extra scales for overtime is also amended by providing this where a worker in a non-seasonal factory works for more than nine hours in any day or for more than forty-eight hours in any week or in a seasonal factory works for more than nine hours in any day or for more than fifty hours in a week, he shall be entitled in respect of the overtime to be paid at the rate of twice his ordinary rate of pay.

11. The Provident Funds (Amendment) Act, 1946.—Certain judicial decisions have cast doubts on the status of nominees under certain Provident Fund Rules. Hence this Act is passed to clarify the rights of a person duly nominated under the Rules to receive a subscriber's Provident Fund Deposits.

Sec. 5, sub-sec. (1) of the Provident Funds Act, 1925 is amended as follows :—

Notwithstanding any thing contained in any law for the time being in force or in any disposition whether testamentary or otherwise by a subscriber to or depositor in a Government or Railway Provident Fund of the sum standing to his credit, the person who has been duly nominated in accordance with the rules of the Fund shall become entitled to the exclusion of all other persons to receive the subscriber's deposits provided that such subscriber dies before the sum becomes payable. But if such nomination is cancelled and another nomination is made by the deposior in his life-time or if such nomination becomes invalid for any reason then in that case such person nominated does not receive the amount of the Provident Fund.

It is also provided that if a nominee dies before the subscriber then his nomination ceases to subsist.

12. Trade-Marks (Amendment) Act, 1946.—The Trade Marks Act, 1940 is only effective in British India and not in Indian States some of which have their own Trade Marks Acts. The commercial community complained that separate registrations in a number of territories in India have imposed a great financial burden on them apart from the embarrassment and confusion that arose as a result of conflicting trade marks being registered in various territories in India. It is with a view to avoiding conflict of registrations in various Indian States and also to make trade marks registered in any territory effective in all territories in India in which trade marks legislation has been enacted that this Amending Act has been passed.

Sec. 4 of the Trade Marks Act of 1940 is amended by this Act so as to empower the Central Government to appoint two or more deputy registrars of trade marks to discharge certain functions of the registrar.

Sec. 10 is amended for extending the protection to trade marks which are registered in Indian States.

Sec. 19 is also made applicable to trade marks in any Indian State.

A new sub-sec. (2) is added to Sec. 21 which provides that a person who is registered in any Indian State to which Sec. 82A of the Act of 1940 for the time being applies, as proprietor of a trade mark shall have the same rights in respect thereof as are conferred by Sec. 21 on a person registered under this Act as proprietor of a trade mark.

Sec. 22 is also amended by extending its provisions to any Indian State.

In Sec. 23 the words "registered trade mark" are changed into "trade mark registered under this Act or registered in any Indian State."

An explanation is added to Sec. 46 to include a person who is registered in an Indian State as also a person aggrieved so that he is also entitled to oppose registration of a trade mark which conflicts with a trade mark registered by him in an Indian State.

A new sub-sec. is added to Sec. 57 providing that a person registered in any Indian State as proprietor of a certification trade mark shall have the same rights as a person registered under this Act.

A new Sec. 82A is added empowering the Central Government to enter into reciprocal arrangements with any Indian State whereby trade marks registered under this Act shall have the same protection as if they are registered in that State.

13. Indian Companies (Amendment) Act, 1946—Sec. 282B of the Indian Companies, Act, 1913 lays down that moneys belonging to a provident fund constituted by a company for its employees shall be invested [illegible] in a post office savings bank. The limit of the amount allowed to be kept in the post office savings bank is only Rs. 5,000 which has been found to be insufficient to meet the running expenses of provident funds of big concerns. Consequently a proviso is added to sub-sec. (2) of Sec. 282B of the Companies Act, 1913 empowering a company to deposit the excess over Rs. 5,000 in a special account which may be opened in a scheduled bank.

14. Railway Companies (Substitution of Parties in Civil Proceedings) Act, 1946.—The Central Government acquired the Bengal-

Nagpur Railway on 1st October 1944 and assumed responsibility for the contractual obligation of the railway company. There are a number of suits pending in law courts to which the railway is a party, and difficulty has arisen by reason of the Central Government having become the owners of the railway. Similar difficulty has also arisen in respect of Bengal and North-Western and Rohilkund and Kumaon Railways, the liability in respect of which has also been accepted by the Central Government. There are liquidators appointed to complete the liquidation but owing to the change of ownership much delay is being caused in the completion of the liquidation.

Hence this Act provides that in every civil proceeding pending, to which the Bengal-Nagpur Railway, the Bengal and the North-Western Railway or the Rohilkund and Kumaon Railway is a party and which proceeding is founded on any right or liability assumed by the Central Government, the Governor-General in Council shall notwithstanding any thing to the contrary in the Code of Civil Procedure, 1908, be deemed to be substituted in the place of the railway company and such proceeding may be continued by or against the Governor-General in Council and the railway company shall be discharged from all liability in connection with the proceedings.

15. Indian Coconut Committee (Amendment) Act, 1946.—The Indian Coconut Committee Act, 1944 which provides for the levy of an excise duty at a rate not exceeding annas four per cwt. on copra consumed in mills and which amount is to be utilised by the committee for improving the cultivation and marketing of coconuts in India, was passed as emergency legislation which remained in force only for a temporary period hence this Act is passed to continue the Indian Coconut Committee Act of 1944 on a permanent basis. Consequently Sec. 9 of the Act is amended providing for the permanent creation of a Coconut Improvement Fund, and for the application of the fund for the purpose of cultivation and marketing of coconuts.

16. Protective Duties Continuation Act, 1946.—This Act continues for a further period of one year after 31st March 1947, the protective duties on sugar, woodpulp, paper, cotton, Silk manufactures, Iron and steel manufactures, magnesium chloride and wheat and wheat flour.

The Act also extends for one year more the Sugar Industry Protection Act, 1932.

17. Protective Duties Act.—Pending the recommendations of the Tariff Board for giving protection to industries this Act has been passed to empower the Governor-General to impose by executive action additional duties to restrict the inflow of goods from abroad.

Sec. 2 empowers the Central Government to impose on any goods produced or manufactured in any country outside India and imported into British India, a duty of customs which is to be deemed to be a duty leviable under the Indian Tariff Act, 1934.

Sec. 3 provides that a Bill shall be introduced in the Central Legislature to give effect to the proposals of the Central Government in regard to the continuance of a protective duty of customs on foreign goods.

18. Indian Soldiers (Litigation) Amendment Act, 1946.—This Act restricts the benefit of the extended limitation conferred by the exception to the proviso to Sec. 11 of the Indian Soldiers (Litigation) Act, 1925 to suits in which the right of pre-emption which a soldier wishes to enforce on his return in respect of agricultural land.

19. The Hindu Married Women's Right to Separate Residence and Maintenance Act, 1946.—Even with regard to elementary rights of human beings, the position of a Hindu married woman is deplorable. This Act intends to give her the right of separate residence and maintenance in case of her living under unbearable conditions.

Sec. 2 provides that notwithstanding any custom or law to the contrary a Hindu married woman shall be entitled to separate residence and maintenance from her husband on one or more of the following grounds :—

(1) if he is suffering from any loathsome disease not contracted from her,

(2) if he is guilty of such cruelty towards her as renders it unsafe or undesirable for her to live with him,

(3) if he is guilty of desertion that is to say of abandoning her without her consent or against her wish,

(4) if he marries again,

(5) if he ceases to be a Hindu by conversion to another religion,

(6) if he keeps a concubine in the house or habitually resides with a concubine,

(7) for any other justificable cause, provided that she shall not be entitled to separate residence and maintenance if she is unchaste or ceases to be a Hindu, or fails without sufficient cause to comply with a decree for restitution of conjugal rights.

Sec. 3 says that the Court shall in determining the amount to be paid to the wife shall have regard to the social standing of the parties and the husband's means.

20. The Industrial Employment (Standing Orders) Act, 1946.—This Act seeks to provide for the framing of "Standing Orders" in all industrial establishments employing one hundred or more workers.

Experience has shown that "Standing Orders" defining the conditions of recruitment, discharge, disciplinary action, holidays, leave etc., go a long way towards minimising friction between the management and workers in industrial undertakings.

This Act is made applicable to every industrial establishment wherein one hundred or more workmen are employed and to such class or classes of other industrial establishments as the appropriate Government may from time to time by notification specify.

Sec. 3 enacts that within six months from the date on which this Act becomes applicable, every employer or owner of an industrial establishment shall submit to the Certifying Officer five copies of the draft Standing Orders proposed by him for adoption in his industrial establishment.

Sec. 5 enacts that on receipt of the draft Standing Orders, the Certifying Officer shall forward a copy thereof to the trade union of the workmen together with a notice in the prescribed form requiring objections if any which the workmen may desire to make to the draft Standing Orders. The Certifying Officer shall after hearing the objections of both the employer and workmen and after making such modifications as he may think fit, shall then certify the draft Standing Orders.

Sec. 6 gives the right of appeal to the employer and the workmen from the order of the Certifying Officer.

Sec. 7 provides that Standing Orders as certified by the Certifying Officer shall unless an appeal is preferred, come into operation on the expiry of 30 days from the date on which authenticated copies thereof are sent to the employer and to the trade-union or other prescribed representatives of the workmen.

The Act further provides for registration of the Standing Orders and for posting them in a prominent place in the language understood by the workmen near the entrance of the establishment. The Standing Orders as certified shall not be liable unless by agreement of parties to any modification until after expiry of six months.

Sec. 13 provides for penalties where an employer fails to comply with the provisions of the Act.

Sec. 15 empowers the appropriate Government to make rules for carrying out the purposes of the Act. A Schedule is annexed to the Act which states what matters should be provided in the Standing Orders.

21. Merchant Seamen (Litigation) Act, 1946.—This Act is intended for special protection in respect of civil and revenue litigation of serving merchant seamen.

The Act defines "Seaman" as a person other than a person subject to naval law, who is employed or engaged under an agreement on board any seagoing ship in any capacity.

Sec. 3 enjoins every party who files a suit by presenting a plaint or who makes an application or appeal to any Court and who has reason to believe that any adverse party is a serving seaman, to make a statement to that effect in the plaint, application or appeal.

Sec. 4 empowers the Collector to intervene in a case on behalf of a seaman whom he has reason to believe is serving as a seaman and is unable to appear at the hearing by certifying the facts in the prescribed manner to the Court and the Courts shall suspend the proceeding and give notice to the Shipping Master.

Sec. 7 empowers the Court to set aside decrees and orders against a serving seaman if such decree and order are passed against him while he is serving.

Sec. 8 modifies the law of limitation in the case of a seaman who is a party by providing that the time that he has been serving as a seaman shall be excluded from computation.

Sec. 9 provides that if any Court is in doubt as to whether a seaman is serving or not it may refer the question to the Shipping Master.

Sec. 10 empowers the Central Government to make rules.

22. The Mica Mines Labour Welfare Fund Act, 1946.—The object of this Act is to constitute a fund for the financing of activities and to promote the welfare of labour employed in the mica mining industry.

Sec. 2 empowers the Central Government to levy and collect as a cess, on all mica in whatever state exported from British India a duty of customs at such rate not exceeding six and one-quarter *per centum ad valorem* as the Central Government may fix.

The amounts so received shall then be credited to a fund to be called the Mica Mines Labour Welfare Fund.

Sec. 3 provides that this fund shall be applied by the Central Government to meet expenditure in connection with measures in the opinion of the Central Government necessary or expedient to promote the welfare of labour employed in the mica mining industry, towards the improvement of public health and sanitation, prevention of disease, medical facilities, improvement of educational facilities, water supplies and standard of living including housing and nutrition, etc.

Sec. 4 empowers the Central Government to constitute two Advisory Committees one for the Province of Madras and one for the Province of Bihar, to advise Government on any matters arising out of the administration of this Act or this Fund.

Sec. 5 empowers the Central Government to appoint inspectors, Welfare Administrators and such other officers as it thinks necessary to administer and supervise the fund.

Sec. 6 empowers the Central Government to make rules to carry into effect the purposes of this Act.

23. The Reserve Bank of India (Amendment) Act, 1946.—Section 31 of the Reserve Bank of India Act, 1934 prohibits the issue of bills of exchange payable to bearer on demand. It does not however prevent the issue of promissory notes payable to bearer after a fixed period. The issue of such promissory notes not only enabled anonymous holdings and thereby facilitating tax evasion but such promissory notes also became in effect after the expiry of the period, bearer bonds payable on demand. Such issue was therefore found to be undesirable. Besides, it was apprehended that the circulation of large quantities of such bank papers which might be issued by some banks without adequate cover, might well prejudice the credit of Government's own paper currency. It was therefore decided to prohibit such issue and on 18 May 1946 an Ordinance was promulgated making it illegal for banks to issue promissory notes payable to bearer.

This Act therefore now provides that notwithstanding anything contained in the Negotiable Instruments Act, 1881, no person in British India other than the Reserve Bank or the Central Government, shall make or issue any promissory note expressed to be payable to the bearer of the instrument.

Sec. 3 repeals the Bearer Promissory Notes (Prohibition Issue) Ordinance, 1946.

24. The Essential Supplies (Temporary Powers) Act, 1946.—Controls in respect of certain essential commodities (such as foodstuffs, cotton and woollen textiles, paper, petroleum and petroleum products, spare parts of mechanically propelled vehicles, coal, iron and steel and mica) have been continued since 1st October 1946 through the Essential Supplies (Temporary Powers) Ordinance, 1946. This Ordinance is now converted into this Act making the duration of the Act to be the period provided in Sec. 4 of the India (Central Government and Legislature) Act, 1946. This Act by Sec. 2 defines the essential commodities into eight classes as stated above.

Sec. 3 empowers the Central Government where it appears to be necessary or expedient for maintaining or increasing supplies of any essential commodity or for securing their equitable distribution and availability at fair prices, to pass orders providing for regulating or prohibiting the production, supply and distribution thereof and trade and commerce therein.

Sec. 4 empowers the Central Government to delegate its powers to pass orders upon such officer or authority subordinate to the Central Government or such Provincial Government or such officer or authority subordinate to a Provincial Government as may be specified.

Sec. 5 empowers the Central Government to give directions to any Provincial Government as to the carrying into execution in the Province of any order made under Sec. 3.

Sec. 6 enacts that any orders passed under Sec. 3 above shall be valid and effective notwithstanding anything inconsistent therewith contained in any other enactment.

Sec. 7 provides for penalties for contravention of any order made under Sec. 3.

Sec. 8 makes an attempt to contravene an order punishable.

Sec. 9 provides that where a company or other corporate body contravenes an order, every director, manager, secretary or other officer or agent thereof shall be deemed to be guilty of such contravention, unless he proves that the contravention took place without his knowledge or that he exercised all due deligence to prevent such contravention.

Sec. 10 provides for punishments for making false statements or returns, with imprisonment for a term which may extend to three years or with fine or with both.

Sec. 11 provides that no Court shall take cognizance of any offence under this Act except on a report in writing of the facts constituting such offence, made by a person who is a public servant.

Sec. 12 gives powers to Magistrates to try the offences in a summary way.

Sec. 13 enacts a special provision empowering First Class Magistrates and Presidency Magistrates to pass a sentence of fine exceeding rupees one thousand on any person convicted of contravening an order made under the Act.

Sec. 15 enacts that where any person is prosecuted for contravening any order which prohibits him from doing an act or being in possession of a thing without lawful authority or without a permit, licence or other document, the burden of proving that he has such authority, permit, licence or other document shall be on him.

Sec. 17 repeals the Essential Supplies (Temporary Powers) Ordinance, 1946.

25. The Delhi Special Police Establishment Act, 1946.—In 1943 the Government of India, set up a Police Staff called Special Police Establishment (War Department) under the Special Police Establishment (War Department) Ordinance, 1943 for the purpose of investigating offences of bribery and corruption connected with the Departments of the Central Government. This Organisation did useful work in the investigation of cases in which employees and the contractors of the Central Government were involved and in bringing offenders to book.

The above Ordinance lapsed on 30th Sept. 1946. Accordingly this Act was passed with the object of making provision for the constitution of a special police force for the Chief Commissioner's Province of Delhi for the investigation of certain offences committed in connection with matters concerning Departments of the Central Government, for the Superintendence and Administration of the said force and for the extension to other areas in British India of the powers and jurisdiction of members of the said force in regard to the investigation of the said offences.

This Act extends to the whole of British India.

Sec. 2 provides that notwithstanding anything in the Police Act, 1861 the Central Government may constitute a special police force to be called the Delhi Special Police Establishment for the Chief Commissioner's Province of Delhi for investigation into the offences notified under Sec. 3 below. This police force is given all the powers, duties, privileges and liabilities which police officers of the Delhi Province possess.

Sec. 3 empowers the Central Government to specify by notification the offences or classes of offences committed in connection with matters concerning Departments of the Central Government which are to be investigated by the Delhi Special Police Establishment.

Sec. 4 vests the Superintendence of the Delhi Special Police Establishment in the Central Government which may appoint an officer for its administration giving him the powers of an Inspector-General of Police.

Sec. 5 empowers the Central Government to extent the operation of this Act to any area including Railway areas in British India and extend the powers and jurisdiction of members of the Delhi Special Police Establishment for the investigation of the offences specified in Sec. 3 above outside Delhi.

Sec. 6 provides that in case any investigation is conducted by a member of Delhi Special Police Establishment in a Governor's Province the consent of the Government of that Province shall be obtained.

Sec. 7 repeals the Delhi Special Police Establishment Ordinance.

26. The Special Tribunals (Supplementary Provisions) Act, 1946.—The Criminal Law Amendment Ordinance, 1943 provided for the constitution of Special Tribunals for the trial of specified cases allotted to them by the Central Government. Two of these tribunals ceased to exist on 1st Oct. 1946. As questions were bound to arise as to the Courts which should be regarded as their successors for the purposes of the Code of Criminal Procedure this Act has been passed replacing the Special Tribunals (Supplementary Provisions) Ordinance, 1946 and providing that where any special tribunal ceases to function, the sentences or orders passed by it shall be deemed for the purposes of the Code of Criminal Procedure to have been passed by the Court of Session, within the local limits of whose jurisdiction the offences charged in the case were committed and where the offences charged in the case are alleged to have taken place in a Presidency Town, they shall be deemed to have been passed by the Chief Presidency Magistrate.

27. The Banking Companies (Restriction of Branches) Act, 1946.—There has been in recent years a rapid increase in new branches of banks mostly at places where adequate banking facilities are already available.

Complaints have been received regarding failure of some of the banks to repay deposits received at new branches. In several cases new branches have worked to the detriment of the interest of the depositors by involving heavy capitalised expenditure out of proportion to the resources of the bank, payment of high rates of interest, speculative activities, manipulation of accounts, employment of untrained and untrustworthy managers, etc. These developments were considered to be dangerous to the banking structure of the country and hence this Act has been passed to control banking branches.

Sec. 3 enacts that no banking company shall open a new branch or change the location of its existing branch without obtaining prior permission in writing from the Reserve Bank.

Before giving the permission the Reserve Bank is authorised to make an investigation into the affairs and financial position of the banking company.

Sec. 4 provides that if any bank opens a branch or changes the location in contravention of Sec. 3 above, every director or other officer who is knowingly and wilfully a party to such contravention shall be liable to a fine which may extend to one hundred rupees for every day during which that branch remains open for business.

28. The Hindu Marriages Disabilities Removal Act, 1946.—Under the Hindu Law, a man cannot marry a girl of the same *gotra* or *pravar*. This rule is not against eugenics but it is an archaic rule prohibiting marriages between persons of the same *gotra* or *pravar* or between persons belonging to different subcastes of the same caste.

This rule does not prevail among sudras and even among certain sections of the Brahmans and Kshatriyas it has been modified by custom. This rule of marriage has often been a barrier which is tried to be surmounted by some persons by following the procedure of getting the girl adopted by a stranger of a different *gotra*. There can however be no legal adoption of a girl under the Hindu Law. Public opinion in favour of the modification of this archaic rule has necessitated legislation in the Baroda and Indore States. But the general belief prevails that such marriages which are rare are not lawful.

The Act therefore provides that notwithstanding any text, rule or interpretation of the Hindu Law or any custom or usage, a marriage between Hindus which is otherwise valid, shall not be void by reason only of the fact that the parties thereto belong to the same *gotra* or *pravar* or belong to different divisions of the same caste.

29. The Indian Tea Control (Amendment) Act, 1946—At the beginning of each year, special export licences under the Indian Tea Control Act, 1938 are issued to cover shipment of the balance of quotas for tea outstanding for export at the end of the previous year. These licences were originally valid only upto 31st May of the year in which they were issued but owing to the shipping and freight difficulties during the War, the Act was amended in 1943 so as to extend their period of validity from two to twelve months. Now that conditions have returned to normal, this Act provides for the period of validity originally fixed for these licences.

Sec. 17 of the Indian Tea Control Act, 1938 is amended so as to provide in sub-sec. (2A) for applying to the Committee for a special export licence covering the further quantity and the Committee unless prevented by the operation of any other provision of the Act shall grant such licence. It is further provided that a special export licence issued before 1st April 1947 shall be valid upto 31st March 1947.

30. The Registration of Transferred Companies (Amendment) Act, 1946.—The Registration of Transferred Companies Ordinance, 1942 was passed with the object of enabling companies evacuated from various parts of the British Empire owing to circumstances arising out of the war, to register themselves and operate in and from British India. With the termination of the war some of the companies registered under the Ordinance are desirous of going back to the countries of their original incorporation. With a view to facilitate their return, this Act has been passed.

Sec. 2 inserts a new Sec. (2A) after Sec. 2 of the Registration of Transferred Companies Ordinance 1942 whereby the Central Government is empowered by order to cancel the registration of any company under this Ordinance on such terms and conditions as may be specified in the order to safeguard the interests of all concerns.

31. The Foreigners Act, 1946.—At present the only permanent measures governing foreigners specifically are the Registration of Foreigners Act of 1939 and the Foreigners Act, 1864. The Act of 1939 provides for the making of rules to regulate registration of all foreigners and formalities connected therewith,

their movement in, or departure from, India. The Act of 1864 provides for the expulsion of foreigners and their apprehension and detention pending removal and for a ban on their entry into India after removal; the rest of the Act which provides for report on arrival, travel under a licence and certain incidental measures can be enforced only on the declaration of an emergency. The needs of the war emergency were met by the enactment of the Foreigners Ordinance in 1939 and the promulgation under it of the Foreigners Order and the Enemy Foreigners Order. Even at that time the need for more satisfactory permanent legislation was recognised. The Foreigners Ordinance was therefore replaced by the Foreigners Act, 1940, the life of which expired on 30th September 1946. but was extended by the Foreigners Act (Amendment) Ordinance, 1946 upto 25th March 1947. This Act therefore has been passed to place the legislation on foreigners on a permanent basis and it provides for the exercise by the Central Government of certain powers in respect of the entry of foreigners into British India, their presence in British India and their departures from British India.

Sec. 2 defines a foreigner as meaning a person who is not a natural-born British Subject as defined in the British Nationality and Status of Aliens Act, 1914 or one who has not been granted a certificate of naturalization as a British Subject or who is not a ruler or subject of an Indian State or who is not a native of the tribal areas. It is however provided that any British Subject who ceases to be a British Subject shall be deemed to be a foreigner.

Sec. 3 empowers the Central Government to make orders and provisions with respect to all foreigners or with respect to any particular foreigner or any class of foreigners for prohibiting, regulating or restricting the entry into or departure from British India of such foreigners.

Sec. 4 provides for the detention and confinement of foreigner internees.

Sec. 5 prohibits a foreigner from changing his name by which he ordinarily is known and also prohibits him from carrying on any trade or business under any changed name or style and the Act is made applicable to a foreigner who enters British India after this Act has come into force.

Sec. 6 imposes obligations on masters of all vessels landing or embarking at a port in British India passengers, to furnish returns giving particulars as prescribed with respect to passengers or members of the crew who are foreigners. The same obligations are also imposed on pilots of aircrafts.

Sec. 7 imposes similar obligations on hotelkeepers and keepers of furnished or unfurnished lodgings or sleeping accommodation to submit information in respect of foreigners accommodated in such premises.

Sec. 8 empowers the prescribed authority to decide questions as regards the true nationality of a foreigner and his decision is made final.

Sec. 10 empowers the Central Government to exempt the application of this Act or any of the provisions of this Act with such modifications or conditions as may be specified, in the case of any individual foreigner or any class or description of foreigner.

Sec. 12 empowers the prescribed authority to delegate its powers to any subordinate authority.

Sec. 14 imposes penalties for contravening the provisions of this Act or of any order made thereunder and any person who is found guilty of contravening any order or direction or provision of this Act is liable to be punished with imprisonment which may extend to five years and also liable to fine.

Sec. 16 enacts that the provisions of this Act are in addition to and not in derogation of the provisions of the Registration of Foreigners Act, 1939, the Indian Passport Act, 1920 and of any other enactments for the time being in force.

Sec. 17 repeals the Foreigners Act of 1864, the Foreigners Act of 1940 and the Foreigners Act (Amendment) Ordinance of 1946.

Laws of 1947

1. The Criminal Tribes (Amendment) Act, 1947.—This Act amends S. 23 of the Criminal Tribes Act of 1924 by prescribing lesser punishment than what was prescribed for second offender's third offence which punishment under the Act of 1924 was found to be oppressive.

2. The Prevention of Corruption Act, 1947.—The object of this Act is to make provisions for the more effective prevention of bribery and corruption. The Act extends to the whole of British India and applies to all British subjects and servants of the Crown in any part of India.

S. 3 makes the offence under S. 162 of the Indian Penal Code of taking gratification to influence public servants and the offence under S. 165 of the Indian Penal Code of obtaining valuable thing by public servant without consideration cognizable offences.

S. 4 provides that where a public servant accepts gratification or other valuable thing from any person other than legal remuneration he shall be presumed to have accepted that gratification or valuable thing as a reward.

S. 5 makes it an offence punishable with imprisonment for a term which may extend to 7 years or with fine if a public servant commits criminal misconduct in the discharge of his duty and defines criminal misconduct as habitual acceptance of gratification or valuable thing without consideration as a reward or as obtaining some advantage by illegal or corrupt means by abusing his position.

S. 6 requires previous sanction for prosecution under S. 161 or S. 165 of the Indian Penal Code or under sub-sec. (2) of S. 5 of this Act.

S. 7 enables a person charged with an offence under the abovementioned sections to be a competent witness and to give evidence on oath in disproof of the charge or charges made against him if he so chooses to do.

3. The Indian Extradition (Amendment) Act, 1947.—By this Act a new sub-section 2 is added to s. 8A of the Indian Extradition Act, 1903 conferring powers on the District Magistrate and the Chief Presidency Magistrate in relation to the taking of a deposit in lieu of taking a bond as required by s. 8A and providing for forfeiture of bonds and discharge of sureties.

4. The Coffee Market Expansion (Amendment) Act, 1947.—S. 3 amends s. 4 of Coffee Market Expansion Act, 1942 providing that the Marketing Board shall consist of representatives of the Central Government, Madras Government, Mysore State, Travancore State, Cochin State, of the Coffee trade interest including certain Coffee Planters Associations and certain representatives of the Labour Organisation.

By s. 4 the Indian Coffee Cess Act, 1935 is repealed.

By s. 5 the expressions "Controller of Coffee" and "Deputy Controller of Coffee" are changed into "Chief Coffee Marketing Officer" and "Deputy Chief Coffee Marketing Officer."

5. The Factories (Amendment) Act, 1947.—This Act inserts a new section 33A in Chapter III of the Factories Act, 1934 and it empowers the Provincial Government to make rules requiring a factory employing more than two hundred workmen to provide a canteen for the workers and to make rules as regards the accommodation therein and the food to be supplied to the workers and charges for the food.

6. The Indian Railways (Amendment) Act, 1947.—This Act by s. 2 increases the figure of Rs. 100 to Rs. 300 in s. 75 (1) of the Indian Railways Act, 1890. S. 75 (1) provides that the Railway Administration shall not be responsible for the loss, destruction or deterioration of any articles mentioned in the Second Schedule of the value of over Rs. 100 and handed over to the Railway for carriage unless, the value of such goods is declared. Now the value of the articles is raised to Rs. 300 by this amendment.

7. The Foreign Exchange Regulation Act, 1947.—This Act is intended to regulate and control payments and dealings in foreign exchange and securities and the import and export of currency and bullion.

This Act applies to British subjects and servants of the Crown in any part of India and is to remain in force for five years only with power to the Central Government to extend it for a further period not exceeding three years.

S. 4 deals with restrictions on dealings in foreign exchange and provides that no person other than an authorised dealer shall except with the previous permission of the Reserve Bank in British India buy or borrow from or sell or lend to or exchange with any person not being an authorised dealer in any foreign exchange. It further provides that no person even though an authorised dealer shall enter into any transaction for the conversion of Indian currency into foreign currency or *vice versa* without the permission of the Reserve Bank at rates of exchange other than those fixed by the Reserve Bank.

This restriction however does not prevent a person from buying from any post office any foreign exchange in the form of postal orders or money orders.

An authorised dealer is defined as a person whom the Reserve Bank authorises to deal in foreign exchange, and he has to abide by all directions as the Reserve Bank may from time to time think fit to give.

S. 5 provides that no person in or resident in British India shall make any payment to any person resident outside India or draw, issue or negotiate any bill of exchange or promissary note so as to transfer any payment to any person resident outside India or place any sum to the credit of any person resident outside India without the permission of the Reserve Bank. In short this section imposes restrictions on payments in any manner to a person resident outside British India without the permission of the Reserve Bank.

S. 6 provides for keeping a blocked account where the Reserve Bank gives permission to make payment to any person resident outside British India.

S. 7 provides for maintaining special accounts in the case of persons resident in any territory to whom payments are to be made.

S. 8 imposes restrictions on import or export of gold or silver or currency notes and bank notes or coins without the permission of the Reserve Bank.

S. 9 empowers the Central Government to acquire foreign exchange from any person who owns such foreign exchange.

S. 10 deals with the duty of persons entitled to receive foreign exchange or make payment of rupees.

S. 11 gives power to the Central Government to impose conditions on the use or disposal of or dealings in gold and silver prior to their import into British India.

S. 12 empowers the Central Government to prohibit the export of any goods from British India unless the declaration is made by the exporter that the amount representing the export value will be paid in the prescribed manner.

S. 13 prohibits export and transfer of securities outside India.

S. 14 empowers the Central Government to order any security belonging to any person to be held in the custody of an authorised depository.

S. 16 deals with the acquisition by the Central Government of foreign securities.

S. 17 places restriction on persons resident in British India from making settlements and trusts otherwise than by will in favour of persons resident outside India in certain territories.

S. 18 provides that no person resident in British India shall except with the permission of the Reserve Bank do any act whereby a company which is controlled by persons resident in India or the United Kingdom ceases to be so controlled and no person shall lend any money to any company which is controlled by persons resident outside India elsewhere than in the United Kingdom or certain notified territories.

S. 19 empowers the Central Government to take search and call for information from owners of foreign exchange and foreign securities.

S. 21 deals with agreements and contracts entered into for evading the provisions of this Act.

S. 23 provides for punishment for contravening the provisions of this Act.

S. 25 empowers the Central Government to give directions to the Reserve Bank for the purposes of this Act.

S. 27 empowers the Central Government to make rules for carrying into effect the provisions of this Act.

8. The Indian Navy (Discipline) (Amendment) Act, 1947.—This Act amends s. 90 of the Naval Discipline Act as set forth in the First Schedule to the Indian Navy (Discipline) Act, 1934 and makes provisions respecting discipline of persons under engagement to serve His Majesty.

For the old s. 90 a new s. 90 is substituted providing that if any person enters into an agreement with the Central Government to serve His Majesty in a particular ship and agrees to become subject to this Act such person shall so long as the engagement remains in force and although he may not be actually serving in any ship be subject to this Act as if he belongs to His Majesty's Navy. It further empowers the Central Government by order to direct that any such person while subject to this Act be deemed to be officer or petty officer for the purposes of of this Act.

9. The Sugar (Temporary Excise Duty) Act, 1947.—The ex-factory price of sugar was raised by Rs. 4-4-0 a maund with effect from 23rd October 1946 and an Ordinance called the Sugar (Temporary Excise Duty) Ordinance, 1946 was issued to recover the excess price of Rs. 4-4-0 on existing stocks held at the old price. The time of expiry of this Ordinance was in June 1947. As it was necessary to continue the provisions of this Ordinance in as much as it was considered that the assessment and recovery of the duty from the various stock-holders would take some time more, this Act has been passed to give effect to the provisions of the Ordinance.

S. 2 provides that the expiry of this Ordinance shall not affect the liability to pay the duty levied under that Ordinance or the liability to any penalty thereunder and for the purposes of enforcing the recovery of the duty.

S. 3 provides for giving power to the factory owners and wholesale dealers to recover the duty on sugar from their buyers in respect of sales made at the old price.

10. The Explosives (Temporary Provisions) Act, 1947.—This Act continues for a limited period the powers of the Central Government to exempt the loading, unloading, handling, storage and conveyance of ammunition, explosives and inflammable substances from certain restrictions and provides in the interest of safety, for the regulation of such operations.

The Act is made to remain in force for two years only.

S. 2 empowers the Central Government to declare that certain restrictions which are imposed under any law shall not apply to the loading, unloading, handling, storage or conveyance of ammunition explosives and inflammable substances.

Such order or declaration under s. 2 shall apply only to the ports of Karachi and Vizagapatam and to railways over which such substances are carried to or from those ports. It further provides for regulating the loading, unloading and handling of such substances.

S. 4 provides for punishment for contravention of any order made under the Act.

11 The Reserve Bank of India (Amendment) Act, 1947.—The Government of Burma has decided to entrust the currency and coinage of Burma to a Currency Board of its own and has given notice to the Government of India under India and Burma (Burma Monetary Arrangement Order, 1937 for the termination of the joint monetary arrangements governing India and Burma with effect from 1st April 1947. As a result the Reserve Bank ceased from that date to function as banker to the Government of Burma or to manage its note issue. Hence this Act enables the Reserve Bank to wind up its affairs in that country by deleting from the Reserve Bank of India Act 1934 all references to Burma.

Provision has also been made in the Act to abolish the Rangoon share register of the Bank and to transfer the elective directorship from the Rangoon to the Madras area.

The amendments in this Act are therefore all formal for abolishing all references to Burma.

12. The Railways (Transport of Goods), Act, 1947.—During the war railway priority was exercised under Rule 85A of the Defence of India Rules in respect of certain essential commodities. The continuance of such control is necessary so long as the present shortage of the essential commodities continue and some form of priority control is essential for the movement of essential commodities by rail without delay and in preference to less important movements. This Act therefore seeks to empower the Central Government to exercise preference in respect of certain essential commodities for a period of one year.

S. 3 empowers the Central Government or any person authorised on their behalf to direct any railway administration to give special facilities or preference for the transport of any of the goods mentioned in the schedule or to refuse to carry such goods.

S. 4 provides that inspite of any provision contained in the Indian Railways Act 1890 to the contrary every railway administration shall be bound to carry out such directions.

13. The Delhi Muslim Wakfs (Amendment) Act, 1947.—The Delhi Muslim Wakfs Act XIII of 1943 does not contain any provision as to the authority which is competent to accept the resignation of a member of the Majlis-i-Awkaf or of the Sadr of the Majlis.

Accordingly ss. 7 and 8 of the Act of 1943 are amended empowering the Majlis to accept the resignation of any of its members and the vacancies so caused to be filled in the manner provided by section 10 and also to accept the resignation of a Sadr and to elect another Sadr.

From the experience gained of the actual working of the Act of 1943 it has been found that Mutawallis of Wakfs do not co-operate with the Majlis in supplying the necessary information about the Wakfs which are in their charge with the result that the Majlis has found itself helpless in work. Under the circumstances power is given by this Act by new ss. 72 and 73 to the Majlis or the Nazir to summon and enforce the attendance of witnessess and to compel the production of documents.

S. 73 provides for penalties where a Mutawalli fails to apply for registration of a Wakf or to furnish information as required by the Majlis or the Nazir or to carry out the directions of the Majlis or the Nazir or to do any other act which he is lawfully required to do by this Act.

14. The Industrial Disputes Act, 1947.—This Act is intended to promote industrial peace in the country and it makes provision for the investigation and settlement of industrial disputes and for certain other purposes. It extends to the whole of British India.

It defines "industry" as meaning any business, trade, undertaking or manufacture and includes any service employment handicraft or industrial occupation and "workman" means any person employed in any industry to do skilled or unskilled manual or clerical work for reward.

S. 3 requires every industrial establishment employing one hundred or more workmen to constitute a Works Committee consisting of representatives of employers and workmen and it is provided that it shall be the duty of the Works Committee to promote measures for securing and preserving amity and good relations between the employer and workmen.

S. 4 provides for the appointment of conciliation officer charged with the duty of mediating in and promoting the settlement of industrial disputes.

S. 5 provides for the appointment of Boards of Conciliation consisting of an independent Chairman and equal number of persons to represent the parties to the dispute.

S. 6 empowers the appropriate Government to constitute a Court of Inquiry.

S. 7 empowers the appropriate Government to constitute one or more Industrial Tribunals for the adjudication of industrial disputes in accordance with the provisions of this Act.

S. 10 provides for reference of disputes to Boards, Courts or Tribunals.

S. 11 lays down the procedure for conciliation.

S. 12 provides for duties of conciliation officers.

S. 13 provides for duties of the Boards.

S. 14 provides for duties of Courts.

S. 15 provides for duties of Tribunals.

S. 18 says that awards made by the Board or the Court or the Tribunal shall be binding.

Ss. 22 and 23 deal with strikes and lockouts and they prohibit sudden strikes and lockouts without due notice and prohibit a workman from going on strike.

S. 25 prohibits financial aid to illegal strikes and lockouts.

Ss. 26 to 31 provide for penalties for illegal strikes for instigation to illegal strikes, for breach of settlement or award and for disclosing confidential information, etc.

S. 32 provides for punishing every director, manager, secretary or agent in the case of an offence committed by a company.

S. 33 provides that during the pendency of proceedings or dispute the conditions of service etc., shall remain unchanged.

S. 35 protects every person who refuses to take part in an illegal strike or lock-out from being expelled by any trade union or society or deprived of any right or benefit.

S. 36 allows a party to an industrial dispute to be represented by an officer of a registered trade union but not by a legal practitioner except when the dispute is being heard before a Court or Tribunal.

S. 38 empowers the appropriate Government to make rules for giving effect to the provisions of this Act.

S. 40 repeals the Trade Disputes Act, 1929.

There is a schedule annexed to this Act describing industries which may be declared to be public utility services, *viz*:—

1) Transport for the carriage of passengers or goods by land, water or air (other than railways).
2) Coal.
3) Cotton textiles.
4) Food stuffs.
5) Iron and Steel.

15. Armed Forces (Emergency Duties) Act, 1947.—During the war, Defence of India Rule 18(3) empowered the Central Government to direct the employment of persons subject to the Indian Army Act or Indian Air Force Act in any undertaking essential to the life of the community. The Defence of India Rules having now expired such an undertaking cannot be lawfully ordered and so with a view to empower Government to maintain services vital to the community and to make use of troops or naval or air force personnel for the purposes, this Act has been passed.

S. 2 provides that the Central Government may at any time declare any specified service to be a service of vital importance to the community and upon such declaration it shall be the duty of every person in the Army, or the Air Force to obey any command given by any superior officer in relation to employment upon or in connection with the service specified in the declaration.

16. The Trading with the Enemy (Continuance of Emergency Provision) Act, 1947.—This Act provides for the continuance of the special powers enjoyed by the Government of India under the Defence of India Rules and the Emergency Powers (Continuance) Ordinance 1946. Although hostilities ceased long ago it is obligatory on the Government of India to maintain the general prohibition against trading with enemies until peace Treaties are signed. Similarly it is their responsibility to continue to look after enemy property until it is liquidated or released.

S. 2 provides that notwithstanding the expiry of the Defence of India Act 1939 and the Emergency Provisions (Continuance) Ordinance 1946, certain provisions of the Defence of India Rules mentioned in the schedule to this Act shall continue in force.

S. 3 says that the provisions of the Defence of India Rules as continued in force by s. 2 and all orders made therein shall have effect.

S. 4 empowers the Central Government to delegate its powers under the Act to any officer or authority.

S. 5 provides that no order made under the provisions of this Act shall be called in question in any Court.

17. The Requisitioned Land (Continuance of Power) Act, 1947.—This Act provides for the continuance of certain emergency powers in relation to land which has been requisitioned under the Defence of India Act, 1939.

S. 3 provides that notwithstanding the expiration of the Defence of India Act 1939 and the rules made thereunder and the repeal of the Requisitioned Land (Continuance of Powers) Ordinance 1946, all requisitioned lands shall continue to be subject to requisition until the expiry of this Act and the appropriate Government may use or deal with any requisitioned land in such manner as it thinks fit.

S. 4 provides for giving possession of requisitioned land to the person entitled to the same when the Government decides to release such land from requisition.

S. 5 empowers the appropriate Government to acquire requisitioned land and such decision shall not be called in question in any court.

S. 6 provides for payment of compensation for land in respect of which the requisition is continued and for compensation for acquisition of requisitioned land.

S. 8 provides for delegation of the powers given under the Act to the Central and Provincial Governments.

18. Imports and Exports (Control) Act, 1947.—The control over imports and exports was imposed under Rule 85 of the Defence of India Rules and under the Emergency Provisions (Continuance) Ordinance 1946. The Continuance of such control is necessary to avoid any disturbance to the economy of the country during the transition from war time to peace time conditions and hence this Act has been passed extending its operation to the whole of British India.

S. 3 empowers the Central Government to make provision for prohibiting, restricting or otherwise controlling in all cases or in specified class of cases and subject to such exceptions as may be imposed, the import or export of goods, and for this purpose to impose conditions on the clearance of any goods imported into British India.

S. 5 provides for punishment with imprisonment for a term which may extend to one year or with fine or with both for contravening any order made under this Act.

S. 6 requires a complaint in writing from the Customs Collector or an officer specified in that behalf before the case is tried.

19. The Delhi and Ajmer-Merwara Rent Control Act, 1947.—The object of the Act is to control the rents of premises in certain areas in the Provinces of Delhi and Ajmer-Merwara and also to control evictions.

The Act is not made applicable to any premises the construction of which is not completed and which are not let to a tenant before the commencement of this Act or to any premises belonging to the Government.

S. 3 provides that no tenant shall be liable to pay any rent in excess of the standard rent except in the case of a lease entered into before 1st January 1939. This Act expressly provides that no agreement for payment of rent in excess of the standard rent shall be valid if such agreement is made after 1st January 1939.

S. 4 provides for certain lawful increases of standard rent.

S. 5 makes it unlawful for the landlord or his agent or the tenant to receive any premium in addition to the standard rent.

S. 7 provides that all disputes regarding the standard rent shall be determined by the Court and also to fix the standard rent in specified cases.

S. 8 provides that the landlord shall give notice of any increase in rent whenever it is permissible.

S. 9 provides that no tenant shall be evicted unless he has not paid nor tendered the arrears of rent within one month of the service of a notice of demand or unless the premises are used by the tenant for a purpose other than that for which they are let out or if he assigns or sublets without the consent of the landlord or if the premises being let for residence neither the tenant nor any member of his family comes to reside therein for a period of six months prior to the date of the filing of the suit or where the landlord bona fide requires purely residential premises for his own use and occupation or where the tenant being in the employment of the landlord ceases to be in service or where a tenant is guilty of nuisance or causes substantial damage.

S. 10 gives right to the landlord to take possession of his vacant ground for purposes of erecting buildings.

S. 11 empowers Government to require possession of premises the standard rent of which is not less than two thousand four hundred Rupees per year whenever they become vacant.

S. 12 provides for keeping the premises in good repair by the landlord.

S. 13 provides for penalties for failing to comply with the provisions of the Acts.

S. 14 provides that any question arising under this Act shall be determined by the Court.

S. 15 repeals Delhi Rent Control Ordinance 1944, New Delhi House Rent Control Order 1939 and the Ajmer-Merwara Control of Rent and Eviction Order 1946.

20. The Indian Finance Act, 1947.—S. 2 for the first time in history discontinues for the year beginning from 1st April 1947 duty which used to be formerly levied on Salt manufactured in or imported by sea or by land into British India.

S. 3 continues subject to certain modifications for a further period of one year inland postage rates.

S. 4 continues the additional duties of customs imposed by s. 6 of the Indian Finance Act 1942 read with the Indian Tariff Act 1934 and as modified by s. 5 of the Indian Finance Act 1946.

S. 5 continues the temporary export duty on raw cotton and the enhanced rates of export duties on raw jute. It further enhances the export duty on tea and fixes the same rates of income-tax and super-tax and makes certain provisions relating to income-tax and super-tax and Excess Profits Act.

21. The Business Profits Tax Act, 1947.—The object of this Act is to impose a special income-tax on the profits exceeding one lakh of rupees of business professions and vocations.

The word business is defined by s. 2(3) as including any trade, commerce or manufacture or any profession or vocation the profits of which are chargeable under s. 10 of the Income-tax Act but, excluding the profits of a professional man working for a salary.

Sub-cl. 17 defines "taxable profits" as meaning the excess of profits over one lakh of rupees a year.

S. 4 provides for levying a tax of sixteen and two-thirds per cent on the business profits.

S. 6 provides for relief when there is deficiency of profits.

S. 8 deals with payment of the tax by companies and the subsidiary companies and the section follows the corresponding Excess Profits Tax provision.

S. 9 provides for the aggregation of profits made by individuals earning more than one lakh of rupees from various businesses with the object of counteracting the possible loss of revenue.

S. 10 allows reduction of business profits in computing income for income-tax and super-tax purposes.

S. 12 deals with the assessment of tax.

S. 13 empowers the levy of provisional assessments.

The rest of the sections ending with s. 24 seek to make applicable the same machinery of assessment, appeal, etc. as applies to Excess Profits Tax. There is a schedule annexed at the end containing rules for computation of profits.

22. The Income-tax and Excess Profits Tax (Amendment) Act, 1947.—The main object of this Act is to include in the Indian Income-tax Act, 1929, provisions enabling income-tax to be levied on a profit or gain arising from the sale, exchange or transfer of a capital asset. For this purpose several amendments have been introduced to the Income-tax Act. In addition the Act amends the Excess Profits Tax mainly by making provision for terminal losses occurring after the excess profits tax has ceased.

A new clause (4A) is added to section 2 of the Income-tax Act of 1922 defining "capital assets" as meaning property of any kind excluding agricultural land whether connected or not connected with any business but not including personal effects such as jewellery and furniture.

The charging section 4 of the Act of 1922 is amended by including therein capital gains arising from the sale exchanged or transfer of securities.

A similar amendment is made to section 6 by adding an additional head of income namely "Capital gains" and a new section (12B) is added providing for assessing tax on capital gains.

The Act introduces consequential amendments to certain other sections of the Act of 1922.

s. 16, 17 and 18 of this Act introduces amendments to the Excess Profits Tax Act, 1940 in order to prevent escape of excess profits made by certain businesses to which the Excess Profits Tax had not applied.

23. The Reserve Bank of India (Second Amendment) Act, 1947.—The external value of the rupee is regulated by ss. 40 and 41 of the Reserve Bank of India Act 1934 which oblige the Reserve Bank to buy and sell sterling without limit between certain specified rates above and below one shilling six pence to the rupee. Under the Articles of Agreement of the International Monetary Fund, the countries which are members thereof are required to fix the par values of their currencies in terms of gold and exchange

rates are determined by the ratios which par values bear to each other. As a result of India becoming a member of the International Monetary Fund and the fixing of par values, sterling has ceased to be the sole determining factor of the external value of the rupee.

This Act therefore by s. 4 repeals ss. 40 and 41 of the Act of 1934 and substitutes a new s. 40 requiring the Reserve Bank to buy and sell foreign exchange at such rates and on such terms and conditions as the Central Government may from time to time determine in conformity with its obligations as a member of the International Monetary Fund.

The Reserve Bank may also be required in future to buy and sell foreign exchange other than sterling. The Act therefore by s. 3 introduces certain consequential amendments in s.17 of the Act of 1934 defining foreign exchange and permitting the Reserve Bank to buy and sell foreign exchange both on its own account and on account of Government.

24. The Rubber (Production and Marketing) Act, 1947.—During the years immediately preceding the war the rubber industry had to face difficult problems arising out of overproduction. With the occupation of the Dutch East Indies and Malaya by Japan however, rubber became scarce and the Indian Rubber Production Board was set up in 1942 with the object of increasing the production of rubber in India. It became necessary therefore to set up a statutory organisation to look after the interests of the rubber producers in India and for this object this Act has been passed.

By s. 2 of the Act it is declared that in the public interest the Central Government should take under its control the development of the rubber industry.

The rubber is defined as including crude rubber and rubber prepared from the leaves, bark or latex of any rubber plant.

S. 4 constitutes a board called the Indian Rubber Board.

S. 10 requires registration by the owner of estate on land planted with rubber.

S. 11 empowers Central Government to prohibit, restrict or control the import and export of rubber.

S. 12 imposes a cess on all rubber produced in British India.

S. 13 empowers the Central Government to fix the maximum and minimum prices for sale of rubber after consulting the Rubber Price Advisory Committee and it further provides for punishing any person who buys or sells rubber at more than the maximum price or at less than the minimum price.

S. 14 requires a general or special license for sale or purchase of rubber.

S. 16 prohibits the possession of rubber without a license.

S. 17 provides that no person shall plant rubber without a license.

S. 18 requires every holder of a license to furnish a report specifying the areas newly planted or replanted with rubber.

S. 19 prescribes levy of license fees.

S. 20 provides for submitting returns to the Board and maintenance of accounts.

S. 21 authorises the Board to appoint inspectors to inspect lands and premises or factories where rubber is manufactured.

S. 22 empowers the Central Government to supervise all acts of the Board.

S. 23 allows appeal from an order of the Board.

S. 25 empowers the Central Government to make rules to carry out the purposes of this Act.

S. 26 provides for penalties for contravention of the provisions of this Act.

S. 27 requires the previous consent of the Central Government or the Board for prosecuting any person under this Act.

25. The Indian Tariff (Amendment) Act, 1947.—This Act amends the First Schedule to the Indian Tariff Act 1934 by giving protection to the industries of sodium compounds, phosphates, calcium-chloride, coated abrasives, hurricane lanterns, cocoa powder and chocolate, sewing machines, woodscrews, antimony and cycles in accordance with the recommendations of the Tariff Board.

The Act continues protection for a further period of one year on manufactures of iron and steel, artificial silk, cotton and artificial silk fabrics, silk, sugar, silver thread and wire and magnesium chloride.

The Act imposes revenue duties on wheat, wheat flour, wood pulp, paper, cotton textiles and certain iron and steel manufactures.

26. The Control of Shipping Act, 1947.—By ordinance No. XX of 1946 provision was made for the continuance of control over trade by seas. This ordinance ceased to be valid from 25th March 1947. Owing to abnormal conditions still prevailing it became necessary to place control to ensure priority by sea of the carriage of coal, food-stuff and other essential cargoes.

This Act therefore provides for a system of licensing with regard to ships registered in British India to enable the shipping authority to specify the trades in which ships may engage and the voyages which they may undertake and to issue directions for carrying passengers and cargo on priority to others.

S. 3 requires every ship registered in British India to obtain a license from the Shipping Authority and s.4 provides that no officer of Customs shall grant a port-clearance to a ship until a license is produced.

S. 5 empowers the Shipping Authority to give directions to shippers to carry passengers or cargo in the order of priority and for this purpose the Central Government may also give directions to the shipping Authority.

S. 6 empowers the Central Government to fix the rates at which a ship registered in British India may be hired and to fix rates at which passengers and cargo may be carried.

S. 7 empowers the Shipping Authority to give information as may be required.

S. 8 provides for penalties.

27. The Motor Vehicles (Amendment) Act, 1947.—This Act includes several important amendments to the Motor Vechiles Act, 1939.

S. 2 amends various sections in Chapter VIII of the Act of 1939 relating to the insurance of motor vehicles against third party risks.

In section 93 of the Act of 1939 the definition of "authorised insurer" has been further expanded to include the Central or Provincial Government or Government of a reciprocating Indian State when such Government carries on the business of insuring motor vehicles against third party risks, "Reciprocating territory" is given the meaning as such Indian States or such area administered by the Crown Representative as may be notified as such by the Central Government.

S. 3 substitutes a sub-section (2) to section 94 giving exemption from insuring vehicles in the case of any vehicle owned by the Central Government, the Crown Representative, any Provincial Government, the Government of any Indian State, the Government of the French or Portuguese Settlements, any local authority in British India, any local authority established by the Crown Representative and any local authority in an Indian State.

S. 4 introduces various amendments in section 95 of the Motor Vehicles Act, 1939 relating to compulsory insurance. One amendment in sub-section (1) of S. 95 makes clear that insurance with a Co-operative Society allowed under section 108 to transact such business is sufficient compliance with Chapter VIII. Another amendment empowers Provincial Governments to bring within the scope of the Act a limited class of liability arising under the Workmen's Compensation Act, so as to cover liability to pay compensation in respect of drivers, conductors and other employees.

S. 8 makes certain amendments in section 108 of the Act of 1939 relating to insurance business done by Co-operative Society.

28. Indian Coinage (Amendment) Act, 1947.—The Indian Coinage Act of 1906 provides at present for the coinage of silver coins of the denomination of a rupee, half rupee and quarter rupee with fifty per cent silver content. Besides the coinage of coins higher than an eight anna piece is not permitted to be coined in any metal; so that the rupee coin is not permitted to be coined except as a silver coin. Half and quarter rupee coins are already issued in pure nickel. Under modern conditions when the nature of coins as tokens of value is well understood it is unnecessary and wasteful to use a metal of high value like silver for coinage. Most advanced countries including the United Kingdom have now ceased to use silver for their main coins. The Act therefore seeks to authorize Government to issue all coins including the rupee coin in any metal. Accordingly sections 4 and 5 of the Act of 1906 are deleted while a new section 6 is substituted for the old section 6 under the heading "Coinage". This new section 6 provides that coins may be coined at the mint for issue under the authority of the Central Government of such denominations not higher than one rupee of such dimensions and designs and of such metals or of mixed metals of such composition as the Central Government may determine.

Sections 10, 11, and 12 of the Act of 1906 are also omitted while a new section 13 is substituted for the old section 13 providing that all new coins issued under section 6 shall be a legal tender in payment or on account provided that the coin has not been defaced or has not lost certain weight. It also provides that all silver coins shall continue to be a legal tender and all nickel, copper and bronze coins shall also continue to be a legal tender.

29. Capital Issues (Continuance of Control) Act, 1947.—The object of this Act is to keep in existence for five years more the control over capital issues which was imposed by Rule 94A of the Defence of India Rules in May 1943. In the lights of experience gained this control is still necessary to secure a balanced investment of the country's resources in industry, agriculture and the social services.

S. 3 provides that no company incorporated in British India shall except with the consent of the Central Government make an issue of capital outside British India and no company shall except with the consent of the Central Government make an issue of capital in British India or make in British India any public offer of securities for sale or renew or postpone the date of maturity or repayment of any security maturing for payment in British India. The same section empowers the Central Government to make an order giving recognition to an issue of capital made or to be made outside British India by a company not incorporated in British India.

S. 4 provides that no person shall issue in British India any prospectus or other documents offering for subscription or offering for sale any securities without a statement that the consent of the Central Government has been obtained.

S. 5 prohibits any person from accepting or giving any consideration for any securities unless the consent of the Central Government has been accorded or from selling or purchasing any securities issued by a company after 17th of May 1943 in British India or elsewhere without the consent of the Central Government.

S. 6 gives to the Central Government power of exemption from any of the provisions of the Act and to condone contraventions.

S. 7 empowers the Central Government to require a company to give information as may be required and to give inspection of books and documents. Such information is to be kept a secret.

S. 10 empowers the Central Government to delegate its functions.

S. 11 provides that the Central Government shall constitute an Advisory Committee to advise on matters arising out of the administration of this Act.

S. 13 provides for penalties for contravening the provisions of this Act.

30. Taxation on Income (Investigation Commission) Act, 1947.—It has been established that recently businesses and properties have changed hands for very large sums of money. Governments are anxious to know how in spite of very high rates of taxation large fortunes have been accumulated. The Act therefore proposes to appoint and empower a Special Commission

to investigate both the actual incidence of taxation with particular reference to individual cases and the extent to which the existing law is adequate to prevent evasion.

S. 3 empowers the Central Government to constitute a Commission to be called the Income-tax Investigation Commission whose duties are to investigate and report to the Central Government on all matters relating to taxation on income and relating to the assessment and collection if such taxation with a view to prevent evasion thereof and further to investigate any case referred to it by the Central Government.

S. 5 empowers the Central Government to refer a case to the Commission for investigation in which the Central Government has *prima facie* reasons for believing that a person has to a substantial extent evaded payment of taxation on income.

S. 6 deals with the powers of the Commission.

S. 7 lays down the procedure to be followed by the Commission.

S. 8 empowers the Central Government to reopen assessments of income of any period after 31st December 1938.

S. 10 empowers the Central Government to make rules.

31. The Antiquities (Export Control) Act, 1947.—The object of this Act is to control the export of articles and other things of antiquarian or historical interest or significance.

S. 2 defines the word "antiquity" as including coin sculpture, manuscript, epigraph or other work of art, any article or object detached from a building or a cave or any article, object or thing illustrative of science, art, crafts, literature, religion, customs, morals or politics in bygone ages which have been in existance for not less than one hundred years.

S. 3 provides that no person shall export any antiquity except under a license granted by the Central Government. Such antiquities are deemed to be goods which are prohibited under section 19 of the Sea Customs Act, of 1878.

S. 5 provides for penalties for exporting an antiquity without a license including the confiscation of the article.

S. 6 provides for the determination of all questions as to whether an article is an antiquity or not by the Director General of Archaeology in India.

S. 9 provides that this Act supplements the Ancient Monuments Preservation Act 1904 or any other law for the time being in force.

32. The Coal Mines Labour Welfare Fund Act, 1947.—This Act is intended to make better provision for financing measures for promoting the welfare of labour employed in the coalmining industry including housing and dispensary services.

S. 3 provides for the imposition and collection of a duty of excise as a cess on all coal and coke despatched from collieries in British India at the rate of not less than four annas and not more than eight annas per ton.

S. 4 provides that the proceeds of the duty shall be paid into the Reserve Bank of India at Calcutta and shall be credited to a fund called the Coal Mines Labour Housing and General Welfare fund.

S. 5 provides for the expenditure for carrying out the objects of the fund to be defrayed out of the Fund. It also provides for giving grants-in-aid to colliery owners who maintain dispensary services. The above Fund is divided into two accounts one called the housing account for erecting and maintaining housing accommodation for labour employed in the coal mining industry and the other called the general welfare account for providing facilities for education, nutrition, recreation and sanitation.

S. 6 empowers the Central Government to constitute a Coal Mines Labour Housing Board to carry out the provisions for suitable housing accommodation.

S. 8 empowers Central Government to constitute an Advisory Committee to advise on matters arising out of the administration of this Act.

S. 9 empowers the Central Government to appoint a Coal Mines Labour Welfare Commissioner, Inspectors and Welfare Officers to supervise and carry out the measures financed from the Fund with power to such officers to enter any place for the purpose of the proper discharge of his duties.

S. 10 empowers the Central Government to make rules to carry out the purposes of the Act.

S. 11 repeals the Coal Mines Labour Welfare Fund Ordinance 1944.

33. The Negotiable Instruments (Amendment) Act, 1947.—The Bombay High Court has held recently in a case that the protection afforded to bankers under section 131 of the Negotiable instruments Act 1881 absolving them from liability in respect of payments received in good faith for cheques is not available to them in respect of bank drafts. This Act accordingly inserts a new section 131A to the Negotiable Instruments Act of 1881 to the effect that the provisions in Chapter XIV of the Act of 1881 shall also apply to a draft as if the draft were a cheque.

34. The Indian Boilers (Amendment) Act, 1947.—This Act has been passed with the object of including "economiser" as part of a boiler under the Indian Boilers Act, 1932.

Accordingly in section 2 of the Indian Boilers Act, 1923 which deals with definitions two new sub-sections (cc) and (ccc) are added.

Sub-section (cc) defines "economiser" as meaning any part of a feed-pipe which is wholly or partially exposed to the action of flue gases for the purpose of recovery of waste heat.

Sub-section (ccc) defines "feed-pipe" as meaning any pipe or connected fitting under pressure through which feed water passes directly to a boiler.

A new section 2B is added after 2A providing that every reference in the Act of 1923 to a boiler, shall include a reference to an economiser.

A proviso is added to sub-section (5) of section 7 of the Act of 1923 to the effect that where the Chief Inspectors on registering a boiler, issues a certificate in respect of an economiser, he may authorise its use for a period not exceeding twenty-four months.

Similar provisos are added in sub-sections (3), (4) and (5) of section 8 relating to the renewal of the certificate for economiser.

35. The Panth Piploda Law (Amendment) Act, 1947.—This Act amends the Panth Piploda Laws Regulation 1929 and makes the Co-operative Societies Act, 1912 applicable to that Province and in this way provides facilities for granting loans for seed and other agricultural purposes with a view to help the Province to increase the food supply.

36. The Indian Medical Council (Amendment) Act, 1947.—Under the Indian Medical Council Act, 1933 it is provided that one member from each British Indian University should be elected to the Medical Council by the Members of the Senate of the University. The Lucknow University has no Senate but has a Court which corresponds to the Senate of most other Universities. Hence in the Indian Medical Council Act, 1933 it has been specifically provided that in the case of the University of Lucknow its member to the Council should be elected by the Lucknow University Court.

Recently the Nagpur University has constituted a medical faculty and has applied for representation to the Medical Council of India. Like the University of Lucknow the Nagpur University has no Senate but has a Court. Hence this Act inserts an amendment in section 3 (1)(b) by inserting words to the effect that in case any University has no Senate but a Court then the election to the Council shall be made by the Court.

37. The Indian Patents and Designs (Extension of Time) Amendment Act, 1947.—The Indian Patents and Designs (Extension of Time) Act, 1942 was passed to enable the Controller of Patents and Designs to grant extended time to applicants and patentees in India for doing certain acts which could not be done in the prescribed time on account of circumstances arising out of the war. The International Industrial Property Union Conference held at Neuchatel agreed that delays due to war were sufficient to justify emergency extensions of time limit and an agreement was signed by 25 countries whereby time for doing certain acts under the Patents and Designs Act was extended to 30th June 1948. This Act therefore amends section 1 of Act of 1942 by stating that that Act shall be in force upto 30th June 1948.

38. The Foreigners (Amendment) Act, 1947.—The Foreigners Act, 1946 has in certain respects been found inadequate for the effective control of foreigners in India. This Act therefore has been passed to give adequate powers for proper control over foreigners.

S. 5 of this Act amends section 6 of Act of 1946 by insertion of two new sub-sections. One such sub-section provides that if any foreigner enters India in contravention of the Act of 1946 or in contravention of any order made thereunder, the prescribed authority may direct the master of the vessel or the pilot of the aircraft on which such entry was effected to provide accommodation on a vessel or an aircraft for the purpose of removing the said foreigner from India. The other sub-section provides that the master of any vessel or the pilot of any aircraft which is about to carry passengers from a port or place in India to any destination outside India shall if so directed by the Central Government take a foreigner and his dependants who have been ordered to leave India to the place where the vessel or aircraft is destined.

S. 7 of the Act of 1946 is also amended giving power to the prescribed authority to direct a person occupying or having under his control any residential premises to submit all information required in respect of foreigners accommodated in such premises.

A new section 7A is added to the Act of 1946 empowering the prescribed authority to direct the owner or person having control of a restaurant or a place of public resort or entertainment or a club and frequented by foreigners to close such premises entirely or during specified periods and to use such premises only under certain conditions and to refuse admission to such premises to all foreigners or to any specified foreigner or class of foreigner.

39. The Press (Special Powers) Act, 1947.—The experience of recent communal riots has shown that inflammatory writings and speeches and their dissemination by the Press have contributed to the creation and maintenance of tension between the communities and have hampered the return of normal conditions in riot-stricken areas. Publication of false or exaggerated reports about riots and ill-informed or violent comments thereon have spread this tension to or resulted in the outbreak of rioting even in distant areas. The permanent law as it stands has been found inadequate to deal with this problem. This Act therefore has been passed to remedy the dissemination of undesirable matter.

This Act applies to all Chief Commissioners' Provinces.

S. 4 empowers the Provincial Government or the Chief Commissioner by an order to a printer, publisher or editor or generally to all printers, publishers or editors to prohibit or to regulate the printing or publication in any document either absolutely or for a specified period or in a particular issue of a newspaper or periodical of any matter which tends directly or indirectly to promote feelings of enmity or hatred between different classes of His Majesty's subjects. The Provincial Government may also require that any document or any matter relating to a particular subject shall before publication be submitted for scrutiny to a specified officer and on such scrutiny the Officer may prohibit its publication or allow it to be published with certain modifications.

A "document" is defined as including gramophone records, sound tracks, and any other articles on which sounds have been recorded with a view to their subsequent reproduction.

Power is also given to the Provincial Government to delegate its authority conferred by this Act to a District Magistrate.

S. 5 empowers the Provincial Government to prohibit or regulate the entry into or sale or distribution or circulation or publication or

possession within the Province of any document or of any matter tending to promote feelings of enmity or hatred between different classes of subjects.

S. 6 empowers the Provincial Government to seize and forfeit documents, books and newspapers containing prohibited matters.

S. 7 empowers the Provincial Government to prevent the printing or publication of a newspaper, book or other document containing prohibited matter.

S. 8 provides for the punishment of any person with imprisonment or fine or with both, who disseminates prohibited matter.

S. 9 provides for prohibition and seizure of all documents pubished in contravention of Government's orders including the seizure of printing press and other apparatus.

S. 10 provides for penalties for contravention of any provision of this Act.

S. 12 empowers the issue of search warrants for the purpose of the Act.

S. 14 makes every declaration of forfeiture conclusive and bars any Court from calling such order into question.

S. 15 provides that any order made under this Act shall have effect notwithstanding anything inconsistent therewith contained in any other law.

40. The Foreign Exchange Regulation (Amendment) Act, 1947.—A doubt has been arisen whether the power under section 8(1) of the Foreign Exchange Regulation Act, 1947 to prohibit the import of bullion into India extends to bullion brought into a port or place in India but intended to be taken elsewhere without being removed from the ship or conveyance in which it is carried. Accordingly this Act amends section 8 of Act of 1947 by adding an Explanation to the effect that the bullion carried under the above circumstances shall also be deemed to be a bringing or sending into British India.

41. The Indian Merchant Shipping (Amendment) Act, 1947.—In view of the policy of rapid expansion of the Indian Mercantile Marine to which the Government of India are now committed and in view of the difficulties of acquiring additional tonnage, this Act has been passed with a view to take steps to conserve the small tonnage on the Indian Register and to confer on the Central Government powers for the same. This Act is also intended to enable Government to exercise control over the transfer or acquisition by any person of any ship registered in India.

Accordingly three new sections 289(A), 289(B) and 289(C) have been added to the Indian Merchant Shipping Act.

S. 289A prohibits any person from transferring or acquiring any ship registered in any port of registry in India or any share therein without the previous approval of the Central Government and makes such transfer or acquisition void and unenforceable.

S. 289B prohibits the transfer of the registry of a ship from a port of registry in India to a port of registry outside India without the previous approval of the Central Government.

S. 289C empowers the Central Government to exempt any ship from any specified requirement prescribed in this Act or other Merchant Shipping Act.

42. The India Finance (Supplementary) Act, 1947.—This Act is intended to levy an enhanced duty of customs on the export of cotton, cloth and yarn.

S. 2 of this Act introduces two items in the second schedule to the Indian Tariff Act, 1934 after item No. 5. The first item being item No. 6 is for levying a duty of four annas a square yard on all cloth manufactured either wholly from cotton or partly from cotton and any other substance and containing not less than ten per cent of cotton by weight.

The other item being item No, 7 is for levying a duty of six annas a lb. on cotton yarn manufactured either wholly or partly from cotton and containing not less than ten per cent of cotton by weight.

S. 3 provides that Central Government may from time to time make such contributions to the Cotton Textiles Funds as it thinks fit.

43. The United Nations (Security Council) Act, 1947.—This Act aims at giving power to the Central Government to give effect to any decision of the United Nations Security Council.

S. 2 enacts that if under Article 41 of the Charter of the United Nations signed at San Francisco on 26th June 1945, the Security Council of the United Nations calls upon the Central Government to apply any measures not involving the use of armed forces to give effect to any decision of that Council, the Central Government may by order make such provisions (including provisions having extra-territorial operation) as appears to it necessary.

44. The Income-tax and Business Profits Tax (Amendment) Act, 1947.—This Act clarifies the Indian Income-tax Act, 1922 and the Business Profits Tax Act of 1947.

Capital assets is defined as property of any kind other than agricultural land. As the definition stands capital gains arising from the sale, exchange or transfer of any agricultural land would not be liable to capital gains tax. Under the Income-tax Act agricultural income is exempt only if it is derived from land assessed to land revenue.

S. 2 therefore amends the Income-tax Act so as to secure that the capital gains arising from the sale, exchange or transfer of any land would be exempt only if the agricultural income derived from that land is exempt from tax under the Income-tax Act.

S. 3 amends the Business Profits Tax Act, 1947 by introducing a second proviso to the effect that where the profits of a part only of a business carried on by a person who is not resident in British India accrue or arise in British India then this Act shall apply only to such part of the business and such parts shall be deemed to be a separate business.

In the schedule of the Business Profits Tax Act, 1947, a new rule 2A is added to the effect that where only a part of the profits of a company is chargeable under the provisions of this Act, its capital shall be the sum ascertained in accordance with rule 2 diminished by an amount which bears to that sum the same proportion as the amount of its profits not so chargeable bears to its total profits.

45. The Indian Trade Unions (Amendment) Act, 1947.—This Act introduces several amendments to the Indian Trades Unions Act of 1926 and provides for Government recognition of Trade Unions.

A new Chapter IIIA is added under the heading Recognition of Trade Unions.

A new section 28A is added providing that the Central Government shall be deemed to be the appropriate Government in respect of Trade Unions consisting of workmen employed by the Central Government or by a Federal Railway or in a Major Port, Mine or Oilfield.

S. 28B empowers the appropriate Government to appoint Labour Courts with powers of a Civil Court.

S. 28C provides for registration of a memorandum of agreement between an employer who agrees to recognise the Trade Union and the officers of the Trade Union and while the agreement is in force the Trade Union shall in its relations with the employer have all the rights of a recognised Trade Union under this Act.

S. 28D provides that a Trade Union shall not be entitled to recognition by order of a Labour Court under section 28E unless it fulfils certain specified conditions.

S. 28E provides for applying by a Trade Union which does not obtain recognition from an employer to the Labour Court for recognition by that employer, and the Labour Court may call for information for the purpose of ascertaining whether the Trade Union is entitled to recognition by the employer, and after making all investigations the Labour Court shall make an order.

S. 28F provides for giving certain rights to recognised Trade Unions.

S. 28G provides for withdrawal of recognition of a Trade Union under certain circumstances.

S. 28H allows a fresh application to be made by a Trade Union for recognition.

S. 28I says that every Trade Union recognised under s. 28E shall submit to the Registrar the prescribed returns.

Sections 28J and 28K describe what practices on the part of Trade Unions and on the part of the employer shall be considered as unfair practices.

A new section 32A is added to the Act of 1926 imposing penalties for unfair practices.

46. The United Nations (Privileges and Immunities) Act, 1947.—This Act gives effect to the convention on the Privileges and Immunities of the United Nations and further provides for giving similar priviliges and immunities to other International Organisations and their representatives and officials.

S. 2 provides that the provisions set out in the Schedule to this Act of the Convention and Privileges and Immunities adopted by the General Assembly of the United Nations on 13th February 1946 shall have the force of law in India. The same section empowers the Central Government to amend the Schedule in conformity with any amendments made in the provisions of the said conventions.

S. 3 empowers the Central Government in pursuance of any international agreement, convention or other instrument to confer privileges and immunities to other international organisations and their representatives and officers.

The Schedule to this Act contains eight Articles the first Article says that the United Nations shall have juridical personality and shall have the capacity to contract and to acquire and dispose of immovable and movable property and to institute legal proceedings.

Article II makes the Property, Funds and Assets of the United Nations wherever located immune from every form of legal process, search or confiscation and are made inviolable.

Article III gives facilities in respect of communications.

Article IV provides for giving privileges and immunities to the representatives of members of the United Nations.

Article V provides for giving immunities to officials of the United Nations.

Article VI provides for privileges and immunities to experts on missions for and on behalf of the United Nations.

Article VII provides for recognition of Laissez-Passer issued by the United Nations to its officials for purposes of travel, etc.

Article VIII provides for settlement of disputes arising out of the convention of the United Nations by the International Court of Justice.

47. The Extra-Provincial Jurisdiction Act, 1947.—The Central Government have acquired by agreement, treaty, usage, certain powers and jurisdiction in the Non-jurisdictional and Semi-jurisdictional States and Talukas on Western India and Gujrat, Manipur, etc.

The Central Government have in consequence assumed certain functions in relation to the administration of these areas. In order to provide legal machinery for the exercise of these functions the Extra-Provincial Jurisdiction Ordinance was promulgated. This Act replaces the ordinance.

S. 2 defines extra-provincial jurisdiction as meaning jurisdiction which by treaty, grant, usage, sufferance or other lawful means, the Central Government has for the time being in relation to any area outside the province.

S. 3 empowers the Central Government to exercise extra-provincial jurisdiction in such manner as it thinks fit and further empowers the Central Government to delegate its powers to any officer or authority.

S. 4 empowers the Central Government to make such orders as may seem to it expedient for the effective exercise of any extra-provincial jurisdiction of the Central Government.

S. 6 provides that if in any proceeding civil or criminal any question arises about the extent of any extra-provincial jurisdiction of the Central Government, the Secretary to the Government of India shall on the application of the Court send to the Court, the decision of the Central Government on the point which shall be binding upon the Court.

48. The Indian Nursing Council Act, 1947.—This Act enacted for constituting an Indian Nursing Council in order to establish a uniform standard of training for nurses, midwives and health visitors.

S. 3 gives power to the Central Government to constitute a Council consisting of nurses and midwives from various Provinces.

S.7 provides for holding meetings of the Council.

S. 8 provides for appointment of officers, committees and servants of the Council.

S. 10 provides for the recognition of qualifications mentioned in the Schedule.

S. 11 deals with the effect of recognition.

S. 13 provides for appointing inspectors to inspect any training institution.

S. 16 gives power to the Council to make regulations to carry out the provisions of this Act.

49. The Delhi Premises (Requisition and Eviction) Act, 1947.—Owing to the shortage of accommodation in the Province of Delhi an emergency arose which made it necessary to confer powers to requisition premises and to evict from Government premises persons continuing without authority to occupy those premises and for this purpose this Act has been passed. This Act is made to remain in force till 31st December 1949 but power is given to the Central Government to extend the time for one year more.

S. 3 provides that whenever it appears to the competent authority, *i.e.*, the Estate Officer to the Government of India, that any premises are needed for any public purpose it shall be lawful after due notice to enter upon and inspect such premises or to require any person to furnish such information in his possession relating to the premises as may be required or direct the landlord or occupier of the premises not to dispose of or alter the premises and if necessary to requisition the premises provided however that where a landlord or a tenant is using any premises for himself or his family the competent authority shall as far as possible provide alternative accommodation for him or them.

S. 4 exempts all premises exclusively used for religious worship or for school, orphanage or hospital from the operation of this Act.

S. 6 provides that where any premises are requisitioned the tenant or occupier may by notice in writing be ordered to vacate the premises within ten days of the receipt of the notice. If any person fails to comply with the order of eviction he shall be deemed to be a tresspasser.

S. 7 provides for compensation for requisition of premises.

S. 8 provides for rights and liabilities of the Central Government in respect of the premises requisitioned.

S. 9 provides for releasing premises from requisition.

S. 11 provides for evicting persons unauthorisedly in occupation of any premises belonging to or requisitioned by the Central Government or to call upon a person in occupation of such premises to vacate the same in case he sublets without permission or acts in contravention of the terms under which he occupies the premises from the Government.

S. 12 empowers the Central Government to make rules for carrying out the purposes of the Act.

S. 13 provides that no order made under the Act shall be called in question in any Court.

S. 14 protects all persons acting in good faith in pursuance of this Act from any suit or prosecution.

50. The Delhi and Ajmer-Merwara Rent Control (Amendment) Act, 1947.—This Act amends the Delhi and Ajmer-Merwara Rent Control Act of 1947 by including new houses in Delhi within the jurisdiction of the Ajmer-Merwara Rent Control Act. For this purpose a new section 7(A) is added.

A further amendment is made to the Act of 1947 by the addition of the fourth schedule to the Act. By this fourth schedule the Central Government is given power to appoint a Rent Controller to fix the standard rent of newly constructed premises. In fixing the standard rent the Rent Controller is required to give his reasons in writing. Right is given to any person aggrieved by an order of the Rent Controller to appeal to the District Judge, Delhi within thirty days from the date of the order.

51. The Indian Cotton Cess (Amendment) Act, 1947.—The Act is designed to prevent the loss of income to Indian Central Cotton Commitee consequent on the creation of the Dominion of Pakistan. Under the Indian Cotton Cess Act, 1923 cotton produced in India and either consumed by the mills in India or exported is subject to the levy of a cess, the proceeds of which are utilised in financing the Indian Central Cotton Committee. As cotton produced in Pakistan is no longer cotton produced in India this Act provides with retrospective effect for the levy of the cess on cotton produced in Pakistan and consumed in Indian mills.

52. The Ajmer-Merwara (Extention of Laws) Act, 1947.—In the Legislative field the Province of Ajmer-Merwara is governed mainly by some old Bengal Regulations and by Regulations made before 1937 by the Governor-General under the old Government of India Acts. The Province does not have a Legislative Council of its own, and the Central Legislative Assembly can scarcely be considered to be a suitable forum for the enactment of competent legislation on provincial subjects for the Province.

This Act therefore empowers the Central Government by a notification to extend or apply to the Province of Ajmer-Merwara with such restrictions and modifications as it thinks fit any enactment which is in force in any other Province.

53. The Salaries of Ministers Act, 1947.—By reasons of the provisions of section 10(3) of the Government of India Act, 1935 as adapted by the India (Provisional Constitution) Order, 1947, it is necessary to fix the salaries of Ministers of the Dominion of India.

S. 3 provides that with effect from the date on which this Act comes into force there shall be paid to each Minister of the Dominion of India a salary of Rs. 3,000 a month and a sumptuary allowance of Rs. 500 a month.

S. 4 provides that each Minister shall be entitled without payment of rent to the use of a fully furnished residence in New Delhi throughout his term of office and for fifteen days more and a fully furnished residence in Simla during the summer season of each year as the Governor-General may determine and no charge shall fall on the Minister personally in respect of the maintenance of either residence.

The Fighting Forces

THE present army of India originated in the small establishments of guards, known as peons, enrolled for the protection of the factories of the East India Company; but sepoys were first enlisted and disciplined by the French, who appeared in India in 1665. Before this detachments of soldiers were sent from England to Bombay, and as early as 1665 the first fortified position was occupied by the East India Company at Armagon, near Masulipatam. Madras was acquired in 1640, but in 1654 the garrison of Fort St. George consisted of only ten men. In 1661 Bombay was occupied by 400 soldiers, and in 1668 the number was only 285 of whom 93 were English and the rest French, Portuguese and Indians.

After the declaration of war with France in 1744 the forces were considerably increased, but this did not prevent the French capturing Madras in 1746. Following the French example, the English raised considerable sepoy forces and largely increased the military establishments. In 1748 Major Stringer Lawrence landed at Fort St. David to command the forces of the Company. The English foothold in India was then precarious and the French under Dupleix were contemplating fresh attacks. It became necessary for the English Company to form a larger military establishment. The new commandant at once set about the organisation and discipline of his small force, and the garrison was given a company formation. This was the beginning of the regular Indian Army of which Lawrence subsequently became Commander-in-Chief. In Madras the European companies were developed into the Madras Fusiliers; similar companies in Bengal and Bombay became the 1st Bengal and 1st Bombay Fusiliers. The native infantry were similarly organised by Lawrence and Clive. By degrees Royal Regiments were sent to India, the first being the 39th Foot, which arrived in 1754.

Struggle with the French.—From this time for a century or more the army in India was engaged in constant war. After a prolonged war with the French, whom Dupleix had by 1750 raised to the position of the leading power in India the efforts of Stringer Lawrence, Clive, and Eyre Coote completed the downfall of their rivals, and the power of England was established by the battle of Plassey in Bengal; and at Wandewash in Southern India, where the French were finally defeated in 1761. A number of independent States, owning nominal allegiance to the Emperor at Delhi, had risen on the decline of the Mughal Empire, some ruled by Mahratta Princes and others by Muslim adventurers such as Hyder Ali of Mysore. A prolonged struggle ensued with the latter and his son and successor Tipu Sultan, which ended only with the defeat and death of Tipu and the capture of Seringapatam in 1799.

Reorganisation of 1796.—In 1796 the Indian armies, which had been organised on the Presidency system, were reorganised. The European troops were 13,000 strong and the Indians numbered some 57,000, the infantry being generally formed into 75 regiments of two battalions each. In Bengal, regiments were formed by linking existing battalions of ten companies each with large establishments of English officers. The Madras and Bombay armies were at the same time reorganised on similar lines, and cavalry and artillery companies were raised.

In 1798, the Marquis of Wellesley arrived as Governor-General, firmly imbued with the necessity of destroying the last vestiges of French influence. In pursuance of this policy he reduced Mysore, where Tipu was intriguing with the French, and then turned his attention to the Mahratta States, in which Sindhia had established power over the Mughal Emperor at Delhi by means of a large regular army officered by Europeans under the French adventurer Perron. In campaigns against Sindhia in Hindustan by a British Army under General Lake, and in the Deccan against that prince and the Raja of Berar by an army under General Wellesley, afterwards Duke of Wellington, the power of these Chiefs was broken in the battles of Laswari and Assaye. French influence was finally destroyed. Subsequently Holkar also was reduced, and British power established on a firm footing.

Mutiny at Vellore.—The British Indian Army had been from time to time subject to incidents of mutiny which were the precursors of the great cataclysm of 1857. The most serious of these outbreaks occurred at the fort of Vellore in 1806 when Indian troops suddenly rebelled and killed the majority of the European officers and soldiers quartered in the fort, while the striped flag of the Sultan of Mysore, whose sons were confined there, was raised upon the ramparts. The mutiny was suppressed by Colonel Gillespie, who galloped over from Arcot at the head of the 19th Light Dragoons, blew in the gate of the fort, and destroyed the mutineers. This retribution put a stop to any further outbreaks in the army.

OVERSEAS EXPEDITIONS

Several important overseas expeditions were undertaken in the early part of this nineteenth century. Bourbon was taken from the French; Ceylon and the Spice Islands were wrested from the Dutch, and Java was conquered in 1811 by a force largely composed of Bengal troops which had volunteered this service.

In 1814, the Nepal War took place in which Gillespie, who had distinguished himself in Java, was killed when leading the assault on the fort of Kalunga. The Gurkhas were overcome in this war after stout resistance.

In 1817, hostilities again broke out with the Mahrattas, who rose against the British during the progress of operations against the Pindaris. Practically the whole army took the field and all India was turned into a vast camp. The

Mahratta Chiefs of Poona, Nagpur, and Indore rose in succession, and were beaten, respectively, at Kirkee, Sitabaldi, and Mehidpur. This was the last war in Southern India. The tide of war rolled to the north never to return. In the Punjab, to which the frontier now extended, the army came into touch with the great military community of the Sikhs.

In 1824, the armies were reorganised, the double-battalion regiments being separated, and the battalions numbered according to the dates they were raised. The Bengal Army was organised in three brigades of horse artillery, five battalions of foot artillery, two regiments of European and 68 of Indian infantry, 8 regiments of regular and 5 of irregular cavalry. The Madras and Bombay armies were constituted on similar lines, though of lesser strength.

Afghan and Sikh Wars.—In 1839, a British Army advanced into Afghanistan and occupied Kabul. There followed the murder of the British Envoys and the disastrous retreat in which the army perished. This disaster was in some measure retrieved by subsequent operations, but it had far-reaching effects on British prestige. The people of the Punjab had witnessed these unfortunate operations, they had seen the lost legions which never returned, and although they saw also the avenging armies they no longer regarded them with their former awe. Hostilities broke out in 1845-46, when a large portion of the Bengal Army took the field under Sir Hugh Gough. The Sikhs were defeated after stubborn fights at Mudki and Ferozeshahr, the opening battles, but did not surrender until they had been overthrown at the battles of Aliwal and Sobraon. Two years later an outbreak at Multan caused the Second Sikh War when, after an indecisive action at Chillianwala, the Sikhs were finally overcome at Gujrat, and the Punjab was annexed. Other campaigns of this period were the conquest of Sind by Sir Charles Napier, and the Second Burmese War, the first having taken place in 1824.

The conquest of the Punjab extended over the frontier to the country inhabited by turbulent tribes. To keep order on this border the Punjab Frontier Force was established, and was constantly engaged in small expeditions which, while they involved little bloodshed, kept the force employed and involved much arduous work.

1857 UPHEAVAL

On the eve of the upheaval in 1857 there were in the Bengal Army 21,000 British and 137,000 Indian troops; in the Madras Army 8,000 British and 49,000 Indian troops; and in Bombay 9,000 British and 45,000 Indian troops.

Disaffection culminated in mutiny at Berhampur and in an outbreak at Barrackpore where sepoy Mangal Pande attacked a European officer. The next most serious manifestation was the refusal of men of the 3rd Bengal Cavalry at Meerut to take the obnoxious cartridge. These men were tried and sentenced to long terms of imprisonment, their fetters being riveted on parade on the 9th May. Next day the troops in Meerut rose, and, aided by the populace burned the houses of the Europeans and murdered many. The troops then went off to Delhi.

Delhi is the historic capital of India. On its time-worn walls brood the prestige of a thousand years of Empire. It contained a great magazine of ammunition. At the time Delhi was held only by a few Indian battalions, who joined the rebels. The Europeans who did not succeed in escaping were massacred and the Delhi Emperor was proclaimed supreme in India. The capital constituted a nucleus to which the troops who rebelled in many places flocked to the standard of the Mughal. An army was assembled for the recovery of Delhi but the city was not captured until the middle of September. In the meantime mutiny had spread. The massacres of Cawnpore and Jhansi took place, and Lucknow was besieged until its relief on the 27th September. The rebellion spread throughout Central India and the territory that now forms the Central Provinces, which were not recovered until Sir Hugh Rose's operations in 1858 ended in the defeat of the Rani of Jhansi.

Minor Campaigns.—During the period until 1879, when the Second Afghan War began, there were many minor campaigns including the China War of 1860, the Ambeyla Campaign, and the Abyssinian War. Then followed the Afghan War in which the leading figure was Lord Roberts. There were expeditions to Egypt and China, and Frontier Campaigns of which the most important was the Tirah Campaign of 1897. There were also the prolonged operations which led up to or ensued upon the annexation of Burma, several campaigns in Africa, and the expeditions to Lhasa.

But until 1914, since the Afghan War, the army of India, except that portion of the British garrison which was sent to South Africa in 1899, had little severe fighting, although engaged in many arduous enterprises.

Reorganisation after 1857.—In 1857 the East India Company ceased to exist and their army was taken over by the Crown. At this time the army was organised into three armies, *viz.*, Bengal, Bombay and Madras, the total strength being 65,000 British and 140,000 Indian troops.

Several minor re-organisations took place during the following years, such as the linking of three Regiments together and the raising of Class Regiments and Companies. In 1895 another large reorganisation took place. This was the abolition of the three Armies and the introduction of the command system. Four Commands were formed, *viz.*, Punjab, Bengal, Madras and Bombay.

Lord Kitchener's Scheme.—This system lasted until 1904 when under Lord Kitchener's re-organisation the Madras Command was abolished and the Army divided into three Commands—the Northern, Eastern and Western, corresponding to the Punjab, Bombay and Bengal Commands.

In 1907, Lord Kitchener considered that consequent on the delegation of administrative powers to Divisional Commanders, retention of such powers by Lieutenant-Generals of Commands led to delay in the dispatch of business. The Command system was therefore abolished and India was divided into two Armies—the Northern and Southern—each under a General Officer who was responsible for the command, inspection and training of the troops, but was given no administrative responsibilities.

Early in the First Great War both Army Commanders took the field and were not replaced until 1916 and 1917, when both had practically the same functions as their predecessors. It was then realised that administration was being unduly centralised at Army Headquarters and the machinery was becoming clogged with unnecessary details. To secure efficiency at A. H. Q., therefore, a certain measure of decentralisation was carried out in 1918. With the alteration of the designation "Army" to "Command" at this time, a considerable increase was made in the administrative staffs of the two Commands, and the General Officers Commanding were given powers to deal with all administrative questions other than those dealing with matters of policy, and new principles of war.

The commands were increased to four in 1920, each under a General Officer Commanding-in-Chief. One of these, namely Western Command, was abolished on the 1st November, 1938, and replaced by an Independent District.

The Chatfield Committee.—In September, 1938, an announcement was made on behalf of the British Government, that the outcome of the discussions regarding the role of land and air forces in India in relation to the defence problems of India, and the Empire which had been authorised in March of that year, had been considered by the British Government.

The need for early action to place the defence organisation of India on a more satisfactory basis was accepted, and, at the suggestion of the Government of India, an expert body of inquiry known as the Chatfield Committee was appointed by the British Government to visit India.

In the meantime and in the light of the progress made during the discussions that were held in the summer of 1938, the British Government in September, 1938, made certain offers of assistance, subject to approval of Parliament. These were an increase of £500,000 to the annual grant of £1,500,000 which had been paid to the Government of India, since 1933, in aid of India defence expenditure, a capital grant up to £5,000,000 for the re-equipment of certain British and Indian units in India, and the provision of aircraft for the re-equipment of certain squadrons of the Royal Air Force. It was further agreed that four British battalions should be transferred from the Indian to the Imperial establishment.

The following is the substance of the main recommendations of the Chatfield Committee Report:

Modernised Re-equipment.—The Committee reported that in the interests of Indian defence the whole of the army forces in India should be modernised with only such minor variations as would not affect the general level of efficiency.

The types of modernised units were to be as follows:—

British and Indian Cavalry light tank regiments equipped with light tanks and armoured carriers for reconnaissance;

Indian cavalry armoured regiments equipped with light tanks and armoured cars;

Indian cavalry motor regiments—provided with motor transport for conveyance of the personnel who would be normally on foot;

British and Indian field artillery regiments—all regiments were to be mechanised and in due course equipped with 25 pounder guns;

Sappers and Miners units—with mechanised first line transport and mechanical power tools;

British and Indian infantry battalions—armed with rifles, brens and 2 in. mortars and fully mechanised first line transport;

Units on the North-Western Frontier would retain a certain proportion of pack mules.

It therefore recommended a thorough-going scheme for re-equipment of all branches of the service. One of the most important features of the modernisation proposals was the mechanisation of the bulk of the cavalry and of the first line transport of a large portion of the infantry with the object of greatly increasing the mobility of the units.

With this end in view the Chatfield Committee recommended that the basis of distribution of the Army in India should be (A) Frontier Defence, (B) Internal Security, (C) Coast Defence, (D) External Defence Troops.

The total reduction of British troops as measured with the establishment on July 1, 1938, was approximately 25 per cent. A reduction in the number of units was also involved.

Supply of Munitions.—The principle that India should as far as possible be made in all major respects self-sufficient in munitions in time of war was accepted, and a scheme for re-organising, and, where necessary, expanding the Ordnance Factories in India was recommended.

Defence Gift To India.—The British Government took full account of the heavy capital cost involved which was estimated at some £34,330,000, or Rs. 45 crores. Accepting that this capital expenditure could not be found out of the resources available in India, the British Government offered to provide it from the British Exchequer. The sole condition attached was that India should bring her defence forces up to the standard of equipment necessitated by modern warfare and adjust her strategical plans to the conditions now obtaining in the world.

It was estimated that a period of five years would be required for the completion of the modernisation plan and the provision of the total capital sum would accordingly be spread over this period. Of the total amount three-quarters would be provided as a free gift while one-quarter would be advanced by way of a loan. The interest on this portion, however, would be entirely remitted for the first five years; thereafter interest would become payable together with instalments of capital.

India's Defence Liabilities.—In estimating India's defence requirements, the Committee had to consider how far the prevailing conceptions as regards India's liability for defence could be held

valid in the light of modern conditions. Till then the principle had been accepted that India should be responsible for the "minor danger" of the maintenance of internal security and for the defence of her land frontiers, while Great Britain should be responsible for the "major danger" of an attack by a great Power upon India, or upon the Empire through India.

Modern developments have, however, clearly shown how vulnerable India is to attack in other forms than those that were envisaged when the principle was first laid down. Such attacks, if they should ever mature, would so vitally affect India's own well-being that they would demand her immediate co-operation in effective measures for her defence. In such cases India's defence would clearly be most effectively and economically assured by co-operation in the defence of points outside India strategically essential to her security.

Thus the Committee recommended as a general principle that the forces maintained by India should be adequate not merely for the narrower purposes of purely local defence, but also to assist in maintaining what they described as "India's external security," and further that India should acknowledge that her responsibility could not in her own interests be safely limited to the local defence of her land frontiers and coasts.

It was fully appreciated that the forces maintained by India could only bear a small share in those wider responsibilities, and that she could not necessarily bear in full the cost of such forces as were maintained in India. The committee recommended therefore that the contribution hitherto paid by the British Government should be continued at the higher level of £2,000,000 a year to which it had been provisionally raised by Government.

On this basis it was estimated that it should be possible for India, without enlarging the annual provisions for defence expenditure, to meet the whole maintenance costs of the forces organised and equipped on the scale proposed. From this main principle the conclusion was drawn that if forces held in India for the purposes covered by the joint responsibility were used outside India in an emergency affecting India's external security, their ordinary maintenance charges to be borne by India.

The margin for external defence suggested is one-tenth of the forces maintained in India in the case of the Army.

THE PARTITION

The year 1947 is a landmark in the history of the Armed Forces of India. Consequent on the division of the country into the two Dominions of India and Pakistan, it was decided that each Dominion should establish its own Armed Forces. The Royal Indian Navy, the Indian Army and the Royal Indian Air Force were accordingly divided between the two Dominions on communal-cum-optional basis which worked out to the approximate proportion of one-third to Pakistan and two-thirds to the Union of India. A scheme was then evolved by which those units which were predominantly Hindu or Muslim should belong to India and Pakistan respectively; individuals of the other community serving in such units were given the choice as to which Dominion they wished to serve.

Thus each Dominion was allotted its own Sea, Land and Air Forces. India retained the title of Royal Indian Navy, Indian Army and the Royal Indian Air Force for these particular arms; while the titles of the Pakistan Forces became Royal Pakistan Navy, Pakistan Army and the Royal Pakistan Air Force.

Such a division and re-organisation of the Armed Forces needed a co-ordinating authority which was provided by the Supreme Commander's Headquarters. Field Marshal Sir Claude Auchinleck, former Commander-in-Chief, was appointed as Supreme Commander with the specific purpose of reconstituting the Armed Forces for the two Dominions under the directional control of the Joint Defence Council, which consisted of representatives from both Dominions, the Governor-General of India Viscount Mountbatten being the independent Chairman.

Since the bulk of the work of reconstitution was completed sooner than it was anticipated, the Supreme Commander's Headquarters closed at the end of November, 1947, and the Joint Defence Council on April 1, 1948. A communique explained that as nearly all the functions for which the Joint Defence Council was set up had been completed there was no need for such a body. The Executive Committee of the Joint Defence Council, however, which will be renamed the Inter-Dominion Defence Secretaries' Committee will continue in existence in order to carry out the remaining functions of the Joint Defence Council of which the chief is the movement of stores from India to Pakistan and *vice versa*.

As for the ordnance factories, no physical division has taken place. India has assumed full liability for their book value, and has agreed to make available to Pakistan a sum of rupees six crores to be drawn as and when required by way of assistance towards the setting up of ordnance factories and other institutions.

As regards the ten regiments of Gurkhas recruited from Nepal (an independent country), six were retained by the Indian Union and four were transferred to the British Government to form a part of the British Army by mutual agreement between the Governments of Nepal, India and the United Kingdom.

WITHDRAWAL OF BRITISH FORCES

An agreement was reached between the Government of India and His Majesty's Government that all British Forces in India would be withdrawn soon after the transfer of power. Accordingly the first detachment of the British Troops—Army and Royal Air Force—approximately 1,500 strong left India on August 17, 1947 and the withdrawal was completed on February 28, 1948, when the last British Unit—First Battalion, the Somerset Light Infantry, sailed from India.

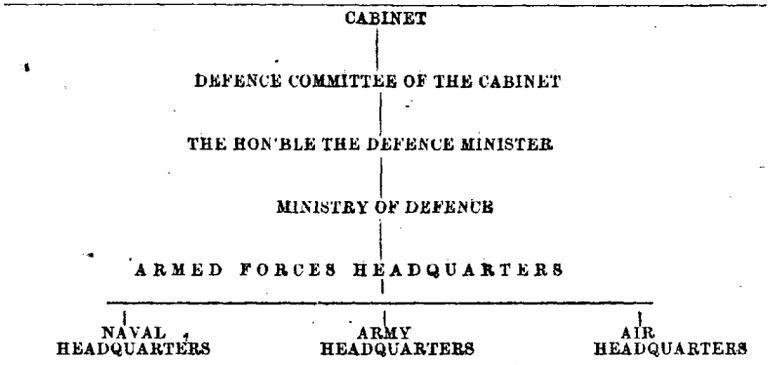
NATIONALISATION

The Armed Forces of India used to contain a very large British element but the Government of the new India decided to completely nationalise her Armed Forces at the earliest date possible. As a result of the division of the Armed Forces and the policy of nationalisation the Armed Forces of the new India are very different from what they used to be before. Only a small number of British officers, mostly in technical branches, have been retained on contractual basis for a short period to fill the gap and they will be used wholly for training and never for field operation.

Demobilisation.—From V-J Day to the end of August 1947, the net reduction in the strength of the Indian and Pakistan Armies amounted to 1,648,772 men and women. Of these 32,677 were British and Indian/Pakistan officers, 12,177 were officers and auxiliaries of the WAC(I), 49,024 were British. Other Ranks serving with Indian and Pakistan Armies and, 1,533,570 were Indian and Pakistan Ranks including 64,321 civilians attached to Indian/Pakistan armies.

MINISTRY OF DEFENCE

The Defence Organization of India consisting of the Ministry of Defence and the Armed Forces Headquarters is as follows :—



The Army is commanded by the Chief of the Army Staff and the Commander-in-Chief Indian Army; the Navy is commanded by the Chiefof the Naval Staff and Flag Officer Commanding, R.I.N.; and the Air Force is commanded by the Chief of the Air Staff and Air Marshal Commanding, R.I.A.F. They are responsible to the Defence Minister, through the Ministry of Defence, for the administration of the Army, the Navy and the Air Force respectively.

THE INDIAN ARMY

The Indian Army is divided into numerous Arms of the service, in just the same way as the British Army.

The Indian Armoured Corps.—This was formed from the Indian Cavalry Regiments, and many new Regiments have been raised. The first unit was mechanised in January 1940 and general mechanisation began between October 1940 and January 1941. The Regiments are organised in a variety of ways, depending on their role, and are divided into Indian Armoured Regiments, Indian Armoured Car Regiments, Divisional Reconnaissance Regiments, Indian Motorised Regiments and Frontier Armoured Regiments. The majority of the tank and armoured car crews of the Indian Armoured Corps are now Indians. The men are drawn from every community and they are provided with heavy, medium and light tanks, armoured cars and carriers and trucks.

The Indian Artillery.—Is divided into a number of branches, the most famous of which is the Mountain Artillery. There is also Field Artillery, Anti-Tank Artillery, light and heavy Anti-Aircraft Artillery and Coast Defence Artillery. During the Second World War, the Royal Indian Artillery increased to nearly 84,000 all ranks, serving, among other units, in 12 Mountain, 11 Field, 7 Anti-Tank, 2 Medium and 29 Anti-Aircraft regiments.

The Corps of Indian Engineers.—Is normally divided into the Sapper and Miner Groups and the Military Engineer Service. There are now many other branches, such as Bridging Units and Bomb Disposal Units, Works Service (Construction) and Works Service (E. & M.) Groups, Railway and Inland Waterways Transportation Groups. There are three Sappar and Miner Groups: Queen Victoria's Own Madras Sappers and Miners, King George V's Own Bengal Sappers and Miners, The Royal Bombay Sappers and Miners.

The Corps of Indian Mechanical and Electrical Engineers.—Counterpart of the Royal Mechanical and Electrical Engineers in the British Service, this was formed in May 1943, to take over the engineering functions and technical personnel hitherto controlled by the I.A.O.C. The Corps was responsible for the repair, recovery and maintenance of the complete technical equipment of the Army, which includes guns of all descriptions, mechanical transport, small arms, tanks, radar, tele-communication equipment, instrument and other machinery.

The Indian Signal Corps.—The Corps is organised on the same lines as a Sapper and Miner Corps, with headquarters for recruiting and training personnel, and detached field units

for the various army formations. The head of the corps is the Signal Officer-in-Chief in the General Staff Branch at G. H. Q. He acts as a technical adviser on questions connected with signals, and is also responsible for the technical inspection of all signal units. A chief signal officer with similar functions is attached to the headquarters of each Army Command. The British portion of the Corps has now been amalgamated with the Royal Corps of Signals.

The Indian Infantry.—During 1945 several changes took place in the designation and titles of Indian regiments, the most important being the change in title of the 4th Bombay Grenadiers which became the Indian Grenadiers and the 19th Hyderabad Regiment which was renamed the Kumaon Regiment. All other India regiments with the exception of the Punjab Regiments dropped their numerical designations.

The number of Battalions in each Regiment varies. Parachute Battalions were raised in the early part of 1942 and are organised on similar lines to the Indian Infantry.

Royal Indian Army Service Corps.—The Royal Indian Army Service Corps is the counterpart of the Royal Army Service Corps of the British Army. It has developed from the Commissariat Department of an earlier period, and its immediate predecessor was the Supply and Transport Corps, by which name the service was known up to 1923. The Royal Indian Army Service Corps which is under the control of the Quartermaster-General, is constituted in three main branches, namely: (*a*) Supply, (*b*) Animal transport, and (*c*) Mechanical Transport.

Apart from units and vehicles employed in the conveyance of military stores, the mechanical transport service also provides motor ambulance convoys for hospitals, animal transport ambulance sections and field medical units and vehicles for other miscellaneous purposes.

The mechanical transport was taken over by the Royal Indian Army Service Corps in 1927. The Officers for the service were mainly drawn from the Royal Army Service Corps, and by transfers from both British and Indian units.

The war years witnessed considerable expansion in R.I.A.S.C. transport services. From 36 A. T. Coys. and 29 M. T. Units of various types, they were increased to 80 A. T. Coys. and 304 M. T. Units.

The elephant was for the first time taken in the service and was found to be very useful in Burma.

Our additions to the service were Tank Transporters, Amphibians and Water Tpt. Coys. There has also been a very great expansion in air supplies which at one time was the main service of supply in Burma.

Medical Services.—The military medical services in India are composed of the following categories of personnel and subordinate organisations:—

(*a*) Officers and other ranks of the Royal Army Medical Corps serving in India.

(*b*) Officers and other ranks of the Army Dental Corps.

(*c*) Officers of the Indian Army Medical Corps. This Corps came into existence on April 3rd, 1943 and is organised on the lines of the R.A.M.C. It embodies all members of the I. M. S., the I. M. D. & I. H. C.

(*d*) I. M. S.

(*e*) Queen Alexandra's Imperial Military Nursing Service.

(*f*) The Queen Alexandra's Military Nursing Service for India.

(*g*) The Indian Military Nursing Service.

(*h*) The Auxiliary Nursing Service.

Of these categories, the officers and men of the Royal Army Medical Corps and the Army Dental Corps, the assistant surgeons of the Indian Medical Department (B.C.) and the Queen Alexandra's Imperial Military Nursing Service and the Queen Alexandra's Military Nursing Service for India are primarily concerned with the medical care of British troops; while the Indian Army Medical Corps and the Indian Military Nursing Service are concerned, primarily, with the medical care of Indian troops.

Indian Army Ordnance Corps.—This Corps is the equivalent of the Royal Army Ordnance Corps in the British Army. It is divided into two sections, Stores and Workshops. The former deals with the issue and repair of equipment, arms and ammunition, while the latter is responsible for the repair and maintenance of mechanical transport.

INDIAN ARMY CORPS OF CLERKS

For the efficient administration of the Indian Army, much depends on the Indian Army Corps of Clerks, who form in the main the clerical staffs of Army Commands, Districts and various military establishments in India.

With the outbreak of World War II a vast expansion took place, when the peace-time strength of 800 all ranks, equally divided into two wings, British and Indian, was increased.

Wherever the Indian Army fought, men of this Corps were with them.

Veterinary Services in India.—The Veterinary services are responsible for the veterinary care, in peace and war, of animals of British troops, Indian cavalry and artillery, R.I.A.S.C. units, the remount department (excluding horse-breeding operations), etc. The veterinary services include: The establishment of Royal Army Veterinary Corps officers, serving on a tour of duty in India and those of the continuous service cadre. The establishment of warrant and non-commissioned officers, India Unattached List, and veterinary assistant surgeons of the Indian Army Veterinary Corps.

Educational Services.—The education of the army is under the control of the Army Educational Corps and of Indian officers borne supernumerary to the establishment of units of the Indian Army.

Military Farms Department.—This department, which is under the control of the Quartermaster-General consists of two branches:-

(i) The military grass farms, which provide fodder for the army.

(ii) The military dairy farms, for the provision of dairy produce for hospitals, troops and families.

Frontier Militia and Levy Corps.—These forces are "Civil" troops, *i.e.*, they are administered and paid by the Civil authorities and not by the Army. They are, however, officered by Officers of the Regular Indian Army. These forces were raised for duty on the North-West Frontier.

AIR FORCE IN INDIA

The Air Force in India is controlled by the Minister of Defence as part of the defence services of the British Commonwealth. The Air Force budget is incorporated in the Defence Services estimates. The Officer Commanding the Air Force in India is an Air Marshal whose rank corresponds to that of a Lieutenant-General in the Army.

The Royal Indian Air Force had its origin in the recommendations of the Skeene Committee in 1926. Six years later the Indian Air Force Act was passed by the Indian Legislature and the first flight was formed in April, 1933. From that first flight, with its three aeroplanes and six pilots trained at the R.A.F. College Cranwell, has grown a Service which, by 1946 had eight Fighter and two Transport squadrons and anti-aircraft co-operation unit, a force equivalent in aircraft strength to thirteen squadrons.

Consequent on the division of the country into two Dominions, the Dominion of India received one Transport and seven Fighter squadrons as its share of allotment.

Training Facilities.—These have expanded throughout the length and breadth of the sub-continent covering all phases of instruction for flying and ground personnel. The expansion during the last few years has been phenomenal. Training is of the same high standard as in the R.A.F. Provided with some of the latest equipment and under the able guidance of highly skilled instructors, technical schools are turning out first-class mechanics.

During the training, candidates not only receive instruction on ground subjects such as theory of flight, aircraft recognition, aero engines, etc., but also experience of at least three hours flying, approaching more closely to service conditions.

Trained originally for Army Co-operation work, Indian pilots had their first operational experience over the difficult flying country of the North-West Frontier. They shared with the R.A.F. the duty of policing tribal territory until the summer of 1941 when they took over the work completely.

On the outbreak of war in 1939 the Indian Air Force Volunteer Reserve, together with a number of R.A.F.V.R. officers resident in India, was formed for the purpose of guarding India's coasts and keeping the shipping lanes open. It did this with conspicuous success until the end of 1942 when it was embodied in the R.I.A.F.

During the Burma campaign in 1942 the R.I.A.F. had its first experience of operations against a major power. No. 1 Squadron earning a special message of congratulation from the Commander-in-Chief, Field-Marshal Lord Wavell. Its commanding officer won the D.F.C. Nos. 3 & 6 Coast Defence Flights also operated with success in Burma.

R.I.A.F. Squadrons.—From November 1943 upto the end of the Burma campaign full use was made, for the first time of R.I.A.F. squadrons in offensive operations. The main weight of the battle effort was felt by the Japanese on the Arakan front. The R.I.A.F. also distinguished itself during the Imphal siege and supported the eventual victorious advance into Burma.

Equipped with Spitfires and Hurricanes, squadrons of the R.I.A.F. were operating continuously on the Burma front. Their particular duties included the attack on enemy troops and supply dumps and lines of communication, tactical and photographic reconnaissance, close support to the army, and fighter and escort work with supply-dropping aircraft.

Besides operating as complete squadrons and units with Eastern Air Command in Burma thousands of ground crews, technicians and airmen of all trades worked with R.A.F. units all over India.

On March 12, 1945 His Majesty the King approved the designation of "Royal" as a prefix to the Indian Air Force in recognition of the work done during the short history of India's own Air Force.

The present strength of the R.I.A.F. is 1 Transport and 7 Fighter Squadrons. Plans are under consideration for the expansion of the R.I.A.F.

Women's Auxiliary Corps (India).—The Women's Auxiliary Corps (India) was formed in April 1942 with the object of releasing men for work in forward areas. British, Indian and Anglo-Indian women undertook a variety of work ranging from staff and administrative appointments to technical work with all three fighting Services. In February 1944, a Naval Wing was formed for personnel serving with the R.I.N. Training of recruits was carried out in three large training centres and officers received their instruction at O.C.T.U., Officers' School and Staff College. Service was entirely voluntary and for the duration of the war or for as long as service was required. The Corps was disbanded on 1st April 1947.

WAR PRODUCTION

The development of equipment position was phenomenal, and the war production capacity was so far developed that it was able to supply the sub-continent's armies with a large part of their weapons and equipment, as well as contingents overseas. Upto V-J day, approximately 2,48,000 chassis of nearly 30 different types were assembled in 5 plants in the sub-continent. About 2,02,000 bodies of 50 different types were built mainly with Indian or

Pakistani material and Indian or Pakistani labour. Over 7,000 armoured bodies were produced in various railway workshops. Progress was made in the manufacture of armoured plate and armoured fighting vehicles were satisfactorily produced. Various new types of small arms ammunition and artillery ammunition came from the ordnance factories and about 620 million rounds of small arms ammunition were repacked for U.S. Army Forces during the 5th and 6th years of war.

Probably the greatest advances were made in the supply of clothing and equipment. In the first four years of the war, the output of tailored items rose to a peak of over 12 million items. Nearly 49 million boots, chappals and canvas rubber shoes were produced up to the end of 1945. A considerable quantity of these were sent overseas both to the Middle East and other theatres of war. Over 13¼ million blankets, 48 million pairs of woollen socks, 28¼ million cotton shirts, 12¼ million pairs of drill trousers were produced. The production of rifles during the war was nearly 574,000. Over 80 items of ammunitions including light machine-guns, bayonets, guns and carriages were produced in Indian and Pakistani factories. Among other important items of armament stores which were produced in quantity was Bren gun tripods, anti-aircraft, gun sights, binoculars, stereoscopes, clinometers and telescopes. Mention must also be made of the production of trawlers and assault crafts which played a great part during the Burma campaign.

INDIAN OFFICERS PAY

The Post-war Pay Committee constituted by the Government of India to formulate the new Pay Code of officers and men of the Indian Armed Forces completed its task early in June 1947. The rates of pay which apply to officers and men in the three Services from July 1, 1947, are designed to provide a level of remuneration comparable with those granted to the Civil Services of the Government of India. The new rates of pay represent a very substantial simplification of the old pay structure. Officers receive the same dearness allowance as civilian officers, but other ranks, who are housed, fed and clothed at the public expense will get half the civil rates. The numerous allowances for special duties which was the feature of the old Pay Code have been abolished, as the new pay covers the full range of duties of officers and other ranks. The general effect of the new Pay Code is to improve the remuneration of Other Ranks and to reduce that of senior officers.

INDIAN TERRITORIAL FORCE

The Territorial Force was one of the several aspects of the Indianisation of the military services. The force was intended to cater, amongst other things, for the military aspirations of those classes of the population to whom military service was not hitherto been a hereditary profession. It was intended, at the same time, to be a second line to and a source of reinforcement for the regular Indian army. Membership of the force for this latter reason carried with it a liability for something more than purely local service or home defence. It involved in certain circumstances, service overseas. The force was the direct successor of the Indian section of the Indian Defence Force created during the Great War of 1914-18. It was modelled on the old militia in England. The essence of its scheme of organisation consisted in training men by means of annual embodiment for a short period in successive years. By this means Indian Territorial Force units were given sufficient preliminary training in peace to enable them, after a comparatively short period of intensive training, to take their place by the side of regular units in war.

THE STATES FORCES

The States Forces, formerly designated "Imperial Service Troops," consist of the military forces raised and maintained by the Rulers of Indian States at their own expense and for State service. It has been the custom in emergency for State troops to be lent to the Government of India, and the Government of India have on many occasions received military assistance of great value from this source. But the rendering of such aid is entirely at the discretion of the Ruling Princes and Chiefs.

The war year witnessed an enormous expansion in the State Forces. In August 1945, there were 130,000 officers and men serving in the States Forces, of whom 44,000 were serving outside the States in theatres of war and (what was then) British India.

The Government of India appointed in November 1947 a Military Adviser, Indian States Forces, to co-ordinate the training and administration of these forces.

OFFICERS

Before the war there were three main categories of officers in the Indian Army: those holding the King's Commission, those holding Indian Commissions and those holding the Viceroy's Commission. The latter are all Indians, apart from the Gurkha officers of Gurkha battalions, and have a limited status and power of command, both of which are regulated by the Indian Army Act and the rules made thereunder.

King's Commissioned Officers were obtained either from the Military Colleges or the Universities in England. Up till 1932 these commissions were open to either Englishmen or Indians.

In 1932 the Indian Military Academy at Dehra Dun was opened to undertake the training of Indian Officers. They were granted Indian Commissions and have identical powers to those of King's Commissioned Officers within the Indian Army.

During the late war, no regular commissions were granted except to those cadets who were already under training when the war began. Instead, Emergency Commissions were given to British candidates and Indian Emergency Commissions to Indians. The Commissions had the same status as Regular Commissions but were limited to the duration of the war and a period thereafter. Grants of Emergency Commission ceased in July 1946.

Now that the war has ended, Regular Commissions have been re-started. The sources of supply are the Indian Military Academy and selected officers from among those holding Emergency Commissions. It is also expected that the Universities will provide some candidates for Regular Commissions. Only subjects of Indian nationality are eligible for these commissions.

Plans are under way for the establishment of a National War Academy at Poona, at which all future officers of the three services will be trained.

As an interim measure a limited number of Short Term Commissions are being given to suitable candidates most of whom will be Indian Emergency Commissions Officers. These Commissions are granted for a limited period and are designed to fill the gap between demobilisation of the war commissioned officers and the re-establishment of a full intake of Regular officers from the Military Academy.

Opportunities for promotion to officer status from the ranks continue to be available.

In conformity with the policy of nationalising the service, which assumed prominence in 1946 no more commissions were granted to British officers and those holding regular commissions, with less than 20 years, service on 1st January 1947, were given the chance of transferring to British service.

The King's Indian Orderly Officers.—Since the earliest times Indian officers have been a link between Indian ranks and British officers. These Indian officers hold Viceroy's Commissions, as distinct from the King's Commissions held by British officers and Dehra Dun graduates. They are for the greater part promoted from the ranks. The highest rank is subedar-major in the infantry and artillery regiments, risaldar-major in the cavalry.

The first Indian officers associated with the Sovereign were in command of detachments sent to London for Queen Victoria's Jubilees in 1887 and 1897. It was then realised that some personal link should be maintained between the King-Emperor and the Indian Army.

On January 1st, 1903, the Viceroy issued a General Order announcing certain favours and concessions to the Army in India in connection with Edward VII's Coronation, among them the annual appointment of Indian Orderly Officers.

Six Indian Orderly Officers were appointed in 1903, a number reduced to four in 1904. These four were appointed each year for the London season, from April to August. They attended the King at Courts and Levees, standing near the throne, at all reviews and at such ceremonies as Trooping the Colour. Upon these occasions they appeared in full dress. For garden parties and similar engagements they were dressed in grey coats of knee length.

For their services in London, the Orderly Officers receive the Royal Victorian Medal, a souvenir of their supreme honour.

Reserve of Officers.—Previous to the War of 1914-18 there existed what was called the Indian Army Reserve of Officers, a body of trained officers available to replace casualties in the Indian Army. The First World War proved that for many reasons this reserve did not fully meet requirements and in 1922 the Army in India Reserve of Officers was constituted.

The revised Regulations for the A. I. R. O. published in 1934 provide that the following gentlemen may be granted commissions in the Reserve:—

(1) Ex-Officers who, having held King's commission in any Branch of His Majesty's British, Indian or Dominion Forces, either naval, military (including the Auxiliary Force (India) and Indian Territorial Force) Marine or Air, have retired therefrom and are no longer liable for service therein, and who are resident in India, Burma or Ceylon.

(2) Civil officials of gazetted status serving under the Government of India or a local Government, whose services can be spared in the event of general mobilization being ordered.

(3) Private gentlemen who are resident in India, Burma or Ceylon.

Ceylon Government officials are not eligible for appointment to the Army in India Reserve of Officers.

NATIONAL CADET CORPS

Far-reaching proposals for the formation of a 200,000-strong National Cadet Corps and a Territorial Force were announced by India's Defence Minister, Sardar Baldev Singh, in the Central Legislature on March 13, 1948. He said that one of the steps by which Government propose to impart military training to Indian youth was to implement immediately the report of the National Cadet Corps Committee.

This committee had been appointed by the Government of India in July, 1946, under the chairmanship of Pandit Hirday Nath Kunzru, the veteran Liberal leader.

Simultaneously with the Defence Minister's announcement the 44-page report of the Kunzru Committee was released to the press.

To begin with the corps would consist of a senior division with 32,500 members, a junior division with 135,000 members and a girls' division.

When the corps is raised, the present University Officers' Training Corps and the Indian Air Training Corps would cease to exist and be re-formed as the Senior Division, Army Wing, and the Senior Division Air Force Wing. A Senior Division, Naval Wing, would also be raised.

It has been decided that the enrolment in the National Cadet Corps should be entirely voluntary, and without any liability for service in the armed forces—"Government being confident that the enthusiasm of youth in general for serving the country is sufficient guarantee that the response in colleges and schools will be satisfactory."

The Government of India have also accepted the suggestion for the formation of a National Territorial Force "in principle. A detailed scheme was being drawn up, and when completed would be examined by the Cabinet."

Bodies for armoured fighting vehicles mine-sweeping trawlers, new types of weapons and ammunition and various items of personal and other equipment were produced. It was during this war that the sub-continent began to make a number of special steels. Machine tools were also made and supplied in large quantities. Her ancient silk Industry was revived to meet the demands for parachutes. Rubber production was increased and went hand in hand with developments in the use of substitutes and planting of new and novel rubber yielding plants. During the war, the sub-continent made notable gains in munition production. In 1943-44, gun and mortar ammunition increased to 35 times the pre-war output, guns and carriages and bayonets 20 times the pre-war quantity and small arms ammunition more than 4 times their pre-war output. Grenades, mines, bombs and pyrotechnic stores, most of which were not made in the sub-continent before the war were now manufactured, and in the last year of war the output steadily increased. A feature of special significance during the war was the manufacture of radar development equipment.

For the 2½ years of the North African war, the sub-continent was responsible for supplying the bulk of stores for the theatre of operations. Allied troops in the Mid-East wore clothes made in India, to a consideration extent, and walked in boots supplied by Indian or Pakistani factories. Nearly 90 per cent of the tents which protected the troops from the torrid heat, the canvas ground sheets which kept away the sands of the deserts from tanks, planes, motors and vehicles and nearly all the timber came from the sub-continent. India and Pakistan sent over 1,500,000 tons of stores in a steady stream. Other vital supplies to the Mid-East included assault craft, camouflage paints, nets and hemp, medical stores and equipment for the comfort of troops. Important supplies were also sent to Russia.

GALLANTRY AWARDS

The following awards for gallantry were won by the three fighting Services from 3rd Sept. 1939 to 1st April 1947 :—

Gallantry Awards.	R.I.N.	Indian Army.	R.I.A.F.
V.C. ..	..	31	..
G.C. ..	..	9	..
D.S.O. ..	2	275	1
I.O.M. ..	2	365	..
D.S.C. ..	15	..	..
M.C. ..	..	1,457	..
D.F.C. ..	..	..	21
A.F.C. ..	..	..	2
D.C.M. ..	..	4	..
D.S.M. ..	28	..	..
I.D.S.M. ..	10	1,231	..
M.M. ..	..	1,724	..
G.M. ..	..	7	..

Meritorious Service Awards won during this period :—

Gallantry Awards.	R.I.N.	Indian Army.	R.I.A.F.
G.C.B. ..	..	2	..
G.C.S.I. ..	..	1	..
G.C.I.E. ..	..	2	..
K.C.B. ..	..	8	..
K.C.S.I. ..	..	2	..
K.C.I.E. ..	1	8	..
K.B.E. ..	..	2	..
C.B. ..	1	59	..
C.S.I. ..	..	6	..
C.I.E. ..	13	67	..
C.B.E. ..	2	62	..
O.B.E. ..	16	371	2
M.B.E. ..	33	938	7
Knighthood ..	1	1	..
B.E.M. ..	23	134	4
Foreign Decorations ..	..	67	..
Miscellaneous ..	..	1	..

ARMY'S AID TO REFUGEES

Unprecedented disturbances broke out in the Punjab in the weeks following the partition of the country, resulting in large scale movement of population. The Army, whose aid was sought for tackling the problem set up in September, 1947, a Military Evacuation Organisation on which fell the responsibility for rescue and movement of hundreds of thousands of refugees between the two new Dominions. Muslims in East Punjab and non-Muslims in West Punjab were rescued to refuguee camps and later escorted to Pakistan and Indian territories respectively, by road, rail and air. Within six weeks the Organisation had moved 15 lakhs of Muslims to West Punjab and a larger number of non-Muslims from Pakistan to India. Foot convoys, which were the means of movement for the largest number of refugees were provided with military escort all along the route. The refugee trains were also escorted by the Military.

Unprecedented floods in East Punjab in October rendered the refugee routes unserviceable and Army Engineers worked hard and got them going within a week.

Speaking of the effort on the Indian side accommodation to refugees was provided in 56 camps. The Army placed 40,000 tents at the disposal of the provinces. The largest of the camps is the one at Kurukshetra which was organised by the Army. The camp accommodated at one time nearly 300,000 refugees and can normally house 250,000 in separate towns of 50,000 each. At its peak 20 major Indian Army units were employed. The camp has a hospital of its own with up-to-date arrangements for vaccination and innoculation. Accommodation stores such as camp ketties for use in the camp were also made available by the Army.

Field Ambulance, surgicals units and almost all other medical services of the Army were provided for the use of refugees. Mass inoculations and vaccinations were carried out and ambulance cars accompanied foot convoys. The Army made available 1,300 beds for refugees in the Combined Military Hospitals in Jullundur, Ambala and Delhi. Medical officers were detailed for work in East Punjab. Medical stores and equipment amounting to about 250 tons were supplied to the refugees.

The Army placed at the disposal of the Military Evacuation Organisation six Transport Companies and supervisory staff for five civilian transport companies. The M.E.O. used in one month alone over 1,000,000 gallons of petrol in the East Punjab area. At the peak period about 600,000 gallons of aviation spirit a month were used.

INDIAN SAILORS', SOLDIERS' AND AIRMEN'S BOARD

These Boards are probably the most important and valuable non-official institutions connected with the Armed Forces. They were constituted in 1919, in place of the Central Recruiting Board, the purpose of which was fulfilled with the end of the First World War. The object was at the outset to deal with a number of post-war problems—the finding of employment for soldiers released from the colours, the relief of the dependents of those who had lost their lives in the war and of those who were incapacitated for further service, the education of soldiers' children and the safeguarding of the general interests of soldiers and their dependents. As years passed, the Board had gradually to adjust itself to normal peace conditions and it was decided to maintain it permanently for a series of duties which have from time to time expanded and developed.

The Board on 31 December 1922 had the residue of the war fund, known as the Imperial Indian War Relief Fund, handed over to it. This formed the nucleus of its finances. The latter have since been husbanded with great care. The face value of the securities constituting the fund amounted on 31 March 1941 to Rs. 17,11,200, bearing an annual interest of Rs. 59,892.

The Board has its seat at New Delhi and co-ordinates the activities of Provincial Boards which exist in each province. Under the control of these Provincial Boards there exists throughout the country a network of District Boards reinforced in some cases by Tehsil or Taluka Committees and other kindred bodies.

Meetings of Indian S.S. and A. Board are normally held twice a year. The composition of the Board is as follows :

President : The Hon'ble the Minister for Defence.

Members : the Hon'ble the Ministers for Finance, Education and Labour, the Secretary, Ministry of Defence, the Secretary, Ministry for States, the Director-General of Health Services, the Adjutant-General in India, the Flag Officer Commanding, R.I.N., the Financial Adviser, Defence and Supply, Mrs. Hannah Sen (unofficial) and the Air Marshal Commanding, R.I.A.F. An Under-Secretary of the Defence Ministry is the Secretary of the Board.

The Provincial Board is at the head of the provincial organisation and is normally located at the capital of the province. The Patron of the Board is H.E. the Governor and the President is the Premier (or a Minister nominated by the Patron). The Secretary is a civilian officer in the Provincial Secretariat.

The working unit is the District S. O. S. and A Board, normally located adjacent to the Deputy Commissioner's or the Collector's office. These Boards are established in all districts from which recruits have been obtained in sufficient numbers. The President of the Board is the Collector or the Deputy Commissioner. Each Board has a paid Secretary, usually an ex-V.C.O.

In the more heavily-recruited districts, Tehsil or Zail Sub-committees are formed with the Tehsildar, Zaildar or Mamlatdar as President and an honorary Secretary, where necessary. These sub-committees are represented on the District S.S. and A.

In the Indian States also, there are Boards corresponding to the provincial and district S.S. and A Boards.

In May 1940, Army Headquarters appointed regimental officers as whole-time Deputy Military Vice-Presidents with the express object of frequently touring areas covered by a fixed number of District Soldiers' Boards. Three such officers were appointed for the Punjab and the North-West Frontier Province. These were subsequently replaced by Civil Liaison Officers.

From 79 District Soldiers' Boards in British India when war broke out, the number has risen to 166, besides 36 State Soldiers' Boards.

OBJECTS

The following are the objects and duties of the District Soldiers' Boards :—

(*a*) Constantly to endeavour to promote and maintain a feeling of good-will between the civilian and military classes ;

(*b*) To give all possible assistance to the President of the Board in his capacity as head of the district in all administrative matters connected with the ex-soldier or his family ;

(*c*) To demonstrate the benefit of and so promote the desire for mutual co-operation between ex-soldiers and civilian officials ;

(*d*) To represent and explain to the civil authorities all matters of particular moment to ex-soldiers that require the attention of the local administration ;

(*e*) Generally to watch over the welfare of the ex-soldier and his family, and the interests of serving soldiers absent with their units.

As regards item (*e*), quoted above, the function of the Board and corresponding organisations cover a wide range. Their main tasks are enumerated below :—

(*a*) To ascertain and intimate the whereabouts of an absent soldier to his dependents and to communicate to him news of all important matters affecting his family's welfare.

INDIA IN GREAT WAR I

In a despatch by the Commander-in-Chief published in July, 1919, the whole operations of the Indian Army during the war were reviewed. The following figures show the extent of India's contribution in terms of men. On the outbreak of war, the combatant strength of the Indian Army, including reservists, was 194,000 Indian ranks; enlistments during the war for all branches of the service amounted to 791,000, making a total combatant contribution of 985,000. Of this number, 552,000 were sent overseas. As regards non-combatants, the pre-war strength was 45,000; an additional 427,000 were enrolled during the war and 391,000 were sent overseas. The total contribution of Indian personnel has thus been 1,457,000, of whom 943,000 have served overseas. Casualties amounted to 106,594, which include 36,696 deaths from all causes. The number of animals sent overseas was 175,000.

IN GREAT WAR II

The sub-continent's magnificent contribution in the late war was both substantial and valuable. Units of the R.I.A.S.C. went to France in 1939 and gained particular praise for their courage and bravery in adversity. Indian formations were in action in Syria, Iraq, Iran, British and Italian Somaliland, the Sudan, Eritrea, Hong Kong, Borneo, Malaya and Burma and Italy. The total of her fighting forces reached the peak strength of 2.25 million. The Indian Army, won more than 7,000 awards including 31 Victoria Crosses—an Empire record surpassed only by the United Kingdom.

Africa.—Here in 1940, assembled an Allied army of which the Fourth and Fifth Indian Divisions were destined to play a leading role.

Against Marshal Graziani's Libyan army of more than 300,000 men, this Allied force under the command of Field-Marshal Wavell marched into the Western Desert. In the great clash at Nibelwa they captured the Italian camp, thousands of prisoners and vast quantities of stores. Then came the Italian disaster at Sidi Barrani where, in December, 1940, 20,000 Italians capitulated and Wavell's men swept on to Sollum, Bardia, Tobruk, Derna and Benghazi.

In the meanwhile the Fifth Indian Division was busy with the Italians in East Africa. Early in 1941 this division drove the enemy from Gallabat, Gedaref and Butana Bridge and then, with the Fourth, continued the pursuit deep into Eritrea.

Victories at Barentu and Ad Teclesan paved the way for the triumph at Keren where, after two weeks of bitter fighting, the Italians hoisted the white flag. The Fifth went on to Asmara. Massawa fell and in May, 1941, the Viceroy of Abyssinia surrendered at Amba Alagi.

Back again to the Western Desert went the Fourth and Fifth in June to meet a new menace —Rommel's panzers. Under the command of Field-Marshal Sir Claude Auchinleck Indian forces fought hard but were slowly pushed back to Mersa Matruh. Benghazi was cut off and Tobruk fell.

Many weary months of disappointment followed but at El Alamein in June, 1942, came the turn of the tide. In this, the Fifth's last action before leaving for Iran *en route* to India, the division, on the Ruweisat Ridge, captured about 2,000 prisoners. In October the Allies passed to the offensive at El Alamein. The avalanche had started to come to a halt only on the other side of Africa.

The Germans were rolled back from Egypt, then across Cyrenaica and towards Tripolitania. The new year came and still the retreat continued at the Mareth Line, the enemy's defences crumbled and he retreated still further west. There followed the Fourth's brilliant action in the Wadi Akarit area and the pursuit went on.

Sfax was by-passed, Sousse was occupied in the middle of April, 1943, and at Garci the Germans turned once more to fight—and lost. Soon the Eighth Army linked up with the British First Army and together they burst open the gates of Tunis in May. The Fourth Indian Division played a prominent part in this final action and—a fitting climax to the whole campaign—Gen. Von Arnim, who had taken over from Rommel as commander of Axis forces in Africa, was compelled to surrender to the famous Indian formation.

ITALIAN CAMPAIGN

In the liberation of Europe, Indian troops played a worthy part. By their exploits in Italy they proved to the world that the valour of India's arms was second to none. Three famous Indian divisions were concerned in the hard-fought campaign that ended in the capitulation of the Germans.

The Eighth Indian Division came into the line in October, 1943. Before the end of that year it had crossed three rivers—the Biferno, Trigno and Sangro—in the face of severe opposition and after breaking the German winter line, got past the Moro river. The Fourth Indian Division entered the arena in December, 1943, and after a short spell on the Orsogna and Maiella sectors arrived on the Cassino front in February, 1944. Spearheading the American Fifth Army's offensives against Cassino the division fought one of the fiercest battles of the war. In April, 1944, the third of the trio, the Tenth Indian Division took up positions on the Adriatic sector.

When the great offensive against Cassino started in May, 1944, the Eighth was assigned the most vital role—that of crossing the Rapido river, south of the town. After a tremendous effort our forces outflanked Cassino and the enemy stronghold fell. After the capture of Rome the Tenth moved to the Perugia-Tiber area, the Eighth took over the Certaldo-Poggibonsi sector and the Fourth, after clearing Pescara and Chieti, began a drive along the Upper Tiber and Arno valleys in conjunction with the 10th.

The Eighth crossed the Arno river, entered Florence and fought its way to the Sieve valley, the Tenth pushed along the upper reaches of the Tiber and the Fourth moved across to the Adriatic to spearhead the Eighth Army's all-out attack on the Gothic Line, striking the first blow at these redoubtable positions on

the Foglia river, capturing Monte Calvo and fighting north, forced a bridgehead through the Marano to enter the citadel of San Marino.

UNCONDITIONAL SURRENDER

In the breaking of the Gothic Line the remaining two Indian divisions also played a decisive part. In the 5th Army sector the Eighth Division went through Mount Giovi, crossed the Sieve, captured Mount Verucka and occupied the fortress feature of Femina Morta. While in the mountains overlooking Bologna the Eighth was called upon to help repel the German offensive in the Serchio valley and earned the praise of the Commanding General for their stout-hearted defence.

Meanwhile the Tenth kept moving against stubborn resistance and, going past Pietrolunga and Alpe di Catania, captured M. Filleto. Prior to taking part in the final phases of the campaign the division also captured Farneto.

Early in April, 1945, the Eighth Army crossed the Santerno. By the middle of the month they had smashed through the Argenta gap. Bologna was liberated on April 21 and major elements struck north after crossing the Po. By the end of April the Eighth Army was consolidating on the Piave. Twenty-five German divisions had been smashed and prisoners totalled 120,000.

On the afternoon of April 29, the enemy estimated at nearly one million under the command of Gen. Vietinghoff surrendered unconditionally. The Italian campaign was over.

Victory in Burma.—The virtual end of the Burma campaign was heralded by the capture of Rangoon in May, 1945.

The road to victory was no easy one. In the spring of 1942 the Indian troops faced annihilation when the Jap hordes swarmed into Burma and forced them, fighting every foot of the way, into Assam itself where they turned at bay and let the enemy's effort spend itself.

There followed weary months of relentless patrolling during which our little army used every dodge to keep the enemy guessing until we had built up sufficient strength to strike back. Early in 1943 came our counter-blow when the first Wingate expedition penetrated into Burma as far as the Irrawaddy.

In the meantime great preparations were afoot in India for the coming offensive. In March, 1943, the blow fell and Wingate's men struck once again—this time by air—in the heart of enemy occupied territory. Simultaneously the Japs launched what proved to be their last serious attempts to invade the sub-continent when they attacked the Seventh Indian Division in the Arakan.

At the Ngakyedauk Pass the Seventh first held the Japs and then, with the aid of the Fifth Indian Division, who came to their help, systematically isolated and cut up the enemy. Foiled in the south the Japs turned north and struck at the Dimapur road but the gallant defence of Kohima proved to be the turning point of the campaign and the enemy began a retreat which ended in his final defeat.

The year 1944 was one of further victories—Myitkyina, Mogaung, Tamu, Sittang, Tiddim, Fort White, Kalemyo.

By the end of 1944 a desperate situation faced the Japs. The 14th Army had crossed the Chindwin and was advancing into Central Burma towards Mandalay.

It was in this phase that Gen. Sir William J. Slim, then commanding 14th Army, sent an entire corps secretly on a 320 miles march down the Gangaw valley to approach Mandalay from the rear. Meiktila was captured, and, unable to cope with this double threat, the enemy were forced to surrender Mandalay to the 19th Indian Division on March 20. The pursuit continued on to Yenanguaung, Toungoo, Prome and Pegu.

AMPHIBIOUS ASSAULTS

Meanwhile, seven major amphibious assaults, Myebon, Akyab, Ponnagyun, Ramree Island, Leptan, Taungup and Ru-Ywa, had carried Fifteenth Indian Corps far down the Arakan coast.

Finally an amphibious assault was mounted against Rangoon in conjunction with 14th Army's rapid approach from the North. The 26th Indian Division had left Ramree Island and sailed to the Gulf of Martaban. The advance on Rangoon developed into a race between this force and their comrades in arms pushing South on the capital from Pegu. The latter lost by a narrow margin for, with the dropping of para-troops South of Rangoon, assault craft brought 26th Indian Division up the Rangoon river to the greatest prize of the war.

Rangoon was occupied on May 3rd and the link-up between our two forces took place a fortnight later.

Thousands of Japs, stranded by our rapid push towards the capital, made desperate attempts to cross the Sittang and outwit our encircling forces. A few did escape, but without supplies, ill-armed and in unfriendly country they perished in the fever-laden swamps and jungles in which they sought refuge. More than 10,000 of the enemy were killed in this phase, the last of the war.

The debacle of the Japanese was complete. Indian Army troops fanned out over South-East Asia, occupying territory that had awaited liberation for more than three years.

The end of the long road came at Singapore on September 12, 1945, when the entire Japanese Expeditionary Forces, Southern Regions, were formally surrendered to Admiral Lord Louis Mountbatten, Supreme Allied Commander, South-East Asia, by Field-Marshal Count Terauchi.

WAR SUPPLIES

The sub-continent's contribution in the economic sphere has been no less important. The utmost use was made of the sub-continent's agricultural, industrial and mineral resources. The value of war orders handled by the Supply Department alone came to over Rs. 841 crores from 1939 to end of 1945

(b) To procure legal advice in the case of a law-suit against an absent soldier where there is no male member of his family capable of protecting his interests;

(c) To assist an absent soldier's family in the event of disease or famine;

(d) To assist ex-soldiers and their dependants in securing medals, pensions, arrears of pay, etc.;

(e) To investigate cases of ex-soldiers invalided out of the Indian Army for chronic diseases such as tuberculosis, leprosy, diabetes, etc., and to report them to the Provincial Branch of the Indian Red Cross Society for medical assistance;

(f) To investigate applications for relief from the various military charitable funds.

Another leading development has been the institution of welfare workers and Sevadarins. They are in fact the touring representatives of Boards, the latter being particularly concerned with investigation of the troubles of the serving man's womenfolk.

Boards, which have become the recognised centre to which the man comes when in trouble, have also attached to them information bureaux which are linked to the regional exchange organisation set up by the Labour Deptt. to find employment for ex-Servicemen.

ROYAL INDIAN NAVY

The Royal Indian Navy traces its origin so far back as 1612 when the East India Company stationed at Surat found that it was necessary to provide themselves with armed vessels to protect their commerce and settlements from the Dutch or the Portuguese and from the pirates who infested the Indian coasts. The first two ships, the Dragon and Hoseander, were despatched from England in 1612 under Captain Best, and since those days under slightly varying titles and of various strengths the Government in India have always maintained a sea service.

The periods and titles have been as follows:—

Hon. E. I. Co.'s Marine	..	1612–1686
Bombay	..	1686–1830
Indian Navy ..	..	1830–1863
Bombay Marine ..	..	1863–1877
H.M. Indian Marine	..	1877–1892
Royal Indian Marine	..	1892–1934
Royal Indian Navy	..	1934

India's Naval Force has always been closely connected with Bombay, and in 1668 when the E. India Company took over Bombay, Captain Young of the Marine was appointed Deputy Governor. From then until 1877, the Marine was under the Government of Bombay, and although from that date all the Marine Establishments were amalgamated into an Imperial Marine under the Government of India, Bombay continued to be the principal centre of Indian Naval Training and to a large extent of administration. In the winter of 1940-41, the Naval Headquarters moved to New Delhi.

During the war 1914-1918, Royal Indian Marine Officers were employed on many and various duties. Royal Indian Marine Ships served as Auxiliary Cruisers. Officers also served in the Royal Navy.

RE-ORGANISATION SCHEMES

After the war the Esher Committee, who came to India to report on the Indian Armed Forces, strongly recommended that the R.I.M. should be re-organised as a combatant service.

But the times were hard; money was scarce. The report of the Inchcape Committee necessitated drastic retrenchments, and the working of the Montagu-Chelmsford reforms resulted in the Local Governments having to defray the cost of the work of R.I.M. Ships on their various stations, on light-house duties, transport work, carrying of officials, etc.

Happily for the Service, however, the Government of India in 1925 appointed a Departmental Committee under the Chairmanship of General Lord Rawlinson. This Committee recommended that the R.I.M. should be re-organised as a purely combatant Naval Service with the title of Royal Indian Navy, in the first instance to be commanded by a Rear Admiral on the active list in the Royal Navy. The scheme was accepted by the H.M.G. and the Government of India.

Accordingly on 2nd October 1934, the Royal Indian Navy was inaugurated, the historic ceremony taking place in Bombay.

The Chatfield Committee's Report, presented in 1939, made far-reaching recommendations in regard to the Royal Indian Navy.

EXPANSION DURING THE WAR

Shortly before the War, permission was given for the establishment of the Royal Indian Naval Reserve and the Royal Indian Naval Volunteer Reserve and during the war the increase in the number of ships, training establishments and personnel was most rapid. At the end of the hostilities the Royal Indian Navy Fleet comprised 6 modern sloops, 3 old sloops, 4 corvettes, 16 minesweepers (Bangors/Bathurst class), 16 trawlers, 4 gunboats, 6 motor minesweepers, one coastal force depot ship, one landing ship, infantry, one salvage vessel, 22 auxiliary M/S and patrol vessels, 27 fairmile M.L's, 23 harbour defence M.L's and 21 flotillas of minor landing craft and L.C.T's.

Four frigates namely "SHAMSHER", "DHANUSH", "TIR" and "KUKRI" were acquired from the Royal Navy after the hostilities. During the war, the personnel in the Service increased to 3,031 officers and 27,651 ratings. Normally the ratings in the Service

are recruited as boys and they sign an engagement for 12 years. During the War as a result of expansion, a large number of ratings were recruited for active service for 5 years. These ratings were trained in newly set up establishments near Bombay. Officers of the R.I.N. are generally trained in U.K. but during the hostilities, officers of the Naval and Volunteer Reserve, were trained in a Shore Establishment called H.M.I.S. FEROZE. Officers in the Executive Branch were given short but intensive courses in seamanship, gunnery, signals and other subjects. About 160 of these Reserve Officers have now been granted regular and short service commissions.

ACTIVITIES DURING WAR

Throughout the war R.I.N. ships were engaged in operations and in November 1942 one of the R.M. Indian ships, "*Bengal*", won world-wide renown by engaging in the Indian Ocean two Japanese raiders which were far more heavily armed and were ten times her size. One of the raiders was sunk, the other made off, and H.M.I.S. BENGAL reached port safely. In the early months of 1943 vessels of th R.I.N.'s Coastal Forces did good work in support of our troops on the Arakan Coast. Our vessels intercepted Japanese coastal craft conveying troops and supplies and took part in the raid on Myebon.

In 1944, ships of the Royal Indian Navy again co-operated with the land forces engaging the enemy on the Arakan Front. Support was afforded by bombarding enemy shore positions and by harassing the enemy's water-born supplies. In four months these ships steamed more than 30,000 operational miles on 43 separate missions in enemy waters.

The Royal Indian Navy was well represented in the eight amphibious operations by which the 15th Indian Corps advanced down the Arakan Coast from the Indian frontier to Rangoon in the spring of 1945.

In Burma.—Men of the R.I.N. Landing Craft Wing, who had been trained secretly for more than two years, established their reputation on the beaches of Akyab, Myebon, Kyaukpyu, Kangaw, Ru-Ywa and Letpan. They formed the spearhead of each of these six assaults, carrying troops to the beaches and keeping them supplied during critical phases of the ensuing battles.

The Indian sloops NARBADA, JUMNA, KISTNA and CAUVERY fired tens of thousands of shells in support of the Army's coastal advance in Arakan, penetrating up inland waters as far as thirty miles from the open sea to increase the effective range of their bombardments.

A flotilla of nine fleet mine-sweepers of the Royal Indian Navy cleared the approaches to the Rangoon River estuary before the arrival of the invasion convoy, whose escort included two Indian sloops—SUTLEJ and CAUVERY.

The period, July to December 1945, brought to the R.I.N. the opportunity of operating in waters from Rangoon to Hongkong. R.I.N. fleet mine-sweepers played a prominent part in the operations around Malaya and two sloops were serving with the British Pacific Fleet.

Throughout July 1945, H.M.I. ships NARBADA, GODAVARI and KISTNA maintained patrols in the Mergui Archipelago, the Forrest Straits, and off the Tavoy and Tennasserim coasts. Many of the islands in the Archipelago were visited and landing parties went ashore to interrogate the inhabitants.

Malay Pacific.—In July H.M.I.S. PUNJAB and H.M.I.S. DECCAN took part as daniayers to the 7th (R.N.) mine-sweeping flotilla in the mine-sweeping operations off Phuket Island, at the northern end of the Malacca Straits. The two ships assisted in fighting the fire in H.M.S. VESTAL after a suicide bomber had crashed on her deck and H.M.I.S. PUNJAB later rescued the survivors. Both the ships were complimented by the Captain, East Indies Escort Forces, for their work in this operation.

H.M.I. sloops NARBADA, GODAVARI and KISTNA, the fleet mine-sweepers of the 37th Mine-sweeping flotilla, H.M.I.S. BARRACUDA and the 56th M.L. flotilla took part in the general move eastwards to Malaya and the Netherlands East Indies. H.M.I.S. KISTNA arrived at Penang on 1st September 1945 in company with the 3rd Battle Squadron, and remained there giving assistance to the occupation forces till the middle of the month.

The 37th mine-sweeping flotilla played a prominent part in company with the 6th and 7th mine-sweeping flotillas in operations to clear British and Japanese mine-fields in the Singapore Roads and the Malacca Straits, and visited most of the ports in southern Malaya. H.M.I.S. BENGAL arrived in Singapore on 3rd September in company with the cruiser H.M.S. CLEOPATRA (wearing the flag of the Commander-in-Chief, East Indies Station) and the 6th mine-sweeping flotilla, these being the first British warships to return to Singapore.

On 26th September 1945 H.M.I.S. NARBADA arrived at Port Blair with the Naval Force Commander for the re-occupation of the Andamans and Nicobar islands. The official surrender of the Japanese Forces in these islands was made to this Force.

H.M.I. Ships GODAVARI, CAUVERY and SUTLEJ operated till recently with the British Pacific Fleet since the recapture of Singapore and steamed many miles in Far Eastern Waters on the various duties required of occupation forces.

MUTINY

On 18th Feb. 1946 mutiny broke out in H.M. I.S. TALWAR spreading to other ships and Naval establishments in Bombay. After a day or two, ships in other ports also joined. There was an exchange of fire between the mutineers in Castle Barracks, Bombay, and the Military guards. In Karachi H.M.I.S. HINDUSTAN also exchanged fire with the Military. The mutineers however surrendered on 23rd February. The Government of India appointed a Committee to inquire into the causes and origin of the mutiny.

The Committee's report revealed the existence of certain grievances. And the Government in their conclusion said that the lessons of the

mutiny were two: officers must consider the welfare of the men before their own comfort or safety and, two too rapid an expansion without proper provision for the training of officers was unwise and the aim of the service in peace must be to prepare for service in war.

Among the other points which the committee made were the following: 1. casualties 9 officers and 1 rating killed; 41 ratings including 2 B. R.O's and one officer wounded, 2. Politics and political influence had great effect in unsettling the men's minds, 3. Extremely rosy picture was held out by recruiting authorities 4. There was lack of contact between officers and men and a feeling of discrimination, 5. There was lack of patient and sympathetic attitude to genuine grievances, 6. Ratings were denied certain concessions and privileges enjoyed by ratings of the Royal Navy, 7. Indian officers were regarded as inferiors.

PARTITION OF R.I.N.

On 14th August, 1947 before the partition, the R.I.N. had six modern sloops, four frigates, 16 fleet mine-sweepers and other mine craft beside 997 Officers and 10,061 ratings. As a result of partition the sloops NARBADA, GODAVARI, the frigates SHAMSHER and DHANUSH, four mine-sweepers and some minor craft were allocated to Pakistan. In addition to this the R.I.N. lost three of its shore establishments to Pakistan. H.M.I.S. DILAWAR, BAHADUR and HIMALAYA. The first two are boys' training establishments and the last one a gunnery and radar school. The following has been allocated to India:

SLOOPS:—SUTLEJ, JAMNA, KISTNA, CAUVERY.

FRIGATES:—TIR, KUKRI.

MINE-SWEEPERS:—ORISSA, DECCAN, BIHAR, KUMAON, KHYBER, ROHILKHAND, CARNATIC, RAJPUTANA, KONKAN, BOMBAY, BENGAL, MADRAS.

CORVETTES:—ASSAM.

SURVEY VESSEL:—INVESTIGATOR

TRAWLERS:—NASIK, CALCUTTA, COCHIN, AMRITSAR.

MOTOR MINE-SWEEPERS.—FOUR IN NUMBER.

CN HARBOUR DEFENCE MOTOR LAUNCHES.—FOUR IN NUMBER.

All existing landing craft.

A new Boy's Training Establishment is being put up at Vizagapatam. Till the 14th August the R.I.N. had the following training establishments for ratings:

(*a*) Communication School.

(*b*) Torpedo and Electrical School.

(*c*) Physical Training School.

(*d*) Seamanship, Damage Control and Disciplinary School.

(*e*) Anti-Submarine School.

(*f*) Cookery School.

The Communication and the Anti-submarine Schools which were at H.M.I.S. TALWAR and H.M.I.S. MACHLIMAR were transferred to Cochin in September, 1946. These schools are now in the process of establishment on a permanent basis at Cochin. The Physical Training Seaman School is now being transferred to Cochin. The original Torpedo and Electrical schools at Jamnagar are also to move to Cochin as soon as the buildings are ready. Plans are also complete for a new Gunnery Navigational and Radar school.

EXPANSION

Now that India and Pakistan are independent the responsibility for defending a long coast line rests on their shoulders. With a view to achieving this object, it is the policy of the National Government of India (and of Pakistan too) to launch a comprehensive programme of expansion of the Navy within the next 10 years and to build up an effective naval task force. Accordingly it is intended to acquire British types of modern war vessels during this period.

The first phase of this expansion is the acquisition of a Leander class Cruiser H.M.S. ACHILLES and three Destroyers. A large number of officers and ratings have already been sent to U.K. for intensive training in R.N. ships and establishments and to man the cruiser which is expected to arrive in India about August 1948. Meanwhile it is the Government's policy to accelerate the pace of recruitment of boys, cadets and special entry officers to meet the commitments of the future.

The Co-operative Movement

THE outstanding feature of the rural economy of India and Pakistan is the appalling poverty of the rural population. The various estimates, official and non-official, that have been made of the income per head of population at various times leaves the matter absolutely in no doubt. The Central Banking Enquiry Committee estimates that the average income of an agriculturist does not work out at a higher figure than Rs. 42 a year. The extent of an average holding, which is about 6 acres, for an agricultural family of 5 persons is too inadequate to maintain it in ordinary comfort even with the low standard of living which is so characteristic of the rural population. Moreover, cultivation is in a large measure exposed to the vagaries of the monsoon. In every 5 years there is but one good year, one bad year and three indifferent years. These unfavourable conditions might be mitigated to some extent by a well conceived policy of irrigation by the States; but so far, of the total cultivated area in the countries, about 16 per cent. only has irrigation facilities from rivers, tanks or wells while the remaining 84 per cent. depends wholly on rainfall. Thus the frequency of failure of crops, owing to drought and floods, frost and pests, coupled with the low vitality and high mortality of the live-stock, render the economic position of the cultivator worse still. The inadequacy of the subsidiary occupation to supplement the slender income from agriculture contributes further to his extreme economic weakness. He has sufficient spare time on his hands to devote himself to subsidiary occupations but he has been exposed to the full blast of the competition of forces from the rest of the world and many of the industries on which he relied in the past have suffered largely from, or been wiped out by the competition of machine-made articles. He is now being drawn steadily into the sphere of influence of markets both national and international and he has neither the organisation nor the credit facilities to help him as in countries like the United States of America or Canada or some of the European countries. Though the recent rise in the prices of agricultural products has benefited him, his position remains essentially weak. In addition to these numerous difficulties, the agriculturist has another serious handicap in that he is largely illiterate. The percentage of literacy in India and Pakistan is still very low being only 13 per cent. and any progress in agriculture is well-nigh impossible without the background of general education. All these factors lead to what is the most outstanding feature of the rural economy of India and Pakistan—the chronic and almost hopeless indebtedness of the cultivator.

RURAL INDEBTEDNESS

The Central Banking Enquiry Committee has estimated that the total rural indebtedness of India and Pakistan is about Rs. 900 crores. Though indebtedness of the agricultural population has continued from old times, it is acknowledged that it has risen considerably during the last century and more especially during the last 50 years. This colossal burden of debt is the root problem which has got to be faced in any attempt towards the economic regeneration of the masses. A peculiar feature of this indebtedness is that the debt which remains unpaid during the lifetime of the cultivator who contracts it passes on as a burden to his heirs, so that many agriculturists start their career with a heavy burden of ancestral debt which they in their turn pass on with some further increase to their successors. Ignorance and improvidence, extravagance and conservatism have further been held as the reasons for the continued growth of this heavy load. A marriage festival in the family tempts the cultivator to launch out into extravagance while funeral ceremonies prove no less costly. All these factors—the uneconomic nature of the agricultural industry, the chronic and heavy indebtedness and illiteracy all form a thoroughly depressing background for the rural economy of India and Pakistan.

GENESIS OF THE MOVEMENT

It is no wonder that under the circumstances detailed above the agriculturist has constant recourse to borrowing and that too not only for any permanent improvement that he may contemplate but for his current agricultural needs as also for periodical unproductive purposes such as weddings and funeral ceremonies. The absence of any banking organisation in the country-side has driven him into the arms of the *sowcar* or the *mahajan* who, while proving a very accommodating person, has acquired a grip on him from which the cultivator has found it impossible to extricate himself. The usurious rates of interest charged, coupled with various devices which increase still further the actual rate of interest, and the numerous services which the *sowcar* performs as a retail tradesman and the buyer of the cultivator's produce, make the *sowcar* the dominant force in the village, reducing the agriculturist to a position of absolute serfdom.

In 1883 the Land Improvements Loans Act was passed and this was followed in the next year by the Agriculturists Loan Act enabling Government to advance loans repayable by easy instalments and at low rates of interest for improvements and also for current agricultural needs. In 1892 Sir Frederick Nicholson submitted a report to the Madras Government on the possibility of introducing land and agricultural banks and the discussion thus initiated by him was continued by Mr. Dupernex of the U.P., in his "Peoples Banks for Northern India". The caste system of the Hindus and the ideas of common brotherhood among the Moslems were evidences of the peoples' natural aptitude for co-operation and the *nidhis* of Southern India furnished a practical proof of this aptitude. In 1901 the Government of the day appointed a committee to consider the question of the establishment of agricultural banks and the report of this committee resulted in the passing of the Co-operative Credit Societies' Act of 1904. The co-operative movement was thus launched in the country on the

25th March, 1904. The Act aimed at encouraging thrift, self-help and co-operation amongst agriculturists, artisans and persons of limited means and the societies that were to be started were intended to be small simple credit societies for small and simple folks with simple needs and requiring small sums only. Knowledge of and confidence in their fellow members which are the keynote of success were ensured by providing that a society should consist of persons residing in the same town or village or group of villages and should be members of the same tribe, class or caste. In order to provide facilities in urban areas for the small man, urban societies were also permitted. The Act introduced the principle of unlimited liability for rural societies. The local Governments were empowered to appoint special officers called Registrars of Co-operative Societies, whose duty it would be to register societies formed under the Act, to get the accounts of such societies audited by a member of their staff and in general to see that the societies worked well. The seed thus sown has grown in the course of 40 years into a fine tree with twigs and branches, spread out in many directions. In spite of several weaknesses in the co-operative movement in the two countries, it is beyond dispute that the movement has been a powerful instrument towards the awakening of the country-side and has led to a steady improvement in various directions of the life of the cultivator. Moreover, the use of the vote, the elective system, the ideals of self-help, self-reliance, compromise, give and take, the habit of working on an organised plan, the rounding of angularities are all great items in the training of a citizen and the co-operative societies have been great schools for political and civic education. Since the launching of the movement in 1904, there have been amendments of the co-operative law and committees and commissions of enquiry to remedy defects and to suggest further lines of action.

GROWTH OF CO-OPERATION

In the first few years of the movement the number of societies grew very slowly but the growth was considerably accelerated from 1910 and the average number of societies from 1910 to 1915 was about 12,000. The pace of growth still further quickened after 1915 and now there are 136,647 agricultural societies and 24,941 non-agricultural ones. Table 1 shows the distribution of these societies by Provinces in India and Pakistan. It will appear from the table that progress in different parts has not been uniform. The Bengals, the Punjabs, the United Provinces, and Madras have the largest number of societies while other major provinces like Bombay, Bihar, the Central Provinces and Assam show smaller figures. The two Punjabs with 26,438 societies come first in the number of societies (89.3) per one lakh inhabitants, while the Bengals which have a larger number of societies than the Punjabs come second in that respect with 68.1. The progress in smaller areas, like Coorg and Ajmer-Merwara, must be regarded as very satisfactory in view of their small population, since the number of societies per one lakh inhabitants works out in their case at 168.0 and 134.0 respectively. It is satisfactory to note that the co-operative movement has spread not only in the Provinces but also in the States; and compared with the total population, Kashmir, Gwalior and Indore lead in this matter though the premier States of Mysore, Baroda, Hyderabad and Travancore have also made considerable progress. Even more instructive are the figures in Table 2. The total number of members of primary societies stands on the 30th of June 1945 at 84 lakhs. Taking the normal family at a little under 5, it is clear, that about 4¼ crores of people in India and Pakistan are being served by this movement. There is no single movement rural or urban fraught with such tremendous possibilities for the uplift of the masses as the co-operative movement and there is no other movement which affects such a large percentage of the population. Bombay leads in the number of members of societies, 45.0 per one thousand inhabitants, the Punjabs come next with 36.8, Madras, the Bengals, and Sind rank thereafter. This shows that the size of societies varies in different Provinces and that Bombay, while having a smaller number of societies, has a larger average of membership per society as compared with the other Provinces of India and Pakistan. Of the smaller areas, Coorg takes a leading place with 159.9 members per one thousand inhabitants, while Travancore has an average of 30.9. Membership is a much better test in many respects of progress than the number of societies and from this point of view, the progress in the two Punjabs, Bombay, Coorg, Travancore and Ajmer-Merwara must be regarded as quite satisfactory. There is also a third aspect of the growth of the movement. The number of societies, or the membership in the societies alone is not an index of the work that is being done and of the benefits which are being conferred by the movement. The societies are predominantly credit organisations or rather small banking institutions and the part that they play can be better appreciated from their working capital than from the number of members. In this direction the marvellous progress so far achieved by the movement should also be noted. From about Rs. 68 lakhs, which was the average up to 1910, the working capital has advanced very rapidly and stands in 1945 at more than Rs. 1,47 crores. It is gratifying to note from Table 3 that this large sum has been derived mostly from non-Government sources. The share capital, reserve fund and deposits from members together constitute about Rs. 62 crores and this is really owned capital, that is to say members' own money. The provincial or central banks and other societies contribute a little less—34 crores while the non-members or the outside public contribute about 42 crores. This latter item shows to a remarkable extent the growth of public confidence in co-operative institutions and speaks well in general of the management of the societies and the very useful purpose they serve in the banking organisation of the country. The distribution of the working capital by Provinces and States gives us a further insight into the progress made in this direction by the co-operative movement in different parts of India and Pakistan. Bombay and Sind lead in this respect with 215 and 918 annas per head of population respectively. The two Punjabs and Madras come next with 112 and 105 while the Bengals fall behind

with 58. Among the smaller areas, Coorg comes out first with 257 annas per head of population while Ajmer-Merwara comes second with 162. Of the States, Baroda takes the first place with 96, while Indore, Mysore and Cochin follow with 81, 69, and 59 respectively. Bombay is easily first in the matter of deposits from members which amount to about 6 crores out of a total working capital of 29 crores and this is one of the best tests of the success of a co-operative society. It is obvious from a glance at the figures in the tables that there has been very rapid progress in the number of societies, in their membership and in the working capital of these societies. Bombay, the Punjabs and Madras lead in many respects, U.P. showing a spurt in recent years. The smaller areas and the States have also achieved considerable progress though the movement there started comparatively later. The agricultural societies predominate in all the Provinces and States while non-agricultural, that is, urban societies show a much slower development. But before we proceed, we must explain the chief component parts of the structure, as it has now been built up.

FINANCIAL STRUCTURE OF THE MOVEMENT

Apart from the comparatively few co-operative societies at present working for non-credit purposes, whether in urban or rural areas, a co-operative society largely means a small bank or a credit institution for providing financial accommodation to its members on a co-operative basis. Of these credit institutions, by far the greater proportion is rural. The rural credit society has, for its main purpose, the financing of the agriculturist and as such it needs funds. The original idea of co-operative credit lies in making available to the needy the surplus of the well-to-do brethren through the medium of the society but in the villages, the well-to-do and the needy rather form distinct groups, the former playing or trying to play the *lowcar*. Thus instead of comprising more or less all sections of the population of the village, a society is very largely made up of the needy section. Even if it was not the slender savings of the well-to-do would not be enough to meet the wants of the needy and a village society cannot, therefore, be self-sufficient, making available the deposits of its well-to-do members as loans for the needy ones. The heavy load of unproductive debt of the average farmer, his habit of investing his savings, if any, in lands and ornaments, his illiteracy and consequent lack of the banking habit, soon made it apparent that rural credit societies could not be expected to raise the required funds in deposits either from members or locally. The question of funds for the working of a rural co-operative society thus becomes a vital question indeed. Central banks have therefore been brought into existence at the district headquarters in order to raise money from towns and make them available to the primary rural societies. Following up the idea further, it has been found necessary to have a provincial bank at the provincial headquarters to serve as a balancing centre for the central banks and to make available larger funds for the primary societies through the central banking institutions. The financial structure of the co-operative movement is thus largely composed of three parts—(*i*) the Agricultural Credit Society, (*ii*) the Central Financing Agencies, and (*iii*) the Provincial Banks. Obviously one more part in the structure seems possible and desirable, namely, an Apex All-India or All-Pakistan Co-operative Bank. So far, however, such a bank has not been started though the provincial banks of India have a Provincial Co-operative Banks' Association.

ARICULTURAL CREDIT SOCIETIES

The success of these societies is closely related to their very peculiar constitution. In an ordinary joint-stock company, a member is liable only to the extent of the value of his share holding and his liability is therefore limited; but in the case of agricultural credit societies, the liability is unlimited, that is to say, members are jointly and severally liable to the creditors of the society for the full amount of the debts incurred by it. Such a liability would never be acceptable to any person, unless he was imbued with the broader vision of brotherhood between members and unless he himself had an active voice in the management of the society and had a more or less full knowledge of the character and antecedents of his fellow members. Co-operative credit is the capitalisation of character and unlimited liability is the great instrument to secure the admission into a society as members of those persons only, who by their character and antecedents deserve to be taken into that brotherhood which imposes such an obligation as unlimited liability on all, so that they either swim or sink together. To secure success, therefore, the proper selection of members is of the utmost importance; and it is unfortunate that this has not in practice been as well kept in view as it should be, in the eager desire to promote the formation of more and yet more societies.

Credit is a blessing only if turned to productive account; if used up for unproductive purposes, it is a curse. It would enrich the producer but it would only impoverish the consumer. The agriculturist needs money for productive purposes such as his current agricultural needs, land improvement, purchase of stock and implements, manures and seeds, as also for unproductive purposes, such as repayment of old debts, weddings and funerals. He thus requires credit not only as a producer but also as a consumer—a producer who hardly makes profits from his industry and a consumer who has no past savings to enable him to tide over a bad period, but who is a perpetual borrower ready to live for today and let tomorrow take care of itself. He is besides ignorant and illiterate, and though sufficiently conversant with the routine of his industry hardly awake to the need or scope for improvements in his methods. In such circumstances, it is imperative for the management of a rural co-operative society very carefully to scrutinise the loan applications and examine the purpose for which loans have been asked and to see that the loan when sanctioned is used for the specific purpose. And yet it is in this very respect that co-operative societies have fallen short in their duty.

THEIR RESOURCES

The funds of an agricultural credit society are raised from entrance fees, share capital, deposits or loans from non-members, loans from the central or provincial banks, loans from Government and the reserve fund. The income from entrance fees and share capital is small compared with the financial requirements of the members. A large source from which funds are derived is deposits and loans. The volume of deposits which a society is able to secure on terms offered by it is an index of the measure of the public confidence it has inspired and the soundness and the stability of its financial position. The ideal placed before these societies is the development of members' deposits to the extent of making the society financially self-sufficient. These deposits by members further serve the purpose of stimulating thrift and saving habit among them, and are, therefore, eminently desirable. Attempts are everywhere made to encourage deposits, but the response has been small, except in the province of Bombay, where they form one-fifth of the total working capital. Loans from central banks therefore furnish the bulk of the working capital of these agricultural credit societies at present.

Low dividends and voluntary services resulting in low cost of management have made it possible to divert a substantial proportion of the profits of these societies to reserve funds, and thereby provide against unforeseen losses, bad debts and losses on the realisation of certain assets such as by investment depreciation. The general practice in regard to the use of the reserve fund in the business of the societies is that it is used as ordinary working capital.

The funds collected by the agricultural societies in India and Pakistan are at present by no means negligible. They aggregate to about 31 crores of rupees. Their financial position as on the 30th of June 1945 stood thus :—

	In thousands of rupees
Share capital	5,20,09
Reserve and other Funds ..	10,08,54
Deposits	2,39,64
Loans	12,84,76
Total Working Capital ..	30,53,03

The figures show that these tiny agricultural societies work with about Rs. 18 crores of their own capital (including members' deposits in this head) as against their outside borrowed capital of about Rs. 13 crores. The owned capital was thus about 58 per cent. of their total working capital, and this proportion is rising steadily as years pass.

CENTRAL FINANCING AGENCIES

The formation of banks in urban areas on co-operative principles, with the sole object of raising funds for advances to societies having been found necessary to place the financial structure of the movement on a sound basis, the Co-operative Act of 1904 was amended in 1912, and the Co-operative Societies Act II of that year provided for the registration of central banks with the sole object of financing societies.

Then on the number of central financing agencies grew rapidly specially in the Punjabs, the Bengals and the United Provinces. The function of these central societies was not only to supply the required capital to the primary societies but also to make the surplus resources of some societies available to other societies suffering from a deficiency of funds and to provide proper guidance to and inspection over them. On 30th June 1945 the number of central banks was 602.

There are four main sources from which a central bank derives its working capital which stood in 1944-45 at 39.8 crores : (*a*) Share capital, (*b*) Reserve, (*c*) Deposits, (*d*) Loans.

The paid-up share capital and reserves of central banks constitute the owned resources of these banks as distinguished from borrowed resources and provide the guarantee fund against which additional funds are raised by them in the shape of deposits or loans. It is usual to prescribe a suitable proportion between the owned and borrowed resources of central banks in each province. The most usual proportion observed in practice between the borrowed and owned resources is 1 to 8. Deposits from members and non-members constitute the bulk of the borrowed capital of central banks. The total amount of deposits held by central banks in the year 1944-45 from individuals and other sources amounted to Rs. 21 crores and from primary societies to Rs. 6.8 crores. Deposits in central banks are mainly of two kinds, *viz.*, savings and fixed. Current deposits are not universal but confined only to selected central banks in selected areas. The principle usually observed by these banks is not to grant loans to societies for periods longer than those for which deposits are available, and where loans for long periods are advanced the periods of deposits are also comparatively long. In addition to funds obtained by deposits, central banks raise loans from outside banks, from other central banks, from the local provincial bank and from Government. The total amount of loans held by the central banks in 1944-45 from outside banks, from other co-operative banks and from the provincial banks was Rs. 3.3 crores and from Government Rs. 63 lakhs. Central Banks ordinarily do not directly borrow loans from Government, but, in recent years undivided Bengal and Orissa have held Rs. 3 and Rs. 2 lakhs respectively. This practice is more common in the States, where Gwalior, Baroda, Hyderabad, Indore and Bhopal hold from their Governments Rs. 28, 11, 6, 2 and 2 lakhs respectively. Borrowings from outside banks are generally confined to accommodation obtained from the Reserve Bank against Government Securities or Promissory Notes executed by societies in favour of the Central Bank and endorsed by the latter in favour of the Reserve Bank. This accommodation is, however, limited and advances from other joint-stock banks are also now rare. The main source of loans is, therefore, the provincial bank, and where a provincial bank exists, the central banks are generally prohibited from having any direct dealings with either the Reserve Bank or any other joint-stock bank or with one another. This rule is, however, not rigidly observed in the Punjabs and Madras. Several central banks, because of their long standing, possess sufficient resources to be independent of any outside financial assistance but they all continue credit arrangements mainly with the provincial bank on which they rely for emergencies.

In the initial stages, several central banks developed from ordinary urban societies which wanted advances to individual shareholders. A few of such central banks have continued the practice and the amount advanced by central banks to individual members during the year 1944-45 was Rs. 4 crores chiefly in Bombay and the Punjabs. Advances are made to individuals on the pledge of agricultural produce, thus combining trading with banking which is against sound banking principles. Besides, such advances encroach upon the domain of marketing finance and hamper the growth of co-operative marketing. The total advances made by central banks to societies at the end of the year 1944-45 amounted to over Rs. 35.3 crores.

After meeting management expenses the profits of central banks are distributed as allocations to reserves and dividends to shareholders. The combined net profits of the 602 central banks of the country during the year 1942-43 amounted to Rs. 55 lakhs on the total working capital of Rs. 40 crores ; the rate of dividend paid varied from 3 to 6 per cent. in different parts of the country but the most usual rate paid was 3 per cent. per annum.

PROVINCIAL CO-OPERATIVE BANKS

At present, all the major Provinces except Orissa have apex banks functioning in them. There are apex institutions in two of the States, Mysore and Hyderabad, though in the others also there are institutions corresponding to the apex bank or functioning as such. There are 11 such institutions in all out of which 9 are in India and Pakistan and two in the States. The constitutions of these institutions vary considerably ; but the functions of all these institutions are more or less the same, namely, the co-ordination of the work of the central banks and provincialisation of finance in them. It is found that in a large majority of the apex banks the constitution is a mixed one, that is, both in the general body of the banks as well as in the directorate, there are individual shareholders as well as representatives of co-operative societies and central banks.

All apex banks both in the Dominions and in the States depend for their working capital largely on deposits from the affiliated co-operative societies as also from the public. It is, therefore, thought necessary to insist upon the maintenance of fluid resources on a certain scale and in some Provinces the Government of the Province has prescribed definite rules with regard to the maintenance of fluid resources. The period for which deposits are accepted determines the maximum period for which they can lend out these borrowed funds to their clients, and in every Province the apex bank has fixed for itself a maximum term, beyond which no loans are, in general, sanctioned. The following figures will clearly show the position of the apex banks in 1944-45.

Provincial Banks, 1944-45

	In thousands of rupees
Working Capital—	
Share Capital	96,12
Reserve and other funds	1,75,26
Deposits and loans—	
from individuals	8,83,01
from Provincial and Central banks	5,52,17
from societies	3,21,98
from Government	30,04
Total ..	20,58,58
Loans made during the year to—	
Individuals	6,95,52
Banks and societies	9,39,20
Total ..	16,34,72
Loans due by—	
Individuals	1,80,85
Banks and societies	4,55,79
Total ..	6,36,64

While accepting deposits from co-operative banks and the general public, most of the apex banks have also dealings in current account with the latter. The undivided Punjab apex bank does not encourage such accounts with individual non-members, as it does not wish to enter into competition with central banks. Apex banks also generally carry on ordinary banking business, such as collecting *hundis* and dividends from companies and collecting pay and pensions. The provincial banks of Bombay, Madras and the undivided Punjab have floated long-term debentures. The Bombay bank has so far issued debentures of the value of Rs. 9·8 lakhs and these debentures are recognised as a trustee security. The bank at Madras has floated debentures of the value of 2·18 lakhs on the security of a floating charge of the general assets of the bank, while the Punjab bank has issued debentures of the value of 6 lakhs. As in every banking institution, these banks are also frequently troubled with surpluses and deficits, though at different times in different institutions. There is therefore interlending of surplus funds between these apex banks, and during the period of shortage of funds, deposits are accepted from surplusing banks, and some of them call for special season deposits allowing favourable rates of interest to tide over the period of shortage. The All-India Provincial Co-operative Banks' Association enables the member banks to ascertain which of them are surplusing in the period and by correspondence to arrange for inter-provincial borrowings.

OVERDUES

Among the most important tests of the success or otherwise of a co-operative credit society is undoubtedly the promptness in repayment of loans by members, and it is in this respect that one has to recognise that the societies have not attained any very great measure of success. On 30th June 1945, the overdue loans in agricultural societies amounted to Rs. 6,79,08,554 as compared with Rs. 7,89,05,293 the year before; the working capital of the agricultural societies was Rs. 30,53,03,307; the loans due by individuals were Rs. 18,19,68,385. The overdue loans were therefore 22 per cent. of the working capital and 37 per cent. of the total loans due by individuals. The position is, however, rendered more serious when one realises that the figures are considerably obscured by book entries and extensions of the date of repayment and in some cases, by the farmers' borrowing from the *sowcar* to pay the society's dues and that the percentages represent merely an average for the two Dominions. The following table shows the position in different provinces on 30th June 1945.

Overdue Loans in Agricultural Societies, 1944-45
(In lakhs of rupees.)

Province	Working capital	Loans due by individuals	Overdue loans by individuals	Percentage of overdue loans to	
				Working capital	Loans due
Madras	5,75	3,60	86	15	24
Bombay	3,87	2,20	75	19	34
Sind	86	49	26	30	53
Bengal (E. and W.) ..	5,90	3,04	2,59	44	85
Bihar	66	33	18	27	55
Orissa	47	33	21	49	64
United Provinces	1,61	1,04	19	12	18
Punjab (E. and W.) ..	5,93	3,17	64	11	20
Central Provinces and Berar	75	53	11	15	21
Assam	14	5	5	36	100
Mysore	50	32	15	30	47
Baroda	61	29	5	8	17
Hyderabad (Dn.)	95	58	10	11	17
Gwalior	31	42	21	68	50
Indore	30	27	..	..	..
Kashmir	46	27	11	24	31
Travancore	48	21	13	27	62
Total ..	30,53	18,20	6,79	(average) 22	(average) 37

The position after June 1933 grew more serious, since the fall of prices of agricultural produce and the world crisis and trade depression reduced the repaying capacity of the agricultural borrower considerably and increased the terrible load of overdue loans in rural credit societies. This continued growth of overdue loans is an ominous portent and reflects very badly on the soundness of the Co-operative structure. The loans having been based on the assets of members, the ultimate solvency of the societies is beyond dispute; but severe pressure on members and the consequent wholesale liquidation of societies would have very serious political and economic reactions. The causes that have led to this phenomenon, which menaces the entire existence of the co-operative movement, are chiefly to be found in not basing the loans sanctioned on the repaying capacity of the borrowing member, in sanctioning loans for unproductive though perhaps necessary social or domestic purposes or for the redemption of old debts, and generally in the uneconomic nature of the agricultural

industry. The loose scrutiny of the purposes stated in the loan applications and the absence of a careful watch on the way the loan is spent by the members, which must be the case where almost every member is a borrower or a surety to other borrowers and where the societies are composed almost wholly of the needy section of the village, the remissness in exerting pressure and in taking action against the defaulter, even when he is wilfully defaulting, add considerably to the growth of the menace of excessive overdues. The central financing agencies are more concerned with the assets that in the last resort are the security for their lendings and, with more funds than they could use, are more eager than even the Registrar himself for organising new credit societies.

The position has been eased considerably by the recent rise in the prices of agricultural produce under war conditions; but temporary relief is no solution and care will have to be taken so that the earning capacity of the agriculturist is increased by linking up credit with co-operative marketing and by the development of subsidiary industries or secondary occupations for him in his leisure.

LAND MORTGAGE BANKS

The loans advanced by co-operative societies to their members and by the central financing agencies to their constituent societies are, from the very nature of the source from which they derive the bulk of their finance, for short or intermediate terms only. By concentrating upon the growth and multiplication of rural credit societies and thus upon facilities for short and intermediate term loans, the co-operative movement did not provide for the redemption of old debts or for increasing the earnings of agriculturists which alone would prevent any further increase in their debts and pave the way for the paying off of the old ones. It does not seem to have been adequately realised that the removal or the lightening of the heavy load of indebtedness does not depend so much upon the easy terms on which co-operative finance can be made available, as upon the ascertainment of the amount of individual indebtedness to the *sowcar*, upon so fully financing the agriculturists that they could be prevented from resorting to the *sowcar* any more, and above all on making agriculture an industry sufficiently paying to leave a little saving after all legitimate current expenditure on agriculture and the household has been met, so that this saving could be applied to the liquidation of old debts. The mistaken notion associated with the start of the movement that co-operative credit could serve this purpose and which has clung more or less till now as evidenced by permitting this purpose to be regarded as a legitimate purpose for loans is largely responsible for increasing the load yet further. Short or intermediate term loans can, if judiciously employed, prevent any further increase in the burden, though even that in the present state of uneconomic agriculture seems scarcely possible; but it cannot leave any adequate margin of saving which could be employed to redeem past follies or misfortune. The *sowcar*, it is often forgotten, is the village retailer as also the purchaser of the villagers' produce and what he cannot recover from the borrower by way of interest or the part payment of the principal of the loans, he can more than make good on the threshing floor or in his shop. The co-operative movement by concentration on the credit side has attacked him on one front only, so that the risks of non-payment are saddled on the society while the profits of the merchant and the retail shopkeeper are still enjoyed by the *sowcar*; the attack ought to have been on all fronts. However, under the circumstances, the clarification of the situation of indebtedness is most desirable as a preliminary towards tackling the important questions of the redemption of old debts. The Indian Central Banking Enquiry Committee has wisely emphasised the need for a vigorous policy of debt conciliation on a voluntary basis and for exploring the possibility of undertaking legislation to secure, if need be, the settlement of debts on a compulsory basis. A simple Rural Insolvency Act as recommended by the Royal Commission on Agriculture and endorsed by the Central Banking Committee would also be an important step towards liberating those who have already given up all their assets, from the incubus of ancestral and old debts, so that at least they and their heirs could start with a clean slate. In any case, the need for long term loans to the agriculturists for land improvement and for the redemption of old debts seems obvious, and it has now been recognised that the time has come for the provision of this facility by the starting of land mortgage banks.

There are three main types of such banks. The strictly co-operative type is an association of borrowers who raise credit by the issue of mortgage bonds bearing interest and made payable to bearer. The commercial type works for profit and declares dividends. The third type—the quasi co-operative—has a mixed membership of borrowers and non-borrowers, operating over fairly large areas and formed with share capital and on a limited liability basis. The banks organised so far in the sub-continent are of the co-operative type, though strictly speaking they belong to the quasi co-operative variety, admitting as they do to the membership a few non-borrowing individuals for attracting initial capital as well as business talent, organising capacity and efficient management.

At present there are 9 co-operative land mortgage banks in the Punjabs. Two of these operate over whole districts, the rest confine their operations to a single tehsil. Bombay has 16 land mortgage societies and a Provincial Land Mortgage Bank, which have been successfully carrying on their business. The Bengals have 9, Assam 4, C.P. and Berar 21 while Madras has 119 primary land mortgage banks and a central land mortgage bank. It is too early to pronounce on the success or otherwise of these few banks. Among the objects for which these banks advance loans are the redemption of old debts, improvement of land and method of cultivation and the purchase of land in special cases. The Central Banking Committee think, however, that for a long time to come the resources of these institutions will be mainly required for enabling the cultivator to

redeem his land and his house from mortgage and to pay off his old debts. One feels, however, extremely doubtful whether the emphasis should not be laid on the intensive and extensive development of agriculture, since as pointed out above, unless agriculture becomes a paying industry, the redemption is impracticable and illusory. The bulk of the funds of these banks will have to be raised by debentures and for these purposes there will have to be in the Provinces central land mortgage banks as in Madras and in Bombay. Government will have also to render assistance to these institutions for the success of the debenture issue, and its guaranteeing the interest as in the Punjabs ought to meet all reasonable needs, though in special cases there would not be much harm in the Government's purchasing debentures of a certain value. While mutual knowledge of and control over one another among members is the insistent feature in the case of the unlimited liability credit society, the insistence in the case of a land mortgage bank with limited liability is on the capacity and business habits of the directorate, in order to ensure sound valuation of security, careful investigation of titles, correct assessment of borrower's credit and repaying capacity and on the efficient management of affairs. The recent rise in the value of agricultural lands has tempted the agriculturist to sell one or more of the plots he holds and pay off a large part of his debts to the *sowcar* and to the Land Mortgage Bank from the price realised, so that the business of the land mortgage banks has been decreasing considerably. This factor with the low yield on investments has been causing some anxiety.

The operations of the Land Mortgage Banks and Societies in India and Pakistan during 1944-45 were as under :—

Number of banks or societies		289
Number of members		1,38,709
Share Capital	Rs.	51,28,187
Debentures from the public ..	,,	3,74,59,432
Debentures from Government ..	,,	5,99,517
Deposits	,,	17,88,377
Reserve and other funds ..	,,	28,62,734
Loans	,,	3,01,40,007
Working Capital	,,	7,79,78,264
Loans made to individuals ..	,,	39,68,037
,, ,, ,, Banks and Societies,	,,	38,77,304
Profit	,,	4,98,539

PROPAGANDA, EDUCATION AND TRAINING

In the initial stages of the movement, it fell on the Registrar to carry on propaganda and organise co-operative societies. For this purpose the assistance of non-official honorary workers was imperative and in the various Provinces a band of such workers was brought into existence, who as honorary organisers of the district or talukas actively co-operated with the officials in carrying on propaganda, organising new societies as a result thereof and looking after the societies so started in some measure. With the rapid growth of co-operative societies, however, it was felt that for the further propagation of the movement it was desirable to carry on work by co-operators themselves in a more organised manner and for that purpose co-operative institutes were started in the various Provinces. In some Provinces, like Bombay, these institutions are mixed institutions with a membership of individual sympathisers and workers and of co-operative societies. In others, like Madras and the United Provinces individuals were not admitted as members and the institutions became provincial unions of co-operative societies. In some Provinces, like Bihar and Orissa, they became federations of co-operative societies, in others, like the Bengals and Assam, they are known as co-operative organisation societies. Whatever the exact form assumed by these provincial institutions, their functions were more or less the same in all Provinces, that is, propaganda and the focussing of co-operative opinion on the various problems that confronted the movement from time to time. These institutions have come to be regarded in an ever increasing measure as the third arm of the movement, the Registrar and his staff representing the administrative side performing more or less the functions assigned to them under the statute, the provincial bank with the central banks and banking unions representing the financial side and as such concerned more with the financing of the movement, and the institutes, unions, federations or organisation societies representing the propagandist side and as such concerned more with educating popular opinion and representing co-operators' views to the authorities. In 1930, the All-India Co-operative Institutes' Association was established to co-ordinate the activities of the provincial institutes, to formulate non-official co-operative opinion on important co-operative problems from time to time and to encourage the growth of co-operative literature.

It was soon perceived that one of the serious handicaps to the successful working of co-operative societies was the ignorance of the members and the absence of trained men as office-bearers of societies. Illiteracy of the rural population, however, has been found too big a problem for these institutes and they have, therefore, attempted only to spread knowledge of co-operation and co-operative principles to the members of societies and to train the office-bearers in various ways. Education has thus developed into an important function of these institutes. In Bombay, the Institute has created a special education board which maintains co-operative schools at different centres and conducts periodically training classes suitable for different types of workers and employees of co-operative societies. It has started this year a Co-operative Training College at Poona for the benefit of employees of the Co-operative Department as also of the Co-operative Banks and other Societies. In the Punjabs, however co-operative education has been organised by the Co-operative Department, though the Punjab Co-operative Unions render active assistance therein. In Bihar and Orissa a permanent Co-operative Training Institute had been established at Sabour in the Bhagalpur Division which is controlled by a governing body which includes the Registrar, and a few representatives of the Co-operative Federation. The Training Institute has now been transferred to Pusa. Madras has organised 6 training institutes and has recently started a College

as in Bombay. In the United Provinces, Bengal and the Central Provinces, arrangements for co-operative training and education have not yet been properly made, though there also it is the Department assisted by the provincial union which organises the training classes. The need for proper co-operative training and education has been felt in an increasing degree in recent years and the Central Banking Enquiry Committee has recommended very strongly the establishment of Provincial Co-operative Colleges and a Co-operative College for the whole country for the higher training of the more important officials of the Department, banks or societies. No action apparently has been taken till now on these recommendations, but there is no doubt whatever that any serious attempt at improvement of the co-operative societies in the country must include a proper organisation of co-operative education not only for the office-bearers of societies or the managers and inspectors of central and provincial banks but also for the inspectors, auditors and assistant registrars of the co-operative departments. The undivided Central Government placed in the last few years at the disposal of each of the Provincial Governments about one lakh of rupees which were devoted to a better organisation of co-operative training and education for the staff of the co-operative departments as also of other institutions.

In some Provinces like the Punjabs and Bihar and Orissa, the provincial union or federation has been actively associated in discharging the Registrar's statutory function of the audit of societies, but this is a statutory obligation of the Registrar and is generally done by him. The departmental audit or inspection by the central banks cannot dispense with the need for careful supervision, which to be effective must be from within, and the provincial federation or union is obviously the best agency for this friendly and efficient supervision. In recent years, however, the need for tightening official control on the co-operative societies has been felt and supervision, audit and training have been taken up by the Provincial Co-operative Departments more and more, and the Provincial Co-operative Institutes and Unions have not been functioning as actively or profitably as the well ordered development of such a popular movement as the co-operative movement would require. The Seventh All-India Co-operative Conference held at Lucknow in May, 1947, stressed the need for strengthening these Institutes and of progressive deofficialisation of the co-operative movement.

NON-CREDIT AGRICULTURAL CO-OPERATION

For some years past increasing attention has been directed to other forms of co-operation for the benefit of the rural population. Credit is but one of the needs of the cultivator ; its organisation through co-operation touches but the fringe of the problem ; and different provinces have been experimenting upon the application of co-operative organisation to meet his various non-credit needs. The problems of irrigation, consolidation of holdings, improved sanitation, fencing, cattle insurance, dairying and supply of agricultural requisites, and above all the marketing of agricultural produce have been therefore engaging the attention of co-operators, and societies for these purposes have been established here and there and have been working with varying success. In a land of ignorant and illiterate agriculturists, it would appear wiser to adopt the rule of one village, one society ; but the complexities of the non-credit forms of co-operation have induced the authorities to avoid the multi-purpose or general society and to favour the single purpose society, and we have the curious spectacle of an agriculturist being viewed as a person with a bundle of several needs, each one of which it is proposed to meet separately. A single society trying to meet all the needs of the agriculturist would attack the *sowcar* on all fronts and would become a live force in the village and tend to promote the ideal embodied in the famous phrase: Better living, better farming and better business. However, co-operative opinion is fast coming to accept the wisdom of this and discard the theory of almost water-tight compartments. The agricultural non-credit societies in India and Pakistan on the 30th June 1945 were 20,578 distributed as under :—

Non-Credit Agricultural Societies, 1944-45

Province	Purchase and sale	Production	Production and sale	Other forms of co-operation	Total
Madras	242	....	219	505	966
Bombay	90	19	177	238	524
Sind	1	....	6	1	8
Bengal (E. and W.) ..	226	1,008	897	1,575	3,706
Bihar	57	....	3,052	....	4,109
Orissa	18	....	20	....	38
United Provinces	13	463	1,974	4,470	6,920
Punjab (E. and W.) ..	17	747	2,851	297	3,912
Central Provinces and Berar	81	18	3	....	102
Mysore	75	....	31	33	139
Baroda	91	19	64	35	209
Hyderabad	...	....	....	5	5
Total ..	1,044	2,335	9,509	7,690	20,578

Of these the most important are the marketing societies particularly for the sale of cotton in Bombay, and the consolidation of holdings and better living societies in the two Punjab.

MARKETING SOCIETIES

Marketing of Agricultural produce is the real crux of the whole question of rural prosperity and betterment, and as group marketing is always more effective than individual marketing especially in India and Pakistan where the individual producer is illiterate and constitute a small unit, co-operative marketing has been accepted now as one of the most desirable ideals to work for. It is only the complexity of the working of co-operative sale societies, the difficulty of providing marketing finance, the lack of expert knowledge on the part of co-operative officials, and the lack of godown and storage facilities that have prevented the rapid multiplication of sale societies and their efficient working. It is really in the development of this form of co-operative effort that ultimate success must be sought for credit alone could never bring comfort. Where it has been tried with success, the results have been extremely satisfactory. The tremendous headway made in European countries like Denmark and in the United States of America in co-operative marketing organisation and the successful examples of the cotton sale societies in Bombay should arrest attention and invite concentration on the co-operative organisation of agricultural marketing. The jute and paddy sale societies of the two Bengals have not met with success, but the cotton grower in Gujarat and the Bombay Karnatak has reaped considerable benefit from the cotton sale societies. Absence of fraud in weighment, adequate and high prices, insurance of the produce against risks of fire, prompt payment of sale proceeds, financial accommodation till the produce is sold, information of daily price fluctuations in the Bombay market, supply of gunnies and genuine and certified seed, bonus and dividends are no small gains to the agriculturist, who was otherwise at the mercy of the *adatya* or worse still of his village *sowcar*. The cotton sale societies of Surat have recently combined in a federation which has taken over the co-operative ginning factory already started by the members. A few societies for the sale of other articles have also been organised in Bombay, such as for the sale of jaggery, tobacco, chillies, paddy, onions and arecanut. The Bengals have several jute sale societies with a Jute Wholesale at Calcutta and paddy sale societies with a sale depot in Calcutta. The Punjabs have several commission shops to provide storage facilities so that the grower could wait for better prices, but which sell to local merchants yet, rather than to the merchants at the port. Madras has a number of sale societies, but their transaction are small and they have not yet made much progress. The United Provinces have organised the sale of sugar-cane very effectively through Sugar-cane Societies and the Marketing Union. Recently provincial co-operative marketing societies have been started with Government encouragement and assistance in Madras and Bombay the results of the working of which will be watched with great interest by co-operators all over the country. Both these Societies have been rendering useful service to the country by undertaking on behalf of Government work in connection with the distribution of manures, and other agricultural requisites, and rationing. It is indeed high time that Government gave to marketing societies consistent patronage in a fuller measure and linked up Co-operative Credit effectively with marketing. Separate statistics are not available for marketing societies and it is to be hoped that the Reserve Bank will publish them in its statements.

CONSOLIDATION OF HOLDINGS

The law of primogeniture, by which the eldest son alone succeeds to the property of his ancestor and which is in force in some European countries does not obtain in India or Pakistan. Each heir is given a proportionate share of each item of the inherited property and not a share of the whole, equivalent to his portion. The result is that successive generations descending from a common ancestor inherit not only smaller and smaller shares of his land but inherit that land broken up into smaller and smaller plots.

The disadvantages of fragmentation are obvious. A part of land is wasted owing to fragmentation being so excessive as to prevent any agricultural operations, and another part is lost in boundaries. The economic loss due to this system can be easily imagined, and the only solution is consolidation of holdings. This most difficult, important and interesting experiment originated in the undivided Punjab in 1920. The procedure adopted in establishing a Co-operative Consolidation of Holdings Society is to call together all persons directly interested in land in a given village, persuade them to accept the bye-laws whereby a majority in a general meeting might approve a method of repartition, and then carry out actual adjustment of fields and holdings in such a manner that no single individual might have any grievance. As the result of patient work which has now extended over 20 years, some very striking results have been achieved and the movement for consolidation in the Punjabs has assumed the dimensions of an important agricultural reform. It is steadily gaining in popularity, and, as more staff is trained and the people become better educated to the advantages of the system, the figures for the area consolidated would mount up year by year. This work began in 1920-21 and in 10 years since then, 263,462 acres were consolidated by the end of July 1930, out of the whole cultivable area of about 30 millions, at an average cost of Rs. 2-5 per acre.

In the Central Provinces some success in consolidation has been achieved in the Chattisgarh Division where scattered holdings are particularly common and it is not rare to see 10 acres broken into 40 plots. The Local Government found it desirable to resort to legislation and passed the Central Provinces Consolidation of Holdings Act in 1928. Any two or more permanent holders in a village holding together not less than a certain minimum prescribed area of land, may apply for the consolidation of their holdings, but the outstanding feature of the Act is that it gives power to a proportion, not less than one-half of the permanent right-holders, holding not less than two-thirds of the occupied area in a village, to agree to the preparation of a scheme of consolidation, which scheme, when confirmed, becomes binding on all the permanent right-holders in the village and their successors in interest.

In Bombay a Bill was introduced in the Legislative Council in 1928 to deal with certain features of the problem. When this Bill was introduced, it encountered a good deal of opposition, and so the Bill had to be ultimately dropped. Very recently, however, the Bombay Legislature has passed a Bill for the prevention of further fragmentation of holdings and for consolidation.

There are 11 societies for the consolidation of holdings in the United Provinces, and 11 in the Baroda State based on the Punjab model.

RURAL RECONSTRUCTION

One of the main reasons why the achievements of the co-operative movement fall so short of the expectations of the promoters and workers is the extreme backwardness of the rural population, and so the ultimate success or otherwise of the co-operative movement is bound up with general rural development and progress. The co-operative movement itself is a great experiment in rural reconstruction aiming to protect the agriculturist from exploitation by the usurer, the middleman—*dalal* and the merchant. Rural reconstruction has, however, of late years claimed an increasing amount of attention; but so far attempts on a mass scale have not been made; what has been done has been individual effort. The best known of such centres is at Gurgaon in East Punjab. The work done there covers education, sanitation, medical relief, improvement of agriculture, female education and maternity welfare.

In the Central Provinces and Berar the local Government started similar work in November 1929. The latter part of 1933 saw a considerable impetus imparted to the cause of rural reconstruction. His Excellency Sir Frederick Sykes, the then Governor of Bombay, concentrated on village uplift and carried on an intensive propaganda in that behalf which has led to the formulation of a scheme whereby the work can be carried on by District Committees under the guidance of District Collectors, the work being co-ordinated by Divisional Officers. The old Punjab appointed Brayne of Gurgaon fame as Commissioner, Rural Reconstruction and old Bengal made a similar appointment. It appears that all Provincial Governments are devoting considerable thought to this very important work. Since the accession to power of the National Governments in Delhi, Karachi and the Provinces, earnest efforts are being made for village betterment through Provincial and District Rural Development Committees and long-range plans are being formed to that end.

The old Punjab was responsible for introducing this very desirable type of co-operative society to promote better living among the members. There are now more than 300 such societies. The societies do not collect any levy from their members, except a small entrance fee and they lay down a programme of work and make rules for carrying it out from year to year, violation of which is punishable with fine under the by-laws. Though these societies in the first instance have for their object the curtailment of ruinous expenditure on marriages and other social occasions, they have also helped in various other matters. **Some of these societies have levelled and paved and swept the village lands, some have promoted sanitation, some have induced the villagers to improve ventilation in their houses, some have repaired and roofed the village drinking well, some have arranged that all manure should be pitted, some have discouraged expenditure on jewellery, and some have stopped waste on farms. Thus in a variety of ways these societies generally have been great factors in the improvement of conditions in the life of the village.**

URBAN CREDIT SOCIETIES

While the chief objective of the co-operative movement was from the first to do service to the rual population, it must be remembered that the Act of 1904 permitted two classes of societies,—rural and urban, recognising thus the suitability of the co-operative method for solving the problems of urban population also. At present there are in all 21,924 non-agricultural societies with a membership of 3,130,590. Of these, 7,472 are credit societies, the rest being societies for other purposes.

An important class of the urban population is that of the merchants and traders, and though the joint-stock banking system that has so far developed is quite well suited in many respects for them, from the point of view of the small trader it is co-operative banking that is obviously wanted. The importance of People's Co-operative Banks promoted for the benefit of urban people without any distinction of caste or creed is, therefore, very great, for the financing of small merchants, artisans and craftsmen, and for the stimulation of trade and industries in and around district and taluka towns. The principal business of these banks is short-term credit and in this respect they resemble the ordinary commercial banks. In the absence of any industrial co-operative bank, it is also for the peoples' bank to finance small industrialists and help the development of cottage industries which still play a very considerable part in industrial economy. Another very important function which falls to peoples' banks is the financing of the marketing of the produce of the land from the field to the port or to the principal market centres, and thus assist in the development of the internal trade of the country. It is only, however, in Bombay and East and West Bengal that we meet with some good institutions functioning as peoples' banks. In Madras there are 1,184 non-agricultural credit societies but most of these are not real peoples' banks. The two Punjabs have 1,009 unlimited liability societies and 235 with limited liability. Even here we hardly find any development of real peoples' banks. In East and West Bengal the limited liability societies number 584 and though these societies seem to have won public confidence the more important of them are salary earners' credit societies. Some of the divisions especially the Chittagong Division

have several big concerns, however, working on sound lines. The question of starting peoples' banks in Bihar and Orissa has not yet been seriously taken in hand. In the Bombay Presidency, institutions with a working capital of Rs. 20,000 and more are classed as urban banks. Since 1922 co-operators in this Presidency have been very keen on having a full-fledged *peoples' bank in every taluka town*, for it has been realised that with the proper development of urban co-operative banking, there is no doubt that the various units will come into touch with one another and that mutual settlement of terms and co-ordinated and harmonious work will greatly assist the development of inland trading agencies. Peoples' banks are a repository of peoples' savings, a nucleus for co-operative activity and an institution giving facilities for internal remittance, *and it is quite necessary therefore that* their share capital must be pretty large.

SAVINGS

In the Bombay Province on the 30th June 1940 there were 181 urban banks most of which are fairly successful. The total membership was 210,460, the working capital was Rs. 5,07,51,125 and the reserve fund amounted to Rs. 59,25,640. It can be said without exaggeration that the development of urban banking has been a distinct contribution of Bombay to the co-operative movement, and other Provinces might well follow Bombay's example in this direction. Urban banking has now been found so successful that deofficialisation and relaxation of departmental control will probably first be introduced with regard to them, supervision and guidance being made available from their own federations.

An important variant of the urban co-operative society is the Thrift Society. The system adopted is to collect regular savings every month for a continuous period of two to four years, invest the collected amount to the best advantage and pay back to the subscriber his amount at the end of the term with interest. In many societies, loans are advanced also but not exceeding a certain fixed proportion, usually ¾ of the deposits. E. and W. Punjab have more than 1,000 societies and the bulk of the members are school masters. There are over 125 thrift societies for women only having a membership of more than 2,000. Madras has also more than 100 thrift societies and Bombay has a few also. Recently however Life Insurance Societies have been started in Bombay, Bengal and Madras. The Bombay society was started in July 1930 largely through the efforts of Dewan Bahadur H. L. Kaji and for a few months it worked as a provident society only, issuing policies of Rs.150 to Rs.500 and that too without medical examination, the idea being to bring life insurance within easy reach of the small man in the village as in the town. It has no share capital and works on a mutual basis. It has now, however, widened its scope and has been writing policies for larger amounts under its ordinary branch. It has by now written a business of over four crores. The Bengal Society has had to seek amalgamation with a joint-stock insurance company, while the Madras Society—the South India Co-operative Insurance Society—started vigorously as a full fledged life insurance society with share capital and comparatively low rates of premia, and has already written a large business of over Rs.5¼ crores. In the absence of statistics, it is not possible to review the progress of industrial societies, housing societies and such other types. But they are important and claim attention.

REVIEW

The Co-operative Societies Act of 1904 had limitations which were soon recognised and at a conference of the Registrars, a Bill was drawn up which became the Co-operative Societies Act of 1912. This Act remedied the defects of its predecessor, authorized the registration of societies for purposes other than credit, substituted a scientific classification based on the nature of the liability for the arbitrary one into rural and urban and legalised the registration of Unions and Central Banks.

In 1914 the then Government of India reviewed the situation in a comprehensive resolution and recommended a change in the policy regarding the grant of loans to members, so that they might lend money for domestic purposes as well as for agricultural ones in order that the members might confine their dealings with the Co-operative Societies and be weaned from the *sowcars*. In 1914, the Maclagan Committee on co-operation was appointed and its report in 1915 led to the reorganisation and overhauling of the whole administration of co-operation. Punctual repayment of loans was insisted upon, and all those societies that failed to live up to the ideal of co-operation were sought to be eliminated. From this time onwards the share of co-operators in the movement assumed increasing importance and it came to be realized that for the success of the movement, deofficialising was necessary. The Government of India Act of 1919 made co-operation a provincial transferred subject and the local Governments were left free to adapt the 1912 Act to their own requirements.

The steady growth of the Central Financing Agencies relieved the Registrars partly of the need for attending to this very important matter in the development of co-operation; but propaganda still remained the function of the Registrar and his staff, paid or honorary, and it was perceived that non-official institutions should be established to take over this function from official hands. Accordingly Co-operative Institutes were started in various Provinces in some cases as unitary societies reaching down to the village through their branches in the divisions and the district, in other cases as a federation or union more or less complete of the primary societies. The part these non-official bodies began to play henceforth became increasingly important, some adding to the primary function of propaganda, others such as co-operative education, supervision over societies and even audit.

ENQUIRY COMMITTEES

The steady progress of the movement—sometimes even too rapid—for nearly 20 years, however, was found hardly to lessen the colossal burden of indebtedness of the ryot, for co-operative credit necessarily confined itself to short-term loans. It was in the undivided Punjab that the first Co-operative Land Mortgage Bank was started at Jhang in 1920. Soon after other provinces followed suit.

While the movement was developing at a rapid pace it was found that financially the situation was worsening. Defaults in repayment were becoming increasingly common and Co-operative Committees of Enquiry were instituted in various Provinces. The Central Provinces thought it necessary to have such a committee in 1922, while Bihar and Orissa followed with a similar committee in 1923. A few years after, the Oakden Committee made similar inquiries for the U.P., the Townsend Committee for Madras and the Calvert Committee for Burma. These Committees have carefully analysed the position in their respective provinces and have made recommendations for the consolidation and rectification of the co-operative credit organisation and the extension of the non-credit side of agricultural co-operation. The powers conferred upon the Local Government by the Act of 1919 to modify the Act of 1912 have been exercised by almost all Provinces, except the Punjab and the U.P. Bombay passed the Co-operative Societies Act of 1925 making the object of the movement still wider than that of its predecessor and its preamble refers to "better living, better business and better methods of production" as the aim of the movement. The chief features of the Bombay Act of 1925 are the adoption of a scientific system of classification of societies, the improvement of the procedure for liquidation of cancelled societies, the extension of summary powers of recovery to the awards of arbitrators and the provision of penalties against specified offences. The Madras Act came into force in July 1932. East and West Bengal, Bihar and Orissa have also similar Co-operative Acts of their own. The progress of the movement in forms other than credit has not been very remarkable and credit societies still predominate, especially the Agricultural Credit Societies.

There are a number of housing societies especially in Bombay, Madras and Mysore, and artisans' societies and unskilled labour societies in Madras. It may be noted that on the agricultural side co-operative farming has hardly been touched and on the non-credit side the consumers' movement has made but meagre progress. It is true that the extraordinary circumstances created by the Second World War have led to the problem of food distribution and systems of rationing and to the consequent formation of a large number of consumers' store societies. But it is very doubtful how far these Societies will continue their work when normal times return, unless they amalgamate into larger units and function more as genera stores than as food and groceries stores.

In 1926, the Royal Commission on Agriculture was appointed and co-operation formed only a part—though an important one—of its extensive enquiry. Since then, in consequence of the appointment of the provincial committees under the Indian Central Banking Inquiry Committee the co-operative movement in the different provinces has been further surveyed. But the provincial committees, for obvious reasons, confined their inquiries to banking in relation to agriculture, small industries and trade. Thus only those aspects of the co-operative movement which have an intimate bearing on the credit needs of the population and the development of banking facilities have been examined.

A few years back, the Government of Bombay appointed a small committee to inquire into the co-operative movement and to suggest how effective action could be taken to improve, extend and strengthen the movement. The report has been submitted and one welcome feature of the suggestions is the adoption of the multi-purpose society as the primary unit in villages advocated strongly by the Agricultural Credit Department of the Reserve Bank.

The growing difficulties of the co-operative movement in times of unprecedented depression led the undivided Government of India to hold a Co-operative Conference at New Delhi on the 29th January 1934. In December 1936 and 1939, other Conferences of Registrars met at Delhi and discussed the situation further.

As a result, consolidation, rectification and rehabilitation of the credit societies were accepted as the policy, whereas expansion and diversification were severely restrained. Official control was strengthened and the movement which was being passed on to the co-operators themselves in the twenties became more officialised than ever before.

It may also be mentioned that the States were not slow in introducing the co-operative movement within their limits, and the movement in some of the more important of the States, such as Hyderabad (Deccan), Mysore, Baroda, Gwalior, Indore, Kashmir, and Travancore has made considerable progress, more or less on the same lines as those followed in the neighbouring Provinces. Statistics are now available for some of the smaller States like Bharatpur, Sirmur, Kotah, Patiala, Kolahpur and Bahawalpur which show how rulers of the States have accepted Co-operation as their best lever for rural betterment.

LANDMARKS

The landmarks in the history of the co-operative movement are: the Co-operative Credit Societies Act of 1904; the Co-operative Societies Act of 1912; the Maclagan Committee Report, 1915; the provincialisation of co-operation, 1919; the establishment of institutes, unions and federations for propaganda; the Committees of Enquiry into the co-operative movement in several provinces; provincial legislation; the Report of the Royal Commission on Agriculture, 1928; Reports of the Indian Central and Provincial Banking Enquiry Committees, 1931; greater official control; marketing surveys, debt conciliation schemes, land mortgage banking and organisation of provincial marketing societies; Report of the Co-operative Planning Committee.

The movement has thus developed rapidly and the stages of its evolution may be briefly **summarised as—agricultural credit; urban credit; central credit organisations; apex co-operative banks; propaganda by co-operators themselves; beginnings of non-credit agricultural co-operation; urban co-operative banking; land mortgage banks; co-operative education; rectification and consolidation of the credit movement; organisation of supervision over primary societies and rural reconstruction: multi-purpose societies, co-operative marketing and industrial co-operatives.**

In recent years, Provincial Governments have been seriously undertaking programmes in the interests of the agriculturists. Money-lenders' bills have been passed to restrict the evils of usury and debt legislation has been or is being passed in Madras, Central Provinces, Bombay and a few other provinces so as to reduce agricultural debt and to bring it within the repaying capacity of the debtor. The strengthening and reorientation of the co-operative movement has also been taken earnestly in hand, which would by the conversion of the credit primaries into multi-purpose societies, by organising co-operative sale of agricultural produce and by promoting secondary occupations for the agriculturists on a co-operative basis, change the whole emphasis of the movement from one of merely supplying credit to supplying the entire needs of the rural population. Active mass-scale efforts at rural reconstruction and at increasing the earnings of agriculturists represent the keynote of the present-day trend of the co-operative movement.

An important landmark in the history of the Co-operative Movement is the report of the Co-operative Planning Committee issued towards the end of 1946. The Report which is very comprehensive lays down the lines and principles of co-operative development for the next few decades. But the Report gives no indication as to the relative importance of different types of co-operative effort. So it is up to the Provincial Governments now to lay down the priorities and start working quickly towards the goal. What was India has now been partitioned, but it is hoped that so far as co-operation is concerned the old unity will remain.

TABLE NO. 1.

Number of Societies by Provinces and States for 1944-45 *only*

Province	Estimated Population (Millions.)	Central	Supervising and Guaranteeing Unions	Agricultural	Non-Agricultural	Total Number of Societies	Number of Societies per 1,00,000 Inhabitants
1	2	3	4	5	6	7	8
Madras	51·3	31	247	11,873	3,452	15,603	30·4
Bombay	21·7	13	117	4,885	1,037	6,652	30·7
Sind	4·9	1	1	859	211	1,072	21·9
Bengal (E. and W.)	61·9	120	....	39,624	2,424	42,168	68·1
Bihar	37·9	45	1	8,456	203	8,705	23·0
Orissa	9·1	15	....	2,672	370	3,057	33·6
United Provinces	56·2	65	1	17,141	1,104	18,311	32·6
Punjab (E. and W.)	29·6	121	....	20,390	5,927	26,438	89·3
Central Provinces and Berar	17·6	36	6	5,469	668	6,179	35·1
Assam	10·5	19	....	1,111	1,452	2,682	24·6
N.-W. F. Province	3·4	5	....	943	80	1,028	30·2
Coorg	0·2	1	13	205	57	336	168·0
Ajmer-Merwara	0·6	7	9	601	187	804	134·0
Hyderabad Administered Area (now part of the State)	0·1	....	1	....	18	19	19·0
Delhi	1·3	1	....	240	144	385	29·6
Total (for India and Pakistan)	306·3	480	396	1,14,534	17,934	1,33,344	43·5
Mysore	7·7	4	....	1,835	657	2,496	32·4
Baroda	3·3	10	 2	1,125	350	1,487	45·1
Hyderabad	16·9	46	1	5,448	830	6,325	37·4
Bhopal	0·8	14	2	298	....	314	39·3
Gwalior	4·4	15	....	3,717	122	3,854	87·6
Indore	1·9	6	....	845	99	950	50·0
Kashmir	4·8	15	....	2,809	988	3,902	80·7
Travancore	6·5	1	27	1,188	287	1,503	23·1
Cochin	1·7	1	 2	109	192	301	17·7
Bharatpur	0·6	1	....	643	72	718	119·7
Sirmur	0·2	....	....	593	4	597	298·5
Kotah	0·8	1	....	495	54	550	68·8
Patiala	2·1	5	....	396	70	471	22·4
Kolhapur	1·2	2	....	421	41	464	38·7
Bahawalpur	1·5	1	....	315	43	359	23·9
Patna	0·7	1	....	293	17	311	44·4
Other States	5·6	10	2	1,494	181	1,687	30·1
Total (States in India and Pakistan)	60·2	133	36	22,113	4,007	26,289	43·7
Grand Total	366·5	613	432	1,36,647	21,941	1,59,633	43·6

TABLE NO. 2.

Number of Members by Provinces and States for 1944-45 only

Province	Estimated Population (Millions)	Central (including Provincial and Central Banks and Banking Unions.)	Supervising and Guaranteeing Unions	Agricultural (including Cattle Insurance Socs. and Land Mortgage Banks & Socs.)	Non-Agricultural (including other Insurance Societies.)	Total Number of Members of Primary Societies	Number of Members of Primary Societies per 1,000 inhabitants
1	2	3	4	5	6	7	8
Madras	51·3	17,454	8,791	8,74,982	8,50,070	17,25,052	33·6
Bombay	21·7	20,242	3,913	3,97,051	5,78,631	9,75,682	45·0
Sind	4·9	3,028	959	26,079	73,520	99,599	20·3
Bengal (E. and W.)	61·9	40,506	....	11,54,388	3,86,292	15,40,680	24·9
Bihar	37·9	6,677	9	2,07,377	39,675	2,47,052	6·5
Orissa	9·1	3,790	....	1,07,127	33,931	1,41,058	15·5
United Provinces	56·2	17,213	97	6,50,621	1,06,108	7,56,729	13·5
Punjab (E. and W.)	29·6	36,500	....	8,40,070	2,48,181	10,88,251	36·8
Central Provinces and Berar	17·6	40,542	10,506	87,930	68,939	1,56,869	8·9
Assam	10·5	1,704	....	28,146	1,48,872	1,77,018	16·9
North-West Frontier Province ..	3·4	1,052	....	27,126	2,382	29,508	8·7
Coorg	0·2	868	306	21,623	10,358	31,981	159·9
Ajmer-Merwara	0·6	1,684	147	14,091	10,062	24,153	40·3
Hyderabad Administered Area (now part of the State)	0·1	....	18	....	15,805	15,805	158·1
Delhi	1·3	505	....	10,009	14,923	24,932	19·2
Total (India and Pakistan) ..	306·3	1,91,763	24,746	44,46,620	25,87,749	70,34,369	23·0
Mysore	7·7	1,540	....	93,866	1,17,128	2,10,994	27·4
Baroda	3·3	2,035	112	50,042	73,125	1,23,167	37·3
Hyderabad	16·9	6,951	5,379	1,04,964	1,48,995	2,53,959	15·0
Bhopal	0·8	795	30	9,223	....	9,223	11·5
Gwalior	4·4	6,317	....	69,246	2,740	71,986	16·4
Indore	1·9	2,534	....	19,173	16,142	35,315	18·6
Kashmir	4·3	3,702	....	63,628	40,878	1,04,506	24·3
Travancore	6·5	3,144	1,403	1,48,355	52,513	2,00,868	30·9
Cochin	1·7	151	....	12,272	29,792	42,064	24·7
Bharatpur	0·6	....	315	15,281	1,874	17,155	28·6
Sirmur	0·2	....	....	10,281	65	10,346	51·7
Kotah	0·8	1,390	....	4,778	1,536	6,312	7·9
Patiala	2·1	98	....	9,181	1,610	10,791	5·1
Kolhapur	1·2	3,221	....	27,461	16,258	43,719	36·4
Bahawalpur	1·5	414	....	9,422	954	10,376	6·9
Patna	0·7	420	....	6,296	302	6,598	9·4
Other States	5·6	1,864	99	51,983	1,11,449	1,63,432	29·2
Total (States in India and Pakistan) ..	60·2	34,576	7,338	7,05,450	6,15,361	13,20,811	21·9
Grand Total	366·5	2,26,339	32,084	51,52,070	32,03,110	83,55,180	22·8

TABLE NO. 3

Working Capital by Provinces and States for 1944-45 only

In lakhs of rupees.

Province	Estimated Population (Millions.)	Share Capital Paid-up	Loans and Deposits held at the end of the Year from					Borrowings of Land Mortgage Banks and Societies	Reserve and other Funds	Total	Number of Annas per head of Population
			Members	Societies	Provincial or Central Banks	Government	Non-Members and other sources				
1	2	3	4	5	6	7	8	9	10	11	12
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	
Madras	51·3	3,79	2,12	2,84	7,40	15	7,78	5,46	4,30	33,82	105·4
Bombay	21·7	4,11	5,73	2,94	2,56	12	9,65	66	3,40	29,17	215·1
Sind	4·9	66	2,13	36	26	1	1,85	..	51	5,79	189·1
Bengal (E. and W.)	61·9	3,01	2,32	81	4,71	11	6,36	6	4,06	22,44	58·0
Bihar	37·9	39	39	9	72	24	69	..	41	2,93	12·4
Orissa	9·1	30	6	10	29	4	37	2	22	1,40	24·6
United Provinces	56·2	1,12	36	23	70	..	78	1	96	4,17	11·9
Punjab (E. and W.)	29·6	2,41	1,32	2,05	3,82	1	7,24	2	3,93	20,79	112·4
Central Provinces and Berar.	17·6	46	19	17	1,24	1	2,07	12	69	4,96	45·1
Assam	10·5	34	45	5	5	..	51	1	16	1,56	23·8
North-West Frontier Province.	3·4	5	..	6	5	..	16	..	6	38	18·0
Coorg	0·2	6	2	3	5	..	9	..	7	32	256·6
Ajmer-Merwara	0·6	8	7	7	5	..	15	1	17	61	162·1
Hyderabad Administered Area (now part of the State) ..	0·1	4	38	..	..	..	9	..	3	55	873·8
Delhi	1·3	9	16	5	2	..	14	..	7	53	65·6
Total (India and Pakistan)	306·3	16,93	15,71	9,84	21,91	70	37,93	6,37	20,04	1,29,42	67·6
Mysore	7·7	70	1,01	13	9	1	43	39	55	3,31	68·8
Baroda	3·3	28	73	9	9	12	35	7	26	1,99	96·4
Hyderabad	16·9	1,07	10	18	68	7	1,06	..	79	3,95	37·4
Bhopal	0·8	1	..	..	2	2	..	..	6	12	24·6
Gwalior	4·4	15	2	14	..	28	23	..	32	1,21	43·9
Indore	1·9	9	27	1	5	2	28	..	24	97	80·5
Kashmir	4·3	24	1	5	18	7	22	..	31	1,08	40·3
Travancore	6·5	31	15	8	5	..	10	..	16	84	20·7
Cochin	1·7	7	7	4	1	1	19	16	7	63	59·2
Bharatpur	0·6	2	..	2	5	8	14	..	5	36	95·5
Sirmur	0·2	1	..	..	1	..	..	..	..	3	20·8
Kotah	0·8	3	3	3	..	..	32	..	8	50	99·7
Patiala	2·1	2	..	..	1	1	1	..	..	5	3·7
Kolhapur	1·2	6	12	14	2	1	15	..	7	57	75·6
Bahawalpur	1·5	4	..	3	1	..	1	..	8	18	18·9
Patna	0·7	1	..	..	2	..	3	..	..	6	12·7
Other States	5·6	19	33	4	16	2	41	..	23	1,39	39·6
Total (States in India and Pakistan)	60·2	3,28	2,85	98	1,46	73	3,98	63	3,30	17,21	45·8
Grand Total ..	366·5	20,21	18,56	10,82	23,33	1,43	41,91	7,00	23,34	1,46,63	64·0

TABLE NO. 4.

Operations of Co-operative Societies, 1944-45 (India and Pakistan)

(In Thousands of Rupees)

	Provincial Banks	Central Banks	Land Mortgage Banks and Societies	Agricultural Societies		Non-Agricultural Societies	
				Credit	Non-Credit	Credit	Non-Credit
Number	11	602	289	1,15,780	20,578	7,472	21,924
Working Capital:—							
Share Capital	96,12	2,90,81	51,28	5,20,09		10,61,31	
Loans and deposits held from—							
Members	8,83,01	21,04,50	3,93,33*	2,39,64		16,16,30	
Non-Members				1,82,01		10,21,51	
Societies	3,21,98	6,77,03	2,99,49	20,79		62,43	
Provincial or Central Banks	5,52,17	3,31,06		10,66,09		3,88,15	
Government	30,04	63,13	6,00	15,86		33,38	
Reserve and other Funds..	1,75,26	5,13,05	28,63	10,08,54		6,08,34	
Total ..	20,58,58	39,81,58	7,79,78	30,53,03		47,90,43	
Loans made during the year to—							
Individuals..	6,95,52	3,78,49	39,68	11,81,83		18,80,27	
Banks and Societies ..	9,39,20	35,43,29	38,77	2,91,04		3,75,50	
Loans due by—							
Individuals..	1,80,85	1,38,67	3,28,64	18,19,68		20,31,66	
Of which overdue	....	....	4,30	6,79,09		2,33,29	
Banks and Societies ..	4,55,79	17,70,20	2,79,50	2,71,27		6,24,24	
Profits	14,14	52,93	4,99	81,76		1,48,35	

* Including Rs. 3,74,53 as debentures.

Labour

THE Indian sub-continent is and always has been a predominantly agricultural area. It is necessary, therefore, for both the smaller cultivators and the agricultural labourers to migrate frequently to the towns and cities in search additional work in order to keep the wolf from the door; but, the migration is generally of a temporary character, and the agriculturist's contact with his land is seldom, if ever, permanently broken.

Up to almost the end of the nineteenth century there was no State control over conditions of employment in any industry in the sub-continent. Hours of labour were inordinately long, rates of wages unduly low and other conditions of work not too satisfactory. There was no regulation of the age at which children could be employed; there were no periodical or weekly holidays; and there was no legislation to safeguard factory workers from injury through accident.

With the growth of factory organisation and the rapid development of her industries, the minds of certain men, notably Sorabjee Shapurjee Bengali, however, began to be awakened to the existence of evils which by the standards of today would be considered intolerable, and unceasing efforts at securing some improvement in conditions of work in factories resulted, notwithstanding strenuous and universal opposition at the time from all employers, in the passing of the first Indian Factories Act of 1881.

The Act contained no restrictions in connection with the employment of adult labour but provision was made for the fencing of such parts of machinery as would be dangerous if left unfenced and for the reporting of accidents. Owing to an almost complete lack of adequate inspection, the 1881 Act remained a dead letter in most provinces.

First Factory Act.—A Factories' Commission was appointed in 1890 and on the basis of its recommendations, a new Factories' Act was passed in 1891. Th qualification for registration was the employment of 50 workers as against 100 in the 1881 Act and local Governments were empowered to notify concerns employing as few as twenty. The main features of this Act were: (1) a compulsory rest interval of half an hour; (2) a weekly holiday; (3) non-employment of a child under nine and a 7-hour day for children between nine and fourteen; (4) a 11-hour day for women with a 1½-hour interval if they were required to work for the permissible maximum hours; and (5) restriction in the employment of women during 8 p.m. and 5 a.m.

The last decade of the nineteenth century saw the advent of two new factors in the field of industrial labour in the sub-continent which were destined, for the time being at any rate, to worsen conditions in the various factories. The first was the introduction of electricity for purposes of factory lighting and the second was plague. The immediate effect of these two was a considerable increase in working hours. Many of the larger textile mills resorted to day and night working and evidence is not wanting that some mills worked their operatives continuously for stretches of fifteen to twenty hours per day. In Bombay City there were actually auctions for labourers at street corners. The weaker cotton and the jute mills, however, began to be alarmed at the competition from the mills which worked day and night and many millowners were not unwilling that Government should step in and prohibit night working altogether.

One could also notice the first awakenings of a sense of class consciousness among industrial workmen. They were less ready to submit to the old conditions; and wherever the employers tried to force those conditions upon their workmen they were met by opposition. Early successes led to disputes of a more widespread and concerted character—disputes which resulted in a general all-round improvement in wages.

Reduction in Hours.—Conditions of work in factories in the sub-continent during the period were inquired into by the Freer Smith Committee which was appointed in 1906 and by the Factory Labour Commission, a body appointed by the British Government in 1907. The Commission endorsed the abuses and the evasions of the 1881 and 1891 Acts in connection with the employment of children but were unanimously of opinion that some limitation in hours of work was essential but the majority were opposed to any direct limitation. As far as women's hours were concerned, they proposed that the statutory maximum should be increased from 11 to 12. A new Factories' Bill was introduced in the Governor-General's Legislative Council and passed into law in 1911.

The 1911 Act sought to make a beginning in the restriction of the hours of work of adult males by prescribing that men's hours in textile factories should not exceed twelve per day. The provisions of the 1891 Act in connection with women's hours were maintained but with the difference that the rest interval of an hour and a half prescribed for women who were made to work for the full permissible hours was reduced. This was done in order to limit the spreadover. Children's hours in textile factories were reduced to six per day and more stringent measures were provided for inspection and certification. A compulsory rest interval of half an hour in the middle of the day was provided for all operatives except for those employed in continuous process factories. A number of provisions were made for the health and safety of the operatives and several changes designed to make inspection more effective and to prevent and punish breaches of the Act were incorporated; but, at the same time, wide powers were given to local Governments to grant exemptions. The 1911 Act was brought into force with effect on the 1st of July 1912.

Owing to the restriction on imports resulting from conditions prevailing during the World War of 1914-18, there was considerable expansion of Indian industries resulting in greater employment. Labour, however, still remained very inarticulate and unorganized and it did not reap the benefits of the War to the same extent as industrialists, traders and manufacturers did. Although prices were soaring, wages did not

keep pace with prices and there was considerable discontent among labour. Owing to the influx of large bodies of persons into the towns, housing became hopelessly inadequate and rents soared to heights which forced several local Governments to pass legislation to control them.

Then came the influenza epidemic which left large gaps in the ranks of available labour especially as the age groups between 20 and 40 suffered most heavily. A situation very similar to that which followed the great plague of the 'nineties was again created.

I. L. O.—As is well known, the International Labour Organisation owes its creation to the Treaty of Versailles. India joined this organisation at the very start and since 1922 has been one of the eight leading industrial countries in the world and as such has been allotted a permanent seat on the Governing Body of the Organisation. India also contributes liberally towards the finances of the Organisation and stands fourth in the list of contributors. India's share in the appointments of the office is, however, somewhat inadequate. This is a matter which has been discussed from time to time and was also prominently raised in the recent session of the Asian Regional Labour Conference.

The International Labour Office and its various annual conferences have been a source of inspiration and guidance to India in the enactment of labour legislation and framing of labour policies. India has so far ratified 15 out of the 67 Conventions adopted by the International Labour Organisation but has in addition incorporated into its national legislation the essential features of many other Conventions. Since the International Labour Organisation is essentially a Tripartite Organisation, India's membership of it has resulted in the formation of powerful central organisations both of employers and of labour for purposes of representation, etc., at the conferences.

The last ten years have marked a new development in the policy of the International Labour Organisation, namely, the holding of Regional Labour Conferences of Member States. The first and second such Conferences were held in Santiago de Chile and Havana respectively in 1936 and 1939. The Philadelphia Conference of 1944 passed a resolution recommending that an Asian Regional Conference should be held at an early date. Accordingly, the Government of India invited the International Labour Organisation to hold an Asian Regional Conference in India and the invitation was accepted. The session of the Conference in India started on the 27th of October 1947 and lasted for over a week. More than 200 delegates from various countries, including America and some of the European countries, were represented at the Conference. It was opened by the Chairman of the Governing Body and its opening session was attended by the Prime Minister of India, the Hon'ble Pandit Jawaharlal Nehru who in an inspiring address reiterated some of the statements contained in the Philadelphia Charter and declared that India was most anxious to cooperate with the International Labour Organisation in carrying out a policy of amelioration of the conditions of labour. The problems dealt with by the Conference were incorporated by the International Labour Organisation in a series of Reports which were circulated to those attending the Conference. The following were the subject matters of the Reports :—

(i) Problems of social security,

(ii) Labour policy in general including the enforcement of labour measures,

(iii) Programme of action for the enforcement of social standards embodied in Conventions and recommendations not yet ratified or accepted,

(iv) The General economic background of social policy, including problems of industrialisation, and

(v) Director-General's Report dealing with the question of the co-ordination of regional activities of the International Labour Organisation.

The Act of 1922.—The winter of 1919-20 saw the recrudescence of industrial strife of a greater intensity than that of the year before. The principal cause again was the fact that cash wages were lagging far behind the continued rise in prices and that real wages were again falling. On this occasion, however, the workmen did not limit their demands to increases in wage rates alone and their leaders everywhere demanded both increases in wages and reduction in hours of work. Concerted strikes in the cotton mills of Bombay, Ahmedabad and Cawnpore resulted in the employers conceding a 10-hour day in addition to the granting of higher wages.

In March 1920, the Millowners' Association of Bombay presented a memorial to the Viceroy asking for a statutory reduction of hours of work in all textile factories in the Indian subcontinent from twelve to ten. The rapid sequence of events in favour of a 10-hour day broke the back of all opposition to reduced hours of work in the factories and an easy passage for the necessary legislation was assured.

The law relating to factories was amended and consolidated by the Act of 1922. The main provisions of factory legislation as it now stood were as follows ; (1) the qualification for registration was the employment of 20 persons—factories employing not less than ten workers could be notified ; (2) non-employment of a child under 12, a 6-hour day for children between twelve and fifteen, a half-hour rest interval after four hours work and prohibition of the employment of a child in two factories on the same day ; (3) restriction in the hours of work of adults to eleven per day and sixty per week ; (4) prohibition of the employment of women between 7 p.m. and 5-30 a.m. except in the fish curing and canning industry ; (5) compulsory rest intervals and a weekly holiday ; and (6) measures for controlling excessive artificial humidification and for the health and safety of operatives.

Exemptions on well defined principles were to be permitted. The Amending Acts of 1923, 1926 and 1931 effected minor improvements but the general principles remained unaltered until the Act was again overhauled in 1934.

New Labour Laws.—Up to the end of the year 1922, the only important law relating to labour in the sub-continent was that regulating the conditions of employment in factories. The influence of the International Labour Organisation was, however, soon felt and industrial strife too was on the increase.

Little attempt had so far been made for the peaceful and amicable settlement of trade disputes. Such attempts as were made were hampered by the absence of reliable and accurate data regarding wages and conditions of employment.

Acting on a private resolution adopted in the Provincial Legislative Council, the Government of Bombay appointed an Industrial Disputes Committee in 1922 under the Chairmanship of Sir Stanley Reed, M.P., then Editor-in-Chief of *The Times of India*, " to consider and report on the practicability or otherwise of creating machinery for the prevention and early settlement of trade disputes." This Committee submitted a comprehensive report on the subject of industrial strife and made various recommendations for the prevention of disputes and their settlement when they arose. Among its main recommendations was one for the setting up of an Industrial Court.

The Government of Bombay drew up a Bill on the subject and this was introduced in the local Legislative Council in the winter of 1923-24. This Bill was subsequently withdrawn on the Government of India formulating proposals for Central Legislation on the subject ; but it was not until 1929 that the Trade Disputes Act was placed on the Statute Book.

Much headway had, however, been made in the meanwhile in the framing of new labour laws. Among the more important of these were the Workmen's Compensation Act and the Indian Mines Act which were passed in 1923 and the Indian Trade Unions Act which was passed in 1926.

Industrial Strifes.—The post-war depression which set in 1922 continued for several years and the millowners in Bombay announced a cut of 12½ per cent. in wages. This announcement was followed by a general strike. Both sides were adamant but the millowners gave an undertaking to Government to drop the proposal for a wage cut if the excise duty on cotton manufactures was abolished. The strike, therefore, ended as soon as the Viceroy's Special Ordinance announcing the suspension of the excise duty was published at the end of November 1925.

The year 1928 witnessed another outbreak of industrial strife of great intensity. Two causes were directly responsible for this. The Indian Tariff Board (Cotton Textile Industry) constituted by the Government of India in 1926 had made a number of recommendations aiming at a more efficient conduct and management of cotton textile mills in the sub-continent. A group of these recommendations concerned the introduction, by the mills, of "rationalised" methods of work by which is meant the asking of workers to mind more machines.

The second was the formation of the Workers' and Peasants' Party the members of which secured influential positions on the executives of many trade unions in the country. The industrial strike was the chief weapon in their armoury. Early in the year 1928, a few groups of mills announced their intention of securing greater efficiency. The strike of cotton textile mill operatives of 1928 in Bombay City which followed was the most disastrous that had yet taken place in the sub-continent. All the mills in the city were affected and there was complete stoppage of work for over six months. Both parties put up irreconcilable sets of demands. Various discussions were held but to no avail. Finally the Joint Strike Committee agreed to call off the strike on Government assuring the parties that they would appoint an impartial committee to inquire into and report on all the points in dispute.

The report of this Committee was more favourable to the workers than to the employers and it still continues to be one of the standard works of reference on conditions of employment in cotton textile mills in Bombay City.

Other important strikes during the year 1928 occurred in the Tata Iron and Steel Company's Works at Jamshedpur, on the East Indian and South Indian Railways, in the Fort Gloster Jute Mills and in the textile mills at Sholapur and Cawnpore.

In the middle of the year 1929 the Government of India announced the appointment of a Royal Commission on Indian Labour " to enquire into and report on existing conditions of labour in industrial undertakings and plantations in British India ; on the health, efficiency and standard of living of the workers ; and on the relations between the employers and the employed ; and to make recommendations." The Commission was presided over by J. H. Whitley. Most of the recommendations of this Commission which was presided over by J. H. Whitley merely related to the expansion of the scope and the improvement of the existing Acts. They have been implemented by fresh amending or consolidating Acts.

Wage Reductions.—The first attempt at reduction of wages in organized industry was made in cotton textile mills in Bombay. The Millowners' Association, Bombay, gave a free hand to its member mills in the matter. Many mills closed down for a few months and reopened with offers of reduced rates of wages. There was little night working and there was a considerable volume of unemployment. Workers had no option but to accept employment on the reduced rates. Other mills taking advantage of the situation, effected reductions either in basic rates or in the dearness allowances or imposed percentage cuts on earnings. Not satisfied with one cut some mills imposed another within the short space of a few months.

Employers in many other industries all over the sub-continent also began to reduce wages. Many representations and memorials were submitted to Government on behalf of Labour but no Provincial Government, except Bombay, took any action in the matter. In March 1934, the Government of Bombay instructed its Labour Office to institute a Departmental Inquiry into the extent to which wages had been reduced during the year 1933-34 in the various centres of the cotton textile industry in the Province and also to ascertain the extent of unemployment

prevailing in the industry. Bombay and Sholapur were again the scenes of prolonged strikes in most cotton mills in these centres.

The publication of the report of the Departmental Enquiry in June 1934 was followed by the Millowners' Association's Bombay, adopting a simple scheme of standard minimum rates for unrationalised occupations on time rates of wages for affiliated mills in Bombay City. They also agreed, in cases where the dearness allowance for weavers had fallen to less than 40 per cent. to raise this allowance to that figure after the coming into effect of the 54-hour week on the 1st January 1935.

Towards the end of the year 1933, the Ahmedabad Millowners' Association, attempting to profit as a result of the successful experience of the Bombay mills in the matter, decided to reduce wages in the cotton mills in Ahmedabad by 25 per cent. and an agreement was concluded early in January 1935 on the basis of a uniform cut of 6¼ per cent. subject to the proviso that the earnings of a two loom weaver should not be reduced below Rs. 41-4 0 for 26 working days.

Trade Disputes Act.—By far the most important result of the report of the Bombay Departmental Enquiry was the passing by the Government of Bombay of a Trade Disputes Conciliation Act in August 1934. This Act made provision (1) for the appointment of a Labour Officer to look after the interests of cotton mill workers in Bombay City, to represent their individual grievances to their employers and to secure redress of such grievances whenever and wherever possible; and (2) for the appointment of the Commissioner of Labour as an *ex-officio* Chief Conciliator to whom the Labour Officer could bring all cases in which he could not succeed. Although the functions of the Chief Conciliator were to bring about an agreement between two opposing parties, he came to be regarded almost as an industrial judge whose decision was mostly accepted by both the parties to a dispute.

This Act was superseded with effect from the 1st August 1939, when the Bombay Industrial Disputes Act, 1938, which we describe lower down, was brought into operation for the cotton textile industry in the Province of Bombay.

During the period of nearly four years for which the 1934 Act was in operation considerable progress was achieved and there was much less industrial strife in the cotton mill industry in Bombay City than there was prior to that year.

The Government of Bombay, Bihar, the Central Provinces and Berar and the United Provinces appointed Committees of Inquiry to examine existing levels of wages and conditions of employment, and to make recommendations. In Bombay and in the C.P. these enquiries were to relate to labour employed in cotton textile mills. In the United Provinces and in Bihar, labour in all industries was covered. The Government of Madras, following a prolonged strike of cotton mill workers in Coimbatore, appointed a Court of Inquiry under the Indian Trade Disputes Act. Fortunately for labour all these various enquiries were conducted during a period when the textile industries in India were, after a fairly prolonged period of depression, showing signs of revival owing mainly to the Sino-Japanese War. Many of the recommendations, particularly those relating to wages, made by these Committees were accepted by the respective Governments.

Earlier, the Government of India had appointed a Labour Investigation Committee. As this was a fact finding committee and one of its important terms of reference was an enquiry into the wages and earnings of workers employed in industries, the Committee during their investigations made intensive enquiries into this subject. For some of the industries, *e.g.*, Cotton, Jute, Cement, Paper, Matches, Coalmines, etc., they conducted wage censuses on a sample basis. All these data have been incorporated in the Reports issued by members of the Committee. For the first time, therefore, now we have more or less a complete picture of wages and earnings in the principal industries in the sub-continent.

Legislative Activity.—During the year 1938 the Government of Bombay put through the Bombay Legislative Assembly their Bombay Industrial Disputes Act. They also issued to the various interests concerned for opinion draft proposals for the conditions to be fulfilled for the recognition by employers of unions of their workers; for the grant of holidays with pay during periods of sickness; and for the regulation of hours of work, rest periods and the grant of holidays in commercial offices, shops, hotels, theatres, cinemas, etc. As far as the last is concerned, a Shops and Establishments Act was passed on the 31st October 1939.

There were any number of legislative measures for the amelioration of labour conditions in other provinces as well. Both the United Provinces and old undivided Bengal enacted legislation during the year 1938 for the payment of maternity benefits and the Sind Legislative Assembly passed an Act in June 1939 to amend the Bombay Maternity Benefit Act, 1929, in its application to the Province of Sind. In the Central Provinces and Berar Bills were drawn up for (1) the collection of statistics; (2) for amending the Indian Factories Act, 1934, to provide for the registration of all factories and for the payment of registration fees in a manner to be prescribed by Government; and (3) to make provision for relief or benefits to workers in industrial occupations who are rendered unemployed and consequently destitute. The first has been passed into law. The second was enacted in 1939 and brought into force with effect from 1st April 1940. Scales of registration fees depending upon the maximum number of persons employed in any one day in the year have been prescribed.

The Governments of old undivided Bengal, and the Punjab and the Government of Sind adopted legislation for the control of hours of work in shops and commercial establishments. The Punjab Trade Employees Act was enforced in Punjab with effect from 1st March 1941, the Bengal Shops and Establishments Act was brought into effect from the 1st April 1941 and the Sind Act was brought into force from the 20th November 1941. The Government of the United Provinces published, on the 21st October 1939, the draft of a Bill to regulate the hours of employment and certain conditions of employment in shops and commercial establishments.

As far as Madras is concerned, the Minister for Labour was successful as a result of his personal efforts in the matter, to secure recognition by the employers of all unions which had been registered under the Indian Trade Unions Act.

Strikes Prohibited.—The tempo of industrial strife in the Indian sub-continent which was slowing down for seven years after the catastrophic strikes of 1928 and 1929 began to show a rapid quickening after the advent of Provincial Autonomy. Both Labour and its leaders believed that popular Governments in the Provinces would do all they could to improve the standard of life and the conditions of employment of the workers.

The strikes of 1937 and 1938 may have brought about a large amount of beneficial concessions to Labour, but they were also responsible, in a large measure to the passing by a popular Congress Government of the Bombay Industrial Disputes Act, 1938, by virtue of which all strikes are prohibited in the industries to which the Act is applied unless the formalities laid down by the Act have been observed.

Among the more important events that occurred in the world of Indian Labour during the years 1937 to 1939 must be mentioned the visit paid by Mr. Harold Butler, Director of the International Labour Office, to India, Ceylon, Malaya and the Netherland Indies during the winter of 1937-38. Mr. Butler has recorded the impressions gained as a result of his tours in his report entitled "Problems of Industry in the East"—International Labour Office, Geneva, 1938, Studies and Reports, Series B (Economic Conditions) No. 29.

A short time before the outbreak of the Second World War, the main Indian industries—especially the Textiles—were beginning to feel the effects of a slump. The outbreak of the war, however, resulted in considerable demand for the products of Indian industries and industrial activity in the country began to look up.

The year 1942 witnessed in the principal cities of India evacuations on an unprecedented scale owing to the panic created by the apprehension of bombardments. This, for the time being, caused tremendous dislocation of industry.

Special Privileges—The war period, notably the period 1942-45 witnessed stoppages and unavailability of different types of supplies and this has affected the community and labour in diverse directions. For instance, owing to the acute shortage of coal and in some cases of electric power, factories had to be intermittently closed down and this led to considerable voluntary unemployment and reduction in earnings. Industries taken as a whole did not compensate their workers for such voluntary idleness although a notable exception has been the Jute Mill Industry which agreed to give to its workers what is known as "khoraki" amounting to Rs. 4-6-0 a week during such weeks as the workers had to remain compulsorily idle owing to shortage of raw material or fuel

Old, undivided Bengal having been in the war theatre, its principal industry, namely, the Jute Mill Industry, was affected by war conditions in a peculiar way. While there was an insistent cry for more production, many of the Jute mills were commandeered by the military authorities and the industry was forced to make some mills, known as "Foster Mills," work double shifts in order to keep up production and find employment for workers employed in mills which had been commandeered for the army.

The unavailability and short supplies of daily articles of consumption affected labour like other members of the general community but one war-time development has been that most large employers in the country have made arrangements for the supply of such articles to their employees with the result that labour on the whole has been placed in a more favourable position in this respect than the members of the general community. Even during the dark and dangerous days of the Bengal famine of 1943, the Jute mill workers in Bengal, for instance, were fairly well provided for with daily articles of consumption at reasonable prices. The loss on account of supply of such grains has been made good by the employers.

DEARNESS ALLOWANCE

The enormous expansion of credit and currency which took place during the war resulted, as will be seen from another section of the Chapter, into a tremendous rise in prices and the index numbers went up in some cases upto 300 as compared to the pre-war period. The usual method followed for compensating the workers for the increase in the cost of living has been the grant of what is known as dearness allowance. There has, however, been no uniformity as between industry and industry and even between the same industry in different centres as regards the scale of relief granted. The highest scale of relief granted has been in the Cotton Mill Industry in Ahmedabad where, at one time, the workers were compensated upto about 100 per cent. of the rise in the cost of living.

Generally speaking, the scale of dearness allowance granted has been in the neighbourhood of only about 50 per cent. of the increase in the cost of living. One notable feature of the relief granted has, however, been that those on the margin of subsistence have been granted, a much larger quantum of relief than those in receipt of higher wages. Speaking generally, however, although money incomes of the workers have gone up considerably, barring a few exceptions like workers in Ahmedabad and Karachi, on the whole, the working classes have not benefited much as a result of the conditions created by the war. Apart from the fact that wages and earnings have not kept pace with the increase in the cost of living, the working classes in the country generally have had to undergo many sacrifices resulting from short supplies, unavailability of supplies, etc., along with the rest of the community.

But to compensate for all this employment during the war years increased considerably and in most factories it went up by about 50 per cent.

Sliding Scale.—One of the most vexed questions in Indian industry since the advent of the Second World War has been the maintenance of the workers' pre-war standard of life. During the earlier stages of price control, prices varied within narrow margins. The official cost of living index for Bombay City with prices in 1933-34 as the base stood at 105 for August, 1939. The limit of variation in the monthly index numbers in this series during the whole of the year 1940 was within six points only.

Organised demands for dearness allowances in Indian industry were first made in Bombay in December 1939 and then in other centres. The demand made by cotton mill workers in the City of Bombay was referred by the Government of Bombay to a Board of Conciliation appointed under the Bombay Industrial Disputes Act, 1938 presided over by Sir Sajba Rangnekar. Conciliation failed but the Millowners' Association, Bombay, accepted the recommendations made by the Board and sanctioned the payment of a dearness allowance at a flat rate of two annas per day of attendance, with retrospective effect from 1st December 1939, to every worker whose earnings did not amount to more than Rs. 150 per month. Dearness allowance at this rate was to be paid so long as the official cost of living index for Bombay City remained between the limits of 105 and 123. It was reckoned that an allowance at this rate would compensate the workers to the extent of an average of 76·9 per cent. of the actual rise in the cost of living so long as the official index remained between these limits.

The demand for dearness allowance made by cotton mill workers in Ahmedabad was referred to conciliation. As in Bombay, conciliation failed in Ahmedabad but in the latter centre an agreement was reached between the Ahmedabad Millowners' Association and the Textile Labour Association, Ahmedabad, to refer the dispute to the arbitration of the Bombay Industrial Court. The Industrial Court in its award on this dispute laid down a sliding scale of allowances varying with the fluctuations in the official cost of living index for Ahmedabad on the basis of a grant of an allowance equivalent to one-elevenths of Rs. 3-8-0 per month for every rise of one point in the index, as compared with the figure for August 1939, in the month two months prior to the one for which the allowance is to be paid. It was calculated that this would compensate the workers to the extent of 66·67 per cent. of the actual rise in the cost of living at any particular date. A part of the balance was to be made up by opening cost price grain shops. This was the first beginning in the sub-continent of the payment of dearness allowances on a sliding scale linked up with fluctuations in the cost of living index.

The position in the principal industries in the sub-continent is somewhat as follows :—

In Different Centres.—The scale of dearness allowance differs from centre to centre in the cotton textile industry. Except in the Bengal area, and in the other important centres, the dearness allowance is generally linked with the cost of living index numbers. The Bombay and Ahmedabad cotton textile workers are compensated as a result of the award of the Industrial Court to the extent of 76.5 per cent. of the rise in their cost of living. Before August 1945, however, the workers in Ahmedabad were compensated to the extent of 96.66 per cent. In 1946, dearness allowance amounted to Rs. 36-10-0 in Bombay and Rs. 48-10-0 in Ahmedabad. In Madras, the dearness allowance amounted to Rs. 18-6-0 in June 1944 and in Madura to Rs. 24. In Coimbatore, the rate has been fixed at as. 8 for every 5 points. The industrial Tribunal appointed in 1946 recommended the payment of dearness allowance at 3 annas and 2¼ annas per point of index number according to localities. According to the Tribunal's award, the position regarding dearness allowance in December 1946 was as follows :—

Monthly Income Group	*Relief* Rs.
Less than Rs. 15	12
Income Rs. 16	10
Rs. 17 to Rs. 50	8
Rs. 51 to Rs. 100	6

The scale of dearness allowance in the Bengal area varies very considerably from as. 4 per rupee of wages to about Rs. 25 per month. In Cawnpore, in August 1945, workers in the lowest wage group were given an allowance of as. 14 per rupee of wages. In Nagpur, the dearness allowance was Rs. 27-8-0 in January 1944 to workers attending full time. The Delhi cloth mills pay a dearness allowance of Rs. 32 per month. In Indore, the dearness allowance is linked with the three monthly average of the cost of living index numbers for Bombay, Ahmedabad and Sholapur and the allowance amounted to Rs. 30-9-0 in September 1944.

Jute Industry.—In the jute mill industry no dearness allowance as such is paid but an allowance known as 'amenity allowance' is given. It was Rs. 2 per week in 1944 but was subsequently raised to Rs. 3 per week. In the jute industry, however, in addition to the amenity allowance, the mills issue foodstuffs at concession rate and this concession worked out to Rs. 1-4-4 during 1944.

Metals.—Among minerals and metals, the Tata Iron and Steel Co. at Jamshedpur are the principal employers. In their concerns those getting less than Rs. 100 were in receipt of Rs. 15 per month. In addition to the dearness allowance, however, employees drawing less than Rs. 500 are paid emergency bonus equivalent to 10 per cent of their basic wages subject to a minimum of Rs. 5. Employees are allowed foodgrain rebate which comes to Rs. 4-14-0 and Rs. 3-9-5 for married persons and bachelors respectively, drawing above Rs. 150, while it is Rs. 6-14-0 and Rs. 4-13-6 in the case of married persons and bachelors respectively drawing less than Rs. 150.

Cement.—In the cement industry, there is no uniformity as regards either the policy or the scale for the payment of dearness allowance. In most of the factories the amount of dearness allowance comes to 5 to 8 annas per rupee of basic wages.

In the match industry, the WIMCO unit at Ambernath, Bombay, pays a dearness allowance of Rs. 30 per month to all operatives. There are wide variations in regard to the allowance paid by other match factories.

Railways.—The recommendations of the Central Pay Commission apply to the railways. According to these recommendations, dearness allowance would be payable at the rate of Rs. 30 per month for persons drawing below Rs. 50 when the all-India cost of living index is 280. Government have also continued to give the railway workers the food concessions which they were receiving formerly.

Mining Industry.—In the coal mining industry, dearness allowance was being paid at the rate of 22½ per cent. of total earnings in 1943. This was raised to 50 per cent. in December 1943 and subsequently to 100 per cent. The Board of Conciliation which published its Report early in 1947 have raised the scale of dearness allowance to 150 per cent. of the basic wage. Before the Board's Report, the dearness allowance in the railway collieries used to be Rs. 14 per month.

Plantations.—In the plantations, there have been changes recently in the basic wage rates. In addition, however, dearness allowance at the rate of 2 annas for adults and 1 anna for children per day is given in the Assam tea plantations. In March 1946, the United Planters' Association of Southern India decided to recommend a dearness allowance of Re. 0-1-6 for adults and Re. 0-0-9 for children per day. Recently, the United Planters' Association are paying a consolidated rate for re-imbursing the workers for the rise in the cost of living and this is known as district allowance. In the principal centres of the tea and coffee plantations it comes to about Re. 0-8-0 for men, Re. 0-5-6 for women and Re. 0-4-0 for children.

Bonus.—During the General Strike in cotton textile mills in Bombay in 1940, the Government of Bombay enquired of the Millowners' Association, Bombay, whether it was willing to give an undertaking to Government that the millowners would be prepared to give a war bonus to their workers if increased profits were made by the industry as a result of war conditions as soon as the extent of these profits had been determined. The Government of Bombay were aware of the increasing desire of textile workers to be given an adequate share in the improved trading conditions of the industry resulting from the war and they, therefore, took up the matter again with the Millowners' Association, Bombay, towards the end of the year 1941. As a result of these discussions, the Association decided that its Cotton Mill Members in the City and Island of Bombay should grant to their workers a cash bonus equivalent to 12½ per cent. of, or two annas in the rupee on, their actual earnings (exclusive of dearness allowances) for the period 1st January to 31st December 1941.

As will be seen, the cotton mill industry in Bombay was the first one in the country to grant a profit bonus amounting to about eight days' wages to its operatives. As a result of the grant of profit bonus in Bombay City, industrial workers all over the sub-continent started clamouring for a similar bonus. Among the large organised industries the jute mill industry is the only one in the sub-continent which is not granting profit bonus. Speaking generally, the amount of profit bonus granted varies from two months' wages to about four months' wages in the cotton mill industry.

Some of the small industries, such as, the wool and silk industries, do not appear to grant any profit bonus. It is worthy of note, however, that although in the coal mining industry the employers were until recently opposed to the grant of any profit bonus, recently they have as a result of the recommendations of a Board of Conciliation appointed in Bihar and Bengal, agreed to do so and actually in the coal mines it has been decided to grant a profit bonus equivalent to four months' wages. This bonus is partly linked with production and partly with attendance. Quite recently it has been decided also to grant a similar bonus in the coalfields in C.P. and Berar.

TECHNICAL TRAINING

With the object of taking power to require industrial undertakings, including mines, in the sub-continent to release technical personnel for employment in factories under the Crown or declared to be engaged on work of national importance, the Governor-General promulgated the National Service (Technical Personnel) Ordinance, 1940, on the 28th June 1940. This Ordinance was amended by three further Amending Ordinances issued in September 1940, in January 1942 and in July 1943.

About the end of the year 1940, the Government of India instituted a Technical Training Scheme designed to provide for the intensive training of a large number of skilled technicians required for the technical branches of the Defence Services and for ordnance and munitions factories. When the scheme was first initiated the number of persons to be trained was fixed at 15,000. This was increased to 44,600. The total number of training centres in the sub-continent as on 30th April, 1945, was 163.

Not only was training in all centres given free of charge, but during their training all candidates received generous stipends which vary according to whether they are matriculates or not and which also vary from time to time according to dearness allowance plus free medical treatment. The trainees were also entitled to the benefits provided under the Workmen's Compensation Acts. On selection a trainee was posted to a Civil or a Civ.-Mil. (Civil-Military) Centre. After a period of two months, trainees in a Civil Centre as were willing to enrol in the Defence Services were enrolled and transferrred to a Civ.-Mil. Centre where they remained until they passed certain trade tests. They were then drafted into one of the services on a minimum salary which varies from service to service.

Hindustani was taught with the object of universalising training in this language throughout the sub-continent. Recruitment of a better type of trainee was being effected by requiring candidates seeking admission to training centres to pass intelligence tests on the lines of the psychology tests given in other countries. A measure adopted to improve the physical standard of the trainees was to give shark oil at the rate of two teaspoonfuls a day to underdeveloped men.

A new Instrument Mechanics Training Centre was started at Hindupur near Bangalore with 275 seats in the year 1944 for training boys in the manufacture of precision tools which at one time was considered unsuitable for the sub-continent. The trade is open to young men who have reached Matriculation Standard and are between the ages of 17½ and 30. They are trained under the guidance of a British expert. Trainees get a scholarship of Rs. 59-4-0 per month with free food, lodging and clothes.

The Technical Training Scheme has demonstrated that, with intensive training semi-skilled men can be trained for all industries and that the standard of such men, after from six to eight months' training, is at least up to, if not above, the standard reached under ordinary peace-time apprenticeship schemes of two to three years' duration. The Government of India felt that if the training imparted under the Technical Training Scheme is supplemented by further 'biassed' training the final product would be more acceptable to employers.

The number of technicians trained under the scheme and supplied to the Defence Services up to 31st October 1945 was 83,867. More than 100,000 trained men have passed through the Training Centres during the five years of the operation of the scheme. With the termination of the war, however, the recruitment of trainees under the Scheme ceased.

Meanwhile the Government of India appointed a Special Committee with N.R. Sarkar as Chairman to consider the question of the establishment of a high grade technological institute in India possibly on the lines of the M.I.T. to provide advanced instruction and training in technology to meet the demands of industry.

Essential Services.—As a consequence of the entry of Japan into the War, the danger had arisen of persons in India abandoning their employment or leaving certain areas. In order to avoid such a danger, the Governor-General, in exercise of the powers conferred on him by Section 72 of the Government of India Act, 1935, promulgated in 1941 an Ordinance called the Essential Services (Maintenance) Ordinance.

Provincial Governments in India under the above ordinance "declaring" as essential such services as railways, oil and fuel installations, port trusts and dockyards, municipalities, gas and electricity producing plants, telephone systems, certain banks, *et cetera*, to which the Ordinance was to apply. When once any employment in any particular area was 'declared' no person engaged in that employment could depart from that area without the permission of the authority making that order, nor could any employer discontinue the employment of such person without reasonable cause, and so on. A number of Provincial Governments followed suit.

We refer elsewhere in this publication to the widespread disturbances which occurred in the sub-continent in August 1942 following the arrest of Mahatma Gandhi and the leaders of the Indian National Congress as a result of the All-India Congress Committee deciding, at its historic Session of 6th/8th August in Bombay to empower Mahatma Gandhi to launch a Civil Disobedience Movement. These disturbances included *hartals* or stoppages of work for prolonged periods in many industrial units in several centres in the sub-continent. All the cotton textile mills in Ahmedabad remained totally closed for nearly four months. A number of other factories and large engineering workshops in Bombay, Cawnpore, Nagpur and in many other places were also affected and essential war production was considerably interfered with. In order to prevent a repetition of similar trouble in the future, the Government of India, by a notification dated the 17th April 1943, amended the Defence of India Rules by adding a new rule —Rule 56A—for the Prevention of *Hartals* in places of Employment.

Early in 1943 the Government of India also promulgated Rule 78A of the Defence of India Rules conferring powers on both the Central and the Provincial Governments to compel certain persons to do work. This Rule empowered any Officer of Government authorised in this behalf by a general or special order to require any male person within such area as may be specified in the order to assist in the doing of work on land for such period and in such manner as the officer may direct, being work the doing of which is in the opinion of the officer necessary to meet an actual or apprehended attack, or to repair or to reduce the damage resulting therefrom or to facilitate offensive or defensive operations in the area. Refusal by any person to comply with any lawful direction given to him under this order rendered him liable to imprisonment which might extend to six months or with fine or both. The Officer giving a direction under this order had the right to determine the remuneration to be paid for the work.

Employment Exchanges.—When the National Service Labour Tribunals were established under the National Service (Technical Personnel) Ordinance, it was the intention that they should gradually assume the role of employment exchanges for technical personnel. This they had been doing but the statutory powers given to Tribunals to fix wages and terms of service and to compel an employer to give up an employee and an employee to take up employment in the national service have distinguished them from the voluntary employment exchanges commonly met with in other countries. The exacting needs of war made it necessary for the Tribunals to have these statutory powers and they served their purpose.

As the war progressed it was felt necessary to look ahead and to build up an employment organisation which would be in a position to deal with the registration and voluntary placement of the many skilled and semi-skilled workmen who would be thrown out of employment on the termination of hostilities. The Tribunals had gained much experience of the requirements of employers and the placement of labour and it was therefore decided to use these organisations in the first instance for the setting up of voluntary employment exchanges for skilled and semi-skilled personnel.

The Directorate-General of Resettlement and Employment was set up in July 1945 consequent on the Government of India's decision that the resettlement of ex-service personnel should be a civilian and not a military responsibility. The object of the organisation is the resettlement and employment in civil life of demobilised ex-servicemen and women and discharged war-workers.

The organisation is in the charge of a Directorate-General. There are three Directorates namely, (1) Directorate of Employment Exchanges, (2) Directorate of training, and (3) Directorate of Publicity. The country is divided into eight regions (as against 9 before the partition) each under the adminstrative control of a Regional Director of Resettlement and Employment.

There are now 53 Employment Exchanges consisting of a Central Exchange in New Delhi, 7 Regional Exchanges and 45 sub-regional Exchanges. Before the partition of the country there were 70 Exchanges of which 17 have gone to Pakistan.

The Central Employment Exchange acts as an Inter-Provincial Clearing House to balance the supply of and demand for labour within the various regions.

In addition to the Exchanges, there are 132 Employment Information Bureaux with a view to establishing a personal contact with ex-Servicemen in widely scattered rural areas. It is proposed to attach a Mobile Section to each Exchange. It would appear that the employers in the country are beginning to appreciate the advantages of employment exchanges. The number of employers using the Exchanges has risen from 2,500 in July 1946 to 3,500 in July 1947.

The method adopted to save members of the Defence Services unnecessary travelling to the Exchange is to register them at the time of release and to forward their particulars to the Exchange covering the area in which they intend to reside. Each demobilised person thus registered is given a card which he is asked to post to the Exchange when he is in need of help in obtaining work.

Each Exchange maintains full details of the qualifications, experience, etc., of persons registered and classifies them by occupations according to a special classification system, which has been evolved for this purpose. Vacancies notified by employers are classified according to the same system. This facilitates speedy identification of suitable workers for available vacancies.

The Employment Service was primarily intended for ex-Servicemen and discharged war-workers but its scope is being extended to meet the needs of individual Provinces. Thus, the Governments of West Bengal and U.P. have decided to expand the scope of their Exchanges to cover all categories of employment seekers. In other Provinces also, specific categories of civilian employment seekers have been added.

The following table contains the latest available information regarding registrations and placements by Employment Exchanges.

Month.	Total Registrations.	Placings during the month.	Vacancies cancelled.	Vacancies outstanding at the end of the month.
August 1946 ..	50,931	7,601	16,236	96,217
October " ..	48,309	9,484	22,157	94,344
December " ..	44,837	10,570	15,402	90,917

MINES WELFARE FUND

With a view to meeting expenditure incurred in connection with measures which in the opinion of the Government of India are necessary or expedient to promote the welfare of labour employed in the coal-mining industry, the Government of India, under the powers conferred by Section 72 of the Government of India Act, promulgated the Coal Mines Labour Welfare Fund Ordinance 1944. This Ordinance has now been replaced by Coal Mines Labour Welfare Fund Act of 1947 which places the Fund on a permanent footing. The principal objects for which this fund will be utilised are defined in the Act. These are: (1) the improvement of standards of living including housing and nutrition, the amelioration of social conditions and the provision of recreational facilities for the benefit of the labour employed in the coal mining industry; (2) the provision of transport to and from work; (3) the provision of improvement of educational facilities; (4) the provision of improvement of supplies of water; and (5) the improvement of public health and sanitation, the prevention of disease, the provision of medical facilities and the improvement of existing medical facilities. The Act makes provision for the appointment of an Advisory Committee consisting of Government Officers and an equal number of members representing colliery owners and workers employed in the coal mining industry of whom one has to be a woman.

The Act also contemplates the appointment of Welfare Administrators, Inspectors and other officers to supervise or carry out the activities financed by the fund. The functions of the Advisory Committee are to advise the Central Govt. on all matters which the Act requires Government to consult it and on any other matters arising out of the administration of the Act and the fund. Both the cost of administration of the fund and the salaries and allowances of the officers appointed in connection therewith are to be defrayed from the fund itself.

The Rules framed under the Coal Mines Labour Welfare Fund Act were published in the Gazette of India dated the 15th October, 1944. These make provision for the composition of

the Advisory Committee, the collection of the excise duty or cess levied under the Act and its administration.

The Rules provide for the appointment of a number of Sub-Committees which include (1) a finance Sub-Committee to frame schemes of expenditure and to advise generally on the budget and all expenditure debitable to the Fund; (2) a Works Sub-Committee to consider all major projects and (3) separate Coalfields Sub-Committees for each of the main Coalfields in W. Bengal, Bihar, the Central Provinces and Berar and Assam to consider and advise on all matters relating to expenditure from the Fund in their respective Coalfields.

The Rules further empower the Central Government to impose certain conditions on Provincial Governments, local authorities or Owners, Agents or Managers of Coal-mines to whom grants are made from the Fund in aid of any schemes approved by the Central Government.

At the Second Meeting of the Advisory Committee held at Dhanbad in 1944, the Committee decided to recommend to the Government of India that a cess of four annas per ton should be levied on all coal and coke despatched from collieries in the Dominion with effect from 1st November, 1944. In deciding on the maximum amount of cess permissible under the Ordinance, the Committee felt that it might not be possible to maintain this figure in periods of slump and they recommended that Government should accept, as a general principle, the building up of a reserve fund in those periods in which the maximum was levied so as to ensure that welfare measures could be maintained in periods of slump.

Some of the welfare schemes so far recommended by the Board are as follows: (1) Anti-Malaria Campaign with a recurring annual expenditure of Rs. 7 lakhs and a non-recurring expenditure of 3 lakhs; (2) the provision of two regional hospitals in the Jharia Coalfields at an estimated capital cost of Rs. 3,00,000 and two hospitals for Raniganj Coalfields at an estimated cost of Rs. 1,34,000; (3) part provision of grants of Rs. 3,00,000 each towards the captial costs of Central hospitals in Jharia and Raniganj; (4) a token grant of Rs. 5 lakhs for a water-supply scheme; (5) a token grant of Rs. 10 lakhs for a housing scheme; (6) grants for propaganda measures and for growing vegetables; and (7) a sum of Rs. 27 lakhs to be spent immediately to build for coal-miners a township of two roomed tenements on the outskirts of coal areas in the Raniganj Coalfields.

SOCIAL SECURITY

One of the resolutions unanimously passed the Tripartite Labour Conference of 1943 asked for the setting up of machinery to investigate questions of wages and earnings, employment and housing and social conditions generally, and that as soon as possible after receipt of the required statistics and other data the Central Government should appoint a mixed committee to formulate plans of social security.

In pursuance of this resolution, the Governor-General-in-Council appointed, early in 1944, a Committee of Enquiry to be known as the Labour Investigation Committee. The Committee was composed of Mr. D. V. Rege, I.C.S., as Chairman and Mr. S. R. Deshpande, Dr. Ahmad Mukhtar and Mr. B. P. Adarkar as Members.

The terms of reference of the Committee were as follows: (*a*) to collect data relating *inter alia* to wages and earnings, employment, housing and social conditions of labour and in particular of industrial labour in the sub-continent; and (*b*) to investigate and report *inter alia* on: (*i*) the risks which bring about insecurity; (*ii*) the needs of labour, by various classes, to meet such risks; (*iii*) the methods most suitable for meeting such risks; and (*iv*) housing and factory conditions. The Headquarters of the Committee were at Simla.

The Committee made exhaustive fact-finding surveys in some 36 industries including major industries like cotton, jute, coal, etc. Part of this survey work was done by the employment of field staff consisting of Supervisors and Investigators. For some of these surveys the Committee undertook a wage census on a sample basis. Unlike other Committees the reports of the Committee have been published under the responsibility of individual members while the Committee as a whole has prepared a document known as the Main Report of the Labour Investigation Committee. Since this was a fact-finding Committee, it has not made any recommendations as such although its findings now serve as a basis for the formulation of future policy.

A special branch entitled the Social Security Branch of the Labour Department of the Government of India was opened towards the beginning of 1945. The following three distinct schemes were under preparation in this Branch:

(1) A Unified Scheme of insurance against sickness, accident and maternity for factory workers, to replace the original health insurance scheme was drafted by Mr. Adarkar. In the year 1944 Prof. B. P. Adarkar's Report on Health Insurance for Industrial workers was published. The Government of India invited the International Labour Organisation to depute two experts to advise them on matters contained in Prof. Adarkar's Report. These two experts were Messrs. Stack and Rao of the I.L.O. After certain amount of touring in the country and consultations with Prof. Adarkar and certain interests concerned, Messrs. Stack and Rao suggested certain alterations to the findings of Prof. Adarkar. These were published by the Government of India.

(2) A unified scheme of insurance against sickness, accident and maternity for coal-miners. And,

(3) A scheme of sickness insurance and old age pensions for Indian seamen serving on Indian and foreign ships.

The last has now been published (See "Indian Labour Gazette," May 1947 issue). As regards the Health Insurance Scheme, a bill incorporating the scheme was introduced in November 1947 in the Dominion Parliament by the Hon'ble Mr. Jagjivan Ram and at the time of writing this section, had been referred to a Select Committee of the Legislature.

War Injuries Compensation.—Incidentally a War Injuries (Compensation Insurance) Scheme was enacted by the Central Government under the War Industries (Compensation Insurance) Act, 1943, and was brought into force on the 16th November 1943.

Another point which might be mentioned in passing is the establishment of labour supply boards. During the earlier stages of the War the supply of unskilled labour had been satisfactory, requiring no measures for its control or allotment. By the end of the year 1942, however, there were indications that the problem of supply of such labour was assuming importance in a few areas. The Government of India therefore decided to set up both Provincial and Regional Labour Supply Committees for areas where serious shortages were being experienced or were likely to be anticipated and a beginning was made by the setting up of such a Committee at Jubbulpore where the needs of the Central Government establishments predominate. The Committees had no statutory powers. They were generally, under the chairmanship of the Chairmen of the National Service Labour Tribunals of the Provinces in which they were established. The Committees were dissolved in October 1945.

The direction of labour was carried a step further when by a notification published in the "Gazette of India" dated the 9th June 1944, the Government of India directed that Rule 81 of the Defence of India Rules was applicable for controlling the recruitment and employment of labour in such areas as may be specified in the order, with a view to securing that sufficient workers are available for essential undertakings.

The Labour Recruitment Control Order was brought into force with effect from the 18th December, 1944 and was designed to regulate the recruitment of labour from certain controlled Districts in Bengal, Bihar and the Central Provinces and Berar. The order required contractors and employers of labour to obtain licenses for recruiting labour from controlled districts for work outside the controlled districts. All works or employments within the controlled districts were exempted from taking out licenses. This order was rescinded with effect from October 1945.

LABOUR LEGISLATION

The Central co-ordinating authority in India for questions connected with labour legislation is the Department of Labour (styled Ministry of Labour since October 1947) of the Government of India with the Labour Minister in charge. The administration of matters connected with the English and Indian Merchant Shipping Acts, the Mercantile Marine Department and Indian Seamen is with the Ministry of Commerce. In respect of all the Railways, the Labour Minister is responsible for the administration of the Payment of Wages Act, 1936, Trade Disputes, Hours of Work for employees not covered by the Factories Act and regulation of employment of children. He is also responsible for Regulation of Labour and Safety in respect of mines and oilfields; trade disputes in industries, businesses or undertakings carried on by the Central Government; and Inter-Provincial Migration.

In the field of Concurrent Legislation, the Labour Minister is responsible for (1) Factories; (2) Welfare of labour, conditions of labour, provident funds and workmen's compensation, health insurance including invalidity pensions and old age pensions; (3) unemployment insurance; (4) trade unions and industrial and labour disputes; (5) electricity; and (6) boilers.

As the permanent ex-officio Chairman of the Tripartite Labour Conference, all matters connected with the Conference and its Standing Labour Committee are dealt with by the Labour Minister. He is also responsible for the administration of the National Service (Technical Personnel) Ordinance; recruitment of unskilled labour throughout India for employment on defence works, the administration of the Technical and the Bevin Training Schemes; the Cost of Living Index Scheme, the Essential Services (Maintenance) Ordinance, and air raid precautions in Factories.

CENTRAL OR PROVINCIAL ?

Under the Devolution Rules made under the Government of India Act, 1919, 'Regulation of Mines' and 'Inter-Provincial Migration' were Central subjects whereas industrial matters included under the head 'factories' and 'welfare of labour' fell within the scope of the provincial legislatures. Although the Government of India has passed central legislation in connection with most questions affecting the welfare of labour—in order to secure uniformity of treatment in all provinces—the administration of the various Acts connected with factories, workmen's compensation, trade unions, payment of wages, the pledging of child labour, etc., falls on the Provincial Governments who have to bear the entire cost of administration as it is not permissible under the constitution for the Central Government to incur any expenditure from Central revenues on the administration of provincial subjects.

The Central Government in the Ministry of Labour, however, maintains control in connection with the Indian Mines Act and the Mines Maternity Benefit Act.

The Royal Commission on Indian Labour recommended that the possibility of making labour legislation both a federal and a provincial subject should receive adequate consideration; and that, if federal legislation were not practicable, efforts should be directed to securing that, as early as possible, the whole of India should participate in making progress in labour matters.

For the States in which there was appreciable industrial development, the Commission thought that the Industrial Council which they recommended should be set up would offer a suitable channel for co-operation. (It may be mentioned here that the States have been given six seats in the Tripartite Labour Conference). The Government of India Act, 1935, lays down that the following subjects may be legislated for concurrently both by the Federal Legislature and by the Provincial Legislatures:—

(1) Factories; regulation of the working of mines, but not including mineral development;

(2) Welfare of labour; provident funds; employers' liability and workmen's compensation;

(3) Trade Unions; industrial and labour disputes.

Since the institution of the Annual Conference of Labour Ministers, the First Session of which was held at New Delhi in January, 1940, the trend has been towards Central rather than Provincial Labour Legislation—with this difference, that, whereas all the Central Acts passed prior to 1941 automatically applied to the whole of India, some of the recent labour legislation has been permissive, that is to say, it is open to any particular Province to extend such legislation to its territory or not as it pleases.

PRESENT LAW

In the Chapter on the historical survey of the growth of the labour problem in the sub-continent we have traced the development of factories' legislation in the country since 1881 when the first Factories Act was passed and we gave the main features of that Act and the 1891 and the 1911 Acts as amended by the Amending Acts of 1922, 1923, 1926 and 1931.

Factory law in the sub-continent was completely overhauled in 1934 as the result of the acceptance by Government of most of the recommendations made for its improvement by the Royal Commission on Indian Labour. A new consolidating and amending Act was passed by the Central Legislature in 1934 and "The Factories Act, 1934" was brought into operation with effect from 1st January 1935. This Act has been amended on five occasions in 1936, 1940, 1941, 1944 and 1945. The amendment of the Act which was effected in 1945 deals with holidays with pay for all workers employed in perennial factories. The main provisions of the law relating to factories as it stands today are as follows:

(a) *Classification of Factories.*—A distinction is drawn between 'seasonal' and 'perennial' factories. A factory which is exclusively engaged in cotton ginning, cotton or jute pressing, the decortication of ground-nuts, or the manufacture of coffee, indigo, lac, rubber, sugar (including gur) or tea is to be a seasonal factory, provided that a Provincial Government may, by notification in the official gazette, declare any such factory in which manufacturing processes are ordinarily carried on for more than 180 working days in the year, not to be a seasonal factory for the purposes of the Act. The Provincial Government may also, by notification, declare any seasonal factory in which manufacturing processes are ordinarily carried on for not more than 180 working days in the year and which cannot be carried on except during particular seasons or at times dependent on the irregular action of natural forces, to be a seasonal factory for the purposes of this Act.

By virtue of the Factories (Amendment) Act, 1940, the provisions of the 1934 Act relating to health, safety, regulation of child labour and registration may be applied to power factories employing from 10 to 19 workers and in which children are employed. It was felt that this amendment would lead to the complete non-employment of children in small factories because rather than be compelled to register under the Act, the owners concerned would prefer not to employ children at all.

There has been an increasing tendency in most Provinces in the sub-continent during recent years especially in Bombay, to take advantage of Section 5 of the Factories Act, 1934, by notifying all factories employing ten or more persons as "factories" for the purposes of the Act. In this connection it is of interest to record that Dr. K. N. Katju, at present Governor of Orissa conducted a detailed inquiry into alleged sweated labour in small factories for a period of over two years. He found that in over 300 factories employing 4,000 workers labour was sweated, there were no fixed hours of work and health and sanitary conditions were deplorable. The Government of the United Provinces thereupon took immediate action by declaring all such factories as employed 10 or more persons as factories for the purposes of the Act. The Second Conference of Labour Ministers held in January 1941 decided that the Factories Act should be so amended as to make registration of all factories employing 10 or more persons compulsory but this recommendation has not yet been given effect to.

(b) *Age and Sex Groups.*—Factory operatives are divided into four age and sex groups. (1) adult males, (2) adult females, (3) children of both sexes, i.e., persons over 12 and under 15 years of age, and (4) 'adolescents' defined as persons of both sexes who are over the age of 15 years and under the age of 17 years but who have not been certified as fit for employment as adults. Such adolescents as have not been so certified are to be deemed to be children.

(c) *Hours of Work.*—The maximum limits of eleven hours per day and sixty hours per week laid down by the 1922 Act for both adult males and females are permitted only in the case of seasonal factories. The maximum hours permitted for perennial factories have been reduced to ten per day and 54 per week subject to the proviso that persons employed on work necessitating continuous production for technical reasons and persons whose work is required for the manufacture or supply of articles of prime necessity which must be made or supplied every day may be employed for not more than 56 hours in any one week. The maximum hours of work permitted for both uncertified adolescents and children have been limited to five per day both in seasonal and in perennial factories.

(d) *Spreadover.*—By "spreadover" is meant the limitation of the period of consecutive hours during which the daily limits of hours of work may be availed of by the owner or occupier of a factory. This principle was introduced in factory legislation for the first time in 1934. The spreadover in the case of adults is limited to thirteen consecutive hours and in the case of children to seven and a half continuous hours; but the continuous period of eleven free hours in every twenty-four hours in the case of adults and of sixteen and a half free hours in the case of children must include the hours between 7 p.m. and 6 a.m. for both women and children. The effect of the Amending Act of 1944 on this question has been dealt with below. The power to grant exemptions in the case of women where technical reasons require that work should be done at night, *e.g.*, in the fish curing industry, continues to be allowed.

(e) *Artificial Cooling and Humidification.*—Power has been given to Provincial Governments to authorise Factory Inspectors to call upon managers of factories to carry out specific measures for increasing the cooling power of the air if they are of opinion that it is at times insufficient to secure operatives against danger to health or serious discomfort; provided, however, that the cooling power can be appreciably increased without involving an amount of expense which would be unreasonable under the circumstances.

(f) *Welfare.*—Provision is made for four matters in connection with workers' welfare: (1) for the maintenance of a suitable and sufficient supply of water for washing, for the use of persons employed in processes involving contact with obnoxious or poisonous substances; (2) for adequate shelter for rest in factories employing more than 150 persons; (3) for the reservation of suitable rooms for the use of children of women employed in factories employing more than fifty women; and (4) for the maintenance of adequate first aid appliances.

(g) *Rest Intervals and Holidays.*—The provisions of the 1911 and the 1922 Acts with regard to rest intervals and the weekly holiday were maintained subject only to verbal modifications of a minor character.

(h) *Holidays with Pay.*—The Factories (Amendment) Act, 1945 which comes into force with effect from the 1st January 1946 provides for compensatory holidays and holidays with pay. In cases where, as a result of the passing of an order or the making of a rule exempting a factory or the workers therein from the provisions of the Act relating to a compulsory weekly holiday, a worker is deprived of any of such holidays, he must be allowed, as soon as circumstances permit, compensatory holidays of equal number to the holidays so lost. The provisions with regard to holidays with pay will enforce, in all perennial factories, an annual paid holiday of 10 days for adults and 14 days for children. These holidays can be accumulated over a period of two years. Half of the wages payable for these holidays are to be paid before the worker proceeds on leave and the balance on his return. A more liberal provision will not be affected by this law and factories providing benefits substantially similar to those laid down in the amending Act can be exempted from its provisions.

(i) *Overtime.*—The old Acts contained no limitations with regard to the overtime hours which could be worked by 'exempted' workers. The new Act places a limitation of hours on the amount of overtime that can be worked by virtue of any exemptions granted under the Act. With regard to overtime rates of pay, the Act lays down that a time and a half should be paid in all cases where a worker in a seasonal factory is required to work for more than sixty hours in any one week or where a worker in a factory other than a seasonal factory is required to work for more than ten hours in any one day. But where a worker in a factory other than a seasonal factory is required to work for more than fifty-four hours in any one week, he is to be entitled, in respect of the overtime worked less any overtime in respect of which he is entitled to extra pay under the preceding sentence, to pay at the rate of one and a quarter times his ordinary rate of pay.

(j) *Certificate of Fitness for Children.*—Provincial Governments have been given powers to make rules prescribing the degree of fitness to be attained by children and it has been prescribed that whenever such a standard has been laid down, no child failing to attain it can be certified for employment in a factory. Similarly, adolescents cannot work as adults unless certified 'fit to work as an adult'. If they are not so certified they are considered children.

(k) *Security of Factory Structures.*—Factory Inspectors have been given powers to call upon managers to carry out such tests as may be necessary to determine the strength or quality of any specified parts of the structure of factories if they are of opinion that, on account of any defect or inadequacy in the construction of any factory, the factory or any part thereof is dangerous to human life or safety. Provincial Governments are further empowered to make rules for the furnishing, by factories, of certificates of stability.

(l) *Exemptions.*—A frequent cause of complaint against the older Factory Acts was that they gave local Governments very wide powers to exempt certain classes of workmen from all or any of the restrictive provisions of the Act. The new Act limits these powers and prescribes further that no exemptions are to be granted in respect of the provisions for spreadover, prohibition of night-work and the limitations of weekly hours for women and persons under the age of sixteen years.

Act of 1944.—The Factories (Amendment) Act, 1944 was passed to remedy certain defects and meet some difficulties in the administration of the main Act. Washing facilities were required to be provided only in places where workers come in contact with injurious or obnoxious substances. By removing the restrictive clause, all factory owners are required to provide washing facilities for their workers. Bombay was the only Province, which had framed draft Rules in connexion with this matter.

A recent judgment of the Bombay High Court held that orders passed by an Inspector of Factories regarding "means of escape" were *ultra vires*. In order to validate the rules made

by Provincial Govts. in the matter of 'Precautions against fire,' Section 23 of the Act has been suitably amended. Under the provisions of Sections 45 and 54 no woman or child was allowed to work in a factory except between the hours of 6 a.m. and 7 p.m. but the limiting hours could be varied by a Provincial Government to cover a span of 13 hours between 5 a.m. and 7-30 p.m. Owing to the change in Indian Standard Time practical difficulties were felt in this respect in western Provinces. The evening limit has therefore been extended from 7-30 p.m. to 8-30 p.m. This amendment, however, was to have effect only for the duration of the War.

A new rule has been promulgated under the Defence of India Act which enables the Central Government to require that the lighting of any factory or class of factories shall reach a certain standard. This has been done to remedy defective lighting arising from one or the other of the following two causes: (1) many factories planned their interior lighting under peace-time conditions on the assumption that night-work would rarely be necessary; (2) compliance with black-out or other A.R.P. regulations requiring the prevention of the emergence of beams of light from a building has actually reduced lighting of the interior below the standard required for efficient work.

Latest Position.—The latest position in regard to the regulation of conditions of work by the Factories Act of 1934 as amended in 1946 is as follows:—

The daily hours of work are reduced from 9 to 8 and the weekly hours from 54 to 48 in the case of perennial factories and from 10 to 9 and from 60 to 54 in the case of seasonal factories.

The rate of overtime pay has also been appreciably increased.

In conformity with the new Government's policy of giving a fair deal to the common man, the Indian Factories Act is being almost completely overhauled. A Bill on the subject was introduced in the Dominion Parliament in 1947. The main features of this Bill are as follows:—

(1) The age of employment which is at present 12 is being raised to 13, and their working hours reduced from 5 to 4 and a half.

(2) At present the Act applies to work places which employ 20 or more persons and in which a manufacturing process is carried on with the aid of mechanical power. It is proposed to make the Act applicable to small places with only a bare minimum of requirements under the Factories Act. This will enable the workers in small works at once to get the benefit of other Acts, such as, the Maternity Benefit Act, Holidays with Pay Act, etc. The distinction between seasonal and perennial factories is removed.

(3) The general provisions of the Bill for the larger factories have been extended to bring the standards of safety and of the safe working of plant up to the accepted standards in Western countries. Every factory should be registered and should take a license for working to be renewed at periodical intervals.

(4) In view of the anticipated industrial expansion in the country it is necessary that the layout, etc. of the new concerns should be as safe and comfortable as possible from the point of view of the workers. A provision has, therefore, been made for the supervision of all new factory buildings by requiring that the plans of all such buildings should be submitted for approval either to the Inspectorate or to the appropriate authority nominated by the Provincial Governments.

(5) Provision has been made for the disposal of trade wastes to be approved by the Health Authorities.

(6) In regard to industrial diseases, provision has been made for a more adequate examination of young persons before they can be employed. Workers in certain specified dangerous trades are to be protected by periodical medical examination, etc.

(7) The sections in the present Act dealing with welfare have been strengthened. It has been suggested that drinking water should be cooled during the hot season. Definite requirements regarding sanitary accommodation, washing facilities, canteens and rest places have been laid down and a higher standard suggested. Creches will be compulsory where the number of women employed makes such provision necessary.

(8) Hours of employment, holidays with pay, etc., have been more specifically stated, with the penalty clauses being presented in a simpler form.

C. P. Act.—The Legislative Council of the Central Provinces and Berar passed an Unregulated Factories Act early in 1937. This Act was intended to regulate the labour of women and children and to make provision for the welfare of labour in factories to which the Factories Act, 1934, does not apply. "Unregulated Factory" has been defined as "any place wherein fifty or more workers are employed or were employed on any one day of the preceding twelve months and to which the Factories Act, 1934, does not apply and wherein the following industries are carried on:—(*i*) *bidi* making, (*ii*) shellac manufacture, and (*iii*) leather tanning." A "child" has been defined as a person who has not completed his fourteenth year.

The provisions with regard to health and safety, notices and registers, penalties and procedure closely follow the similar provisions in the Factories Act. Children's hours are restricted to seven in any one day and no child can be employed in any unregulated factory except between 8 a.m. and noon, and 1 p.m. and 5 p.m. The double employment of children is prohibited and a child who has worked in any unregulated factory on any one day is prevented from working overtime or taking work home. The hours of work of adult males are limited to ten per day and provision has been made for the grant of a holiday after every period of six consecutive days. Women's hours are restricted to nine per day and they are prohibited from working in any unregulated factory before sunrise or after sunset.

FACTORY STATISTICS

Upto and including the Report for the year 1939, statistics regarding the numbers of factories and of factory workers used to be given in the annual reports on the administration of the Factories Act published by all the Provincial Governments. The Government of India published a Summary of the Provincial Reports every year. These summaries contained statistics in eight different statements in regard to the following matters: (1) totals of the number of working factories, classified by Provinces according to types of factories; (2) average daily numbers of workers employed classified in the same way and by age and sex groups; (3) intervals, holidays and hours of work separately for perennial and seasonal factories; (4) accidents; and (5) convictions in respect of offences under the Act. A table containing the figures for numbers of working factories and the average daily number of workers employed therein classified by age and sex groups, between the years 1894 and 1939 was published at page 479 of the 1942-43 edition of this publication.

Owing to the shortage of paper, both the Provincial Governments and the Government of India discontinued the publication of the Annual Reports on the administration of the Factories Act and the Annual "Statistics of Factories" with effect from the publication of the Reports for the year 1940. In view, however, of the fact that information relating particularly to employment figures would be widely used, the figures for the years 1938 to 1942 were published in the August, 1943 and in the January, 1944 issues of the *Indian Labour Gazette*.

No corresponding information was given in the published tables for numbers of factories but from figures recently published by the Government of India it would appear that the total number of factories registered in old undivided India under the Factories Act, 1934 was 13,209 in the year 1943 as against 11,868 in the year 1941 and 12,527 in the year 1942.

The following table sets out the statistics of the average daily numbers of persons employed in all factories in India for the years 1939 to 1944 classified according to main industry groups and according to their employment in perennial and seasonal factories.

Classes of Factories	Average Daily Number of Persons employed in the years				
	1941	1942	1943	1944	1945
Government and Local Fund					
Perennial Factories	219,233	299,273	355,878	420,435	456,000
Seasonal Factories	853	620	507	484	700
Total ..	220,086	299,893	356,385	420,919	456,700
All Other Perennial Factories					
Textiles	953,320	965,459	1,001,893	993,269	1,014,309
Engineering	204,056	223,820	253,947	265,392	314,688
Minerals and Metals	76,162	82,493	92,694	91,126	125,457
Food, Drink and Tobacco	119,888	121,311	124,736	132,384	309,686
Chemicals and Dyes	71,150	72,626	82,755	88,813	101,687
Paper and Printing	48,245	48,501	50,534	52,696	72,271
Wood, Stone and Glass	77,627	82,334	89,824	96,189	106,857
Gins and Presses	21,538	17,029	15,408	14,850	129,467
Silks and Hides	23,516	29,608	33,669	34,624	36,301
Miscellaneous	35,346	38,465	37,091	35,477	107,253
Total ..	1,630,848	1,681,646	1,782,551	1,804,820	2,317,976
All Other Seasonal Factories	305,443	300,698	297,883	294,996	276,000
Grand Total: All Factories ..	2,156,377	2,282,237	2,436,819	2,520,251	3,050,676

A table published at pages 160-1 of the November 1944 issue of the *Indian Labour Gazette* gives the composition of the average daily number of workers employed in registered factories in the different Provinces by age and sex groups for the years 1942 and 1943 but not by industries. The figures for the year 1943 show that of the total number of workers in all factories in British India, 2,133,023 were men, 262,744 were women, 38,069 were children and 13,484 were adolescents.

THE INDIAN MINES ACT, 1923

The conditions of employment of labour in Indian Mines are governed by the Indian Mines Act, 1923, as amended by the Amending Acts of 1928 and 1935. The Act of 1923 which came into force from the 1st July 1924 replaced the earlier enactment of 1901.

The Amending Act of 1928 made some minor changes concerning daily limits of the hours of work and regulation of shifts. As a result of the recommendations of the Royal Commission on Labour and the adoption of the Draft International Labour Convention on Hours of Work in Coal Mines the Act was further amended in 1935. Further minor changes were made by the Amending Acts of 1936, 1937 and 1946 and in Ordinance of 1945.

The 1923 Act for the first time prescribed maximum limits of 54 hours per week for underground and 60 hours per week for above-ground workers. No limits were prescribed for daily hours. A daily limit of 12 hours was imposed for the first time by the Amending Act of 1928 which was brought into effect from 1st April 1930. As a result of the recommendations made in the matter by the Royal Commission on Indian Labour and the adoption of the Draft Convention on Hours of Work in Coal Mines by the Fifteenth Session of the International Labour Conference in 1931, the Government of India passed the Indian Mines (Amendment) Act, 1935, which was brought into effect from 1st October 1935.

The main provisions of the law regarding hours and conditions of work in Indian Mines as it now stands, are as follows :—

(*a*) No person is to be employed in a mine for more than six days in any one week.

(*b*) No person employed above-ground in a mine is to be permitted to work for more than 54 hours in any one week or for more than ten hours in any one day ; and the periods of work of any such person are to be so arranged that along with any intervals of rest they shall not on any one day spread over more than twelve hours.

(*c*) The periods of work of a person employed below-ground in a mine are to be reckoned from the time he leaves the surface to the time he returns to the surface and are not in any one day to spread over more than nine hours. No person is to be allowed to remain below-ground except during his periods of work and where work below-ground is carried on by a system of relays, the periods of work of all persons employed in the same relay are to be the same and are to be reckoned from the time the first person of the relay leaves the surface to the time the last person of the relay returns to the surface.

(*d*) The employment in any mine of children under fifteen years of age is prohibited and those below the age of 17 are not permitted to work in mines unless certified medically fit.

(*e*) Accidents which cause bodily injury resulting in the enforced absence from work for more than seven days are to be recorded in the prescribed manner.

The Government of India promulgated regulations under Section 29(*j*) of the Indian Mines Act, 1923, on the 7th March 1929 prohibiting the employment of any woman underground in the coal mines in Bengal, Bihar and Orissa and the Central Provinces and the salt mines in the Punjab with effect from the 1st July 1929 and in all other mines with effect from the 1st July 1929. In order to prevent undue hardship a principle of graduainess in the number of women to be reduced every year was laid down. Women are not prohibited from accepting employment in open workings and on the surface of mines.

In view, however, of an acute shortage of labour in coal mining areas this policy was temporarily reversed. By two notifications dated the 24th November and the 4th December, 1943 respectively, the Government of India exempted, until further orders, all coal mines in the Provinces of Bengal, Bihar, Central Provinces and Berar and Orissa from the provisions of clause (*j*) of Section 29 of the Indian Mines Act, 1923 to the extent to which regulations made thereunder prohibit the entry of women into under-ground working, for the purpose of employment subject to the following two conditions : (1) no woman was to be employed under-ground in galleries which were less than six feet in height ; and (2) every woman employed under-ground was to be paid wages at the same rate as a man employed under-ground on similar work. Milk was to be supplied to women working underground. There was considerable agitation both in India and abroad against the lifting of the ban on the employment of women under-ground. So the Government of India re-imposed the ban with effect from 1st February 1946, and there is now no employment of women under-ground in coal mines.

MINING STATISTICS

The collection of full statistics with regard to the numbers of mines and of the persons employed therein dates from 1924. These statistics used to be published in the Annual Reports of The Chief Inspector of Mines in India. Commencing from the year 1940, the Government of India have been publishing abridged reports which contain no figures for numbers employed. Statistics for the 16 years from 1923 to 1939 were given in a table at page 480 of the 1942-43 edition of this publication. The Government

of India have, however, published figures showing the average daily number of persons employed in all mines in the various Provinces in India in the issues of the *Indian Labour Gazette*. We set out the available figures in the following table :—

Province	1939	1940	1941	1942	1943	1944
Assam	2,463	2,704	2,732	2,325	2,539	3,038
Baluchistan	617	707	834	1,131	2,518	3,112
Bengal (E. and W.) ..	60,965	65,643	65,431	60,501	60,507	67,503
Bihar	166,394	180,845	200,577	209,565	206,922	223,140
Central Provinces	41,466	49,421	51,722	51,741	43,792	39,324
Bombay	3,890	3,420	1,203	2,528	2,304	1,782
Rajputana	1,312	1,403	3,768	3,661	3,870	2,687
United Provinces	1,579	2,283	2,377	2,543	1,436	1,623
Orissa	576	638	775	1,195	1,097	1,164
Punjab (E. and W.) ..	5,828	7,378	5,308	5,578	5,311	5,083
Sind	142	173	259	309	643	663
Madras	14,549	14,339	12,862	15,312	17,603	14,882
Delhi	1,266	810	1,179	732	755	935
N.-W. Frontier Province	7	6	....	25	24	12
Total ..	301,054	329,770	347,018	357,646	349,361	364,948

THE PAYMENT OF WAGES ACT

The Payment of Wages Act was passed by the Central Legislature early in 1936 and amended in a minor particular by an Amending Act in 1937. A detailed note on the history of this piece of legislation will be found at pages 503 and 504 of the 1938-39 Edition of this publication. The more important provisions of this Act which were brought into operation with effect from the 20th May 1937 are as follows :—

(*a*) *Scope of Application.*—The Act in the first instance applies to factories and railways but Provincial Governments are empowered to extend it to tramway or motor omnibus services ; docks, wharves or jetties ; inland steamer vessels ; mines, quarries or oil-fields ; plantations ; and any other class of workshops or establishments in which articles are produced, adapted or manufactured with a view to their use, transport or sale.

(*b*) *Wages.*—'Wages' for purposes of the Act means all remuneration, capable of being expressed in terms of money, which would, if the terms of the contract of employment, express or implied, were fulfilled, be payable, whether conditionally upon the regular attendance, good work or conduct or other behaviour of the person employed, or otherwise, to a person employed in respect of his employment or of work done in such employment, and includes any bonus or other additional remuneration of the nature aforesaid which would be so payable and any sum payable to such person by reason of the termination of his employment but does not include travelling allowances, employees' contributions to provident funds, gratuities payable on discharge, or the value of any housing accommodation or services rendered to the worker by his employer.

Many industrial establishments, especially cotton textile mills in the sub-continent, grant good attendance and efficiency bonuses in addition to wages. These bonuses operate as fines in cases where the standards for earning them are not attained. The Government of India, while framing the Act, included such bonuses within the ambit of "wages" but the definition of this term as far as bonuses are concerned has been widely interpreted.

The Government of Bombay held that existing good attendance and efficiency bonuses wherever they obtained must be paid without conditions and notified all factories accordingly. As a test case, the Arvind Mills in Ahmedabad were prosecuted in the City Magistrate's Court for non-payment of these bonuses in cases where the conditions for earning them were not fulfilled. The Magistrate held that bonuses were wages and directed that the deductions made should be refunded to the workers. The matter was taken in appeal in the Court of the Assistant Judge, Ahmedabad, where the decision of the Magistrate was upheld. The Mills thereupon filed a further appeal in the High Court, Bombay, which reversed the Ahmedabad judgments and held that all bonuses must be earned. The Government of India intend introducing a Bill in the Central Legislative Assembly to amend this Act with a view to clarifying the position of 'bonuses.'

(*c*) *Wage Periods.*—No wage period is to exceed one month and all wages are to be paid in coin and or currency notes.

(*d*) *Time of Payment.*—The wages of all persons employed in concerns employing less than one thousand persons are to be paid before the expiry of the seventh day after the last day of the wage period in respect of which the wages are payable and in establishments employing more than one thousand persons before the expiry of the tenth day. Where employment is terminated by the employer, all due wages are required to be paid before the expiry of the second working day following that on which the employment is terminated.

(*e*) *Permissible Deductions.*—Deductions from wages are permitted only in respect of fines, absence from duty, damage to or loss of goods expressly entrusted to an employed person for custody, housing accommodation supplied by an employer, for recovery of advances or for adjustment of over-payments of wages, for income-tax, for contributions to or repayment of advances from provident funds, for schemes of postal insurance, for dues to co-operative societies and,

on orders made by courts of law. Deductions are also permitted in respect of such amenities and services supplied by the employer as the Governor-General in Council or a Provincial Government may, by general or special order, authorise. The Central Government promulgated a Payment of Wages Amendment Ordinance in 1940 amending the Act to enable deductions being made from wages with written authorisation of the employed person for investment in any War Savings Scheme approved by a Provincial Government. The Act does not permit an employer to make deductions from wages in respect of the value of material damaged in the process of manufacture and to hand over the same to the employee concerned. Such a system was widely prevalent in certain centres of the textile industry in India and particularly in Ahmedabad where it was estimated that a total sum of nearly fifteen lakhs of rupees was deducted annually from the wages of about 25,000 weavers in respect of weaving fines and the value of damaged cloth handed over to them.

Fines—(*f*) *Fines.*—No fines are to be imposed on children, *i.e.*, persons below the age of fifteen years. No fines can be imposed save in respect of such acts or omissions as have been exhibited in notices which have received the approval of the Provincial Government or of an authority which a Provincial Government may prescribe in the matter and unless the person who is fined has been given an opportunity of showing cause against the fine. The total amount of fines which may be imposed on any person during any wage period is not to exceed half an anna in the rupee of wages for that wage period and no fine can be recovered in instalments or after the expiry of 60 days from the day on which it was imposed. All fines are to be recorded in prescribed registers and all realisations from fines are to be expended on objects beneficial to the workers. Provincial Governments have been empowered to make rules in connection with most of these matters.

In December 1937, the North-Western Railway reduced the monthly rate of pay of an engine driver by Rs. 7 for unsatisfactory work. The employee filed an application against the Railway in the Small Causes Court at Karachi for illegal deductions. The application was dismissed and the case was taken in appeal to the Chief Court of Sind. Mr. Justice Weston held that a reduction in an employee's wages by way of punishment was in contravention of the Payment of Wages Act and ordered a refund to the applicant of the amounts deducted from his wages.

(*g*) *Deductions for Absence from Duty.*—Deductions from wages for periods of absence from duty should be *pro rata* and should not bear a larger proportion than the period of absence bears to the period of duty (*i.e.*, if the wage is Rs. 27 for 27 working days the deductions for 7 days absence must not be more than Rs. 7); provided that "subject to any rules made in this behalf by the Provincial Government if ten or more employed persons acting in concert absent themselves without due notice (that is to say without giving the notice which they are required to give either expressly by their contracts of employment or impliedly by the terms of their service) and without reasonable cause, such deduction from any such person may include such amount not exceeding his wages for eight days as may by any such contract or terms be due to the employer in lieu of due notice." By the amending Act of 1937 an explanation was added to the Section dealing with this matter which provides that "an employed person shall be deemed to be absent from the place where he is required to work if although present in such place, he refuses to carry out his work."

(*h*) *Deductions for Recovery of Advances.*—Recovery of an advance of money given before employment began is to be made from the first payment of wages in respect of a complete wage period, but no recovery is to be made on advances given for travelling expenses; and recovery of advances of wages not already earned are to be subject to rules to be made by Provincial Governments.

(*i*) *Contracting-Out.*—No contracting-out is permitted.

Procedure—(*j*) *Procedure.*—Provincial Governments are empowered to appoint Commissioners for Workmen's Compensation or any other persons with judicial experience as the authority to hear and decide all claims arising out of deductions from or non-payment of wages. Penalties have been laid down for malicious or vexatious claims. Appeals to courts of small causes are permitted and an elaborate procedure has been laid down with regard to trials for offences under the Act. Since the passing of the Act it has been found that the procedure laid down in Section 15 of the Act in connection with claims arising out of deductions from wages is a very dilatory one. The action is a civil one and it takes a long time before the case is brought to a decision. In many cases where applications are filed for non-payment of wages the employer is let off if he has paid wages to the workers concerned after the filing of the complaint and the Courts ignore the fact that even in such cases delay in making payments had occurred.

(*k*) *Administration.*—Inspectors of factories are made responsible for the administration of the Act as far as factories are concerned and powers are reserved to the Governor-General in Council and to Provincial Governments to appoint such other persons as they think fit to be inspectors for the purposes of this Act for railways.

The present position is that in the case of persons employed on Railways the responsibility of administering the Act rests upon the Chief Labour Commissioner (Central).

By an amendment in the Payment of Wages (Federal Railways) Rules the application of the Act has been extended to cover workers employed by railway contractors employing on an average 20 or more persons.

It is now proposed to amend the Act in the light of experience gained and in conformity with the new policy of Government to give a fair deal to labour. The principal proposed amendments are (*a*) to extend the scope of the Act to those drawing upto Rs. 400 per month and (*b*) to empower Government to extend the provisions of the Act to workers in industrial establishments under their control including

contract labour. The amendment also seeks to provide for the supply of pay dockets to the workers containing a full account of their wages.

Recently plantation workers in Madras have been brought within the purview of the Act. The Government of India have also decided to extend the Act to Coal and Salt Mines.

WORKMEN'S COMPENSATION ACT

In its main principles, the Indian Act which was brought into operation with effect from 1st July 1924, follows the British model but its precision and rigidity and the special machinery set up for its administration are some of the features which distinguish it from the British Act. In its scope—type and classes of workers covered—the original Act of 1923 fell far short of the British Act but it was necessary for the Government of India to adopt a policy of gradualness in the matter so as to secure the support of all interests to the original measure. The original limitations of scope were to a large extent removed by amending Acts passed in 1926, 1929, 1931 and 1933.

Under the Act, payment of compensation has been made obligatory on all employers whose employees come within its scope, even in cases where there has been no negligence; and injured workmen or the dependents of those killed can obtain compensation in all cases where personal injury has been caused by accident *arising out of and in the course of employment* and where the accident is not directly attributable to the workman having been at the time of the accident under the influence of drink or drugs or to wilful disobedience of rules or orders or wilful disregard of safety devices.

Besides bodily injuries the contracting of certain occupational diseases such as anthrax and lead and phosphorus poisoning were deemed and treated for the purposes of compensation, as injuries caused by accident, provided however, that the worker concerned was in the service of the same employer for more than six months. Mercury poisoning was added to the list of original occupational diseases in 1926 in order to bring the Indian law into conformity with a Draft Convention adopted by the International Labour Conference in 1925.

This list was further expanded in 1933 and again in 1938 by the addition of (1) poisoning by benzene and its homologues or the sequelæ of such poisoning; (2) chrome ulceration or its sequelæ; (3) compressed air illness (Caisson Disease) or its sequelæ; (4) arsenical poisoning or its sequelæ; (5) pathological manifestations due to (*a*) radium and other radio-active substances, and (*b*) X-Rays; and (6) Primary epitheliomatous cancer of the skin.

Main Provisions.—The main provisions of the Workmen's Compensation Act as it stands today are as follows:

Classes of Workmen Covered by the Act.—These have been specified in the definition of the term "workman" contained in section 2(1) (*n*) and in Schedule II. In all cases persons employed in an administrative or clerical capacity and those whose monthly earnings exceed Rs. 300 (except Railway Servants) are excluded. According to the Amended Act passed in 1946, the upper income limit has been extended to Rs. 400 per month.

Speaking broadly, the Act covers railways; factories; mines; seamen; docks; persons employed in the construction, repair or demolition of buildings designed to be or which are of more than one storey or of twenty feet in height or of dams and embankments, roads, bridges or tunnels; or wharves, quays, sea walls or other marine work; the setting up, repairing, maintaining or taking down any telegraph or telephone line or overhead electric lines or cables; aerial ropeways, canals, pipe lines or sewers; the fire-brigade; railway mail service; persons employed in outdoor work in the postal and telegraphic services; operations for winning natural petroleum or natural gas; blasting operations and excavations; ferry boat services; cinchona, coffee, rubber or tea plantations; electricity or gas generating stations; lighthouses; cinematograph picture producing and exhibiting; divers; elephant and wild animal trainers and keepers and salaried motor drivers and cleaners. Recently persons employed in warehouses in markets employing ten or more persons have also been brought within the scope of the Act. Persons employed through sub-contractors by a person fulfilling a contract with a railway are also covered. The Government of Madras have recently brought persons employed in plucking cocoanuts within the scope of the Act.

As far as seamen are concerned, those employed on ships registered in the sub-continent are covered. But if accidents take place within the three mile limit of the territorial waters the Act applies even to those employed on ships not registered in the sub-continent. But with a view to facilitating the settlement of claims in respect of seamen on ships not registered in the sub-continent and to avoid litigation, provision has been made in the Lascar's Agreement for the settlement of claims for compensation on the lines of the Indian Act and in default of agreement the Commissioner of the Port where the agreements are signed has been accepted as the final authority to whom these matters should be referred for decision.

Not only workmen employed within the precincts of a factory or a mine but also men engaged in any kind of work incidental to or connected with a factory or any mining operation are entitled to the benefits of the Act. As far as factories are concerned, those using mechanical power and employing more than ten persons or those not using mechanical power and employing more than fifty persons are covered.

The Provincial Governments are empowered to bring within the scope of the Act other classes of workmen whose occupations are considered to be of a hazardous nature. In pursuance of that power the Government of Bombay have extended the scope of the Act to persons employed on motors or other mechanically propelled vehicles engaged in loading, unloading, handling or transport of goods and to all employees of Municipalities and District Local Boards engaged in occupations ordinarily requiring outdoor work.

Amount of Compensation.—The amount of compensation payable depends, in the case of death, on the average monthly wages of the deceased workman and in the case of an injured workman both on the average monthly wages and the extent of disablement. The term 'wages' includes overtime pay and the value of any concessions or benefits in the form of food, clothing, free quarters, etc. After the monthly wages of a worker are calculated the amount of compensation due is decided by a reference to Schedule IV which gives in a tabular form the amounts of compensation for death, permanent total and temporary disablement in respect of each of seventeen wage classes.

The amounts of compensation payable in the case of an injured workman whose monthly wages are not more than Rs. 10 are Rs. 500 for death, Rs. 700 for permanent total and half the monthly wages for temporary disablement. For a workman whose monthly wages are between Rs. 50 and Rs. 60, the corresponding figures are Rs. 1,800, Rs. 2,520 and Rs. 15 respectively. The maxima for persons earning over Rs. 200 per month are Rs. 4,000, Rs. 5,600 and Rs. 30 per month respectively. In the case of minors the amounts of compensation for death and for permanent total disablement are at a uniform rate of Rs. 200 and Rs. 1,200 respectively, and half the monthly wage for temporary disablement.

No compensation is payable in respect of a 'waiting period' of seven days following that on which the injury was caused; but many large firms such as General Motors (India), Ltd., Messrs. Lever Brothers (India), Ltd., and others pay compensation in lieu of wages with effect from the date of injury.

(NOTE: *Permanent total disablement* means such disablement which permanently incapacitates a workman for all work which he was capable of performing at the time of his accident. Any combination of injuries totalling 100 per cent. loss in earning capacity is regarded as permanent total disablement even if the combination of injuries does not arise in one accident.)

Dependents.—These are defined in two categories: firstly, those who are in practically all cases actually dependents; and secondly, those who may or may not be in that position. The first includes a widow, a minor legitimate son, unmarried legitimate daughter and a widowed mother. The second includes a widower, a parent other than a widowed mother, a minor illegitimate son, an unmarried illegitimate daughter, a minor legitimate or illegitimate daughter if married or widowed, a minor brother, an unmarried or widowed sister, a widowed daughter-in-law, a minor child of a deceased son and a paternal grandparent.

The interests of dependents in cases of fatal accidents have been safeguarded by ensuring that (1) all cases of fatal accidents should be brought to the notice of the Commissioner; (2) in all cases where an employer admits liability the amount of compensation payable is to be promptly deposited with the Commissioner; and (3) in cases where the employer disclaims liability and there are good grounds for believing compensation to be payable, the dependents get the information necessary to enable them to judge if they should make a claim or not.

A contractor has been given the right to be indemnified by his sub-contractor if he has had to pay compensation either to a principal or to a workman.

An employer is permitted to make to any dependent advances on account of compensation not exceeding an aggregate of one hundred rupees and so much of such aggregate as does not exceed the compensation payable to that dependent is to be deducted by the Commissioner from such compensation and repaid to the employer. Further, the Commissioner may deduct a sum up to Rs. 25 from the amount of compensation for the funeral expenses of a deceased workman and pay the same to the person by whom such expenses were incurred.

Administration.—The Act is administered entirely on a provincial basis by Commissioners to be appointed by Provincial Governments. The Provinces of West Bengal and Madras have one Commissioner each for the whole province. The Province of Bombay has one Commissioner for the more important industrial areas and for the other areas sub-judges have been appointed as ex-officio Commissioners for Workmen's Compensation. In the other provinces, the District Magistrate or the District and Sessions Judge or the Senior or Sub-Judge is the Commissioner within his jurisdiction.

Under the common law of England, in civil suits for damages for injuries sustained by workmen it is open to the employer to plead: (1) the doctrine of common employment, by which the employer is not normally liable to pay damages to a workman for an injury resulting from the default of another workman; (2) the doctrine of assumed risk, by which an employee is presumed to have accepted a risk if it is such that he ought to have known it to be part of the risks of his occupation.

The Royal Commission on labour regarded both these doctrines as inequitable and recommended by a majority that a measure should be enacted abrogating these defences. Provincial governments were consulted in 1932 and were almost unanimously in favour of legislation for the purpose. In the meantime judicial decisions in British India while generally agreeing as to the inequitability of the doctrines were such as to leave it open to employers in most Provinces to have recourse to them. The Government of India passed the Employers' Liability Act, 1938, through the Central Legislature declaring that these defences shall not be raised in suits for damages in British India in respect of injuries sustained by workmen.

Amendments.—During the year 1939, two amendments were made in the Workmen's Compensation Act, one in Section 5 and the other in Section 15. The first clarifies the meaning of the expression "monthly wages" which has now been defined to mean the amount of wages deemed to be payable for a month's service irrespective of whether the wages are payable by the month or by whatever other period or at piece rates. The amendment thus resolves a doubt as to whether a workman employed on wages payable otherwise than by the month or on a monthly basis is or is not a workman within the meaning of the Act. The Personal Injuries (Emergency Provisions 2 and 3 Geo. 6, C. 82) Act, 1939, provides for certain payments to be made in respect of personal injuries to seamen. The Workmen's Compensation Act had, therefore, to be amended in order to avoid double payment, both under this Act and under the Personal Injuries Act.

The second amendment referred to above provides that failure to give notice or make a claim or commence proceedings within the time limit required by the Act shall not be a bar to the maintenance of the proceedings provided that the Commissioner is satisfied that an application was made in the reasonable belief that the injury was such that a payment could be made under the said Act and that the Provincial Government certifies that the application was rejected.

The Government of India in the Ministry of Commerce, formulated a Lascars War Risk Compensation Scheme in August 1940 in respect of death or disablement directly attributable to war injuries sustained by lascars employed on ships registered in the United Kingdom. The scheme provides for widow's pensions, children's allowances and generous disablement allowances.

It often happens, in cases before Commissioners for Workmen's Compensation, that there is a dispute between the parties on medical questions. In such cases the usual practice is to call in private medical practitioners to give verbal evidence on the points in dispute. This not only increases the cost of the proceedings but tends to delay settlements. With a view to preventing this unsatisfactory, dilatory and expensive procedure, the government of old undivided Bengal passed the Workmen's Compensation (Bengal Amendment) Act, 1942 for the appointment of medical referees whose report would be binding on both the parties. This Act also provides for the creation of a permanent panel of qualified medical practitioners who may be appointed as medical referees.

STATISTICS

All Provincial Governments in the sub-continent used to publish Annual Administration Reports on the working of the Workmen's Compensation Act. The Government of India summarised these Reports and published an annual survey under the title "Statistics of Workmen's Compensation". The Government of India have stopped the publication of these summaries since 1939, but an annual note on the working of the Act is being published regularly in the Indian Labour Gazette which is being issued by the Labour Bureau of the Government of India.

At page 585 of the 1941-42 edition of this publication we gave a table showing the figures of fatal and non-fatal cases in respect of which compensation was paid from the year 1924 when the Act was first brought into effect up to the end of the year 1938 together with the figures for the total amount of compensation paid. The latest available statistics on the subject will be found in the following table :—

Year	Total number of cases	Total compensation paid	Year	Total number of cases	Total compensation paid
		Rs.			Rs.
1925	11,371	6,44,120	1941	39,045	15,84,293
1935	22,999	11,61,465	1942	44,443	18,69,359
1938	35,065*	14,32,723*	1943 †	44,826	22,88,991
1939	38,681	15,09,327	1944 ¶	31,581	16,96,494
1940	41,015	19,38,476	1945	67,390	42,25,339

* Excludes figures for Sind (Not available).
† Excludes figures for Bombay.
¶ Excludes figures for Bombay and Madras.

One Comprehensive Law.—Facilities for accident insurance are now being provided by a number of leading insurance companies in the country and the most important of these are the Claims Bureau in Calcutta and Madras. The Calcutta Claims Bureau which represents many of the leading insurance companies operating in the sub-continent deals with a large number of claims and offers valuable co-operation to the authorities in settling compensation claims. In Bombay, insurance companies are now concerned with half the number of cases that come up before the Commissioner. Insurance companies as a rule contest only cases involving questions of law or principle and are of benefit to all concerned. In these provinces insurance is widely resorted to by the employers especially in the textile industry.

The Millowners' Mutual Insurance Association, Ltd., Bombay, is an organisation of employers one of whose objects is the mutual insurance of members against liability to pay compensation or damages to workmen employed by them or their dependants for injuries or accidents, fatal or otherwise, arising out of or in the course of employment.

The Government of India have now on the legislative anvil one comprehensive scheme which will cover sickness insurance, maternity benefits and compensation for accidents. When the Health Insurance Bill becomes law, there will be no separate Workmen's Compensation Law.

MATERNITY BENEFIT

A Bill introduced by Mr. N. M. Joshi in the Central Legislative Assembly in 1924 to provide for the payment of maternity benefits to women employed in certain industries was not passed. The Government of Bombay, however, took up the question a few years later and the Bombay Maternity Benefit Act was passed in 1929. This was substantially amended by an Amending Act passed in 1935. A similar Act was passed in the Central Provinces in 1931. These were the first Acts of their kind in the sub-continent. Since then, Maternity Benefit Acts have also been passed in the Provinces of Madras, old undivided Bengal, Sind, Assam, old undivided Punjab, and the United Provinces and in Ajmer-Merwara and Delhi. In the year 1941, the Bengal Legislature passed a second Maternity Benefit Act for women employed in tea plantations under the title of the Bengal Maternity Benefit (Tea Estates) Act, 1941. Except for the Assam Maternity Benefit Act which covers women employed in both factories and on plantations and the last Act, all the other Maternity Benefit Acts are applicable to women employed in factories only.

The subject of extending the benefits of such legislation to women employed in Mines was discussed at the Second Conference of Labour Ministers held in January 1941 and as the result of those discussions the Central Legislature passed The Mines Maternity Benefit Act, 1941, in the same year. This Act was amended in 1948 in such a way as to prevent a woman from being debarred from drawing benefit for a day on which the mine is closed and a further amendment of the Act was made in 1945.

The main principles in all Maternity Benefit Legislation are the same: provision for the payment of a cash benefit to women for specified periods before and after childbirth, a compulsory period of rest after delivery and also before delivery if notice is given; but, in the latter case, the period for which an employer has to pay cash benefit is strictly limited. All Acts specify a qualifying period for the earning of the benefit: this varies from six months to a year. Women are prohibited, under penalty, from accepting employment under another employer during periods for which they are in receipt of cash benefit from the employer with whom this liability rests.

In the Central Act for women employed in Mines and in the U.P. Act additional bonuses of Rs. 3 and Rs. 5 respectively are provided for if the services of a qualified midwife are availed of; but, if such assistance is provided for by or in an institution of an employer, this bonus is not to be paid.

Assam Act.—The Assam Act has certain provisions which are not met with in the other Provincial Acts and the Central Governments Mines Maternity Benefit Act. One such provision is that no employer shall knowingly employ a woman in any job during the four weeks immediately preceding the day of her delivery save upon such suitable light work as may be recommended by a medical practitioner. The other Acts prohibit only theemployment of women during the four weeks immediately following childbirth.

By another provision an employer is required either himself to provide upon the premises to which the Act applies free medical treatment and attendance for every woman entitled to maternity benefit, or to make such arrangements with a medical practitioner to provide such treatment and attendance during pregnancy, and at, and after confinement. If a woman declines to accept this free medical attendance and treatment provided by the employer or leaves the service of the employer, she forfeits the maternity benefit which is admissible to her under the Act.

Another interesting feature of the Act is that the qualifying period of employment entitling a woman to the maternity benefit is 150 days, which period is the lowest as compared with the periods prescribed in the other provinces and the mines where the periods range between 6 and 9 months. No qualifying period is required in the case of an immigrant woman who was pregnant when she first arrived in Assam.

The Act provides for the payment of maternity benefit at weekly rates unlike the daily rates found in the other Act. It provides for payment—(i) on plantations at the rate of Re. 1 per week during the period preceding the day of delivery and Rs.1-4-0 per week during the period following the day of delivery, provided that the total cash payment which the employer shall be required to make on this account shall be Rs. 14; and (ii) in employments other than plantations Rs. 2 per week or the average weekly wage or salary subject to a minimum of Rs. 2 per week.

The qualifying period in the Central and in the U.P. Acts is six months and in the Ajmer-Merwara Act twelve months. In all the remaining Acts it is nine months. The maximum period for which maternity benefits can be paid is six weeks under the Ajmer-Merwara Act, seven weeks under the Madras Act, sixty days under the Punjab Act and eight weeks under all the other Acts. The rate of benefit used to be eight annas per day or the average daily wage whichever was less in most Acts but many Acts are now adopting a uniform eight annas a day. The Punjab Act gives average daily earnings or twelve annas per day whichever is greater.

THE TRADE UNIONS ACT, 1926

The origin of the passing of a Trade Unions Act in the sub-continent was the historic Buckingham Mill Case of 1920 in which the Madras High Court granted an interim injunction against the Strike Committee of the Madras Labour Union forbidding them to induce certain workers to break their contract of employment by refusing to return to work. Trade Union leaders found that they were liable to prosecution and imprisonment for *bona fide* union activities and it was felt that some legislation for the protection of trade unions was necessary.

In March, 1921, Mr. N. M. Joshi, successfully moved a resolution in the Central Legislative Assembly recommending that government should introduce legislation for the registration and protection of trade unions. Opposition from employers to the adoption of such a measure was, however, so great that it was not until 1926 that the Indian Trade Unions Act was passed. This Act was brought into operation with effect from

1st June 1927 and was slightly amended in 1928 to facilitate the procedure of appeal against the decision of the Registrar refusing or cancelling the certificate of registration of trade unions by employers.

Apart from the necessary provisions for administration and penalties, the Indian Trade Unions Act, 1926, makes provision for three groups of matters: (1) conditions governing the registration of trade unions; (2) the obligations to which a trade union is subject after registration; and (3) the rights and privileges accorded to registered unions. 'Trade Union' has been defined in such a way as to cover both combinations of workers and of employers but not of workers and employers. Persons under the age of 15 are debarred from membership of any registered union.

Registration.—The administration of the Indian Trade Unions Act is entirely on a provincial basis and each Provincial Government is required to appoint a Registrar of Trade Unions. A union is to be registered in the province in which its head office is situated and if this is transferred to another province, the registration has to be transferred to that province. Any seven or more members of a union can apply for registration but no union can be registered unless (1) its rules provide for certain statutory matters which have been laid down in Section 6; and (2) its executive is constituted in accordance with the requirements of Section 22 which lays down that at least fifty per cent. of the executive must consist of members actually engaged in the unit or group of units which the union proposes to cover. The Government of Sind enacted legislation in the year 1944 to amend the Indian Trade Unions Act in such a way as to require that two-thirds of the members of the executive of a Union must be workers and also to prevent one individual person from being an Officer of more than one Union.

The registration of a union may be cancelled or withdrawn at any time by the Registrar on the application of the union itself, or if the Registrar is satisfied that the certificate has been obtained by fraud or mistake, or that the union has ceased to exist or has wilfully and after notice contravened any provision of the Act, or if it has allowed any rule which is inconsistent with the Act to continue in force or has rescinded any rule which is required by the Act. Any union aggrieved by the refusal of a Registrar to register it or by the cancellation of its registration may prefer an appeal to a judge appointed by the Provincial Government for the purpose; and, in the event of the dismissal of such an appeal, the aggrieved party has the right of a further appeal to the High Court.

Obligations, Rights.—The general funds of registered trade unions cannot be spent on objects other than those specified in Section 15 of the Act nor on political objects; but the Act makes provision for the creation of a separate political fund, subscription to which may be collected from such members as voluntarily desire to contribute to it. All registered unions are required to submit annually to the Registrar duly audited statements of accounts in prescribed forms together with changes in officers and the executive and a copy of the rules corrected up to date. Notices of all changes in the rules or of the registered name or the registered address of the office of the union, of amalgamations with other unions or of dissolution must be submitted to the Registrar in prescribed forms within prescribed periods of their occurrence.

Failure to carry out these obligations may result either in the cancellation of a union's registration or by the imposition of a fine. The Act further requires that the rules of every registered union should make adequate provision for the inspection of books of accounts and lists of members by the officers and members of the union. The Govt. of Madras have recently tightened up their regulations in connexion with the maintenance, by registered unions of their registers. Among other things, all unions will now be required to maintain files of vouchers and machine-numbered subscription receipt books.

The Act confers on registered unions the right to corporate existence and of perpetual succession with power to acquire and hold both movable and immovable property and to enter into contracts. A registered trade union is immune from prosecution for criminal conspiracy in respect of an agreement, unless it is one to commit an offence, made between its members for the furtherance of a trade dispute or for restraint of trade and from any legal difficulties arising therefrom. It also enjoys immunity from civil suits in certain cases.

Registered unions are empowered under the Indian Trade Unions Act to carry on any form of insurance activity without being under any obligation to secure professional advice as to the actuarial soundness of such business. By virtue of Section 118 of The Insurance Act, 1938, insurance business carried on by a trade union is not subject to the provisions of that Act.

One of the most vexed questions in connexion with trade unions in the sub-continent is that of their recognition by the employers. We are dealing with this question more fully under the heading Trade Unionism in the sub-continent. Many Bills aimed at compelling employers to recognise unions of their workers have been introduced by private members in Provincial Legislatures but these failed to carry the support of the Governments concerned. The subject was discussed at the Second Session of the Labour Ministers Conference and, as a result of the decisions then reached, the Government of India drafted a Bill intended to add a New Chapter dealing with the Recognition of Trade Unions and Rights and Liabilities of Recognised Trade Unions to the Indian Trade Unions Act. This was circulated to all Provincial Governments for opinion after consultation with the interests concerned. In the light of the criticisms received, the Government of India drafted a new Bill on the subject and this was introduced in the Central Legislative Assembly by the Hon'ble the Labour Member on the 13th November 1943, and became law in November 1947.

Besides providing for compulsory recognition of representative trade unions by the employers the Act specifies certain acts as unfair practices on the part of employers and recognised trade unions and provides for punishment of a fine in the case of employers and withdrawal of recognition in the case of trade unions.

Statistics.—As far as statistics of registrations are concerned, tables showing the numbers of registered unions on all the provincial registers in India and Pakistan at the end of each financial year together with the membership and income of those which furnished returns, have been incorporated in this section in some previous issues of this publication. A table giving this information for the years 1927-28 up to 1939-40 was published at page 487 of the Edition for 1942-43. As we have pointed out in the opening paragraphs of this Chapter, the Government of India and the Provincial Governments have stopped the publication of annual reports on the administration of Labour Laws for the duration of the War.

The Government of India have, however, commenced publishing short and abridged reports containing the more important statistics in the *Indian Labour Gazette*. The latest year for which information of an All-India character is available is for the year ending 31st March 1943 and this has been given in an article appearing in the June, 1945 issue of that publication. The statistics relating to registered trade unions for that year are reproduced below:

Province	Number of Registered Trade Unions	Number of Unions making returns of Membership	Membership of the Unions making returns
Ajmer-Merwara ..	3	3	946
Assam	9	9	2,486
Bengal (E. and W.)	330	134	286,255
Bihar	49	31	73,428
Bombay	98	79	172,679
C. P. & Berar ..	53	27	13,748
Delhi	40	19	30,504
Madras	154	141	88,270
N.-W. Frontier Province.. ..	4	2	328
Orissa	4	4	1,494
Punjab (E. and W.)	22	21	8,308
Sind	39	39	12,431
United Provinces..	34	34	36,734
Trade Unions whose objects were not confined to one Province ...	31	30	161,774
Total ..	865	573	889,385

INDUSTRIAL DISPUTES BILL

Recent years have witnessed a great deal of activity both on the part of the Central Government and of the Provincial Governments and the States in considering and enacting measures for the prevention and settlement of industrial disputes. Till the year 1929 the only law relating to the settlement of trade disputes was the Employers and Workmen (Disputes) Act of 1860. The Royal Commission on Indian Labour referred to the necessity of establishing a permanent statutory machinery to deal with labour disputes. The Government of India in a Bill which they introduced in 1934 to make the 1929 Act permanent included in it some of the suggestions made by the Commission. This Bill was passed in April 1934. In 1936 an amending Bill was introduced which was passed into law in 1938. This new legislation provided for the appointment of Conciliation Officers, extended the scope of the Act to cover certain other trade disputes and some other public utility services.

The war showed certain inherent defects in this legislation and made it necessary for Government to supplement the Law by enforcement of Rule 81 (A) of the Defence of India Rules. According to this Rule, the Government could refer any dispute for arbitration and enforce the award. The enforcement of this Rule in the large number of cases proved of great benefit both for labour, industry and the community as it considerably assisted in diminishing industrial strife. The enforcement of this rule was, however, a temporary measure and it was decided therefore, in 1946 to introduce the Industrial Disputes Bill in the Legislative Assembly which was passed into an Act in March 1947.

The Act provides for setting up of two types of organisations, namely, (1) Works Committees and (2) Industrial Tribunals for the prevention and settlement of disputes. It makes conciliation compulsory in all disputes in public utility services and optional in other cases.

Section 22 of the Act declares any strike or lock-out in a public utility service to be illegal if it is commenced or declared (i) without giving to the employer or employees, as the case may be, a notice of strike or lock-out in a prescribed manner, within six weeks before striking or declaring a lock-out, or (ii) within 14 days of giving such notice, or (iii) before the expiry of the date of strike specified in any such notice; or (iv) during the pendency of any conciliation proceedings before a conciliation officer and 7 days after the conclusion of such proceedings, etc. The Act also prohibits certain other strikes and lock-outs and declares them illegal if commenced or declared during the pendency of (i) conciliation proceedings before a Board and 7 days after the conclusion of such proceedings; (ii) proceedings before a Tribunal and 2 months after the conclusion of such proceedings, or (iii) during any period in which a settlement or award is in operation, in respect of any of the matters covered by the settlement or award.

Provinces and States.—Following upon the publication of Bombay Departmental Enquiry Committee's Report in 1934, the Bombay Government enacted the Trade Disputes Conciliation Act in 1934. This was a simple measure which provided for the appointment of Labour Officer and for instituting conciliation machinery. When the Congress came into power, this measure was replaced by a more radical one, known as the Bombay Trade Disputes Act of 1938.

During the War, most of the Provinces made a liberal use of Rule 81 (A) under the Defence of India Rules. With the cessation of hostilities, however, many Provinces introduced Bills to enact legislation for prevention and settlement of industrial disputes. In 1946, Bills were introduced in the Provincial Legislatures by the Governments of C.P. and Berar, Sind and Bombay. The C.P. and Berar Industrial Disputes Settlement Act was passed in May 1947 and the Sind Industrial Relations Act in June 1947. the Bombay Industrial Relations Bill received the assent of the Governor-General in April 1947.

The new Bombay Act is an advanced piece of legislation and covers a number of matters apart from those relating to the Prevention and Settlement of Disputes. For the first time, it provides for the establishment of Labour Codes and increases the powers of Government to make arbitration compulsory. It also provides for setting up of Joint Committees and for maintenance of records of labour conditions in each undertaking.

Indore, Cochin, Travancore and Baroda are some of the States which have passed legislation for the prevention and settlement of industrial disputes more or less on the model of the Indian Trade Disputes Act of 1929. There are, however, slight variations from the Indian Act and these relate to certain categories like public utility workers, appointment of conciliation officers, etc. The Baroda Act provides for a permanent Board of Conciliation consisting of a chairman and two persons appointed by the Government. It also requires one month's notice for strikes and lock-outs in public utility services as against 14 days' notice in the Indian Act. Under the Indore Act, picketing of any kind in furtherance of any illegal strike or lock-out, or any meeting convened with a view to calling into question the Government orders on the report of the officer or the Board is also illegal and liable to punishment.

Statistics

Statistics of industrial disputes in the sub-continent have been collected only since 1921. The following table sets out the number of disputes in some of the years since 1921, the number of persons affected by these disputes and the total time lost in man-days:

Year.	Number of disputes.	Number of workpeople involved.	Number of working days lost.
1921 ..	396	600,351	6,984,426
1926 ..	128	186,811	1,097,478
1931 ..	166	203,008	2,408,123
1936 ..	157	169,029	2,358,062
1939 ..	406	409,189	4,992,795
1940 ..	322	452,539	7,577,281
1941 ..	359	291,054	3,330,503
1942 ..	694	772,653	5,779,965
1943 ..	716	525,088	2,342,287
1944* ..	658*	550,015	3,447,306
1945 ..	820†	747,530	4,054,499

* Results not known in 5 cases and demand not known in 1 case. † Result not known in 1 case and demand not known in 6 cases.

Employment of Children:—The Government of India passed an Act in the Central Legislature in 1938 for the prevention of the employment of children who have not completed their fifteenth year in any occupation connected with the transport of passengers, goods or mails by railway or in any occupation involving the handling of goods within the limits of any port to which for the time being any of the provisions of the Indian Ports Act, 1908, are applicable.

By an Amending Act passed in 1939 the employment of any child who has not completed his twelfth year is prohibited in any workshop connected with *bidi* making; carpet weaving; cement manufacture including bagging of cement; cloth printing, dyeing and weaving; manufacture of matches, explosives and fireworks; mica-cutting and splitting; shellac manufacture; tanning and wool cleaning.

The prohibition, however, does not extend to any workshop wherein any process is carried on by the occupier with the aid of his family only and without employing hired labour or to any school established by or receiving assistance or recognition from a Provincial Government.

Provincial Governments are empowered by the Amending Act to add any description of process to the industries already scheduled in which the employment of children under twelve years of age should be prohibited.

TEA EMIGRANT LABOUR ACT

One of the earliest pieces of labour legislation in the Indian sub-continent was the Assam Labour and Emigration Act of 1901 which was designed mainly to regulate the recruitment and engagement of indentured labour for the tea plantations in that province. Owing to altering conditions, it had not been possible for many years to subject plantation workers to penal contracts and although several attempts had been made to improve the law by amendments of the main Act in 1908, 1915 and 1927 and by the issue of rules and regulations, these proved to be abortive and ineffective and the law on the subject became extremely confused. The whole question was subjected to a thorough examination by the Government of India and the Provincial Governments in 1923-28 and by the Royal Commission on Indian Labour in 1929-30.

The Commission recommended that the existing legislation should be replaced by a new enactment which should provide: (*a*) that no assisted emigrants from controlled areas should be forwarded to the Assam tea gardens except through a depot maintained either by the tea industry or by suitable groups of employers and approved by the Provincial Government; (*b*) that the Government of India should have power to frame rules regarding transit arrangements, in particular for the laying down of certain prescribed routes to Assam and for the maintenance of depots at necessary intervals; (*c*) that the power conferred by section 3 of the 1901 Act to prohibit recruitment for Assam in particular localities should be withdrawn immediately; (*d*) that the existing Assam Labour Board should be abolished and that in its place a Controller of Immigrants in Assam should be appointed to look after the interests of emigrants from other Provinces; (*e*) that every future assisted emigrant to an Assam tea garden should have the right after the first three years to be repatriated at his employer's expense, and that the Controller should be empowered to repatriate a garden worker at the expense of the employer within one year of his arrival if it is found necessary on the grounds of health, unsuitability of the work to his personal capacity or for other sufficient reason; and (*f*) that in the event of the recrudescence of abuses, Government should have power to reintroduce in any area the prohibition of recruitment otherwise than by means of licensed *garden-sirdars* and licensed recruiters.

The Government of India implemented these recommendations in the Tea Districts Emigrant Labour Act, 1932, which was brought into effect from the 1st October 1933.

The first object of this Act is to make it possible, on the one hand, to exercise all the control over the recruitment and forwarding of assisted emigrants to the Assam tea gardens as may be justified and required by the interests of actual and potential emigrants; and, on the other hand, to ensure that no restrictions are imposed which are not justified. Provincial Governments are empowered, subject to the control of the Government of India, to impose control over the forwarding of assisted emigrants (chapter III) or over both their recruitment and their forwarding as occasion may dictate (chapters III and IV).

No license is required for recruiters but the forwarding of recruits to Assam must be made through the prescribed routes where arrangements for feeding, rest and medical treatment have been made and by authorised forwarding agents. It is made unlawful to assist persons under 16 to migrate unless they are accompanied by their parents or guardians. A married woman who is living with her husband may only be assisted to emigrate with the consent of the husband.

Repatriation.—Full effect was given to the Royal Commission's recommendations regarding repatriation (sections 7 to 11) and it is further provided that where an employer fails to make all the necessary arrangements for the repatriation of a worker within fifteen days from the date on which a right of repatriation arises to an emigrant labourer, the Controller may direct the employer to despatch such labourer and his family or to pay him such compensation as may be prescribed within such period as the Controller may fix (sections 13 and 15).

Section 3 of the Act makes provision for the appointment of a Controller of Emigrant Labour with some staff and possibly one or more Deputy Controllers for supervising the general administration of the system which the Act seeks to establish. The charges for this establishment are to be met from an annual cess called the Emigrants Labour Cess which is to be levied at such rate not exceeding Rs. 9 per emigrant as the Central Government may determine for each year of levy.

The cess is collected by the Controller by the sale of certificates of emigration. Every assisted emigrant has to be provided by the employing interest on whose behalf he was recruited with such a certificate. All particulars about the emigrant together with a running record of the details of his employment in Assam are given on it. Failure to provide a certificate is punishable with a fine which may extend to Rs. 500. The rate of cess was reduced by the Government of India from Rs. 5 to Rs. 3 from 1st October 1938. It was subsequently raised to Rs. 4 for the year commencing 1st October 1939 which rate continues for the current year.

The provisions of this Act were intended, in the first instance, to apply only to emigration for work on tea plantations in eight specified districts in Assam, but power is retained to extend its application to other industries and to other districts in Assam if necessary.

The following details taken from the latest available Administration Report of the Controller of Emigrant Labour would be of interest :—

During the year 1945-46, the number of assisted emigrants was 42,939. There were also 9,154 non-assisted emigrants. The *per capita* cost of recruitment was Rs. 90-4-6 and showed an increase of Re. 1 over the previous year. The repatriation charges remained the same as in the previous year being Rs. 28-12-0.

The number of adults and children living on tea estates in Assam was 5,84,222 and 5,60,217 respectively making the total of 11,44,439.

During the course of the year the Indian Tea Association created a Labour Department to look after the welfare of labour.

SHOPS LEGISLATION

The first Province in the sub-continent to enact legislation for the regulation of hours of work and conditions of employment in shops and commercial establishments was Bombay where the Legislative Assembly passed the Bombay Shops and Establishments Act on the 30th October 1939. Three other Provinces in India—Bengal, the Punjab and Sind—enacted similar laws during the year 1940. The Punjab Act was extensively amended by virtue of the Punjab Trade Employees (Amendment) Act, 1943. The Sind Act was amended in 1944. The Bombay Act was brought into effect from 15th November 1940. The Punjab Trade Employees' Act came into force with effect from 1st March 1941, the Bengal Shops and Establishment Act from 1st April 1941 and the Sind Act from 20th November 1941.

The question of framing Central legislation for the grant of a weekly holiday to shop workers in those Provinces which have no legislation on this subject was discussed at the Second Session of the Labour Ministers' Conference and the Conference decided that such legislation was necessary. The Government of India drew up a Bill on the subject and this was passed by the Central Legislature with the title of the Weekly Holidays Act, 1942, early in that year. The option for the application of this Act in any Province which has no Shops' Legislation rests with the Government of that Province.

We shall first proceed to describe the Bombay Shops and Establishments Act in some detail and we shall then give a brief outline of the manner in which the Bengal, the Punjab and the Sind Acts differ from the Bombay prototype.

The Bombay Act deals with three main types of establishments: shops; commercial establishments; and restaurants, eating houses, theatres and other places of amusement or entertainment.

In Bombay City in 1945 there were 42,432 shops, 7,088 commercial establishments and 3,775 restaurants and theatres, etc., employing 82,822, 37,075 and 26,423 workers respectively to which the Act applied.

Application.—This Act covers commercial establishments, shops, theatres or any other places of public amusement or entertainment, restaurants or eating houses, government Offices and offices of Local Authorities; clubs and residential hotels; bazaars or fairs for the sale of work for charitable or other purposes from which no profit is derived; hospitals, nursing homes and dispensaries; stalls and refreshment rooms at wharves and docks; chemists' and druggists' shops as are approved by the Provincial Government by a general or special order; and persons exclusively employed in the collection, delivery or conveyance of goods *are excluded* from the operation of the Act.

The Act does not apply to persons occupying positions of management or employed in a confidential capacity; persons whose work is inherently intermittent such as that of travellers, canvassers, watchmen and caretakers; and persons exclusively engaged in preparatory or complementary work, such as clearing or forwarding clerks or messengers.

Shops :—Section 7 of the Act prescribes the maximum hours of work of persons employed in shops at 9½ per day. Every person employed in a shop is to be given at least one day in a week as a holiday with pay and no person can be employed for more than five continuous hours unless he has had an interval of rest for at least half an hour. The Act makes it compulsory that every shop shall be closed not later than 9 p.m. Power has been given to the Provincial Government to grant exemptions in the case of certain types of shops, such as chemists' and druggists' shops, etc.

In order, however, that compulsory closure may not affect adversely the interests of shop-keepers, it is necessary to prevent street trading after the shop closing hour, and provision has therefore been made to prevent any person from carrying on the sale of any goods after 9 p.m. in or adjacent to a street or public place. This does not, however, apply to the sale of newspapers.

The maximum spreadover has been fixed at 12 hours a day, but in order to cover the cases of shops which deal in perishable goods and whose busiest periods are early in the morning and late at night provision has been made for the extension of the spreadover to 14 hours, provided such shops close for not less than three hours between the opening and the closing time.

Commercial Establishments : In the case of these establishments the Act provides that the total number of hours that can be worked in any one month should be restricted to 208. Taking 26 as the number of working days in any one month, this works out at an average of 8 hours per day. No overtime is permitted in the case of shops, but in commercial establishments overtime to the extent of 120 hours per year is permitted.

The provision for holidays is on the same basis as in shops, but the periods of work and intervals of rest of persons employed in commercial establishments are so arranged that they shall not together be spread over more than 12 hours in a day. The Provincial Government is, however, empowered to grant exemptions from this requirement for not more than six days in every calendar year for each person who may be required to work on account of stock-taking, making of accounts, settlements or on other prescribed occasions.

Restaurants and Places of Amusement :—For these establishments, a ten-hour day has been prescribed with a spreadover of 14 hours. No closing is prescribed for these places because they are already subject to regulation by the police or excise departments.

Miscellaneous Provisions :—No special provision has been made in the Act for the hours of work of women employees, and as the Act stands, there is nothing to prevent the employment of women in the types of establishments to be covered by it at night. But, no child who has not completed his twelfth year is allowed to work at all in the establishments covered by the Act.

The hours of work in the case of young persons between the ages of thirteen and seventeen years are restricted to 42 per week and to 8 per day and no young person is permitted to work in any establishment covered by the Act between the hours of seven in the evening and six in the morning.

All overtime work is to be paid for at the rate of a time and a quarter.

Enforcement of the Act is in the hands of the local authorities subject to such supervision of the Provincial Government as may be prescribed. Employers who contravene any of the provisions of the Act are liable, on conviction, to a fine which may extend to Rs. 25 for the first offence and upto Rs. 250 for every subsequent offence.

The Act in the first instance was made applicable to the City of Bombay, the Ahmedabad Municipal Borough and Cantonment, the Poona City and Suburban Municipal Borough and Cantonment, and the Sholapur and Hubli Municipal Boroughs. The Act was extended to Barsi in 1943.

Other Acts.—The Sind Act is applicable to almost the same classes of establishments as are covered by the Bombay Act. The Bengal Act grants exemption from the provisions of the Act relating to restrictions in hours of sale, *viz.*, those for the closing of shops for one and a half days in the week and after 8 o'clock each night to shops dealing in perishable commodities like meat, vegetable, flowers, etc.; shops dealing in articles required for obsequial ceremonies; and to shops dealing in tobacco, *pan*, newspapers, etc. and such seasonal commercial establishments and the clerical establishments of such seasonal factories as may be exempted by Government.

The Punjab Act, has a somewhat wider application than any of the three other Acts; but, shops dealing in perishables, medicines and newspapers; all places of public entertainment; clubs and residential hotels; barbers and hair-dressers; stalls at railway stations; and caretakers, porters, travellers, canvassers, domestic servants, etc., are exempted only from the operation of the sections

dealing with opening and closing hours and the 'close day'. By virtue of the amending Act of 1943, all Government and Railway Offices, essential services, refreshment rooms and stalls at railway stations and dining cars, offices of lawyers, auditors or registered accountants, hospitals and dispensaries and factories are exempted from the operation of any of the provisions of the Punjab Act.

Whereas the Bombay Act prescribes 9 p.m. as the closing hour for shops, the Bengal Act prescribes 8 p.m., while in the Punjab this varies with the seasons of the year—not later than 10 p.m. in the summer, and 9-30 p.m. in the winter. In Sind, the 1944 Amending Act altered the closing hour of shops from 9 p.m to 10 p.m. In actual practice, however, this is made effective only during the summer months, *viz.*, from March to October. During the winter months of November to February the closing hour is altered to 9 p.m. by Government notification.

The Punjab is the only area which provides for opening hours—6 a.m. in summer and 9-30 a.m. in winter and the Punjab Act, therefore makes no provision for limiting the spreadover as the other Acts do.

As far as hours of work are concerned the Bombay Act places a daily limit in respect of shops and places of amusement and a monthly limit in respect of commercial establishments. In contradistinction to this, the Sind Act prescribes a maximum of 54 hours per week for persons employed in commercial establishments, the Bengal Act 56 hours a week for shops and the Punjab Act 54 hours a week for shops and commercial establishments.

The Bengal Act does not place any limitations on hours of work—daily, weekly or monthly—in commercial establishments but places a maximum limit of ten hours per day for work in shops and in places of amusement. The Punjab Act prescribes a uniform ten hour day as the maximum that may be worked in any establishment covered by it.

The Punjab Act endeavours to restrict dual employment by providing that the hours worked by an individual employee with two or more employers should all be taken into account for purposes of recording. Whereas payment for overtime beyond the permissible daily hours is to be made at a time and a quarter in Bombay, Bengal and Sind, the Punjab Act requires overtime in excess of daily hours to be paid for at double rates.

Leave with Pay.—While the Bombay, Punjab and Sind Acts provide that all the employees covered by these Acts should get one holiday every week; the Bengal act goes much further and prescribes that all employees should get one and a half holidays in each week. The Bengal and the Punjab Acts, moreover, prescribe that every shop shall also be closed for at least one and a half days and one day respectively in each week.

As far as employment of children is concerned the Bombay and the Sind Acts provide that no child below the age of twelve years shall be employed in any establishment covered by the regard to the non-employment of children whereas the Punjab Act prescribes a minimum age limit of fourteen years. The Punjab Act also prohibits the employment of any young person in any shop or commercial establishment to which the Act applies before 8 a.m. or after 7 p.m. Hours of work are not to exceed seven per day or 42 per week and no young person is to be asked to work for more than 3½ hours at one stretch without an interval for rest.

Whereas the Bombay and the Sind Acts make no provision for the prompt payment of wages, the Bengal Act prescribes that all wages must be paid within ten days of the end of the period for which they are due and the Punjab Act prescribes a fortnight for this purpose.

The Bombay Act makes no provision for leave with pay: all the three other Acts do: Sind—15 days' leave with pay during every year of service to lapse if not availed of within two months at the end of the year; Bengal—14 days' privilege leave with full pay after every twelve months continuous employment with right to accumulate up to 28 days and, in addition, casual leave on half pay for ten days in every year; and Punjab—14 days for a year's or 7 days for six months' continuous employment.

Fines.—Two provisions which are to be found in the Punjab Act but not in the Bombay, Bengal and Sind Acts deserve special mention: (1) no employer may fine any employee to an extent greater than three pies in the rupee of his monthly wages; and (2) One month's notice or one month's pay in lieu of notice to be given by the employer for termination of service.

The Central Weekly Holidays Act is a very simple measure as compared with the four Provincial prototypes. As its title implies it is merely confined to making provision for the grant of a weekly holiday in certain classes of establishments. Every shop must remain entirely closed on one day of the week. All persons employed otherwise than in a confidential capacity or in a position of management in any shop, restaurant or theatre must be allowed a holiday of one whole day in each week. Provincial Governments are empowered, if they so desire, to close shops for an additional half-day in the week or to permit employees in theatres and restaurants to enjoy an additional half-day holiday in every week. No deduction or abatement is to be made from wages in respect of any holiday that may be granted under this Act. No provision is made in the Central Act for employees in banks and offices.

The Act contains the usual provisions for inspection, penalties, rule-making power and enforcement. The Weekly Holidays Act was brought into operation in the N.-W. F. Province, Bihar, Baluchistan, Ajmer-Merwara and Madras during the year 1943, while the Govt. of Orissa is contemplating extension of the Act to that Province.

The U. P. has also now enacted legislation for the regulation of hours and conditions of work in shops and commercial establishments, the Act having received the assent of the Governor-General in August, 1947. The general set up is similar to that of the Punjab Act

The Sind and the Bombay Acts have placed the duty of enforcement of these acts on the Local Authorities, whereas the Bengal and the Punjab Acts leave enforcement with the Provincial Governments.

The Bombay Municipality has appointed one Chief Inspector and five senior and eleven junior Inspectors for the inspection work in the Municipal limits of the City.

The Government of India have published a review on the working of Shops Legislation in India at pages 293 to 301 of the March 1945 issue of the *Indian Labour Gazette*.

Committee Report.—The report of the Committee appointed by the Government of Bombay to review the working of the shops Act has now been published. Among the more important recommendations are:

Leave with pay for employees, compulsory weekly closures of shops and commercial establishments, a substantial reduction in the normal working hours in all establishments, except commercial establishments, and the application of the Act to the areas with a population of 25,000 and more.

The Committee has suggested material and substantive changes in the Act. It recommends that the scope of the Act should be extended by including in its operation residential hotels and clubs and widening the definitions of "commercial establishment" and "shop." The Act should be applicable to local areas with a population of 25,000 and more.

The total exemptions from the provisions of the Act should be severely curtailed and partial exemptions should be provided. Similarly registration of establishments should be provided and the opening and closing hours of establishments should be fixed.

Weekly hours for shops, daily and weekly (instead of existing provisions for monthly) hours for commercial establishments should be fixed. A substantial reduction in the normal working hours in all establishments, except the commercial establishments should be effected.

Provision for identity cards for employees in residential hotels, restaurants and eating houses be made. Women should be prohibited from work before 7 a.m. and after 7 p.m. and the age-limit of a child should be raised from 12 to 14. Fourteen days' leave with pay with freedom to accumulate upto 28 days should be provided.

The Factories Act should be amended, so that the employees in clerical establishments of factories may be governed by it.

These are tentative suggestions which will be taken into account when drafting a Bill for amending the existing law on the subject, after Government have considered the Committee's report in detail.

INDUSTRIAL STATISTICS ACT

The collection of statistics regarding wages conditions of employment and other matters relating to industry in the sub-continent had hitherto been effected through the goodwill and voluntary effort of the industrial units concerned. This method was not considered satisfactory. As a matter of fact, the Government of Bombay had introduced a Bill for the collection of statistics in the local Legislative Council as early as in 1924 but that Bill was dropped owing to the strong opposition put up by employers' interests against the adoption of such a measure.

Practically every Commission and Committee appointed in connection with matters relating directly or indirectly to industry in the sub-continent has stressed the necessity for the passing of a Statistics Act. The subject was discussed at the Eleventh Session of the Industries Conference held in 1939 and again at the Second Conference of Labour Ministers held in 1941 and it was decided that such a measure should be adopted. The Government of India introduced a Bill on the subject in the Central Legislative Assembly on the 27th February 1942 and this was passed into law at the same session with the title of The Industrial Statistics Act, 1942.

The Act permits the collection of statistics with regard to any of the following matters: (1) prices of commodities; (2) attendance; (3) living conditions including housing, water-supply and sanitation; (4) indebtedness; (5) rents; (6) wages and earnings; (7) provident and other funds provided for labour; (8) benefits and amenities provided for labour; (9) hours of work; (10) employment and unemployment; and (11) industrial and labour disputes. Penalties are provided for persons refusing to supply information or failing to furnish the required returns. Provincial Governments are empowered to appoint an officer to be the Statistics Authority for the purposes of the collection of any statistics under the Act and that Authority, when once appointed, has the power to call upon employers to furnish the information required. Penalties are also provided for in the Act for improper disclosure of information or returns by persons engaged in the collection of the information or the tabulation of the data.

The Industrial Statistics Act was brought into force in Bombay with effect from the 1st March 1943 and in old undivided Bengal with effect from the 15th March 1943. In Bengal the Labour Commissioner was also appointed the Statistics Authority.

The Government of the Central Provinces and Berar have published Rules in connexion with the introduction of this Act in the Province.

DEMAND FOR UNIFORMITY

The impetus towards enacting measures to improve the lot of the working classes, differed in intensity from one Province to another and there were wide gaps between labour amenities in different parts of the sub-continent during the regime of the first Congress Governments (1937-39). These disparities, it was recognised must inevitably tend to weaken the competing power of those Provinces where labour laws placed greater restrictions and imposed heavier financial burdens on the employers.

With a view to achieving some uniformity in Labour legislation the Government of India convened a Conference of Labour Ministers from the Provincial and the State Administrations at New Delhi in January 1940. The agenda consisted of an examination of the shortcomings of the existing labour laws and also of

proposals for new legislation. A Second Labour Ministers' Conference which was held at New Delhi in January 1941 was preceded by separate Conferences between the Labour Member of the Government of India and the representatives of the two Federations of Employers' Associations and the All-India Trade Union Congress at Calcutta at the beginning of the year. A similar procedure of separate conversations with the representatives of Capital and Labour was followed prior to the third session of the Conference of Labour Ministers which was held at New Delhi on the 30th and 31st January, 1942.

At the Third Conference of Labour Ministers, Mr. Firoz Khan Noon who was then the Labour Minister in the Government of India said that it was for the consideration of the Conference whether for the future it would not be healthier to develop the practice of having joint meetings of employers, workmen and representatives of Governments leading to the establishment of an Industrial Council which the Royal Commission on Labour had suggested.

TRIPARTITE CONFERENCE

So a plenary conference of the representatives of workers, employers and Governments met on August 7, 1942 at New Delhi and decided that a collaborative machinery composed of the representatives of Governments, employers and workers in the sub-continent should be established forthwith for the consideration of all questions relating to the conditions of labour and that the constitution of the Plenary Conference should be as follows: Chairman—The Labour Member of the Government of India; Members—(1) Three representatives of the Government of India including one representative to represent Minor Administrations; (2) Eleven representatives of Provinces; (3) Six representatives of industrially important States; (4) Two representatives of the Chamber of Princes to represent other States; (5) Eleven representatives of employers to be nominated by Government, four each in agreement with the Employers Federation of India and the All-India Organization of Industrial Employers respectively and the remaining three to represent other classes of employers; and (6) Eleven representatives of employees to be nominated by Government, four each in agreement with the All-India Trade Union Congress and the Indian Federation of Labour respectively and the remaining three to represent other employees' interests.

It also decided that a Standing Labour Committee composed of the following members should be constituted: (1) Two representatives of the Government of India of whom one—the Labour member—would be the Chairman; (2) One representative each of the Governments of Bengal (now W. Bengal), Bombay and the United Provinces to be selected by the Governments of these Provinces; (3) Three representatives of the remaining Provinces, one each to represent (*a*) Madras and the Central Provinces and Berar, (*b*) Assam, Bihar and Orissa, and (*c*) Punjab (now E. Punjab), Sind and the North-West Frontier Provinces (now in Pakistan) to be selected by agreement between the Governments of these Provinces preferably by a system of rotation; (4) Three representatives of Indian States including one representing the Chamber of Princes; and (5) Five representatives each of Employers and Employees, four from each group being nominated by the Government of India in agreement with the two leading All-India Associations of Employers and the two main Associations of Employees, the fifth Member in each group being nominated by the Labour Member.

The second and the third sessions of the Tripartite Labour Conference were held at New Delhi on the 6th and 7th September, 1943 and on the 27th and 28th October, 1944, respectively.

The main function of the Standing Labour Committee is to consider and examine such questions as might be referred to it by the Plenary Conference or by the Central Government taking also into account suggestions made by Provincial Governments, States, and representative organizations of Employers and Workers. Whereas the Plenary Conference is to meet at least once in every year, the Standing Labour Committee is to meet as often as it might be convened by the Central Government for the consideration of questions that may be before it.

Industrial Committees.—In the light of the experience it was found that the subjects for the Conference or the Committee should be divided into (1) those dealing with general problems and (2) those covering all concrete questions relating to labour welfare and administration of labour laws. The former to be assigned to the Plenary Conference and the latter to be dealt with by a new body called the Labour Welfare Committee. The Standing Committee should cease to be a deliberative body and should act as the agent of the Conference.

It has now been decided to set up Industrial Committees for important industries. A Committee for Plantation Labour has already been constituted and similar Committees are being organised for coal mines, cotton textiles, jute mill industry, etc.

The question of re-constituting the tripartite machinery was again placed on the agenda of the eighth Labour Conference held in April 1947. In view of the establishment of Industrial Committees, proposals were also made for the abolition of the Standing Committee but the workers' representatives were opposed to this change.

As there was imperative need after the advent of the Interim Government in September 1946 for a co-ordinated and uniform labour policy throughout the sub-continent, it was felt that the co-operation of the Provincial and State Governments was necessary before giving a final effect to Government's programme of amelioration of labour conditions. Separate conferences first with the Provincial Labour Ministers and then with the States Labour Ministers were, therefore, organised. Government's labour programme was discussed in detail at both these Conferences. This Conference was followed by a joint Conference of Provincial and States Labour Ministers. At the end of the year 1946 a special Conference of employers and workers was also held to consider the five-year programme.

WAGES, HOURS OF WORK AND CONDITIONS OF EMPLOYMENT

Although some associations of employers such as the Indian Jute Mills Association and the Millowners' Association, Bombay, have made efforts during the last few years to secure a certain measure of standardisation in wage rates and conditions in the concerns controlled by their members, conditions of work and employment in Indian industry vary widely not only between industry and industry and centre and centre but also between unit and unit in the same industry and in the same centre. At the best, therefore, it can only be possible to give broad generalisations for the more important industries and indications as to where further information can be found. As far as conditions in factories are concerned, the various provincial annual factory administration reports and the summaries compiled by the Government of India on the basis of these reports, when published, used to give valuable information on hours of work, etc. Information on conditions in Indian mines used to be similarly contained in the annual all-India mines administration reports. The four Reports on a Wage Census in the perennial factories in the Bombay Presidency issued by the Bombay Labour Office and the 36 Reports issued by the Labour Investigation Committee, however, contain detailed and comprehensive information relating to wages and earnings in principal industries in the sub-continent.

WAGE RATES

Except where wages are fixed as a result of awards of tribunals appointed by various Governments, there is as yet no wage fixing machinery in the sub-continent although the question of setting up such machinery has recently been under the consideration of the Government of India and the Minimum Wages Act has already been passed; and with a few exceptions, there are no trade agreements or union rates. One important exception is the cotton textile industry in Ahmedabad where the Textile Labour Association and the Ahmedabad Millowners' Association have been able to reach agreements regarding certain wage rates.

Except in the case of a very few firms like General Motors (India), Ltd., time rates of wages are not hourly rates, as in the West, but are daily or monthly rates or, where wages are paid weekly or fortnightly, daily and weekly or fortnightly rates.

The skilled engineering trades like fitting, machining, etc., are often divided into several grades and sub-grades. Each individual Administration or unit has its own arbitrary method of grading but railway workshops and Government Ordnance factories lay down standards for each grade and for the trade tests the passing of which alone entitles an individual workman to promotion. The Government of India have been recently engaged in standardising sub-occupations in the principal engineering trades and Committees with the Chairmen of the National Service Labour Tribunals as Chairmen have been appointed for this purpose.

In their five-year programme for the amelioration of labour conditions, the Government of India have decided to proceed with the question of the standardisation of occupations and wages. Already during the year considerable progress in the matter of standardisation of wages in the cotton textile industry has been brought about as a result of an award of the Industrial Court in Bombay. Similarly in Madras, as a result of a recent award, a minimum wage of Rs. 26 per month has been laid down for the cotton mills in Madras City both for men and women.

Personal competence and efficiency, supply and demand and bargaining power are the main factors which determine the wage an individual should get in the vast majority of concerns where no grades have been fixed. Where monthly rates of wages are paid the "month" has a widely varying meaning. It may be the calendar month or the number of working days in the month, or a month of 26 or 27 working days, or the Hindu month or a "book" month—a month of so many complete weeks, or a month of so many hours, as in the case of the G. I. P. Railway where monthly rates are for a month of 208 hours.

Section 9 of the Payment of Wages Act prescribes that the amount of deduction made from a monthly rate for absence from duty shall in no case bear to the wages payable a larger proportion than that which the period of absence bears to the number of working days in the wage period.

Allowances.—Practically no industrial unit in the sub-continent today pays a consolidated rate. During the World War of 1914-18 and for a few years later, dearness or war or grain allowances were given in addition to a "basic" wage. "Basic" did not mean some fixed or prearranged amount universally paid at any particular moment; it applied to the amount of wage an individual received at the time when the allowance was given to him. A new comer to industry would not necessarily get the same "basic" wage and allowance given to his predecessor: he might get the same but he would generally get a lower "basic" wage and the allowance or a consolidated rate. The dearness allowances granted to industrial workers in the sub-continent during the First World War were never completely taken away.

The few years preceding the commencement of the Second World War were characterised by insistent demands by Labour for the consolidation of these allowances with "basic" rates of pay. With the advent of the Second World War, however, dearness allowances were again reintroduced in almost all industries in the sub-continent as a separate item except in the Jute Mill industry where an increase in the basic wage was granted and subsequently an allowance called "amenity allowance" given.

The payment of wages in tea plantations in Assam and Bengal is on the *hazira* and *tucca* system. In October 1946, basic wage rates were slightly increased. Foodgrain concessions

continue to be paid. A dearness allowance of two annas per day for adults and one anna for children was also given as from February 1947.

In South Indian tea, coffee and rubber plantations, payment is on a daily basis. From February 1947, the dearness allowance paid, foodgrain concessions given etc., were consolidated into a district allowance paid in cash.

It would be of interest to observe that certain industrial concerns in the sub-continent have adopted the Halsey Weir or Bedaux point systems of wage payment. The International Bedaux Company of New York and Amsterdam which is the largest organisation of industrial consultants in the world extended its activities to the Indian sub-continent in 1936. The Indian branch of the Company is known as the Eastern Bedaux Company and its address, Construction House, Ballard Estate, Bombay.

RATES OF WAGES

In view of what has been stated above it must be obvious that the rates of wages paid in Indian industries must vary widely. Wage data relating to agricultural labour are contained in a series of reports of quinquennial census conducted in certain provinces of agricultural wages. The latest report on this subject is the one for Madras relating to the year 1946. The reports of Courts of Inquiry appointed under the Indian Trade Disputes Act and the reports of Provincial Committees appointed by certain Provincial Governments to enquire into wages and conditions of employment of workers in certain industries also contain information relating to wages.

The collection of satisfactory wage statistics is always an exceedingly difficult matter and more particularly so in the sub-continent where conditions vary so markedly and widely. The necessary preliminaries to the conduct of any satisfactory enquiry into wages in sub-continent therefore, must be (1) the establishment of a uniformity of method, (2) the standardisation of occupational terms (as pointed out above, this is now being attempted) and (3) the thorough education and instruction of the clerical staffs of the units to be covered in the proper use of the standardised designations and in the accurate filling up of the required returns.

Since its establishment in 1921, the Labour Office of the Government of Bombay has conducted five enquiries in the years 1921, 1923, 1926, 1933 and 1937 into the wages of cotton textile mill workers in the Province of Bombay, an enquiry into agricultural wages covering a period of twenty-three years from 1900 to 1922; an enquiry into the wages of peons in Government and commercial offices in 1922; enquiries into the wages of all municipal employees in the Province in 1924, of clerical employees in Railway and Commercial offices in Bombay City in 1925, of printing press workers in Bombay City in 1929, of workers employed in the building trade in Bombay City in 1935, and of all employees in the retail trade in various important towns in the Province in the same year.

In 1934 the Labour Office conducted a general wage census covering all workers in all working perennial factories in the Province including cotton mill operatives. The second part of this census covering seasonal factories was conducted in the winter of 1935-36. The results of the special enquiry which that Office conducted into wages in cotton textile mills in 1937 expressly for the Bombay Textile Labour Inquiry Committee have been published in the Committee's Report. The results of all the other enquiries have been published either in special reports or in articles in the *Labour Gazette*.

It may also be noted that one of the functions of the Labour Bureau appointed by the Government of India is to collect comprehensive and up-to-date statistics regarding wages.

EARNINGS

Whilst full and accurate information with regard to wage rates may be of great value for purposes of wage fixation, statistics of earnings alone are of value for the proper assessment and appreciation of the well-being of the workers.

The only data on the subject of earnings in factory industries in the sub-continent are those available in the *Indian Labour Gazette*. The average earnings are reproduced below.

Industries	Average annual earnings during (in rupees)		
	1939	1945	1946
Textiles	293·5	618·7	633·6
Engineering	263·5	653·1	589·8
Minerals and Metals	457·2	601·9	573·5
Chemicals and Dyes	244·8	445·2	484·6
Paper and Printing	332·7	565·8	474·1
Wood, Glass and Stone	194·2	413·6	368·4
Skins and Hides	285·8	536·7	532·1
Ordnance Factories	361·9	642·8	546·8
Mints	367·4	667·0	695·2
Miscellaneous	281·2	508·2	513·8

Pay Periods.—There is a complete absence of uniformity as regards the periods for which payments of wages are made in the various branches of industry in the sub-continent. In scarcely any industry is there a single period of payment. If generalisations may be attempted, the jute industry in Bengal, coal-mines, tea plantations, seasonal factories, oil mills, rice and flour mills and certain classes and groups of workers in Government establishments such as the Security Printing Press at Nasik pay wages for periods of a week.

Payments on a fortnightly basis range between payments for *haptas* or wage periods of fourteen and sixteen days for weavers and spinners respectively in the cotton mills in Ahmedabad to bimonthly payments for periods from the 1st to the 15th and from the 16th to the end of the month in textile mills in Broach and various other centres.

The month is the accepted wage period for the railways (including railway workshops), cotton textile mills in Bombay, Sholapur and several other centres, engineering workshops, dockyards, printing presses and for the persons employed in the mechanical and maintenance departments of almost all concerns which pay wages to process operatives weekly or fortnightly.

Wages are calculated on both the monthly and the fortnightly basis in sugar mills and tanneries.

In the Tata Iron and Steel Works at Tatanagar where over 50,000 workers are employed wages are paid weekly to men on daily rates and monthly to those on monthly rates.

The most general system of payment in the case of casual labour is that of daily payment. Supervisory and clerical staffs in all industrial establishments are paid on a monthly basis.

The question of shortening the wage period universally in the sub-continent by law to a week or a fort-night has been considered by the Government of India, in consultation with the Provincial Governments and interested persons and bodies, on three different occasions within the last twenty years. Attempts were also made to amend the Payment of Wages Act in such a way as to achieve this object. The position, however, has still remained unchanged.

Hours of Work.—The existing restrictions on hours of work in factories and mines subject to the Indian Factories and Mines Acts have been described in the sections dealing with those Acts. The most important happening last year in regard to hours of work in factories was the reduction of the weekly hours of work from 54 to 48 in perennial factories and from 60 to 54 in seasonal factories. This reduction was effected because of two considerations: (1) it was felt that 9 hours of work in a factory per day was somewhat too long; and (2) the reduction of hours of work might lead to employment of more persons.

Actually, in many industries in this country during the war when three shifts were being worked, the hours of work were not in excess of 8 per day. In the coal-mines in Bihar and Bengal the workers seldom work for more than five to six hours in the day or for more than four to five days in the week. According to a recent investigation the average weekly attendance of a coalminer was 4·56 days. The cotton textile industry in almost all centres normally works a uniform 8-hour day. A recent development in the cotton textile industry is to work shifts on the basis of what is known as *The Relay System*. By this system a unit does not stop work during the noon recess and continues working throughout a whole shift, different batches of workers being given rest intervals by turns and the remainder being asked to do double substitute work for the time being.

One group of mills in Bombay City have been working three shifts of seven hours each for the last seven or eight years; but here the whole system is highly rationalised. In jute mills which are members of the Indian Jute Mills Association the hours of work are regulated according to the recommendation of the Association.

All the dockyards, many of the larger engineering and almost all the railway workshops work a 48-hour week but the daily hours vary according to the number of hours worked on a short Saturday. The hours in many of the mechanic shops of textile mills and in the larger non-engineering factories are usually half an hour to an hour less than those for process workers and approximately more closely to those in large engineering plants. Factories engaged in the production of metalware, however, work the full number of hours permissible under the Factories Act as also do oil and sugar mills.

Almost all seasonal factories work a uniform 10-hour day for all the days in the week except on the compulsory rest day which is not always on a Sunday especially in the districts where factory owners endeavour, as far as possible to close on the local bazaar day.

In all cases where continuous production is necessary such as in electricity generating plants and certain water pumping stations, cement factories, etc., work is arranged on a system of three shifts—the different shifts changing over every week or fortnight. The change-over is so arranged that every workman gets a rest period of at least twenty-four continuous hours once in one week. A system of change-over of shifts has been widely adopted in cotton textile mills in the City of Bombay but very little progress in this matter has been made in other centres of the industry owing mainly to the opposition of the day shift workers whose services had been engaged prior to the introduction of night work.

As far as railways are concerned, hours of work in railway workshops are controlled by the Indian Factories Act. Most of the larger running sheds have also recently been classified as factories and work in these large sheds is arranged on the basis of three shifts of 8 hours each. In the smaller sheds where work is of a fairly intermittent character, systems of two shifts of 12 hours each obtain but the work of the individual is so arranged as not to work each operative for more than 8 hours.

The question of the hours of work of railway servants was submitted for adjudication to Mr. Justice Rajadhyaksha of the Bombay High Court and his report is now published.

Speaking generally, in the dry docks and workshops attached to Ports two to three shifts of 8 hours each are worked. Only in the Madras Port is there a system of weekly change-over of shifts among dock workers. During the war, overtime was a regular feature in the major ports due to increased activities created by war conditions.

In the major municipalities in the sub-continent the hours of work vary from department to department but are generally 8 to 10 per day. In the Water Works Department, the Pumping Station and Distribution Department in Madras, there is a regular system of change-over of shifts but such a system is not to be found in other municipalities. Speaking generally, municipal workers get a weekly holiday. Although those in the conservancy department get only half a day off per week, there is a certain amount of discontent among the conservancy staff for not getting a weekly holiday but since they are engaged on essential work most of the municipalities find it difficult to grant such a holiday.

As far as the industries not specifically dealt with here are concerned, the hours of work in the case of certain individual units may, by the standards of to-day, be considered excessive but the existing regulation of the hours of a large percentage of industrial labour in the sub-continent had a very salutary effect in bringing about a general reduction to more normal standards in the case of the non-regulated industries and concerns.

RECRUITMENT

Until recently, recruitment of labour in almost all industrial undertakings in the sub-continent, with the possible exception of Railway workshops, was effected through the medium of a recruiting agent, a *Sardar*, a *Mukkadam*, a *Mistri* or a jobber. As a result, however, of the recommendations made on the subject by various Committees—notably the Royal Commission on Indian Labour and the Bombay Textile Labour Inquiry Committee which have condemned this method of recruitment owing to the abuses which have come to be associated with it—many of the larger and more progressive concerns have appointed Labour Officers who are directly responsible for all new recruitment. The old method is, however, still largely prevalent in the majority of the industrial concerns in the sub-continent.

There are various forms in which a recruiting agent is remunerated. He may be a salaried employee with a commission for every recruit he brings in as in the mines and plantations, or he may receive a lump sum payment for each recruit or a gang of recruits, or he may be paid a recurring sum for each man he places in employment as long as that men continues in service. Whatever be the method by which an employer remunerates the recruiting agent, it is fairly well known that the agent keeps a continuous hold on the recruit he places in employment and extracts from him recurring sums of money whilst he continues in that employment under pain of losing his job.

The evils in connection with recruitment were most marked in the case of casual or substitute labour. The Millowners' Association, Bombay, have dealt with the problem by establishing what is known as the "Badli Control System." Daily casual vacancies are filled only from card holders and whenever there is a permanent vacancy it is filled from these card holders. The evil influence of the jobber is thus eliminated. The system has been highly commended by the Textile Labour Inquiry Committee and the Government of Bombay have recommended its adoption by all mills in the other centres of the cotton textile industry of the Province.

Labour Officers.—No reference to the appointment of Labour Officers in industrial concerns in India would be complete without mentioning the lead given in this matter by the Millowners' Association, Bombay. The Association, conducts special classes for the training of Mill Labour Officers and actively supervises and controls the work done by all such Officers where they have been appointed through the Association. Following the example of the Millowners' Association, Bombay, the University of Calcutta, in co-operation with the Indian Jute Mills Association, has recently inaugurated a special course of social work for giving suitable training to Labour Welfare Officers engaged in jute mills. The course covers both theoretical training and intensive practical work in the field, *i.e.*, the jute mills themselves. The Indore Christian College has also recently started a course for the training of Labour Officers.

The Indian Jute Mills Association which has appointed a large number of Labour Officers, created a special post of a Senior Labour Officer in 1944 and they have been successful in procuring the services of Mr. John Lee, who has had a large experience of personnel management in the United Kingdom.

In this connection mention might also be made of the Employment Exchange started by the Northern India Employers' Association in Cawnpore. Some of the progressive cotton mills in the South have also opened special Labour offices through which only recruitment is made.

Some of the worst evils in regard to the recruitment of labour are to be found in Indian Coal Mines. More detailed information will be found in Mr. S. R. Deshpande's Report on the Conditions of Labour in Indian Coal Mines.

Absenteeism.—One of the most usual complaints of Indian industrialists has been the high percentage of absenteeism and the large turnover in Indian factories, mines, etc. From the available information it is clear that the percentage of absenteeism in Indian industries and particularly in mines and plantations is very high. It amounts to about 10 to 15 per cent. in factories, and to about 25 to30 per cent. in mines and plantations. The high percentage of absenteeism in mines is due largely to the fact that there is a periodical exodus of miners to their villages for purposes of cultivation. The high percentage of absenteeism in plantations can be attributed to the large amount of sickness which prevails, particularly in the tea plantations in Assam and the Bengal area. It is noteworthy that in factories in which the conditions of work and wages are satisfactory and also where there is a system of granting leave with pay apart from the statutory holidays with pay, the incidence of absenteeism is not so high as is otherwise the case. The available statistical data on absenteeism in certain types of concerns is given in the tabular statement below:—

	Cotton Mill Industry			Woollen Industry, Cawnpore (c)	Leather Industry, Cawnpore (c)	Ordnance Factories (a)	Cement Factories (a)	Match Factories (a)
	Madras (a)	Bombay (b)	U. P. (c)					
1946								
January	12·2	9·4	9·3	5·7	7·7	10·4	10·1	..
February ..	13·2	10·6	9·4	5·7	5·6	10·4	9·9	..
March	12·1	13·0	10·9	5·7	5·3	11·5	14·4	..
April	14·1	13·0	13·7	11·0	9·1	12·7	14·7	..
May	13·8	14·3	18·2	15·8	11·0	15·0	14·2	..
June	15·1	13·8	17·0	11·9	9·5	13·7	13·9	..
July	13·1	14·7	13·5	6·8	6·9	10·9	13·4	..
August	12·2	11·7	11·2	6·2	7·2	10·6	11·4	..
September ..	12·8	11·8	15·7	6·7	24·7	9·2	11·8	..
October	11·7	13·5	12·5	7·2	11·0	9·5	15·5	..
November ..	12·5	13·5	12·2	7·3	9·7	8·8	16·6	..
December ..	14·2	12·2	11·2	6·7	8·7	9·1	12·8	..
1947								
January	12·3	10·8	14·4	11·1	32·3	8·8	11·7	..
February	13·3	12·2	11·2	4·5	10·3	10·1	11·5	..
March	14·7	11·4	14·5	6·3	11·3	10·2	12·3	10·2
April	14·5	12·6	16·8	13·0	17·5	13·0	12·1	11·3
May	14·8	14·8	21·5	17·8	23·3	13·7	13·9	15·6
June	15·2	..	21·2	14·3	34·2	11·1	12·8	13·4

PENSIONS, GRATUITIES

The subjects which we deal with under this section are pensions, gratuities, profit sharing, provident funds, co-operative societies, grain and cloth shops, advances and loans.

Pensions.—All monthly and time-rated workmen in the industrial establishments of Government are entitled to pensions on retirement provided that a minimum of ten years' service has been put in. Commutation up to 50 per cent. of the amount of the monthly pension is permitted in certain cases. Outside Government concerns, pensions on retirement are almost non-existent although some concerns give small pensions to old employees who have put in long periods of trusted and faithful service but these are mostly *ex gratia* and cannot be claimed as of right.

Gratuities.—All railway employees and the employees of local and public bodies and a few of the larger public companies receive gratuities on retirement. Gratuities are also paid to non-pensionable workers who have put in not less than thirty years' service in Government concerns.

In all cases specified periods of qualifying service have to be put in before gratuities can be earned. The rules of individual administrations vary widely but the most generally accepted principle is half a month's pay for each year of service limited to fifteen months' pay in all. Permanent Government servants who have put in less than ten years' active service are entitled to gratuity if they are compelled to retire on medical certificate.

A few large industrial establishments in India such as Messrs. Lever Bros. (India), Ltd. and others have started Retirement Benefit schemes where an account is opened for every individual worker to which a fortnight's or 13 days' pay is credited every year: interest is allowed and the amount standing at a worker's credit is paid to him on retirement.

The Tata Iron and Steel Company has instituted a gratuity scheme under which every permanent employee who has put in 20 years' service and whose salary does not exceed Rs. 500 per month is eligible for gratuity equal to half a month's pay for every completed year of service subject to a maximum of 12 months' pay. In certain specified cases, employees with less than 20 years' service also become eligible for gratuity.

Provident Funds.—These are of two kinds: (1) contributory, where both the employer and the employee subscribe to them; and (2) non-contributory where the employee alone subscribes to them. The Provident Fund Rules of different Provincial Governments in the sub-continent are by no means uniform. The Government of Bombay, by a notification dated 20th March 1941, made it compulsory for all Government servants in receipt of a monthly income of Rs. 50 per month who joined Government service before that date or of Rs. 25 per month

who joined after that date to subscribe to the Government Provident Fund. Pensionable Government servants can only join the non-contributory section of the Fund.

State Railways and Ordnance factories have their own rules. Whereas it is obligatory for most categories of permanent non-workshop railway staffs with monthly pay over specified limits to join the provident fund, workshop employees with monthly and daily rates over specified limits are permitted to exercise an option. Once the option to join has been exercised, no withdrawal is permitted.

Compulsory Schemes.—Compulsory contributory schemes are provided for all permanent workmen in the factories owned by certain public bodies such as the Bombay Port Trust; whilst both compulsory and optional non-contributory and contributory schemes obtain for permanent workmen in the factories owned by most municipalities. Most of the larger public utility companies and corporations such as the Tata electricity generating and distributing plants, the Bombay Electric Supply and Tramways Company, Ltd., and the Burma-Shell Corporation, to mention only a few of many, provide contributory schemes for the benefit of the majority of their workmen. Several others have schemes for their supervisory and clerical establishments but not for their workmen.

The most usual amount of deduction from pay is one-twelfth of the monthly pay but the amount contributed by employers varies from 50 per cent. to 100 per cent. of the amount put in by the employee. The rate of interest may be fixed or it may fluctuate with the rate at which Government or the employer borrows money.

All provident fund rules make provision for loans to subscribers from the balances standing at the credit of their accounts in respect of their own subscriptions, and for the compulsory repayment of these loans. Subscribers are entitled to withdraw their own subscriptions at any time on retirement or on relinquishing their posts but the payment of that share of a contributory provident fund account which represents the employer's subscriptions depends on the putting in of specified periods of qualifying service—periods which show considerable variation.

The Government of India have drawn up a set of Model Rules for Provident Funds for industrial employees in India. These Rules were considered at the Fourth Meeting of the Standing Labour Committee of the Tripartite Conference held at Lucknow in January, 1944.

During the year in many cases submitted to Adjudicators and Boards of Conciliation, one of the demands of the workers has been that they should be entitled to a contributory provident fund. In several cases this main demand has been met by the Adjudicators. The notable example in this connection is that of coal mines in India in which, as a result of the recommendations of the Board of Conciliation appointed by the Government of India, workers in coal mines are now entitled to a contributory provident fund.

Profit Sharing.—Profit sharing had so far been unknown in the sub-continent but some concerns are adopting this in their plants. The Tata Iron and Steel Company has adopted a scheme which provides that when the amount paid to the shareholders as dividend exceeds Rs. 1 crore during a financial year, every employee who had been in the continuous employ of the Company throughout the year is to receive a half month's pay, plus an additional half a month's pay for every 25 lakhs in excess of Rs. 1 crore paid as dividend.

Some cotton mills in South India have linked up bonuses with the dividends declared by them and this really amounts to a profit bonus. Here again a notable event which occurred during the year has been the payment of a bonus which has been introduced in the coal mining industry as a result of the recommendations of the Board of Conciliation appointed by the Government of India. The details regarding the profit bonus are as follows:—

The Board have recommended the grant of an annual bonus equal to four months' basic wages and that it should be split up into two methods of calculation:—

(a) two months' basic wages as bonus dependent on attendance, the qualifying periods being 190 days per year in the case of underground workers and 265 days per year in the case of weekly, or monthly rated employees or surface workers, and

(b) a bonus on the basis of two months' basic wages of those qualifying under (a) above and related to raisings during the year which the Board have termed as 'Production Bonus.'

These bonuses should be admissible only to those who have not taken part in any illegal strike during the qualifying period.

Co-operative Societies.—The co-operative movement has made considerable progress in industrial establishments all over the sub-continent notably in the south during recent years. Almost all railway systems have co-operative banks and savings banks in addition to credit societies.

Cheap Grain and Cloth Shops.—Employers' grain and cloth shops were very common during the period of the first world war, but with the subsequent fall in prices, the majority of these shops disappeared. The Payment of Wages Act, 1936, prohibits employers from making deductions from wages or from receiving payments from their employees for purchases from employers' shops.

Most Provincial Governments had, however, notified cheap grain and cloth shops as "amenities" in respect of purchases from which employers may make deductions from wages. In all such cases both the qualities of the articles sold in such shops and the prices charged for them are controlled by a 'prescribed authority' who is generally the Chief Inspector of Factories.

As a result of the outbreak of the Second World War, all Provincial Governments have not only notified cheap grain and cloth shops as "amenities" for the purposes of the Payment of Wages Act but have opened such shops of their own and have also encouraged employers to do likewise. The articles sold at these shops are bought at wholesale prices and are sold without any profit except for a small addition to cover working expenses of the shops.

With the introduction of Rationing of certain food-grains in Bombay in May, 1943 and with the extension of rationing to other cities and areas in the sub-continent arrangements

have been made between Government Rationing Departments and large employers of labour for the establishment of Government controlled grain shops in hundreds of industrial plants in the country. Sales from these shops are largely on credit, recoveries being effected from pay.

Loans and Advances.—Speaking generally most industrial concerns do not grant loans to their workers except during periods of an acute shortage of labour when recruiting agents are empowered to liquidate debts in order to attract the required workers to join industry. But, all workers who subscribe to provident fund schemes in such concerns as have them or who are members of co-operative credit societies can secure loans on easy terms both as to interest and to repayment. A few concerns, however, have set apart special funds for the purpose. 'Advances'—applying the term to the small sums of money advanced against earned wages—on the other hand, are more widely prevalent. The Payment of Wages Act empowers Provincial Governments to frame rules for the regulation of these advances but no interest on such advances is now permitted.

The system of giving advances is fairly common in the tea plantations of Assam and in the Bengal area. The average amount of advance, however, is nominal.

INDUSTRIAL SAFETY

All railways have undertaken extensive schemes of safety-first propaganda including the putting up of safety posters and safeguards both in English and in the vernaculars at all prominent points and places; the free issue of illustrated booklets on accident prevention; publication of special articles with photographs in railway magazines; addresses and magic-lantern lectures; and the organisation of special safety-first committees in the larger workshops.

The Millowners' Association, Bombay, has done a considerable amount of good work of a pioneering character in connection with Safety-first measures. Working in conjunction with the Safety-first Association of India, the Association drew up a Safety Code for the Cotton Textile Industry and this Code was published and put into operation from August 1940. It is of interest to note that most cotton mills in Ahmedabad had also established safety-first committees by the end of the year 1939. Factory Departments in all Provinces do all they possibly can in improving safety measures in factories. Since the beginning of the Second World War of 1939 special attention has been paid to ordnance works consequent on the employment of workers not ordinarily used to machine shop hazards.

Accidents.—The Indian Factories Act requires the manager to report all accidents which cause death or bodily injury whereby the person injured is prevented from returning to his work in the factory during the 48 hours next after the occurrence of the accident. All classes of accidents namely, fatal, serious (*i.e.*, accidents which prevent a person returning to work for 21 days or more) and minor are to be reported to the Inspector of Factories and to the District Magistrate and in cases of any accident resulting in death to the officer in charge of the police station in addition.

It is the duty of the Inspector of Factories to make an investigation as soon as possible into the causes of and the responsibility for a fatal or serious accident, and to take steps for the prosecution of the person concerned if it is found that the death or serious injury resulted from any infringement of the provisions of the Act or of the rules framed under the Act. The Act also requires notice to be given of an accident which is due to any cause that has been notified in this behalf by a Provincial Government, even though no injury may have resulted therefrom to any person.

The provisions contained in the Indian Mines Act with regard to the reporting of accidents are somewhat similar to those contained in the Factories Act but with the difference that every accident which occurs in a mine has to be recorded in a special register to be kept for the purpose.

Section 32 (*b*) of the Factories Act, 1934 makes it obligatory on all factory owners to maintain stores of first aid appliances and to provide for their custody in accordance with rules to be framed by Provincial Governments in the matter.

In recent years the Government of India have been evincing a very great deal of interest in industrial safety. Two years back Sir Wilfrid Garrett, Chief Inspector of Factories in the United Kingdom, was officially invited here to look into the many questions dealing with factory administration and industrial safety. A new office called the Office of the Chief Adviser, Factories has been started at Delhi and this office issues from time to time valuable literature on the subject of industrial safety.

In regard to mines also much more attention is being paid to the question of safety. Provision has been made for the training of miners in first-aid and according to the latest Report of the Chief Inspector of Mines, in the year 1944, certificates in first aid were awarded to 92 persons. There are also in the mining areas two rescue training centres where training has been given for fighting fires, etc. in coal mines. The table below shows the number of minor and fatal accidents in Indian factories and mines in the years 1939, 1943, 1944 and 1945:—

Year	FACTORIES		MINES	
	Minor	Fatal	Minor	Fatal
1939	29,948	221	10,584	286
1943	48,799	361	9,000	328
1944	56,336	348	8,946	365
1945	58,775	342	8,724	307

AMENITIES

The general policy adopted by Government in providing quarters for the labour employed in their industrial establishments is to do so when funds permit but usually only where conditions are such that private enterprise does not adequately meet the demand for housing, or where it is necessary for special reasons to provide quarters for certain classes of staff near to their work places.

These principles appear to be generally followed by private companies and concerns as well, especially by coal-mine owners in Bihar and Orissa, and sugar-cane growers and tea planters in Assam. The collieries in the Jharia coalfield are amply and efficiently equipped with approved types of houses whose design, construction, ventilation and general amenities are controlled by the Jharia Mines Board of Health. Every house in the coalfields has to be licensed and licenses are not granted unless the standards are complied with. If labourers are found in occupation of unlicensed houses the management is liable to prosecution. Even so, however, according to a recent *ad hoc* investigation, it was found that a considerable proportion of the mining community had not been provided with housing and that there was large congestion in the houses already provided by the mines. The general consensus of opinion also now is that one of the reasons is the migratory habits of the miners and their unwillingness to put in long spells of work in the mines. Accordingly, the Coal Mines Labour Housing and General Welfare Fund, has decided to give a higher priority to schemes for housing the miners according to new and improved designs. Thus, a target for building 50,000 houses for the miners has been laid down of which about 1,000 houses are already under construction. In Assam, all residential employees on tea estates are provided with rent-free quarters in barracks or 'lines' as they are called. Almost all sugar factories provide housing for their employees because the factories are located near large sugar-cane plantations.

Pioneers in Housing.—The pioneer work in the field of industrial housing has been done by the railways which have spent nearly 50 crores of rupees to date in providing adequate residential quarters for different classes of their employees, and by the Government of Bombay who have built 207 chawls with nearly 17,000 tenements for industrial labour in Bombay City. The rents of the tenements in these chawls vary from Rs. 5 to Rs. 8 per month. The chawls are situated at Naigaum, Worli, Sewri and at DeLisle Road. The Municipalities of Calcutta, Bombay, Cawnpore, Madras and Karachi, the Calcutta and Bombay Port Trusts and the Improvement Trust in Bombay have done much to house their own labour and also to supply low-rented tenements for other classes of industrial workers.

Perhaps the most outstanding schemes of industrial housing conceived in the sub-continent by private employers are those launched by the Tata Iron and Steel Company, Ltd. at Jamshedpur, the Empress Mills under the agency of Messrs. Tata Sons Limited at Nagpur and the Co-operative Housing Scheme of the Madura Mills. The Tata Iron and Steel Company has laid out the town of Jamshedpur on Garden City lines, and had, up to June, 1945 constructed 8,428 houses of different types for its employees and has now a further extensive programme of housing construction in hand as soon as the difficult conditions created by the war are removed.

Many of the jute mills in the Bengal area and cotton mills in Bombay City and other centre have provided housing for a percentage of their total staffs but the majority of textile workers in the sub-continent are not housed by their employers.

It is of interest to observe that the Government of India, following the recommendation made by the Royal Commission on Indian Labour in the matter, amended the Land Acquisition Act in such a way as to enable owners of industrial concerns to acquire land for the erection of workers' dwellings.

The Government of Bombay, finding it desirable to take powers to control labour housing and sanitation in areas outside municipal and cantonment limits, enacted the Bombay Non-urban Labour Housing Sanitation and Provision Shops Act, 1944 in the month of April, 1944.

Under the above Act, Government have the power to make regulations in respect of any non-municipal or non-cantonment area or any employer in respect of housing and sanitation. It is also proposed to levy a small tax on the employers to finance industrial housing.

Despite all the efforts made by Governments, co-operative societies, however, industrial housing, in the sub-continent continues to be most unsatisfactory, particularly in the large urban areas such as Bombay, Calcutta, Cawnpore, Ahmedabad, etc. This has been referred to in detail in the Main Report of the Labour Investigation Committee and certain suggestions have been made for tackling the problem. The Committee have come to the conclusion that industrial housing cannot be regarded as the responsibility of the employer and must be regarded as a responsibility of the State just as education and medical relief are responsibilities of Government.

The Government of India are seriously tackling the question of housing of miners and already a fair start has been made in this direction.

Shelters, Canteens.—Section 33 (1) of the Indian Factories Act, 1934, makes it obligatory for all factories employing more than 150 workers to provide adequate shelters for the use of workers during periods of rest. Apart from this almost all large industrial establishments did provide tiffin rooms and rest shelters for their workmen. Most concerns had also permitted the establishment of tea stalls on the premises but apart from this, little effort had been made to run co-operative canteens on the lines of those which are associated with most of the large factories in the West.

Pioneer work in this direction had been done by Messrs. E. D. Sassoon & Co. in Bombay. This Company had established large canteens in all their mills. The management in each case bore the salaries of staff and the on-cost for equipment; and hot meals were supplied to the workmen at actual cost. The Company had also established a hostel for boarding and lodging its poor women workers.

In May, 1939, the Millowners' Association, Bombay, recommended to all its member mills that they should establish canteens with the help of the Indian Tea Market Expansion Board. The suggestion was adopted by a number of mills and permission to make deductions from the wages of workers on account of canteen coupons sold to them was granted by the Chief Inspector of Factories, Bombay, on the understanding that the canteens were run on a non-profit basis.

The Tata Iron and Steel Company maintain a number of restaurants inside their works at Jamshedpur which ensure wholesome meals and refreshments to the workmen at cost price. A Women's Rest House has also been provided where women employees can wash and change and leave their babies to be looked after in their absence, these babies being served with milk and biscuits free of charge.

About the middle of the year 1943, the Government of India recommended to all employers, through the Employers' Federation of India and the All-India Organisation of Industrial Employers, the opening up of more canteens for workers. In October 1943, the Central Board of Revenue issued instructions to all Income-Tax authorities stating that any loss incurred by employers in running canteens for workers should be allowed as a revenue loss in assessing income and excess profits tax while cost of building and equipment of canteens would be chargeable as capital expenditure.

An article on 'Canteens for Industrial Workers' published at pages 219 and 220 of the March, 1944 issue of the *Indian Labour Gazette* gives the available statistics on the subject.

The Indian Tea Market Expansion Board which maintains five working centres in India and Pakistan at Bombay, Calcutta, Madras, Lahore and Cawnpore organises new canteens in industrial establishments. It has a large trained staff for this purpose.

The war witnessed a very large expansion in the provision of canteens in Indian industry from north to south. By an amendment of the Indian Factories Act it has been made compulsory for all factories employing more than 250 persons to set up canteens in conformity with prescribed standards and conditions as regards construction, accommodation, equipment, foodstuffs to be served and the prices to be charged, representation of the workmen in the canteen, etc.

INDUSTRIAL HEALTH

Such statistics of health and mortality as are collected and published in the sub-continent relate to the whole community and no statistics are compiled separately for industrial workers alone. In the absence of such data it is not possible to generalise about these matters.

The War witnessed a tremendous drive against the scourge of malaria especially in the coalfields of W. Bengal and Bihar. For a time the whole organisation for fighting malaria by the use of D. D. T. was taken over by the army and deaths from malaria went down to a considerable extent in a couple of years' time. The Labour Welfare Fund which has been started in the collieries is also spending large amounts for fighting the scourge of malaria.

In the tea plantations of Assam and the Bengal area the Indian Tea Association is spending large sums of money in order to reduce the incidence of malaria. Even so, however, in many of the industrial towns and in the tea plantations, there is still a large amount of illness resulting in absenteeism and loss of production.

Although there is not much evidence of the existence of occupational diseases notified under the Workmen's Compensation Act in the mining and factory industries of India, this may partly be due to the defective arrangements which exist for detecting such diseases. Silicosis on a considerable scale is, however, to be found in the gold mines in Kolar.

As in most things connected with the welfare of labour, the railways are in the forefront in the matter of the provision made for medical aid and relief. All railways maintain fully equipped hospitals with qualified surgeons, physicians and nursing staffs at suitable centres in addition to fully equipped dispensaries in charge of qualified medical officers at all places where there are sufficient numbers of workers to justify them.

The Government of India have provided adequate medical facilities in most of their own establishments such as Indian Naval Dockyard and the various Ordnance and Ammunition Factories. Several of the larger municipalities and public bodies such as the Port Trusts also maintain their own hospitals and dispensaries for the benifit of their workers. Following the lead of Government and public and local bodies in the matter, almost all the large labour employing establishments—cotton and jute mills, mines, engineering workshops, tea plantations, etc.—maintain dispensaries. The Tata Iron and Steel Company conducts a large hospital with special surgical, maternity and gynæcological wards in addition to six dispensaries and two first aid stations at Jamshedpur both for its own employees and for the public. All employees of the Company and their families receive free treatment.

It has been stated already that Government have now introduced in the Assembly a bill for health insurance. The bill provides for both medical and monetary relief. When it becomes an Act and the necessary organisation is set up for its implementation, it is to be hoped that disease and death among industrial workers will be reduced to a considerable extent.

HOLIDAYS WITH PAY

In the sub-continent, holidays with pay have hitherto been enjoyed by a very small percentage of the population and most leave, wherever it has been granted, has been without pay. Exceptions were: workmen in Government and railway factories and in the industrial establishments of local bodies, public utility companies and in the factories of petroleum and

kerosene installations and a few other concerns like General Motors (India), Ltd., Ford Motors (India), Ltd., Messrs. Lever Bros. (India), Ltd., and Godrej and Boyce Manufacturing Co., Ltd.

All permanent monthly rated employees in Government factories in all industries are entitled to leave with pay—in the case of the concerns under the Government of India, according to the Fundamental Rules; and for the factories owned and controlled by the Provincial Governments according to the Civil Service Regulations in force at the time in the different provinces.

Daily rated employees and certain categories of menials and piece rated workers are governed by special orders suited to each case. According to the rules which are in operation at present, the minimum period of leave with pay which can be earned by all permanent Government servants is about a month for every eleven months of duty plus ten to twenty days casual leave in every calendar year.

The leave rules for railway workshop men who joined before the 1st September 1928 vary not only between railway and railway but also according to the dates when the men were first engaged; but all leave rules of State owned Railways have now been standardised on the basis of those laid down by the Army Department. Leave rules for those employees who joined before the date mentioned are more liberal.

Perhaps the most liberal leave rules in any private industrial undertaking in the sub-continent are those to be found in the Tata Iron and Steel Works in Jamshedpur where all monthly rated workers receive one month's leave with full pay for every year of service with the right to accumulate leave up to three months and five days' casual leave and two days' festival leave with pay. In addition, monthly rated employees drawing Rs. 30 and over get six months' furlough on half pay or three months' furlough with full pay after every seven years' service. Daily rated workers paid monthly get two festival days leave and fourteen days' privilege leave with pay for every year of service which can be accumulated up to a maximum of six weeks; and daily rated workers paid weekly get five days casual leave with pay. One day off with full pay is given to all workers on Founder's Day.

Under the Holidays with Pay Act of 1945, the factory employees are entitled to holidays with pay not exceeding 10 days in the year. However recently the tendency for many units particularly in South India, has been to allow holidays with pay in excess of this limit. In many of the recent awards of Adjudicators, leave with pay up to 14 days has been awarded. It is noticed generally that in the south the provision of holidays with pay is much more generous than in Bombay and in the north.

WELFARE ACTIVITIES

The Reports of the Labour Investigation Committee on labour conditions in 36 odd industries as also their Main Report contain detailed and comprehensive information regarding labour welfare undertaken in various Provinces and industries and it is unnecessary, therefore, to go over the ground again except briefly to refer to the most salient features of welfare work that is being done in the country.

Until recently the Government of India had not undertaken any activities to promote the welfare of industrial labour employed in Central concerns. Recently, however, they have done a great deal in this respect. Reference has already been made to the institution of the Coal Mines Labour Welfare Fund. Proposals for levying a cess to create a welfare fund for tea plantations is also under consideration.

The Provincial Governments have also given up their policy of *laissez faire* in regard to welfare work. The first big step in this direction was taken during the regime of the Popular Ministries during the years 1937-39 when the Bombay Government instituted a large Welfare Department and undertook welfare activities themselves for all industrial workers in the principal industrial towns in Bombay. During wartime the Bombay Government and the U. P. Government have directly embarked on a policy of providing welfare measures and Bengal and Sind followed suit. We may reproduce below from the Labour Investigation Committee's Main Report, the welfare activities of the various Provincial Governments:—

Provinces.—In 1939, the Bombay Government first organised model welfare centres. The expenditure sanctioned in that year was Rs. 1,20,000 but it has gone up to Rs. 2,50,000 during 1944-45. In all, there are now 27 centres classified under four classes—'A', 'B', 'C', and 'D'. At Bombay there are 3 'A' class, 9 'C' Class and 4 'D' class centres, located in various parts of the city; at Ahmedabad, 1 'A' class and 4 'C' class; at Sholapur, there are 5 'C' class centres; at Hubli only 1 'C' class centre. No 'B' class centre has yet been opened. 'A' Class centres have a full time nursery school for children; a women's section providing literacy, sewing and embroidery classes and suitable games; outdoor games and gymnasium with all facilities for men; and separate arrangements for water-taps and shower baths for both men and women. Static as well as circulating libraries are attached to these centres; radio sets are provided; monthly cinema shows are arranged; and well equipped dispensaries are attached. 'B' class-centres are intended to be a replica of 'A' class centres but on a very much smaller scale. 'C' class centres provide indoor recreation and educational facilities, static and circulating libraries and dispensaries. 'D' class centres provide only outdoor recreation, such as games and sports. The centres have been very popular and the response from workers has been quite encouraging.

In the United Provinces a new Department of Labour was created in 1937, with a Labour Commissioner and a Labour Officer whose duties were mainly to keep in constant touch with the labour situation in Cawnpore and adopt conciliation measures when necessary. A Welfare Department under an experienced Superintendent has now been created to provide healthy recreation and wholesome amenities of life to workers. Recently, a Labour Welfare Superintendent also was appointed to carry on welfare work among women and children. Three types of Welfare Centres—'A', 'B' and 'C'—at present numbering 28 in all have been opened. Thus, in Cawnpore, 3 'A' class, 4 'B' class and 5 'C' class centres have been opened; in Agra, 1 'A' class centre; in Lucknow, 3 'B' class centres, in Aligarh, Bareilly, Hathras, Firozabad and Saharanpur, 1 'B' class and 1 'C' class centre each; and in Allahabad and Mirzapur, 1 'B' class centre each.

The total budget for the first year (1937) was only Rs. 10,000 but in 1945-46 Rs. 1,57,600 has been sanctioned. 'A' class centres provide medical aid, recreation, education, maternity and child welfare, sports and games and physical training. 'B' class centres provide all the above, though on a smaller scale. 'C' class centres are of the nature of workmen's clubs, with a reading room, a library, and indoor and outdoor games. Dispensaries are attached to both 'A' and 'B' class centres; and a trained midwife or *ayah* attends at each centre to wash, bathe and massage the workers' children, to entertain them with interesting games and to serve them hot milk—all free of charge. Moreover, industrial and instructional classes are held for women and girls of the working class. Sewing, knitting, embroidery and other useful domestic arts are also taught. Debates and lectures are arranged; a number of night schools are run for mass literacy; and books and stationery are provided free of cost. Cinema shows are arranged for workers and their families, and dramatic clubs have been successfully organised at some centres. Occasionally, baby shows, music parties, and *mushahiras* are also arranged. These Welfare Centres have been very popular.

Till 1940, the Government of old undivided Bengal gave grants to private organisations for the benefit of labour but the total amounts were very small (Rs. 3,005 only in 1939-40). In 1940, however, besides these grants, Government made a start with ten Welfare Centres, and in 1944-45, there were in all 41 Centres. The activities of the Centres consist of educational classes, indoor and outdoor games, gymnasiums and recreational facilities like radio, gramophone and cinema shows. Considering that Bengal is industrially a very advanced area with a large working class population, the paltry sum of Rs. 34,720 spent on welfare measures in 1944-45 appears hardly adequate.

The Sind Government have started two Welfare Centres in Karachi with provision for a gymnasium, indoor and outdoor games, a reading room and a library. The centres, however, have not been a success for want of adequate funds and supervision.

Other Provincial Governments have done next to nothing in the direction of welfare amenities for workers and have mainly contended themselves with suggesting to employers the desirability of doing certain things to improve the living conditions of their employees. Under instructions from the Central Government, Provincial Governments have taken steps to encourage the starting of cost-price grain shops and co-operative societies in industrial establishments for supplying the necessaries of life to workers at cost or concessional prices.

Coming to the States, one finds that apart from a few exceptions, the State Administrations have done little by way of labour welfare work. The Mysore Government have opened two Recreation Centres in working class areas in Bangalore City with provision for indoor games, a reading room, a library and weekly *bhajanas*. Between 300 and 400 labourers visit each centre daily.

During wartime, the Baroda Government started a movement for establishing co-operative credit and thrift societies with a view to encouraging the saving habit amongst workers. So far, 20 societies, with a membership of 24,511 have been established. The scheme was at first voluntary but has recently been made compulsory. The deposited money was to be returned after the war. This was part of a programme of anti-inflationary measures, but is likely to continue during peace-time as well.

Employers' Activities.—During recent years, there was considerable extension in the welfare activities done by employers which generally take the form of provision of dispensary, rest shelter, institution of creches, provision of canteens, etc. Most of the ground has been covered elsewhere but it may be helpful to bring it all together in a brief summary.

The Tata Iron and Steel Co. provide an up-to-date and well-equipped hospital with 168 beds and a qualified medical staff, a network of primary and secondary schools, gymnasiums, clubs with facilities for indoor and outdoor games, canteens, creches, co-operative stores, etc. The Delhi Cloth and General Mills have constituted an Employees' Benefit Fund to finance welfare measures, which include Gratuities, Pensions, Provident Fund, Sickness Insurance, educational facilities for workers' children, night schools for adults, a vocational school, libraries and reading rooms, hospitals, gymnasiums, creches, sports clubs, swimming pools, dramatic clubs, theatres, facilities for excursion, canteens, messes and grainshops. The Buckingham and Carnatic Mills of Madras have an excellent system of welfare work, including schools, mess rooms, a co-operative society, workmen's stores, an ambulance corps, athletic associations, etc. The British India Corporation of Cawnpore provide schools for boys and girls, sports, dispensaries, maternity and child welfare centres, club-rooms, a hospital, a Widows' Home, etc. The Begg Sutherland Group of Mills, Cawnpore, has provided Schools for adults and children, play grounds, indoor and outdoor games, radio and well-equipped creches. The J. K. Industries of Cawnpore, have created a Trust with Rs. 3,00,000 for providing several schools, a swimming pool and other amenities for their workmen. The Empress Mills of Nagpur have provided 4 well-equipped dispensaries, a central primary school, Kindergarten classes, a co-operative society, a sickness benefit fund, a pensions scheme, etc. The Madura Mills provide a well-equipped dispensary, a co-operative store, a thrift society, a workers' saving fund, a child welfare centre and creches, and a tea canteen. Besides, they have contributed a sum of Rs. 25,000 for operating an association called "The Madura Labour Union Welfare Association", to which they are also paying a monthly contribution of Rs. 1,000. The association conducts schools for adults and children, indoor and outdoor games, a reading room and a library. The Calico Mills of Ahmedabad have provided

an excellent hospital with 40 beds in the general and 20 in the special maternity wards. Messrs. E. D. Sassoon & Co., of Bombay have canteen facilities, a co-operative society and a number of schools for workers. The four mining companies of the Kolar Gold Field have constituted a Central Welfare Committee to co-ordinate all welfare work, which includes the provision of a large hospital and five maternity homes, schools, sports clubs, cinema shows, dramatic performances, etc. The Dalmia Cement Company of Dalmianagar in Bihar, have provided a well-equipped hospital with female and maternity wards, a high school, a reading room and a library and facilities for indoor and outdoor games.

In Class I railways, again, medical facilities are provided at important centres with well-equipped hospitals. There are also educational facilities to the children of the employees mostly free of charge. Staff Benefit Funds have also been created by certain railway companies which give monetary help to the children and widows of the deceased employees. On plantations, likewise, attention has been devoted to welfare activities. Planters have maintained dispensaries and hospitals and they were probably the first to give maternity benefits. Anti-malarial measures costing large sums of money have been adopted especially in Assam. As regards employers in the States, mention may be made of the Tata Oil Company at Tatapuram near Ernakulam in the Cochin State, in which numerous welfare measures have been introduced, including a co-operative society, medical aid, gymnasium facilities and sports, a canteen, a literacy class and a *kala-samiti* to encourage the histrionic art and music. The list can be extended but this is enough to give an idea of the work being done by employers.

Trade Union Share.—Except for the Ahmedabad Textile Labour Association, the Railwaymen's Unions, and the Mazdoor Sabha of Cawnpore, labour unions have not done much by way of labour welfare. This has been due largely to lack of funds. Some of the Railwaymen's Unions have organised co-operative societies and various kinds of funds for the provision of specific benefits, such as, legal defence, death and retirement benefits, unemployment and sickness benefits and life insurance, etc.

Here are some aspects of labour welfare work which employers undertake under compulsion or persuasion from Government. The question has been dealt with elsewhere in piecemeal fashion. For purposes of easy reference the whole has now been brought together in this summary.

Canteens.—The Government of India have now instructed all Provincial Governments to encourage and persuade employers to start regular canteens serving tiffin as well as hot meals in their concerns. The results obtained have not, however, been very encouraging although much progress has been made, as will be seen from the fact that till the year 1945, there were only 37 canteens in the United Provinces; 130 in Bombay, 70 in Madras and 133 in the Bengal area. According to a recent legislation on the subject, however, factories employing 250 or more number of persons are required compulsorily to open a canteen.

Creches.—Under the Factories Act, Provincial Governments can make rules "requiring the reservation of a suitable room for the use of children under the age of six years belonging to women workers in factories employing 50 or more such women." Most of the Provinces, including Bombay, C. P., Berar, and U. P., old undivided Bengal and Madras have availed themselves of this rule-making power. On the whole, however, employers have been rather slow in observing the requirements in regard to the provision of creches. Nor is the standard of maintaining the creches uniform as between factory and factory. There are some fine examples of first-class creches while in some factories the creches are only an apology for the word.

Medical Facilities.—Medical facilities provided by employers range from first-aid posts and dispensaries to first-class hospitals. In many of the factories there are not enough drugs and appliances, nor a qualified fulltime medical man appointed. Some factories employ a parttime doctor who visits the factory premises once or twice a fortnight, or more often, just for an hour or so. Sometimes factories arrange to send their workers to private practitioners under an agreement. There are some examples, however, in which first rate medical facilities are provided. For example the Tata Iron and Steel Co. maintain a large well-equipped hospital with 168 beds, 29 medical officers, 38 nurses and other staff; and aslo 6 outdoor dispensaries. The Delhi Cloth Mills maintain a hospital which is fully equipped with X-ray apparatus and other modern appliances, and which gives free medical aid to both mill workers and their families and free food to indoor patients. The hospital at the Kolar Goldfield is a model of its kind. The Buckingham and Carnatic Mills of Madras and the three important groups of employers of Cawnpore, the Assam Oil Co. at Digboi and many other employers have also provided adequate medical facilities. In all Class I railways in British India there are medical departments under the control of chief medical and health officers with divisional medical officers assisted by a number of assistants.

Washing and Bathing Facilities.—Although the Factories Act requires that provision should be made for washing especially in factories where workers come into contact with injurious or obnoxious substances, very little effective provision exists in this regard because most factories only provide water for washing but not soaps, soda, towels, etc. As for bathing facilities, extremely few employers provide this amenity.

Provident Fund, Gratuities and Pensions.—Though some of the larger employers have instituted schemes for the provision of the future of their workers, the number of such employers is small. During the last few years, however, some progress has been made in this direction. Provident Funds are generally common, gratuities are given only in some cases and pensions can be regarded as being rare. There are wide variations as between concern and concern in regard to the eligibility for provident funds.

A few employers have instituted gratuity and pension schemes. The amount of gratuity generally amounts to half a month's wages for every completed year of service.

Other Facilities.—Other types of welfare work done by factories relate to the provision of recreational facilities, amenities for the education of workers and their children, the provision of cost price grain shops, the establishment of co-operative societies, etc.

COST OF LIVING

Bombay was the first Province in the sub-continent to complete and publish a price series intended for measuring changes in the cost of living. A monthly cost of living index number for working classes in Bombay City compiled on the aggregate consumption method and with July 1914 as the base period was regularly published in the Bombay *Labour Gazette* from September 1921 to June 1937 when this series was replaced by another. The scope and the method of the compilation of the old index were described in the issues of the *Labour Gazette* for September 1921, September 1923 and April 1929.

The Labour Office of the Government of Bombay conducted a comprehensive family budget inquiry in Bombay City between Sept. 1932 and June 1933 and taking the weights based on the results of that inquiry it compiled a new cost of living index series on the price relative method with the average prices for the year ended June 1934 equated to 100. A full note on the method used in the compilation of this index number has been given at pages 370-72 of the issue of the *Labour Gazette* for January 1940.

This new index was made as comprehensive as possible by expanding the list of commodities covered and by adding a new group for "miscellaneous expenditure" which did not find a place in the old index. The method of compilation of the index number for the cereals sub-groups was readjusted with effect from the index for the month ending 15th May 1943 owing to rationing of certain cereals like *jowar* and *patni* and owing to difficulties in securing continuity of prices for the particular qualities included in the index.

The Index.—The Table below shows cost of living index numbers for Bombay by months from 1941 onwards:

Bombay Cost of Living Index.
(1933-34—100.)

Month*	1941	1942	1943	1944	1945	1946
January ..	117	137	203	238	229	242
February	119	135	205	230	229	243
March ..	119	137	208	226	225	247
April ..	121	138	225	231	226	248
May ..	122	142	227	235	230	249
June ..	122	152	232	236	235	259
July ..	126	168	235	241	240	268
August ..	131	168	236	250	243	267
September	129	170	238	239	240	270
October ..	125	172	245	239	242	264
November	126	178	248	242	242	271
December	129	188	247	236	242	279

* The figures for June 1943 and onwards are for the calendar month. Prior to that they are for the month ending on the 15th in each month.

In addition to the cost of living index series which the Labour Office of the Government of Bombay compiles for working classes in Bombay City, it also compiles similar cost of living index series for three other centres in the Province of Bombay: (1) Ahmedabad; (2) Sholapur; and (3) Jalgaon. Those for Ahmedabad and Sholapur are published regularly in the *Labour Gazette* along with that for Bombay City. The average prices for the year ended July 1927 have been adopted as the basis for the Ahmedabad series while the one for Sholapur is based on the average prices for the year ended January 1928.

Details regarding the scope and the method of compilation of the Ahmedabad and Sholapur series have been published in the issues of the *Labour Gazette* for January 1930 and for February 1931 respectively. The introduction of price control and rationing have necessitated changes in the compilation of the group index figures for cereals and pulses in a similar way to that adopted for the cost of living index figure for Bombay.

Other Provinces.—Other Provinces in the sub-continent which compile cost of living index series for working classes are Madras, the Central Provinces and Berar, the United Provinces, Bihar, the old undivided Punjab and Orissa. Mysore was the first State to start the compilation of a cost of Living Index for the City of Bangalore in 1942. The Mysore Government also publish now cost of living figures for Kolar Goldfields and Mysore. Among the other States, which publish such figures are Cochin and Hyderabad. These figures are reproduced regularly every month in the *Indian Labour Gazette* along with those for India.

The Government of Madras compiles nine series in all: one for Madras City with the average prices for the year ended June 1936 equated to 100 and eight other series for low paid employees at Vizagapatam, Ellore, Bellary, Cuddalore, Coimbatore, Madura, Trichinopoly and Calicut with the average prices for the twelve months from July 1935 to June 1936 as base.

The Government of the Central Provinces and Berar compiles two series for Nagpur and Jubbulpore with prices in January 1927 as base and six other series for Mofussil textile centres in the Province. Since April 1942 the base period for the indexes for Nagpur and Jubbulpore has been changed to August 1939.

In the United Provinces, one series with August 1939 as the base is compiled for working classes in Cawnpore and five other series with prices at 31st July 1939 equal to 100 are specially compiled for low paid Government employees at Lucknow, Benares, Bareilly, Meerut and Gorakhpur. The Government of Bihar compiles cost of living index numbers with the average prices for the five years ending December 1914 as the base for the following six centres in the Province: Patna, Muzaffarpur, Monghyr, Jamshedpur, Jharia and Ranchi.

Average prices for five years are also the base for cost of living indexes for Lahore, Sialkot, Multan, Ludhiana and Rohtak in the old undivided Punjab but the base period in the Punjab is the quinquennium ending December 1935.

The Government of Orissa compiles a cost of living series for its headquarters town of Cuttack on the same method and base as those adopted by the Government of Bihar and another with average prices during the year 1939-40 as base, for Berhampur.

Index Figures.—Owing to the variations in the method of compilation of these indices, they are not strictly comparable, but the table below shows the movement of cost of living index numbers in selected centres for the year 1946 :—

1946.	Bombay.				United Provinces.	Central Province.		Punjab.	Madras.	Cochin State.		Mysore State.			Hyderabad State.	
	Bombay.	Ahmedabad.	Sholapur.	Jalgaon.	Cawnpore.	Nagpur.	Jubbulpore. (Base: Aug. 1939 = 100.)	Lahore.	Madras.	Ernakulam.	Trichur.	Bangalore (Base: July 1935 to June 1936 = 100.)	Mysore.	Kolar Goldfields.	H'bd city. (Base: Aug. '43 to July '44 = 100)	
January ..	230	267	275	307	305	275	286	293	230	—	—	—	—	—	—	
February ..	231	260	270	306	311	279	286	292	232	—	—	—	—	—	—	
March ..	235	270	273	317	309	279	294	302	233	—	—	—	—	—	—	
April ..	236	273	277	315	308	279	298	305	233	—	—	200	—	224	109	
May ..	237	279	277	317	309	282	304	305	237	—	—	202	—	226	112	
June ..	247	297	284	327	321	287	304	294	240	—	—	203	—	229	120	
July ..	255	308	299	329	351	289	306	298	242	—	—	241	236	263	122	
August ..	254	297	302	332	346	291	308	303	242	299	289	243	236	255	119	
September ..	257	290	298	337	346	291	310	308	239	306	295	241	241	255	118	
October ..	251	300	304	336	340	285	309	309	240	309	296	242	238	255	119	
November ..	258	296	303	341	350	288	312	319	248	308	296	242	240	258	118	
December ..	266	296	314	347	345	292	308	326	254	302	292	246	238	256	117	

The Royal Commission on Indian Labour had commented on the unsatisfactory character of the cost of living index numbers published in the sub-continent and the Rau Court of Enquiry were also greatly handicapped in their investigations owing to the paucity of reliable data in regard to the cost of living index numbers for industrial workers. The Government of India, therefore, in consultation with the Provincial Governments, decided to launch upon an All-India Scheme for the preparation and maintenance of working class cost of living index numbers for selected centres in the subcontinent. This scheme was started in the year 1942 and has now been completed. Over 27,000 family budgets have been collected in some 28 selected centres in India and Pakistan. The data collected in the course of this investigation have now been tabulated and the Reports for some of the centres have already been published.

STANDARD OF LIFE

The Bombay Labour Office carried out two family budget enquiries for working classes in Bombay City one in 1921-22 and the other in 1932-33 and the results were published in the years 1923 and 1935 respectively. As has already been mentioned similar enquiries were also conducted in Ahmedabad and Sholapur cities and the results of both these enquiries were published in the year 1928. In Madras, the Director of Industries published in 1938 the results of an inquiry into the family budgets of industrial workers in organized and unorganized industries in Madras City conducted under the direction of the Commissioner of Labour. A number of family budgets were also collected at Cawnpore in the United Provinces and at Nagpur and Jubbulpore in the Central Provinces with the object of compiling cost of living indexes.

The following table gives the percentage distribution of expenditure :—

Groups	Bombay (1932-33)	Ahmedabad (1933-35)	Sholapur (1925)	Nagpur (1927)	Jubbulpore (1927)	Madras (1938)
Food	46.60	49.31	49.25	64.10	66.00	52.68
Fuel and light	7.11	6.65	9.60	9.62	7.95	6.67
Clothing	7.75	9.12	11.86	10.70	10.86	4.50
House rent	12.81	10.97	6.27	1.92	1.44	11.14
Miscellaneous	25.73	23.95	23.02	13.66	13.75	25.06
Total ..	100.00	100.00	100.00	100.00	100.00	100.00

NOTE.—The figures are not *strictly comparable* due to differences in the items included in the different groups.

The standard of life is more often than not conditioned by the size of the family and its income. The following figures are of interest in this connection :—

——	Bombay	Ahmedabad	Sholapur	Nagpur	Jubbulpore	Madras
Average size (of the family in persons)	3.70	4.05	4.57	4.33	3.76	6.03
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Average monthly income ..	50 1 7	46 5 0	39 14 10	..	..	37 5 11

THE TRADE UNION MOVEMENT

The earliest known trade unions were (1) the Bombay Millhands' Association, a loose organisation formed in 1890 for the purpose of memorialising Government for improvements in factory law and which soon became moribund after the passing of the 1891 Act; (2) the Amalgamated Society of Railway Servants of India and Burma formed in 1897 by Anglo-Indians and Domiciled Europeans employed on railways, more as a friendly society than a combination for securing concessions; (3) a Printers' Union started in Calcutta in 1905; and (4) the Bombay Postal Union which was formed in 1907.

The Kamgar Hitwardhak Sabha, Bombay, which came into existence in 1910, was a body of social workers who were interested in questions connected with the general welfare of labour and was an association rather for the workers than of the workers. Apart from the cases cited, the trade union movement, as this is known in the West, did not begin in the sub-continent till almost after the end of the first World War.

The decade following the end of that War witnessed rapid developments in the field of trade unionism in the sub-continent but it must be regretfully admitted that even today organised association of the workers in the sub-continent is far below the stage of development which it has reached in Great Britain and in many other countries of the world.

Whenever an industrial dispute was apprehended or whenever it occurred, there was a tendency on the part of some leaders and workers to form strike committees. Many of these committees secured a considerable measure of success in so far as concessions in wage rates were concerned; but, whereas most of them fell into a state of inanition on the conclusion of a dispute, a good few of them, emboldened with the success they had met with, set themselves to the task of creating permanent associations or trade unions of the workers. These were the beginnings of the trade union movement in the sub-continent and within a period of five years (1919 to 1923) scores of unions were formed in all parts of the country.

Federations.—The pressing need for a co-ordination of the activities of the individual unions was recognised at a very early stage of the movement and both central and provincial federations were formed. A central organisation at the apex was also necessary because only such a body could make recommendations with regard to the personnel of the labour representation on Indian delegations to the Annual Sessions of the International Labour Conference. Thus, the All-India Trade Union Congress was formed in 1920 on a national basis. The Central Labour Board, Bombay, and the Bengal Trades Union Federation were formed in 1922. The All-India Railwaymen's Federation, co-ordinating all unions of railwaymen on an industrial basis, was formed in the same year and this was closely followed by the creation of both provincial and central federations of unions of postal and telegraph employees. The latter bodies received a very generous measure of recognition both from the Railway Board and the Director-General of Posts and Telegraphs in India. In the former case, half-yearly conferences are held between the representatives of the Railway Board and the Railwaymen's Federation and at these conferences all the more important questions connected with railway establishments are discussed and as great a measure as possible of agreed solutions are arrived at.

The Treaty of Versailles in providing for the creation of an International Labour Organisation and the holding of periodical International Conferences had laid down that the delegates representing labour from the States Members should be chosen by national labour organisations. Representatives of Indian labour had attended the earliest of these conferences and had had an opportunity of studying the growth and the powerful position of workmen's associations in the West, and on their return to India they had set themselves to the task of forming trade unions in the country.

This was an entirely new development in the eyes of the Indian employer. One powerful group of employers who had hitherto not organised set themselves to form an association whose primary object was to combat trade unionism. It is unfortunately too true that many employers in the sub-continent have looked and even today look askance at the growth of organisation among their workers and that employees who take part in trade union activities are victimised. The trade union movement, therefore, instead of getting its most important support from within the ranks of labour itself, was thrown by Indian employers into the waiting hands of outsiders. In Ahmedabad, however, a strong trade union had been formed of the workers in cotton textile mills under the leadership of Mahatma Gandhi and also of certain sections of railways which were manned by a more intelligent and literate type of persons. These unions, however, were hardly representative of the workmen in the organisations concerned owing to the smallness of their membership as compared with the total number of workers employed.

Obstacles.—As far as recognition by the employers was concerned, trade unions were faced with three main difficulties. First, workmen taking interest in trade union activities were victimised; second, the majority of the employers refused to recognise unions whose executives were composed of outsiders and the third, an amendment passed in the Indian Penal Code in 1913 for the purpose of dealing with criminal conspiracies was such as to make trade unions doing the only kind of work for which they are generally formed illegal bodies in the eyes of the law.

We have already dealt with the first two of these three questions. As far as the third is concerned, the matter was brought to a head by the historic Buckingham Mill case of 1920 in which the Madras High Court granted an interim injunction against the strike committee of the Madras Labour Union forbidding them to induce certain workers to break their contracts of employment by refusing to return to work. This was a bolt from the blue for the trade union movement in the country. Trade union leaders suddenly discovered that they were liable to prosecution and imprisonment for *bona fide* union activities and it was at once apparent that some legislation for the protection of trade unions was necessary.

The height of the trade union movement in the sub-continent was reached in 1928-29 when the communists became influential. Communist leaders had captured almost every important union in the sub-continent except the textile union in Ahmedabad and they had succeeded in securing a membership of over 50,000 textile workers in Bombay City for their Bombay Girni Kamgar Union. The membership figures of the various other unions which they controlled also showed remarkable increases.

The Split.—The communists made a successful attempt in 1929 either to capture or to break the All-India Trade Union Congress. They affiliated the Bombay Girni Kamgar Union with a membership of 54,000 and the G.I.P. Railway Workers' Union with a membership of 41,000 to that body during the year and with the assistance of the voting strength which these two unions together with some of their other unions gave them, they captured both the Congress and its Executive Committee at The Tenth Session of the Congress which was held in Nagpur in that year.

Resolutions were adopted favouring the affiliation of the Congress to international communist organisations and for the boycott of the Royal Commission on Indian Labour, the International Labour Conference and the Round Table Conferences on Indian Reforms.

Moderate trade unionists under the leadership of Mr. N. M. Joshi thereupon seceded from the Congress and formed a new organisation called the Indian Trades Union Federation. The All-India Railwaymen's Federation which was till then affiliated to the Trade Union Congress left that body in 1929 and remained outside till 1935.

At the eleventh session of the All-India Trade Union Congress held at Calcutta in July 1931, a further split occurred in its ranks and the extreme left wing under the leadership of Messrs. S. V. Deshpande and B. T. Randive broke away to form the All-India Red Trade Union Congress. By this time, however, trade unionism in the sub-continent was at a thoroughly low ebb and none of the three national organisations could by any manner or means make a claim to speak on behalf of Indian labour; but, as the Congress had already decided to boycott the International Labour Conference, the Government of India accepted the Indian Trades Union Federation as the body competent to recommend delegates to the International Labour Conference.

With a view to bringing about unity in the ranks of Indian labour, a committee called the Trade Union Unity Committee was appointed at a representative conference held in Bombay on the 10th May 1931 under the auspices of the All-India Railwaymen's Federation. This Committee found that three different and distinct sections of labour were in existence in the sub-continent—(1) the communist group; (2) the liberal group; and (3) the rest—and that the gulf which divided the communists from the other sections was unbridgeable. The Committee, therefore, recommended a platform of unity for the remaining sections of labour. It was proposed to organise and unite all unions which accepted this 'platform of unity' under a new federation to be called the National Federation of Labour. At a joint meeting between the General Council of the Indian Trades Union Federation and the Provisional Committee of the National Federation of Labour held at Calcutta in April 1933, the two federations were amalgamated on the basis of the platform of unity as finally evolved by the Trade Union Unity Conference but subject to certain modifications and the new amalgamation was named the National Trades Union Federation.

Unity Attempts.—In 1935, the two sections of the All-India Trade Union Congress composed their differences and it was agreed that the parent body should be recognised as the central organisation of the working classes in the sub-continent. In the month of February of the same year an agreement was reached between the representatives of the All-India Trade Union Congress and the National Trades Union Federation by virtue of which a Joint Committee of the two organisations was to be formed with a view to exploring the possibilities of common action with the assistance of the affiliated unions of both. Another direction in which an effort towards common action on agreed matters was made was the agreement entered into between the National Federation of Labour and the All-India Congress Socialist Party for joint action on specific political and economic issues.

At the end of the year 1937, the National Trades Union Federation had a membership of 83,000 with 62 affiliated unions and the All-India Trade Union Congress had a membership of 46,000 with 98 affiliated unions. It is interesting, however, to note that the labour unions of Ahmedabad which draw their inspiration from Mahatma Gandhi have throughout remained aloof from both these bodies.

At a special joint session of the All-India Trade Union Congress and the National Trade Union Federation held at Nagpur on the 17th April 1938, it was decided to combine these two bodies into one central organisation. The principal terms of the agreement approved by the executives of both these bodies were that the basis of representation on the joint General Council of the new combined Trade Union Congress be fifty-fifty—44 members from each group—and that the Trade Union Congress accept the constitution of the National Trade Union Federation *in toto*. The General Council was to act for the combined body with the one limitation that questions relating to general strikes and affiliation with international bodies should be decided by a three-fourth's majority. If this scheme worked well, the task of unification should be pushed further and the two bodies merged into one. The Provisional Affiliation entered into at Nagpur in April 1938 was formally ratified at the Eighteenth Session of the All-India Trade Union Congress held at Bombay on the 28th and 29th September 1940.

Attitude to War.—This very same session, however, was responsible for yet another split in the Congress. The Session adopted a resolution of neutrality in connexion with the war effort but certain elements headed by Dr. Aftab Ali, President of the Seamen's Union at Calcutta desired to support the war effort. The Trade Union Congress while adhering to the principle of neutrality, however, gave a free hand to such of their affiliated members as desired to support the War Effort. This attitude of lukewarmness did not satisfy Mr. Aftab Ali and he disaffiliated his Union from the Congress.

Another section, headed by Mr. M. N. Roy and known as the Royists with Mr. Jamnadas M. Mehta, formed a new central organisation known as the Indian Federation of Labour with its head office at Delhi. Mr. Jamnadas M. Mehta was appointed its President and Mr. M. N. Roy its General Secretary. Two hundred trade Unions in the sub-continent with a total membership of over a quarter of a million have affiliated themselves to the new Federation which was carrying on a country-wide campaign and propaganda for all-out support by Indian labour for the war effort.

The All-India Trade Union Congress, at the moment is made up of three distinct groups: (1) the Communists; (2) the Nationalists (including the Indian National Congress and the Congress Socialist Party); and (3) the pure Trade Unionists.

There are, however, two important groups outside the Trade Union Congress. One is the Royists. The other is the Hindustan Mazdoor Seva Sangh which is the permanent offspring of the Labour Sub-committee set up by the Gandhi Seva Sangh in 1937 to organise labour on the principles set up by Mahatma Gandhi—principles which have been followed by the Textile Labour Association, Ahmedabad, since its inception in 1921. The original Sub-Committee established a training school in Ahmedabad to educate interested persons in trade union work. After completing a course of training in this school, the trainees are sent out to different centres to organise and conduct *bona fide* trade unions. The Sangh acts as an Advisory Body and is not a federation of unions. In politics, its policy is the same as that of the Indian National Congress but it does not organise or conduct trade unions of workers on political lines.

According to an enquiry recently made by the Government of India, it has been found that the most representative workers' organization in India is the All-India Trade Union Congress.

The latest development in the field of trade unions in India has been the establishment of what is known as the Indian National Trade Union Congress. This institution has the active support of Congress Governments in the country. The Ahmedabad Textile Labour Association has joined this organisation which generally follows the ideology of the Congress.

STATISTICS OF TRADE UNIONS

One of the Annual Reports which the Government of India stopped publishing during the War was that relating to the administration of the Indian Trade Unions Act. These reports used to contain statistics regarding number of registered unions and their membership.

No Province except Bombay has maintained any records for both registered and unregistered unions. The Labour Office of the Government of Bombay has collected full and complete information regarding all trade unions in the Province of Bombay since the year 1922. The following Table shows the progress of the trade union movement in that Province during the last few years:

Year	Average number of Unions during the year	Average Membership during the year
1928	18	41,030
1929	91	191,937
1939	170	159,026
1940	177	191,942
1941	174	184,517
1942	183	183,364
1943	214	221,029
1944	261	266,042
1945	295	321,582
1946	352	340,540

All-India Figures.—Although the Government of India have not so far revived the publication of an Annual Report on Trade Unions, their Labour Bureau publishes figures for Registered Trade Unions in the *Indian Labour Gazette*. The following tabular statements show the latest available position in regard to Registered Trade Unions:—

Province	No. of Registered Trade Unions	No. of Unions making returns	Membership of Unions making returns.
Ajmer-Merwara ..	3	3	946
Assam	9	9	2,486
Bengal (E. and W.)	330	134	286,255
Bihar	49	31	73,428
Bombay	93	79	172,679
C.P. & Berar ..	53	27	13,748
Delhi	40	19	30,504
Madras	154	141	88,270
N.-W.F.P. ..	4	2	328
Orissa	4	4	1,494
Punjab (E. and W.)	22	21	8,308
Sind	39	39	12,431
U.P.	34	34	36,734
Trade Unions whose objects were not confined to one Province	31	30	161,777
Total ..	865	573	889,388

The following table shows the number and membership of the Registered Trade Unions from which returns were received, classified according to industries:—

Branches of Industry	1944–45	
	No.	Membership.
1. Railways (including workshops and other transport excluding Tramways)	82	304,486
2. Tramways ..	4	10,390.
3. Textiles	113	210,712
4. Printing Presses ..	24	13,560
5. Municipal ..	23	11,928
6. Seamen	9	79,501
7. Docks and Port Trusts	24	37,098
8. Engineering ..	53	35,513
9. Miscellaneous ..	241	186,200
Total ..	573	889,388

Conventions Ratified.—India and Pakistan have ratified only 15 out of the 67 Conventions ratified by the I. L. O. but have in addition incorporated into the national legislative measures the essential features of many other Conventions. The following is the list of Conventions ratified:—

1. Hours of Work (Industry), 1919.
2. Night Work (Women), 1919.
3. Night Work (Young Persons), 1919.
4. Right of Association (Agriculture), 1921.
5. Weekly Rest (Industry), 1921.
6. Minimum Age, 1921.
7. Medical examination of Young Persons (Sea), 1921.
8. Workmen's Compensation (Occupational Diseases), 1925.
9. Equality of Treatment, 1925.
10. Inspection of Emigrants, 1926.
11. Seamen's Articles of Agreement, 1926.
12. Marking of Weight, 1929.
13. Night Work (Women) Revised, 1934.
14. Underground Work (Women), 1935.
15. Protection Against Accidents (Dockers) Convention, 1929, Revised in 1932.

LABOUR ADMINISTRATION

The work of the Ministry of Labour of the Government of India has increased considerably. As a matter of fact, recently this Ministry has been split into two different Ministries, one styled the Ministry of Labour and the other Ministry of Works, Mines and Power.

Apart from dealing with labour legislation and labour conditions and attempting and bringing about uniformity of standards in the different Provinces, this Ministry has recently undertaken very great additional responsibilities for the placement of civil and military demobilized personnel. It administers and controls all matters in connection with the work of the National Services Tribunal, the Technical Training Scheme, the Bevin Scheme and the system of Employment Exchanges. It has continued active co-operation with organized employers and labour organizations through the Tripartite Labour Conference and Standing Labour Committee.

Prior to the year 1920 there was little co-ordination between the Centre and the Provinces in matters connected with Labour. The participation by India in the First Session of the International Labour Conference held at Washington in 1919 and the increasing interest taken by the Indian public in questions connected with labour made it necessary, however, both for the Government of India and the Governments of the more industrialised Provinces not only to consider the question of the representation of labour in the Central and provincial legislatures but also to allocate to special departments or offices the administration of labour questions.

The Government of India established a Labour Bureau in the year 1920 which instituted inquiries into certain phases of factory work and published some reports in a series known as "Bulletins of Indian Industries and Labour."

The Bureau was however abolished in March 1923 on the recommendation of the Indian Retrenchment Committee. Since the War and the creation of the Tripartite Labour Conference the Ministry of Labour of the Government of India has considerably expanded its staff and it now deals with a much wider range of subjects than it did before the War.

Labour Bureau—To meet the ever growing needs of Government, industry and labour for accurate and reliable information relating to labour conditions, labour legislation, etc., the Central Government established on 1st October 1946, a Labour Bureau with the following functions:—

(*a*) The collection of statistics relating to labour, etc.

(*b*) To maintain the cost of Living Index Numbers compiled under the Government of India's Scheme for the preparation of Cost of Living Index Numbers on uniform lines.

(*c*) To keep up-to-date the factual data relating to working conditions collected by the Labour Investigation Committee.

(*d*) To conduct research into specific problems with a view to furnishing data required for the formulation of policy.

(*e*) To edit the *Indian Labour Gazette*, and,

(*f*) To edit a Labour Code of various Legislative enactments and the statutory rules made thereunder and a Year Book giving authoritative description of labour affairs in the country.

The Bureau has now been in existence for nearly two years. It has so far issued the following two publications:—

1. A symposium containing articles contributed by Sir Wilfrid Garrett, Chief Adviser of Factories, to the *Indian Labour Gazette*.

2. A Report on an Enquiry into the Family Budgets of Workers in the Tea Plantations of Assam, Bengal and South India.

At the time of writing the Indian Labour Year Book is in the press.

One of the extensions of the activities of this Ministry has been in the field of the collection of necessary data for compiling cost of living index numbers for selected centres in India on uniform lines. Accordingly, an Officer styled Director, Cost of Living Index Scheme, was appointed in the year 1942 and he has now collected some 27,000 family budgets in about 28 selected centres in India and Pakistan. The data have now been tabulated and within a short time it may be possible to have for the first time, scientifically compiled cost of living index numbers for principal centres in the two Dominions.

The Central Government, in the Ministry of Labour, have also now appointed a Chief Labour Commissioner. This officer is in charge of industrial relations and conciliation, labour welfare operation of labour laws, and maintenance of information regarding wage rates and conditions of work. There are a number of deputies working under him known as Regional Commissioners. Among the functions of the

Province, the Secretary to Government in the Legislative Department is entrusted with the work of industrial and labour disputes. In **Ajmer-Merwara**, the Labour Officer is now designated Registrar of Trade Unions. He deals with all matters pertaining to Labour.

States—The rapid industrialisation witnessed in the sub-continent especially since the advent of the Second World War in 1939 has not been confined to the Dominions alone but has also extended to the States. After the end of the First World War, there was a slight tendency for industry in British India to migrate to the States owing to the absence of labour laws and restrictive conditions of work but most of the progressive States such as Hyderabad, Baroda, Mysore, Gwalior, Indore, Travancore, Cochin, etc., have endeavoured during recent years, to bring their labour legislation into line with the Labour Laws in the Dominions with the result that industrial workers in these States are now assured of conditions very similar to those obtaining in India and Pakistan. The participation by some States in the Conferences of Labour Ministers and their representation in the Tripartite Labour Conference and in the Standing Labour Committee created in 1942 have given an added impetus to planned industrialisation and the levelling up of conditions of work in the States with those obtaining in the Dominions.

Mysore—Prior to 1941, Mysore had a Factories Act, a Mines Act, a Workmen's Compensation Act and a Maternity Benefit Act. Labour problems in Mysore have, however, been brought into considerable prominence as a result of rapid industrialisation in the last few years. In addition to 28 new plants, 25 large industrial concerns of which 17 were State-aided and eight State-owned were established in the State during the decade ending 1941. The total number of large industrial undertakings stood at 330 by the end of 1943 and these gave employment to an average of nearly 86,000 workers. An amendment made to the Mysore Factories Act in 1942 extends the scope of the Act to all factories employing ten or more persons instead of 20 as before thus bringing almost all factories in the State within its purview. The Mysore State has now fallen in line with the Indian Factories Act by reducing the hours of work to 48 per week. The Mysore Workmen's Compensation Act was considerably liberalised and the operation of the Mysore Maternity Benefit Act was extended to women employed in mines in the same year. The Code of Civil Procedure was also amended in such a way as to ensure the exemption of the wages of workers from attachment.

The most advanced piece of labour legislation in States today is the Mysore Labour (Emergency) Act enacted in 1941 and placed permanently on the Statute Book in January 1942.

This Act creates machinery for the peaceful and speedy settlement of industrial disputes and seeks generally to promote the welfare of labour. Among its many provisions are those relating to the setting up of a Department of Labour with a Commissioner and three Assistant Commissioners of Labour and a Court of Industrial Arbitration: the framing by the Commissioner of Labour, of Standing Orders for workmen; and the conferring of the rights of association on all labour employed in the State. The Court of Industrial Arbitration, consisting of a Judge of the High Court as its Chairman and two independent members decides industrial disputes referred to it by Government or by agreement between the parties and decides appeals from the Orders of the Commissioner of Labour regarding Standing Orders.

The creation of rival unions of workers is avoided by prescribing a single Association each for industrial undertakings employing not less than 100 persons and by conferring Statutory recognition on each Association immediately it is registered.

A Labour Welfare Board consisting of representatives of employers, unions of workers and local bodies entrusted in labour welfare with the Commissioner of Labour in Mysore as Chairman was constituted in December 1942 with a wide range of functions covering all matters relating to labour welfare, labour legislation, collection of statistics and dissemination of labour intelligence.

The personnel dealing with matters connected with labour is as follows:—Commissioner of Labour and Chief Inspector of Factories; Assistant Commissioners of Labour; Chief Conciliator and Registrar of Associations and the Chairman, Court of Arbitration.

Hyderabad—On the 1st April 1944, there were 668 industrial concerns subject to the Hyderabad Factories Act employing 53,295 operatives of whom 37,627 were men, 12,255 were women and 1,413 were children. In addition to the Factories Act which embodies provisions for the health and safety of labourers, there is a Mines Act, a Boiler and Machinery Act, the Hyderabad Labour Compensation Act, and a Maternity Benefit Act. Recent legislation includes a Payment of Wages Regulation, an Employment of Children Regulations, a Trade Disputes Order for the appointment of an Industrial Court and Conciliation Boards and a Trade Unions Act. Debt Conciliation, Land Mortgage and Money-Lenders Regulations have been framed for the protection of agriculturists and agricultural labour. Hours of work in the majority of the factories do not exceed 54 or 60 per week and in Government concerns are limited to 7 to 8 per day. Strikes and lockouts have been made illegal unless 21 days' notice has been given.

A Departmental Employment Bureau has been created for solving the problem of unemployment. A Statistics Act, much wider in scope than the Industrial Statistics Act of India has also been enacted. The Department of Statistics has instituted quinquennial inquiries into wages and conditions of employment of agricultural and industrial labourers since the year 1920 and the first printed Report on the Labour Census was published in 1935. The second Report on Labour Wages Census (Rural and Urban) 1940 has also been published. A scheme for Inquiries into Family Budgets and the compilation of Cost of Living Indexes in several Industrial centres of the Dominions, Hyderabad City (including Secunderabad), Warangal, Nizamabad, Nanded, Aurangabad and Gulbarga is in process of completion. A collection of Statistics Act was adopted early in the year 1945. This is the most advanced piece of legislation of its kind yet adopted in the sub-continent and is much wider in scope than the Industrial Statistics Act, 1942. The personnel dealing with matters connected with Labour is as follows: Minister in charge of Labour; Secretary for Labour; Commissioner of Labour; Labour Officer and the Labour Welfare Inspectors.

Baroda—The total number of registered factories in the Baroda State on the 31st July, 1944 was 170 of which 80 were perennial and 90 seasonal. The total number of persons employed in all factories employing more than 20 persons was 41,771. Baroda was one of the first states in India to enact a Mines Act. The Baroda Mines Act, 1908 contains provisions in regard to health and safety of workmen employed in the Mines. As far as other Labour Laws are concerned the Government has adopted, with certain changes to suit local conditions, the Indian Factories Act, 1934; the Workmen's Compensation Act, 1923; the Trade Disputes Act, 1929; the Trade Unions Act, 1926; the Payment of Wages Act, 1936; and the Bombay Maternity Benefit Act, 1929. Under the Baroda Factories Act, the maximum permissible weekly hours of work are 48 for perennial factories and 54 for seasonal factories. The Workmen's Compensation Act and the Rules framed thereunder have been adopted *in toto*. In the Baroda Maternity Benefits Act, the benefit is to be at the rate of six annas a day as against 8 annas a day as in the Bombay Act. Sections 6(3) and 18A (relating to the appointment of Conciliators) have been omitted from the application of the Trade Disputes Act, 1929.

The Baroda Trade Unions Act has important variations from the India Act on which it has been modelled; (1) No Associations or Unions of Government Servants, whatever be their objects, are permitted; (2) the forming by Unions, of political funds is not recognised; (3) the proportion of persons connected with an industry which is covered by a Union to outsiders on its executive has been fixed at 66⅔ and 33⅓ per cent. respectively; and (4) Section 30 of the British Indian Act has been omitted. Under the Baroda Payment of Wages Act, all wages have to be paid before the expiry of the tenth day following the period for which they fall due. In the application of Rule 81A of the Defence of India Rules, the period of notice required for the declaration of a strike or a lock-out is six weeks.

A Labour Officer whose main duty was to endeavour to bring about settlements in labour disputes was appointed in the year 1938. In addition to conciliation work he is entrusted, as Special Registrar of Co-operative Societies for Workers, with the work of organising Co-operative Societies and other welfare Schemes with the help of employers. In the year 1943, the Government of Baroda State instituted an inquiry into the general financial condition of the cotton mills in the State and the conditions of labour employed in them with special reference to recruitment, wages, hours of work, labour welfare and efficiency.

With a view to seeing that the increased earnings accruing to industrial workers in the State as a result of war conditions might not be frittered away in drink, etc., the Baroda Government decided to start Co-operative Thrift Societies for the workers. The Government have guaranteed the security of all deposits made in such Societies. By the end of February, 1945, twenty such Societies with a membership of 24,301 workers had been established in the State. The total amount of savings as at the same date amounted to Rs. 20,19,962.

The personnel of the Government of Baroda dealing with administrative matters connected with Labour is as follows: Director of Labour and Registrar of Trade Unions; Labour Officer, Inspector of Factories under the Payment of Wages Act and Special Registrar of Co-operative Societies for Labour and the Inspector of Factories.

Indore—In October 1943, Indore was the fifth largest centre of the cotton textile industry in the sub-continent with seven mills having 213,446 spindles and 6,301 looms. The total number of factories on the register on 1st October 1944 was 485 of which 322 were perennial and 163 seasonal. These provided employment for 30,297 workers in all of whom 26,377 were employed in cotton mills.

Labour legislation in Indore is almost parallel to that in India and includes Factories, Workmen's Compensation, Trade Unions' and Maternity Benefit Acts. The Indore Trade Disputes Act provides for the appointment of Courts of Inquiry and Boards of Conciliation to deal with disputes and also for a Labour Officer to secure the maintenance of harmonious relations between the workers and their employers. Standardisation of wages has been secured in cotton textile mills and labour has been decasualised by the introduction of the *Badli* Control System on the lines adopted by the Millowners' Association, Bombay. Safety Committees to prevent accidents in factories have also been established.

Cochin—Unlike Mysore, Baroda and Indore, the large industrial population of Cochin State is organised on a cottage basis. The number of concerns on the Factory Register at the end of the last official year (18th August 1944) was 108 employing 12,806 persons. Today Cochin State has all the labour laws which have been enacted in Indore with a Dock Labourers' Act in addition. Recent additions include an Employment of Children Act and the Employee's Liability Act. The administration of labour matters is generally in the hands of the Commissioner of Labour. The Factories Act and the Workmen's Compensation Act are, however, under the immediate administrative control of the Chief Engineer, Public Works Department and the District Magistrate of the State respectively.

Office of the Chief Commissioner of Labour, is to look after the welfare of the employees employed in concerns belonging to the Central Government, including mines. The Chief Commissioner of Labour and his deputies also intervene in disputes arising between Government and employees in the various mines and factories.

The Provinces—Consequent on the introduction of Provincial Autonomy with effect from 1st April, 1937, Sind was separated from the Presidency of Bombay and made into a separate Province. The new Government of Sind modelled its administration of all labour questions on Bombay and created a Labour Office with a special Commissioner of Labour. Since the year 1937, the Governments of the United Provinces, Assam, the Central Provinces and Berar and Bihar have also created special appointments of Commissioners of Labour; but, whereas the appointments in the United Provinces was a full-time one, those in the Central Provinces and Berar, Bihar and Assam have been coupled with other posts. In the old undivided Punjab, administrative matters connected with Labour were in the hands of the Director of Industries. Labour conditions in Orissa and in the North-West Frontier Province are not such as to justify the creation of special appointments of Labour Commissioners.

Bengal (E. and W.)—The personnel of the Governments connected with labour matters consists of the :

Labour Commissioner and Registrar of Trade Unions; Deputy Labour Commissioner and Chief Inspector, Shops and Establishments; Commissioner for Workmen's Compensation and Authority under the Payment of Wages Act; Assistant Labour Commissioners; Labour Officers and the Chief Inspector of Factories.

During the last two years, the office of the Commissioner of Labour, has carried out a number of statistical and socio-economic enquiries into labour conditions such as family budget enquiries, wage censuses, etc. This work was undertaken either in connection with the Government of India's scheme for the preparation of cost of living index numbers on uniform lines or on behalf of the Labour Investigation Committee.

Bombay—The real pioneer work in the field of labour information and statistics in the sub-continent during the last twenty-five years has been done by the Bombay Labour Office. The principal work of the Labour Office during the year was in connection with the editing of the Labour Gazette and conciliation in Trade Disputes. The administration of the Bombay Industrial Disputes Act, 1938, has resulted in a heavy strain on the Labour Organization of the Government, the chief personnel of which consists of Commissioner of Labour, who is also Chief Conciliator, Bombay Industrial Disputes Act, and Registrar of Trade Unions; Assistant Commissioners of Labour; Labour Officer, Bombay and Officer-in-Charge, Labour Welfare Department; District and Assistant Labour Officers; Commissioner for Workmen's Compensation; Chief Inspector of Factories and the Labour Welfare Officer, Bombay. The Commissioner co-ordinates the work of the three Labour Directorates, *viz.*, Directorate of Labour Information, of Labour Administration, and of Labour Welfare respectively.

Madras—The Commissioner of Labour in Madras is also the Chief Inspector of Factories but for the administration of the Factories Act he is assisted by a Deputy Chief Inspector of Factories at headquarters, in charge of the Madras Factories Circle. Three additional Factories Circles, each in charge of an Asst. Inspector of Factories were sanctioned in 1945-46.

The Labour Commissioner in Madras has no special statistical office to deal with labour statistics, and no reports have been published of any special inquiries into questions connected with Industrial labour in the Province. The conduct of the Quinquennial Census into Agricultural Wages has, however, been placed in his hands and, with a view to the proper administration of the Payment of Wages Act a beginning has been made for a more accurate collection of industrial wages statistics, information regarding which is included in the Annual Reports on the Administration of the Factories Act.

In view of the large increase of work resulting from war conditions, the Government of Madras sanctioned the creation of a post of Assistant Commissioner of Labour in September, 1943. In February 1944, this Officer was appointed an Additional Commissioner for Workmen's Compensation. An additional post of a Labour Conciliation Officer for the Madura, Ramnad and Tinnevelly Districts with headquarters at Madura was created in 1945.

The personnel of the Madras Government connected with Labour matters consists of the Commissioner of Labour; Commissioner for Workmen's Compensation; Registrar of Trade Unions; Chief Inspector of Factories and the Authority under the Payment of Wages Act; Deputy Chief Inspector of Factories; Asst. Commissioner of Labour and Additional Commissioner for Workmen's Compensation and the Labour Conciliation Officers.

C. P. and Berar—Prior to January 1942 when the Government of the Central Provinces and Berar created the post of a Commissioner of Labour, matters in connexion with the administration of questions connected with Labour were dealt with by the Director of Industries. The new Labour Office in Nagpur has been modelled on lines similar to that in Bombay and it is to be responsible for the collection of statistics relating to the cost of living, industrial disputes and trade unions. The Commissioner of Labour is assisted by a Labour Officer and Assistant Labour Officers. The Commissioner and the Labour Officer have been appointed Conciliators under the Trade Disputes Act, 1929.

U. P.—Following the recommendations of the Cawnpore Labour Inquiry Committee, the Government of the United Provinces sanctioned the post of a wholetime Labour Commissioner in March 1940. This Officer, like the Commissioner of Labour in Bombay, was to hold all the statutory appointments connected with Labour and he was provided with a permanent staff with effect from 1st April 1941.

The main functions of the Labour Department are: 1(*a*) Prevention and settlement of industrial disputes. (*b*) Disposal of individual complaints received from workmen or their organisations. 2(*a*) Labour Intelligence. (*b*) Collection, compilation and publication of accurate statistics of labour conditions and welfare. 3. Organisation, superintendence, direction and control of Labour Welfare Work. 4. Registration of Trade Unions. 5(*a*) Labour Regulation. (*b*) Administration of Labour Acts. (*c*) Supervision and control of the Office of the Chief Inspector of Factories and Boilers, U.P., and 6. Miscellaneous work connected with Labour, *viz.*, (*a*) Emigration and (*b*) Preparation of Electoral Rolls, etc.

An inquiry into Rents and Density of Population in Workers' Dwellings at Cawnpore begun about the middle of 1943 has now been completed. Other inquiries into the conditions in the Brassware Industry at Moradabad and the Scissors Industry at Meerut have also been completed. Yet another enquiry which is also now completed is one into Family Budget at Cawnpore under the Govt. of India's centrally controlled cost of living index scheme.

The personnel of the United Provinces Government dealing with Labour matters consists of the Labour Commissioner, Commissioner for Workmen's Compensation, Registrar of Trade Unions, and Chairman, Sugar Commission, United Provinces and Bihar; Labour Officers and the Chief Inspector of Factories.

Bihar—In pursuance of the recommendations of the Bihar Labour Inquiry Committee, a Department of Labour on the lines of the Bombay Labour Office was brought into existence in Bihar with effect from 1st July, 1942. This was established on a permanent basis with effect from the 15th March, 1944. The Factory and the Boiler Inspection Departments have been placed under the Commissioner of Labour since September, 1944. The Commissioner of Labour has been appointed ex-officio Inspector under the Factories Act, the Payment of Wages Act and the Employment of Children Act. The Commissioner and his two Assistants have also been appointed Conciliators under the Trade Disputes Act, 1929. The Employment Bureau which was created in 1935 and was attached since then to the Director of Industries was transferred permanently to the Office of the Commissioner of Labour with effect from 1st January, 1945. The Commissioner of Labour is a Commissioner for Workmen's Compensation only in contested cases. Other cases are taken up by District Magistrates who are ex-officio Commissioners for the purposes of the Workmen's Compensation Act.

The newly formed Labour Department has been engaged in the settlement of industrial disputes and in the examination of the recommendations contained in the Report of the Bihar Labour Inquiry Committee. The personnel of the Government of Bihar dealing with Labour matters is as follows: Commissioner of Labour and Employment Conciliation Officer, Registrar of Trade Unions and Chairman, National Service Labour Tribunal; Assistant Commissioners of Labour; and the Chief Inspector of Factories.

Sind—In July 1940, the Government of Sind constituted an Advisory Board of Labour consisting of persons interested in Labour matters for promoting better relations between employers and employees and to advise Government on Labour matters in general. The Honourable Minister holding the Labour Portfolio is the Chairman and the Commissioner of Labour is the Secretary. This Board was reconstituted in 1944 on the basis of equal representation for employers and Labour. It now has 23 members. The functions of the Board are to examine labour problems and to conduct surveys on all questions connected with Labour, to devise schemes for the development of better relations between employers and employees and to offer expert opinion and advice to Government on all important matters concerning Labour.

The Commissioner of Labour in Sind has been appointed as an Arbitrator in a number of industrial disputes. The Government of Sind has now constituted a panel of two Adjudicators for settlement of trade disputes. The Personnel of the Government of Sind dealing with Labour matters is as follows: Commissioner of Labour, Registrar of Trade Unions, Chief Inspector of Shops, and Conciliator, Trade Disputes Act; Assistant Commissioner of Labour and the Chief Inspector of Factories and Boilers.

Punjab (E. and W.)—The Punjab was the only major Province which had not appointed a Commissioner of Labour. The administration of labour matters prior to the partition of the country in the Province was in the hands of the Director of Industries, who was also the Registrar of Trade Unions. The personnel of the administrative staff of the government old undivided dealing with matters connected with Labour was as follows: Director of Industries and Registrar of Trade Unions; Chief Inspector of Factories; Labour Officer; and the Chief Inspector of Shops and Commercial Establishments, Punjab.

In Eastern Punjab no suitable organisation has yet been set up at the time of writing owing to the uncertain conditions resulting from mass evacuations.

In **Assam** the main question connected with Labour is that concerning the recruitment of Labour for tea plantations from other provinces. As inter-provincial migration is a central subject, the Provincial Government are not very actively interested in the special consideration of other Labour questions. Notwithstanding this however, the Government of Assam have obtained the approval of the Government of India and the vote of the Legislature for appointing the Controller of Emigrant Labour as part-time Labour Commissioner, with a whole-time Assistant.

The only important event of interest that has occurred in the field of Labour in Assam recently is the creation of the Workmen's Compensation Deposit Scheme. Labour conditions in **Orissa** and the **North-West Frontier Province** are not such as to justify the appointment of Labour Commissioners. In Orissa, the Director of Development is the Labour Commissioner; and the Revenue Commissioner is the Registrar of Trade Unions. In the North-West Frontier

States in India and Pakistan

THE Narendra Mandal or Chamber of Princes came into existence, with the earnest co-operation of a number of leading Princes themselves, as one of the results of the Report on Indian constitutional reform presented to Parliament by Montagu, Secretary of State for India and Lord Chelmsford, Viceroy and Governor-General of India in 1919. The proposal was that the Chamber should exist as a permanent consultative body, with the Viceroy as President and the members composing the Chamber consisting mainly of the Princes and Chiefs having salutes or whose membership might otherwise be considered desirable by the Viceroy. Certain smaller Chiefs were grouped and were given the privilege of nominating a member to represent them from year to year. The Chamber a recommendatory body, performed its functions under a constitution approved by the Secretary of State and dealt with questions submitted to it concerning the Princes and their rights and privileges generally and their position in imperial affairs.

The Chamber was formally inaugurated by the Duke of Connaught on 8th February 1921.

As the constitution of the Chamber provided for each State-Member exercising one vote on any question coming before the Chamber, power in the Chamber gradually fell into the hands of a majority representing the smaller States because these States were naturally the readiest to exercise their membership privileges. This development caused serious dissatisfaction among the Greater States and out of that sprang a movement for the re-organization of the Chamber.

The differences between the Greater States and the Lesser States were much sharpened by the different view-points which they held in regard to Federation. His late Highness of Patiala early in 1936 resigned the Chancellorship on this account. Thereafter His late Highness of Bikaner resigned from the Standing Committee of the Chamber. Only one Ruling Prince with a salute as big as 17 guns was then left an active participant in the Chamber's affairs. His Highness of Patiala was succeeded in the Chancellorship by His Highness of Dholpur, who automatically proceeded to the appointment from that of pro-Chancellor. His Excellency the Viceroy, in consultation with the Princes, convened a meeting in February 1937.

This meeting was preceded by intensive deliberations in the Informal Conferences of Princes. Their Highnesses at discussions which they held in Bombay in October 1936 appointed a Constitution Committee, under the Chairmanship of His late Highness the Maharaja of Patiala and including the Chancellor, to examine the Government of India Act of 1935 from the point of view of the States' entry into Federation. This Committee produced its report in the first week of February 1937, and in the course of it said that upon careful consideration of the Act they had "come to the conclusion that the safeguards have been substantially met" and that certain further recommendations now newly made by themselves would, if adopted, completely fulfil them. These recommendations, the Committee said, had been drafted in consideration of the fact that the Act had already been passed. They comprised, therefore, four proposed changes in the Draft States' Instrument of Accession.

This report was taken into consideration by the general body of Princes at an informal Conference which adopted the report of the Constitution Committee. This decision was endorsed at a formal meeting of the Chamber of Princes in February 1937 by the re-election of His late Highness of Patiala to the Chancellorship by an overwhelming majority, and by the election of a pro-Chancellor and Standing Committee in sympathy with the same decision.

His Highness the Jam Saheb of Nawanagar succeeded His late Highness of Patiala in the Chancellorship and held the office for a number of years until the election in 1944 of His Highness the Nawab of Bhopal.

Internal Reform.—The pace of administrative and constitutional reform in the States rapidly increased in the years before the war owing to the introduction of provincial autonomy in British India, the apparent approach of Federation, and pressure—sometimes direct—from the Indian National Congress.

A new factor in the accession of the States to the proposed federation arose early in 1938. The Congress demanded as one of the conditions precedent to its active co-operation with the federal scheme of 1935 the introduction in the States of self-governing institutions and an undertaking by the States rulers that in choosing their representatives to the federal legislature they would adopt an elective element. Neither the British Government nor their representative in India could countenance these demands which were contrary to the provisions of the Act. Nevertheless the tide of democracy could not be stemmed.

Numerous States announced their Rulers' intention to liberalise their constitutional machinery and to improve their administration. Many actually introduced reforms. A few Rulers declared that responsible government was the goal of policy and took steps towards it.

An extraordinary development took place early in 1939 when Mahatma Gandhi decided on a fast to death to compel the Thakore Saheb of Rajkot to implement his promise concerning the membership of a reforms committee. The Viceroy intervened and Mahatma Gandhi agreed to the adjudication of the Chief Justice of the Federal Court, which went in his favour. But subsequently further difficulties over the constitution of the committee arose owing to the Mahatma's promise to the minorities and the Mahatma eventually recanted and declared that his fast had been coercive in character. He therefore left the committee to be constituted by the State. Later Mahatma Gandhi announced a "new technique" for agitation by States' subjects, in which he counselled moderation in their demands and called off all civil disobedience movements in the states.

His advice and direction was followed in almost every State where previously the air had been thick with strife. In some cases the response was quick, while in others the local leaders were inclined to be resentful of this sudden brake on their activities. Eventually, however, quiet was restored on the "States front," although stray "incidents" continued to engage the attention of the local public and of Mahatma Gandhi himself.

1943 Meeting.—The annual meeting of the Princes' Chamber was held in October 1943. It was addressed by Lord Linlithgow for the last time, for he left India almost immediately after. The address was listened to by the largest number of Princes that had ever attended any session since the inauguration of the Chamber. The Crown Representative upheld the federal ideal as the best for Indian unity and for the constitutional future of India and declared that "that unity is wholly consistent with the survival and orderly development of Indian States." He emphasised that the Crown's obligations to protect carried with them equally binding responsibilities to ensure, if need be, that what was protected continued to be worthy of protection.

1944 Crisis.—In the middle of September two deputations of the Princes waited on His Excellency the Crown Representative. One of them discussed questions affecting smaller States such as interstate general services, while the other took up with His Excellency the industrial policy of the Government of India as affecting the States, post-war reconstructions, treaty rights and relationship with the Crown. What happened at this interview is not clear except from the rapid events which culminated in a crisis in December 1944. On December 4, 1944, for the first time in the 23-year-long history of the Chamber of Princes, the Standing Committee of the Chamber resigned *en bloc* and the session of the Chamber, scheduled to meet on the following day, was obliged to be postponed *sine die*.

On this crisis of first rate importance there is, curiously enough, no authoritative information. For an understanding of the subject, one has to rely on press reports published at the time. These varied in detail but were agreed on the main causes of the crisis. According to these press reports, the unprecedented step of the resignation of the entire Standing Committee of the Chamber and the appointment of a "Committee of action" (including the Chancellor and the Pro-Chancellor, the Nawab of Bhopal and the Jam Saheb of Nawanagar) was the climax of a series of events since September 15-16, 1944 when a deputation of Princes, led by the Nawab of Bhopal, waited on H. E. the Crown Representative.

About a month later the Chancellor addressed a communication to the Political Adviser to the Viceroy. The latter replied on December 2, which was the immediate cause of the Princes' decision. The decision was taken after several hours of protracted discussion extending over two days, and in the later stages the opinion of rulers outside the Standing Committee and of a few eminent administrators with State experience was consulted.

Besides the Nawab of Bhopal, Chancellor of the Chamber, and the Pro-Chancellor, the Jam Saheb of Nawanagar, the members of the Standing Committee who resigned include the Rulers of Indore, Dewas (Senior), Doongarpur, Patiala, Jaipur, Bikaner, Bilaspur and Rampur.

Princes' Demands.—Newspaper reports claim that the Princes' deputation to the Viceroy in the middle of September raised eight points, namely: First, the boards set up to control the working of the joint services of States should consist of full-powered States and should not include minority representatives of States.

Secondly, joint advisers appointed for groups of States which find it financially and otherwise desirable to have them should not deal with Political Officers over the head of the State administrations.

Thirdly, the working of various schemes relating to the States should be reviewed periodically.

Fourthly, the Standing Committee should be given the opportunity to prepare schemes to secure minimum standards of administration in the States.

Fifthly, Princes should be allowed to draw up an alternative plan for co-operative grouping.

Sixthly, joint High Courts should not be set up. The Raja of Bilaspur, in particular, is reported to have opposed these courts as an invasion of the rights of States.

Seventhly, the Instrument of Attachment should be revised in consultation with representatives of the attaching and attached States and no further attachments should be made.

Eighthly, arbitration machinery should be set up to ensure that treaty rights are not overriden.

The Viceroy's reply expressed disagreement with points one, two, five, six and eight and the first part of seven, and promised consideration of three and four. As regards the second part of seven, the reply pointed out that the scheme of attachment was limited to Western India and Gujerat States and the Government had no intention of extending it to other States.

The reply promised protection against undue newspaper attacks from British India against States and drew attention to the fact that as States' administrations improved occasions for harsh or unjust criticisms would become less and less.

On the question of post-war reconstruction and industrial planning, the Crown Representative was against allowing any unit or units to follow any policy of development that was likely to upset the All-India scheme.

In the summer of 1945, it was reported that the deadlock had almost been resolved. The resignations made in December 1944 were withdrawn late in the summer of 1945 and the Princely Order turned its attention to measures towards the political, social and economic uplift of the States against the background of current developments in the country.

THE WAVELL PLAN

The Princes' meeting in Bombay in the summer of 1945 coincided with the conference of leaders convened by the Viceroy. The Nawab of Bhopal, addressing the Constitutional Advisory Committee of Princes and Ministers, welcomed the Wavell Plan, expressed the desire that an agreed settlement should be reached, and gave the assurance that the Princes would co-operate most cordially with an interim national Government for British India on matters of all-India concern.

His Highness felt confident that they could come to reasonable and honourable terms with the Government of a free India, and said: "India is our motherland. We have a great heritage of tradition, culture and administrative experience. We yield to none in patriotism .... We must associate our people as closely as possible with the administration of our States. This is, in fact, being done in many States..."

The Standing Committee met again at the end of September, 1945, and considered a number of questions of interest to the States.

Referring to the contention that low taxation standards in the Indian States attracted capital from British India, Sir Manubhai Mehta made it clear that the States had no intention to invite British Indian industrialists to establish industries in State territories at the expense of the industrial development of British India. The States asked for a voice in the formulation of the economic and industrial policy of the whole country. Sir Manubhai also complained that the Central Government had obstructed the natural growth of industries in Indian States.

Sir Manubhai declared that the States were prepared to collaborate in order to see that India achieved full political progress. What they opposed was unilateral changes in their treaty rights. He said that there should be no change in the monarchical form of government. The rulers might accept representative or responsible government.

Princely circles were busy in January 1946 on the eve of the annual session of the Chamber. Both at the meeting of the Standing Committee and at a general conference of about two hundred rulers and ministers, they discussed the position of the States in general against the background of impending constitutional developments in India, the attachment scheme, all-India industrial and aviation policies, co-operative grouping of States and joint services.

LARGER UNITS

Meeting after an interval of nearly two years, the annual session of the Chamber of Princes heard the Viceroy, Lord Wavell, give an assurance on one of the main points of difference which led to the crisis of 1944, namely, treaty rights and relationship with the Crown.

"I can assure you," said the Viceroy, "that there is no intention on our part to initiate any change in this relationship or these rights without your consent.

"I am confident that you will have no intention or desire to stand in the way of the growth of India to its full stature or to hinder the political, economic or social progress and advancement of your subjects."

Speaking of States whose finance was inadequate, Lord Wavell suggested that it was incumbent upon them so to modify their constitutional position as to ensure the welfare of their subjects for the future. In order that these States might have political stability, adequate financial resources and effective association of the people with the administration, he strongly urged that they should arrange to join a larg unit or combine with other small States to form a political entity of a sufficient size.

The Viceroy also touched on the importance of gradually approximating taxation policies and systems in Indian States with those of British India.

IMPORTANT DECLARATION

An important declaration on constitutional developments in Indian States, guaranteeing certain fundamental rights to the States people, was made by the Chancellor, the Nawab of Bhopal. On behalf of the States he pledged himself to make "our fullest contribution to any attempt to settle India's constitutional problems on a just and reasonable basis." The declaration of rights was an earnest of this desire. A resolution urging States to adopt immediate measures to implement the policy outlined in the declaration was adopted by the Chamber.

As an earnest of the spirit of collaboration to enable the States to play their full part in the India of the future, the Chancellor made the following declaration:

"The Chamber of Princes in consultation with the Committee of Ministers have given anxious consideration to the question of the development of constitutional reforms in Indian States.

"The Chancellor of the Chamber of Princes is authorised to make the following declaration on behalf of and with the full authority of the Chamber of Princes:

"The object is to *set up forthwith constitutions in the States in which the sovereign powers of the Rulers are exercised through regular constitutional channels without in any way affecting or impairing the continuance of the reigning dynasty in, and the integrity of, each State.*

"There shall be *popular institutions* with elected majorities to ensure close and effective association of the people with the governance of the States.

"It is understood that in framing the detailed constitution of individual States on the above lines, regard shall be had to the special circumstances in each State.

Rights of Subjects—"Most States have already adopted statutory provisions guaranteeing the rule of law and the security and protection of persons and property within their territories. In order to lay down and declare the position in this matter in precise and clear terms, the following essential rights should be guaranteed in States where this has not already been done with powers vested in the courts of the States to redress any infringement of these rights:—

"(1) No person should be deprived of his liberty, nor should his dwelling or property be entered, sequestered or confiscated save in accordance with law.

"(2) Such right may be suspended as may be prescribed in case of war, rebellion or serious internal disorder.

"(3) Every person should enjoy the right of free expression of opinion, the right of free association and combination and the right to assemble peacefully without arms and without military formation for purposes not opposed to law or morality.

"(4) Every person should enjoy freedom of conscience and the right of freely to profess and practice his religion, subject to public order and morality.

"(5) All persons should be equal before the law, irrespective of religion, caste or creed.

"(6) No disability should attach to any person merely by reason of his religion, caste or creed, in regard to public employment, office of power or honour, or in the exercise of any trade or calling.

"(7) There should be no *begar* (forced labour).

Administration.—It is reaffirmed that the administration shall be based on the following essential principles which would be strictly enforced where they do not obtain at present:

"1. The administration of justice must vest in an impartial and competent judiciary independent of the executive, and there must be suitable provision for the impartial adjudication of disputes between individuals and the State.

"2. The Rulers in their own States should clearly demarcate administrative budgets from civil lists and fix the latter at a reasonable percentage of the ordinary revenue.

"3. The incidence of taxation must be fair and equitable and a definite and substantial portion of the revenue must be allocated for the benefit of the people, particularly in the nation building departments.

"It is strongly recommended that the essential measures recommended in this declaration should, where they are not in force, be adopted without delay.

"This declaration, made spontaneously and earnestly, is inspired by faith in the peoples of Indian States and in the future destiny of the States. It represents the will of the Rulers to implement these decisions without reservation or delay. May it lead to increasing freedom from want and fear, and freedom of the mind and its expression! May it grow on the sure foundation of mutual love, tolerance, service and responsibility!"

Collaboration Promised.—Replying to the Crown Representative's opening address, the Nawab of Bhopal on behalf of the Princes, said: "We are grateful to Your Excellency for the *reassurance that there is no intention to initiate any change in our relationship with the Crown or the rights guaranteed by our treaties and engagements without our consent.* We have already declared that we have no intention of withholding our consent to any adjustments which may be required under the future constitutional arrangements in India and which we consider reasonable in the wider interests of India.

Referring to the attachment scheme the Chancellor said: "We take it as understood that the arrangements envisaged under this suggestion are intended to proceed on the basis of mutual consent and do not exclude suitable schemes of joint services between some bigger and some smaller States where these may be evolved by mutual agreement. We are convinced that it is possible to ensure the objective in view without impairing the continuance of the ruling dynasty, or the integrity and autonomy of the State concerned."

GUARANTEES

The political outlook underwent a transformation with the announcement in the middle of March, 1946, that a British Cabinet Delegation would visit India and finally settle the constitutional problem of the country.

At a meeting of Rulers and Ministers of the Indian States, early in April 1946, it was generally agreed that any constitution would be subject to ratification by the States in order to be binding on them, that adherence to the monarchical form of Government and continuance of the reigning dynasty in each state would not be open to question and that the existing treaties and *sanads* would not be altered ultimately without the consent of the States concerned. It was also agreed that the following points should be placed before the Cabinet Delegation:

Enforcement of constitutional safeguards, which the States may secure, should be such as can be enforced through the Federal Court;

Every State shall continue to retain its sovereignty, except to the extent to which its powers are delegated by it to the future Indian Union;

The territorial integrity of each State shall not be interfered with and the existing boundaries of each State shall not be altered without its free consent and approval;

The reigning dynasty of each State shall continue;

The existing form of Government in each State shall not be interfered with by the Union or any unit of the Union;

States which cannot individually afford to provide the basic efficiency of administration required in modern times should freely enter into suitable arrangements founded on consent with large States or combine in groups of small States.

Shortly after, the Indian States Constitutional Advisory Committee decided that the Princely Order should remain outside the proposed Interim Government, but the idea that an *ad hoc* committee should be established, to serve as a liaison body between the Interim Central Executive and the Indian States found

MISSION'S PROPOSALS

In a memorandum on States Treaties and Paramountcy, presented to the Chancellor of the Chamber of Princes, the Cabinet Mission said among other things:

"Prior to the recent statement of the British Prime Minister in the House of Commons an assurance was given to the Princes that there was no intention on the part of the Crown to initiate any change in their relationship with the Crown or the rights guaranteed by their treaties and engagements without their consent. It was at the same time stated that the Princes' consent to any changes which might emerge as a result of negotiations would not unreasonably be withheld ...

"During the interim period, which must elapse before the coming into operation of a new Constitutional structure under which British India will be independent or fully self-governing, paramoun cy will remain in operation. But the British Government could not and will not in any circumstances transfer paramountcy to an Indian Government.

"In the meanwhile, the Indian States are in a position to play an important part in the formulation of the new Constitutional structure for India... In order to facilitate this they will doubtless strengthen their position by doing everything possible to ensure that their administrations conform to the highest standard. Where adequate standards cannot be achieved within the existing resources of the State they will no doubt arrange in suitable cases to form or join administrative units large enough to enable them to be fitted into the constitutional structure. It will also strengthen the position of States during this formulative period if the various Governments which have not already done so take active steps to place themselves in close and constant touch with public opinion in their State by means of representative institutions.

"During the Interim period it will be necessary for the States to conduct negotiations with British India in regard to the future regulation of matters of common concern, especially in the economic and financial field. Such negotiations, which will be necessary whether the States desire to participate in the new Indian Constitutional structure or not, will occupy a considerable period of time, and since some of these negotiations may well be incomplete when the new structure comes into being, it will, in order to avoid administrative difficulties, be necessary to arrive at an understanding between the States and those likely to control the succession Government or Governments that for a period of time the then existing arrangements as to these matters of common concern should continue until the new agreements are completed. In this matter, the British Government and the Crown Representative will lend such assistance as they can, should it be so desired.

"When a new fully self-governing or independent Government or Governments come into being in British India, H. M. G.'s influence with these Governments will not be such as to enable them to carry out the obligations of paramountcy. Moreover, they cannot contemplate that British troops would be retained in India for this purpose. Thus, as a logical sequence and in view of the desires expressed to them on behalf of the Indian States, His Majesty's Government will cease to exercise the powers of paramountcy. This means that the rights of the States which flow from their relationship to the Crown will no longer exist and that all the rights surrendered by the States to the paramount power will return to the States. Political arrangements between the States on the one side and the British Crown and British India on the other will thus be brought to an end. The void will have to be filled either by the States entering into a federal relationship with the successor Government or Governments in British India, or failing this, entering into particular political arrangements with it or them."

Princes' Reaction.—Shortly after the Standing Committee of the Chamber and Ministers of other States met to consider the Cabinet Mission's proposals in the light of the memorandum quoted above. In June 1946 the Chancellor wrote to the Viceroy:—

"... The Standing Committee are of the view that the plan provides the necessary machinery for the attainment by India of independence as well as a fair basis for further negotiations. They welcome the declaration of the Cabinet Mission in regard to paramountcy, but consider certain adjustments necessary for the interim period which have already been indicated by them...

"The Standing Committee have decided, in response to Your Excellency's invitation, to set up a Negotiating Committee whose personnel is given in the enclosed list. The Committee did their utmost to keep the number small as desired by Your Excellency, but they felt that it would not be possible for them to reduce that number... The result of the negotiations are proposed to be considered by the Standing Committee of Princes, the Committee of Ministers and the Constitutional Advisory Committee whose recommendations will be placed before a general conference of Rulers and representatives of States...

"In the meantime, as desired by Your Excellency, questions relating to the exercise of paramountcy in the interim period are proposed to be pursued with Sir Conrad and any outstanding points will be submitted to Your Excellency."

To this the Viceroy replied at the end of June:—

"The Cabinet Mission and I welcome the attitude which the Princes have adopted towards the plan which we have proposed for the solution of India's constitutional problem, and we particularly appreciate the action of the Standing Committee in endorsing the suggestions we made in regard to the manner in which States could best fit themselves to make their due contribution to India's new constitutional structure.

"I understand from Sir Conrad Corfield that he is already engaged in active discussions with the authorities of the Central Government about the machinery for giving effect to the Princes' proposal for a Consultative Committee to deal with matters of common concern to British India and the States.

PEOPLES' REPRESENTATIVES

The Indian States had to fit in into the radical transformation which the Indian political scene was to undergo. The trend towards democratisation of Princely rule was determined partly by the realisation among the rulers themselves to end the mediæval autocracy, partly by the influence of external nationalist urges, especially the representatives of the States' people.

In July 1946 a demand that States' representatives on the proposed Constituent Assembly must be elected representatives of the States' people was made by the Standing Committee of All-India States People's Conference which met in Bombay. The resolution declared that the people of the States would not recognise any decision taken without their approval and consent. Pandit Jawaharlal Nehru presided over the meeting.

The meeting appointed a committee of five persons with powers to add two more members to prepare material and draft proposals on behalf of the States' people for the then coming constitutional changes in the country as a whole and internal changes in the States.

Five more resolutions were adopted relating to Kashmir, Bikaner, Kalat States, the food situation in Mysore and the organisation of labour in States. The committee reiterated that the ban on Pandit Nehru's entry into Kashmir was unwarranted, that it could not be tolerated and that there would be no peace until Sheikh Abdulla was released.

On the eve of Independence Day, Mr. K. T. Bhashyam, a prominent Congressman and former President of the Mysore Congress and a member of the Expert Committee appointed by the All-India States People's Conference in Bombay to draft a constitution for Indian States with a view to aligning them with the provinces in a free Indian Union, issued for publication his draft constitution for the States. Under Mr. Bhashyam's scheme, India's 584 States were to be classified under three heads, namely, those that could remain as they were, those that had to be grouped together to constitute administrative units and those that could not or would not join a group and had to be abolished as States.

In September it was announced that the States' Negotiating Committee, which was to negotiate on behalf of the Indian States, matters relating to States' representation on the Constituent Assembly, was to consist of nine members. They were: the Nawab of Bhopal, Chancellor of the Chamber of Princes; the Maharaja of Patiala, Pro-Chancellor; the Jam Saheb of Nawanagar; the Maharaja of Dungarpur; Sir Mirza Ismail, President of the Nizam's Executive Council; Sir Ramaswami Mudaliar, Dewan of Mysore; Sir C. P. Ramaswami Aiyar, Dewan of Travancore; Sir Sultan Ahmed, Constitutional Advisor to the Chancellor; and Sardar K. M. Panikkar, Prime Minister of Bikaner.

A little later Pandit Jawaharlal Nehru, in a statement to the press, declared that he felt that he should not continue to function as President of the All-India States People's Conference under the prevailing circumstances though he proposed to remain a member of the Standing Committee. In his place Sheikh Mahomed Abdulla, the Vice-Chancellor, was chosen to function as President.

OBJECTIVES RESOLUTION

The deep concern of the Indian Princes for the future was evidenced by the important and many meetings held by them in December to consult jointly on the negotiations which were to be conducted with the Constituent Assembly. The meeting of the Standing Committee of the Princes was first held in Delhi under the chairmanship of the Chancellor, H. H. the Nawab of Bhopal. This was followed by a meeting of the Grouping Committee of the Chamber of Princes at which the various schemes for a regional confederation of the grouping of the States was discussed.

The States Constitutional Advisory Committee reviewed the up-to-date constitutional position in the country, *vis-a-vis*, the States and discussed the broad outlines of the policy to be followed by the Negotiations Committee set up by the Princes. Three members of the States Negotiating Committee then present in Delhi regretted to note that the resolution had been moved at the preliminary session of the Constituent Assembly raising many fundamental constitutional issues which, in their opinion, could not and should not be considered or decided by the Constituent Assembly in the absence of States' representatives and before the Negotiations contemplated under the Cabinet Mission's plan. (The Constituent Assembly's resolution, *inter alia*, proposed to set up an independent sovereign republic comprising not only British India but also the territories that then formed the States).

The All-India States People's Conference at the close of December, after a critical reference to the activities of the Political Department of the Government of India, demanded in a resolution for a "complete change" both in its personnel and its relations with the Government of India and States. The Chief Officers of the Department, it was urged, should be Indians acceptable to the people of the States and further the Department's activities should be carried on in close consultation with the Government of India.

Later, in a report, the Experts Committee of the Conference laid down ten principles which, in its view, was to frame the basis of responsible Government in the States and suggested the grouping of the States into regional units.

At the deliberations of the leading Princes and Ministers in New Delhi at the end of January 1947 grave fears were expressed about the future of the States. Engendered by Pandit Nehru's resolution on the objectives of the Constituent Assembly, the terms of the motion constituting the Committee to confer with the States and the speeches of leaders and of the legal opinion of British Indian statesmen were discussed. The plea that all aspects of the position of the States in the future union and not merely the method of representation of the States in the Constituent Assembly should be the subject of

negotiation was the main point of the resolution drafted by the States' Constitutional Advisory Committee and adopted by the Committee of Ministers.

It was later adopted by the Standing Committee of the Princes' Chamber and later endorsed by a conference of about 60 rulers. Besides authorising the Negotiations Committee to settle the terms of the States participation in the Constituent Assembly and to determine their ultimate position in the All-India Union subject to ratification by the States, the resolution offered co-operation in framing an agreed constitution according to the Cabinet Mission's plan. It also laid down certain fundamental propositions which were to serve as the basis for the States acceptance of the Mission's scheme. The majority party in the Constituent Assembly did not see eye to eye with the Princes in many of the condit ons stipulated in the resolution. But then the Princes, it was argued, had been "provoked" by some of the sentiments expressed in the Constituent Assembly.

AGREEMENT REACHED

The Princely attitude was summed up in the words of the Nawab of Bhopal, "You are asked to quit or exist on sufferance only; it will be unworthy on our part to succumb to these threats."

On February 9, 1947, a momentous agreement was reached between the Negotiating Committee of the Constituent Assembly and the Princes' Chamber as a result of which the States' co-operation in constitution-making was practically assured. The proposals as to how the States ought to be represented in the Constituent Assembly and the distribution among the States of their quota of seats was to be drawn up by the Secretariats' of the Constituent Assembly and the Princes Chamber and submitted to another joint meeting of the two committees to be held early next month.

The following month a joint statement was issued by H.H. the Nawab of Bhopal, Chancellor of the Chamber of Princes, and Pandit Jawaharlal Nehru, which said:

"The States' Negotiating Committee set up by the Chamber of Princes and the corresponding committee of the Constituent Assembly held joint meetings yesterday and today. In the course of the discussions, reference was made to the Cabinet Delegation's statement of May 16, the resolutions of the Constituent Assembly and the resolution passed by the Conference of Rulers. The discussions were friendly and satisfactory.

"On the basis of a general understanding arrived at, it was decided to take up the question of the representation of the States in the Constituent Assembly. The Secretariats of the Assembly and the Chamber of Princes were accordingly asked together to draw up detailed proposals for the allocation of the 93 seats allotted to the States and to place them for consideration before the next joint meeting of the two committees which will consider the proposed allocation as well as the method of selection of the States' representatives."

A joint meeting of the Standing Committee of Princes and the Constitutional Advisory Committee ratified a day later the action taken by the States' Negotiating Committee.

As a logical sequel to this agreement and surviving a second shock, the negotiations between the committees of the Constituent Assembly and the Princes' Chamber emerged satisfactorily. In an agreement reached on the method of representation of the States and the method of distribution of the 93 States' seats in the Constituent Assembly, a sub-committee representative of both sides was to supervise the implementation of the agre ment. As a result of the agreement the States' people would have at least a 50 per cent. share in the States' quota.

Split Averted.—At a meeting of the Committee of Ministers of the Chamber of Princes held in Bombay at the end of March, it was suggested to hold a round table conference of representatives of the major politi al parties in India and of the States to find out the greatest measure of accord which could be secured as regards defence, communications and foreign affairs when the final transfer of power to one or more successor governments was to be effected.

A threatened split in the ranks of the Princely Order on what constituted the appropriate moment for the States' representatives to enter the Constituent Assembly was averted by a last minute compromise reached after midnight parleys early in April to resolve group differences on the eve of a general conference of rulers in Bombay which was to follow immediately. The compromise formula prepared by His Highness the Maharaja of Gwalior permitted freedom to the member States of the Chamber to enter the Assembly at any stage they might deem proper after the Assembly would ratify the agreement between the Negotiating Committees of the Chamber of Princes and of the Assembly.

At the annual session of the All-India States People's Conference held at Gwalior in mid-April, Dr. Pattabhi Sitaramayya, who presided, declared that the Princes had no place in the Constituent Assembly any more than Governors of provinces, which might thereafter be called States composing the Indian Union. The conference decided to accept the agreement arrived at between the Negotiating Committees of the Princes and the Constituent Assembly regarding the method of selecting States representatives to the Constituent Assembly. Also resolutions on constitutional reforms in the States, instructions to Praja Mandals and on grouping of States were passed at this session.

The Joint Committee of the Negotiating Committee of the Constituent Assembly and the Chamber of Princes finalised the draft allocation of seats among the States on April 24. Sixty out of the 93 seats earmarked for the States were to be shared by 20 bigger States entitled to send representatives to the Assembly independently. The remaining 33 seats were distributed among the smaller States which would form groups as described to elect the allotted number of representatives.

At the end of April, Pandit Nehru moved resolutions in the Constituent Assembly "recording" the report of the committee appointed to negotiate with the States' Negotiating Committee and welcomed the representatives of the States who had already been chosen, expressing the hope that other States which had not chosen their representatives so far would take immediate steps to that end in accordance with the agreed procedure.

DISSOLUTION RECOMMENDED

After H.M. Government's plan of June 3 of 1947, storm clouds were gathering over the Princes' Chamber. The schism between the two schools of thought among the Princes widened as to their place in the future political set-up of India. The crisis was precipitated by the resignation of the Nawab of Bhopal of the Chancellorship of the Chamber. The first impact of the plan found the Chamber of Princes disintegrating. The Standing Committee of the Princes, under the Chairmanship of the Maharaja of Patiala (who, as pro-Chancellor, was acting as Chancellor) passed a resolution recommending to the Crown representative to wind up the Chamber of Princes.

The reaction of the Standing Co mittee of the All-India States People's Conference to H.M. Government's statement was contained in a resolution declaring that "on the lapse of Paramountcy sovereignty resided in the peoples of the States and the Princes could only be constitutional rulers embodying the people's sovereignty. . . . any ruler declaring his State independent will thereby express his hostility not only to the Indian Union but to his own people. Such an act will have to be resisted." Later a directive to the people of the States to be vigilant and be prepared for contingencies as certain States were increasing their forces was contained in a resolution adopted by the Standing Committee.

INSTRUMENT OF ACCESSION

According to the Draft Instrument of Accession circulated among the rulers at the end of July, the States which would be acceding to the Indian Dominion would not be committing themselves in any way to acceptance of any future constitution of India or fettering their discretion to enter into agreement with the Government of India under any such future constitution. Further, the terms of the Instrument of Accession should not be varied by an amendment of the Indian Independence Act of 1947 unless such amendment was accepted by the ruler concerned by a supplementary Instrument of Accession.

The schedule attached to the Instrument of Accession covered matters with respect to which the Dominion Legislature might make laws in the acceding States. They included defence, foreign affairs and communications as main subjects and other ancillary subjects.

This was soon followed by a Princes' Conference with the Viceroy at which the latter strongly advised the Indian States to join one or the other Dominion by August 15.

A REVOLUTION

"The bloodless revolution" since independence in one-third of what was once the undivided India—the territory of the Indian States—was one of the most sweeping and radical in the history of this country.

Addressing a press conference in New Delhi at the end of January 1948, Sardar Vallabhbhai Patel made a 3,000-word statement detailing the various stages of this "revolution." The statement, showed how the Indian States, by a twin process of democratisation and integration, had undergone such drastic changes as to change the whole map of India.

Sardar Patel made the following statement on the consolidation of States:—

"As you are all aware, on the lapse of Paramountcy, every Indian State became a separate independent entity, and our first task of consolidating about 550 Indian States was on the basis of accession to the Indian Dominion on three subjects. Barring Hyderabad and Junagadh, all the States which are contiguous to India acceded to the Indian Dominion. Subsequently, Kashmir also came in.

"With the birth of independence in India, the urge for enjoyment of similar freedom naturally inspired the people of the States, where the process of democratisation of administration had not made anything like the same progress as was made in the adjoining provinces. The result was agitation on the part of the people and occasional clashes between the Rulers and the ruled. Some Rulers, who were quick to read the writing on the wall, gave responsible Government to their people, Cochin being the most illustrious example.

"In Travancore, there was a short struggle, but there too the Ruler soon recognised the aspirations of his people and agreed to introduce a constitution in which all power would be transferred to the people and he would function as a constitutional ruler.

"Similarly, in Mysore there was a struggle for a short time in which the popular will triumphed eventually, and we know that there has been a complete transfer of power from the Ruler to the people.

"While these big States were temporarily able to deal with popular movements, the smaller States were not able even to maintain law and order with their limited resources and with the people in opposition to the administration. This was particularly evident in the Eastern States, in one of which States, namely, Nilgiri, the situation had so deteriorated as to result in the Ruler leaving the State."

MERGER

"In another State, in the same area, the Ruler could not return to the capital and had to approach the Ministry of States to advise the local 'praja mandal' to keep quiet as the Ministry was about to take up the question of consolidation of States.

"These States had formed a superficial union which could not last as it was not based on linguistic, cultural and economic affinities. The law and order situation in some of the States was so bad as to cause apprehension to the adjoining administrations of Orissa and the Central Provinces.

"You know the sequence of events thereafter, I went there in the middle of December, met the Orissa Rulers at Cuttack and the Chhatisgarh Rulers at Nagpur, and it was decided that the best interests of the people as also of the Rulers lay in administrative integration of the States with the adjoining provinces.

"The merger of Eastern States electrified the whole atmosphere. The people of the States found that there was a remedy for their difficulties arising out of their limited resources and narrow outlook.

"The eight Deccan States which formed the United Deccan State by merging their sovereignties into the new State, a step which was then considered to be revolutionary, felt that even in the new State their life would be cramped and that they would not have the same amenities and benefits as the people of the adjoining province of Bombay would have with all the resources of Bombay.

"The people who had assembled to frame a democratic constitution for their new State changed their minds and asked for the merger of their States into Bombay.

"The rulers who have always been known for their progressive outlook, appreciated the weight and soundness of this view and agreed to abide by the decision of the people. The Constituent Assembly of the new State met on January 26, and passed a resolution by an overwhelming majority in favour of merger into Bombay Province. The merger will thus be given effect to within a few days. [*The merger took place on March 8, 1948*].

"There are some other States in the Deccan which had not joined the Union, but in these States also the movement for merger had become so strong that the Rulers could not maintain law and order pending the merger of the States into the province of Bombay. These states are Akalkot and Jath.

"The ruler of Jamkhandi was one of the earliest to read the sign of the times and had approached this Ministry more than two months ago for unqualified merger of the State into Bombay. There was thus no trouble in his State, and the people have welcomed the decision and the action of the Ruler.

"Thus all the States in the Deccan, except Kolhapur, will shortly take their place in the Province of Bombay to the mutual advantage of both, and to the particular advantage of the people of these States."

KATHIAWAR

"Next came the problem of Kathiawar. Kathiawar is a veritable jigsaw puzzle of different jurisdictions. The States in Kathiawar comprise 13 salute States, 107 limited jurisdictional States and 329 non-jurisdictional estates and talukas, making up 449 units altogether. The area involved is more than 22,000 square miles with a population of between 3½ to four million.

"The administration of the States is complicated by the fact that many of them have scattered islands of territory all over the place. The Salute States of Nawanagar, Gondal and Junagadh, for instance, have respectively 9, 18 and 24 separate areas of territory. Added together, these 449 units divide the map of Kathiawar into about 860 different areas."

Sardar Patel then briefly described the main features of the new set-up.

He said: "The new State of Kathiawar is known as the United State of Kathiawar. There is a Presidium of Rulers consisting of five members, each of whom shall be the Ruler of a covenanting State. The Rulers of Nawanagar and Bhavnagar, the two most important States in the region, are members of the Presidium in their own right. One member is elected from amongst themselves by the Rulers of covenanting non-salute States. The other two members are elected by the members of the Council of Rulers, consisting of the Rulers of the Salute States other than Nawanagar and Bhavnagar.

"The Council of Rulers elect one member of the Presidium to be the President or the Rajpramukh and another to be the Vice-President of the Presidium. The first elections have already taken place, and H. H. the Jam Saheb of Nawanagar, who played a notable part in bringing these negotiations to a successful conclusion, has been elected as the Rajpramukh with H. H. the Maharaja of Bhavnagar as the Vice-President. The term of office of the Rajpramukh and the Vice-President is five years.

"There will be a Council of Ministers to aid and advise the Rajpramukh.

"This covenant, as you will have noticed, applies only to the Salute States and non-Salute States. There are, in addition, a number of talukas and thanas which are administered by the Government of India through its Regional Commissioner in Kathiawar."

Saurashtra State.—On February 16, 1948, the United State of Kathiawar was inaugurated at Jamnagar in the presence of a distinguished gathering which included Sardar Vallabhbhai Patel, Deputy Prime Minister and Minister for States, and Sardar Baldev Singh, Defence Minister, Government of India.

About 440 States of Kathiawar—of which 13 were Salute States and 113 with jurisdictional powers—with a population of 4,000,000, an aggregate area of 35,000 square miles and a revenue of 6½ crores were united and were to have responsible Government. Under the Covenant executed by the rulers of Kathiawar, complete transfer of power to the Union was provided for. The Rulers would become completely constitutional heads and in the majority of cases would surrender their sovereignty, jurisdiction and territory for the sake of a unified administration in the entire region. Another important provision was to set up a Constituent Assembly to frame a constitution for the United State of Kathiawar.

At the inauguration of the new State the Jamsaheb of Nawanagar said: "Five Rajput Rulers have taken the oath; you know our traditions; you know our history; you can depend upon our oaths. As Rajpramukh, I shall accept in the sphere which is reserved for me to work as the constitutional head of the State."

The Jam Saheb of Nawanagar was the first Rajpramukh and the Maharaja of Bhavnagar the Upapramukh. Mr. U. N. Dhebar was elected the Chief Minister of the State.

Two months later, Mr. V. P. Menon, Secretary to the States Ministry, at yet another conference at New Delhi was able to outline more clearly what the 562 Indian States and thousands of semi-jurisdictional thanas, estates and talukas that lay across the map of India like an unassembled jigsaw puzzle would look like in a few months, when the process of union and integration of States with the Dominion of India was consummated.

The 562 States, he declared, would be reduced to 25 sizeable political units.

Detailing the then five-month-old process of the unification of India, Mr. Menon stated that 289 jurisdictional, non-jurisdictional and semi-jurisdictional talukas, thanas and estates would merge with Bombay on June 5, 1948. This would add an area of about 27,000 square miles and an annual revenue of Rs. 2½ crores to the exchequer of the Province. A total of 869 full-fledged and other units covering an area of 200,000 square miles having a revenue of more than Rs. 30 crores would be involved in the unions and mergers which had been or likely to be consummated in the near future.

SUMMING-UP

Here is a short note each on the various mergers. For the latest position see the table at the end of the article.

Central India States (or Malwa State.)—A special session of the Regional Council of the Central India States' People's Conference held at Gandhigram, Ujjain, early in March, passed a resolution urging the formation of a State comprising all the States of Central India. The Maharaja of Gwalior gave his consent to the formation of a single union comprising all the States of Central India. The new State, expected to be born in the near future at the time of writing was to comprise 22 Central Indian States including Indore, Gwalior, Dewas (Sr.), Dewas (Jr.) and Dhar and was expected to have a population of about 7,000,000 and a revenue of about Rs. 8 crores.

This Union named Madhya Bharat has now been formally inaugurated and is the largest of the States Unions.

Chhatisgarh States.—In January 1948 all the 14 Chhatisgarh States in the Central Provinces became an integral part of the Provinces with the taking over of the administration of these territories by the officials of the C. P. Government.

The C. P. Government instructed its officers in the newly created four districts of Chhatisgarh Division to see that the people felt they were all equal before law and that justice would be administered without fear or favour. The Government also impressed on their officers to do nothing which would needlessly offend the dignity or compromise the status of a Ruler whose ancient rights, immunities and privileges and civil list were guaranteed by the Government of India and the Provincial Government. Consequent on the merger of Chhatisgarh States, the limits of the Nagpur, Jubbulpore and Chhatisgarh Divisions were altered as follows with effect from January 1, 1948:—Nagpur: Nagpur, Wardha, Chanda, Chhindwara, Betul and Bhandara districts; Jubbulpore: Jubbulpore, Saugor, Mandla Hoshangabad, Nimar and Balaghat; Chhatisgarh: Raipur, Bilaspur and Drug.

Deccan States.—Early in February 1948, the newly formed United Deccan State which brought together eight Indian States in the Deccan covering an area of about 8,000 square miles as one administrative unit, with its Rajamandal (Council of Rulers) and its constitution-making body created under the agreement were all dissolved to facilitate the merger of each of the member States with the Bombay Province. A little later, on February 19, Rulers of 15 Deccan States affixed their signatures in Bombay on separate similar agreements integrating their administrations with that of Bombay Province.

The signatories to the agreement were the Rulers of Akalkot, Aundh, Bhor, Jamkhandi, Jhat, Kurundwad Jr., Kurundwad Sr., Mudhol, Miraj Jr., Miraj Sr., Phaltan, Ramdurg, Sangli, Savnur and Vadi.

By the agreement the Rulers ceded to the Dominion Government full and exclusive authority, jurisdiction and powers for and in relation to the governance of the States and agreed to transfer their administrations to the Dominion Government on March 1, 1948.

The Government of Bombay, however, took over on March 8 the administration of 16 Deccan States, the additional one being Sawantvadi with a total area of more than 8,000 square miles and a total population of over a million and a half.

Gujerat States.—The Rulers of 18 Gujerat States comprising an area of 27,000 square miles with a population of 2,600,000 and a revenue of Rs. 1½ crores agreed on March 20, 1948, to integrate their administration with that of Bombay Province and on the same terms as was done by the Deccan States. The merger agreement of the Gujerat States, which was to become effective on June 5, 1948, when the States would be handed over to the Government of India, had already been signed by the rulers of Bansda, Baria, Cambay, Dharampur, Jawhar, Lunawada, Rajpipla, Sant, Idar and Vijayanagar. The agreement was also signed on behalf of the rulers of Balasinor and Chhota Udepur, who are minors, by the ruler of Lunawada. A few days later Sachin, Radhanpur, Danta, Palanpur, Jambhugoda and Sirohi also signed the agreement.

Himachal Pradesh.—A new province in the Indian Dominion, Himachal Pradesh came into being on April 15, 1948.

It has an area of about 11,000 square miles and a population of nearly 1,000,000. Its revenue is about one crore of rupees.

The rulers of 21 hill states of Simla comprise the new province.

Mr. N. C. Mehta, Secretary, Ministry of Information and Broadcasting, Government of India, was appointed Chief Commissioner of the Himachal Pradesh Province.

Mangrol and Manavadar States.—The States of Mangrol, Manavadar, Sardargarh and Babriawad decided to accede to the Indian Dominion according to the results of the referendum held in the States in the middle of February 1948.

Matsya State.—In the Durbar-e-am (Chamber of the People's Representatives) in the historic Bharatpur Fort was inaugurated on March 17, 1948, the State of Matsya comprising Alwar, Bharatpur, Dholpur and Karauli.

Mr. N. V. Gadgil, Minister for Works, Mines and Power, Government of India, inaugurated the Union of Matsya and administered the oath of office to the Rajpramukh, the Maharaja of Dholpur, and the Upapramukh, the Maharaja of Alwar. The Chief Minister of the Union was to be Mr. Shoba Ram of Alwar.

The four States of the Matsya Union comprise between them 7,536 square miles of territory with a population of close upon 2,000,000 and a revenue of about a crore of rupees. They are contiguous States, constituting roughly a semi-circle abutting on Muttra and Agra District of the United Provinces with Jaipur forming the other half of the circle. They form part of the former Rajputana Residency.

Rajasthan State.—A free union of States—the Union of Rajasthan—was inaugurated on March 25, 1948, by Mr. N. V. Gadgil on behalf of the States Minister, Government of India, Sardar Vallabhbhai Patel.

After the accession of Udaipur to the Union a month later, the enlarged Union brought under one administrative unit all the portion of Rajputana which lies to the east of Aravali Hills; the only Rajput States that remained separate entities were Bikaner, Jaipur, Jodhpur and the State of Jaisalmer, all four lying to the west of the Aravali Range.

The Union State of Rajasthan constituted the second biggest Union in India comprising 30,000 square miles with a population of about 4¼ millions and enjoying an aggregate revenue of a little more than 3 crores.

Udaipur singly provided as much again in area, population and revenue as the nine States which once constituted the Rajasthan Union. Naturally, it was given a leading position in the expanded Rajasthan and its ruler was constituted Rajpramukh for life, the original Rajpramukh, the Maharaja of Kotah, having readily agreed to step down in favour of the premier Rajput Prince and becoming Upapramukh along with the rulers of Bundi and Dungarpur. The Chief Minister of the Union was Mr. Gokul Lal Aswa.

Palanpur, Danta and Sirohi, three small states to the west of Udaipur, though included in the Rajasthan Agency are claimed to be part of Guierat.

The ten States which formed the Rajasthan Union are Kotah, Bundi, Dungarpur, Jhalwar, Banswara, Partabgarh, Tonk, Kishangarh, Shahapura and Udaipur.

Vindhya Pradesh State.—The Union of Vindhya Pradesh, comprising the 35 States of Bhundelkhand and Baghelkhand, came into being on April 4, 1948. Mr. N. V. Gadgil inaugurated the Union.

The integration of the administration of these two Agencies with the Government of India resulted in the addition of an area of nearly 25,000 square miles with a population of 3,500,000 to the Dominion, while the total revenue of the States is estimated at a little less than 2½ crores.

The Maharaja of Rewa was made the Rajpramukh of the new Union and the Maharaja of Panna the Upapramukh. Mr. K. P. Saksena became Prime Minister of the new State.

At the time of writing the formation of yet another Union to be called the Phulkian State in East Punjab, consisting of Nabha, Kapurthala, Jhind, Faridkot, Malerkotla, and Patiala is under discussion.

All the States within the Pakistan orbit have acceded to Pakistan: Dir, Swat, Chitral, Khairpur, Bahawalpur, Kalat, Kharan, Las Bela and Makran.

KASHMIR

In contrast with the "peaceful revolution" that most of the Indian States have undergone since independence, three States two of them major ones,—Kashmir, Hyderabad and Junagadh—offered India one of the thorniest problems to be solved.

The problem of Kashmir was exhaustively dealt with in a White Paper giving "factual information, backed by relevant documents," which was laid on the table in the Indian Parliament early in March 1948.

Divided into four parts with an introduction giving a brief description of the territories involved, the White Paper gave the Indian point of view of the whole dispute which ended in a reference by India to the U.N.O.

The first part of the White Paper dealt with events leading to the accession of Jammu and Kashmir State to India; the second dealt with the invasion of the State by raiders from Pakistan; the third, with the evidence for Pakistan's complicity in the invasion; and the fourth with India's objectives.

The following are in brief, the statements contained in the White Paper:

The State of Jammu and Kashmir announced its intention of negotiating a Standstill Agreement with both India and Pakistan. In fact, however, the State signed a Standstill Agreement only with Pakistan and entered into no agreement with the Government of India prior to its accession on October 26, 1947.

Nevertheless, in an effort to coerce the State into acceding to Pakistan, the Pakistan authorities cut off supplies of food, petrol and other essential commodities to Kashmir and hindered the free transit of travellers between Kashmir and Pakistan.

Economic pressure was thus applied simultaneously with military pressure in the form of border raids.

On October 24, the Government of India received the first request for military aid from the Government of Jammu and Kashmir State. At that time the Government of India had no agreement, military or political, with the State.

On October 25, the Government of India directed the preparation of plans for sending troops to Kashmir by air and road. Indian troops were sent to Kashmir by air on October 27 following the signing of the Instrument of Accession on the previous night.

The accession was legally made by the Maharaja of Kashmir and this step was taken on the advice of Sheikh Abdullah, the leader of the All Jammu and Kashmir National Conference, the political party commanding the widest popular support in the State.

Part two of the White Paper deals with the invasion.

Part third of the White Paper (dealing with the alleged complicity of Pakistan in the invasion of Kashmir) details evidence based on moral and material aid, on assistance, both active and passive, given to the raiders in Pakistan.

The White Paper points out that, as has been stated by the Prime Minister of India on numerous occasions, the task of Indian troops is to clear the raiders from and restore peace to Kashmir, as this is necessary to the holding of a plebiscite or referendum by the people of the State to decide finally as to which Dominion they would accede.

After protracted debates in the United Nations a Mandatory Commission was set up to settle the Kashmir question. The terms of reference, however, have proved unacceptable both to India and Pakistan.

HYDERABAD

Internal difficulties in Hyderabad State since Independence in the form of disturbances and popular agitation have demanded a solution no less than the major one of accession to the Indian Union.

With a view to solving both these questions, a Standstill Agreement between Hyderabad Government and the Dominion of India was executed in Hyderabad and Delhi at the end of November 1947.

The Agreement, while making it clear that the Nizam's sovereign rights were to remain unimpaired, laid down that the Union Government was to undertake to co-operate with the Nizam's Government in preventing and discouraging all subversive activity and propaganda. All Dominion troops were to be withdrawn from Hyderabad territory before the end of February 1948.

Hyderabad had a right under the Agreement to appoint agents-general in all countries including the U.S.A. and the Dominions. Simultaneously it was announced from Hyderabad that Mir Laik Ali, a leading industrialist of the State, had been appointed Prime Minister of Hyderabad by the Nizam.

When the settlement with Delhi was reached, Swami Ramananda Tirth, President of the Hyderabad State Congress, was released from jail where he had been put by the State authorities on August 15, 1947, when a non-co-operation movement was launched to support his demand for responsible government. Mir Laik Ali the new Prime Minister, invited Congress participation in the Interim Government formed ostensibly for the standstill period.

That Government was, however, to be committed to no particular line of action, except to search for a new form of constitution. The composition of the Interim Executive Council itself was proposed on the basis of a President, a Vice-President and four officials appointed by His Exalted Highness, four Muslim representatives of the Ittehad-ul-Muslimeen and four non-Muslims. Apart from this insistence on non-official communal parity, the Prime Minister refused to be committed to responsible government, a constituent assembly, accession to India o. even a plebiscite on the last issue.

Mir Laik Ali's own appointment and that of his official colleagues, it was then felt in India, were made by the ruler in deference to the clamour of extremist Muslims.

A week after the Standstill Agreement was signed, there was an attempt on the life of His Exalted Highness the Nizam. Strong condemnation was expressed by all the parties in the State of this attack, including the State Congress.

Soon breaches of peace in the State began to assume alarming proportions. Terrorism became rampant and the pronouncements and deeds of Razakars, the armed volunteers of Ittehad-ul-Muslimeen under the leadership of Kazim Razvi, did not help to ease a difficult situation.

At the end of April a substantial number of political detenus were released together with an announcement of His Exalted Highness the Nizam in a special "firman" liberalising the administration in Hyderabad. The "firman" urged representatives of the people to associate themselves in a greater measure with the work of framing a new constitution for the State and invited the political parties outside the Interim Cabinet to come in and assume the responsibilities of Government. The Nizam expressed confidence that the various classes of the people in the State would adopt every possible means to preserve peace and tranquillity and remove all such tendencies in the public life of the State as were likely to affect its prestige and position.

Hopes, however, of a new and more helpful phase in the relations with the Indian Union were dashed to the ground, as the "firman" and the Prime Minister's statement which followed were both considered to contain too much caution and vagueness.

JUNAGADH

Though less localised than the problem of Kashmir, Junagadh sprang into almost equal prominence by being referred to the United Nations Security Council.

The sequence of events in Junagadh were as follows:—

After the Dewan of Junagadh had announced accession to Pakistan, demonstrations occurred and the Nawab finding his position getting difficult left for Karachi. His departure only served to make the situation still worse when the Dewan also followed the ruler to Karachi.

Whether there was an economic blockade or not the administration soon collapsed. The Dewan then sent one of his ministers to the leaders of the "Provisional Government" to negotiate a settlement. When the negotiations concluded the Dewan requested the Indian Government to assume responsibility for administering Junagadh to save it from chaos. Indian forces then entered Junagadh territory and restored order.

Early in January 1948, the "Provisional Government" was dissolved, since according to Mr. Samaldas Gandhi the purpose for which it was brought into existence had been fulfilled. The functions of the "Provisional Government" were taken over by the Junagadh Praja Mandal.

At the end of February, in a referendum held in the State, the number of votes in favour of accession to India was 190,779 while those in favour of Pakistan were 91.

Pakistan's case with regard to Junagadh and Manavadar was that both the States had lawfully acceded to Pakistan and that subsequently, without any justification, India had sent troops to those States, unlawfully occupied them and taken over their administration.

Regarding Mongrol, Sardargarh and Bantwa, Pakistan contended that being federating States, attached to Junagadh, they could not independently accede to India or Pakistan and that, therefore, their accession to India was invalid.

HERE IS A DIAGRAMMATIC REPRESENTATION OF THE CHANGES WHICH HAVE TAKEN PLACE AS GIVEN IN THE WHITE PAPER ON INDIAN STATES:

Date of Merger or integration.	Name of States.	Number of States.	Province with which merged.	Area in sq. miles.	Population. (in Lacs).	Revenue (in Lacs).
1	2	3	4	5	6	7
January 1st, 1948.	Athgarh, Athmalik, Bamra, Bamra, Baudh, Bonai, Daspalla, Dhenkanal, Gangpur, Hindol, Kalahandi, Keonjhar, Khandpara, Narsingpur, Naya arh Nilgiri, Pal Lahara, Patna, Rairakhol, Ranpur, Sonepur, Talchar, Tigiria.	23	Orissa	23,637	40·46	98·74
January 1st, 1948.	Bastar, Changbhakar, Chhuikhadan, Jashpur, Kanker, Kawardha, Khairagarh, Korea, Nandgaon, Raigarh, Sakti, Sarangarh, Surguja, Udaipur.	14	C.P. & Berar	31,598	28·20	88·06
February 1st, 1948.	Makrai	1	C.P. & Berar	151	·14	·25
February 22nd, 1948.	Banganapalle	1	Madras	259	·45	3·25
February 23rd, 1948.	Loharu	1	East Punjab	226	·28	1·96
March 3rd, 1948	Pudukkottai	1	Madras	1,185	4·38	27·56
March 3rd, 1948	Dujana	1	East Punjab	91	·31	4·16
March 8th, 1948	Akalkot, Aundh Bhor, Jamkhandi Jath, Kurundwad, (Junior), Kurundwad (Senior), Miraj (Junior), Miraj (Senior), Mudhol, Ramdurg, Sangli, Savanur, Sawantwadi, Wadi Jazhir, Janjira and Phaltan.	17	Bombay	7,651	16·93	142·15

HERE IS A DIAGRAMMATIC REPRESENTATION OF THE CHANGES WHICH HAVE TAKEN PLACE AS GIVEN IN THE WHITE PAPER ON INDIAN STATES—*Contd.*

Date of Merger or integration.	Name of States.	Number of States.	Province with which merged.	Area in sq. miles.	Population.	Revenue (in Lacs).
1	2	3	4	5	6	7
April 7th, 1948	Pataudi	1	East Punjab	53	·22	4·26
April 15th, 1948	The Punjab Hill States of Baghal, Baghat, Balsan, Bashahr, Bhajji, Bija, Darkoti, Dhami, Jubbal, Keonthal, Kumarsain, Kunihar, Kuthar, Mahlog, Sangri, Mangal, Sirmur, Tharoch, Chamba, Mandi, and Suket.	21	These areas will be centrally administered as a unit to be known as the Himachal Pradesh.	10,600	9·36	84·56
May 18th, 1948	Seraikela and Kharsawan *	2	Bihar	623	2·08	6·45
June 1st, 1948	Kutch	1	This will be a centrally administered area.	8,461	5·01	80·00
June 10th, 1948	The 18 full jurisdictional Gujarat States of Balasinor, Bansda, Baria, Cambay, Chhota-Udepur, Dharampur, Jawhar, Lunawada, Rajpipla, Sachin, Sant, Idar, Vijaynagar, Danta, Palanpur, Jumbughoda and Sirohi; and the semi-jurisdictional and non-jurisdictional thanas, Estates and Talukas of Gujarat.	157	Bombay	19,300	27·09	165·00
	Total ..	241		103,835	134·91	706·40
	II-UNIONS					
February 15th, 1948.	449 Units including the 30 jurisdictional States of Nawanagar, Bhavnagar, Porbandar, Dhraugadhra, Morvi, Gondal, Jafrabad, Rajkot, Wankaner, Palitana, Dhrol, Chuda, Limbdi, Wadhwan, Lakhtar Sayla, Vala, Jasdan, Amarnagar (Thandevli) Vadia, Lathi, Muli, Bajana, Virpur, Maliya, Kotda-Sangani, Jetpur, Bilkha, Patdi and Khirasra.	217	Saurashtra	31,885	35·22	800·00
March 17th, 1948.	Alwar, Bharatpur, Dholpur, and Karauli.	4	The United State of Matsya.	7,536	18·38	183·06

* These two states were in the first instant merged with the Orissa Province.

HERE IS A DIAGRAMMATIC REPRESENTATION OF THE CHANGES WHICH HAVE TAKEN PLACE AS GIVEN IN THE WHITE PAPER ON INDIAN STATES—*Contd.*

Date of Merger or integration.	Name of States.	Number of States.	Province with which merged.	Area in sq. miles.	Population.	Revenue (in Lacs).
1	2	3	4	5	6	7
	II-Unions—(Contd.)					
April 2nd, 1948	Ajaigarh, Baoni, Baraundha, Bijawar, Chhatarpur, Charkhari, Datia, Malhar, Nagod Orchha, Panna, Rewa, Samthar, Alipur, Banka Pahari, Berl, Bhaisaundha, Bihat, Bijna, Dhurwai Gaurihar, Garrauli, Jaso, Jigni, Kamta-Rajaula, Khaniadhana, Kothi, Lugasi, Naigawan-Rotai, Pabra, Paldeo (Nayagaon), Sarila, Sohawal, Taraon and Tori-Fatehpur.	35	The United State of Vindhya Pradesh.	24,610	35·69	243·30
April 18th, 1948	Banswara, Bundi, Dungarpur, Jhalawar, Kishengarh, Kotah, Partabgarh, Shahpura, Tonk and Udaipur.	10	The United State of Rajasthan.	29,977	42·61	316·67
May 15th, 1948	Alirajpur, Barwani, Dewas (Senior) Dewas (Junior) Dhar, Gwalior, Indore, Jaora, Jhabua, Khilchipur, Narsingarh, Rajgarh, Ratlam, Sailana, Sitamau, Jobat, Kathiawara, Kurwai, Mathwar and Pipioda.	20	Gwalior-Indore-Malwa Union.	46,273	71·50	776·42
July 15th, 1948	Patiala, Kapurthala, Nabha, Jind, Faridkot, Malerkotla, Nalagarh and Kalsia.	8	Patiala and East Punjab States Union.	10,119	34·24	500·00
	Total ..	294		150,400	237·64	2819·45
	GRAND TOTAL ..	535		254,235	372·55	3525·85

INDIVIDUAL STATES

We shall now proceed to deal with some of the individual States as they stood on December 31, 1947.

AKALKOT, a Mahratha State in the Deccan, is bounded on the north by Hyderabad, on the east by Kurundwad (Jr.) and Hyderabad, on the south by Bijapur and Hyderabad and on the west by Sholapur Dt. The climate is comparatively cool and agreeable with an average rain-fall of 25 inches. The capital is Akalkot.

The Ruling House is Mahratha belonging to the Bhonsle family. The rulers trace their origin to Ranoji Patel of Parad in the Nizam's Dominions, who was taken by the Chhatrapati Shahu Maharaj (grandson of the great Shivaji) of Satara into his family and had the family surname Bhonsle of the Rajas of Satara conferred upon him.



RAJA SHRIMANT VIJAYASINH FATTESINH BHONSLE, RAJASAHEB OF AKALKOT, was born on December 13, 1915. He was educated at the Bishop's High School, Poona, the Rajkumar College, Rajkot where he passed with distinction in English and science, and finally the Deccan College, Poona. He also took a course in Administrative Training in Bangalore. The Rajasaheb ascended the *gadi* on April 3, 1923, and was invested with full ruling powers on February 27, 1936. He married Princess Kamala Devi of Gwalior on February 23, 1934, but she died at Akalkot a little less than a month later. The Rajasaheb married again in April 1942 Shrimant Maharajkumari Nirmala Devi, grand-daughter of His late Highness Sayajirao Gaekwar of Baroda. The Heir-apparent is Shrimant Prince Jayasinh Rao Bhonsle, the younger brother of the Ruler.

The Rajasaheb's recreations are shooting, riding, tennis, cricket, motoring and racing.

The area of Akalkot is 498 sq. miles and the population 1,03,903. The average annual revenue is Rs. 6,85,145.

The soil is mostly black and mixed. The chief crops are jawar, bajra, wheat, tur gram and mung, and the money crops groundnuts, chillies, cotton, linseed, sesamum, etc., which afford scope for industrial development.

INDUSTRIES

Akalkot has a match factory, an oil mill, a soap factory, a hosiery works and cotton ginning and power looms. A distillery and a chemical works are also working satisfactorily. A factor that is partly responsible for the development of industries in the State is the Akalkot Waterworks constructed at a cost of Rs. 12 lakhs and the Power House.

There is State control over the necessities of life such as food and clothing. The Government has invested Rs. 4 to 5 lakhs in the procurement of food-grains which are distributed to the people through organised agencies at very reasonable rates. Sugar, cloth and yarn for the hand-loom industries in the State are similarly distributed. The whole system of control is working very satisfactorily.

ADMINISTRATION

The old Assembly has been dissolved and it is proposed to appoint a popular minister to carry on the administration of the State. Another way in which the administration is readjusting itself to modern conditions is to conclude a temporary co-operative arrangement with the Kolhapur Darbar in the matter of the High Court, Police, and Secretariat correspondence with the Ministry of States.

As for local self-government an elected municipality with an elected president has just started functioning and in 7 of the villages panchayats are working satisfactorily.

Dewan: A. N. PRADHAN, B.A.

AMARNAGAR (THANADEVLI) STATE is a premier Wala Kathi State in Central Kathiawar within Western India and Gujerat States region. The Ruler belongs to the illustrious Jaitani Kathi clan. Rule of primogeniture governs succession in the State.



DARBARSHREE AMRAWALA SAHEB, the present Ruler of AMARNAGAR STATE, was born on November 28, 1895. He ascended the *gadi* on October 23, 1922. He was educated at Rajkumar College, Rajkot.

The Heir-Apparent Samatwala was born on January 10, 1943. Grandson of the Ruler and son of the deceased prince Yuvraj Shri Ramwala, he is studying at home. Cadet, K. S. Harsurwala, born on October 6, 1931, is also receiving education at Rajkumar College, Rajkot.

The area of the State is 117.32 sq. miles, its population 20,000 and its average annual revenue Rs. 3,50,000. The State has acceded to the Dominion of India.

There is a purely popular municipality in Amarnagar having its own elected President and members. Every village has a Grama Panchayat over which is the Sar Panch Committee of elected members.

EDUCATION

His Highness has evinced a keen interest in the education of his subjects. Primary and secondary education is free and compulsory. Poor and needy students from the State are offered scholarships within and without the State. Special encouragement is given to sons of cultivators. Free medical aid has also been provided.

Facilities to industrialists have brought about the establishment of the Amresh Oil Mill by Rajya Mitra Sheth Shree Nanjibhai Kalidas Mehta, and of a jaggery process factory by Sheth Abdul Karim of Dhoraji to facilitate the work of sugarcane cultivation and other similar industries.

The State is spending about Rs. 40,000 to Rs. 50,000 per annum on relief by distributing foodstuffs at concession rates to petty servants as well as average middle class people, and free to deformed and poor people. Religious tolerance is a unique feature of the State. All communities are treated alike and they live like brothers.

The cessation of hostilities has brought the problem of post-war planning to the forefront. New buildings such as Secretariat, Power House, Middle School and Girls' School are being constructed. Town planning in Amarnagar and Luni is a feature of the post-war reconstruction scheme.

ADMINISTRATION

The administration is assisted by an Executive Council consisting of the Dewan and four members. *Dewan and Vice-President in Council :* KUSUMRAI J. DEWAN B.A., LL.B. ; *Huzur Secretary :* MANOHAR K. PANDIT, B.A, LL.B. ; *First Member ;* TRIBHUWAN R. CHOKSHI ; *Treasury Officer and Second Member :* VISMNULAL H. BUCH ; *District & Sessions Judge and Third Member :* AMRATLAL K. CHARADWA, ADVOCATE ; *Popular Member (Fourth Member):* RAJYARATNA SHETH JIVRAJ LAXMICHAND : *Huzur Court Judge :* DOLATRAI N. BUCH ; *Municipal President :* RAJYA RATNA SETH JAGJIWAN KALYANJI ; *Chief Medical Officer :* DR. LAXMIDAS R. MEHTA, M.B.B.S. ; *Nyayadhish and First Class Magistrate :* BHASKARRAI P. VAISHNAV, B.A., LL.B.

BAHAWALPUR is the principal Muslim State in Pakistan. The Ruling family is descended from the Abbaside Khalifas of Baghdad. Legends strengthened by existing records show that they established themselves as progressive pioneers in their newly acquired territory, making a special feature of agricultural development by the construction of canals from the Indus river.



ALAHAZRAT JALALAT-UL-MALIK HIS HIGHNESS AMEER AL-HAJ SIR SADIQ MUHAMMAD KHAN V ABBASI, G.C.S.I. (1941), G.C.I.E. (1931), K.C.S.I. (1929), K.C.V.O. (1922), Hon. LL.D. (Punjab and Aligarh Muslim Universities), the present Ameer of Bahawalpur, was born in 1904, the only son of His late Highness Nawab Al-Haj Muhammad Bahawal Khan V. Abbasi Bahadur. He succeeded to the *gadi* in 1907 and assumed full ruling powers in 1924.

The Ameer was educated at Aitchison Chiefs College, Lahore. He married the daughter of Sahibzada Faiz Muhammad Khan Abbasi in 1921. He was A.D.C. to H.R.H. the Prince of Wales during his Indian tour, 1921-22. He is the Colonel-in-Chief of Bahawalpur State Forces and an Hon. Maj.-General in H.M.'s Forces. He was also a member of the Standing Committee of the Chamber of Princes from 1933 to 1947. His Highness has travelled widely in the Middle East, Europe and the United Kingdom. He performed Haj in 1935. He visited various fronts during the last World War and is the recipient of, besides British Commemorative and other War Medals, the Grand Cordon of the Order of Al-Rafidain (Iraq) 1941. He is keenly interested in shooting, tennis, polo, motoring and philately.

The area of the State is about 20,000 sq. miles, its population 2 millions and its revenue Rs. 4,23,00,000. The State has acceded to the Dominion of Pakistan.

The Ruler is entitled to a salute of 17 guns.

The HEIR-APPARENT MAJOR SAHIBZADA MUHAMMAD ABBAS KHAN ABBASI, WALIAHAD BAHADUR, was born on March 22, 1924.

ADMINISTRATIVE PROGRESS

His Highness has been taking keen interest in the improvement of State Forces and his personal example as a good soldier has gone a long way in raising the standard of efficiency of the Army.

The State is predominantly agricultural. The participation of the State in the Sutlej Valley (Irrigation) Project is an example of His Highness' foresight and his solicitude for his people. The State has three major Head Works on rivers Sutlej and Chenab from which canals take off and provide perennial irrigation for 2.8 million acres. The capital expenditure on this Project up-to-date comes to over 200 lakhs. The completion of this colossal irrigation Project has opened a new era of increasing prosperity for the State. Arrangements have been made for the establishment of a large Cotton Textile Mill, a Hydrogenated Vegetable Oil (Vanaspati) Plant, a Soap Factory, and a big Flour Mill. The schemes have also been completed for the establishment of a large modern tannery and leather works, a woollen spinning and weaving mill and chemical works. The primary and secondary education up to middle standard is free. A number of young men are being selected for training abroad for free higher training at State expense. The State has a first grade degree College and one intermediate College besides numerous High Schools. The Jamia Abbasia is a magnificent Institution run on the lines of Al-Azhar University at Cairo. His Highness takes a keen interest in the administration and maintains constant and close touch with his people.

BANGANAPALLE, the only Muslim State in the Madras Presidency, is situated in the Kurnool Dt. The climate is dry and healthy and the physical features are of the common Deccan type.

The State is entitled to a hereditary salute of 9 guns. The capital is Banganapalle.

The Nawabs of Banganapalle belong to two historical Muslim families and trace their descent on the one side from a Grand Vazeer of Aurangazeb and the other from Saiyid Mahomed Khan Razvi the great Minister of Shah Abbas II of Persia. In 1769, a descendant named Saiyid Hussain Ali Khan came into possession of the jagir of Banganapalle from the Sultan of Bijapur. It is from Saiyid Hussain Ali Khan that the present Nawabs of Banganapalle trace their descent.



HIS HIGHNESS NAWAB MIR FAZLE ALI KHAN BAHADUR, the present ruler, was born on November 9, 1901. He was educated at the St. George Grammar School, Hyderabad; Newington Institute, Madras; and the Mayo College, Ajmer. He succeeded to the throne on the death of his father on January 22, 1922. In 1924 he married the only daughter of his paternal uncle. After the death of his first wife the Nawab married again in 1930 Raisunnisa Begum Sahib, the present Begum Saheba, who belongs to the family of Nawab Salar Jung Bahadur of Hyderabad. The Nawab has one son and one daughter by the first wife, and two daughters by the second. The Heir-Apparent, Nawab Mir Gulam Ali Khan Bahadur, was born on October 12, 1925.

His Highness has travelled widely in India and has made pilgrimages to the holy places of Iran, Iraq and Arabia. He is a keen sportsman and is very good at polo, tennis, cricket and billiards.

The area of Banganapalle is 275 sq. miles and the population 44,631. Of the people 32,508 are Hindus, 10,571 Muslims, and 1,552 other castes. The annual revenue of the State is Rs. 3,75,545.

PRODUCE AND MINERALS

The main occupation of the people is agriculture, the principal crops being millets and pulses. Cash crops like cotton and groundnuts are also grown. The State is rich in mineral resources such as diamond and calcite. There are also extensive slab deposits.

For its communications the State chiefly depends on its roads which connect every village with every other village. The railway is also easily accessible as the nearest railhead Panyam on the Bezwada-Guntakal section of the M. & S. M. Railway is only 17 miles from Banganapalle.

Medical education is free and so is education up to the lower secondary stage.

The State has an ambitious post-war programme which will include projects for the improvement of communications and the opening of irrigation works.

ADMINISTRATION

On July 1, 1947, the Nawab announced his intention of establishing a constitutional government in the State. Meanwhile as an earnest of his intention he has set up a State council to conduct the administration.

Dewan-President of the State Council: KHAN SAHIB SYED IMAM SAHIB BAHADUR, B.A.; *Chief Judge:* VAIDYANATHA AIYER, M.A., B.L.; *Revenue Member:* KHAJA NAZEER HUSSAIN SAHIB; *General Member:* SRI MEDAM SUBBIAH GARU; *Civil & Sessions Judge:* MOHAMMED KHALID SAHIB, B.A., B.L.; *Revenue Officer:* MIRZA HYDER BAIG SAHIB; *State Surgeon:* KHAN SAHIB DR. SYED ZAINULABIDDIN SAHIB; *P.W.D. Officer:* A. SUBBA RAO GARU; *Munsiff-Magistrate:* MAHMOOD BIN MOHAMMAD, M.A., B.L.; *Chief Police Officer:* SYED HUSSAIN SAHIB; *Public Prosecutor:* R. VENKATA RAO, B.A., B.L.; *Education Officer:* LATEEF NAIK SAHIB, B.A., L.T.

BANSWARA: Banswara is an independent State situated in the southern part of Rajputana. During British rule this was one of the first class treaty States enjoying full Sovereign Powers and a dynastic salute of 15 guns. The area of the State is 1,946 sq. miles with a population of 2,99,913. The State is rich in minerals and uptil now has been surveyed and settled three times for purposes of land revenue administration.



The present ruler, RAYAN RAI MAHIMAHENDRA MAHARAJADHIRAJ MAHARAWALJI SAHIB SHREE CHANDRAVEER SINGHJI SAHIB BAHADUR, NARESH RAJYA BANSWARA, was born on Kartik Shukla Paksha 14, Samvat 1966 Vikrami, corresponding to 26th November 1909 A.D.

He succeeded his late father His Highness the Maharawal Sahib on the 27th July, 1944; the Raj Tilak was celebrated on 7th August, 1944, and the Rajyabhishek (Coronation) on the 20th November, 1945. Descended from the senior branch of the premier clan of Ahara Sisodiya Rajputs now ruling over Mewar, His Highness is 22nd in descent from Maharawal Jagmal Singhji, who founded Banswara in Samvat 1583 Vikrami corresponding to 1527 A.D. His Highness was educated at the Mayo College, Ajmer, and received his administrative training at Bikaner under the personal supervision of His late Highness the Maharaja Shri Sir Ganga Singhji Sahib Bahadur of Bikaner. The State has a Legislative Assembly consisting of members with a non-official majority. The Municipal Board of Banswara town has a majority of non-official elected members.

Both primary and secondary education is free in the State and provision for technical education is also made in the High School.

There is a decent hospital and a number of dispensaries in the rural areas.

The State is well served with telephonic communications. There are many relics of archæological interest.

The capital is almost in the centre of the State and is 65 miles from Dohad railway station, 53 miles from Ratlam railway station (Standard gauge), 44 miles from Namli railway station and 60 miles from Mandsor railway station (Metre gauge). There is a metal-road linking the capital with Dohad railway station. The State has various motor bus services (working on monopoly system).

The administration of the State is conducted by His Highness who is assisted by a Prime Minister and a Cabinet of Ministers. The State has also an Executive Council consisting of His Highness as the President, the Prime Minister as the Vice-President and other Ministers as members.

BARIA STATE is situated in the heart of the Panchmahals District between 22°-30′ and 23°-0′ north latitude and 73°-41′ and 74°-11′ east longitude. The Rulers of Baria are Chauhan Rajputs being the descendants of Palunsinh who conquered Champaner and its dependencies in or about Samwat 1300 (A. D. 1244).



LT.-COL. HIS HIGHNESS MAHARAOL SHREE RANJITSINHJI, K.C.S.I., the present Ruler was born on July 10, 1886; was educated at Rajkumar College, Rajkot, Imperial Cadet Corps, Dehra Dun and in England; married Shrimant Taktakunverba Saheb, daughter of H. H. Maharaja Saheb of Rajpipla in 1905, and Shrimant Dilher Kunverba Saheb, niece of H. H. the Maharaja Saheb of Rajpipla in 1918; succeeded to the *gadi* on February 29, 1908 and was installed as Ruler May 7, 1908. The Heir-Apparent Maharaj Kumar Shree Jaydeepsinhji, grandson of the present Maharaja and the eldest son of the late Shree Subhagsinhji was born on June 24, 1929.

His Highness served during the Great War of 1914-1918 when he was made a captain on January 1, 1918. He also served during the Afghan War of 1919. In 1930 he was promoted Major and in 1937 Lt.-Col. He had become K.C.S.I. in 1922. In 1933 he visited England and in 1937 he went again to attend the King's coronation in April that year. The Maharaja is entitled to a salute of 11 guns.

The State has an area of 845 square miles, and a population of 2,020,55. The gross revenue of the State based on the average figures for the last five years is Rs. 20,23,322.

The staple crop of Baria is maize, the land being irrigated by wells. The forests are rich in teakwood and other sorts of jungle produce. The State has a large trade in timber and its industry is chiefly centred round saw mills and oil crushing plants of which there are many. There is a State Banking Department for the promotion of commerce and industry. Transport and communications are good. The State is equipped with a narrow gauge railway line which runs from Piplod to Devgad Baria. There are also excellent metalled roads.

Both primary and secondary education is free for all State subjects. And the State is well served by a net-work of medical relief centres.

ADMINISTRATION

Dewan: DEWAN BAHADUR MOTILAL L. PAREKH, M.A., LL.B.; *Chief Commandant, Baria State Forces:* MAJOR MAHARAJ KUMAR HEERASINGHJI; *Judge, Huzur Court:* DEWAN BAHADUR C. N. MEHTA; *Naib Dewan and Sar Nyayadhisha:* U. J. SHAH, B.A., LL.B.; *Nyayadhisha and First Class Magistrate:* M. V. SETH; *Medical Department:* RAI BAHADUR DR. P. N. SEN, I.M.S. (RETD.), P.M.S. (U.P.), CIVIL SURGEON (RETD.); *Electrical Department:* M. L. PATEL, D.F.H. (LOND.); *Education Department:* G. L. PANDYA, M.A., B.T.; *Chief Accounts Officer:* K. G. KADAKIA, B.A., LL.B.; *Police Superintendent:* M. L. CHOWHAN; *Forest Department:* S. G. PITHWA, D.D.R., B.F.S.; *Vety. Surgeon:* H. R. H. AIYAR, G.B.M.C.; *Customs and Excise Officer:* N. C. SHAH, B.A.; *Shree Huzur Kangi Karbhari:* J. S. DAVE.

BARODA, one of the major States in India, lies partly in Gujerat and partly in Kathiawar. The Royal House which is Maratha belongs to the Gaekwad family. The capital of the State is Baroda. The State has acceded to the Indian Dominion.



MAJOR GENERAL HIS HIGHNESS FARZAND -I- KHAS -I- DOWLAT -I ENGLISHIA, MAHARAJA SIR PRATAPSINHA GAEKWAD, SENA KHAS KHEL SHAMSHER BAHADUR, G.C.I.E., LL.D., THE MAHARAJA OF BARODA, was born on June 29, 1908. He was educated at the Baroda College and the Deccan College, Poona. He married Her Highness Maharani Shanta Devi in 1929, and Her Highness Maharani Sita Devi in 1943. He ascended the *gadi* on February 7, 1939. The Heir-Apparent is Shrimant Fatesinha Gaekwad who is 18 years old.

Among the Maharaja's recreations are polo, tennis, cricket and hunting.

The area of the State is 8,176 sq. miles and the population 28,55,010. The revenue for 1945-46 was Rs. 450.74 lakhs and the expenditure Rs. 379.29 lakhs.

Agriculture and pasture support 64.6 per cent of the people. The principal food crops are rice, wheat, gram, maize, and garden produce, and the principal cash crops are castor, rapeseed, poppy, cotton, san-hemp, tobacco and sugar-cane. The land tenure is ryotwari. There are about 386 industrial and commercial concerns, 4 agricultural banks and 1,509 co-operative societies. The State also contains sandstone which is quarried at Songir.

For the post-war period a tentative plan of reconstruction involving an expenditure of 15 crores has been formulated.

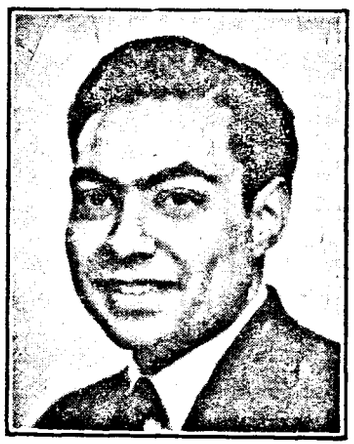
The State is well served by a net-work of railways. Besides the B.B. & C.I., Rajputana-Malwa, Tapti Valley Railways, which pass through the State, the railway owned by the State is 795 miles in length. The total mileage of metalled and fair-weather roads is 694 and 1,633 respectively.

There are 2,609 educational institutions of different kinds in addition to 6 colleges. Primary education is free and compulsory. The State also maintains a system of rural and travelling libraries.

ADMINISTRATION

With a view to falling in line with democratic trends visible in every Indian State, responsible Government has been introduced into the state. Dr. Jivraj Mehta has been appointed Prime Minister. The constitution of the state is to be framed by a Constituent Assembly elected on the basis of adult franchise and the Government have ordered preparations to be made for elections to the Constituent Assembly. The personnel of the new Ministry has not been announced at the time of writing.

BARWANI STATE is situated in Central India. The Ranas are Sisodia Rajputs of the Udaipur family who separated from the parent stock about the 14th century. They were not tributaries to any of the Malwa Chiefs.



HIS HIGHNESS MAHARANA SHRI DEVI SINGHJI, the present Maharana Sahib of Barwani, was born on July 19, 1922. He ascended the *gadi* on April 21, 1930.

His Highness was educated at Daly College, Indore, where he passed the Diploma Examination in 1939, and Indore Christian College. While a student in the Christian College, he joined the Officers' Training Corps at Indore and received military training for six months. He received judicial and administrative training for four months and training in agriculture at the Institute of Plant Industry, Indore. He plays tennis and squash.

The Maharana was invested with full ruling powers on October 18, 1942. He married Shri Dilharkunverba Sahiba, niece of H.H. Maharao Sahib of Cutch, in May 1943. The Heir-Apparent Maharajkumar Anirudh Singhji was born on May 21, 1944.

The area of the State is 1,178 sq. miles, its population 1,76,666 according to 1941 census and its revenue for 1946-47 Rs. 18,00,000. The Ruler is entitled to a salute of 11 guns. The State has acceded to the Dominion of India.

ADMINISTRATION

The administration of the State is carried on by His Highness the Maharana Sahib with the assistance of a State Cabinet consisting of three elected popular Ministers.

President : HIS HIGHNESS THE MAHARANA SAHEB BAHADUR, Ruler of Barwani State.

Chief Minister : SHRI KASHINATH JOSHI, B.A., LL.B.; *Revenue Minister :* RAI SAHIB DAYASHANKER TIWARI; *Judicial Minister :* SHRI B. T. SAKRIKAR.

BENARES : THE STATE of Benares under its Hindu Rulers existed from time immemorial and finds mention in Hindu and Buddhist literature. In the 12th century it was conquered by Shahab-uddin Ghori and formed a separate Province of Mohammedan Empire. During the reign of Akbar the great, it also formed a separate Province. Subsequently Hindu Raj was again established in Benares along with the decline of Moghal Empire. In the 18th century Raja Mansa Ram obtained Sanad of Raj from Emperor Mohammad Shah of Delhi in favour of his son Raja Balwant Singh who founded the present Benares State comprising the Four Circars of Benares, Jaunpur, Gazipur and Chunar. During the next thirty years attempts were made by Saftar Jung and after him by Shuja-ud-daulah of Oudh to destroy the independence of the Raja but the latter withstood them successfully, and strengthened his position. In 1794 management of the Four Circars was taken over by the Company's Government under an agreement by which surplus revenue was granted to the Raja. In 1911, the British Government restored full ruling powers to the Maharaja, to be exercised in respect of a part of the original territory known as Maharaja's 'Family Domains' even in regard to the administration of which, his powers had been limited by the Company's Government.



The State at present, consists of the three districts of Bhadohi, Chakia and Ramnagar.

The area of the State is 875 sq. miles and its population according to the latest census returns is 4,51,428. The revenue of the State in the year 1944-45 was Rs. 34,51,451.

Adopted by His late Highness Maharaja Sir Aditya Narain Singh Bahadur as his son and successor on June 24th, 1934 H. H. MAHARAJA VIBHUTI NARAIN SINGH BAHADUR was born on 5th November, 1927, and succeeded to the *Gadi* on April 5th 1939, following the sudden demise of His late Highness. During His Highness's minority the State was administered by a Council of Administration under the Presidentship of C. R. Peters and later that of Khan Bahadur Syed Ali Zamin, M.B.E., the present Dewan of Benares State.

For his higher education, His Highness remained at the Mayo College, Ajmer for six years whence he was called to take up the full ruling powers of the State on July 11, 1947.

On taking the reins of Government the first thing the Maharaja did was to announce Responsible Government to his people and promptly to implement it by placing the administration in the hands of elected members responsible to popularly elected Praja Mandal. A Reforms Committee comprised of elected members with Pt. Hirdai Nath Kunzru, as its Chairman, has been set up for drafting and recommending a constitution for full responsible government.

The Judiciary comprises a Chief Court and a Judicial Committee consisting of retired Judges of the Allahabad High Court and an ex-advocate General of the U.P. This Judicial Committee advises His Highness in appeals and revisions filed before him.

Education is free even in the High Schools, of which there are three, one in each district, and in addition to these there are three aided High Schools and a number of vernacular Primary and Secondary Institutions, besides a few Sanskrit Pathshalas.

There is provision for efficient medical aid including the activities of the Red Cross Society in the sphere of maternity and child welfare. The new hospital at Ramnagar when fully equipped, would be one of the best hospitals in the area.

Agriculture is the main occupation of the people of the State. There is an agricultural and Rural Development Department running on modern lines. There is an extensive Canal system owned and managed by the State in the district of Chakia which has helped the U.P. Govt., considerably, during the recent food crisis.

There are two important industries in the State namely glass and carpets. The former is produced in the Glass Factory at Ramnagar and the latter at Bhadohi, of which the quality and design are deservedly famous and in large demand in world markets.

The State is well served by communications through road and rail. The E. I. Railway and the O. T. Railway run through State territory and the stations of Benares Cantonment, Moghal Sarai and Jeenathpur are within easy distance of Ramnagar. There are a number of metalled roads and a good motor bus and lorries service, whilst the Delhi-Calcutta Grand Trunk Road runs within a mile or two of the main State Road from Ramnagar and so through the district of Bhadohi.

BHADARWA STATE belongs to the Rewa Kantha Gujerat States Group and is included among the groups of States entitled to send a representative member to the Chamber of Princes. The Chiefs of the State are Waghela Rajputs.



H. H. SHRIMANT MAHERBAN (Namdar) THAKORE SAHEB SHREE NATVERSINHJI RANAJITSINHJI, the present Ruler, was born on November 29, 1903. He was educated at the Rajkumar College, Rajkot and was married to Shree Jijirajkuverbasaheb of Rajpur (Kathiawar) in 1930. The heir to the throne Maharaj Kumar Shree Samarvijaysinhji, was born on October 21, 1942.

H. H. succeeded to the *gadi* on the death of his father on April 26, 1935 and was invested with full powers on October 7, 1935.

Excluding several Wantas in Baroda, the area of the State is 27 sq. miles and the population 13,520. The revenue is Rs. 2,40,000.

EDUCATION

Medical relief and education are free. The State has made good progress in education, and has provided schools for every village having a population of more than 250. The capital town is provided with electricity and pipe-water.

ADMINISTRATION

The outlook of the administration is progressive. Survey settlement has been introduced, permanent tenancy rights having been granted in 1918. The Deccan Agriculturists' Relief Act, the Child Marriage Restraint Act, and such other acts of a reformist nature are all in force in the State.

The State enjoys full civil powers, and in criminal matters it enjoys powers up to 7 years R. I. and a fine up to Rs. 10,000. The Judiciary and Executive are separate. The State police force is well organized. Village panchayats were introduced in every district on the occasion of the birth of the Yuveraj Saheb. The Municipality in the town has a majority of elected members.

Karbhari : S. G. BHAT, B.A., LL.B., Advocate (A.S.).

Nyayadhish and Magistrate : Post Vacant.

Medical Officer : Dr. LABHSHANKER H. ACHARYA, L.C.P.S. (Bom.), M.B.B.S. (Madras).

Address : Bhadarwa (Rewa Kantha).

BHAVNAGAR is a first class State in Kathiawar. It lies at the head and west side of the Gulf of Cambay. The Rulers are Gohel Rajputs and claim descent from the three sons of Sejakji believed to have settled in the country about 1260.



HIS HIGHNESS THE MAHARAJA COL. SIR SHRI KRISHNAKUMARSINHJI, K.C.S.I., the present Ruler of Bhavnagar, was born on May 19, 1912. He succeeded to the *gadi* in July 1919. The State was under a Council of Administration during his minority. He was invested with full ruling powers in April 1931.

His Highness was educated at Rajkumar College, Rajkot and Harrow, England. He returned to India in 1928. In 1931, he married Vijyaba Saheba, third daughter of H.H. the Maharaja Shri Bhojrajji of Gondal. The Heir-Apparent Yuvraj Maharajkumar Shri Virbhadrasinhji was born in 1932.

The area of the State is 2,961 sq. miles, its population 6,18,429 (1941 census) and its average annual revenue including railway Rs. 1,36,69,571. The State has acceded to the Dominion of India.

Bhavnagar is an important port on the Gulf of Cambay. It has long been described as the chief mart and channel of import and export trade of Kathiawar, Ahmedabad and Marwar. It has a good and safe harbour being approached by a creek and offers all modern facilities. It has its own workshop and a dry dock.

The chief means of communication are railways. The Bhavnagar port is linked with the hinterland by the Bhavnagar State Railway which runs to a total length of 307 miles.

Industrially the State is well-developed. The main industries are 3 cotton mills, 5 weaving mills, 1 rubber factory, 4 chemical works, 1 bone crushing factory, 1 silk mill, 1 match factory, 1 cement tiles factory and 1 sugar factory. Besides, there is a large shipping company, the Bharat Lines Ltd. and also the salt industry. A large dairy industry unit has been set up at Khodiyar. Foundation stone for pottery and glass works at Sihor, was recently laid. Moreover there are several small-scale industrial concerns employing manual labour, which produce sugar-candy, copper and brass utensils, chemicals, soap, wooden furniture, cotton thread, gold thread, battery cells, trunks and buckets, and wooden and ivory toys.

The chief agricultural products are grain, cotton, groundnuts, sugar-cane, etc. Measures for the extension of irrigation and improvement of agriculture have received the special attention of His Highness. A fund of Rs. 24 lacs was raised for helping needy farmers. A school of agriculture and an experimental farm were opened and agricultural demonstrations and propaganda were started. The State has launched various schemes of water supply and irrigation. Irrigation tanks at Ambla, Valavad, Ramdhani, Sihor, etc., increase the supply of subsoil water and have been a real boon to agriculturists. The Darbar have also sanctioned a scheme for building a reservoir on the river Rangholi Village panchayats have been introduced.

ADMINISTRATION

The executive head of the administration is the Dewan, who is directly responsible to the Ruler. The Dewan is assisted by four Naib-Dewans who have been assigned different portfolios. There is a Dharasabha or Legislative Assembly consisting of 55 members. The Dewan is the President of the Darasabha. The Judiciary is independent of the Executive. His Highness has a fixed privy purse.

Principal Officers : ANANTRAI PRABHASHANKAR PATTANI, M.A. (Cantab.), *Mukhya Dewan ;* MAGANLAL H. GHANDI, M.A. LL.B., Bar-at-Law, *Naib Dewan (Judicial) ;* RAVISHANKER S. BHATT, M.A. (London), *Naib Dewan (Railway & Finance) ;* HARIPRASAD H. TRIVEDI, B.A., LL.B., *I/c Naib Dewan (Revenue) ;* GAJANAN U. BHATT, B.A., S.T.C., M. Ed. (Leeds), *Naib Dewan (Education) ;* MINOCHAHER R. UNWALA, B.A., LL.B., *Junior Judicial Member, Hasur Court ;* BALKRISHNA V. TRIVEDI, B.A. Bar-at-Law, *Chief Judge*

BHOPAL STATE in Central India lies between north lat. 22°23′ and 24°4′ and east long. 76°28′ and 78°52′. It is bounded on the north by the States of Gwalior, Basoda, Kurwai and Tonk, on the south by the Narbada River, on the west by the States of Indore, Gwalior and Narsingarh, and on the east by the Saugor Dt. of the Central Provinces. Most of the State is situated on the Malwa Plateau to the north of the Vindhyas. The climate is, generally speaking, temperate throughout the State and the average rainfall varies



from 30 to 50 inches. The State contains many remains of great archæological interest including the famous Sanchi Topes, which date from the second Century B.C. and which were later restored under the direction of Sir John Marshall. Adjoining the Topes is the Sanchi station on the G.I.P. main line to Delhi.

Bhopal is the principal Muslim State in Central India and ranks only next to Hyderabad in importance among the Muslim States of India. The ruling family was founded by Dost Muhammad, Khan, an Afghan of the Mirazi Khel clan who came to Delhi in 1708 during the first year of Bahadur Shah's reign in search of employment.

COL. AIR-VICE-MARSHAL HIS HIGHNESS THE NAWAB SIKANDAR SAULAT IFTIKHARUL-MULK MUHAMMAD HAMIDULLAH KHAN, BAHADUR, G.C.S.I., G.C.I.E., C.V.O., B.A., LL.D., the present Ruler of Bhopal, was born on September 9, 1894. He married in 1905, the daughter of Shahzada Humayun, a great grandson of Shah Shuja a Shahzada Khel who was exiled from Afghanistan and became domiciled in India. The Nawab and the Begum have three daughters.

The Nawab was educated at Bhopal and the M.A.O. College, Aligarh. Taking the Bachelor of Arts Degree in 1915, he put in a further year's special study in law. After returning to Bhopal he underwent a thorough practical training in almost every branch of the State administration including the Chief Secretaryship of the Government of Bhopal. Finally on May 17, 1926 he ascended the *gadi* on the voluntary abdication of his mother.

His Highness was throughout a leading member of the Chamber of Princes of which he was Chancellor in 1931-32, and again in 1944 when he remained Chancellor almost till the lapse of paramountcy. As Chancellor of the Chamber of Princes he also took an active part in the deliberations of the Round Table Conference held in London in 1931-32.

His Highness is an all-round sportsman but he is best known in India as one of the country's finest polo-players.

The Ruler of Bhopal is entitled to a salute of 21 guns within, and 19 guns outside his territories. The State has acceded to the Dominion of India.

HEIR-APPARENT

The heir-apparent, Col. Suraiya Jah Nawab Gohar-e-Taj Princess Abida Sultan Begum, was born on August 28, 1913. In 1933 she married Nawab Sarwar Ali Khan, and has one son. The Princess was educated privately and is a fine product of both Western and Eastern culture. She is a scholar in Arabic and Persian and an accomplished pianist and violinist. She is also an all-round sportswoman. She is, for instance, a hard rider, a dead shot, a fine polo player an expert skater, a good pilot and a proficient swimmer. She has been very active in the public life of the State, taking a special interest in social and religious questions. She leads a simple life and always tries to identify herself with the humblest citizen in a hundred different ways.

For some years now the Princess has been taking an active part in the administration of the State. She is at present in charge of the Private Estate of His Highness as Chief Secretary in the Department of Sarfe-khas. During the war years when the Nawab was preoccupied with urgent war work she took over and acted as President of the State cabinet and discharged her onerous responsibilities with great skill and dignity. In recognition of all her services to the State she was awarded the Akhtar Hamidia Gold Medal on the occasion of the fifty-second birth-day of His Highness the Nawab in February 1946. The Princess holds the honorary rank of Colonel in the Bhopal State Military Forces and is officially styled 'Col. Suraiya Jah Nawab Gohar-e-Taj Begum.'

The area of the State of Bhopal is 7,000 sq. miles, its population about 8,00,000.

PRODUCE AND INDUSTRY

More than two-thirds of the State is arable and the soil is generally very fertile. The principal agricultural products are wheat and other cereals and the main cash crops are tobacco and sugarcane. The State forests are very extensive and valuable. The land system which is in force in the State is ryotwari by which the cultivator holds the land direct from the Government. There is absolute permanency of tenure so long as the assessment is regularly paid.

With a view to acquainting the people with improved methods of agriculture, the State Agricultural Department is propagating necessary advices and instructions so as to enable the agriculturists to produce good crops in plenty. The State is always on the look-out to help agriculturists.

Industrially, too, the State is well-off. Among the more important manufacturing concerns in the State are : The Bhopal Textile Mills, the Straw-Board Factory, the Sehore Sugar Factory, the Nerbudda Refrigerated Products Co., the Central India Chemicals Ltd., the Hamidia Match Factory, a tent factory, an oil mill and several ginning and

pressing factories. Bhopal is also rich in deposits such as iron, bauxite, mica and other valuable minerals.

COMMUNICATIONS

Bhopal is on the G. I. P. Railway main line between Bombay and Delhi. The chief means of communication within the State itself are the roads, of which a great many are new.

Both in education and public health excellent facilities are provided by the state authorities. There are travelling dispensaries in the country-side and a new hospital staffed and equipped on modern lines in Bhopal City.

ADMINISTRATION

In January 1946 His Highness announced a series of reforms providing for 1. extended franchise, 2. elected majority in the legislature, 3. consultative committees to advise Government Departments, and 4. Public Services Commission to select candidates for Government posts. In April 1947 three non-official ministers representing the bulk of public opinion were appointed members of the Executive Council which consists of five members, thus giving the popular representatives a majority in that body.

On the 29th of April 1948, the Nawab announced the inauguration of responsible Government in the State with the formation of an Interim Government with Raja Sir Oudh Narain Bisariya as Prime Minister. The interim Government consisting of a Prime Minister and eight other ministers, seven of whom are non-officials, would function under the present constitution until the new constitution has been promulgated and elections to the new legislature have taken place.

Alimartabad, Motamidus Sultan, Raja Sir Oudh Narain Bisariya, *Prime Minister, Law and Order and Legislature;* Pandit Chaturnarain Malaviya (Bhopal Praja Mandal), *Deputy Prime Minister, Commerce, Industries, Supplies and Labour;* Colonel Nawabzada Radhid-uz-Zafar Khan, *Education and Local Self-Government;* K. F. Haider, *Finance;* Mahmud Hussain (Bhopal Praja Mandal), *Revenue;* Mr. Zanoor, *Public Health, Medical and Jails;* Kamta Prasad, (Bhopal Praja Mandal), *Agriculture, Forest and Fisheries;* Rai Lala Mulkraj (Bhopal Political Conference), *Public Works, Irrigation and Communications;* Seth Pratapmal (Bhopal Political Conference), *Rural Development.*

Specially notable has been the success which has attended the efforts of the Ruler, Governments and people of the State to maintain peace and communal harmony. At a time when the greater part of the country seemed to have been infected by the virus of communal bitterness, Bhopal kept aloft the torch of communal amity and goodwill. To assist the State Govt. in this all important task, H. H. has appointed a Peace Liaison Committee for Bhopal city the majority of whose members are non-officials representing all shades of public opinion in the State.

A scheme to maintain the internal security of the State and to preserve a volunteer reserve police, has been designed by the State Government. An aerodrome in the State was expanded in order to serve as an important centre in aerial communications.

The specially notable feature of the administration of the State has been the success of the State's effort to tide over the scarcity of foodstuffs. The State has exported large supplies of grains to deficit areas, hard hit by scarcity. It also maintained civilian supplies all over the State at cheap rates.

BHOR STATE lies in the Western Ghats between north lat. 18° and 18°45′ and west long. 75° and 74°12′. The capital town is Bhor, 32 miles from Poona and 26 miles from Lonand on the M. & S. M. Railway. The State contains forts of historical interest like Torna and Rajgad, and a number of caves which come down from the Buddist period. The State is entitled to a dynastic salute of 9 guns.



HIS HIGHNESS RAJA SHRIMANT SIR RAGHUNATHRAO SHANKARRAO PANDIT PANT SACHIV, K.C.I.E., MADAR-UL-MAHAM, of Bhor was born on September 20, 1878. He studied at two famous institutions, the Poona High School and the Deccan College where he also took a course in law. He ascended the *gadi* on July 17, 1922. His first wife S. S. Gangutai Saheb, whom he married in 1893, died in 1907 fourteen years later. He married a second time in 1908 but lost his second wife S. S. Laxmibai Saheb too in 1931. The Heir-Apparent, Shrimant Sadashivrao alias Bhausaheb, son by His Highness' first wife, was born on September, 27, 1904.

His Highness has travelled widely and has visited England and the Continent of Europe.

The area of the State is 910 sq. miles, and the population according to the 1941 census 1,55,961. The average annual revenue of the State is about Rs. 9,05,000.

INDUSTRY

Rice is the principal crop, though bajri and jawar are also grown in some parts. There are five industrial concerns in the State, the Bhor Trading Co., the Bhor Industries, Ltd., Shri Laxmi Textile Mills, Ltd., Raja Raghunathrao Mills, Ltd., Parek Paper Mills, Ltd. which are all doing very well under the fostering care of the Administration. A project for starting a sugar factory is under consideration. Under post-war planning the State has a scheme for the construction of certain irrigation works, a second scheme for the extension of communications, and a third one for the development of its forest resources.

Primary education has been free since 1922, and scholarships are provided for higher education. There is a State High School at Bhor, the Rajah Raghunathrao High School and a private English school at Pali. Liberal grants are awarded to all private schools. The State also maintains a public library.

ADMINISTRATION

The State enjoys full internal powers. On August 18, 1947, on the occasion of the silver jubilee of his accession to the *gadi*, the Raja introduced responsible government into the State. The State budget is votable. And practically all the departments are in charge of four ministers selected from the Legislature. The State has its own High Court.

BIKANER the northernmost State in Rajputana lies between north lat. 27°12′ and 30°12′ and east long. 72°12′ and 75°41′. It is bounded on the north and west by Bahawalpur State, on the south-west by Jaisalmer State, on the south by Jodhpur State, on the south-east by Jaipur State, on the east by Loharu State and Hissar Dt., and on the north-east by Ferozepur Dt. In point of area it is the sixth largest State, and the second largest in Rajputana. The northern portion of the State consists of level loam land while the remainder is, for the most part, sandy and undulating. The average annual rainfall is about 12 inches. The water level over most of the State is from 150 feet to 300 feet deep.

The reigning family of Bikaner belongs to the Rathor clan of Rajputs who have always been a race of distinguished warriors. The State was founded in 1465 A.D. by Rao Bikaji, son of Rao Jodhaji, ruler of Marwar, and after him both the State and the capital city are named.

Bikaner, which is the third biggest city in Rajputana has a population of 1,27,226 according to the 1941 census. It is a fine city with a network of roads and buildings and other works of public utility and amenities of modern type. Among the finer buildings which are worthy of note are the Lallgarh Palace, the residence of His Highness the Maharaja; the Museum; the Legislative Assembly Hall; the public offices and Law Courts; the Victoria Memorial Club, built in memory of Queen Victoria; the Dungar Memorial College apart from the old palaces and the Fort, and a Public Park with the Kirti Stamba, a 60 feet high memorial to the martial glory of Bikaner.



HON. LT.-GENERAL HIS HIGHNESS MAHARAJADHIRAJA RAJ RAJESHWAR NARENDRA SHIROMANI MAHARAJA SHRI SADUL SINHJI BAHADUR, G.C.S.I, G.C.I.E., C.V.O., was born on September 7, 1902. He ascended the throne and was also invested with the full powers on February 2, 1943. His Highness attended the Coronation Durbar in 1911 when he was appointed a page to King George V. During the Prince of Wales' tour of India in 1921-22 he was attached to his personal staff. He also was Chief Minister of the State from 1920-25.

The Maharaja of Bikaner has travelled widely. He accompanied his father to Europe when the latter attended the Peace Conference after the First World War and the meetings of the Assembly of the League of Nations in 1924 at Geneva. His Highness was equally active during the Second World War. For instance, he toured the Middle East Theatre of War in November 1943, and then the Assam Burma Front in November 1944 to inspect the Bikaner Bijey Battery there.

His Highness played a most notable part in bringing about constitutional unity between the Indian States and the Indian Dominion. It was also to a great extent through His Highness' efforts that satisfactory assurances in respect of the place of the States in the Indian Union were secured.

The Maharaja of Bikaner has married the sister of H. H. the Maharaja Sri Gulab Sinhji Bahadur of Rewa, and has two sons: Maharaj Kumar Sri Karni Sinhji Bahadur, the Heir-Apparent, and Maharaj Kumar Sri Amar Sinhji Bahadur, and a daughter who is married to the Maharaj Kumar Sri Bhagwat Sinhji Bahadur, Heir-Apparent to the throne of Udaipur. On January 13, 1946 a son was born to the Heir-Apparent of Bikaner.

The area of the State of Bikaner is 23,317 sq. miles and the population 12,92,938 according to the 1941 census, an increase of 38.1 per cent over the figure of 9,36,218 recorded in 1931. 70 per cent of the population is Hindu, 14 per cent Muslim, 6 per cent Sikh and 3 per cent Jain.

The estimated total revenue for 1947-48 is Rs. 3,19,22,891 out of which the ordinary revenue is Rs. 2,80,07,646 and capital and extraordinary Rs. 39,15,245.

PRODUCE & INDUSTRY

The State is mainly agricultural although the trading classes have got very big business concerns in all parts of the Dominion as well as abroad. The principal crops in the order of importance are bajri, gram, wheat, barley and jowar. Sarson, cotton, sugar-cane and pulses are also grown in the north and east, and tobacco in the east and south. Cattle, sheep and camels are an important part of the wealth of the agricultural population. Though the sheep and camel are famous, attempts are being made to improve the breed still further.

The chief manufactures are glassware, sugar (by vacuum pan process), distillery, plastic product, biscuit, cardboard, oil, soap, rugs, woollen fabrics, carpets, pottery, lacquer-ware, and others. The Bikaner woollen shawls and carpets are famous all over the world.

Among the mineral and other deposits are coal (lignite) at Palana, salt at Lunkaransar, red sandstone near Dulmera, copper near Bidasar, gypsum at Jamsar, Selenite at Lunkaransar, Fuller's earth (Multani Mitti) at Palana and Madh, glass-sand and bauxite at Madh, calcite near Dhirera, barites in Magra District, and limestone in many localities. Saltpetre occurs as a surface efflorescence in soil in some northern parts of the State. The sandstone is of

excellent quality and finds a ready market. The coal is eminently suitable as gas coal and the gypsum deposits are believed to be the best in India. The quantity of selenite available at Lunkaransar is estimated at half a million tons. The glass works at Bikaner is utilizing glass-sand found at Madh which has proved to be of very good quality.

The chief exports are wool, woollen carpets and rugs, rape-seed, sugar-candy, saltpetre, and fuller's earth; while the chief imports are cereals, piece-goods, cotton, sugar, opium, tobacco and metals.

The Bikaner State Railway is the principal means of transport and is 883.5 miles long. It has cost more than 4¼ crores to build including a capital outlay of over Rs. 20 lakhs on a railway workshop.

IRRIGATION

Till 1927 there was practically no irrigation in the State, the crops depending wholly on scanty and precarious rainfall. Now there is a big irrigation works, the Gang Canal, already functioning, and another and much bigger the Bhakra Dam under consideration. The Gang Canal which was opened by Viscount Halifax (then Lord Irwin) in 1927 irrigates an area of about 7,27,000 acres of land in the north-west. The main canal from Ferozepur Headworks in East Punjab to Shivpur in the Bikaner State is 84.7 miles long and it is believed to be the longest concrete-lined canal in the world. The cost of constructing the Canal including the Dam was over 3 crores and 60 lakhs. The State is also participating in the Bhakra Dam Project which it is expected will irrigate approximately another 12 lakhs of acres in the northern parts. The State's share of the cost is estimated at about Rs. 8 crores.

EDUCATION

The nation building activities in the State are equally well looked after. Primary education is compulsory and free for everyone while secondary education is free for the Bikaneris. Liberal scholarships are awarded to State subjects for higher studies in technical subjects in India and abroad.

Bikaner State is well provided with educational institutions. There are 307 primary schools (15 exclusively for Harijans and 15 for adults), 57 middle and lower middle schools, 18 high schools, 4 intermediate colleges including one for girls and one first grade college providing courses in Arts, Science and Law. Among the special types of schools are one public school which uses the latest technique in teaching, a Montessori school for children of both sexes, and a school for the education of girls under strict purdah arrangements.

MEDICAL SERVICE

The medical service too is organized on modern and up-to-date pattern. There are as many as 46 hospitals and dispensaries in the State, and in the capital itself there are two large and well-equipped hospitals one for men, and the other for women and children. In these hospitals

there are arrangements for the most up-to-date treatment in X-ray, deep-ray therapy, radium, penicillin, etc., every department being in charge of a highly skilled specialist. These two hospitals have become centres of medical aid not only for people in Bikaner but also for people from Rajputana, and sometimes even for people in the outlying parts of the Dominion. Besides these two general hospitals there are a Maternity and child-welfare Centre and a special hospital for tuberculosis. The State intends starting an ayurvedic college too in the capital in a short time. A fund of Rs. 40 lakhs has also been earmarked by His Highness the Maharaja to finance an intensive programme of rural uplift including water-supply and drainage in the Capital and rural areas. One lakh of rupees is set apart every year for providing drinking water, and constructing tanks and wells. Other measures to improve the condition of the people include the abolition of import duty on articles of personal use, the remission of several customary levies and in general a reduction of taxes and cesses. Finally, there are 80 co-operative credit societies to help the cultivator.

ADMINISTRATION

From the political point of view Bikaner has been equally progressive. Not less than 10 per cent of the revenue of the State is spent for nation-building purposes. Bikaner has a separate and well-defined civil list and privy purse with strict demarcation between the personal expenditure of the Ruler and State expenditure. Bikaner was the first State to separate the Judiciary from the Executive, to raise the Chief Court to the status of High Court and to establish a Legislative Assembly with powers of interpellation, discussion of budgets, voting grants, moving adjournment motions, etc. (1913).

His Highness the Maharaja was pleased to promulgate recently the Government of Bikaner Act, 1947, which in two years will lead to the establishment of responsible Government under the ægis of the Ruler, with suitable provision for entrusting vast powers to popular ministers even during the interim period. The Act will bring into existence a legislature of two Houses on a wide and popular franchise and the entire range of administration will be entrusted to a Council responsible to the Legislature with a few reservations relating to His Highness' Household, the Devasthan Department, the Army, and His Highness' relations with Chiefs and Nobles and other Jagirdars. As for local self-government there are 175 Panchayats, a number of District Boards and Municipalities with elected Presidents.

BILKHA is a Rajput State. The Rulers belong to the illustrious Vala Katni Rajput clan and claim descent from the Oghad Virani branch of the Jetpur House.



DARBAR SHREE RAVATEVALA SAHEB, the present Ruling Chief of Bilkha, was born on January 19, 1906. He succeeded to the *gadi* on January 19, 1928.

The Ruler was educated at the Rajkumar College, Rajkot. He married Bai Shree Devkunverba Saheba in February 1928. The Ranisaheba is religious-minded and does not observe pardah. The Ruler has four sons, Prince Jaswant Singhji who is the Heir-Apparent, K. S. Kishorsinghji, K. S. Ranjitsinhji and K. S. Harishchandrasinhji. He has three daughters. The eldest daughter Rajkumari Shree Nandkunverba, was born on December 28, 1929. She is brilliant in her studies and is the first Rajkumari in the community to appear for the matriculation examination of the Bombay University in 1945. The second daughter Kumari Bhanukunverba, was born on October 7, 1935.

The area of the State is 167 sq. miles. It has a population of 45,000. The annual revenue is Rs. 5,87,000. The State has acceded to the Dominion of India.

The Chief Saheb is a great lover of sports and shikar. He takes special interest in cricket, tennis, billiards, golf and volley ball. He won the Kathiawar Gymkhana Tennis Challenge Cup, the Billiards Cup and the Gibson Volley Ball Challenge Shield in 1940. He is a good marksman. He is an expert rider and owns some of the best Kathi horses. He visited England on the occasion of the coronation of His Imperial Majesty King George VI in 1937 and toured the Continent.

The jurisdiction of the Ruler extends over 29 villages. Of these Bilkha, Kunkavav, Medarda and Chital are towns of some commercial importance and afford scope for development of commerce and industry.

REVENUE

In matters of revenue, the system of Bhagbatai prevails in the State. But the Chief Saheb has granted proprietory rights to the Khaduts on their holdings.

COMMUNICATIONS

The important means of communication are railways and roads. Bilkha town is served by the Junagadh State Railway and is a station on the Junagadh-Visavadar section, while Kunkavav and Chital are stations on the Jetalsar-Dhasa section of the Gondal Railway. There is a regular motor service between Medarda and Dushala, and Medarda and Junagadh.

The State has made some progress in the sphere of irrigation. It has recently built a tank named 'Ravatsagar' which irrigates about 1,000 acres of land.

The cessation of hostilities has brought the problem of post-war reconstruction to the forefront and the Ruler has evinced a keen interest in this direction.

ADMINISTRATION

The Chief Saheb is deeply solicitous of the advancement of his State in every respect and it has been his earnest ambition to raise the standard of living of his subjects in all possible ways. With this object he made strenuous efforts to consolidate his Giras which were lying scattered under the exchange system and secured complete sovereignty over the towns of Bilkha, Medardar and Chital, which were Majmu till 1935. Bilkha, the capital of the State, is equipped with electricity and possesses good roads. It has a middle school, a taluka school and girls' school. The Ruler has decided to raise the middle school to a full fledged high school as early as possible. The State has provided medical facilities as well. There is a hospital in Bilkha for medical aid to the people. Construction of a decent hospital with sufficient beds and all modern equipments, and the development of commerce and industry in Bilkha are engaging the attention of the Rajasaheb.

PRINCIPAL OFFICERS

Dewan : CHHOTALAL P. BHATT, B.A., LL.B.

Revenue Member : K. V. SHUKLA.

General Member : LT. YUVRAJ SHREE YESHWANT SINGHJI SAHEB.

Sar Nyayadhish : P. D. KAMDAR, B.A., LL.B.

Private Secretary : N. M. KAJI, B.A., LL.B.

Chief Medical Officer : DR. N. T. VYAS, L.C.P.S.

HEIR-APPARENT



PRINCE JASWANTSINHJI who is the eldest son of the Ruler, is the Heir-Apparent to the throne of Bilkha. He was born on November 19, 1928. He is a keen sportsman like his father and is the captain of the Chandhri High School, Rajkot, C.S. He is also a first class tennis player. A keen marksman, he has shot many lions and panthers. The Yuvraj married Rajkumari Nirvanadevi, daughter of His Highness Major Jogendrasen, K.C.S.I., the Maharaja of Mandi, on May 27, 1946. This alliance is considered to be a social reform marriage in Bilkha.

BUNDI STATE is a mountainous territory in the south-east of Rajputana. It is bounded on the north by Jaipur and Tonk, on the west by Udaipur and on the south and east by Kotah. The jungles of Bundi were in old days famous for big game. Bundi, the capital of the State, is one of the picturesque towns in Rajputana.



MAJOR HIS HIGHNESS HARENDRA SHIROMANI DEO SAR BULAND RAI MAHARAJA DHIRAJ MAHARAO RAJA BAHADUR SINGHJI BAHADUR, M.C., A.D.C., MAHARAO RAJA of Bundi, the present Ruler, stands fourth in order of precedence amongst the Princes of Rajputana.

His Highness was born on March 17, 1921 and succeeded to the *gadi* on April 23, 1945, and educated at Mayo College. *Administrative training:* Police Training College, Moradabad 1940, and I.C.S. Probationers Course at Dehra Dun, 1941. *Married:* The eldest daughter of H. H. the Maharaja of Ratlam, April 1938. *Heir-apparent:* Maharaj Kumar Ranjit Singh, *born* 13th September 1939.

War Services: Entered the Army in 1942 and posted to the Officers' Training School, Bangalore. Commissioned in the Probyn's Horse (Indian Armoured Corps). Served in the Burma campaign. Wounded 2nd March, 1945. Received immediate award of Military Cross, April 1945, for conspicuous gallantry during attack on Meiktila.

The Ruler of Bundi is the head of the Hara Sect of the Great Clan of Chauhan Rajputs, and the country occupied by the sect has for the last 5 or 6 centuries been known as Haraoti. The State was founded in the early part of the thirteenth century. Bundi State has joined the Indian Union after the lapse of Paramountcy on the 15th August, 1947. *Area of State:* 2,200 sq. miles. *Population in* 1941 : 2,49,374. *Salute:* 17 guns. *Revenue:* Rs. 40 lakhs.

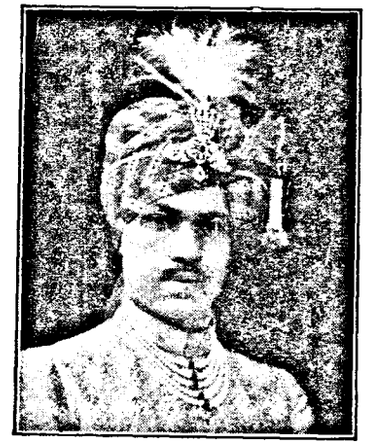
ADMINISTRATION

His Highness is assisted in the administration by a council of ministers, of which he is the President. *Ministers*—Rao Sahib Th. Mahipal Singhji (Ag.), *Prime Minister;* Pt. Deoki Nandan Chaturvedi, B.A., LL.B., *Health and Education Minister;* Maharja Sheo Nath Singh, *Home Minister.*

HIGH OFFICIALS: *Chief Justice:* PT. G. L. DHANOPIA, M.A., LL.B.; *Acctt. General:* KEDAR MAL KABRA; *Puisne Judge:* J. N. TIKKU, B.A., LL.B.; *Customs and Excise Commr.:* PT. RAM DUTT, M.A., LL.B.; *Rev. Commr.:* PT. BHAGWAT DUTT, B.A., LL.B.; *Executive Engineer:* M. L. SABHERWAL; *I. G. of Police and Military:* RAI BAHADUR MANOHAR LAL KAUL; *Chief Medical Officer:* DR. S. V. DUBE, M.B.B.S., D.M.R.E. (Acting); *District & Sessions Judge:* PT. DURGA SHANKER DAVE, B.A., LL.B.; *D.P.I.:* KR. CHANDRA DIP SINGH, B.A., L.T.; *Secretary, State Council:* RAJ RAJESHWAR NATH JAIN; *Conservator of Forests:* RANBIR SINGH PAWAR, B.A., LL.B. (Acting).

CAMBAY STATE is bounded on the east by the Baroda State, on the north and west by Ahmedabad, and on the south by the Gulf of Cambay. The Ruler is a moghul of Shia faith of the Najam-e-Sani family of Persia.

Cambay, the capital of the State, stands at the head of the Gulf of Cambay. Lal Bagh, where the forces of the Moghul Emperor Akbar stayed when he visited Cambay and Kothi and where the East India Company established a factory in 1613, and the Dil Kush are historically important buildings.



HIS HIGHNESS NAJAIN-UD-DAULAH MUMTAZ-UL-MULK MOMIN KHAN BAHADUR DILAVERJUNG NAWAB MIRZA HUSSAIN YAWAR-KHAN BAHADUR, the Nawab of Cambay, was born on May 16, 1911. He succeeded to the *gadi* on January 21, 1915, and was invested with full powers on December 30, 1930. His Highness was educated at Rajkumar College, Rajkot till 1928, and afterwards spent a year in Europe accompanied by his tutor and companion. The Heir-Apparent JANAB WALIAHAD BAHADUR NAWABZADA MIRZA MUHAMAD JAFAR ALI KHAN was born on October 15, 1936. The Ruler is entitled to a salute of 11 guns.

The area of the state is 392 sq. miles, its population 96,501 (1941 census) and its revenue on the average of the last five years' normal income, Rs. 18,87,124. The State has acceded to the Indian Dominion.

The State has a textile mill, three match factories, one starch factory and one glue factory. Besides, dressing of Cornelian and Agate and some precious stones is done.

All services in the State are pensionable. Survey and settlement have been extended to every village in the State. Free primary education and free medical aid are provided. Liberal endowments are given for the relief of agricultural indebtedness. Each village has a panchayat. The High Court is independent of the Executive.

ADMINISTRATION

The administration is carried on by the Interim Council with the Dewan as the President and four others as members, three of whom are popular ministers.

Dewan and President: SARDAR SAHEB SARDAR RANBIR SINGH, B.A.; *Minister for Central Excises:* SAGOONLAL C. DESAI, B.A., LL.B.; *Minister for Revenue:* MADHAVLAL B. SHAH; *Minister for Law:* CHIMANLAL D. BHAGAT, B.A., LL.B. *Minister for Public Health:* HUSAINBHAI F. ALI.

CHAMBA STATE is one of the oldest principalities in India and was founded by Meruta in A.D. 550. It is bounded on the west and north by Kashmir, on the east and south by the districts of Kangra and Gurdaspur and is shut in on almost every side excepting south-west by lofty hill ranges. The whole country is mountainous and is a favourite resort of sportsmen. It possesses a remarkable series of copper plate inscriptions from which its chronicles have been compiled. Chamba town is the capital of the State and the Ruler is a Rajput of the Surajbansi Race.



MAJOR HIS HIGHNESS RAJA LAKSHMAN SINGH, the present Ruler of Chamba State, was born on December 8, 1924. He succeeded to the *gadi* on December 7, 1935, and was invested with full ruling powers on May 4, 1945. His Highness was educated at Aitchison College, Lahore.

The area of the State is 3,127 sq. miles, its population 1,68,938 and its revenue Rs. 16,00,000. The Ruler is entitled to a salute of 11 guns. The State has acceded to the Dominion of India.

PRODUCE

Crops are rice, maize and millets. There are some valuable forests in the State. The possibilities of developing fruit growing for export, cultivation of profitable crops, etc., and mining are being investigated. A couple of Sindhi bulls and heifers have been imported into the State and bull-calves from that breed are distributed amongst villagers for improving the local cattle breed. A department of Industries has been started to explore the possibilities of development in sheep-breeding, bee-keeping, manufacture of textiles, wood work, etc.

Education is free in the State except in higher classes. There is a high school in Chamba town. The State has about 60 primary and lower middle schools.

Medical aid also is free throughout the State. The Chief Medical Officer is in charge of the Public Health and Medical Relief. The Municipality is looking after the sanitation and conservancy in the town. The State has its own Veterinary dispensary.

Co-operative movement has been started since 1943, and thrift and credit societies have been opened. A Central Co-operative Bank has also been started.

The Chief means of communication in the State are roads. The principal road to Chamba town is from Pathankot, the terminus of the Amritsar-Pathankot branch of the North Western Railway. The Darbar have drawn up a five-year road development plan. The wheeled traffic road from Banikhat to Chamba, which forms the chief item of this plan, is almost complete. A lorry service is in operation. Construction and improvement of other essential roads in the interior are also contemplated.

ADMINISTRATION

With a view to associating the people more closely with the administration, the following committees have been constituted namely, Legal Codification Committee, composed of non-officials to advise the administration on the exact form which new State Laws should take, a Municipal Committee in the town, a Constitutional Reforms Advisory Committee to advise the Durbar in drafting the constitution for the State and a Non-Official Advisory Committee to advise the Director of Civil Supplies and the Textile Commissioner. Panchayats have been established in all the Parganas of the State. The judiciary is independent of the Executive. The administration is carried on by His Highness with the assistance of a Council consisting of: *Dewan:* R. S. Lubhaya, B.A., LL.B., and two members—*Home Member:* THAKUR INDAR SINGH; *General Member:* LALA PRAKASH CHAND, B.A., LL.B.

CHARKHARI STATE in Central India, is bounded on the north by the Districts of Banda and Hamirpur, on the south by the States of Chhatarpur and Ajaigarh, on the east by the District of Banda and the States of Ajaigarh and Panna, and on the west by Dhasan River. The State has acceded to the Dominion of India.



HIS HIGHNESS MAHARAJADHIRAJ SIPAHDARUL MULK MAHARAJA JAYENDRA SINGH JU DEO BAHADUR, the present Ruler of Charkhari, and the second son of Shri Raja Mahipal Singh Ju Deo, C.S.I., Ruler of Sarila State, was born on May 24, 1929. The Maharaja was educated at Mayo College, Ajmer and Daly College, Indore. He was installed on the *gadi* on September 7, 1942. His Highness assumed the reins of Government at a grand Darbar held on August 28, 1947. The Ruler is entitled to a salute of 11 guns. His Highness is a keen sportsman.

Judiciary is independent of the Executive. The laws in force in the Indian Dominion are applied in the State. Every big village has a panchayat court to dispose of petty civil and criminal cases.

The State has well organised Revenue, Police, Customs, Excise, Forest and P. W. D. Departments under separate heads. The Ruler takes particular care in the development of education. Dispensaries giving free medicine to suffering humanity have been opened in every Tehsil. There is a Veterinary Hospital at the Headquarters. The State has a power house in Charkhari proper to provide the city with lights. There is a metalled road connecting the Headquarters with the Rly. station at Mahoba on the Jhansi Manikpur section of the G. I. P. Rly.

An experimental agricultural farm demonstrates to the cultivators improved methods of agriculture. Cash Taqavi for seeds, bullocks and wells is liberally distributed every year and grazing facilities have also been extended. Other measures for the uplift of tenants are under the consideration of the Maharaja.

The beggar problem has been completely solved in the State.

ADMINISTRATION

With a view to associating the people of the State with the administration and pending the establishment of a Constituent Assembly for which elections are going to be held shortly, His Highness, immediately after taking over the Government, announced the appointment of an interim government consisting of three members, a Chief Minister, a Public Minister and a Jagir Minister to assist him in the administration of the State.

CHHOTA UDEPUR STATE is situated in the north-east corner of Gujerat, and belongs to the Gujerat States Group. It is bounded on the north by the State of Devgarh, Baria and the Thakurate of Kathiwara, on the east by the State of Ali Rajpur, on the south by the River Narbada and some of the Sankheda Mewas estates, and on the west by the rest of the Sankheda Mewas, the Baroda State and the Narukot territory.

H. H. MAHARAWAL SHRI VIRENDRASINHJI, the present Ruler, was born on October 24, 1937. He ascended the *gadi* on October 16, 1946 while still a minor after the death of his father in Lisbon. The Ruler is now in the care of a tutor who is also the guardian.

The area of the State is 890.34 sq. miles, and the population according to the census of 1941 is 162,292. The income of the State for the year 1945-1946 was Rs. 23,55,000 and the expenditure Rs. 23,24,866.

PRODUCE & INDUSTRY

Besides food grains the chief agricultural products of the State are cotton and groundnut. The arable parts are well watered by a number of rivers and rivulets, though the State encourages the digging of wells in private holdings. The methods of cultivation are very primitive especially among the aboriginal tribes, but lately there has been a great deal of improvement owing to the activities of the Agricultural Department.

There are 5 cotton mills, 3 pressing factories, 4 oil mills and one glass works in the State, the Natwarsinhji Glass Works Ltd. There are also lead, copper and manganese mines which are being worked by companies to whom the mines have been leased.

COMMUNICATIONS

There is a railway owned by the State besides the Champaner Shivarajpur Pani Mines Railway which serves the mining areas. There are about 50 miles of metalled roads, running across rivers on causeways, and connected with feeder cart tracts from the outlying villages. There are the usual post and telegraph offices besides telegraph offices at railway stations. There is an automatic telephone system at work in the State capital, while the Taluka Headquarters too have telephone connections.

Education is free in the State. There are a number of educational institutions including an Anglo-Urdu School. The State devotes special attention to the education of girls for which purpose it maintains six schools at Chhota Udepur, Kavant, Jehpur, Jabugam, Tejgadh and Chulamali.

Post-war planning is very much in the minds of the State authorities. They are planning on an ambitious scale to include agriculture, forestry, cottage industries and primary education. It is proposed to construct a new hospital in the capital with the most up-to-date equipment. The authorities are also planning to improve the transport system. It is proposed to erect a new bridge across the Orsang River to connect the Bombay-Baroda Road with the Bombay-Agra Road. And the construction of another 50 miles of metalled roads is well under way.

ADMINISTRATION

The Ruler being a minor, the State is administered by a Board of Regency through an Executive Council consisting of three members, one of whom is a non-official.

CHHUIKHADAN, one of the smaller States in the Eastern States Union consists of three separate blocks surrounded by the States of Khairagarh and Nandgaon, and the Zamindaris of the Drug district. The capital Chhuikhadan (meaning quarry of white clay) is situated 31 miles both from Rajnandgaon and Dongargarh, two stations on the Bengal Nagpur Railway.

The founder of the State was Mahant Rupkishore Das, who entered the service of the Nagpur Durbar and was rewarded by the grant of Chhuikhadan as *jagir*. Rup Das being a *vaishnava* the State descended from *Guru* to *Chela* but later the system of descent was changed to one of father to son through marriage. The State lapsed to the British Government in 1853. In 1865 the status of Feudatory Chief was conferred on the then ruler Mahant Luxman Das, and an adoption *sanad* granted. In 1937 another *sanad* was granted defining the ruler's status and powers.



The present ruler, MAHANT RITU PARNA KISHORE DAS was born on July 3, 1922, and was educated at the Rajkumar College, Raipur. He was invested with full ruling powers on April 2, 1944. The Mahant has two younger brothers Kumar Thalendra Kishore Das and Kumar Radha Sarveshwar Kishore Das.

The area of Chhuikhadan is 153 sq. miles and the population according to the 1941 census 32,715. The total revenue of the State in 1945-46 was Rs. 1,52,324 and the total expenditure Rs. 1,07,732. The inhabitants of the State are mostly Lodhis, Telis, Gonds and Chamars.

AGRICULTURE, FOREST

The State is mainly agricultural, the principal crops being rice, wheat, gram, linseed and kodo. The State also possesses about 17 sq. miles of forest, the principal yield from which consists of timber, fire-wood, bamboos and some other minor produce. The export trade of the State consists chiefly of grains and betel leaves, while imports include sugar, gur, cloth, yarn, salt and kerosene.

The State has a well-equipped hospital at the capital. There are 20 schools for boys and girls with 1,521 names on the rolls. Primary education is free, and the State spends as much as Rs. 11,500 (figures for 1945-46) on education as a whole.

The State has been keen on associating the people with the administration. Chhuikhadan town, for instance, has a municipality with an elected majority.

The State has prepared an elaborate scheme of post-war reconstruction which includes among others the building of a new dispensary, 2 new schools, several bunds and wells and 10 model villages.

CHITRAL STATE occupies a unique strategic position on the extreme north of the Dominion of Pakistan.

The Chitral dynasty traces its descent to Amir Timur, the famous Tamerlane, through his grandson Sultan Hussain, the Emperor of Herat. Mirza Ayub, the grandson of Sultan Hussain came to Chitral as an exile and married the daughter of the then Ruler of Chitral, who styled himself the descendant of Alexander the Great. The issue of the marriage was the founder of the present dynasty.



LT.-COL. HIS HIGHNESS HAJI MOHAMMAD MUZAFFAR-UL-MULK, the present Ruler of Chitral State, was born on October 6, 1901. He was educated at the Islamia College, Peshawar. His Highness succeeded to the *gadi* on July 29, 1943, when his elder brother died without a male issue.

The area of the State including the districts of Yasin, Ghizer and Ishkoman, is about 8,000 sq. miles. The Ruler is entitled to a salute of 11 guns.

The State has acceded to the Dominion of Pakistan.

RESOURCES

The Ruler has placed the mineral resources of his State at the disposal of the Pakistan Government and has also offered 5,000 Deodar trees in the State forests free of cost for building purposes to the Pakistan Government.

He has contributed Rs. 30,000 to the Quaid-i-Azam's Relief Fund.

The State maintains its own State Forces known as Body Guard with more than 5,000 trained men.

The valleys of which the State consists are extremely fertile and perennially cultivated.

COCHIN is a maritime State lying in the south-west corner of India. It is bounded on the north by Malabar, on the east by Coimbatore Dt., on the south by the Travancore State, and on the west by the Arabian Sea.



H. H. SRI RAMA VARMA, THE MAHARAJA OF COCHIN, was born in August 1876. He succeeded to the *gadi* in July 1948 on the death of his brother, the late Maharaja.

The area of the State is 1,480 sq. miles and the population 14,22,875 according to the 1941 census. The income for the financial year 1945-1946 was Rs. 3,74,68,700 and the expenditure Rs. 3,72,94,700. Budget estimates for the current year are receipts Rs. 4,19,00,000 and expenditure Rs. 4,17,00,000.

Nearly a third of the State is covered with dense forests in which teak, ebony, rose-wood and other valuable trees abound. The forests of the State are among its greatest assets. Rice forms the staple of cultivation. Cocoanuts are largely raised in the sandy tracts and their products are among the chief exports of the State.

The State is equally well advanced in industry. There are 110 factories. These include 20 rice mills, 11 oil mills, 35 tile factories, 2 saw mills, 3 coir factories, one spinning and weaving mill, one spinning mill, one plywood factory, 2 engineering works, etc. Cottage industries include manufacture of furniture, coir goods, bell-metal wares, screw-pine and bamboo mats, agricultural implements, leather goods, handloom products, etc. Cochin has a magnificent harbour and is expected to develop into one of the major ports of India.

In point of education Cochin occupies a front rank among Indian States and Provinces. Primary education is free. There are 719 educational institutions including 9 first grade colleges and a Training College, with a total strength of 2,29,800 (1,29,391 boys and 1,00,409 girls). Apart from libraries attached to schools in urban areas there are 217 rural libraries. The State also maintains 57 medical institutions (allopathic) and 91 ayurvedic institutions.

ADMINISTRATION

The Government is carried on by the Maharaja through a Council of Ministers responsible to the Legislature elected on a wide franchise. Virtually full responsible government has been granted to the people. Legislation rests with the legislature but without prejudice to the right of the Maharaja to make laws. At the head of the judicial administration of the State is the High Court.

Local administration is carried on by 6 municipalities and 87 panchayats in the villages.

Prime Minister : RAO BAHADUR T. K. NAYAR; *Ministers :* PARAMBI LONAPPAN, B.A., B.L.; K. BALAKRISHNA MENON, B.A., LL.B.

COOCH BEHAR STATE in West Bengal is bounded by the Districts of Jalpaiguri, Goalpara and Rangpur. The area of the State is 1,318.35 square miles, its population 6,39,898 and its revenue about rupees one crore. The State has acceded to the Dominion of India.



HON. LT.-COLONEL HIS HIGHNESS MAHARAJA SIR JAGADDIPENDRA NARAYAN BHUP BAHADUR, K.C.I.E., the present Ruler of Cooch Behar, was born on December 15, 1915 He succeeded to the *gadi* on December 20, 1922, and was invested with full ruling powers on April 6, 1936. The Ruler is entitled to a salute of 13 guns. His Highness was educated at Harrow and Trinity Hall, Cambridge.

Her Highness the Maharani Saheba, daughter of His late Highness the Maharaja Sayajirao Gaekwar of Baroda, is the mother of the Maharaja. His Highness has a brother, Maharajkumar Indrajitendra Narayan and two sisters Maharajkumaris Gayatri Devi (H. H. Maharani Sahiba of Jaipur) and Menaka Devi (H.H. Maharani Sahiba of Dewas Jr.).

ADMINISTRATION

The administration is assisted by a Legislative Council which is fully representative of the different interests in the State. In view of the general constitutional development in India, His Highness has increased the number of non-official members to provide for a non-official majority.

President, State Council: HIS HIGHNESS THE MAHARAJA BHUP BAHADUR; *Chief Minister:* RAI BAHADUR HIMMAT SINGH K. MAHESWARI; *Household Minister:* MAJOR RAJKUMAR RAJENDRA SINGH, Bar-at-Law; *Public Health and Education Minister* (representing the non-official group of the Legislative Council to which he is responsible): S. C. ROY SINGH SARKER, B.L.; *Finance Minister*. MAULVI ANSARUDDIN AHMAD, B.A.; *Revenue Minister:* M. W. BAZLEY RAHAMAN SARKER, B.L.

JUDICIARY

Chief Justice: RAI SUBODH CHANDRA DUTT BAHADUR, B.L., District and Sessions Judge, Bengal (Retd.); *Puisne Judge:* SRIJUT T. P. MUKHERJEE, M.A., B.L.

DASPALLA STATE is situated in the Eastern States Union. It was founded in the year 1495 A.D. by Sal Bhanj. The Ruling house is descended from the Bhanj family of the Salar dynasty. The emblem of the State is peacock and the sun. The present Ruler is the seventeenth descendant of the dynasty.



RAJA BAHADUR KISHORE CHANDRA DEO BHANJ, the present Ruler of Daspalla State, was born on April 16, 1908. He succeeded to the *gadi* on December 11, 1913 as the Minor Chief. He was invested with full ruling powers on March 3, 1930.

The Raja Bahadur was educated at the Rajkumar College, Raipur, and passed the Diploma examination creditably in 1927. He was attached to the Raipur district for two years as an Honorary Assistant Commissioner and Magistrate for practical training and had the final year of training in the State itself.

He married the only sister of the Ruler of Bamra State on February 6, 1931. The Heir-Apparent Jubraj Purna Chandrao Deo Bhanj was born in 1932. The title of 'Raja Bahadur' was conferred on the Ruler in 1941.

The area of the State is 568 sq. miles. The State has acceded to the Dominion of India. The people of the State speak Oriya.

Daspalla is an agricultural territory. The staple food crop is rice which is grown extensively in the State with some subsidiary crops such as pulses, etc. Nearly two-thirds of the area is covered with dense forests which abound in sal, bamboos and other valuable trees.

REFORMS

Various improvements have been effected in different departments of the State since the assumption of administration by the present Ruler. The headquarters have been connected with the Railway station Khurda Road on B. N. Rly. by an all weather road with permanent bridges. Several charitable dispensaries have been opened in the interior. There is a telephone system connecting important places. The town has been provided with electricity.

There has been good progress in education. Free and compulsory primary education has been introduced. Various rights and concessions have been granted to the State subjects.

The Raja Bahadur is anxious to remain in constant touch with his subjects rich and poor with a view to hearing their grievances personally and granting redress. He places the prosperity of his people above everything else.

DATIA STATE is one of the states forming the Bundelkhand group. The Rulers are Bundela Rajputs of the Orchha House. The territory was granted by the Chief of Orchha to his son Bhagwan Rao in 1626. This was extended by conquest, and by grants from the Delhi Emperors. The capital of the State is Datia.



LT.-COLONEL HIS HIGHNESS MAHARAJA LOKENDRA SIR GOVINDSINGH JU DEO BAHADUR, G.C.I.E., K.C.S.I., the present Ruler of Datia State, was born in 1886. He ascended the *gadi* on August 5, 1907.

His Highness is a Patron of St. John Ambulance Association, Vice-Patron of National Horse Breeding and Show Society, Vice-President of Red Cross Society and All India Baby Week Society, and Vice-Patron, Girl Guide Association, Indian Empire. He is a member of the Cricket Club of India, besides being a member of several societies, associations and clubs.

HOSPITALS & SCHOOLS

The Maharaja contributed several lakhs to the war effort during the 1st world war. He presented a statue of Lord Reading to the Imperial Capital, Delhi. Several beautiful buildings of public utility, like the Lord Hardinge Hospital, Maharani Mohan Kunwar Female Hospital, Maharajkumari Rupkunwar Dispensary, Lord Reading High School, Lady Willingdon Girls' School and Town Hall, have been constructed in his own capital town.

His Highness celebrated his Silver Jubilee in 1933. He has shot big game in South-East Africa and also in India.

The area of the State is 912 square miles. Its population is 1,74,072 and it has a revenue of about Rs. 20,00,000. The state has acceded to the Dominion of India.

ADMINISTRATION

The administration of the State is conducted with the assistance of an Executive Council of which His Highness the Maharaja Saheb is the President. Besides the President, the Council consists of the Dewan, Home Member, Army Member, Judicial Member and General Member. A new constitution for the State is under preparation.

Dewan : RAO KRISHNAPAL SINGH.

DEWAS SENIOR STATE, excluding the isolated pargana of Bagod, lies entirely on the Malwa plateau in Central India. Its territories, which are intermixed with the possessions of other Central India States especially with those of Scindia and Holkar, are situated roughly between N latitude 22° and 24' and E longitude 75° and 77'.



HIS HIGHNESS MAHARAJA KRISHNAJI RAO PUAR, SENA-SAPTA-SAHA[illegible], the present Ruler, was born on May 12, 1932. He succeeded to the *gadi* on March 23, 1947. His Highness is being educated at K. E. G. V. High School, Dewas Senior, and appeared for the high school examination of the Ajmer Board in March 1948.

The area of the State is 449·50 sq. miles, its population 87,479 and its revenue about Rs. 15 lacs. The Ruler is entitled to a salute of 15 guns. The State has acceded to the Dominion of India.

INDUSTRIES

The Shri Vikram Sugar Mills Ltd., Alote, which forms the major industry in the State, is under construction. There are also ginning factories and flour mills, a starch factory, and Electric Power houses. Hosiery industry is conducted on a small scale. The State is predominantly agricultural and about 80 per cent of the population is employed in agriculture.

ADMINISTRATION

The Ruler is a minor and the State is at present under minority administration. Her Highness Maharani Pramila Raje Chhatrapati of Kolhapur, the mother of His Highness, is the Regent of the State. Her Highness carries on the administration with the aid and advice of an Executive Council. Responsible Government has been introduced in the State under the Dewas State Senior Branch Constitution Act of 1947. There is a Lok Pratinidhi Sabha functioning with an elected majority. The Sabha has nominated three of its members to the Executive Council and they command a majority in the Council.

Executive Council :—Dewan and President : RAO BAHADUR RAJMANTRAPRAVIN SARDAR K. P. NAIDU; *Home Minister :* RAJMANTRA PRAVIN MAJOR SARDAR SHANKARRAO A. PAWAR, GAMBHIR RAO, Jahagirdar of Khatamba and Amarpura; *Education and Health Minister :* V. K. BIDWAI, B.A., LL.B.; *Trade and Commerce Minister :* BHIMSINGH RAGHUNATHSINGH CHOUDHURY, B.A., LL.B.; *Local Self-Government Minister :* MAJOR SARDAR THAKORE GIRIRAJSINGH, Isthamurardar of Jawasia.

DEWAS STATE (JR.) is situated in Central India. The founders of the Senior and Junior Branches of the Dewas State were two brothers of the Puar (Parmar) Rajput tribe who came to Malwa about 1730 A.D.



HIS HIGHNESS MAHARAJA SHRIMANT YASWANTRAO BHAUSAHEB PAWAR, the present Ruler of Dewas State (Jr.), was born in March 1905. He succeeded to the *gadi* on December 2, 1943.

He attended Law terms at the Inner Temple, London and underwent a course of military training at Indore. He received administrative training in Revenue and Settlement Departments at Gwalior and acquired practical experience in matters of administration during the regime of his late father. In 1938, when, his father went to Europe, His Highness conducted the administration. Many beneficent reforms were introduced at his instance, notable among them being concerned with Harijan uplift. He is a keen sportsman and a good shikari. He has visited Europe several times.

The area of the State is 422·53 sq. miles. It has a revenue of Rs. 20 lakhs. The Ruler is entitled to a salute of 15 guns. The State has acceded to the Dominion of India.

Industrially the State has made progress. The soap factory, biscuit factory, cotton spinning mills, flour and sugar mills, engineering works, a power house and the handloom industry of Sarangpur are all worthy of mention.

ADMINISTRATION

In pursuance of the long established traditions of the State to associate its people with the administration, a further step towards self-government was taken on the recommendation of a non-official committee appointed for the purpose and the Government of Dewas Junior Act was promulgated during the year under which a Lok Sabha, consisting of 38 members, of whom 31 are elected and 3 officials and 4 non-officials nominated, has been inaugurated.

His Highness is assisted by an Executive Council, whose duty and powers are defined by the Executive Government Act, 1937. There is a Public Service Recruitment Board for State services. Members in charge of the departments are advised by non-official advisory committees. The Debt Conciliation Board has given great relief to the cultivators.

STATE COUNCIL

Dewan and President (Political, Law and Police): MUNTAZIM-I-KHAS BAHADUR M. B. REGE, B.A., LL.B.; *Vice-President and Member for Revenue, Commerce and Industries:* SARDAR T. S. PAWAR, B.A., LL.B.; *Member for Food:* SARDAR G. S. GANDHYE, B.A., LL.B., Bar-at-Law; *Member for Finance:* R. V. RAIRIKAR, B.A.; *Member for Education, Health and Labour:* R. B. DUBE, M.A., J.D.; *Member for P. W. D. and Local Self Government*, BIRDICHANDJI SHRIMAL.

DHAR STATE in the Malwa group in Central India, takes its name from the old city of Dhar, long famous as the capital of the Parmar Rajputs, who ruled over Malwa from the 9th to the 13th century. The present Rulers of Dhar, Puar Marathas, claim descent from the Parmar Rajputs. In the middle of 18th century the Ruler of Dhar, Anand Rao, was one of the leading chiefs of Central India.

The famous and ancient hill-fort of Mandu, the capital of several ancient and mediæval kingdoms, with its beautiful mausoleums, tombs, palaces, high hills and deep valleys, is situated at a distance 24 miles from the city of Dhar.



HON. LIEUT.-COLONEL HIS HIGHNESS MAHARAJA ANAND RAO PUAR SAHEB BAHADUR, the present Ruler of Dhar State was born on November 24, 1920. He succeeded to the *gadi* by adoption on August 1, 1926.

His Highness was educated in Daly College, Indore. He visited England twice in 1937 and 1938. He was invested with full ruling powers on March 16, 1940.

The area of the State is 1800·24 sq. miles. It has a population of 253,258 according to the 1941 census. The average revenue is Rs. 30,00,000. The Ruler is entitled to a salute of 15 guns. The State has acceded to the Dominion of India.

ADMINISTRATION

The administration of the State is carried on by His Highness the Maharaja Sahib Bahadur assisted by a State Council consisting of the Dewan and two members.

STATE COUNCIL

Dewan and President of the Council: DEWAN BAHADUR N. R. CHANDORKAR.

Judicial Member: N. S. BAPAT, B.A., L.T., LL.B.

Revenue Member: RAO SAHIB N. V. JOHSI, B.A.

Assistant to the Dewan in the Finance Branch: R. M. PURANIK, M. A., LL.B.

Huzur and Council Secretary: R. M. PURANIK, M.A., LL.B.

DHARAMPUR STATE is situated in Gujerat. The Ruler who is a Sisodia Rajput belongs to the solar race. The capital of the state is Dharampur.



HIS HIGHNESS MAHARANA SHRI VIJAYADEVJI, RANA SAHEB of Dharampur, was born in 1884. He was educated at the Rajkumar College, Rajkot. He married a daughter of the Maharaja of Rajpipla in 1905 and after her death he married again in 1907 a daughter of K. S. Samantsinhji of Palitana. The Maharaja lost his second wife too in January 1939. The heir to the throne is Maharaj Kumar Shri Narhar Devji who is a graduate of Bombay and Cambridge. The Maharana ascended the *gadi* in 1921, and twenty-five years later in 1946 his subjects celebrated the silver jubilee of his reign with great pomp and eclat.

His Highness' recreations are shooting, music and travelling. His Highness has travelled widely in Europe, America and the Far East and has given the benefit of the travels to his people in the shape of many reforms calculated to promote their social, educational and material welfare.

The area of Dharampur is 704 sq. miles and the population 123,336. The revenue of the State is about Rs. 18 lakhs.

PRODUCE AND INDUSTRY

The State is agricultural, the principal crops being paddy, nagli, tur and cereals. Sugar-cane can also be grown. The State possesses rich forests abounding in 70 varieties of timber but the most important kinds of wood that reach the market are teak, rosewood, tanach, seven, haladvan, etc. As for industry there are rice mills, one oil mill, 2 flour mills, and a saw mill. A sugar factory may shortly be opened. And as there are bamboos in abundance the question of starting a paper or pulp factory is also under consideration.

The State is very liberal in its attitude to the khatedars and the cultivators. Ryotwari is in force. The lands are classified and suitably assessed. The State supplies the cultivator with seeds and manure at concession rates. There are many co-operative societies in the State.

Primary and secondary education are free throughout the State. In all there are 40 primary schools, one high school, one Urdu school, one Taluka school and one Music school. There are hospitals for both the sexes with the most up-to-date equipment. All medical treatment is free throughout the state. And among the amenities are a museum and a public library.

ADMINISTRATION

Administration is carried on through a State Council under the guidance and supervision of the Ruler. Local self-government functions through a Municipal Council with an elected majority for the town, and a number of panchayats of which every important village has one.

President: RAO SAHEB D. C. MEHTA, B.A., LL.B. (Rtd. Dy. Political Agent).
Law Member: B. T. SHAH, B.A., LL.B.
Revenue Member: N. D. PARIKH, M.A., LL.B., B.Com., F.R.E.S.
Secretary, State Council: SHANTILAL L. SHAH B.A., LL.B.
Huzur Personal Assistant: BHOGILAL J. MODY.

DHOLPUR is the easternmost State in Rajputana. The ruling family of Dholpur are Jats of the Bamraolia clan, the latter name being derived from Bamraoli near Agra where an ancestor of the family held lands about 1195. The capital of the State is Dholpur.



LT.-COL. HIS HIGHNESS RAIS-UD-DAULA SIPAHDAR-UL-MULK SARAMAD RAJ HAI HIND MAHARAJADHIRAJ SIR SAWAI MAHARAJ RANA SIR UDAI BHAN SINGHJI LOKENDRA BAHADUR DELER JUNG JAI DEO, MAHARAJA RANA of Dholpur, was born on February 12, 1893. He was educated at the Mayo College, Ajmer where he won several prizes and then for a brief period in the Imperial Cadet Corps after which he made an educational tour of Western Europe.

The Maharaja has married the sister of the present Rais of Badrukhan a very old House of the Phulkian States. The Maharaja succeeded to the *gadi* in March 1913. He is entitled to a permanent salute of 15 guns and a personal salute of 17 guns.

The area of Dholpur is 1,221 sq. miles and the population 286,901.

The revenue of the State is about Rs. 19,74,000.

PRODUCE

Dholpur is a grain producing country, not remarkable for any special manufacture. The principal crops are bajra, moth, jowar, cotton, wheat, gram and barley. The hills in the Western parts of the State supply inexhaustible quarries of fine grained and easily worked red sandstone. The chief exports besides sand-stone are cotton, ghee, and in good years wheat, gram, bajra, til and mustard seed and the principal imports include salt, cloth, sugar, rice and tobacco.

The Poona-Agra Road as well as the G.I.P. Railway run through the State. There are three railway stations, one at Dholpur and the other two at Mania and Gher respectively.

The present Ruler takes a deep interest in the welfare of his subjects. The number of schools in the State is 34 including one high school teaching up to the Matric standard. There are three well-equipped charitable hospitals and also a separate hospital for orthodox people where indigenous treatment is given. To help the agriculturist with loans the State has established a number of banks. Many artificial lakes have also been constructed to supply the cultivator with water for irrigation. The town of Dholpur has been electrified and the Ruler who is very keen on public works has put up many buildings such as the Town Hall, Clock Tower, Orphanage, and so on.

ADMINISTRATION

The State is administered by a Council of which the Maharaja is the President.
Financial and Political Secretary: PANDIT KALADHAR TEWARI.
Political and Judicial Secretary: S. RANBIR SINGH, B.A., LL.B.
Revenue Secretary: BABO MADHO NARAIN, B.A.
Personal Secretary: RAI SAHEB M. DIN DAYAL, B.A.

DHRANGADHRA STATE is situated in the north of the Peninsula of Kathiawar between North Lat. 23°13′ and 22°33′ and East Long. 71° and 71°48′. The capital Dhrangadhra is 75 miles west of Ahmedabad.



HIS HIGHNESS JHALADHIP MAHARAJADHIRAJ MAHARAJA SHRI MAYURDHAWAJ SANJIT, the present Ruler was born on March 3, 1923. He was educated first at Dhrangadhra and then at the Heath Mount School and Haileybury College, England. In 1940 he returned to India to join the St. Joseph Academy at Dehra Dun where he passed the School Certificate Examination in the first grade with distinction. He married, Maharaj Kumari Shri Brijraj Kumari, a daughter of His late Highness the Maharaja Saheb of Jodhpur on March 3, 1943. The Heir-Apparent Namdar Yuvaraj Maharaj Kumar Saheb Shri Shatrujit Deo was born on March 22, 1944. His Highness succeeded to the throne on February 4, 1942, and assumed the reins of government on Cctober 8, 1943.

The area of the State is 1,167 sq. miles, and the population 94,417. The revenue of the State is Rs. 35,00,000.

Cotton, jawar, bajri and wheat are the main agricultural products. The crops are irrigated by water drawn from wells of which there are as many as 4,162. The State helps the cultivator with loans for sinking wells. It has also built a number of dams at Sitapur, Ratawa, Baisabgadh and Kumarkhan Vanta.

INDUSTRIES

The State has been very active in industry too. Salt and magnesium chloride are produced in the State. The State has also established a company, called the Dhrangadhra Chemical Works, Ltd. for the large-scale manufacture of soda ash, caustic soda, and soda bicarb. There is also another company, Mayurdhwaj Magnesia Works, Ltd., for manufacturing magnesia. An article for which Dhrangadhra is justly noted is the fine building stone which occurs at different places in the State.

The State owns the 57 miles of the railway between Wadhwan and Halvad, and another 18 miles between Dhrangadhra and Kuda. There is bus service between Dhrangadhra and Halvad *via* Kondh.

Primary education is compulsory in the State; so is physical education for boys. There are 64 educational institutions including a school for the blind and a co-educational primary school. Adult education is not overlooked. Free medical help is liberally provided.

A major item in the post-war reconstruction programme is the building of a dam at Bhambhan at a cost of Rs. 30,00,000 which will bring about 75,000 acres of land under cultivation.

Administrative changes were introduced in less than a year after the Maharaja ascended the *gadi*. Administration is conducted by a State Council appointed by His Highness. The members are: *President:* HIS HIGHNESS THE MAHARAJA; *Dewan and Vice-President:* G. R. RADDI, M.A., (London); *Education and General Member:* W. G. SUBHEDAR, B.Sc., LL.B.; *Revenue and Supplies Member:* M. V. ARVIND, B.A., LL.B.

DUNGARPUR STATE in the south of Rajputana is bounded on the north by the Udaipur State, on the west by the Idar State, on the south by the States of Lunawada, Kadana and Sant, and on the east by the Banswara State.

The Rulers of Dungarpur belong to the Gehlot-Ahara clan of the Sisodia Rajputs and are the eldest branch of the House of Udaipur. Dungarpur was founded by and named after Maharawal Dungar Singh on whose death the State of Vagad was split up, the portion to the west of the river Mahi with the capital Dungarpur, being retained by the elder son Prithvi Raj.



HIS HIGHNESS RAI-I-RAYAN MAHIMAHENDRA MAHARAJADHIRAJ MAHARAWAL SHRI SIR LAKSHMAN SINGHJI BAHADUR, G.C.I.E. (1948), K.C.S.I. (1935), the present Ruler of Dungarpur, was born on March 7, 1908. He succeeded to the *gadi* on November 15, 1918. The Maharaja married the granddaughter of the Raja of Bhinga on February 8, 1920. He was educated at Mayo College, Ajmer, passed the Diploma Examination, and studied upto the first year of the Post-Diploma course. He visited Europe in 1927.

The Ruler was invested with full ruling powers on February 16, 1928. He married a second time the daughter of His late Highness Maharaja Sir Madan Singh Bahadur of Kishengarh in 1928. He has three sons, four daughters and three brothers. The Heir-Apparent, Maharaj Kumar Shri Mahipal Singhji Bahadur, was born on August 14, 1931. The Ruler is entitled to a salute of 15 guns.

The area of the State is 1,460 sq. miles, its population 274,000 and its average revenue Rs. 25,00,000. The State has acceded to the Indian Dominion.

ADMINISTRATION

His Highness the Maharawal Sahib Bahadur has established an Interim Responsible Government. The Cabinet consists of five popular Ministers. There is a State Legislative Council consisting of official as well as non-official members. Introduction of meter gauge railway line, construction of roads throughout the State, development of mineral resources, establishment of industries, and connecting the capital with important towns and villages through a telephonic system are among the post-war plans engaging the close attention of His Highness' Government.

GONDAL STATE in Kathiawar lies between North Lat. 21°42′ and 22°8′ and East Long. 70°3′ and 71°7′. The Chief of Gondal is a Rajput of the Jadeja stock with the title of Maharaja Thakore Saheb. He is entitled to a hereditary salute of 11 guns.



HIS HIGHNESS SHRI BHOJRAJJI MAHARAJA THAKORE SAHEB of Gondal was born on January 8, 1883. He was educated at Eton and Balliol College, Oxford.

His Highness ascended the *gadi* on March 9, 1944, when he announced donations worth Rs. 60,00,000 for various works of public utility. This amount has since been increased to Rs. 1,00,00,000 (one crore).

His Highness married Rajkunverba, a daughter of Rana Shri Banesinghji of Vana on January 25, 1905. Maharani Shri Rajkunverba, Her Highness of Gondal, was born on November 7, 1890, and was educated privately. The Rani Saheba is well versed in Gujerati, Canarese and English, and takes a keen interest in the education of girls, especially Rajput girls. She has very advanced views on social questions. She has, for instance, discarded the purdah, and moves about freely among her subjects.

The Maharaja and the Maharani Saheba have two sons and five daughters. The Heir-Apparent to the throne of Gondal, Yuvaraj Shri Vikramsinhji was born on October 13, 1914. He was educated at Bangalore. He married Nayankunverba Saheba, sister of the Raja Diraj of Achrol in 1937. Among his recreations are cricket and tennis in both of which he has achieved a certain degree of proficiency. The Yuvaraj has two sons and two daughters.

The area of the State of Gondal is 1,024 sq. miles and the population 244,514. The revenue is about Rs. 60,00,000.

DEVELOPMENT

The founder of the State was Kumboji I who had a modest estate of 20 villages. Kumboji II, fourth of the line, widened the territory to its present size by conquest. But the man who was chiefly responsible for bringing the State to its pre-eminent position in Kathiawar was Maharaja Bhagvatsinhji who worked with unflagging industry throughout his life for the welfare of his subjects. He reformed the administration,

developed the resources of the State and in general exerted himself so powerfully on behalf of the people that today though the State income has increased ten-fold, the expenditure has increased only three times. Gondal is noteworthy in at least two respects. It is free from rates, taxes, customs, octroi and export duties. It has been a pioneer in the development of railways in Kathiawar.



Maharani Shri Rajkunverba Saheba

The Royal Family of Gondal has great faith in education. It is the only State among the States of Western India where female education is compulsory. The Maharani Saheba, for instance, has played a special part in the opening of a very big residential school for Rajput women in Gondal called the Rajkunverba Rajput Kanya Vidyalaya, and has also given the Maharaja Saheb every assistance in his endeavours in the wider sphere of general education. Expenditure on education has always been on a lavish scale in Gondal. The State has what may be called a complete system of education from elementary schools right up to University training of the most up-to-date type. Care has always been taken to provide these schools with well-qualified staff of both sexes, and the education authorities have insisted that nothing but the latest methods in instruction should be used in all the schools in their care. These schools of a general type are supplemented by Arts Schools and workshops for technical instruction where boys are trained as engineers, mechanics, carpenters, joiners, smiths, painters, surveyors and levellers. But if any one institution must be mentioned of which the State may be specially proud, it is the Grasia College at Gondal which can indeed rank as one of the greatest educational achievements in the whole of Kathiawar.

PRODUCE & INDUSTRY

Gondal has also been remarkable for the vigour with which public works have been put through regardless of cost. Fifty lakhs of rupees have been spent in providing irrigation facilities alone. A great number of wells have been bored, tanks and canals constructed, thus bringing into cultivation enormous new acres of waste land. There is an agricultural association in the State which has done much to foster improved methods of husbandry such as crop-raising, cattle-breeding and the planting of fruit trees.



Yuvraj Shri Vikramsinhji

Expenditure of the nation-building sort has been no less lavish in other directions, as in road-making, for instance, or the construction of telegraph and telephone communications. The main roads, often lined by long avenues of trees, are indeed a model of their kind.

The aged and the sick, too, have shared in this liberality. The Gondal Hospital, for instance, is a model of comfort and convenience with a well-equipped operating room and medical, surgical and lying-in-wards. There is also an asylum where the infirm and the disabled are well provided for, and also encouraged to learn useful crafts.

ADMINISTRATION

The Royal Family is equally alert and enlightened in other directions too. The Yuvraj, for instance, has long been associated with his father in the administration of the State and has spent most of his time in attending to State affairs. Two questions in which he is specially interested are agriculture and town planning. This keen interest on the part of the Royal Family is inevitably reflected in the outlook of the whole administration which is both efficient and up-to-date. In the sphere of justice and social order, for instance, they have the same legal system as in the Dominion of India, making due allowance for local conditions. In addition, there are special regulations provided for the purpose of meeting local requirements such as irrigation rules, plague regulations, revenue code, abkari rules, and so on.

Acting Dewan : P. B. JOSHI, B.A.

Nyaya Mantri : RAO SAHEB T. P. SAMPAT, B.A., LL.B.

Huzur Personal Assistant : G. P. PAREKH.

Political Minister : K. S. RANJITSINHJI, B.A.

Sar Nyayadhish : KIRCHAND J., B.A., LL.B.

Vasulati Adhikari : P. W. MEHTA, B.A.

Ag. Chief Medical Officer : J. B. MEHTA, M.B.B.S.

Commissioner of Police : MANILAL K. MEHTA.

Vidya Adhikari : C. B. PATEL, B.A.

Khajanchi : D. K. VYAS.

Manager & Engineer-in-Chief, Gondal Railway : M. R. PANDYA, B.Sc. (London), A.M.I.E.

GWALIOR is the premier Mahratta State in Central India. It is divided into two parts, *viz.*, Gwalior Prant and Malwa Prant, which are composed of 11 Districts or 37 Tehsils and 12 Tappas. The extreme points of the Gwalior territory lie between North Lat. 22° 10′ and 26° 52′ ; East Long. 74° 38′ and 79° 8′. It is bounded on the north, north-east and north-west by the Chambal River, which separates it from Agra and Etawah districts of the United Provinces and by the States of Dholpur, Karauli and Jaipur in the Rajputana Agency ; on the east by the Indian districts of Jalaun and Jhansi in the United Provinces, and Saugor in the Central Provinces ; on the south by the States of Bhopal, Khilchipur, Raigarh and Sironj Pargana of Tonk ; and on the west by the States of Jhalawar, Tonk and Kotah in the Rajputana group. The State is rich in historic associations with much scenic beauty, picturesque cities and virgin forests for the sportsman, with an abundance of big and small game. The name of the State Gwalior, is derived from Gwalior Fort, situated on a hill anciently known as Gopadri or Gopajini, the Shepherd Hill. The House of Scindia traces its descent to a family of which one branch held the hereditary post of patel in a village near Satara. The Gwalior House was founded by Ranoji Scindia who held the military rank of Chatrapathi Shahu Maharaj. The capital of the State is Gwalior. The languages spoken in the State are Malwi, Mundali, Marathi, Hindi, Urdu, Bundelkhandi and Marwari.



LIEUT. GENERAL HIS HIGHNESS MAHARAJA, MUKHTAR-UL-MULK, AZIM-UL-IQTIDAR, RAFI-USH-SHAN, WALA SHIKOH, MOHAJ-ASHAM-I-DAURAN UMDAT-UL-UMRA, MAHARAJADHIRAJ HISAM-US-SALTANAT, SIR JIWAJI RAO SCINDIA, ALIJAH BAHADUR, G.C.S.I. (1946), G.C.I.E. (1941), MALIK-I-MUAZZAM-I-RAFI-UD-DARJA-I-INGLISTAN, the present Maharaja of Gwalior, was born on June 26, 1916, son of His late Highness Maharaja Sir Madhav Rao Scindia and Her late Highness the Maharani Gajraraja Scindia. He ascended the *gadi* on September

27, 1925 and assumed full ruling powers on November 2, 1936. His Highness was educated privately under the guardianship of his mother, passed matriculation examination in second division and attended Victoria College, Gwalior. He received settlement and revenue training at Lyallpur (Punjab), administrative training in Bombay and Bangalore and military training at Poona. He was appointed 'Associate Knight' of the Venerable Order of St. John of Jerusalem in June 1947. In November 1937, he was elected Vice-President of the East India Association, London. He is interested in motoring, big game shooting, riding, tennis, polo and reading.

The area of the State is 26,367 sq. miles, its population 4,006,159 and its estimated gross revenue for 1946-47, Rs. 385·35 lakhs. The Ruler is entitled to a salute of 21 guns. The State has acceded to the Dominion of India.

His Highness the Maharaja Scindia has, in consonance with the wishes of the people of Gwalior, agreed to join the Gwalior–Indore–Malwa Union, which is the biggest of States Unions in the country. The Union has an area of 46,273 sq. miles, a population of 72 lakhs and revenue of about 8 crores. According to the covenant signed by 20 States of Central India, His Highness the Maharaja Scindia of Gwalior has been appointed the Rajpramukh of the Union for life and His Highness Maharaja Yeshwant Rao of Indore the Senior Upraj-Pramukh for life. Recently at a special session, the Gwalior Legislature has elected its quota of 40 members from Gwalior for inclusion in the Interim Legislature of the Madhya Bharat Union. The Union was inaugurated by Pandit Nehru, Prime Minister of India at Gwalior on May 15, 1948.

STATE FORCES

The State Army consisting of Cavalry, Infantry, and Artillery Units, is well organised and is considered to be the best among the Indian State Forces. The State maintains its own postal system and a light railway known as the Scindia State Railway.

EDUCATION

Educationally, the State is much advanced. There are three Degree Colleges—two at Gwalior, the capital, including one for women, and one at Ujjain; two Intermediate Colleges, and High Schools in practically all the districts. There are a few technical schools imparting education in arts and crafts, a public school on the Gwalior Fort which is run on the English public school lines, and a Montessori School for small children. An up-to-date Medical College, the Gajra Medical College, the only one in Central India and affiliated to the Agra University, commenced functioning from August 1946. Its foundation stone was laid by H. E. Lord Wavell in November 1945.

POLITICAL REFORMS

In June 1939 important political reforms were announced, which were supplemented by His Highness' proclamation of September 1941. The strength of the Praja Sabha was raised to 90, of whom 55 are elected representatives, thus increasing the non-official element in the Lower House. The Praja Sabha (Lower House) and the Raj Sabha (Upper House) have power of discussing the constitution and the budget. Inaugurating the first session of these Sabhas in April 1946, His Highness stressed the necessity of raising the standard of living by increasing *per capita* income, bringing about an all round social,

moral and cultural development, extending medical help, nursing, midwifery, health and sanitation to the very doors of the people, wiping out mass illiteracy and fighting chronic malnutrition and insanitation on a wide front. The Maharaja decided that Gwalior should join the Constituent Assembly of India to which four representatives — one nominated and three elected — were sent with a view to lending its full support towards the peace, stability and prosperity of the Indian Union.

As a result of His Highness' proclamation of January 20, 1948, a responsible Interim Government, with nine popular Ministers collectively commanding the confidence of the Legislature, consisting entirely of elected representatives, and two Ministers nominated by His Highness, was set up on 24th January, 1948. Except for External Affairs, Defence, Privy Purse, Palace Civil List which are entrusted to the two nominated Ministers, all other subjects have been placed in charge of popular Ministers. The constitution and composition of the existing Legislature would be revised forthwith so that there is only one chamber called the Praja Sabha consisting of all the elected members of the present Legislature, the Ministers and such members not exceeding fifteen as may be co-opted by the elected members of the existing two Sabhas to represent unrepresented minorities and interests. The new legislative body will continue during the interim period before the coming into operation of a new constitutional structure. The powers of the existing Legislature will be excercisable by the reconstituted Praja Sabha and will be enlarged without delay in so far as it may be necessary or expedient to give effect to this Proclamation and subsequent proclamation and proclamations in this respect to carry out the Ruler's intentions. The reconstituted Legislature will elect out of its members a President and a Dy. President. A new constitution making body known as the Vidhan Sabha will be brought into being forthwith consisting of 20 members elected by the reconstituted Legislature by the method of proportional representation with single transferable vote and a President elected by the members constituting the body. Excepting the Ruler's Privy Purse and the Palace Civil List, the scope, functions and powers of the committee will have no limitation and its recommendations save in so far as they relate to External Affairs and Defence will be accepted and implemented by the Ruler.

Since the assumption of ruling powers by the present Maharaja, commendable activity has been witnessed in all branches of administration. The construction of the Harsi Reservoir costing about Rs. 1½ crores, the grant of one crore of rupees for rural reconstruction, the establishment of a Degree College for Women and an up-to-date Medical College as also a scheme for construction of a Female Hospital and the creation of a new department of Public Health, are some of the important beneficent measures undertaken during the period. The network of roads has been utilised by motor bus services run by the Gwalior Central India Transport Co., and those places which were unconnected are now being joined with important highways. There is an up-to-date Aerodrome at Maharajpur, 4 miles from the capital.

POST-WAR RECONSTRUCTION

The State is devoting special attention to its post-war schemes of agricultural improvements, betterment of livestock, development of forestry, expansion of

medical relief to villages and diffusion of education in rural areas; besides, such activities as the survey of minerals, metallurgy and industrial resources, construction of roads and buildings, restoration of ex-service personnel to civil life, multiplication of banking facilities, public health, education, etc., have also received due attention. The blue print prepared by the State under the expert advice of Dr. Radhakamal Mukerjee, reputed Indian economist, consists of 128 schemes grouped in 'Special Priority,' 'Particular Area' and 'Whole State' schemes to show at a glance the order they claim for their execution. Post-war reconstruction and development claims a handsome provision in the State budget.

For the resettlement of ex-servicemen, employment exchanges are functioning at Gwalior and Ujjain and a Committee has been appointed by the Durbar for the implementation of other schemes in this connection.

The Pilot projects will inaugurate reconstruction of agriculture by concentrating the activities of all the departments in particular groups of 10 to 15 villages in one district of northern division and another in the southern division. The Government have since sanctioned these projects which are being implemented under the ægis of the Revenue Department. Negotiations are also afoot for participation in the Kotah Hydro-Electric Project, which will make about 26,000 kw of electric energy available to the State. The Post-war Reconstruction Department publish weekly price index numbers which have proved helpful both for agricultural as well as industrial purposes.

ADMINISTRATION

In matters of administration, His Highness is assisted by a Cabinet of Ministers.

Personal Staff: Private Secretary: Lt.-Col. Eknathrao Patil, B.Sc.; *Military Secretary:* Col. S. K. Surve; *Controller of Household:* Maj. S. V. Indulkar.

CABINET

Liladhar Joshi: *Chief Minister, General Administration, Jagirs Department, Planning, Publicity, Public Relations;* Col. Sardar Madhav Rao Phalke: *Army Minister;* Lt.-Col. Brijraj Narain, M.A., LL.B., : *Political Minister;* Gopikrishna Vijayvargiya: *Minister for Commerce & Industries;* Takhtmal Jain: *Finance Minister;* Radhelal Vyas, B.A., LL.B.: *Revenue Minister;* Murlidhar Vishvanath Ghule: *Home Minister;* Jagmohan Lal Shrivastava: *Minister for Law & Justice;* Sunoo Lal: *Minister for Rural Welfare & Local Self-Govt.;* Vadehi Charen Parasar, M.A., LL.B.: *Minister for Education, Medical, Public Health, Jails;* Yeswant Singh Kushwah: *Minister for Customs, & Excise.*

HYDERABAD, the premier State in the sub-continent better known as the Dominions of His Exalted Highness the Nizam, lies between 15° 10′ and 20° 40′ N. and 74° 40′ and 81° 35′ E. It forms a polygonal tract occupying almost the whole of the centre of the Deccan plateau. It is bounded on the north by Berar and the Central Provinces, on the north-west by the Khandesh District of the Bombay Presidency, on the west by the Ahmednagar, Sholapur, Bijapur and Dharwar Districts of Bombay; and on the east by the Wardha and Godavari rivers, and the Kistna District of Madras. The royal dynasty was founded by Asaf Jah, a distinguished General of Aurangzeb of Turkoman descent.



Nawab Mir Osman Ali Khan Bahadur Nizam-Ud-Daula, Nizam-Ul-Mulk, Asaf Jah, the Nizam of Hyderbad and Berar, was born on April 6, 1886. He ascended the *gadi* on August 29, 1911.

The Nizam was educated privately. He married Dulhan Pasha, the daughter of Nawab Jehangir Jung, a nobleman representing a collateral branch of the Nizam's family, in 1906. Nawab Mir Himayat Ali Khan, Azam Jah Bahadur, Prince of Berar, is the heir to the throne.

The State abounds in objects and places of historical and archæological importance, the most noteworthy being the towns of Aurangabad and Osmanabad and the caves of Ellora and Ajanta. The forts of Golconda, Gulbarga, Warangal, Raichur, Mudgal, Parenda, and Naldurg are also very famous, not to mention the innumerable temples, mosques and shrines, which lie scattered about the State.

The capital of the State is Hyderabad. It has a population of 728,400 (1941 census). It is the fourth largest city in the sub-continent of India. It is beautifully situated on the banks of the River Musi with attractive public buildings, broad cement roads, adequate electricity and water-supply, and an efficient bus service run by the State Railway. Among the more interesting sights for visitors to Hyderabad are the Char Minar, and Mecca Masjid.

the fort and tombs of Golconda, the large artificial reservoir—the Osman Sagar and the Himayat Sagar—and the Osmania University.

HEIR-APPARENT

HIS HIGHNESS GENERAL WALASHAN NAWAB MIR HIMAYAT ALI KHAN, AZAM JAH BAHADUR, LL.D. (Osmania and Aligarh Muslim Univ.), Prince of Berar and Heir-Apparent to the Nizam of Hyderabad and Berar, was born on February 22, 1907.



He received his early education under eminent Indian and European scholars. Military training was supervised by the late Major-General Nawab [illegible] Mulk Bahadur. He is a fine shot and a keen all-round sportsman, and excels in polo, tent-pegging, pigsticking and hunting. He has received a thorough training in administrative work both executive and judicial.

His Highness married Durr-e-Shahvar, the only daughter of H.M. the Califa Abdul Majida II. Her Highness received the title of Durdana Begum from H.E.H. the Nizam after marriage. She had her education under the care of her father who was himself a great scholar. And besides being well-versed in various languages she is a keen student, an able speaker and an excellent painter. Their Highnesses the Prince and Princess of Berar have travelled extensively in Europe.

His Highness was appointed Commander-in-Chief of the Hyderabad State Forces in 1934 and has associated himself whole-heartedly with measures designed to enhance the efficiency of the Army. He has done much to reorganise the Regular Forces, Irregular Forces, Paigah Troops with a view to keeping the former abreast of modern lines in arms and equipment and to ensure that their training is maintained at the high level demanded by present-day military standards.

STAFF

Nawab Samad Yar Jung Bahadur, *Controller;* Dr. Haider Husain, *Staff Surgeon;* Syed Bashiruddin Ahmed, *Military Secretary;* Major Hamidullah and Maj. Mahmood Ali Beg, *A. D. Cs.*

The area of the State is 1,00,46[illegible] sq. miles (Berar 17,767 sq. miles) its population 19,636,157 (Berar 3,441,838) and its estimated revenue for 1947-48 Rs. 2678·10 lakhs The Ruler is entitled to a salute of 21 guns. The State has entered into a Standstill Agreement with the Government of the Indian Dominion lasting for a period of one year.

PRODUCE AND INDUSTRY

The Government has always evinced a keen interest in the industrial development of the State and any new venture finds a ready response from them. The State has vast natural resources. It is known for instance to be the largest producer in the world of oil-seeds. Cotton also is a staple produce. There are other agricultural resources. All possible commercial and agricultural industries are being developed. The State Bank in Hydeabad has an authorised capital of Rs. 1,50,00,000. Co-operative Credit Societies have also been created which have already proved of great benefit to the agriculturists.

One of the first acts of the Nizam was to have a dam built across the river Musi, on which Hyderabad is situated, so as to mitigate the violence of any floods. At the same time a reservoir of water was created by the construction of the dam, capable of serving as a source of supply for the large population of the city. Thus a generous and healthy supply of drinking water was assured to the population. The first reservoir has been named 'Osman Sagar' after His Exalted Highness and the second on the Isi River is called 'Himayat Sagar' after the Heir-Apparent.

COMMUNICATIONS

The chief means of communication are railways and roads, of which there is a regular network in the State. The railway is owned by the State which also maintains its own paper currency, coinage and postal system. Hyderabad also possesses an army of its own.

EDUCATION

The education of the people has not escaped the vigilant attention of His Exalted Highness' Government. The most notable experiment on a grand scale, which will make the rule of the present Nizam memorable in history, is the institution at Hyderabad of the Osmania University. The new university represents the first attempt of its kind to impart higher instruction through the students' own vernacular. A special feature is the Translation Bureau attached to it, the object of which is permanently to enrich the Urdu language by translating into it numerous standard European works on mathematics, science, history, philosophy and political economy.

Special facilities have been created for educating those classes who have been denied education by custom or prejudice. The education of women too, almost unknown for a long time, has considerably advanced under the regime of the present Nizam.

The University has six Arts Colleges including one for women, and Colleges of Engineering, Medicine, Law and Teaching. It has also an Honours College, a College for Jagirdars and one for physical education. There are also a village industries training centre, a central technical college and an observatory.

The prosperity of his subjects has always been the main concern of the Nizam. He is deeply solicitous of the welfare of the depressed classes and through the unremitting labour of His Government many new schemes for promoting their welfare have been enunciated. The Legislative Assembly recently voted a grant of one crore of rupees to be utilised by the Government for the uplift of the depressed classes. The Nizam has kept up the tradition of the House of Asaf Jah in observing impartiality in matters pertaining to the religion of the different communities of the Dominion.

ADMINISTRATIVE REFORMS

Constitutional reforms of a far-reaching nature were announced in 1946. Under the scheme a new legislative assembly with an elected majority came into being in February 1947. The assembly consists of 132 members of whom 76 are elected. The basis of representation in the Assembly is functional and the members are elected by the method of joint electorates.

The powers and functions of the Assembly have been considerably increased and the franchise qualifications have been extended. In his Instrument of Instructions, the Nizam has enjoined on the Government the duty of importing into the working of the Constitution a spirit of accommodation and responsiveness to the wishes of the Legislature. By a recent Firman the Nizam has set up a new committee consisting of official representatives and non-official elected representatives drawn from the Legislative Assembly to go into the question of further enlarging the powers of the Assembly.

INTERIM CABINET

Prime Minister: Mir Laik Ali. *Deputy Prime Minister:* Pingale Venkatrama Reddy. *Ministers, Finance and Foreign Affairs:* Nawab Moin Nawaz Jung; *Land Revenue:* Nawab Fazal Nawaz Jung; *Law and Justice:* Raj Mohan Lal; *Police and Customs:* Abdul Hameed Khan; *Railways and Communications:* Abdur Rahim; *Planning and Development:* Ikramullah; *Public Works:* Mohammad Abdur Raoof *Education:* B. S. Venkat Rao *Local Government and Labour:* Yamin Zuberi; *Medicine and Public Health:* Malkarjan Appa.

ICHALKARANJI is a feudatory Jahagir under Kolhapur State. The Jahagir consists of two talukas, Ichalkaranji having 8 villages and Ajra having 70 villages. Ichalkaranji the headquarters of the Ichalkaranji taluka, is also the principal town of the Jahagir and is 18 miles to the east of Kolhapur and 5½ miles away from Hatkanangale Rly. station situated on the Miraj-Kolhapur branch of the M. S. M. Rly.



SHRIMANT VINAYAKRAO NARAYANRAO GHORPADE, PANT SACHIV, the present Ruler of Ichalkaranji, was born in 1896. He succeeded to the *gadi* on August 19, 1947 as the nearest heir to the late Jahagirdar Shrimant Narayanrao Babasaheb Ghorpade.

He was educated at the Ichalkaranji and Jamkhandi High Schools and at Fergusson College, Poona. He took his law degree in 1928. He married Shri Sow Satya Bhamabai, daughter of S. J. Kunte of Sangli, retired Police Prosecutor, Poona and Nasik, in 1924, and has two daughters, Shrimant Kumari Pramilatai studying in the matric class & Shrimant Kumari Durgadevi.

The area of the Jahagir is 241 sq. miles, its population 83,000 (1941 census) and the annual revenue about Rs. 5½ lakhs. The Jahagir has acceded to the Dominion of India, through Kolhapur Darbar.

The principal agricultural products are jowar, tur, gram, cotton, tobacco, sugarcane, etc., in Ichalkaranji Taluka and paddy, nagli, sawa, sesamum, jack fruit and cashew nuts in the Ajra taluka. Sugarcane is grown on water lifted from wells by old contrivances called 'mots' drawn by bullocks. It is also grown to some extent on river water lifted by oil engines from the Panchganga river flowing through the Ichalkaranji taluka.

At present lands are irrigated by well water lifted by old contrivances and in some cases by river water lifted by oil engines. An irrigation plant for utilising the Panchganga river water on a large scale is however under construction. It is a part of the power reconstruction programme of the Kolhapur Darbar and when complete would go a long way in increasing the agricultural yield of the whole territory to be brought under the scheme. The chief exports are tobacco, gur, sugarcane, groundnut, cotton and paddy.

There are fine roads in the Ichalkaranji taluka. Every village has been brought within easy communication with the headquarters. A 20-mile long metalled road in the Ajra taluka has brought the majority of villages in that taluka within easy reach of its principal town. There is a railway station in Arag village in Ichalkaranji taluka, on the Mirag-Pandharpur. B. L. Rly. A good motor road runs from Ichalkaranji to Ajra *via* Kolhapur and Nipani.

Ichalkaranji town is well-known for its sarees and is popularly known as the Manchester of Maharashtra. It has about a hundred saree factories employing nearly six thousand workers. The town has all the modern facilities of good water-supply, electricity, etc. It has a full fledged high school and four banks. Ichalkaranji is also a textile centre having three ginning factories and one pressing factory. Ajra taluka is rich in forests, producing sandalwood, myrabolan, teakwood, etc. It has also good rainfall.

ADMINISTRATION

The administration is conducted by the Jahagirdar with the help of his Karbhari who is also his Chief Revenue Officer and District Magistrate. The Jahagirdar has delegated his judicial powers to an independent Judicial Officer. The Jahagir maintains its own police.

IDAR STATE, popularly known as Nani Marwar, is in Southern Rajputana. It is bounded on the north by the States of Sirohi and Mewar, on the east by Mewar and Dungarpur, and on the south and west by Ahmedabad and territory belonging to the Maharaja of Baroda. It is situated in North Gujarat and is in Political relations with the Western India and Gujarat States Region. The Capital of the State is Himatnagar.

The State enjoys plenary powers and a salute of 15 guns.

The present dynasty of the Rathor clan was founded in Idar by the two brothers Anandsinghji and Raisinghji who came with a few followers from Jodhpur and made an easy conquest and settled at Idar in 1729. Since then the territory of Idar has continued under the sway of the Rathors, though from time to time certain strips of the country were snatched away by the Peshwas.



HIS HIGHNESS MAHARAJADHIRAJ MAHARAJA SHREE HIMATSINGHJI SAHEB BAHADUR, the present Ruler of Idar, was born on September 2, 1899. He was educated at Mayo College, Ajmer where he had a brilliant academic career. He was at the College in all for five and a half years and won every single class prize from the fifth form to the diploma, five for English and eleven for various other subjects. His record on the playing fields was equally distinguished. He represented the Mayo College against the Aitchison College in tent-pegging and tennis. He captained one or the other of the junior football or cricket teams. He was one of the best polo-players at the College all through. And as a crowning achievement he won the first prize for riding every year without a break.

On leaving College, the Maharaja plunged into the administration of the State working under the close personal supervision of his father the late Highness. The Maharaja went on a tour of India in 1929-30 from which he acquired further practical experience of politics and administration, so that when he ascended the *gadi* on July 11, 1931, he was fully equipped to take over the Government of the State and discharge his duties as Prince and Ruler.

Among the Maharaja's hobbies are hunting, pigsticking, horse-racing, music, painting and photography.

The Maharaja has married Shree Jawahar Kunwar Sahiba, the eldest daughter of the Raja of Khandela in the Jaipur State. The marriage took place in 1908.

HEIR-APPARENT

The Maharaja and the Maharani have two sons, Maharajkumar Shree Daljit Singhji and Amar Singhji. The Maharajkumar Shree Daljit Singhji, the Heir-Apparent, was born on July 1, 1917 and was educated like his father at Mayo College, Ajmer. On leaving College, he was given



a training in the various branches of administration in Nawanagar State. He then accompanied the Jam Saheb to England on the occasion of the Silver Jubilee of the reign of King George V. He returned to India in 1935 after a short tour of the Continent. In 1936, he married a sister of the Jam Saheb.

The Maharajkumar has always taken a keen interest in flying and at the first All-India air rally held at Karachi in 1938 he won the Wakefield Trophy for acrobatics and the Speedoline Trophy for instrument flying. During the Second World War he acted as Honorary Pilot Instructor for sometime at Bombay and Madras. At present he is holding the position of Dewan of the State. His hobbies are flying, shooting, cine-photography and swimming. He is also keenly interested in classical music.

The area of Idar State is 1669 sq. miles and the population 307,798 according to the census of 1941. The revenue of the State including alienated lands is in the neighbourhood of Rs. 60,00,000. The majority of the people are Kolis, the remainder consist of Rajputs, Brahmins, Banias, Kunbis, Bhils, etc.

AGRICULTURE, FORESTS

The soil is generally fertile and agriculture is the chief source of livelihood for about 80 per cent of the population. In some places the soil is of a light sandy nature, in others it is rich and black. The principal crops are grains, oilseeds and sugar-cane.

The jungle in some parts specially at the bottom of the hills is very thick. The forests are full of herbs, spices, roots, flosses, barks, resins, gums, and much excellent wood. Other forest produce include material for paper pulp (Boswellia, serrata woods), Urenalaba, a fibrous product suitable for rope and sack cloth, and catechu for calico printing.

The water resources of the State are excellent. The five big rivers, namely Sabarmati, Hathmati, Harnav, Meshwa and Vatrak which flow through the State have nearly every Taluka under command for purposes of irrigation. For the last two years the attention of the authorities has been largely concentrated on the development of the water resources with a view to bringing every bit of arable land under cultivation. For this purpose some of the old irrigation tanks are being renovated, a project which when completed is expected to bring an area of 5,000 acres of land under irrigation. The State is also planning ahead and has under consideration three different projects: 1. a storage reservoir and hydro-electric power production on the Sabarmati near Dharoi in conjunction with Bombay and Baroda; 2. a storage reservoir across the Hathmati near Demai; and 3. a storage reservoir across the Vatrak near Magodi. It is estimated that these three projects will together bring an area of one lakh of acres under canal irrigation.

RURAL UPLIFT

There are other ways too in which the State is trying to promote agriculture. The State has created a Department of Agriculture for giving advice to the agriculturists on modern methods of cultivation. The Department maintains a demonstration farm and distributes improved varieties of seeds. The whole of this activity has been worthwhile as it has produced tangible results in three different directions. The Department has discovered the kind of sugar-cane which suits the soil most so that sugar-cane cultivation has considerably increased. Second, it has found an improved method of gur-making and third, the cotton crop has also improved so that the cotton fetches a much higher price than before.

To help the cultivator maintain his cattle two veterinary surgeons have been appointed in the State whose duty is to give the cultivator advice about proper care and to treat the cattle when they are ill.

The other ways in which the State is helping the agriculturist is by giving him liberal grants to sink new wells and repair old ones. Interest-free loans are also frequently advanced. On this account alone the State is annually spending as much as Rs. 82,000. A unique feature of the village uplift programme is the employment of so-called village guides to tour the countryside and promote the general sanitation and educate the people in habits of health and hygiene.

INDUSTRY

Passing next to mining and industry, we find that the State abounds in valuable minerals such as asbestos, manganese, kaolin, talc magnesite, pipe-clay, silica. mica, felspar, Selenite-lime-stone, sandstone, granite. The State also possesses extensive quarries of building material.

There are a number of industries in the State. There are, for instance, a Match Factory at Himatnagar, the Glass and Ceramic Industries at Himatnagar, the Sabar Valley Kaolin and Starch Industries Ltd. at Arsodia, the Eklera China Clay Works at Eklera, three ginning and pressing factories at Himatnagar, Jadar and Bayad, and Oil Mills at Himatnagar and Bayad. The Arsodia China Clay Factory is one of the biggest and most up-to-date concerns of its kind in the whole subcontinent. At Idar wooden lacquered toys are being manufactured by the Kharadies. In some other parts of the State weaving is done on fly shuttles by Vankars. A new distillery plant has just been erected at Idar.

There is also great scope in the State for textiles, pottery, sugar and tanning industries as cotton, China-clay, sugar-cane and hides and skins are available in plenty.

EDUCATION, MEDICAL

Both primary and secondary education are entirely free for dependents of State subjects. There are 158 schools including two High Schools and Middle Schools. Almost every big village is provided with a middle school teaching up to Standard III. In some cases separate schools are provided for girls. There are about 12,000 students in all on the rolls and the amount of money spent every year on scholarships alone is as high as Rs. 21,000. The total amount of money budgeted for education during the current year is Rs. 2,94,195.

Like education, medical relief is given free. There is a well-equipped hospital with a separate maternity ward at Himatnagar, a hospital and maternity home at Idar, and a number of dispensaries scattered throughout the State. There are in all 25 medical institutions including one homeopathic and 2 ayurvedic dispensaries. The total number of patients treated during the current year (1946-47) was 2,75,728 and the total expenditure incurred was Rs.1,27,446-4-3.

The people are fully associated with the administration in the sphere of local self-government. There are 3 municipal committees, 5 budgeted and 12 non-budgeted sanitation committees and 170 gram-panchayats in the State. These bodies look chiefly after the sanitation of the towns and villages under their charge. All members of the municipal committees except the Presidents are elected, and in the case of the gram-panchayats of the Khalsa villages all members are elected including the Presidents. The State helps the local bodies generously with annual grants amounting to about Rs. 43,000.

INDORE is the premier State in Central India. The State limits extend to 21° 22′ and 26° 60′ North Latitude and 74° 22′ and 78° 51′ East Longitude. It is bounded on the north by the Udaipur and Kotah States of Rajputana, on the north-east by Jhalawar, on the east by the States of Gwalior, Dewas, Dhar, Bhopal and Nimar in the Central Provinces, on the south by the Khandesh District of the Bombay Presidency, and on the west by the States of Gwalior and Barwani. The House of Holkar was founded by Malhar Rao Holkar, born in 1693.



MAJ. GENERAL HIS HIGHNESS MAHARAJADHIRAJ RAJ RAJESHWAR SAWAI SHREE YESHWANT RAO HOLKAR BAHADUR, G.C.I.E.,LL.D., the present Maharaja of Indore, was born on September 6, 1908. He succeeded to the *gadi* on February 26, 1926 and was invested with full ruling powers on May 9, 1930.

His Highness was educated in England from 1920-23 and again at Christ Church, Oxford from 1926-29. He married a daughter of the Junior Chief of Kagal in 1924. A daughter Princess Usha-devi was born on October 20, 1933. Her Highness Maharani Sanyogita Bai died in July 1937. The Maharaja married again on July 6, 1943. A prince was born on May 18, 1944.

The Maharaja was a delegate to the R.T.C. in 1931. He is interested in tennis, cricket and Shikar.

The area of the State is 9,934·18 sq. miles, its population 15,13,966 and its revenue Rs. 2,68,55,900. The Ruler is entitled to a salute of 21 guns within and 19 guns outside the State. The State has acceded to the Dominion of India.

His Highness attaches great importance to the development of Panchayats. He has ordered that every village in the State should have a village Panchayat. Accordingly 517 panchayats have already been formed and are working. The City Municipal Council in Indore enjoys full autonomy in respect of passing their budget, appointment of their officers and initiation of new taxation.

INDUSTRY AND COMMERCE

Indore occupies a foremost place among the Indian States on account of its enormous development in industry and commerce. The industrial development of the State was initiated as early as 1886 when the first cotton mill was started in Indore as a State-owned

and State-managed concern. The State has been following a steady industrial policy resulting in the establishment of a flourishing textile industry with 7 mills and 1,15,000 spindles and 6,300 looms employing nearly 30,000 workers. The paid-up capital in the Industry is Rs. 1·5 crores with block valued at nearly Rs. 4 crores. The production of cloth has been going up rapidly and is now about 150 lakhs of pounds.

Next in importance after the cotton industry is the Engineering industry of the State. Two re-rolling mills produce a variety of articles such as oil expellers, oil engine parts, sugar-cane crushers etc. The sugar mill at Mahidpur, with a crushing capacity of 350 tons per day was erected entirely in the war period. A large Vanaspati manufacturing concern capable of producing 25 to 40 tons a day is under erection in Indore. Besides these, there are six oil mills, one ice factory, one thymol factory and one glass factory. In all there are 174 large industrial running concerns (49 perennial and 125 seasonal). Since the year 1944 permission has been granted to sixty-four industrial concerns such as a large scientific apparatus manufacturing company, four ice factories and one thymol factory. The taxation on industries has been very low being 15 per cent on net profits above Rs. 50,000 and after deduction of depreciation. By way of encouragement to the industrial enterprise, the State grants concessions including acquisition of land on easy terms, supply of water from river free of cost and exemption from payment of customs duty. Under sanctioned rules, the Stores Purchase Committee of the State can purchase products manufactured within the State even if they are priced 10 per cent higher than similar products from outside.

Neither have Cottage Industries been overlooked. Almost 150 years ago the famous Devi Shree Ahilyabai took the trouble of attracting expert weavers from other parts of India and made them settle down in Maheshwar, then the capital of the State. The Maheshwar saries command wide market all over India. Among other cottage industries the most important ones are the Hosiery industry at Indore, blanket weaving factory at Manasa, cloth printing industry of Gotampura.

The State has made remarkable progress in its trade as well. There has been no tax on profits from business. This, coupled with the central position of Indore with a network of roads connecting distant parts of Central India, has led to the growth of a big market in a variety of articles including hardware, medicines, paper, spices, etc. The stock exchange at Indore and the bullion market are also well known as Sarafa.

MEDICAL SERVICE

With a view to carrying medical relief to all parts of the State the policy of opening 16 dispensaries every year for a period of five years was sanctioned and accordingly 64 dispensaries have already been established. The idea is to leave no place with a population of 1,000 or more without a dispensary. The central hospital of the State containing 300 beds and equipped with the latest instruments and apparatus is proposed to be rebuilt with 750 beds at a cost of nearly Rs. 50 lakhs. This will provide clinical training for the students of the Medical College to be started in Indore based on the existing medical school. Liberal contributions have been made to the college by the Holkar Government. The foundation stone for a large T. B. clinic and a large maternity and child welfare home was laid by Her Highness in 1944. This building as also a sanatorium is under construction. Construction of maternity wards have also been sanctioned in every place with a population of 5,000 or more.

EDUCATION

The State has 575 schools and 3 colleges providing education for 53,925 boys and girls. An agricultural school has been added to the Institute of Plant Industry, hitherto purely a research institution. The Holkar College provides education upto the M.Sc. stage and also degree course in Commerce. An Arts School and a School of Music, Sanskrit Mahavidyalaya and many other such institutions are also maintained by the Education Department.

His Highness is known for his advanced views on social matters. The Harijan Entry proclamation of 1938 was hailed as a charter of rights. The Harijan Uplift Committee, has been functioning for a long time and has done good work for the uplift of the community. As an earnest of his concern for these poor people, His Highness the Maharaja gave out of his privy purse a sum of nearly Rs. 2 lakhs, out of which as many as 284 Sanitary tenements have been constructed for the municipal sweepers. Among the notable social enactments by His Highness the Maharaja may be mentioned the Indore Marriage Registration and Marriage Restraint Act, which had been strictly enforced, the Indore Nukta Act and the Marriage Expenses Controlling Act which prevents wasteful expenditure on marriages and funeral ceremonies; the Act for prevention of marriage between old men and young girls, Divorce Act and Civil Marriage Act, etc.

LABOUR

The welfare of industrial labour has also engaged the attention of His Highness and his Government. Indore, with the exception of Ahmedabad, is the only centre in India where complete standardisation of wages of almost all the textile workers has been effected and is working. Adjudication authority recently appointed is engaged in the wide revision of the Standardisation scheme in order to bring it up-to-date in the light of the existing circumstances. On the initiative of the Government of Indore, mill-owners have been persuaded to set apart a sum of Rs. 3·5 lakhs for the construction of tenements for textile labour. It is hoped that about 2,500

houses will go up in the near future. The Government will acquire the necessary land and develop it and provide the necessary services at its own cost. The effect of this sympathetic labour policy has been the comparative immunity from disturbances that has been enjoyed by Indore unlike several other centres in India.

POST-WAR RECONSTRUCTION

Indore has its own post-war plans like the Chambal Hydro-Electric Scheme designed to cost Rs. 6 crores and the development of Indore Electric Supply into a big Thermal Station at a cost of Rs. 121 lakhs. A broad gauge railway scheme from Bhusawal to Tarana *via* Indore and Dewas is being surveyed. Besides, there are a number of schemes on which the Industries Department is actively engaged. Similar schemes of a far-reaching nature have also been prepared by various policy committees and are under active consideration. These include the introduction of free compulsory primary education, construction of several more hospitals and the road programme involving a capital expenditure of Rs. 4 crores. The Indore City Water Supply Scheme has been completed at a cost of nearly Rs. 70 lakhs and the Underground Drainage Scheme estimated to cost nearly Rs. 60 lakhs is being worked up.

ADMINISTRATION

Association of the people with the Government has long been a guiding principle in the State administration. A small legislative committee created in 1926 was expanded into a legislative council in 1936. Under the new scheme of reforms, the Council was expanded and given a two third majority of non-officials from the year 1944. Special representation was provided for Muslims, women, Harijans and others. The council consists of 53 members of whom 37 are elected and the rest nominated, 8 being officials and the rest non-officials. The Council enjoys powers of interpellation in all matters concerning administration and of passing resolutions on the budget, barring a few reservations like treaties, the personal affairs of the Rulers, Army, etc.

Recently His Highness has announced reforms of a far-reaching character. An interim cabinet has been set up pending the introduction of a permanent constitution after full consideration of the recommendations of the Constitution Making Committee which was set up by the Indore Legislative Council. The Interim Cabinet consists of 8 Ministers nominated by the Prajamandal. The Ministry will be responsible to the local legislature except for certain reserved subjects.

INTERIM CABINET

Prime Minister: V. S. Khode
Ministers: Vaijanath Mahodaya Mishrilal Gangwal, K. A. Chitale Manoharsingh Mehta; V. S. Sarwate V. V. Dravid, Nandlal Joshi.

JAMBUGHODA STATE is in the Gujerat States Group. It is bounded on the north by the Devghad Baria State and Panchmahals, on the west by the Panchmahals District and Chhota Udepur State territories, on the east by the Chhota Udaipur State.

The State enjoys full dynastic jurisdictional powers, and has individually acceded to the Dominion of India. The State is a member of the organisation of the full powered States of Gujerat and has entered into a Standstill Agreement with the Government of India.



MAHERBAN SHRIMANT RANA SAHEB SHRI RANJITSINHJI GAMBHIRSINHJI, C.I.E., the present Ruler of the State, was born on January 4, 1892, and was installed on the *gadi* on February 2, 1918. The Ruler was educated at the Rajkumar College, Rajkot. The ruling family of Jambughoda belongs to the hereditary clan of Parmar Rajputs and are direct descendants of the Mahakumars of the famous King Vikramaditya of Malwa.

The Rana Saheb had the honour of presenting the case of 104 small States of Gujerat before the Indian States Enquiry Committee (Financial) at Bombay in February 1932. A new constitution for the State based on responsible government is now under preparation.

On August 12, 1922 was born an Heir-Apparent Maharajkumar Shri Digvijaysinhji, who took his B.A. degree from Bombay. The Maharajkumar was educated in his very early days in Hartshorne Anglo-Vernacular school at Jambughoda and at the Boys' High School, Panchgani. He passed his Senior Cambridge examination in 1939. He eventually joined the college at Baroda and took his B.A. degree in 1944 with History and Economics as special subjects. He married the eldest daughter of the Heir-Apparent of Datia and by this union he has one son and one daughter.

The Maharajkumar is a keen Shikari and has bagged 28 panthers and 2 tigers. He is receiving judicial and administrative training in his own State. He is a member of the Imperial Delhi Gymkhana Club. On the occasion of the Silver Jubilee of His Majesty the late King George the Fifth, he was awarded the Silver Jubilee Medal and the Coronation Medal.

The State covers an area of 143 square miles and has a population of 14,380. The average annual income of the State is about

Rs. 5,50,000. The State has acceded to the Dominion of India.

PRODUCE

The main occupation of the population is agriculture. All food crops and commercial crops such as long staple cotton, sugarcane, groundnuts, oilseeds, etc. are being grown. Owing to the propaganda of the State Agricultural Department people are now taking to improved methods of agriculture. In the post-war development plans, mechanisation of agriculture is contemplated. The State has been planning devices to improve the lot of the agriculturists and educate them in the use of modern implements.

IRRIGATION

In the absence of big rivers in the State, the agriculturists have to depend on well water for irrigating their crops. During the last three years several katcha and pacca wells have been sunk for irrigation purposes.

COMMERCE AND INDUSTRY

For the development of Commerce and Industry, a public limited company, The Jambughoda Industries Ltd. has been formed. This concern runs a saw mill, a soap and phenile making department and a rice and flour mill.

MINERALS

There are appreciable mineral resources in the State, and two big mineral companies from Bombay have shown great interest in Manganese, Galena, Tin and Copper.

COMMUNICATIONS

The State maintains its roads in good condition and these are linked with the Provincial High Roads. In the interior of the State there are feeder roads which connect most of the villages of the State with the main metal roads in the State.

POST-WAR PLANS

This plan is predominantly a peasant's plan. Sixty per cent of the total expenditure is designed to benefit the farmers. The projects include land development, irrigation, livestock improvement, prevention of soil erosion and the building of bunds. Introduction of collective farms is also contemplated.

The plan also envisages development of communications, expansion and improvement of educational and medical facilities. Development of the industrial side of the State is also being planned. This involves establishment of cottage industries as well as large-scale industries. Development of mining and measures to implement the plan will be undertaken as soon as conditions permit.

The Rana Saheb has effected several improvements in education, medical relief, agriculture, communications, etc. A thorough overhauling of the administrative machinery of the State, and the separation of the Judiciary and executive, as well as the construction of buildings for hospitals, schools, library, irrigation wells, tanks, telephone lines, guest houses, etc., are among the achievements of a very progressive ruler.

JAMMU AND KASHMIR STATE: The territory known generally as the Jammu and Kashmir State, lies between 32° and 37° N. and 73° and 80° E. It is an almost entirely mountainous region with a strip of level land along the W. and E. Punjab border, and its mountains valleys and lakes comprise some of the grandest scenery in the world.

The area of the State is 84,471 square miles. The total population is 4,021,616, and the average annual revenue about Rs. 500 lakhs.

HISTORY.—In 1586 Kashmir was annexed to the Moghul Empire by Akbar. In the reign of Sikandar, who was a contemporary of Tamerlane, a large number of Hindus was converted to Islam. Jehangir did much to beautify the Valley, but after Aurangzeb there was a period of disorder and decay, and by the middle of the eighteenth century the Suba or Governor of Kashmir had become practically independent of Delhi. Thereafter the country remained under Afghan rule until 1819 when it was conquered by Maharaja Ranjit Singh and passed to Sikhs.

The early history of the State as at present constituted is that of Maharaja Shri Gulab Singhji, a scion of the old Ruling Family of Jammu, who rose to eminence in the service of Maharaja Ranjit Singh of Lahore and was, in recognition of his distinguished services made Raja of Jammu in 1820. He held aloof from the war between the British and the Sikhs, only appearing as mediator after the battle of Sobraon (1846), when the British made over to him the valley of Kashmir and certain other areas in return for his services in re-establishing peace.

The present Maharaja is Shri Maharaja Hari Singhji Bahadur.

INDUSTRY

The population is predominantly agricultural and pastoral. The principal food crops are rice, maize and wheat. Oilseed is also an important crop. Barley, cotton, saffron, tobacco, beans, walnuts, almonds and hops are also grown. Pears and apples, the principal fruits of the Valley, are exported in large quantities. The State forests are extensive and valuable. The principal species of timber trees are deodar, blue pine and fir.

A survey of the mineral resources of the State revealed that the most noteworthy of the minerals expected to be found were bauxite, coal, Fuller's earth, kaoline, slate zinc, copper and talc. Gold is found in Baltistan and Gilgit, sapphires in Paddar, aquamarines in Skardu and lead in Uri. The silk filature in Srinagar is the largest of its kind in the world. Woollen cloth, shawls, carpets, papier maché and wood carving of the State are world famous.

Recently attention has been directed towards the development of tourist traffic. Tourist Bureaux have been opened at a number of places includig Rawalpindi and Suchetgarh, to give the necessary information regarding the State to the intending visitors.

Great efforts have been and are being made towards the improvement of roads for wheeled traffic in the State. The Jhelum Valley road (196 miles) which links the Kashmir Valley with West Punjab and the North-Western Frontier Province is considered to be one of the finest motorable mountain roads in the world.

The Banihal Cart Road, about 200 miles long, joins Kashmir with the North-Western Railway system at Jammu-Tawi and is also a fine motorable road.

Roads for pack animals lead from Srinagar, the summer capital of Kashmir, to the frontier districts of Gilgit and Ladakh. Internal village communications have also been much improved.

The Jammu-Suchetgarh Railway, a section of the Wizirabad-Sialkot branch line of the North-Western Railway system, is the only Railway in the State. The mountainous nature of the country has so far prevented the extension of the line into the heart of the State. The State is also connected with the telephone system of the two Dominions.

According to the last census of the State, there were over 238,000 literate persons in the State including over 35,000 females. The number of educational institutions is 2,078. There are four Colleges and one aided Oriental College. In Municipal areas education for boys was made compulsory in 1929. More schools including basic schools are being introduced every year.

ADMINISTRATION

The story of how after the transfer of power Kashmir became the scene of fighting between frontier raiders and Indian Troops has been related elsewhere (See introduction to this Section). Though the question has been before the U.N. a long time now no solution wholly acceptable to both sides has yet been found.

Meanwhile the administration has been drastically revised. A popular interim Government has been established with Sheik Mohammed Abdullah as Prime Minister. As for the future as soon as normal conditions are restored a national assembly will be convened in the State on the basis of adult suffrage which will frame a democratic constitution for the State. The Prime Minister and other Ministers function as a Cabinet and act on the principle of joint responsibility. Two members of the Government are Mirza Mohammad Afzal Beg, Revenue Minister and Gulam Mohammad Sadiq, Development Minister.

JANJIRA STATE is situated to the south of the Kolaba Dist. of the Bombay Presidency. The State pays no tribute and owns a dependency on the south coast of Kathiawar known as Jafarabad Territory, which also unlike other Kathiawar States pays no tribute. The State receives from Junagadh an annual 'khandani' payment on Una Mahal of 360 Mosambigiri Ryals equivalent to Rs. 500. The capital of the State is Murad, which is on the mainland, the name of Janjira being retained by the island fort opposite.



H.H. SIDI MUHAMMAD KHAN, THE NAWAB SAHEB of Janjira was born on March 7, 1914. He was educated at the Rajkumar College, Rajkot, the Deccan College, Poona, and was trained in administration in the Mysore State. The Nawab was married to Nawabzadi Rabia Sultan Jehan Begum Saheba, the daughter of H.H. the Nawab of Jaora on November 14, 1933. He has four daughters.

The Nawab ascended the *gadi* on May 2, 1922 on the death of his father, and was invested with full powers on November 9, 1933. During his minority the State was administered by his mother H.H. Kulsum Begum Saheba as Regent with the aid of the Dewan.

H.H. is entitled to a dynastic salute of 11 guns and to a permanent salute of 13 guns within his own territories.

H.H. is a Sunni Muslim and has a *sanad* guaranteeing succession according to the Mohammedan law

The area of the State is 379 sq. miles and its population 117,324. The average income of the State is Rs. 15,00,000 including that derived from the dependency of Jafarabad. The principal sources of income are land revenue, forest, abkari and customs. The ports of Janjira proper have the rights of Dominion Customs ports.

The Nawab pays special attention to the education of his subjects. He has established several Marathi, Urdu and English schools at great expense to the State. There are State dispensaries at important places where medicine is given free.

ADMINISTRATION

The State enjoys plenary civil powers. It also has plenary criminal powers except over Dominion subjects.

Dewan: NAWABZADA MOHD SADIQ, B.A., Bar-at-Law; *Chief Judge, High Court:* I. S. HAJI, B.A., B.Sc. (Econ.), Bar-at-Law, F.R.E.S.; *Judges, High Court:* HARIVADAN DHIRAJLAL THAKORE, B.A., LL.B., Advocate (O.S.), AKBAR A. PEERBHOY, Bar-at-Law; *Sar Nyayadhish:* RAMKRISHNA BABAJI DALVI; *Sadar Tahasildar:* SIDI JAFAR SIDI MAHMUD SHEKHANI, B.A., LL.B.; *Chief Medical Officer:* Dr. A. J. F. ALMEIDA, M.D. (Hons.) Berlin, L.R.C.P. (Edin.), L.R.F.P. & S. (Glas.), D.T.M. (Liv.), L.M. (Dublin); *Director of Public Instruction:* M. A. KOKATE, M.A., B.T.; *Superintendent of Police:* Lt. SYED SHABBAR-ALI, B.A.; *Asstt. Collector of Customs & Salt:* D. M. HANWARI, B.A.; *Huzur Secretary to H. H. the Nawab Saheb:* J. T. CHITNIS, B.A., LL.B.; *Ag. Chief Engineer:* KAZI HASAN KAZI MOHAMAD MHASLAI, B.E.; *Chief Customs Officer:* SIDI EBRAHIM SIDI ABDUL RAHIMAN KHANZADA; *Mamlatdar, Jafarabad:* SIDI YAKUB SIDI MAHOMED KHANZADA; *Chief Forest Officer;* M. USMAN KHAN.

JAORA is the only Treaty State in Malwa, in Central India. There are 2 towns and about 350 villages in the State. The state has acceded to the Indian Union and has joined the Malwa States Group known as "Madhya Bharat". The capital is Jaora. It contains several imposing buildings including a fine secretariat and court house, post and telegraph offices, Mahatma Gandhi High School and other educational institutions, the Central Jail, two hospitals, an Ayurvedic Pharmacy, one sugar mill, one cotton press with nine ginning factories and a number of other structures of public and private character. The other town is Tal, some 18 miles from Jaora. It is the headquarters of the Tal Tehsil.

The prevailing form of speech is Malwi and Rangri. The official language used in the State was Urdu and is now changed to Hindi.

The Chiefs of Jaora claim descent from Abdul Majid Khan, an Afghan of the Tajik Khel tribe from Suwat. The first Chief established himself in the State in 1808.

The state is entitled to a salute of 13 guns.

THE LATE CHIEF LT.-COL. HIS HIGHNESS FAKHRUD DAULAH NAWAB SIR MUHAMMAD IFTIKHAR ALI KHAN SAHIB BAHADUR, SAULAT-E-JANG, G.B.E., K.C.I.E., died on the 18th December 1947 and the question of succession to the *gadi* of the State, which is in dispute, is under the consideration of the Government of India.

The area of the State is 602 sq. miles and the population 116,953. The revenue is about Rs. 15,00,000.

The soil of the State is among the richest in Malwa, being mainly of the best black variety. The principal food crops are jawar, maize and wheat, and the principal money crops poppy and cotton. Irrigation is carried on by means of wells.

As for industry there is one sugar mill with a crushing capacity of 700,000 tons per day, an oil mill, nine ginning and pressing factories and one State pencil factory.

The Rajputana-Malwa Railway on which Jaora is a station runs through the State.

To promote the general well-being of the people in the State an ambitious ten-year programme involving a total expenditure of Rs. 50,10,206 has been drawn up.

ADMINISTRATION

On the 15th January 1948, the Government of India, Ministry of States, appointed Sir Harilal N. Gosalia, Kt., M.A., LL.B., as Administrator of the State with full powers of the late Ruler. The Administrator is assisted by the following Secretaries:—

PANDIT AMAR NATH KATJU, B.Sc., LL.B., *Secretary, Rifah-i-Am and Deputy Chief Minister.*

SAHIBZADA NASRAT MOHAMMAD KHAN, M.A., LL.B.: *Secretary, Law & Justice.*

MOULVI ABDUL GHANI, B.A., P.E.S. (Retd.): *Secretary, P.W.D.*

SAHIBZADA MIR NASIRUDDIN AHMAD: *Household Secretary.*

JASDAN, the premier Kathi State, is situated in Kathiawar. The Rulers are Saketiya Suryavanshi Kshatriyas, being the descendants of Katha, the younger son of the Suryavanshi Maharaj Karan Shruta of Ayodhya. The capital of the State is Jasdan. The State has acceded to the Indian Union.



HIS HIGHNESS DARBAR SHREE ALA KHACHAR, the present Ruler of Jasdan was born on November 4th 1905. He was educated at the Rajkumar College, Rajkot. He succeeded to the *gadi* on June 11, 1919 and was invested with full powers on December 1, 1924. The Heir-Apparent is Yuvaraj Shree Shivrajkumar, born on October 9, 1930.

The area of the State is 296 sq. miles, and the population 37,672 according to the census of 1941. The gross revenue is about Rs. 10 lakhs.

The principal occupation is agriculture, the chief food crops being jowar, bajri, wheat, gram and pulses, and the chief cash crops cotton, and sugar-cane. There are about 12 plantations of fruit trees such as mangoes, musumbis, bananas and chikoos. For irrigation water is drawn from 4 artificial lakes.

As for industry there is an oil mill and a match factory at Jasdan, and a ginning and pressing factory at Vinchhia.

Railway communication is by the Botad-Jasdan Railway which runs from Botad Junction to Jasdan, a distance of 32.87 miles. The State owns half-share in Botad Jasdan Railway. Motor buses from Jasdan go to Vinchhia, Kamalpur, Rajkot and Chital. There is postal service too.

All education is free throughout the State and primary education has been made compulsory in certain villages as an experimental measure. Every village with a population of 500 people has a school. Like education all medical aid given at the State hospital and dispensaries is also free.

All cultivators enjoy heritable tenancy rights and there is also an Agricultural Co-operative Bank to help the cultivators with loans.

ADMINISTRATION

Local government functions through village panchayats as elsewhere. Every village has a panchayat and the panchayats themselves enjoy wide civil and criminal powers.

For the State as a whole there is a Darbar Sabha composed of elected members. The Sabha has powers to pass legislation, discuss the budget, and generally guide and help the Durbar in administration.

Dewan : RAJKUMAR SHREE AMRA KHACHAR; *Huzur Court Judge :* PRABHULAL D. SHUKLA, B.A., LL.B.; *First Member of the Council :* JHAVERILAL TRAMBAKLAL VYAS, B.A., LL.B.; *Revenue Secretary :* DADA VADHER GIDA; *General Secretary :* PUNJBHAI DHADHAL.

JATH is an ancient Mahratha State in the Deccan. It is bounded on the north by Sholapur Dist., on the east by Bijapur Dist., on the south by Belgaum Dist. and on the west by Sangli State.

The Ruling Family, which is of high Mahratha class, claims its descent from Satvajirao Chavan, a Patil of Daflapur on whom Ali Adil-Shah, King of Bijapur conferred the Deshmukhi Watan of the Jahagirs of Jath and Karajagi Paraganas in the year 1680. The capital of the State is Jath.



LT.-COMMANDER RAJA SHRIMANT VIJAYASINHRAO RAMRAO, R.I.N. RAJA of Jath State, was born on July 21, 1909. He was educated for some time at the Deccan College but was suddenly called back owing to the serious illness of his father. The Raja ascended the *gadi* and was invested with full powers on January 12, 1929. On March 27, 1929, he married Shrimant Lilawati Raje, the eldest daughter of the late Rajasaheb of Akalkot, thus uniting two illustrious Houses, namely, the Dafles of Jath and the Raje Bhosles of Akalkot.

The Raja Saheb attended the Round Table Conference in 1932 at the invitation of the Secretary of State for India. He is an all-round sportsman and a good cricketer and takes a keen interest in scouting.

The area of Jath State is 981 sq. miles and the population 107,036. The revenue of the State is Rs. 4,25,000. The Raja exercises full civil and criminal jurisdiction over the State.

ADMINISTRATION

Politically, the whole drift has been towards responsible government. The Legislative Assembly has recently been remodelled and now consists of 18 members out of whom 15 are elected and 3 nominated non-officials to represent the Harijans, the Muslims and the women in the State, respectively. The Speaker and the Deputy Speaker are also elected by the Assembly.

The Shrimant Raja Saheb has appointed three ministers from among the elected members of the Assembly who will form a cabinet with the Dewan as the President. To these ministers all subjects have been transferred except defence, external affairs, and saranjams and inams which the Raja Saheb has reserved for himself.

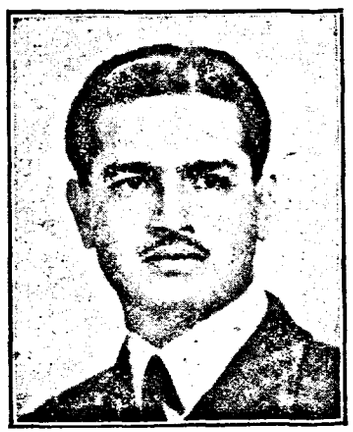
Dewan and President of the Council of Ministers : D. N. PRADHAN, B.A., LL.B.

Chief Minister, Law and Order : Y. M. SAVANT.

Education, Judiciary, Civil Supplies : D. G. DUGANI.

Revenue, Finance : B. SHAIKH.

JAWHAR STATE lies among the Sahyadri Mountains to the north of Thana District and is one of the oldest States in the Bombay Presidency. Most of the State is an elevated territory 1,000 to 1,500 feet above the Konkan plain, healthy and cool and has beautiful scenery on every side. It is 38 miles from Dahanu Road on the B.B. & C.I. Rly. Jawhar City, which is the capital of the State, is only 90 miles from Bombay and has an excellent climate in summer. It is fast developing into an ideal hill station.



The Rulers of the State are the descendants of the illustrious family of Jayaba Mukne, who is said to be the founder of the *gadi*. Nemshaha, the son of Jayaba Mukne, the second Ruler of the State, received in 1343 A.D. the title of Shaha from Mahommed Taghlakh, the Emperor of Delhi and was recognised as the Ruler of a tract of land which now goes to form nearly the whole of the Thana and a part of Nasik Districts and which in those olden days yielded a revenue of nine lakhs of rupees. So important was this event, that the 5th of June 1343, the day on which this title was received in Jawhar, was made the beginning of a new era and is still used as the beginning of the official year of the State.

FT. LT. HIS HIGHNESS MAHARAJA SHRIMANT YESWANTRAO PATANGSHAH VIKRAMSHAH, the present Ruler of Jawhar, was born on December 11, 1917. He was educated at the Rajkumar College, Rajkot, and Blundell's Old Public School in England. While in England he received some administrative training and on return to India he received further practical administrative training under the Collector of Nasik. On January 16, 1938 he ascended the *gadi* and was invested with full ruling powers. In May 1938, he married Shrimant Priyamwada Raje, sister of the Rajasaheb of Jath. The Heir-Apparent Shrimant Yuvaraj Maharaj Digvijaysinhrao was born on January 5, 1940.

The Maharaja's chief recreations are shooting, riding, tennis and motoring. He is entitled to a permanent salute of 9 guns.

The area of the State is 308 sq. miles and the population 65,126 according to 1941 census. The average annual revenue is about Rs. 15,00,000.

PRODUCE

The State is chiefly agricultural, the main foodgrains and pulses produced being paddy, ragi, varai, tur, urd and khurasani. The State also possesses forests consisting of good quality teak. Among other jungle produce are charcoal, gum, honey, hirda, behada and other medicinal herbs, roots and fruit.

In the field of industry too the State is making good progress. The manufacture of bobbins, starch, foreign liquors, chemicals, paper, textiles, dyeing and printing has either started or is well under way.

COMMUNICATION

As for communications, the nearest railway station is Dahanu on the B.B. & C.I. Rly., which is only 38 miles away and between which and Jawhar there is a regular bus service. There is also an excellent Road between Jawhar and Bombay and another between Jawhar and Nasik. Between Jawhar and Nasik also there is a regular bus service.

EDUCATION

In the field of education the State has made good progress considering the Adivasi area. Primary education is provided free to all throughout the State. There is a middle school at Jawhar and it is being developed into a high school. A fine Central Library and a Book Club have recently been opened and a museum with high educational value is under construction.

Free medical relief is available in the State. There are three stationary and two touring dispensaries providing relief to the suffering. A hospital and a maternity home costing more than two lakhs are nearing completion.

POST-WAR PLANS

Jawhar Durbar has drawn up an ambitious post-war programme the main items of which are building a high school, opening a cinema, starting new industries, building a railway station, a creek port at Pale near Dahanu, and a railway line from Pale to Talawali. Other projects include the construction of schools, roads, wells, irrigation works and dairy farming, and the nationalisation of bus service.

CONSTITUTIONAL PROGRESS

Jawhar Durbar have been moving well in advance of the times in introducing constitutional reforms in the State, under which franchise on a very wide basis is given even to Adivasis. In implementation of his promise to reach his cherished goal of becoming a Constitutional Ruler in the minimum of time, the Maharaja has already introduced full responsible Government in the State.

Ministers: S. H. TENDULKAR; K. G. KARKARE, B.A.; V. T. PATIL.

JHALAWAR STATE is situated in the south east of Rajputana surrounded by the States of Kotah, Indore, Gwalior, Sitamau, Dewas and Tonk. There are also two small detached areas of the State—one on the north-east, and another on the north-west bordering Indore, Udaipur and Gwalior territories.

The capital of the State is Brijnagar, the nearest Railway Station being Shrichhatrapur at a distance of 18 miles. Other important towns in the State are Jhalrapatan, Gangdhar, Dag, Bhawani Mandi and Rajendrapur Mandi. The latter two are Railway Stations on the B.B. & C.I Railway main line.



H. H. MAHARAJ RANA SHRI HARISCHANDRA BAHADUR, the present Ruler, was born on 7th of September, 1921. He was educated at the Rajkumar College, Rajkot, Aldenham School, Elstree (England) and St. Joseph's Academy, Dehra Dun. He has also taken the I.C.S. Probationers' Training Course at Dehra Dun and the Indian Police Training Course at Moradabad. His Highness was married to Rajkumari Ila Devi, daughter of the Raja Saheb of Jubbal on 9th May, 1940. The Heir-apparent Yuvaraj Shri Indrajeet was born on 12th June, 1944. A second son—Maharaj Kumar Mahijeet was born on 1st May, 1947.

The area of the State is 813 sq. miles and population approximately 150,000. The revenue is about twenty lakhs.

CROPS & INDUSTRIES

Principal crops are jawar, maize, cotton, gram and wheat. Wells constitute the chief source of irrigation. The State has constructed several tanks and has also introduced lift irrigation from the larger rivers. Principal industries are pottery works, oil mills, and ginning and pressing factories. Good quality of sandstone is quarried from hills for building purposes. There are great possibilities of starting copper and cement works, as also cotton and sugar mills. The starting was delayed due to war conditions, and possibilities are once again being explored. There is an Intermediate Arts College, at Brijnagar. All education in the State is entirely free. The B.B. & C.I. Railway main line has three Railway Stations in the State limits. The Jhalawar Motor Transport Services connect all the districts in the State with one another.

SOCIAL SERVICES

There are three hospitals, two general hospitals with up-to-date equipment including X-ray plant and a Laboratory, and a hospital for ladies known as Shri Hira Kunwarba Hospital. There are dispensaries in all the Districts of the State.

To cultivate a sense of civic responsibility, Home Guards have been organised in the principal towns. There are six fully elected Municipal bodies in important towns receiving grants from the State and Panchayats are being established in the villages. To encourage agriculture and industries, fairs and exhibitions are being held each year at different places in the State.

ADMINISTRATION

His Highness the Maharaj Rana Bahadur has granted full Responsible Government to his people. The Cabinet consists of the President and two other Ministers all the three being elected. HARISHCHANDRA, H. H. THE MAHARAJ RANA of Jhalawar, *President*; KANHAIYA LAL MITTAL, B. Sc. LL.B., *Home & Foreign Minister*; MANGILAL 'BHAVYA', *Development Minister*.

The Judiciary is entirely independent of the Executive. *Judge, High Court:* RAI BAHADUR RANGILAL, Ex-Puisne Judge, Lahore and Ex-Chief Justice, Indore.

JODHPUR STATE, also called Marwar, is the largest (in area) of the Rajputana States. It is bounded on the north by Bikaner and Shekawati, on the east by Jaipur and Kishangarh on the south by Sirohi and Palanpur, and on the west by the Rann of Cutch and the Thar and Parkar District of Sindh. The Maharaja of Jodhpur is the head of the Rathor Clan of Rajputs, and belongs to the solar race of which Rama, the deified king of Ayodhya, is the most illustrious representative. The Royal Houses of Bikaner, Kishangarh, Idar, Ratlam, Sailana, Sitamau and Jhabua are all offshoots of the Family.

The Rathors are first mentioned in the edicts of Asoka in the third century B.C. During the tenth and eleventh centuries the various branches of the clan gradually established ascendency over different parts of India. Then towards the middle of the 13th century that branch of the clan which had settled in Kanouj moved into the desert tracts of Rajputana and founded the city of Jodhpur. The Rathors have been noted for their valour—the motto on the coat-of-arms says, "Ran Banka Rathor," *i. e.*, 'Rathor Invincible'—and one of the kings of Jodhpur was regarded as the most powerful ruler of his time.

The city of Jodhpur contains many handsome buildings, including ten old palaces and eleven fine temples. The fort is one of the finest in Rajputana standing in great magnificence on an isolated rock overlooking the town. Today Jodhpur is an up-to-date airport. It is situated on the main air routes of India and almost all the transcontinental air services pass through this port. The State is entitled to a salute of 17 guns outside and 19 guns inside the territory.



HIS HIGHNESS RAJ-RAJESHWAR MAHARAJADHIRAJ MAHARAJA SRI HANWANT SINGHJI SAHEB BAHADUR, the Ruler of Jodhpur, is the 38th Ruler from Rao Sihaji Rathor (1243-1273 A. D.) the founder of the present ruling dynasty. He was born on June 16, 1923 and was educated at the Mayo College, Ajmer and subsequently the Government College, Ajmer. He married Princess Sri Krishna Kunwarba Saheba, sister of His Highness the Maharajah of Dhrangadhra. He has two daughters, the first born in January 1944 and the second May 1945. After leaving college the Maharaja underwent training in State administration and worked as one of His late Highness' Council

of Ministers, holding such important portfolios as those of Education, Public Works, Customs, and the Ijlas-i-Khas. His Highness ascended the *gadi* on June 9, 1947. Among his recreations are tennis, shooting, fishing, flying, motoring, photography and mechanics.

The area of Jodhpur is 36,120 sq. miles and the population according to the 1941 census 2,555,904. The revenue of the State is Rs. 2,91,65,000.

The greater part of the country is an arid desert. But even in those areas which are fairly fertile the rainfall is scanty and capricious. There are no perennial rivers and the supply of sub-soil water is limited. The only important river is the Luni.

PRODUCE

The principal crops are pulses, millets, bajri, jowar, etc., though wheat and barley are also produced in the more fertile tracts. Large quantities of melons are seen especially near wells. And among the cash crops are cotton, opium, tobacco and sugarcane. Industry is less important than agriculture in Jodhpur. There is a Salt Lake at Sambhar and the marble quarries of Makrana are justly famous. The State is well served by railways. The Jodhpur Railway (a first class railway) extends from Hyderabad (Sind) to Luni Junction, and from Marwar Junction to Kuchaman Road, with branch lines radiating in all directions. The B. B. & C. I. also runs across a portion of the south-eastern border.

Lately the State has witnessed a period of all-round progress and development. The various Departments have been reorganized and put on sound systematic lines. The land revenue system has been revised and the benefit of the Provident Fund placed within the reach of all State servants. Primary education has been greatly stressed and extended. Jodhpur is one of the most literate States of Rajputana. It offers lavish scholarships for vocational training and helps the growth of private institutions by affording handsome aids. There are a number of efficient primary and high schools including a first grade college and four high schools with boarding houses. As for public health there is a State hospital which is the best of its kind in India.

ADMINISTRATION

The Administration of the State is carried on with the aid of the State Council. There is also a Consultative Committee representing the Sardars to help in the administration. Recently, however, great strides have been made in the direction of responsible government. Communal electorates have been abolished, village panchayats with wide powers have been established, the town municipalities have been granted a majority of elected members. A new legislative assembly with an elected majority and power to legislate, interpellate, discuss grants, etc., is to commence functioning shortly.

State Council President and Prime Minister: MAJOR-GEN. MAHARAJADHIRAJ SRI SIR AJIT SINGHJI SAHIB; *Home Minister:* MAJOR MAHARAJ SIR HIMMAT SINGHJI SAHIB; *Revenue Minister:* DEWAN BAHADUR TH. MADHO SINGHJI OF SANKHWAS; *Judicial Minister:* LALA HARISH CHANDRAJI MATHUR, B.A.; *Minister for Public Health:* THAKUR BHERUNSINGHJI BHATI OF KHEJARLA; *Minister for Local Bodies (Local Self-Govt.)* RAI BAHADUR JASWANTRAJJI MEHTA, B.A., LL.B.; *Political Secretary & Ex.-Officio Council Secretary:* SAMRATHRAJ MATHUR, B.A.

JUNAGADH STATE lying in the South-West of Kathiawar Peninsula with a population of 670,719 has assumed a fresh role in the political landscape of what was Kathiawar in 1947 and is Saurashtra in 1948. The area of the State including Mangrol is 3,337 sq. miles.

POLITICAL DEVELOPMENTS

The closing months of 1947 witnessed the breakdown of the machinery of law and order in the State, large scale migration of people across the borders of the territory, the Nawab's desertion of his State and disintegration of his ministry culminating in the Dewan's before his flight to Karachi, requesting the Indian Union represented by the Regional Commissioner for the Western India and Gujarat States at Rajkot to come and administer the State and protect its people from chaos and disorder. Accordingly the Regional Commissioner, under orders of the Ministry of States, took over the administration of the State on 9th November 1947, when peace and order were restored and the migrated population returned to their hearths and homes. The State was placed in charge of Administrator S. W. Shiveshwarkar, M.B.E., I.C.S., assisted by Rao Saheb Tarachand L. Shah, M.B.E., Joint Administrator.

ADMINISTRATIVE REFORMS

The system of governance of the State has since been undergoing steady progress. The first to receive attention was the soothing of the strained relations of sister communities, which was accomplished without much effort with the co-operation of their leaders. Reforms in various Departments were simultaneously taken in hand. Education received priority in that 151 new primary schools were decided to be opened from April, 1948. Text books have been revised. Communal institutions have been changed into schools of common fellowship, Harijan students have been secured the rights and privileges enjoyed by students of any other community.

The Medical Department is also having its share of reforms. District dispensaries are being provided with nurses and mid-wives and additional dispensaries are being planned.

Rail-cum-Road transport has been organised with a fleet of passenger buses plying between various centres in districts. Asphalting of trunk roads and reconstruction of district roads is being planned.

REFERENDUM

In order to determine the unfettered choice of the people whether they wished the State to accede to the Dominion of Pakistan or the Dominion of India, a referendum was taken, after wide notification, on February, 20, 1948 on the specific issue. The referendum was conducted by the Judicial Commissioner for the Western India and Gujarat States Region, C. B. Nagarkar, I.C.S., assisted by a Referendum Officer B. D. Pandit. Out of the total registered voters numbering 2,01,457 throughout the Junagadh State, 1,90,870 exercised their votes at 411 polling booths. 1,90,779 of these voted in favour of accession to the Dominion of India against 91 in favour of the Dominion of Pakistan. The counting of votes was done in the presence of committees of leading citizens of the State, both Hindus and Muslims.

KANKER is a member of the Eastern States Union. It is bounded on the north by Raipur and Drug Dists., on the east by Raipur, on the south by Bastar State, and on the west by Drug Dist., Kanker State has a pleasant, temperate climate. It is the only one of the States in the Eastern States Union which does not pay tribute. The capital of the State is Kanker.

The Ruling Family is Rajput belonging to the Somvashi clan. The State was founded by Bir Kanhar Deo who ruled at Sihawa near Dhamtari in Raipur Dist. about 800 years ago. Some remains of the fort which he built at Dhamtari can still be seen. The family lost the Sihawa Pargana when it was given away as dowry to a Chief of Bastar who is married into the Kanker Royal Family. For some time the Rulers of Kanker were in subsidiary alliance with the Haihayvanshi dynasty of Chhattisgarh and were thus able to hold the Dhamtary tract within their territory. Later when the Mahrattas appeared they could keep their possessions only on condition that they provided a military contingent 500 strong whenever needed. But in 1809 the State fell on evil days when the then Chief was deprived of his possessions. But the misfortune lasted only about ten years for in 1818 the State was restored to the Ruler by the British Resident administering the Nagpur territories on payment of an annual tribute of Rs. 500. This tribute too was eventually remitted in 1823 since when the State has been exempt from payment of tribute of any kind whatever. 1903 marks yet another step forward for in that year the hereditary title of Maharajadhiraj was conferred on the Rulers of Kanker. In 1911 the Rulers were granted a personal salute of 9 guns.



HIS HIGHNESS MAHARAJADHIRAJ BHANUPRATAP DEO, the present Ruler, was born on September 17, 1922. He was educated at the Rajkumar College, and the Mayo College, Ajmer, from where he was graduated. He also took a course in administrative training at the I.C.S. training camp at Dehra Dun in 1943.

His Highness is an adopted son of his predecessor, Maharajadhiraj Lal Komal Deo, and ascended the *gadi* on December 12, 1927, on the latter's death. Seventeen years later in 1944, he was formally invested with full ruling powers. To mark the occasion, the State remitted a large part of the land

revenue which was due to it. The Maharajadhiraj has one son and one daughter.

The area of Kanker State is 1,430 sq. miles and a population of about 150,000 according to the census of 1941. More than half the population consists of Gonds and the remainder are mostly Halbas with a few non-aboriginal castes. The annual income based on the average of the past three years is about Rs. 7,00,000.

The capital town Kanker is situated on the Raipur-Vizianagaram Road, 86 miles from Raipur and 38 miles from Damtari and is connected with both these towns by regular bus service. The population of Kanker town is about 6,000.

AGRICULTURE

The State is predominantly agricultural and the staple food of the people is rice. The Agricultural Department is very active and under its guidance the methods of cultivation are gradually improving through the use of better seeds and implements. The staff does active propaganda throughout the year and explains to the cultivators how to combat insect pests and prepare artificial manure. To increase production the State also supplies the cultivator with improved varieties of seeds. The State has started a dairy with Sahiwal cows, the ultimate object of which is to produce breeding bulls and supply them to the people to improve the breed of the cattle.

FOREST PRODUCE

The State contains 400 sq. miles of forest, from which comes the major portion of its revenue. The chief jungle produce are timber, bamboos, harra, lac, tendu leaves and gum. 1/12 of the harra which is produced in the whole of India comes from Kanker and the quality of the product is also extremely high. With a view to further development a regular working plan has been prepared and about 230 sq. miles of the forest have already been surveyed and demarcated.

His Highness made himself exceedingly popular in all parts of the State soon after his accession to power by the introduction of a series of reforms which included the grant of forest concessions, establishment of village panchayats, development of communications, introduction of constitutional reforms, opening of State temples for Harijans, and the inauguration of many beneficial measures for the welfare and uplift of the masses. His Highness has also acceded to the Indian Union and has signed a Standstill Agreement.

EDUCATION

Being himself a highly educated and enlightened ruler the Maharajadhiraj pays particular attention to the spread of education. Primary education is entirely free while in the high school local students are charged only a nominal fee. There are 34 primary schools in the State including one for girls and according to the new five year plan 5 new schools are to be opened every year. There is already one full-fledged high school located in a magnificent building which is affiliated to the C.P. Education Board. This High School is also remarkable in that it

provides co-education, a novel institution in this part of the country. Further, a new Anglo-Vernacular Middle School has been started at Bhanupratappur, the headquarters of the Tehsil of the same name.

Medical facilities for the rural people have not escaped His Highness' attention either. There is already a fully equipped hospital at Kanker in charge of a competent State surgeon besides five branch dispensaries in the interior, every one of which is in charge of a well-qualified medical man. There is also a Veterinary Department with two veterinary dispensaries, one at Kanker and the other at Bhanupratappur under the supervision of trained doctors. Prompt measures are always taken to prevent outbreaks of epidemics among the cattle.

In a social sense too the State is very much alive. There is some social activity or other all the year round. Kanker has a fully equipped club, Komel Deo Club, named after the late Ruler which provides facilities for indoor and outdoor games. The Club has also a well-equipped library and reading-room.

DEVELOPMENT SCHEMES

A five-year post-war development scheme has been prepared to meet some of the crying needs of the present day. This scheme aims at the development of communications, expansion of education, improvement of agriculture including cattle-breeding, the opening of grain banks, the construction of irrigation projects, the improvement of pisciculture, the extension of medical and veterinary departments, the reorganization of the police and forest services and the expansion of the power house.

ADMINISTRATION

Coming to the question of political organization we find that the Maharajadhiraj was one of the first among the Rulers of the Eastern States Union to introduce responsible government in response to popular demand. The administration is carried on by a State Council of four members including the Maharajadhiraj who is the President and the Dewan who is the Vice-President. The other two members who are chosen by the State Assembly and are responsible to it are designated Revenue and General Member respectively. It is worthy of note that though the ministers chosen by the Assembly wanted only the portfolio of civil supply they were entrusted with other important portfolios like Revenue, Excise, Education, Agriculture and Municipality in addition so that they might effect far-reaching improvements in their respective spheres for the welfare of the people. This generous offer satisfied the Assembly which agreed to work the new Constitution for at least three years.

The Legislative Assembly itself consists of 25 members of whom the majority are elected. His Highness is the President of the Assembly while the Deputy President is a non-official.

Dewan : T. MAHAPATRO, B.A., B.L.

Revenue Member : R. K. LAL.
General Member : C. S. LAHREE.

KAPURTHALA STATE lies in the Province of East Punjab between the rivers Sutlej and Beas. The Maharaja traces his family history back some 900 odd years, when the foundations of his State were laid by Rana Kapur, a member of the Rajput ruling dynasty of Jaisalmer. The Maharaja has a unique position among the Sikh ruling princes of India as both the head of an important State and the premier Taluqdar of Oudh.



MAJOR-GENERAL HIS HIGHNESS MAHARAJA JAGATJIT SINGH BAHADUR, G.C.S.I. (1911), G.C.I.E. (1918), G.B.E. (1927), the present Ruler of Kapurthala, was born on November 23, 1872, son of His late Highness Raja-i-Rajgan Kharak Singh of Kapurthala. His Highness was carefully brought up and received a liberal education. He has five sons and one daughter. The eldest son and Heir-Apparent Shri Tikka Raja Paramjit Singh, was born on May 19, 1892.

The area of the State is 661 sq. miles. It has a population of 3,78,380 and a revenue of about Rs. 70,00,000 including Oudh Estates. The State has acceded to the Indian Union.

His Highness owns landed property in the United Provinces of an approximate area of 700 sq. miles with a population of over 4,50,000, Rai Bahadur Diwan Sunder Dass, M.B.E., being the Manager.

Architecture is one of His Highness' great hobbies. He has always evinced a keen interest in the educational matters of the State. Agriculture has received special attention.

DECORATIONS

His Highness was created a G.B.E. on the occasion of his Golden Jubilee. He was an Honorary Colonel of the 3/11th Sikhs (45th Rattrays Sikhs); was promoted to Major-General in June 1948. He received the Grand Cross of the Legion d'Honneur from the French Government in 1924; also awarded Grand Cordon of the Order of the Nile, Grand Cordon of the Order of Morocco, Grand Cordon of the Order of Tunis, Grand Cross of the Order of Chili, Grand Cross of the Order of the Sun of Peru, Grand Cross of the Order of Cuba, Grand Cross of the Order of Iran; thrice represented Indian Princes and India on the League of Nations in 1926, 1927 and 1929. His Highness celebrated the Golden Jubilee of his reign in 1927, Diamond Jubilee in 1937 and 70th year of his reign in 1947. His Highness had the honour of attending the Silver Jubilee of His late Majesty in 1935, and the Coronation of Their Majesties King George VI and Queen Elizabeth in London in 1937. Appointed Member, India Defence Council in 1941.

STATE COUNCIL

SHRI TIKKA RAJA PARAMJIT SINGH, *President;* MAHARAJKUMAR KARAMJIT SINGH, *Vice-President. Members :* MAJOR MAHARAJKUMAR AJIT SINGH; DIWAN BAHADUR DR. LAKHPAT RAI SIKUND, M.A., Ph.D., Bar-at-Law, *Chief Minister.*

KOLHAPUR, the premier State in the Southern Maratha Country, lies between N. Lat. 15°50′ and 17°10′ and E. Long. 73°43′ and 74°44′. It is bounded on the east by the Patwardhan States (now merged in Bombay Province) and part of Belgaum District of Bombay Province; on the west by Ratnagiri District; on the north by Satara District; and on the south by Sawantwadi State (also merged) and Belgaum District. It represents the only surviving portion of the Maratha Empire founded by Shivaji the Great. It enjoys the right to send its own representative to the Indian Constituent Assembly.



HIS HIGHNESS MAJOR SHRI SIR SHAHAJI CHHATRAPATI MAHARAJASAHEB, B.A., G.C.S.I., the present Ruler of Kolhapur, was born on April 4, 1910. He ascended the *gadi* by adoption on March 31, 1947. He was A.D.C. to H.M. the King, and Ruler of Dewas (Sr.) State before adoption. He served with distinction in the fighting in World War II.

The area of the State is 3,230 square miles. It has a population of about 1,092,046 according to the 1941 census, of whom about 5,54,937 are males and 5,37,109 are females. The Ruler is entitled to a dynastic salute of 19 guns. The State has acceded to the Dominion of India.

COMMERCE AND INDUSTRIES

Industrially the State is sufficiently advanced. There are the Shahu Spinning and Weaving Mill, the Kolhapur Sugar Mills, the Kolhapur State Rly., the Match Factory, a Tobacco Factory and the Radhanagri Hydro-Electric Works (in progress), an Electric Power House and numerous other private industrial concerns existing in the State. Kolhapur City, Jaysingpur and Gadhinglaj are also important commercial and trading centres handling export and import on a large scale of grains, gur, tobacco, ground-nuts, oilseeds, hides, etc.

The principal crops are rice, nagali, warry, and other millets, sugar-cane and ground-nut, jowar, bajri, chillies, tobacco and cotton. The west zone is remarkable for its dense forest and games of all kinds.

The State has minerals particularly bauxite, the deposits of which are some of the richest, finest and most extensive in the whole world. They are capable of profitable exploitation in view of the facility for generating hydro-electric power in the many rivers in the vicinity.

CONSTITUTIONAL REFORMS

Constitutional reforms of a far reaching nature were announced at the time of the formal 'Rajyabhishek' of the present Maharaja, which was held on June 1, 1947. Subject to certain reservations the Executive Council was expanded to include a majority of elected members of the Legislature to whom they were made responsible. On Dasara Day dated 24th October 1947, His Highness announced further reforms and finally on November 19, 1947 an Interim Government was formed of eight Ministers (including the Prime Minister nominated by His Highness), four Ministers belonging to the Praja Parishad and two representing the Kolhapur Legislative Assembly and one of the Scheduled Castes. Responsible Government, subject to some specified reservations agreed to by the Praja Parishad was thereby inaugurated. Elections for a Constituent Assembly to determine the State's future constitution is to be held very shortly. The Prime Minister is in charge of the Reserved subjects only, *i.e.*, Political relations, Foreign Affairs, Army, the Privy Purse of the Ruler and his household and certain specified safeguards as to alienations including Jaghirs. The Ministry functions on the basis of joint responsibility.

At the time of writing, following discussions between the Maharaja and the Secretary to the Indian States Ministry, on the disturbances which occurred in Kolhapur after Mahatma Gandhi's assassination, His Highness has agreed to a request from the Government of India to dissolve the present Ministry to facilitate an impartial and independent inquiry and to appoint an Administrator who would be in charge of the transferred subjects while the reserved ones would be administered by the Prime Minister as before. Capt. V. Nanjappa, I.C.S., the Collector of Nasik took over the charge as Administrator, with effect from 22nd March, 1948.

KOTAH STATE is situated in South East Rajputana bounded on the north by Tonk, Jaipur State and the District of Mathura, on the east by Gwalior State, on the west by Bundi, Udaipur and Indore, and on the south by Rajghar and Khilchipur.



COL. HIS HIGHNESS MAHARAJADHIRAJ MAHI MAHENDRA MAHARAO RAJA SHRI BHIM SINGHJI SAHIB BAHADUR MAHARAO OF KOTAH, the present Ruler was born in 1909 and ascended the *gadi* in 1940. He was educated at Mayo College, Ajmer, and married a daughter of His late Highness Maharaja Ganga Singhji Sahib Bahadur of Bikaner in 1930.

The Heir-Apparent Maharaj Kumar Brijraj Singhji Sahib was born on 21st February 1934.

The ruling family belongs to the Hara sect of Chauhan Rajputs and is an offshoot of the Bundi family. Kotah State came into existence about 1625 during the reign of Madho Singhji, second son of Rao Ratan of Bundi.

Area of the State is 5,684 sq. miles with a population of 777,398; Revenue (from 1941-42 to 1945-46) Rs. 63,89,255 (last five years' average); salute 17 guns.

Agriculture is the chief occupation in the State, and there are two big mandis from where grain and oilseeds are exported. The proposed Chambal Hydro-electric Project is expected to irrigate a vast area of land and run numerous industries.

The State is famous for the manufacture of fine muslin known as "Doria cloth"

EDUCATION

There is a First Grade College affiliated to the Rajputana University, five High Schools, including one Girls' High School at Kotah and 215 other schools out of which one is a Teachers' Training School and 25 Vernacular Schools for girls. Consequent on the passing of the Kotah State Compulsory Education Act 1946, compulsory education has been introduced in the city of Kotah with effect from the 11th August, 1947.

The State maintains 36 dispensaries including one hospital for women in Kotah proper, and subsidizes a number of practitioners in indigenous medicines. The number of Co-operative Societies as on 31-8-47 is 586.

The Nagda-Muttra section of the B. B. & C. I. Rly. and a portion of the Bina Baran Railway run through the State, a length of 32 miles the latter being owned by the State. The capital, Kotah, lies on the B. B. & C. I. Railway. Other trading centres are Baran and Ramganj Mandi.

There is a regular hierarchy of judicial courts from the High Court down to the Village Panchayats, established to provide cheap and prompt justice in petty cases of prescribed nature. The High Court was established in 1939. Justice is administered according to laws codified by the State Government and the spirit of the Law in force in India.

The Kotah State is represented on the Indian Constituent Assembly by Lt.-Col. Kr. Dalel Singhji, M.A., and has acceded to the Indian Union.

ADMINISTRATION

Administration is carried on by His Highness with the assistance of a State Council of five ministers constituted as follows:

President: H. H. THE MAHARAO SAHIB BAHADUR; *Vice-President & Prime Minister*: S. N. MEHTA, I.C.S.; *Home Minister*: RAJ CHANDRA SENJI OF KUNADI; *Development Minister*: N. L. IYA, B.A., B.E., M.I.E. (India); *Revenue & Civil Supplies Minister*: THAKUR MAHENDRA SINGHJI RANAWAT; *Minister-in-waiting* LT.-COL. KR. DALEL SINGHJI.

KUTCH STATE is bounded on the north and north-west by Sind, on the east by the Palanpur Agency, on the south by Kathiawar and on the south-west by the Indian Ocean. Whichever way one looks at the State, either from its isolated position, or its distinctive dialect or the strong feeling of loyalty which the people have for the Ruler, Kutch has more of the elements of a separate unit than any other State in Western India. The capital of the State is Bhuj, founded in 1549.



The earliest historical record of the State is found in Greek writings. Its modern history, however, dates from its conquest by the Sind tribe of Samma Rajputs in the thirteenth century. This tribe later came to be known as Jadeja, that is to say, the children of Jada the reputed founder of the tribe. Thus the Maharao of Kutch has always been recognised as the head of the Jadeja clan of Rajputs.

After their initial victories the Jadejas gradually spread themselves into the various parts of the Peninsula till at last early in the 16th century Maharao Shri Khengarji I became the first ruler of the whole of Kutch with the designation Maharao.

THE RULER

MAHARAJA DHIRAJ MIRZA MAHARAO SHRI MADANSINHJI SAVAI BAHADUR, Maharao of Kutch, the present Ruler, was born on October 12, 1909 and was educated privately. He married Maharaj Kunvari Shri Rajendra Kunver Ba of Kishangarh and has three sons and two daughters.

His Highness personally takes active interest in the administration and has often represented the State in discussions with the Government of India on major problems affecting Kutch. He has travelled widely in Europe and Africa and is keenly interested in Indian philosophy. Among his recreations are riding, pigsticking and shikar. He is a tennis player of note.

The Maharao has 2 brothers and 3 sisters. His younger brother Maharaj Kumar Shri Fatehsingji was born in 1920 and the youngest Maharaj Kumar Shri Himmatsinhji was born in 1928.

Maharaj Kumar Shree Prithvirajji, the eldest son of His Highness, is the Heir-Apparent and is at present receiving education at the Mayo College, Ajmer.

The Maharaja is entitled to a permanent salute of 17 guns and a local salute of 19 guns.

The area of the State of Kutch is 17,225 sq. miles including the two Ranns which have an area of about 9,000 sq. miles. The population of the State is, according to the census of 1941, 500,800. The average annual revenue is about Rs. 70,00,000 (Krs. 2,10,00,000).

PRODUCE

There is a fair proportion of good arable land in Kutch and wheat, barley and cotton are cultivated. Irrigation has been well developed and there are today 18 dams irrigating an area of 6,375 acres.

The State is rich in gypsum, clays and limestone and has fairly large deposits of iron and lignite.

As for occupations other than agriculture and mining, there are the beautiful embroidery and silverwork, for which Kutch is chiefly noted. Silk and cotton textiles are also of some importance. The main industrial establishments in Kutch are the United Salt Works, the Anjar Spinning and Weaving Mill, the Kutch Oil and Allied Industries, the Kutch Match Works, and the Meraw Metal Works.

COMMUNICATIONS

There are 72 miles of railway in the State and 270 miles of road. But goods are mostly carried by sea in country craft, the chief import and export centres being Mandvi and Tuna. The State has a modern port in Kandla which is a natural harbour. The port has a reinforced concrete pier along which large ocean going ships can lie, and the water at the approaches is both smooth and deep.

Both primary and secondary education are free in the State. There are altogether 625 schools with 27,300 names on the rolls. Medical relief is just as extensive with 6 Government hospitals and 14 Government dispensaries, dispensing medicine and advice.

ADMINISTRATION

Passing next to political organisation we find that the authorities are anxious to keep in harmony with the spirit of the times. Local self-government is already functioning in the major towns of the State, where there are municipal bodies with elected majorities and elected non-official Presidents. As for the rural areas a Gram Panchayat Act has just received the Ruler's assent and has become law. Under the Act there will be a Gram Panchayat in every village with a population of 500 and over. Like the Municipalities the Panchayats will have elected majorities and elected Presidents.

In keeping with the political trend all over the country, His Highness has declared his intention to grant full Responsible Government to his people as early as possible.

LAKHTAR STATE in East Kathiawar lies between North Lat. 22°49′ and 23° and East Long. 71°46′ and 72°3′. It consists of two distinct portions, Than and Lakhtar together with some outlying villages in Ahmedabad Dist. The Ruler is descended from the Dhrangadhra House. The capital of the State is Lakhtar.



THAKORE SAHEB SHRI INDRASINGHJI SAHEB of Lahktar, was born on April 15, 1907. He was educated at the Rajkumar College, Rajkot. He married in 1926 Bai Shri Vijayakunverba Saheba, daughter of the late Raolji Shri Taktasinhji Saheb of Mansa. He ascended the *gadi* on July 2, 1940 on the death of his father. The Heir-Apparent Yuvraj Saheb Shri Balbhadrasinhji Saheb was born on November 19, 1929. He is now studying at a leading college in Bombay. The Thakore Saheb has also two daughters.

The Thakore Saheb is a ruler of very progressive views and takes a keen interest in the administration of the State. There is no capital punishment in Lakhtar.

The area of the State is 247.4 sq. miles and the population is over 30,000. The annual income of the State is about five lakhs.

The main occupation of the people is agriculture. Cotton is also grown, besides the usual food grains.

In Lakhtar there are three ginning factories, one pressing factory and one oil mill, while Thangadh, the other town, is famous for its fine pottery works. Lakhtar's chief link with the rest of India is the B. B. & C. I. Railway, the capital itself being a station on the Railway's metre-gauge section.

Like all progressive states Lakhtar devotes special attention to education. The State has one high school affiliated to the Bombay University, 2 middle schools, 9 vernacular schools for boys, and 2 for girls. To encourage higher education, the State has established a permanent fund, and 15 scholarships are awarded for further study in Arts, Agriculture, Medicine and other technical subjects every year.

ADMINISTRATION

The State has a representative constitution the purpose of which is to associate the people more closely with the administration. The judiciary is independent of the executive.

Dewan: R. P. Shukla, High Court Pleader; *Revenue Karbhari:* M. S. Raval; *Popular Ministers:* T. C. Trivedi; L. V. Rana; *President, Legislative Assembly:* J. D. Shah, Advocate; *Chief Medical Officer:* D. M. Shah, M.B.B.S.; *Educational Officer:* B. D. Vyas, B.A.; *Assistant Medical Officer:* C. D. Rana; *Accounts Officer:* K. N. Mehta; *Thangadh Mahalkari:* G. M. Vyas; *Supdt. of Police:* M. M. Rana (Retired Agency Police Officer); *Hazur Shirestedar:* P. G. Shah, Advocate; *State Survey Officer:* P. H. Pathak; *Rayasat Adhikari:* L. K. Gohel.

Huzur Court Judge: C. G. Sanghavi, Advocate, W.I.S. Agency; *Sar Nyayadhish (District & Sessions Judge):* U. K. Mehta, B.A., LL.B.; *Lakhtar Nyayadhish (Civil Judge & First Class Magistrate):* M. B. Shah, B.A., LL.B.; *Thangadh Nyayadhish (Civil Judge & First Class Magistrate):* J. M. Bhatt, B.A., LL.B.; *Huzur Court Registrar:* M. K. Shah, B.A., LL.B.; *Thangadh Medical Officer:* J. P. Mehta, L.C.P. & S. (Bom.).

LATHI STATE is situated in Kathiawar between north latitude 21°14′ and 21°45′ and east longitude 71°23′ and 71°32′. The Rulers are Gohel Rajputs and are the descendants of Sejakji, the common ancestor of Bhavnagar, Palitana and Lathi. The capital of the State is Lathi.



THAKORE SAHEB SHRI PRAHLADSINHJI OF LATHI, the present Ruler was born on March 31, 1912. He was educated at the Rajkumar College, Rajkot. He ascended the *gadi* on October 14, 1918 and after a course of training in administration in the Wankaner State was invested with full ruling powers on February 19, 1931. He has married Surya Kunverba Saheba, a daughter of the late Thakore Saheb of Kotda-Sangani. The Heir-Apparent K. S. Bhupendrasinhji was born on November 27, 1935.

The area of the State is 48 sq. miles and the population 10,812. The annual revenue is Rs. 4,67,000.

Lathi is agricultural, the chief crops being jawar, bajri, groundnut, wheat, gram, pulses, chillies and sugar-cane.

The most important industries are hand-loom weaving, cotton ginning and the production of edible oil. The chief exports are grain, seeds and oil, hand-woven cloth, pottery, gur, hides and skins and the chief imports mill cloth, sugar and luxury goods.

As for communications, the Gondal State Railway passes through Lathi town, and there are motor services which connect Lathi with Amreli, Rajkot, Damnagar and other places.

Among post-war plans are included the construction of a new hospital, high school, waterworks, drainage, roads and houses. A cinema which was part of the post-war programme is already functioning.

Primary education is free.

ADMINISTRATION

The administration is carried on by Councillors selected from a panel submitted to the Thakore Saheb by the non-official members of the Praja Pratinidhi Sabha. The Sabha which was formed on the Maharaja's own initiative is a body with a non-official majority. There is also another Sabha in the State called the Khedut Sabha which deals with problems affecting the social and economic uplift of the cultivators. This Sabha has been functioning since 1937.

High Court Judge: BHUPATRAI M. BUCH, B.A., LL.B.

Political Councillor: BAVALAL UTTAMRAM UPADHYAY.

Revenue and Finance Councillor: PRABHUDAS VASHRAM SHAH.

Public Works and Municipal Councillor: ISUFALLY TYABALLY VORA.

Medical Officer: DR. P. K. DAVE.

Sar Nyayadhish: M. A. MEHTA, B.A., LL.B.

Acting Educational Officer: ISHWARLAL G. VASAVDA, B.A.

Superintendent of Police: BHANJI BHURAJI SOLANKI.

LUNAWADA STATE is situated in the Gujarat States group. The Rulers belong to the illustrious clan of Solanki Rajputs, descended from Sidhraj Jaysinh Deo of Anhilwad Patan, once the Emperor of Gujarat, Cutch and Kathiawar. Lunawada is the capital of the State.



CAPT. HIS HIGHNESS MAHARANA SHRI VIRBHADRASINHJI, the present Maharana Saheb of Lunawada State, was born in 1910. He ascended the *gadi* in 1930.

His Highness was educated at Mayo College, Ajmer. He underwent military training at Dehra Dun and joined the Welsh Regiment for acquiring practical training in modern warfare. He personally proceeded to the Italian Front in 1944-45 to take active part. He is the recipient of 1939-45 Star, Italian Star, Indian Service Medal and War Medal.

The Maharana married Maharani Saheba Shri Munherkunverba, daughter of Capt. H. H. Maharana Raj Saheb Shri Sir Amarsinhji, K.C.S.I., K.C.I.E., of Wankaner State, in 1931.

His Highness is held in high esteem among the Rajputs of the Rewakantha and Panchmahals and has been endeavouring to help the social uplift and educational activities of the Rajputs of the neighbouring areas. He is the Chairman of the Gujarat States organisation and is President of the Regency Board of the two Gujarat States of Chhota-Udaipur and Balasinor.

The area of the State is 388 sq. miles, its population 1,05,318 and its revenue Rs. 14,00,000. The Ruler is entitled to a dynastic salute of 9 guns. The State has acceded to the Dominion of India.

INDUSTRY

Industrially the State is well-off. There are at present a match factory, leather factory, rice, oil and pulse mills and a saw mill. Possibilities are being explored for the establishment of a sugar factory and textile mill in the State. Post-war development schemes are being undertaken and the town of Lunawada will shortly have the benefit of cement roads and an additional hospital with the latest equipment. The State is rich in forests and is considered a paradise for shikaris.

Primary and secondary education and medical aid are given free throughout the State.

Lunawada, the capital of the State, is also a railway station, 25 miles from Godhra on the Bombay-Delhi route of the B. B. & C. I. Rly. The State abounds in very beautiful and attractive natural scenery. Lunawada and other important places are connected by good roads, and a pucca metalled road runs between Lunawada and Godhra



The Maharana Saheb has three sons. Maharajkumar Shri Bhupendrasinhji, the eldest son and Heir-Apparent, was born on October 14, 1934. Rajkumar Shri Dhirendrasinhji and Rajkumar Shri Pushpendrasinhji were born on December 25, 1935 and January 31, 1937, respectively. All the three sons are studying in the Mayo College, Ajmer.

ADMINISTRATION

The administration of the State is conducted by the Maharana Saheb with the assistance of a State Council of which His Highness is the President. *Dewan and Foreign and Political Member:* A. P. SHAH, B.A. (Hons.), Advocate; *Wazir and Home Member:* MAHARAJ PRAVINSINHJI; *Popular Member:* L. K. PATEL; *Naib Dewan and 4th Member:* MAHARAJ VIRVIKRAMSINHJI; *Chief Secretary*: N. K. KANABAR.

PRINCIPAL OFFICERS

High Court Judge: N. N. PATWARI, B.A., LL.B., Solicitor; *District and Sessions Judge*: V. A. MEHTA, B.A., LL.B.; *District Magistrate:* H. P. RATHOD, B.A., LL.B.; *Nyayadhish and F. C. Magistrate:* G. H. ANANDJIWALA, B.A., LL.B.; *Private Secretary:* M. V. PAWAR, B.Sc.; *Ag. State Engineer:* T. P. PANCHAL; *Police Superintendent:* S. M. PANDYA; *Chief Medical Officer:* DR. N. D. SHAH, M.B., B.S.; *Revenue Officer:* A. R. DAVE, B.A.; *Customs Officer:* B. H. CHAUHAN; *Forest Officer:* S. L. DAVE; *Head Master, S. K. High School:* R. G. MODI, M.A.

MANAVADAR STATE, in Kathiawar, comprises an area of 107 sq. miles with a population of 32,000. The revenue is Rs. 11,90,000 (average of last five years).



KHAN SAHEB GHULAM MOINUDDIN KHAN Nawab of Manavadar State, is a descendant of the illustrious Uzmanzai Pathan (Babi) family who, since the reign of Humayun, have always been prominent in the annals of Gujarat.

He was born on Dec. 22, 1912, and was educated at Rajkumar College, Rajkot. The Nawab succeeded to the *gadi* in 1918 and was invested with full ruling powers on Nov. 21, 1931.

He married Sahebzadi Qudsia Siddiqa Begum Saheba, sister of the present Shaikh Saheb of Mangrol, in October 1933.

Nawabzada Mohamed Aslam Khan Saheb, Heir-Apparent, was born on the 15th of March, 1935. The three other princes are N. Z. Mohamed Fatehuddin Khan, N. Z. Mohamed Anees Khan, N. Z. Mohamed Idrees Khan.

The administration of the State during the minority of the Khan Saheb from 1918 to 1931 was in the hands of Fatima Siddiqa Begum Saheba, the late mother of the Khan Saheb, who was awarded the "Kaiser-i-Hind" Gold Medal by the Government for her administrative genius which was amply demonstrated during her Regency.

MAYURBHANJ STATE lies between North Latitude 21·17′ and 22·34′, East Longitude 85·40′ and 87·10′ and is bounded on the north by the Seraikela State and the Singhbhum and Midnapur Districts, on the south by the States of Keonjhar and Nilgiri and the Districts of Balasore, on the east by the Midnapur and Balasore Districts, and on the west by the Singhbhum District and the Keonjhar State. Ancient Mayurbhanj extended over the territories of Kolhan and Seraikela States and parts of the Balasore and Midnapur districts prior to British conquest of Orissa in 1803. It has sometimes been described as the Switzerland of the East Indian Peninsula. The State is rich in antiquities. The recent discovery of certain archæological remains testifies to its ancient civilization and culture.



Maharaja Sir Pratapchandra Bhanj Deo

The ruling family is the head of the Bhanja Vansi Kshatriyas of Orissa and claims to belong to the solar line. The emblem of the State is a peacock. The capital of the State is Baripada, a progressive town which provides modern amenities.

FL./LT. HIS HIGHNESS MAHARAJA SIR PRATAP CHANDRA BHANJ DEO, G.C.I.E., Maharaja of Mayurbhanj, was born on February 18, 1901. He was educated at the Mayo College, Ajmer and the Muir Central College, Allahabad. He was married on November 25, 1925, to a daughter of Mahrajkumar Sardar Singhji of Shahpura, Rajputana. He has two sons and one daughter. The name of the Heir-Apparent is Tikait Pradeep Chandra Bhanj Deo. The Maharaja succeeded to the *gadi* on April 23, 1928, after the death of his elder brother and was formally installed on June 16, 1928.

The area of the State is 4,243 sq. miles. The population is 9,90,977 and the revenue Rs. 46,87,000.

PRODUCE

Mayurbhanj is mainly agricultural, the principal products being rice, maize and millet. The chief cash crop is oil-seeds. There are three major irrigation works at present and new projects are being undertaken yearly to provide more facilities. To help the cultivator the State has opened an Agricultural Department, established granaries and has passed several legislative measures besides making annual liberal grants and loans.

FORESTS

The famous Similipal hills attaining a height of nearly 4,000 feet contain varieties of fauna and flora. Different species of timber are found in these hills. There is an extensive Sabai plantation in the State. Medicinal plants, barks, flowers, fruits and seeds are exported in large quantities. Experiments are being made with growing of exotic species, namely teak, pine, paper mulberry, eucalyptus, sandalwood, cinchona, tea, coffee and Sylhet oranges; and they have proved successful in most cases.

MINERALS

The State is also rich in mineral resources. The mining of iron-

ore undertaken by Tatas is one of the chief industries of the State. A geological survey has revealed the existence of large deposits of vanadium-bearing magnetite, glass-sand and kaolin. All these resources have enabled the State to embark on a programme of large-scale industrialization. For instance, factories for the production of vanadium, glass, textiles, potteries, plastics, chemicals and pharmaceuticals have been set up. The State does not overlook the interests of its cottage industry either. It has opened an industrial school and the products of the Mayurbhanj Tussar Textiles and Cottage Industries have received wide appreciation both in India and abroad.

In its southern part the State is connected with India by the Mayurbhanj Railway which runs from Talbandh, *via* Baripada to Rupsa on the Calcutta-Madras line of the B. N. Railway; and in the northern part it is connected to India by the B. N. Railway running from Badampahar to Tatanagar. The State is also well served by a number of good roads.

EDUCATION

The State is very active in the nation-building departments of the administration. Primary education is free and adult education forms an important item in rural reconstruction. There are four high schools, a large number of primary and middle English schools as well as girls' schools, Muktabs, Sanskrit Tols, special schools and night schools. For the spread of education the State spends about three lakhs of rupees annually.

MEDICAL SERVICE

Throughout the State there are dispensaries including itinerant ones and hospitals and leprosy clinics to cater for the patients. There is an up-to-date hospital at the capital with arrangements for X'Ray, clinical, chemical and microscopic examinations. A fully equipped Zenana hospital is also attached to it. There is also a maternity and child welfare centre in the hospital compound. There is an Ayurvedic Dispensary in charge of a Kaviraj who looks after patients. The number of patients thus treated yearly is over three lakhs.

ADMINISTRATION

Mayurbhanj has been developing for many decades on progressive lines and has evolved an individuality of its own which has stood the test of time and of which it can justly be proud. In its constitutional aspects as well, it has developed a form which is suited to its own conditions and serves its special needs.

The State has acceded to the Indian Union and is represented by Sri Lalmohan Pati.

A Constituent Assembly has been elected, consisting of 51 members with the object of framing a wholly popular form of Government under the ægis of the Ruler but without any reservation for him. The Assembly elected Hon'ble Sri Sarat Chandra Das, President of the Mayurbhanj Prajamandal as the Prime Minister. He formed an Interim Ministry for the State on December 10, 1947. As an interim arrangement pending the framing of the constitution, the Constituent Assembly is functioning as the State Legislature. The executive administration is being carried on by the Council of Ministers responsible to the legislature.

The State has four sub-divisions where regular law courts have been established. Appeals from the subordinate courts are accepted in the High Court at the capital consisting of three judges who are independent of the executive. There is perfect amity amongst different classes and no communal trouble has ever occurred in the State.

MOHAMMADGARH STATE in Central India, lies on the Malwa Plateau to the north-east of Bhopal. Bhonrasa State was conquered by Diler Khan who became Amirul Umera and Nawab. He constructed the Kurwai fort and made it his capital. On his death, the State was divided between his two sons. The younger son Nawab Ahsan-Ullah Khan got the portion with the old capital Bhonrasa. Both the sons became weak and began to lose their territories to the Mahrattas. Nawab Ahsan-Ullah Khan lost almost all his State including the capital Bhonrasa.



Nawab Mohammad Sabir Quli Khan Bahadur Safdar Jang Diler Jang.

Later on his eldest son Nawab Mohammad Khan conquered a small place and constructed a fort, which was named by his father as Mohammadgarh. Nawab Mohammad Khan made Mohammadgarh his capital. In 1912 the administration of the State was made over to Nawab Siddiq Quli Khan. Today Mohammadgarh pays no tribute to any State and has direct political relations with the Government of India through the Regional Commissioner for Central India.

The present ruler of Mohammadgarh, NAWAB MOHAMMAD SABIR QULI KHAN BAHADUR SAFDAR JANG DILER JANG is the eighth ruler of the dynasty, and was born at Bhopal on January 28, 1929. His father is Nawab Siddiq Quli Khan Bahadur who abdicated in his favour on August 2, 1947. His mother Nawab Asadi Begum belongs to the family of Nawab Baqi Mohammad Khan of Bhopal.

The young Nawab was educated at the Daly College, Indore, where he had a distinguished academic career. He passed the Senior Cambridge Examination in the first division in 1947. On August 2, 1947, he was invested with full ruling powers at the age of 18.

The area of the State is about 30 sq. miles and the population about 3,000. The average annual income is about Rs. 60,000.

AGRICULTURE

The State is mainly agricultural, the soil being very fertile. Wheat is the chief crop while among the subsidiary crops are gram, rice, jowar and sugar-cane. Water for cultivation comes from wells and from reservoirs formed by building *palas* across streams. One drawback, however, which the State is trying hard to remedy, is the backward nature of the individual cultivator.

The Ruler is progressive-minded and the State has ambitious plans for post-war reconstruction, which will include the construction of a good school, a hospital and an all-weather road through the State for which last the Administration is looking to the Central Government for help and encouragement.

MUDHOL STATE in the Deccan is situated between the Belgaum and Bijapur Districts of the Bombay Province. Mudhol is an ancient State dating back to 1397. The Ruling family claims descent from the Sesodia Maharanas of Udaipur. The capital of the State is Mudhol.



HIS HIGHNESS SHRIMANT RAJA BHAIRAV SINH, the present Ruler of Mudhol, was born on October 15, 1929. He was educated at Westgate-on-Sea, England, the Shri Shivaji Preparatory Military School, Poona, and the Doon School, Dehra Dun. He succeeded to the *gadi* on November 9, 1937 and was invested with full ruling powers on July 10, 1947.

His Highness is an all-round sportsman and a good shikari.

The area of the State is 367 sq. miles and the population 72,447. The revenue of the State is about 5 lakhs.

The greater portion of the soil in the State is black and the staple crops are cotton, jawar, bajra, wheat and groundnut.

INDUSTRY

Industry is represented by ginning and pressing factories, slate works and oil expellers. A cement and sugar factory is also under contemplation. Handloom industry is carried on on a large scale at Mahalingpur town and a few other villages. There are over 3000 handlooms working in the State, and the saris which they produce are in great demand in the neighbouring districts and the Mysore State.

Mudhol town is connected to the Chikodi Road railway station on the M. & S. M. Railway by a metalled road. There is regular bus service between Mudhol town and Chikodi Road.

Primary education is free and only very small fees are charged for secondary education. Many scholarships are also granted to poor and deserving students. The State maintains a well-equipped hospital and maternity ward at Mudhol and two dispensaries elsewhere.

POST-WAR PLANS

As for post-war planning the Government of India have been approached for the construction of the Raybag-Bagalkot Railway and the project is under active consideration. Negotiations are also in progress about the establishment of a sugar and cement factory in the State. Finally, though the State itself has no independent irrigation projects in hand it is so situated that it stands to benefit by the Daddi Dam Scheme of the Government of Bombay if it materializes.

The Maharaja has declared his intention of establishing responsible government in the State under the ægis of the Ruler. Pending the establishment of a new Constitution, the administration is carried on by the Maharaja himself with the aid of an Executive Council consisting of the Dewan, who is the President of the Council and two popular ministers.

MYSORE STATE is surrounded on all sides by the Madras Presidency except on the north and the north-west where it is bounded by the districts of Dharwar and North Canara respectively and towards the south-west by Coorg. The capital of the State is Mysore, which is also the residence of the Maharaja.



HIS HIGHNESS SIR SRI JAYA CHAMARAJENDRA WADIYAR BAHADUR, G.C.B. (1946), G.C.S.I. (1945), LL.D. (1942), the present Ruler of Mysore, was born on July 18, 1919. He succeeded to the *gadi* in August 1940 and was invested with full ruling powers on September 8, 1940. His Highness was educated at the Maharaja's College, Mysore and passed his B.A. from the Mysore University in 1938. He has travelled extensively in the Far East and Europe, and is an expert musician, a keen rider. He plays tennis and racquets and is fond of big game shooting.

The area of the State is 29,474.82 square miles, population: 73,29,140 and annual revenue Rs. 10,16,46,000. Mysore has acceded to the Dominion of India and has sent its own representatives to the Indian Constituent Assembly.

The chief agricultural products are rice, ragi, sugar-cane, coffee, cocoanut, areca, cotton and mulberry.

Industries manufacturing iron and steel, cement, paper, sugar, cotton and silk, soaps, chemicals and fertilisers, sandalwood oil, etc., thrive in the State. The only aircraft factory in India is situated in Bangalore. Mysore is the principal gold producing centre in India.

Communications by road as well as by railway have been maintained throughout the State. There are 6,273 miles of road of which 5,051 miles are metalled. The State railway comprises of 609 miles of metre gauge line and 102 miles narrow gauge line. There is also a tram line running for 36 miles. Mysore is also rapidly developing into an important air port.

The State is devoting special attention to post-war planning for which many schemes have been formulated. So far Government have sanctioned 80 schemes relating to agriculture, veterinary and animal husbandry, electrical, railways and medical and public health. Government have ordered the working of details for the establishment of a rayon factory in the State.

ADMINISTRATION

The Maharaja has, by a proclamation, announced the establishment of responsible Government in the State. An Interim Popular Ministry has been formed with the Dewan, and 9 Ministers responsible to the legislature, with a Chief Minister. The Ministers now function as a cabinet with the Dewan and act on the basis of joint responsibility on all matters. The Interim Ministry has initiated the setting up of a constituent assembly composed of 76 elected members of whom 5 are Muslims and 9 depressed classes, to frame the new constitution. The new constitution was to have come into effect on July 1, 1948.

COUNCIL OF MINISTERS.—*Dewan*: DIWAN BAHADUR SIR A. RAMASWAMI MUDALIAR, K.C.S.I.; *Chief Minister*: K. CHENGALARAYA REDDY, B.A., B.L.; *Ministers, Finance and Industries*: H. C. DASAPPA, B.A., LL.B.; *Law and Labour*: K. T. BHASHYAM IYENGAR, B.A., B.L.; *Public Works and Agriculture*: H. SIDDIAH, B.A., LL.B.; *Home*: T. MARIAPPA; B.A., LL.B.; *Local Self-Government*: R. CENNIGARAMIAH; *Public Health and Excise*: MAHMOOD SHERIFF, B.A., LL.B.; *Education*: D. H. CHANDRASEKHARAIYA, B.A., LL.B.; *City Municipalities and Muzrai*: RAJASEVASAKTA P. SUBBARAMA SETTY; *Private Secretary to His Highness*: AMATYASIROMANI SIR T. THUMBOO CHETTY; *Chief Justice*: RAJADHARMAPRAVINA DEWAN BAHADUR P. VENKATARAMANA RAO B.A., B.L.

NARSINGARH STATE in Malwa lies between north latitude 23°35′ and 24°0′ and east longitude 76°20′ and 77°10′. It is bounded on the north by Indore, Kilchipur and Rajgarh States, on the east by Maksudangarh and Bhopal, on the west by Dewas and Gwalior, and on the south by Bhopal and Gwalior. The Ruler belongs to the Parmar clan of Rajputs. Besides Narsingarh which is the capital there are three towns *viz.*, Pachore, Khujner, and Chhapihera.



His Highness Rajah Shri Sir Vikramsinghji Sahib Bahadur, K.C.I.E., the present Ruler, was born on September 21, 1909. He was educated at the Daly College, Indore, and the Mayo College, Ajmer. He also spent a year in Bangalore where he received his administrative training under the Mysore Government. In July 1928 he paid a visit to England, Scotland and France. In June 1929 he married a daughter of the late Ruler of Cutch. He ascended the *gadi* on April 23, 1924 and was invested with full powers on October 7, 1929. He again visited Europe in 1933 and 1936. The Maharaja is entitled to a salute of 11 guns.

His Highness has adopted as heir Maharajkumar Shri Bhanuprakash Singhji Sahib Bahadur, the eldest son of his youngest uncle, Maharaj Shri Prabhunath Singhji Sahib Dharmalankar. The Heir-Apparent who is in his nineteenth year is studying at the Daly College, Indore.

The area of the State is 734 sq. miles and the population 1,25,178 according to the 1941 census. The revenue is Rs. 10,77,000.

PRODUCE & INDUSTRY

The soil of the State consists mostly of the fertile black variety common to Malwa; and the main occupation of the people is agriculture. The principal food crops are jawar, wheat, maize and gram in that order of importance, and the principal cash crop is cotton. The State is the sole proprietor of the land, villages being leased out to farmers who are responsible for the assessed revenue of the holdings.

To develop the industrial resources of the State, a technical and economic adviser has been appointed. A Bank called the Hind State Bank has also been started under the patronage of the Maharaj Sahib Bahadur.

Narsingarh is well served by a net-work of motor roads. The nearest rail-heads are Bhopal 71 miles and Sehore 44 miles. Narsingarh is also only 21 miles from Biaora on the Bombay-Agra Road.

Among the post-war projects are the opening of a cinema, the installation of a telephone system in the capital and the establishment of cottage industries like pottery, wood-work, etc.

Primary education is free and liberal scholarships are granted to deserving students for higher education. The State maintains a good number of primary schools, four middle schools, a boys' high school and a girls' school.

Medical aid is free. There are well-equipped allopathic hospitals of all kinds in the State. The ayurvedic and unani systems are also encouraged in equal measure by the grant of suitable allowances to private practitioners.



Heir-Apparent

The State has been active in the sphere of social and economic reform. It has, for instance, abolished child marriage, the nukta ceremony and bedgars. It has constructed culverts, irrigation tanks, etc. Takkavi loans are lavishly granted to cultivators each year, and a general remission of arrears of land revenue amounting to about Rs 10,83,000 has also been declared.

ADMINISTRATION

The Maharaja is assisted by a State Council in which there will be two elected members. There is an independent High Court with C. B. Sanghi, M.A., LL.B., as Chief Justice, who also acts as Adviser-in-Chief to the Maharaja. Local Self-Government has also begun to function and the municipalities have a majority of elected members. The present constitution, however, is being revised by a Committee of six members who are to frame a new constitution.

President, Executive Council: His Highness Maharaja Shri Sir Vikram Singhji Sahib Bahadur, K.C.I.E., Ruler of Narsingarh State; *Dewan & Vice-President:* Maharaj Shri Prabhunath Singhji Sahib, Dharmalankar, Dharmkesri; *Judicial Member:* Rai Sahib Munshi Brahma Dina, B.A., LL.B.; *General Member:* Ambika Prasad Kaushik, B.A.; *Revenue Officer:* Pandit Kundan Lalji; *Private Secretary to His Highness the Maharaja Sahib Bahadur:* Khan Sahib Mulla Abdul Quadir, N.K.D., B.A., LL.B.; *Comptroller of the Household to H H. the Maharaja Sahib Bahadur:* Kunwar Khuman Singhji Sahib; *Personal Assistant to the Dewan & Vice-President, State Council:* Nagendra Mohan Vyas, M.A., LL.B.; *Council Secretary & Superintendent, Durbar Office:* Pandit Vaikuntha Nandan Vyas, B.A., L.S.G.D.; *Accountant General:* Pandit Jagannath Prasad Vyas, B.Com., Visharad. *Foodgrain Commissioner:* Pandit Ishwari Prasad Dube; *Director of Education:* Murlidhar Vijaivargiya, M.A., L.T.; *Chief Justice and Adviser-in-Chief to His Highness the Maharaja Sahib Bahadur:* C. B. Sanghi, M.A., LL.B., Advocate; *District & Sessions Judge:* Rai Sahib Munshi Brahma Dina, B.A., LL.B.; *Munsif & Magistrate, 1st Class Sadar:* R. S. Tiwari, B.A., LL.B.; *Munsif & Magistrate, 1st Class at Khujner:* G. K. Sharma, B.A., LL.B.

NAWANAGAR STATE is situated on the southern shores of the Gulf of Cutch in Kathiawar. Nawanagar comes first in order of preference among the Kathiawar States. Nawanagar has acceded to the Indian Union. The capital of the State is Jamnagar. The Royal family belongs to the Jadeja clan of Rajputs.



Lt.-Gen. HIS HIGHNESS MAHARAJA JAM SHRI DIGVIJAYSINHJI SAHIB, G.C.S.I., G.C.I.E., K.C.S.I., the present Jam Sahib, was born on September 1, 1895. He was educated at the Rajkumar College, the Malvern College, and the University College, London. On April 2, 1933, he ascended the *gadi*, and in 1935 he married Gulabkunverba, a daughter of the Royal house of Sirohi. His Highness was elected Chancellor of the Chamber of Princes in 1939 which office he held till 1944. In the years 1942-1943 he was in England as one of the Indian members of the War Cabinet. Since then he has been pro-Chancellor. The Heir-Apparent Yuvraj Maharaj Kumar Shri Shatrushalyasinhji was born on February 20, 1939.

The area of the State is 3,791 sq. miles and the population 5,04,006 according to the 1941 census. The revenue is about Rs. 98 lakhs.

The State is mainly agricultural, the chief crops being bajri, jawar, wheat, gram. Among the cash crops are ground-nut, garlic, castor seeds and cotton. The State has the largest irrigation works on the west coast of India near Jodiya. Another big project under consideration aims at harnessing the waters of the Sasoi river.

INDUSTRIES

The State has the following industries: spinning and weaving mills, paint manufactures, wire products, salt works, tin factories, cement works, tiles and potteries, plastic button manufacture, match works, soap factories and a mineral development syndicate. The State is also trying to revive the once famous gold-thread industry. There are oyster rocks forming pearl fisheries on the northern coast. The State has great potentialities for a fishing industry. The State has an extended sea-coast and the harbours of Jodiya Bedi and Salaya, one of which Bedi is certain to develop into a major port with the loss of Karachi. Jamnagar which has a fine aerodrome is on the Bombay-Karachi line of the Air Services of India. The State owns a railway and there is a regular bus service on fine metalled roads between important centres and the capital. Besides the Trunk Telephone service at Jamnagar there is an inland telephone system.

Primary and Secondary education is free. There are 275 primary schools, 37 middle schools, and 4 high schools. Scholarships are provided for higher education.

There are 4 hospitals in the capital and dispensaries in all important towns and villages. Free ambulance service is provided for urgent cases. With the opening of an Ayurvedic college, Jamnagar has become a great centre of ayurvedic studies.

ADMINISTRATION

The administration is carried on under the guidance of His Highness by the Dewan M. D. Solanki assisted by the secretaries.

Military Secretary and Home Member: COL. MAHARAJ SHRI PRATAPSINHJI; *Judicial Secretary:* I. C. MUNSIFF, B.A., LL.B.; *Revenue Secretary:* KUMAR SHRI SURSINHJI, B.A. (Cantab.), M.Sc. (California); *Political Secretary:* DWARKADAS L. SARAYA, B.A.; LL.B.; *Chief Medical Officer:* DR. P. M. MEHTA, M.D., M.S., F.C.P.; *Huzur Personal Assistant:* LT.-COL. GEOFFREY CLARKE, M.B.E.; *Manager & Engineer-in-Chief, J. D. Rly.:* F. J. DE SOUZA.

PALANPUR is bounded on the north by the States of Marwar and Sirohi, on the east by Sirohi Danta and the Mahi Kantha Group, on the south by the Baroda State, and on the west by the Banas Kantha Group. The capital of the State is Palanpur situated on the B.B. & C.I. Railway. Palanpur is also the junction for the Palanpur State Railway. Palanpur is a very old settlement of which mention is made as early as the 8th century.

The Ruling Family is Yusufzai Lohani Pathan, His Highness being the 29th Ruler of his House. The State is entitled to a salute of 13 guns.



LT.-COL. H. H. ZUBD-TUL-MULK DEWAN MAHAKHAN NAWAB SHRI TALEY MUHAMMAD KHAN BAHADUR, G.C.I.E., K.C.V.O., A.D.C., NAWAB of Palanpur, was born on July 7, 1883. He was educated privately. He was married on January 20, 1906, to the daughter of Malek Shri Rustomkhanji of Dasada, and his son and Heir-Apparent Nawabzada Iqbal Muhammad Khan was born on June 8, 1917. His Highness ascended the *gadi* on September 28, 1918. He was granted an honorary commission as captain in the Army in 1916, awarded a K.C.S.I. on June 5, 1920, awarded a K.C.V.O. on March 17, 1922, promoted Major in 1930, and made G.C.I.E. on January 1, 1932. He was promoted to the rank of Lt.-Col. in 1936. His Highness was a member of the Indian Delegation to the 9th Assembly of the League of Nations at Geneva in September 1928.

The area of the State is 1,774.64 sq. miles, and the population is 3,15,855. The revenue of the State is Rs. 33,69,842.

There is a considerable trade in cloth, grain, sugar and rice in the State.

ADMINISTRATION

Wazir: J. R. DHURANDHAR, O.B.E., B.A., LL.B., J.P.

Judicial Adviser and Chief Justice: DEWAN BAHADUR K. M. JHAVERI, M.A., LL.B., J.P.

Customs and Education Minister: MUSHIR-UL-MAHAM RAO BAHADUR D. V. PATWARI, B.A., LL.B.

General Minister, Inspector-General of Police and Control and Supply Minister: KHAN BAHADUR ISMAIL K. DESAI, I.S.O.

Finance Minister: RAO SAHIB MANIBHAI B. MEHTA.

Revenue Minister: MUSHIR-UL-MAHAM Y. Y. SYED, B.A., LL.B.

Puisne Judge: BHASKER RAO V. MEHTA, M.A., LL.B.

PATIALA is the premier State in East Punjab and is the largest of the three Phulkian States. The State is divided into three main portions, of which the most extensive is situated in the plains south of Sutlej river. The State is rich in antiquities. The majority of the population belongs to the Sikh religion. The Sikhs are very much attached to the Rulers of Patiala for guidance and the advancement of all their interests. In Sikh history, the voice of Patiala reveals itself to be prominent.



HON. LIEUT.-GENERAL HIS HIGHNESS FARZAND-I-KHAS DAULAT-I-INGLISHIA MANSUR-UL-ZAMAN AMIR UL-UMRA MAHARAJADHIRAJ RAJ RAJESHWAR SHRI MAHARAJA-I-RAJGAN SHRI SIR YADAVENDRA SINGH, G.B.E., G.C.I.E., LL.D., YADU VANSHAVATANS BHATTI KUL BHUSHAN, the present Ruler, was born on January 7, 1913. He succeeded to the *gadi* on March 23, 1938.

He received his early education from private tutors and then joined the Aitchison College, Lahore. In addition he received police training at the Police Training College, Phillaur, in the Punjab.

A son and heir to His Highness was born on March 11, 1942.

Patiala State covers an area of 5,932 square miles and its population according to the census of 1941 is 1,936,259. The annual income of the State is about Rs. 2,70,00,000. His Highness is entitled to a salute of 19 guns. The State has acceded to the Dominion of India.

PRODUCE

Patiala is predominantly an agricultural State. And Government has been most active in developing its agricultural resources. The Agricultural Department created as early as 1919 has been doing useful work in popularising methods of intensive and extensive cultivation and introducing improved varieties of seeds. Also cultivators are encouraged to use better implements such as tractors and to construct tube-wells. The Rural Uplift Department was created in 1939 with a view to raising the standard of living of the villagers and broadening their outlook on life. It aims at educating the people in civic responsibilities and improving the sanitary conditions of the villages.

INDUSTRY

The mineral resources of the State, though yet largely unexploited, are believed to be not inconsiderable. In addition to this the State has valuable forests. A number of factories have been started. The cement works at Surajpur and the Biscuit Factory at Rajpura are among the biggest factories of their kind in India, and are being run on up-to-date lines. As regards transport 139 miles of broad-gauge railway line have been constructed by the State at its own expense.

EDUCATION

There are three colleges, including one for girls, and ten high schools. All these are being run by the State. Primary and female education is free throughout the State.

POST-WAR PLANS

A number of schemes for ameliorating the lot of the demobilised soldier and ensuring for him decent living conditions have been sanctioned. A certain percentage of vacant posts have been reserved for ex-servicemen. His Highness has also prepared elaborate post-war development and reconstruction plans which aim at substantial economic, social and educational uplift of the people. Several industrial projects will be started at an early date and care has been taken to see that the common man is really benefited by them.

ADMINISTRATION

His Highness has introduced several measures of radical and momentous reforms in spite of the strains and stresses of World War II. Separation of the Executive from the Judiciary, re-organising the Judicial Department, and the constitution of the Judicial Committee of the Ijlas-i-Khas to hear appeals against the verdicts of the High Court are among his foremost achievements. The abolition of unpopular escheat laws, the creation of the Industries Department, the addition of a Maternity Ward to the Lady Dufferin Hospital at a cost of Rs. 75,000, the opening of the Bahadurgarh Fruit Farm, increase in the salaries of gazetted officers, ministerial staff, inferior servants and the personnel of the Patiala State Forces and introduction of an elective system in the Municipalities and small town committees, are other achievements of his rule. A T.B. Hospital accommodating 70 beds and 15 cottages is under contemplation. Also a Civil Service Commission has been constituted for the recruitment to civil services on a competitive basis.

In fulfilment of his pledge to grant full responsible government to his people, His Highness has announced constitutional reforms of a far-reaching character. These however, now stand relegated in view of the recently formed Union of the East Punjab States which include Patiala, Nabha, Jind, Faridkot, Kapurthala, Malerkotla, Kalsia and Nalagarh. His Highness the Maharaja of Patiala has been selected as Rajpramukh for life. The new Union was inaugurated on 15th July. A scheme for responsible government for all the integrated Punjab States is now under active consideration.

His Highness as Chancellor of the Chamber of Princes played a vital role in shaping the destiny of the country. He exhorted his fellow Princes to join the Constitu ent Assembly. The Maharaja takes a special interest in the well-being of his community. With a view to promoting its solidarity, he established the Panthic Durbar which aims at unifying the different elements in the Panth.

The State gave the lead in setting up camps for the refugees coming over from Western Pakistan. More than 2,00,000 refugees have so far been permanently settled on land and in business and 3,18,000 acres of land have been allotted to them. The majority of the Sikh refugees from the West Punjab have settled in Patiala State.

PORBANDAR STATE lies in the west of the Peninsula of Kathiawar between 21·58′ and 21·14′ north latitude and 69·28 and 70·28′ east longitude. The capital city of Porbandar is situated on the coast of the Arabian sea on the direct route between Bombay and Karachi. The State forms a triangular strip of territory along the shore of the Arabian sea. The Ruling family belongs to the Rajput clan of the Jethwas claiming descent from Shri Hanuman the devoted friend and ally of the great King Shri Ramchandra of the Ramayana age.



HON. LT.-COL. HIS HIGHNESS MAHARANA SHRI SIR NATWARSINHJI BAHADUR, K.C.S.I., the present Maharana Saheb of Porbandar, was born on June 30, 1901. He succeeded to the *gadi* in 1908.

His Highness was educated at Rajkumar College, Rajkot. He came first at the All-India Chiefs' Diploma Examination in 1918. He married Princess Rupaliba, M.B.E. (decd. 1943), the daughter of the late Ruler Sir Daulatsinhji Bahadur of Limbdi, in 1920. He skippered the first All-India Cricket Team to England in 1932.

The area of the State is 642·25 sq. miles, and its population 1,46,648 according to the 1941 census. The average revenue amounts to Rs. 40,00,000 the main sources being customs and land revenues. The Ruler is entitled to a salute of 13 guns. The State has acceded to the Dominion of India.

The State is rich in quarries, the most important being the limestone quarries at Adityana situated at the foot of the Satpuri Hills and yielding peerless building stone known as the Porbandar stone.

The main irrigation in the State is through tanks and wells. As a result of an extensive programme the State is today dotted by tanks of various capacities and equipped with a large number of field wells.

AGRICULTURE

The State soil is fairly fertile. A large portion of the State consists of saline soil and a considerable portion of mineral land. Drainage of the Barda Hills and inundation of the rivers in flood are also factors which govern agricultural prospects. The soil along the sea-coast is suitable for cocoanut plantation. The principal crops are gram, cotton and pulses. The Hope Reclamation Works named after H.E. the Marquess of Linlithgow are also meant to contribute to the development of agricultural resources of the State.

INDUSTRIES

The principal industries of Porbandar are situated in the northern part of the city. These are Jagdish Industries Ltd., manufacturing vegetable products and the Swastik Industries Ltd., manufacturing hosiery products. Besides, there is a cement factory, also a textile mill, match factory and oil mills.

The administration of the State is always being conducted in accordance with the laws of the State, many of which are adopted from British Indian Enactments. It had always been the policy of His Highness to keep the people associated in all important matters affecting the interests of the State.

The Legislature known as the Raj Sabha (Legislative Assembly) is composed of 30 to 32 members of whom 24 are elected, and only 6 are the Ruler's nominees. The Executive consists of the Chief Minister and the two Ministers, one being designated as Revenue and Finance Minister and the other as Home Minister. The appointment of Chief Minister rests with the Ruler. The two ministers are also appointed by His Highness, the selection being made from a panel of four nominees in the confidence of the Legislature. The two Ministers are responsible to the legislature. The civil service and the Foreign and Political Depts. are reserved to the Chief Minister. The Legislature is competent to pass for the Ruler's assent, enactments in respect of all matters falling under the portfolios of the two Ministers, make interpellations, move resolutions, and regulate financial administration. 14 Raj Mantris and Raj Shubhechhaks constitute two orders of advisers on matters relating to civic and rural questions of public welfare. The village Panchayat Act made applicable to all the unalienated villages, ensures simple, speedy and inexpensive justice.

HEIR-APPARENT

Maharajkumar Shree Udaybhan was born on October 6, 1910. He was adopted by His Highness the Maharana Saheb on June 12, 1941, from Jethwa Shree Shivsinghji of Shrinagar. He received secondary education at the Garasia College, Gondal. After passing Matriculation Examination of the Bombay University in 1926, he joined the Agricultural College, Poona, and took the B.A. degree in 1932. Before adoption he underwent training in the Bombay Port Trust and Customs Department, and was also Preventive Officer till adoption. He is keen at tennis and billiards.



The Yuvraj married Rajkumari Shri Premkunverba, sister of Thakore Saheb Shri Chhatrasalsinhji of Limbdi on July 3, 1941. He takes special interest in the administrative activities of the State with which he has been closely associated by the Maharana. His solicitude for the welfare of the people and peaceful progress of the State has made him very popular. He keeps himself fully informed of local conditions as well as larger questions concerning the State.

Dewan : M. S. Jayakar, M.A., C.I.E.

RADHANPUR STATE is situated in the north of Gujarat and has 174 villages. Its western boundary passes over portions of the Rann of Cutch, while on the east it borders Kankrej and Patan district of the Baroda State. On the south it is bounded by Vanod, Dasada and Jhinjhuwada, and on the north by Wao and Tharad States. There are three rivers, *viz.*, Banas, Saraswati and Rupen. Area: 1,150 square miles; Population: 67,923; Revenue: Rs. 15 lakhs.



H. H. NAWAB SAHEB MURTAZAKHAN JORAWARKHAN BABI BAHADUR is a descendant of the illustrious Babi Family who since the reign of Humayun have always been prominent in the annals of Gujarat. He is the 10th Nawab occupant of the *gadi* since the foundation of the Babi House by Babi Jafarkhan. Born: 10th Oct., 1899. Recognition announced by Govt. on 1st Jan. 1937. Investiture Durbar with full powers was held on 7th April 1937. Educated: Rajkumar College, Rajkot, and received administrative training under His late Highness. Married the daughter of H. H. the Nawab Saheb of Palanpur in 1925, by whom he has one daughter. In 1929 H. H. married the daughter of His late Highness Nawab Sir Jalaludinkhan of Radhanpur. Hereditary and permanent salute: 11 guns.

The principal agricultural products are cotton, wheat, bajri, juwar, mung, rapeseed and castor-seed. The State is noted for its fine breed of cattle known as Wadhiar or Kanrej.

INDUSTRY

There are 8 cotton ginning and one cotton pressing factories. There is also a Match Factory, an Oil Mill and a number of snuff grinding mills.

The Radhanpur State has under contemplation a scheme of irrigation designed by Dr. S. K. Gurtu, Irrigation Expert, and N. B. Baxter, Retired, Chief Engineer, Bombay Presidency, whereby all the surplus water of Banas and Saraswati rivers will be conveyed in various directions through distributaries.

A regular motor service is running between the capital town of Radhanpur and Harij, a Railway Station on G. B. S. Railway, which is at a distance of about 23 miles from Radhanpur. There are postal, telegraph and telephone communications. *Dewan:* Gajanan U. Bhatt, B.A., M. Ed. (Leeds).

RAJKOT STATE is the geographical centre of Kathiawar and has a temperate and healthy climate suited for both Indians and Europeans. The Rulers of Rajkot are Jadeja Rajputs and direct descendants of the Rulers of Cutch and Jamnagar who trace back their lineage to the lunar dynasty of Shri Krishna. The area formerly known as civil station was retroceded to the Rajkot State on July 20, 1947. It is renamed Pradyumna Nagar after the present Ruler. The State is entitled to a dynastic salute of 9 guns. The capital is Rajkot.



HIS HIGHNESS THAKORE SAHEB SHRI PRADYUMNASINHJI OF RAJKOT was born on February 24, 1913. He was educated at Panchgani, the Rajkumar College, Rajkot, where he won a gold medal for good conduct, and at Highgate. He was married on May 30, 1932. The Heir-Apparent, K. S. Manharsinhji, who is now studying at the Rajkumar College, was born on November 18, 1935. His Highness ascended the *gadi* on June 12, 1940, and was invested with full powers on August 17, 1940.

The area of the State is 285 sq. miles, and the population 1,49,000. The revenue is about Rs. 30,00,000.

The usual food grains with cash crops like cotton and sugar-cane are the principal agricultural products. About 3,000 acres are under tank irrigation, and 8,784 acres under well irrigation. The Thorala Dam project which is under consideration will irrigate another 5,000 acres when it is complete.

INDUSTRY

Lately Rajkot has made great progress in industry and commerce. There is a cotton textile mill, a ginning pressing factory, a leather factory, 3 big oil mills, a hosiery works, a metal factory for brass and copper utensils, a number of flour mills, and many other small industrial concerns. Besides the Rajkot State Bank, ten banks established in the Dominions have their branches in the State. The State is well served by railways. The capital is situated at the junction of three railways the Gondal Railway, the Jamnagar-Dwarka Railway and the Morvi Railway. Four trunk roads coming from four different directions converge here. In education too, Rajkot is in the fore-front. There is the Dharmendrasinhji Arts and Science College, the Rajkumar College, the Hunter Training College for men and the Barton Training College for women, besides three high schools and a separate girls' school.

ADMINISTRATION

The administration is carried on by the Executive Council consisting of His Highness the Thakore Saheb as President, the Dewan Saheb as Vice-President and two other councillors.

Dewan and Vice-President, State Council: RAJMITRA R. S. MANE PATIL, C.I.E., B.A., LL.B., F.R.S.S., F.R.E.S. (London); *Chief Judge, High Court:* S. C. SHROFF, Bar-at-Law; *First Member, State Council:* KHAN BAHADUR K. R. GREEN; *Second Member, State Council:* POPATLAL P. ANANDA, B.A., LL.B.; *Revenue Officer:* HARILAL BHIMJI B.A.; *Sar Nyayadhish:* G. K. DWIVEDI, Advocate; *Police Commissioner:* K. D. PANTHAKI; *Huzur Personal Assistant:* S. Y. DURVE, B.A.; *Managing Engineer, Rajkot State Electric Supply Company:* RAI BAHADUR A. C. DAS, M.A.I.E.E.; *Chief Medical Officer:* DR. A. P. MEHTA; *Principal, Dharmendrasinhji College:* DR. R. K. YAGNIK, M.A., Ph.D. (London); *Chief Engineer:* T. D. SANGHAVI, B.E. (Civil); *Secretary, State Council and Officer-in-Charge, Pradyumna Nagar:* D. B. PATEL, M.A.; *Treasury Officer:* V. M. RAIJADA; *Educational Officer:* C. A. BUCH, M.A., B.Sc.; *Diwani Nyayadhish:* V. S. UPADHYAYA, B.A., LL.B.; *First Class Magistrate:* P. L. CHOKSHI, Advocate; *Customs and Excise Officer:* RAO SAHEB H. R. BUCH, B.A., LL.B.; *Riyatas Superintendent:* R. S. JADEJA.

RAJPIPLA is the premier State in the Gujarat States. It is bounded on the north by the Narbudda with the exception of a tract in the north-east part of the State, on the north-east by the territories of the Baroda and Chhota Udepur States and some of the Sankheda Estates, on the south by the Baroda State and Surat District, on the east by the West Khandesh District, and on the west by the Baroda State and the Broach District. The Rulers are Gohel Rajputs, descended from the family which ruled at Perim in the thirteenth century.



LT.-COL. HIS HIGHNESS MAHARAJA SHRI SIR VIJAYSINHJI, G.B.E., K.C.S.I., the present Ruler of Rajpipla, was born on January 30, 1890. He was educated at the Rajkumar College, Rajkot, and Imperial Cadet Corps, Dehra Dun.

The Maharaja has travelled extensively in Europe and America. He is an Honorary Lt.-Col. in the XVI Light Infantry. He is interested in polo, racing and sporting. He won the Derby in 1934 with 'Windsor Lad.'

The area of the State is 1,517.5 sq. miles, its population according to 1941 census 2,49,032 and its total revenue Rs. 65,73,024, the chief sources being land revenue, excise and forests. The Ruler is entitled to a permanent hereditary salute of 13 guns. The State has acceded to the Dominion of India. The State Forces comprise one full infantry company and one full garrison company.

AGRICULTURE

Agriculturally the State is well-off. The soil is fertile and produces foodgrains, cotton, oilseeds, tobacco, etc. The principal crop is cotton which is wholly of the 1027 A.L.F. Long Staple variety. Sowing of inferior cotton is prohibited by law. Rajpipla cotton has established a good reputation in Bombay and other markets and is sought after by the trade.

The State possesses Cornelian and Agate mines. The famous Cup of Ptolemy is reputed to have come from the mines at Limbodra in the Rajpipla State.

IRRIGATION

Narbada, the biggest river in Gujarat, runs through this State. A dam site for forming the biggest lake on the Narbada is situated a little higher up at Mokhadi in this State. Investigation is at present being made by a Special Officer appointed by the Central Government for preparing the Tapti-Narbada Multi-purpose Project. When this scheme materialises, about ½ the area of this State will be under irrigation.

Communications have been developed to a fairly high degree in the State. There are railway communications within the State connecting with the main B.B. & C.I. Rly. at Ankleshwar, having its terminus at Rajpipla. There are two railway lines from Jhagadia one running upto Netrang and 19 miles long, and the other leading to the river Narbada thus opening up river traffic to the Bay of Cambay and Kathiawar. Rajpipla has an aerodrome for civil aviation purposes.

ADMINISTRATIVE REFORMS

Since the assumption of ruling powers by the present Maharaja many important reforms have been introduced into the State. The State employees have been given revised scales of pay with adequate dearness allowance to compensate for the high cost of living with benefit of leave, pension, etc. Survey settlement was introduced into the State as early as 1889-90 and has been extended to every village.

A post-war reconstruction committee has been formed for the moral and material advancement of the people of the State. As a result of the committee's deliberations in the field of education, several reforms have been introduced, namely, free and compulsory primary education (including physical) throughout the State by stages, opening of primary schools in all the villages numbering about 175, opening a college for the training of primary teachers in the State, provision for the award of liberal grants for the establishment of libraries and reading rooms in villages, maintenance of boarding houses for students of the Rajput and Bhil communities and a hostel attached to the high school for the convenience of village students, liberal grants-in-aid to private educational institutions in the State for their maintenance, provision of modern equipment in the high school such as audio visual and visual apparatus, etc., maintenance of a Sanskrit pathshala for imparting religious and cultural education, liberal grants of scholarship, for secondary and higher education, and the appointment of a council to advise the State in all matters relating to education. Primary education has been always free throughout the State.

Liberal endowments have been provided for the benefit of widows and destitutes. Annually Tagavi advances are liberally granted to agriculturists for seed, bullocks and general agricultural purposes. Free grazing of cattle, free supply of firewood and other minor forest produce for *bonafide* consumption are generously allowed in forest areas. Encouragement is given to trade and industry such as sugar, cement, etc. The 1027 A.L.F. variety of cotton has been introduced throughout the State, and pressing and ginning factories have been developed. Railways have been extended, motor bus passenger services have been started for public convenience. District and Taluka Local Boards have been established. The State Forces have been organised. A legislative council has been established and a scheme has been evolved for the grant of responsible government to the people by stages. The Debt Conciliation Act and the Debt Conciliation Court give adequate relief to agricultural debtors. There is a High Court of Judicature, which is completely independent of the Executive. Taluka Advisory Boards consisting of non-official members have been established.

POST-WAR PLANS

The most important post-war plans are (1) evolution of a scheme for the provision of wells for drinking and domestic purposes in each village, (2) remodelling existing tanks in villages for the purpose of irrigation as far as possible, (3) provision of suitable roads for public convenience and (4) the development of village industries including the establishment of a model agricultural farm.

ADMINISTRATION

The State subjects enjoy complete freedom and security. His Highness is accessible to all and is always ready to give a patient hearing to any of his subjects.

Interim Executive Council: President: YUVARAJA SHREE RAJENDRASINH; *State Nominee:* KHAN BAHADUR PHEROZE D. KOTHAVALA, B.A., LL.B.; *Popular Ministers:* SURAJRAM D. PUROHIT, B.A., LL.B., HIRALAL M. GANDHI, B.A., LL.B., and DESAIBHAI BAVABHAI; *High Court Judge:* SIR HORMAZDIAR P. DASTUR, Kt., Bar-at-Law.

HEIR-APPARENT

YUVRAJ SHRI RAJENDRA SINHJI was born on March 30, 1912. He was educated at Mayo College, Ajmer, and Royal Military Academy, Woolwich. He has been the Army Minister since 1943. The Maharaja's younger sons are Maharajkumar Pramodsinhji, born in 1917 and Maharajkumar Indrajitsinhji born in 1925.

RAMPUR STATE is situated in the north of the Rohilkhand Division in the United Provinces of Agra and Oudh and is bounded on the north by the Naini Tal district, on the east by the Bareilly district, on the south by the Budaun district and on the west by the Moradabad district. The area of the State is 892.54 square miles. The State is mainly agricultural, rice, wheat, maize, cotton and sugarcane being the chief crops. Population of the State according to the census of 1941 was 4,77,042. Revenue in 1946-47 was Rs.78,72,380. The State is entitled to a permanent Salute of 15 guns.



The present Ruler MAJ.-GEN. HIS HIGHNESS ALIJAH FARZAND-I-DILPIZIR-I-DAULAT-I-INGLISHIA, MUKHLIS-UD-DAULA, NASIR-UL-MULK, AMIR-UL-UMARA, NAWAB SIR SYED RAZA ALI KHAN BAHADUR, MUSTAID-I-JUNG, G.C.I.E., K.C.S.I., D. LITT., LL.D. was born on 17th November 1906. Educated at Rajkumar College, Rajkot. Married the daughter of the late SAHIBZADA SIR ABDUS-SAMAD KHAN, Kt., C.I.E., in 1921, and has 3 sons and 6 daughters. His Highness ascended the *gadi* on June 20, 1930.

His Highness is the Pro-Chancellor of the Aligarh Muslim University, Hon. Colonel in the 9/11th Jat Regiment, Hon. Colonel, Hodson's Horse, President of the Board of Trustees, Shia College, Lucknow, and a member of the East India Association and Marlborough Club, London.

Colonel Nawabzada Syed Murtaza Ali Khan Bahadur, M.B.E., the Heir-Apparent, was born on 22nd November 1923. Educated at Wellington College, London, passed Senior Cambridge from the Doon School, Dehra Dun in 1942. Was A.D.C. to His Excellency General Sir Claude Auchinleck, Commander-in-Chief from July 1943 till April 1946

During the reign of the present Ruler, the State has made great progress in Commerce and Industries, and the City of Rampur has now become one of the biggest industrial towns of the United Provinces. There are two Sugar Mills, a Textile and an Oil Mill, a Match Factory, Wood Turnery, Fabrics Factory, Ice Factory, a Distillery and Chemical Manufacturing Company, Cottage Industries and Rampur Tannery and Leather Manufacturing Factory.

Besides the two big rivers Ramganga and Kosi and other small rivers flowing from the Naini Tal district into the State, there is a big system of canals of 633 miles in the State which irrigates more than 30,000 bigas of land. There are also tube wells constructed in the areas not served by the canals.

A railway line passes through the State connecting Rampur with Moradabad and Bareilly on the old O. & R. section of the East Indian Railway. There are four Post Offices in Rampur city and a branch post office in each of the Tehsils and also in some of the important villages.

Primary and Secondary education is given free. Liberal Scholarships are granted for secondary and higher education. The State maintains well-equipped hospitals both in the city and at the Tehsil Headquarters.

ADMINISTRATION

The State Council is responsible to His Highness and at present consists of :— *President :* COL. SYED B. H. ZAIDI, C.I.E., BAR-AT LAW, *Chief Minister ; Vice-President :* RAI BAHADUR MAN MOHAN, M.A., *Political Minister*; *Members :* COL. NAWABZADA SYED JAFAR ALI KHAN BAHADUR; RAGHUNAND KISHORE, *Law Member ;* DR. IHSAN MOHAMMAD KHAN M. A., Ph. D., *Finance Minister ; Secretary :* SAHIBZADA MOHAMMAD YUSUF KHAN BAHADUR, B.A. (Cantab.).

RATLAM STATE is the premier Rajput State in the Malwa group in Central India. The Ruler of Ratlam is the recognised head of the Rajputs of Malwa.



HIS HIGHNESS MAHARAJA SHREE LOKENDRA SINGHJI SAHEB BAHADUR, the present Maharaja of Ratlam, was born on November 9, 1927. He was educated at the Mayo College, Ajmer, Daly College, Indore, Col. Brown's School, Dehra Dun, and St. Columbia School, Delhi. He has also completed his practical training in administrative work on January 19,.1947. His Highness married a daughter of Lt.-General Sir Shankar Shumshere Jung Bahadur Rana, K.B.E. of Nepal. He succeeded to the *gadi* in February 1947 and was invested with full ruling powers on August 4, 1947.

The Young Maharaja accompanied his late father to England to attend the coronation and had the privilege of being invited to all functions at Buckingham Palace. He was specially presented to their Majesties the King and Queen at Windsor Castle and Buckingham Palace. He is an all round sportsman.

The area of the State is 693 sq. miles, its population 1,26,117 and its average revenue Rs. 15,00,000. The Ruler is entitled to a salute of 15 guns within and 13 guns outside his State. The State has acceded to the Dominion of India.

ADMINISTRATION

With a view to associating the people with the administration of the State, His Highness formed a committee to propose constitutional reforms suitable for introduction in the State. The committee has submitted its report and the proposed reforms are being implemented. Two popular Ministers have been appointed. The administration is assisted by a State Council of five Ministers of whom one is the President and the Chief Minister.

STATE COUNCIL

President and Chief Minister : DEWAN BAHADUR PT. BRIJ CHAND SHARMA, M.A., LL.B. ; *Ministers :* RAO BAHADUR KESARI SINGHJI PANCHOLI, B.A., LL.B., *Deputy Chief Minister ;* THAKUR MAHENDRA SINGHJI of Sarwan, *Minister-in-Waiting ;* DR. DEVISINGHJI, *Minister for Education and Health*, LAHAR SINGHJI BHATI, *Minister for Local Self-Government ;* THAKUR PARBAT SINGH, *Secretary, Council.*

REWA is the largest State in Central India. The State is bounded on the north by the Banda, Allahabad and Mirzapur Districts of the U.P., on the east by the Mirzapur District of U. P. and Surguja District of C. P., on the south by the Central Provinces and on the west by the States of Maihar, Nagod, Sohawal and Kothi. The State has a number of waterfalls of which, Chachai and Keoti, are famous for their height and grandeur. Area of State is 13,000 sq. miles. Population 1,820,445 (1941 census). Revenue Rs. 65,00,000. Salute 17 guns.



HIS HIGHNESS BANDHVESH MAHARAJADHIRAJA MARTAND SINGH JU DEO BAHADUR, Maharaja of Rewa, was born in 1923 and ascended the *gadi* on 7th February 1946; was invested with ruling powers, 1st April 1946. He was educated at Daly College, Indore and Mayo College, and received training in 1942, at I.C.S. Probationer's Course, Dehra Dun, and Administrative training in Mysore State for over a year.

His Highness married on 23rd Aug. 1943 the daughter of His late Highness Maharao Shree Vija Raj Singh Ji Sewai Bahadur of Kutch.

The Maharaja is a keen sportsman and has shot 42 tigers. He bagged his first tiger at the age of 13 in 1936. He is a member of the General Council of Daly College and of the Managing Committee of King Edward Medical School, Indore.

The general administration of His Highness' Government is conducted by a State Council of which His Highness himself is the President. The State Council consists of four Ministers, a Deputy Prime Minister and a Prime Minister who is also the Vice-President. The Judicial administration is independent of the executive and accordingly a High Court consisting of the Chief Justice and two Puisne judges, has been constituted.

The State is very rich in minerals and there are extensive coal producing areas in the Southern and Eastern portions. Large deposits of corundum noted for their fine quality are also found all over the country. The other minerals found in the State are iron ores, copper, lead, yellow ochre, lime stone, felspar, fire clay, bauxite and sillimanite. There are extensive forests in the State which produce excellent timber.

The State has a Shellac Factory to convert lac found in the state into shellac. Bagai grass and bamboos are also found in great abundance and a Paper Factory is being established in the State.

The soil is fertile and bears excellent crops, rice, maize, Kodau, Bajra, etc., being grown in the autumn and wheat in the spring. Irrigation is mainly by wells and bandhs.

Satna (30 miles) is the Railway Station for Rewa and is situated on the Allahabad-Itarsi Section of the Great Indian Peninsula Railway which passes through the State for a distance of about 18 miles. The B. N. R. branch line from Katni to Bilaspur and the C. I. C. Rly. pass right through the Southern District for about 140 miles. There are about 1,800 miles of roads in the State out of which 500 miles are metalled and the remaining are fair weather roads.

SACHIN STATE lies, roughly speaking, within the limits of Surat Dt. of the Bombay Presidency. The villages constituting the State are widely scattered, some of them being surrounded by Dominion territory, and others by portions of the Baroda State.



The Nawab of Sachin is by descent an Arab or Abyssinian. Originally the Nawabs of Sachin were the Rulers of Janjira. But in the time of the founder of the House, Nawab Sidi Abdul Karim Mahommed Yakut Khan, there was a rebellion and the Nawab's younger brother was put on the throne of Janjira. Eventually, the East India Company and the Mahrattas offered mediation and Nawab Abdul Karim Khan founded the State of Sachin. Thus Sachin is the senior of the only two Abyssinian States in India, the other being Janjira.

The permanent capital of the State is Sachin and the summer capital Dumas. Dumas is a delightful sea resort, ten miles by motor road from Surat. It is the only summer resort of its kind on the west coast offering trunk telephone facilities and other modern conveniences. Among the amusements in Dumas are sea-bathing, tennis, cricket, motoring and so on.

His Highness Mubariz-ud-Daulah, Muzzafar-ul-Mulk, Nusrta-E-Jung, Nawab Bahadur Sidi Mahomed Haider Mahomed Yakut Khan, Nawab of Sachin, the present Ruler, was born on September 11, 1909. He was educated at home and later at the Rajkumar College, Rajkot. He succeeded to the *gadi* and was invested with full ruling powers on November 20, 1930. On July 23, 1937, he married Her Highness Alimama Sultan Nur Mahal Nawab Yuqut Zamani Begum and on May 10, 1938, Her Highness Manzar Sultan Mumtaz Mahal Nawab Massarrat Zamani Begum.

AGRICULTURE

The soil in the State varies from black to light. The usual cereals are known as well as cotton and sugar-cane. Irrigation is carried on from tanks and wells. There are no forests in the State. Cotton yarn and coarse cloth are manufactured. A breakwater at Dumas and a causeway at Bhimpur, by keeping back sea-water have contributed towards the reclamation of a considerable area of uncultivable salt land.

The chief link with the Dominion is the B.B. & C.I. Railway on which Sachin is a station.

His Highness has introduced full responsible government in the State and the Interim Ministry will be elected very shortly.

SAILANA STATE is situated in Central India. The Ruler is a descendant of the Rathor Rajput clan of the Jodhpur House and is the twelfth Ruler of Sailana. The Head Office of the Kshatriya Mahasabha remained at Sailana for ten years.



HIS HIGHNESS RAJA SAHIB SIR DILEEP SINGHJI BAHADUR, K.C.I.E., the present Ruler of Sailana, was born on March 18, 1891. He was educated at Mayo College, Ajmer. He married a daughter of His Highness the Maharawatji Sahib of Partabgarh in 1909, and after her demise, a daughter of Rawatji Sahib of Meja (Mewar). The Heir-Apparent Maharajakumar Digvijayasinghji Sahib, M.A., was born on October 15, 1918.

The Maharaja ascended the *gadi* on July 14, 1919. The Rajputs of the surrounding non-Rajput States consider His Highness as their head and the Rajputs of India consider His Highness as one of the foremost leaders and a distinguished member of the community. His Highness is the patron of the Mahasabha and has presided over its annual sessions six times. He is President of the Kurukshetra Restoration Society, Thaneshwan, and Council of Bharat Dharma Mahamandal. He is also a member of the General Council of the Mayo College, Ajmer and Daly College, Indore.

The area of the State is 297 sq. miles, its population 40,228 and its annual revenue Rs. 6,00,000. The Ruler is entitled to a salute of 11 guns. The State has joined the Rajasthan States.

EDUCATION

The local vernacular school has been raised to a high school, and a new school building and a boarding house have been constructed. Education and medical aid are free throughout the State. A new hospital has been built with facilities for indoor patients and an up-to-date maternity ward.

The constitution of the local municipality is democratic. An agriculture farm at the capital and an industrial free Mandi at Dileepnagar where a cardbord mill and an oil mill are running, have been established by the Raja Sahib. A large oil mill and an iron and steel works have been set up at Bangrod, a broad-gauge station of the B.B. & C.I. Railway.

The establishment of another Mandi at this place has recently been sanctioned. The Judiciary is independent of the Executive, and a High Court has been established.

ADMINISTRATION

The administration is assisted by a Council of State of which SHREEMAN YUVRAJ SAHIB DIGVIJAYSINGHJI, M.A., is the President. *Chief Minister*: THAKUR LOKPALSINGH, M.A., LL.B.

SANDUR, The Maharaja of Sandur is Shrimant Maharaj Yeshwantrao Hindurao Ghorpade, Mamlakatmadar, Senapathi.



Born: 1908. Ascended the *gadi* in 1928 and assumed full ruling powers in 1930.

Married: In 1929 the eldest daughter of Umadat-Ul-Mulk, Raj Rajendra Lieut.-Col. Malojirao Narsingrao Shitole Deshmukh Rustumjung Bahadur of Gwalior.

Sons: Heir-Apparent—Yuvaraj Murar Rao Raje Ghorpade, born 7-12-1931; Rajkumar Shrimant Ranjit Sinh Raje Ghorpade, born 16-2-1933; Rajkumar Shrimant Vijaya Sinh Raje Ghorpade, born 18-10-1937; and Rajkumar Shrimant Shiva Rao Raje Ghorpade, born 13-9-1940. Daughters: Rajkumari Shrimant Nirmala Raje Ghorpade, born 8-2-1934 and Rajkumari Shrimant Vijaya Devi Raje Ghorpade, born 5-2-1947.

The Maharaja is the President of the All-India Mahratta Educational Conference and has been its President for the past three terms.

The Maharaja and Maharanisaheb of Sandur are deeply interested in administration and widely travelled. They visited England and the Continent in 1935, as students of peoples and governments, and Australia in 1939 as guests of the Commonwealth to acquire first-hand knowledge of the working of the federal form of government there. During the past 20 years the Maharaja has instituted progressive reforms in the State, and has associated the people in their own government gradually, culminating in the recent grant of responsible government to the people.

HISTORICAL SKETCH

The Ruler of Sandur has a great and glorious tradition to uphold. The House of 'Ghorpade', of which he is a true son, was founded in the Deccan, centuries ago by Karnasinh, a Sisodia Rajput whose ancestors had died fighting Alauddin Khilji at Chitor. The enterprising Karnasinh scaled the walls of the otherwise impregnable hill fort of Khelna (Vishalgad today) by means of a rope tied to a monitor lizard, called "Ghorpad" in Marathi and so acquired the title 'Ghorpade' for himself and his descendants. The line of Shivaji the Great was founded by the younger brother of Karnasinh, but the claim of the Ghorpade family to a place in history is independent of this relationship to the founder of the Mahratta Empire.

"The vast region of Southern Maharashtra and Karnatak was long under the sway of the various Ghorpade families and ruled by them" (Sardesai). The names of Bhyriji, Santaji and Maloji have inspired both terror and pride over this broad tract. Under Bhyriji's grandson, Murar Rao, the celebrated Chief of Gooty, the Ghorpades attained the height of their power. Murar Rao's empire

extended as far east as Madras and Pondicherry and he levied a tribute of Rs. 7 lakhs from Mysore and Hyderabad. It was this same Chief of Gooty whose help Clive solicited during the siege of Arcot, and who routed Chanda Saheb, turning the scales and history itself in favour of the British. In 1818, during the time of Shiva Rao, the State first came into political relations with the British and its unfettered internal sovereignty was recognised.

GENERAL

Sandur has acceded to the Indian Dominion by executing the standard form of Instrument of Accession.

It is a State located a few miles south of the River Thungabhadra, and is contiguous to the State of Mysore along its south-eastern border.

"Sandur territory is one of the richest iron yielding centres of the whole world."—Bruce Foote of the Geological Survey of India. Manganese ores, red oxide of the highest grade for the manufacture of pigment, and sandalwood of high oil-content are other features of the State.

The population, about 16,000 as per the census of 1941, has increased during the last few years due to the increased industrial activities of the State, and the lack of famine here, which have lead to immigration. The population may now be taken to be in the neighbourhood of 20,000. The rainfall averages 34.37" over the past 10 years. The average revenue for the past three years is in the neighbourhood of 7 lakhs.

ADMINISTRATIVE REFORMS

Many administrative reforms now spoken of as 'modern' were anticipated years ago in Sandur State and have had the benefit of trial and improvement over many years.

Sandur was the first Indian State to do away with untouchability, by the Maharaja's Proclamation of 1932. This is a reform of considerable magnitude as a quarter of the population are members of the Scheduled Castes. Equal rights of worship at all temples and equal rights to all public amenities are guaranteed to the people by Statute in Sandur. Visiting Sandur in 1933, Mahatma Gandhi said that Sandur was "an oasis in a desert" and "a model State". Complete communal harmony among the subjects is a noteworthy feature of the State.

LEGISLATURE

The legislature consists of 2 houses, the Prajamandal consisting of the elected representatives of the people and the Darbar consisting of eligible hereditary members and representatives of various interests. Both houses have equal powers of legislation and vote on the budget, and are the only sources of permanent legislation, the Maharaja having limited his own legislative powers to temporary emergency laws by the Sandur State Constitution Act of 1946, the last permanent proclamation issued by him.

THE MANTRI MANDAL (STATE CABINET)

There is no Dewan in Sandur State, and the policy now enunciated of government by executive council was initiated here as long ago as 1934.

The State Cabinet is presided over by the Maharaja and in his absence by the Prathinidhi who is a member of the Royal Family nominated by him. A Minister nominated by the Maharaja from among the members of the State Legislature, an elected Mantra Sachiv (Popular Minister), and an Additional Member nominated by the Sandur State Congress constitute the Mantri Mandal.

JUDICIARY

Sandur is perhaps the pioneer among the States of her size to constitute an independent Chief Court presided over by a Nyayadhish of unimpeachable integrity. By arrangement with the Government of Madras, the Maharaja appoints the District and Sessions Judge of the adjoining Madras District of Bellary as the Nyayadhish of the Sandur Chief Court.

The judiciary is separated from the executive.

A Debt Conciliation Board was constituted in 1936 to relieve agricultural indebtedness.

EDUCATION

The central educational institution, Shri Chatrapathi Shivaji Vidyamandir, sends up students for the matriculation examinations of the universities outside the State. Special stress is laid on pre-military avocations, extra-curricular activities and the study of Dharma Sashtra at the Vidyamandir. There are State-run or State-aided primary schools in every important village of the State.

MINERAL RESOURCES

The main mineral resources of Sandur State consist of iron and manganese ores. The highest grade of iron ore, described by some geologists as of the very best quality in the world, occurs in the State and competent authorities have estimated the quantity available at 100 million tons. Manganese ore of medium grade analysing about 40 per cent as well as manganese ore of high grade occur in the State and are now being mined and exploited by a British firm, the General Sandur Mining Company, who have been exporting the ore to Continental metallurgical industries at the average rate of 100 thousand tons yearly.

The manufacture of ferro-manganese in the State is the foremost of Sandur's prospective industries. The recent scheme of the General Sandur Mining Company's experts for the electrical treatment of low grade manganese-ore to produce Spiegel-eisen as one of the products, has been examined by the Government of India authorities, whose Mineral Adviser has described the scheme as "a path finder" to other metallurgical industries in India. The Government of India Ministry of Industry have approved the location of a ferro-manganese unit in the State.

The setting up of an iron and steel industry here to utilise the vast deposits of high grade iron-ore occurring here is also being examined.

Red Oxide of the highest grade for the manufacture of pigment occurs in the State, as also vast deposits of Jasper.

FOREST PRODUCE

Sandur Sandalwood has been proved to have an oil-content of 5.77 per cent, by distillation tests. Sandalwood of all types is sold by the State Forest Department. Sandur State has been one of the largest individual suppliers of fodder hay to the Indian Army during the war years and the Forest Department has specialised in the supply of high grade fodder hay.

SANT STATE, in Gujerat is bounded on the north by the States of Banswara and Dungarpur, on the east by the Jalod Taluka, on the west by the Lunawada State and on the south, by the States of Baria, Sanjeli and Godhra Taluka. Since April 22, 1943 the Kadana State has formed part of the Sant State. The Ruling family belongs to the Mahiravat Clan of Parmar Rajputs which is descended from the illustrious family of Vikramaditya and Raja Bhoj of Ujjain. The Parmars originally came from Dhar. They first settled at Jhalod and finally about the thirteenth century at Sant. The founder of the State was Rana Sant who with his uncle Limdev established himself at Sant.

The capital of the State is Satrampur which is 32 miles away from Santroad station on the B.B. & C.I. Ry. The Sant State has acceded to the Dominion of India.



HIS HIGHNESS MAHARANA SHRI PRAVINSINHJI, THE RULER OF SANT STATE was born on December 1, 1907. He was at first privately educated and later at the Rajkumar College, Rajkot, the Princes' School, Baroda, and finally the Baroda College. All through he had a distinguished academic career. He did equally well on the playing-field where he won medals, cups and other prizes. He is a particularly good tennis and football player. Later he donated a silver trophy for a cricket tournament open to all suburban schools in Bombay.

His Highness married Maharajkumari Shri Rajkunverba (Hansakumari), the eldest daughter of His Highness the Maharao Saheb of Kutch on May 15, 1928 at Bhuj. He ascended the *gadi* on December 25, 1946. The Maharana and the Maharani have travelled widely in England and the Continent. They first went to England in 1935 to attend the Silver Jubilee celebrations. They went again in 1937 to attend the Coronation of Their Majesties King George VI and Queen Elizabeth. This second time when they visited England they toured the whole Continent before returning to India in 1938.

The area of the State is 527½ sq. miles, the population is 1,14,047, and the revenue Rs. 12,55,535.

PRODUCE & INDUSTRY

The staple crop is maize, and other agricultural products are oil-seeds, ghee and hides. The forests yield teak and bamboo. The industries are of the hand-made sort, cottage industries which include handloom weaving, basket making and mat making. The State has been running its own handloom factory at Santrampur since 1942. As for the future there is great scope for the development of industries like glass-making and those based on forest produce.

The State takes good care of its subjects. Primary and secondary education are free, there is free medical relief, there is regular land survey, there is a famine relief fund for granting loans free of interest for certain specific purposes such as the purchase of agricultural stock, the digging of wells, the erection of bunds to prevent soil erosion, or other measures taken to effect permanent improvements in the holding.

COMMUNICATIONS

The nearest railway stations are Sant Road on the B.B. & C.I. Railway and Lunawada on the Gujerat Railway which are 32 and 18 miles respectively from Santrampur. There is a post and telegraph office with two branches at Kadana and Malvan. The towns of Sant and Rampur are electrified, and a great many roads are metalled.

ADMINISTRATION

The present Ruler of Sant who enjoys full powers and exercises plenary jurisdiction affords an admirable example of what modern training can do for an Indian Prince. Long before his investiture with full ruling powers His Highness took a hand in the administration of the State so as to equip himself fully for the task when the time came for him to take over responsibility for the government of the State. His Highness possesses rare distinction and a rarer sense of duty and serves his State in a spirit of whole-hearted devotion working hard and incessantly to promote the social and economic welfare of his subjects. The subjects for their part have shown in equal measure their sense of appreciation of His Highness' great qualities as man or Ruler for he is held in very high regard by his subjects, and commands great loyalty. His Highness takes great interest in social reforms also.

The State is administered with the assistance of an Executive Council consisting of three official and two non-official members.

Dewan: N. J. DIVECHA, B.A., LL.B. Senior-officials, *Naib Dewan:* RUTANSINH K. PARMAR, B.A., LL.B., *Nyayadhish & F. C. M.:* V. N. MANIAR, B.A., LL.B.; *High Court Judge:* J. M. ANTIA, B.A., LL.B., Advocate.; *District & Sessions Judge:* MANILAL H. MEHTA, B.A.,LL. B.; *Chief Medical Officer:* DR. M. K. KANE, M.B.B.S.; *State Engineer, P.W.D.:* M. K. GUPTE, B.SC., B.E.; *Forest Officer:* HINGORANI, R.F.O.; *Superintendent of Police:* R. N. DESAI.

SAWANTWADI STATE, one of the ancient Maratha States in Western India is a compact territory unbroken by the lands of other States. Bounded on the north by the Malvan subdivision of the Ratnagiri District and separated by the Sahyadri Hills, on the north-east by Kolhapur territory, on the east and south-east by the District of Belgaum, and on the south by the Dicholi and Pedna sub-divisions of Goa, the general aspect of the country is strikingly picturesque.



HIS HIGHNESS RAJA BAHADUR SHRIMANT SHIVRAM SAWANT BHONSLE, the present Raja of Sawantwadi, was born in 1927. He succeeded to the *gadi* in 1937, and was invested with full ruling powers on May 12, 1947.

His Highness was educated at the Doon School, Dehra Dun and Wadia College, Poona. He had a long and strenuous course of military training. He successfully held responsible posts in the Military. He has also acquired sufficient knowledge of administrative matters, by undergoing training with the Commissioner, Southern Division, Bombay. He is a keen sportsman, an excellent musician, an artist, a true soldier and an administrator.

The area of the State is about 930 sq. miles, its population 2,52,170 (1941 census) and its gross revenue Rs. 10,34,597 the principal source being land revenue, forest and abkari. The State has acceded to the Dominion of India.

The State is rich in teak, especially near the Sahyadri Hills. The principal fruits are mangoes, plantains, citrons, limes and jack-fruit. Coconuts and cashew nuts are in plenty. The staple agricultural produce in the State is rice. The quantity produced in the State is not sufficient and a good deal has to be imported.

Iron-ore of a fairly good quality is found in the neighbourhood of Ramghat in Shayadri range. The Akeri stone, a slate coloured taleschist, is extremely hard compact and heavy and is unrivalled for building purposes. Mica mining is taken in hand. A soap factory has been started at Math. Bidi making is developing on a large scale. The sodium factory at Math is progressing well. There are hundreds of handlooms in the State.

The principal industries in the State consist of gold and silver embroidery work on both leather and cloth, fans, baskets, and boxes of kaskas, brass ornamented with gold thread and beetle wings, lacquered toys, playing cards and elegant drawing room ornaments from the horns of buffaloes and bisons.

ADMINISTRATION

Dewan: RAO BAHADUR P. G. DESHMUK, B.A.; *Sar Nyayadhish and Sessions Judge:* K. M. WAZKAR, B.A., LL.B.; *Naib Dewan, District Magistrate and Huzur Secretary:* RAO SAHEB G. S. BAKRE, M.A.; *Chief Medical Officer:* DR. V. N. ASHTAPUTRE, M.S.; *State Engineer:* C. B. DEWASTHALI B.E.; *Chief Police Officer:* D. H. KHAN; *Malaria Medical Officer and Private Secretary to His Highness:* RAO SAHEB DR. C. H. KARNIK, L.C.P.S.

SIRMUR: This State lies among the Siwaliks Ranges between 77° 5′ and 77° 55′ East and 30° 20′ and 31° 5′ North. It is 1,141 sq. miles in area with a population of 156,054 (1941 Census). Nahan is the capital of the State.



The ruling dynasty is the younger branch of the ruling House of Jaisalmer and the present Ruler is HON. LT.-COL. H.H. MAHARAJA SIR RAJENDRA PRAKASH BAHADUR, K.C.I.E., who is the 48th direct male lineal descendant from the original founder of the Dynasty, Maharaja Subhans Prakash in 1095 A.D. He was born on January 10, 1913 and ascended the *gadi* on November 22, 1933.

He was educated privately and he married the sister of Raja Shrimant Mahendra Singh Ju Deo of Nagod, C.I., in April, 1936 and the daughter of Sir Shri Bahudur Singh Ji Man Singh Ji, K.C.S.I., K.C.I.E., Thakore Saheb of Palitana State in December, 1941.

The State has an Annual Revenue of Rs. 50,00,000 and a Salute of 11 guns.

The State consists of both hills and plains with altitude varying from 1,090 ft. to 11,966 ft.

The chief products are wheat, maize, rice, sugar-cane, poppy, ginger, potatoes, turmeric and chillies, etc. It is rich in Sal, Deodar and Pine forests.

It has an iron foundry which was established in 1867 A.D. and produces sugar-cane crushers which are the best available in the market. The State owns large tea estates at Kowlagarh and Choharpur in Dehra-Dun District.

The mineral resources of the State are being prospected. There are huge deposits of Gypsum, Lime and Iron Pyrites. A scheme for the construction of dams on the rivers Tons and Giri, which are tributaries of the Jumna, to generate hydro-electric power and provide irrigation facilities is under the active consideration of the Durbar. A Sirmur Land Produce Syndicate Limited has been formed.

The State maintains a Corps of Sappers and Miners which rendered valuable services to the Crown during the Second Afghan War and during the First Great War when it was captured with General Townshend's force at Kut-ul-Amara. It also served with His Majesty's Forces during Great War II.

ADMINISTRATION

The administration is carried on by His Highness with the help of a Council of Ministers. Judiciary is separate from the Executive. The highest Judicial authority is the Raj Niyaya Sabha which hears appeals from the High Court.

The legislature is comprised of 30 members of whom 23 are elected on adult suffrage.

State Council President: HIS HIGHNESS THE MAHARAJA SAHIB BAHADUR; *Prime Minister and Vice-President,* COL. KANWAR SHIV RAJ SINGH; *Finance Minister:* RAI SAHIB R. G. ABBHI; *Minister for Local Self-Government:* JAI GOPAL SHARMA; *Secretary to Government of Sirmur:* PT. KRISHAN LAL SHARMA, B.A.; *Raj Niyaya Sabha Members:* RAI BAHADUR MUKAND LAL PURI, M.A., Bar-at-Law and GAURI PRASAD SAXENA, B.A., P.C.S. (Retd.); *High Court Chief Justice:* RAI BAHADUR BHAGAT JAGAN NATH.

SURGUJA STATE lies in the Central Provinces. It is bounded on the north by Mirzapur Dt. and the State of Rewa, on the east by the Palamau and Ranchi Dts., on the south by Jashpur State, Udaipur State and Bilaspur Dt., and on the west by Korea State. It is the largest of the five Chhota-Nagpur States. The Ruling Family is descended from the Arkshel Rajahs of Palamau. The capital of the State is Ambikapur.



MAHARAJA RAMANUJ SARAN SINGH DEO, C.B.E., was born on November 4, 1895. After the death of his first wife in 1921 he married a daughter of General Bhupatindra Bikram Shah, of Nepal in 1922. By his first wife the Maharaja has two sons, the elder of whom, Maharajkumar Ambikeshwar Saran Singh Deo was born on December 14, 1910, and a daughter. By his second marriage he has one son who was adopted under the name Chandra Chur Prasad Singh Deo by the Ruler of Udaipur before his death, and a daughter. The Maharaja has travelled extensively in Europe and East Africa. He is a keen sportsman and a good shot having bagged over a thousand tigers.

The area of the State is 6,055 sq. miles and the population 551,307. The revenue for 1944-45 was Rs. 16,31,034.

PRODUCE AND INDUSTRY

Practically the entire population is dependent on agriculture, the principal crops being rice, wheat, barley, oats and maize. Grams, pulses and oil-seeds are also grown. A great deal has been done to improve agricultural methods. For instance, loans are granted to cultivators. Certain kinds of land (Dand) have been made free of rent. Over 2,000 tanks have been built for irrigation purposes. A large number of demonstration farms and one cattle breeding farm have also been opened so that today the cultivators are trying to grow new crops like sugar-cane, groundnut, and a number of English vegetables.

The mineral resources are abundant and valuable. Among others the State contains the biggest coal-field in the country. But the coal-fields remain unexploited. Other mineral resources are mica, iron, limestone, bauxite and lead. Industrial development is held up because of lack of transport facilities. There are three rail heads in the State, Garhwa Road on the E.I.R., Kharsia on the B. N. R. and Chirimiri on the projected Central India Coal-field Railway. But they are all far off from the capital.

The Maharaja is an enlightened ruler; he has built many schools, dispensaries and dharmasalas.

ADMINISTRATION

The administration is carried on by the Maharaja assisted by a State Council.

Chief Minister: AMBIKESHWAR SARAN SINGH DEO; *Development Minister:* MAHARAJKUMAR CHANDIKESHWAR SARAN SINGH DEO, B.A.; *Finance Minister:* SATYA NARAYAN SINGH, B.A., B.L.

TONK STATE, lies partly in Rajputana and partly in Central India. There are six districts in all in the State and some of them are separated from one another by distances varying from 20 to 250 miles. All the districts contain hills and are well wooded. The various districts resemble each other to this extent, that all are, speaking generally, favoured with good soil and water. The annual rainfall in the Rajputana districts of the State averages between 25 and 30 inches, and in the rest of the territory from 30 to 50 inches. The climate of Tonk is on the whole dry and healthy though malarial fevers prevail during and after the rains.

The ruling family of Tonk is Afghan of the Sallarzai tribe of Buner. The capital town of the State is Tonk. The State has acceded to the Indian Union.



HIS HIGHNESS MUMTAZUDDOWLA WAZIRUL MULK NAWAB MUHAMMAD FARUQ ALI KHAN SAHIB BAHADUR SOWLAT-I-JUNG NAWAB OF TONK, was born on August 8, 1885. The Nawab was educated privately in Persian and Urdu. He ascended the *gadi* on May 31, 1947. The Nawab has a thorough knowledge of Judicial and Revenue law and administration. His Highness is entitled to a salute of 17 guns.

The area of the State is 2,553 sq. miles. The population is about 358,000 and the revenue about Rs. 39,00,000.

The State is agricultural. The staple food crops are jawar, wheat, gram, maize, til. The only money crop grown is cotton. The State depends on artificial irrigation only to a small extent. Irrigation is almost entirely from wells, the water being lifted by means of the charas, buckets made of leather. There are forests but most of them consist of scrub jungle and grass reserves. Teak trees of inferior kind are found in some districts. Among the farm animals are cattle, goats and sheep. The cattle are of an inferior type. But goats and sheep of the ordinary breed are reared in considerable numbers.

Good cotton cloth is woven throughout the State, the best kinds being produced in Tonk itself. Felt rugs and saddle cloths are also made and guitars and pen-cases carved in wood and inlaid with ivory. There is also a cotton press and a ginning factory. The State is not rich in mineral deposits. There are sandstone quarries in a district which yields slabs excellent for building purposes.

The chief exports are cereals, cotton, hides and cotton cloth and the chief imports are salt, sugar, rice, cotton cloth piece-goods, tobacco and iron.

Two railways, Rajputana-Malwa and Bina-Baran, run through parts of the State. There is a fine metalled road which connects Tonk with Jaipur. The rest of the roads are merely fair-weather communications.

ADMINISTRATION

The administration is carried on by His Highness with the help of a State Council consisting of the Prime Minister, the Home Minister and the Revenue Minister. An Advisory Committee has been constituted to formulate proposals for a closer association of the people with the administration. Two popular ministers are soon to be appointed.

President: HIS HIGHNESS THE NAWAB SAHEB BAHADUR; *Vice-President, Prime Minister and Finance Minister:* YAMINUL MULK KHAN BAHADUR RAHMAN BAKHSH KADRI, M.B.E., U.P.C.S., MUSHIR JUNG BAHADUR; *Home Minister:* SHARFUL OMORA RAFIQUL MULK SAHIBZADA MOHAMMAD TOFIQ KHAN SAHIB, BAHADUR RAFIQ JUNG; *Revenue Minister:* KHAN SAHIB MUZAFFERUL MULK MUZAFFAR MOHAMMAD KHAN SAHIB BAHADUR, B.A., MODDABBIR JUNG; *Secretary:* S. SHAMSUDDIN AHMAD, B.A.

TRAVANCORE, the third biggest State in India after Hyderabad and Mysore, occupies the south-west portion of the Indian Peninsula, the southern tip reaching down to Cape Comorin. Travancore is bounded on the north by the State of Cochin and the Coimbatore Dt., on the east by the Dts. of Ramnad and Tinnevelly, and on the south and the west by the Indian Ocean and the Arabian Sea respectively. Travancore is one of the most picturesque parts of South India containing an extensive hill region, numerous rivers, and a succession of backwaters and forests. In point of literacy the State is in the forefront.



Travancore has acceded to the Indian Union. The capital of the State is Trivandrum.

The Ruler belongs to a Kshatriya Family which traces its descent from the ancient Chera Kings of South India. Raja Marthanda Varma, the first Ruler who achieved the unification of what is now Travancore is said to have dedicated his country to Shri Padmanabhaswami and ever since, the Rulers of Travancore, Rajas or Ranis, have ruled the country as the Dasas or Sevinis of the deity.

HON. MAJOR-GENERAL HIS HIGHNESS SRI PADMANABHA DASA VANCHI PALA SIR BALA RAMA VARMA KULASEKARA KIRITAPATI MANNY SULTAN MAHARAJA RAJA RAMARAJA BAHADUR SHAMSHER JANG, G.C.S.I., G.C.I.E., D.Litt., MAHARAJA OF TRAVANCORE was born on November 7, 1912. He ascended the *masnad* on September 1, 1924 when he was 12, and was invested with full ruling powers on November 6, 1931 when he attained majority. The Maharaja was educated privately by an accomplished European tutor. After completing his education the Maharaja travelled extensively in India, Europe, Ceylon and the Dutch East Indies. He holds the honorary degree of D. Litt. of the Annamalai and Andhra Universities.

His Highness is the Colonel-in-Chief of the Travancore State Forces, Honorary Colonel of the 12th Malabar Battalion, Honorary Colonel of the 16th Light Cavalry Regiment of the Indian Army, and Honorary Major-General of the British Army. He is entitled to a local salute of 21 guns and an outside salute of 19 guns.

The Royal Family follows the ancient *marumakkatayam* law or the law of inheritance through the female line. Her Highness Maharani Setu Parvati Bai, the mother of the Maharaja was born on November 6, 1896. She was adopted into the Royal Family at the age of 4 along with her elder sister. In April 1907 she was married to Ravi Varma, a grand nephew of Ravi Varma Koil Tampuran, the famous Indian artist. Her Highness has two sons and a daughter. Her second son, who is the Heir-Apparent, called Elaya Raja, was born on March 22, 1922.



HER HIGHNESS THE MAHARANI like the Maharaja holds the honorary degree of D. Litt. of the Universities of Andhra, Annamalai and Benares and like the Maharaja too she has travelled widely in India, Europe, Ceylon and the Dutch East Indies.

The area of the State of Travancore is 7,661.75 sq. miles and the total population 6,070,018 according to the 1941 census. The revenue of the State is Rs. 975.63 lakhs. Hinduism is the predominant religion and its followers constitute nearly two-thirds of the entire population, while Christians of various denominations including the ancient Syrian Christians represent more than one-fourth. Women generally enjoy a freedom unique in India and their complete equality with men as well as their general education have led to their active participation in public affairs.

Except for a certain warm humidity the climate is temperate. The rainfall is generally heavy averaging about 89 inches per year. The staple food of the people is rice, fish and tapioca.

AGRICULTURE

Agriculture is the main occupation of the people though industry is assuming an increasingly important place in the economy of the State. In the plains we find rice, tapioca, yams, beans and gram. On the lesser uplands near the Ghats are pepper, rubber, ginger and turmeric. On the higher elevations there are extensive tea and cardamom plantations. And on the broad coast-belt and the shores of the back-waters, there are dense cocoanut plantations, while such trees as areca, jack, mango, tamarind and cashew are grown around the homesteads.

The State reserved forests cover an extent slightly less than a third of the area and are well timbered with teak, black-wood, ebony, jack and anjili. And among the forest animals are the elephant, the leopard, the bison, the bear and the sambur and a variety of small game.

INDUSTRY

Government plays a big part in industrial life. The more important State enterprises are: a ceramic factory at Kundara which manufactures porcelain ware, electrical goods, crockery, fancy articles and sanitary equipment like drainage pipes; Travancore Sugars and Chemicals which manufactures besides sugar 260 varieties of pharmaceutical products such as liniments, liquid extracts, liquors, pulses, spirits, syrups and specialities including caffeinaspirin and lysol; a rubber factory at Trivandrum which manufactures cycle tyres and tubes, motor car tyres, surgical tubes, hoses, gharry tyres, etc.; the Aluminium Smelting Factory and Glass Factory at Alwaye and the Plywood Factory at Punalur. All these factories are driven by cheap power obtained from the Pallivasal Hydro-electric Works. Refined salt is also being produced on a commercial scale and the State is now able to export salt after meeting all its requirements.

Enterprises for the starting of which arrangements have been made are: a cane sugar factory, a rayon factory, a cement factory, a few spinning mills, a fishing industry, the processing of ilmenite, manufacture of titanium pigments. The Fertilizers and Chemicals industry with a capital of five crores to produce 50,000 tons of ammonium sulphate per year and other chemicals like caustic soda, sulphuric acid, potassium chlorate, ammonium sulphate, acetic acid and calcium carbide have started production.

COMMUNICATIONS

The whole State is covered by a net-work of roads and canals with a well-regulated system of road and water transport. Trivandrum is a terminus on the South Indian Railway, and there is regular air service between Trivandrum and Madras *via* Cochin and Bangalore. The whole of the road transport system is under State control and a steam navigation company has also been started for the development of coastal traffic.

EDUCATION

The literacy figures are the highest in India—47.05 per cent for the whole State, 58.1 for males and 36 for females, and the literacy figures for those above 5 years are 55 for the whole State, 67.9 for males and 42.1 for females. There are four First Grade colleges, and three Second Grade colleges. There is also a Law College, a Teachers' Training College, a Sanskrit College and a College for Ayurveda.

Distributed throughout the State there are more than 3,500 educational institutions, teaching more than 700,000 pupils. By a proclamation of 1936 a University, exclusively designed to promote technological study and original research and to promote Kerala art and culture, has been established. A scheme of universal and compulsory primary education on the basis of a ten-year plan is also being worked out. About one-fifth of the total revenue of the State is spent on education every year.

Among legislation of the nation-building or social service sort are: a Debt Relief Act, an Act establishing a Credit Bank, a Proclamation throwing open all temples to untouchables, and another Proclamation abolishing the death penalty for certain offences.

The Maharaja has been very generous with his money. His benefactions include large sums for earthquake relief, fight against tuberculosis, for a home for the destitute and the infirm, for a school for the deaf, the dumb and the blind, for feeding the poor and providing food and clothing to poor school-going children. The Maharaja also grants large annual donations to several philanthropic and scientific bodies. He has founded an art gallery in the capital besides the one which he maintains in his palace.

ADMINISTRATION

Though the Ruler is legally the source of all authority yet for more than a century the Maharajas have acted as constitutional monarchs without failing to maintain effective personal contact with the administration. The Legislature which was reconstituted in 1932 is a bicameral body with an Upper House, Sri Chitra State Council, and a Lower House, the Sri Mulam Assembly. Both the Houses are thoroughly representative of all classes, communities and interests with a decisive non-official and elected majority. The Legislature enjoys wide powers, budgetary, legislative and powers of interpellation in relation to all matters except those pertaining to the Ruling Family.

On September 4, 1947 the Maharaja issued a Proclamation expressing his intention to establish responsible government in the State. A representative body consisting of persons elected on the basis of adult franchise will be constituted for framing the future constitution of the State.

Officiating Dewan: RAJYASEVA-PRAVINA P. G. NARAYANAN UNNITHAN, B.A., B.L.

UDAIPUR STATE, also called Mewar, is situated in the south-east of Rajputana. It is bounded on the north by Ajmer-Merwara and Shahpura, on the west by Jodhpur and Sirohi, on the south by Dungarpur, Banswara and Partapgarh, and on the east by the districts of Nimach and Tonk and the States of Bundi and Kotah.



Udaipur is the premier State of Rajputana and also the most ancient. Indeed for centuries the history of Mewar was the history of Rajputana while during one critical period it was almost the history of India. No State made a more courageous or prolonged resistance to the Muslims than Mewar and the old capital, Chitor, itself was sacked no less than three times as a consequence. The Rulers of Udaipur take special pride in the fact that no daughter of Mewar was ever given in marriage to a Muslim conqueror. The Ruling family belongs to the Sesodia clan of Rajputs and the Hindus look upon the Ruler of Mewar as the legitimate heir to the throne of Rama. By reason of its romance and beauty, its snow-white palaces, flower-gardens, wooded islands, and the lovely lake-side capital, Udaipur has had more appeal to poets, painters, and travellers than any other single place in India.

The State is entitled to a permanent salute of 19 guns and a local salute of 21 guns. The capital is Udaipur. The state has acceded to the Dominion of India.

HIS HIGHNESS MAHARAJADHIRAJ MAHARANA SHRI SIR BHOPAL SINHJI BAHADUR, THE RULER, was born on February 22, 1884. He married the sister of the Thakur of Anwa in March 1910. A year after his first wife died the Maharaja married the daughter of Thakur Kesari Singh of Achrol in Jaipur State. The Maharaja's third marriage took place on January 17, 1928, with the daughter of the Thakur of Khudala in the Marwar State. His Highness ascended the *gadi* on the death of his father on May 24, 1930. Maharajkumar Bhagwat Singh, son of Mahara; Partap Singh who was born on June 20, 1921 has been adopted as Heir-Apparent.

The area of the State is 12,941 sq. miles and the population 1,926,698. The revenue is Rs. 1,82,00,000.

The State is self-sufficient in regard to food. On the whole the soil is rich. The chief means of irrigation are wells and tanks.

INDUSTRY

The State has two textile mills, one sugar mill, two oil mills and one match factory. The State is also rich in mineral deposits such as mica, soapstone, beryl, asbestos, manganese, calcites and emeralds. The State has its own railway, the Mewar State Railway, the total mileage being 145.74. There are also 360 miles of metalled road. As for post-war planning, schemes for the development of hydro-electric power, irrigation works, and of the construction of 150 miles of fair weather road, are all under consideration.

Primary and secondary education are free. Besides seven high schools there is a college teaching up to the M.A. classes. The medical service is of a high quality. There are allopathic and ayurvedic dispensaries scattered throughout the State. In the capital there is a large, well-equipped hospital and a college.

Udaipur was among the first states to separate the judiciary from the executive. The State has an independent High Court.

ADMINISTRATION

Prime Minister: DR. SIR S. V. RAMAMURTY, K.C.I.E., C.I.E., M.A. (Cantab), I.C.S. D. LITT.; *Army & Revenue Minister:* COL. RAO MANOHAR SINGH, M.B.E. OF BEDLA; *Finance Minister:* DR. MOHAN SINHA MEHTA, Ph.D., M.A., LL.B., Bar-at-Law; *Home Minister:* MAJOR, RAJADHIRAJ HARI SINGH OF ACHROL; *Public Health & Education Minister:* KR. RAGHUBIR SINGH, B.A.; *Supply Minister:* MOHAN LAL SUKHADIA; *Local Self-Government Minister:* HIRALAL KOTHARI, B.A., LL.B.

VADIA STATE is situated in Western Kathiawar. The Rulers of Vadia belong to the Virani branch of Kathis, who have given their name to the whole region. Kathis once dominated the province; hence the name Kathiawar. The capital Vadia has a suburb, Suragpara, named after the present Ruler, which is regarded as one of the 'beauty spots' of Kathiawar.



DARBAR SHREE SURAGWALA SAHEB, the present Ruler of Vadia, was born on March 15, 1904 and was educated by a private tutor. He married A. S. Kunverbai Saheba in 1922 and has two sons and three daughters. The Heir-Apparent Kumar Shri Krishnakumar Saheb was born on April 23, 1931 and is now studying at a public school in Rajkot. The Darbar Saheb ascended the *gadi* on May 7, 1930 on the death of his father. He is the maker of modern Vadia.

The area of the State is 100 sq. miles and the population 25,000. The revenue is Rs. 3,00,000.

Vadia is agricultural. It produces all the food grains which it needs. It also grows cash crops like sugarcane, cotton and groundnut. Most of the water comes from wells though sometimes electric power is also used for irrigation purposes. There is a considerable amount of industrial activity in the State. There is one oil mill, one ginning factory, one match factory, one Mumra and Pauwa factory and some rice and pulse hullers.

The railway station is Vadia Deoli on the Gondal Railway, which is connected with all the big towns of Kathiawar. From the station to the town proper there is a telephone line.

Education and medical relief are free. In the capital there is an electric power house.

Legislation in the State is of a progressive nature. Among the Acts which are in force in the State are a Child Marriage Restriction Act, a Farmers' Relief Act, and a Prohibition Act. There is also a State Bank. The Municipality was handed over to the people in 1937. Its President is also elected. Since 1945 local Dhara Sabha, Gram-Panchayats and District Panchayats have been in operation. The Vice-President of the Dhara Sabha is elected.

ADMINISTRATION

Dewan: TRAMBAKLAL V. VYAS, M.A., LL.B.; *Companion to Heir-Apparent:* DURGASHANKER J. PANCHOLY, B.Sc., S.T.C.; *Nyayadhish:* MAGANLAL N. BHUPTANY, Advocate; *Chief Medical Officer:* DR. K. J. PANCHOLY, L.C.P.S.; *Private Secretary:* RAMBHAI D. PATGIR; *Hazur Secretary:* HATHIBHAI R. VANK; *Educational Officer:* HIMATLAL J. PANCHOLY, B.A.,S.T.C.D.; *Treasury Officer:* PANACHAND B. SANGANI; *Superintendent of Police:* BHURABHAI RUPSING.

VALA STATE situated about 22 miles north-west of Bhavnagar in Kathiawar, lies between north lat. 21°51′ and 22°1′ and east long. 71°50′ and 72°3′. The Rulers are Rajputs of the Gohel clan. The capital Valabhipur stands on the site of the ancient Valabhi, the seat of the Valabhi dynasty. Copper plates, coins, rings, etc., are frequently dug up in its vicinity.



THAKORE SAHEB SHRI GAMBHIR SINHJI VAKHATSINHJI GOHEL of Vala was born on April 25, 1889. He was educated at Harrow and Clare College, Cambridge. He also took a regular course in military training at the Imperial Cadet Corps at Dehra Dun. The Thakore Saheb married the youngest daughter of the late Thakore Shree Verisalji of Roha Kutch on March 9, 1912. The Heir-Apparent Yuvraj Shri Pravinchandrasinhji was born on October 15, 1925. The Thakore Saheb ascended the *gadi* on June 5, 1943. His chief recreation is riding. Secretary to the Thakore Saheb: Rajkumar Jaswantsinhji of Vala.

AGRICULTURE

The area of the State is 211.9 sq. miles (including zilla villages). The population is 16,197 and the revenue Rs. 6,44,000.

Agriculture is the main occupation. The principal export is wheat. About 1,000 bighas of land are irrigated by water stored in the Gordon Bundh. There is one ginning factory in the State. Salt is also manufactured in small quantities at present and also collected from natural deposits.

Primary and secondary education are free throughout the State.

ADMINISTRATION

The administration is conducted by the Thakore Saheb with the help of a Dewan. The departments of education and municipality have been handed over to the Praja Pratinidhi Sabha.

PRINCIPAL OFFICERS:—*Dewan:* KESHAVLAL K. OZA, B.A. (Hons.), LL.B.; *Sar Nyayadhish:* CHHOTALAL P. TRIVEDI, B.A., LLB.; *Chief Medical Officer:* DR. VALLABHDAS M. BHAYANI, M.B.B.S.; *Nyayadhish & 1st Class Magistrate:* GIRJASHANKAR K. VYAS, B.A., L.L.B.; *Superintendent of Police:* DALSUKHRAM K. BHATT; *Revenue Assistant:* NATVERSINHJI AJITSINHJI JADEJA; *Superintendent, Huzur Office:* BHAGWANTRAI B. HATHI; *Executive Officer, Praja Pratinidhi Sabha:* CHANDULAL K. MEHTA; *State Surveyor:* SAKHARAM K. VIDWANS; *State Overseer:* GOKULDAS B. BHARADIA; *Treasury Officer:* MANISHANKER V. RAJYAGOR; *Bardashi Officer:* JIWANLAL F. MEHTA.

WADHWAN STATE is situated in the north-east part of Kathiawar. Bounded on the north by Dhrangadhra State, on the south by the Chuda and Limbdi States and Dhandhuka Taluka, on the east by the Limbdi State, and on the west by the Muli and Sayla States, the State lies between latitudes 22° and 23° and longitudes 71° and 72°. It was founded in about 1630 by Rajoji, son of Prathirajji, the eldest son of Raja Chandarsinhji of Halvad. The Ruler belongs to the Jhala clan of Rajputs.



HIS HIGHNESS MAHARANA THAKORE SAHEB SHRI SURENDRASINHJI JORAWARSINHJI JHALA, the present Ruler of Wadhwan, was born on January 4, 1922. He succeeded to the *gadi* on July 27, 1934, and was invested with full ruling powers on June 8, 1942.

His Highness was educated at Mayo College, Ajmer and Blundells School, Tiverton (Devonshire), England. He married Ba Shri Jayakumariba, youngest daughter of His Highness Maharaja Saheb Shri Bhojrajji Saheb of Gondal on February 18, 1942. He has two brothers Kumar Shri Virendrasinhji and Kumar Shri Vikramsinhji.

The Heir-Apparent Tika Raja Shri Birendra Deo Bahadur was born on March 30, 1943.

The area of the State exclusive of the villages in the Indian Dominion is 242·6 sq. miles, its population 69,911, and its revenue about Rs. 7½ lacs. The Ruler is entitled to a permanent salute of 9 guns.

Industrially the State is well-off. There is one spinning and weaving mill in Surendranagar. There are also 9 ginning factories and 4 presses. Wadhwan City and Surendranagar are the important centres of commerce and industry, where the branches of five banking companies are situated. Washing soap, and brass, copper and silver wares are manufactured on an extensive scale.

The B. B. & C. I. Railway, and the Morvi and Bhavnagar State Railways pass through the State territories. Wadhwan Junction is an important railway station where all the above three railways meet. Two regular tramway services, one between Jorawarnagar and Sayla and the other between Wadhwan City and Surendranagar pass through the State. A bus service between Wadhwan City and Jorawarnagar is run by the Jorawarnagar Municipality. Almost all the important villages are interwoven by regular bus services. The State maintains about fifteen miles of roads, namely the Wadhwan-Rajkot Trunk Road, Wadhwan-Dhrangadhra Road and Wadhwan-Limbdi Road, as also two good roads connecting Wadhwan City and Surendranagar. The State does not possess any irrigation facilities.

ADMINISTRATION

The administration of the State is assisted by a State Council of which His Highness is the President. *Dewan and First Member:* RAO SAHEB J. L. BAROT; *Naib Dewan and Second Member:* LAXMICHAND N. GOSALIA, B.A.; *Third Member:* KUMAR SHRI KARANSINHJI J. JHALA.

PRINCIPAL OFFICERS: *High Court Judge:* P. L. CHUDGAR, Bar-at-Law; *Officer-in-Charge, Surendranagar:* MOHANLAL JIWANLAL, Bar-at-Law; *Sar Nyayadhish:* BHOLANATH J. THAKER, B.A., LL.B.; *Supdt. of Police:* RAO BAHADUR HARISHANKER J. RAWAL; *Director of Education:* VISHWANATH S. ABHYANKER, M.A., B.Sc. (U. S. A.); *Ag. Chief Medical Officer:* DR. REWASHANKER A. SHUKLA, L.C.P. & S.; *Rajkharch Officer:* GOPALJI B. GOHEL; *Chief Revenue Officer:* GOVINDSINHJI R. JHALA; *Nyayadhish:* SHANTILAL M. VORA, B.A., LL.B.; *First Class Magistrate & Civil Sub-Judge, Surendranagar:* DHIRAJLAL B. NARICHANIA, Advocate; *Treasury Officer:* PATHUBHA K. CHUDASAMA; *State Engineer:* RUBSINHJI B. JHALA; *Secretary, State Council:* D. M. JOSHI; *Palace Medical Officer:* DR. REWASHANKER A. SHUKLA, L.C.P. & S.; *Khangi Kamdar:* DEVISINH G. JADEJA.

Indian Representatives Abroad

Ambassador in China, Nanking, His Excellency Sardar K. M. Panikkar.

Ambassador in U.S.S.R., Moscow, Her Excellency Shreemati Vijayalakshmi Pandit.

Ambassador in Iran, Tehran, His Excellency Mr. Ali Zaheer, Bar-at-Law.

Ambassador in Nepal, Kathmandu, His Excellency Sardar Surjit Singh Majithia.

Ambassador in Burma, Rangoon, His Excellency Dr. M. A. Rauf, Bar-at-Law.

Ambassador in Egypt, Cairo and Minister to Transjordan, His Excellency Dr. Syud Hossain.

Ambassador in Afghanistan, Kabul, His Excellency Wing Commander Rup Chand.

Ambassador in Turkey, Ankara, His Excellency Diwan Chiman Lal.

Ambassador in the United States of America, Washington, D. C., His Excellency Sir B. Rama Rau.

Charge d'Affaires in France, Paris, Sir N. R. Pillai, K.C.I.E., O.B.E.

Charge d' Affaires in Belgium, Brussels, B. F. H. B. Tyabji, I.C.S.

Envoy Extraordinary and Minister Plenipotentiary in Siam, Bangkok, Bhagwat Dayal.

Envoy Extraordinary and Minister Plenipotentiary, Berne (Switzerland), D. B. Desai.

Envoy Extraordinary and Minister Plenipotentiary, Rio de Janeiro (Brazil), M. R. Masani.

Consul-General in Indonesia, Batavia, vacant.

Consul-General in Shanghai, E. S. Krishnamurthy.

Consul-General in the French Establishments and Consul-General in Portuguese Possessions in India, Pondicherry, Mirza Rashid Ali Baig.

Consul in Indo-China, Saigon, A. N. Mehta.

Head of the Indian Liaison Mission, Tokyo, B. N. Chakravarthy.

Head of the Indian Military Mission, Berlin, Brigadier Khub Chand, I.C.S.

His Majesty's Consul-General, Kashgar, E. Shipton.

Political Officer, Sikkim, A. J. Hopkinson, C.I.E.

Consul-General in United States of America, New York, R. R. Saksena.

Representative of the Government of India with the United Nations, Indian Delegation's Office, New York, Dr. P. P. Pillai.

High Commissioner in Canada, Ottawa, H. S. Malik, C.I.E., O.B.E., I.C.S.

High Commissioner in Ceylon, Colombo, V. V. Giri, Bar-at-Law.

Agent to the Government of India in Ceylon, Kandy, N. E. S. Raghavachari, I.C.S.

High Commissioner in the United Kingdom, London, V. K. Krishna Menon.

High Commissioner in Pakistan, Karachi, Sri Prakasa.

Deputy High Commissioner in Pakistan, Karachi, Sardar Sampuran Singh.

Offt. Secretary, High Commissioner's Office, Canberra, K. R. Damle, I.C.S.

Secretary, High Commissioner's Office, Cape Town, J. W. Meldrum, O.B.E., I.C.S.

Representative of the Government of India in Malaya, Singapore, J. A. Thivy, Bar-at-Law.

Agent of the Government of India in Malaya, Kuala Lumpur, T. G. Nataraja Pillai.

Liaison Officer to the Government of India in Pakistan, Peshawar, K. L. Khana.

Envoy in Czechoslovakia, N. Raghavan, Bar-at-law.

Envoy in Br. East Africa, Appa Saheb Pant.

Indian Embassy in Pakistan

After the division of the Indian sub-continent and the establishment of Pakistan, the Government of India nominated on August 11 Mr. Sri Prakasa a well known Congress leader from the United Provinces, as their High Commissioner in the new Dominion. Soon afterwards, Sardar Sampuran Singh was appointed as Deputy High Commissioner at Lahore. Mr. V. Viswanathan, I.C.S., one of Indian civilians with a long diplomatic experience was sent to the Pakistan capital as the Deputy High Commissioner to organise the Indian High Commissioner's office. At about the same time, Mr. K. L. Punjabi, I.C.S., was named as the Deputy High Commissioner at Peshawar but subsequently, he was transferred to Lahore his place being taken by Major B. K. Kapur as Liaison Officer at Peshawar.

The offices at Lahore and Peshawar were mainly engaged in tackling problems arising out of the mass exchange of population between East and West Punjab and N.-W. Frontier Province. The actual work of evacuation was carried out in that region by the Military Evacuation Organisation. These two offices were also concerned with the difficult problem of settling claims of evacuees' abandoned property in the two Dominions. Even after evacuation of Government personnel and refugees, the problem of abducted women remained to be solved and both India and Pakistan have shown exemplary co-operation in handling this and other allied Inter-Dominion problems. In the Frontier Province, there are still some small Hindu pockets which are being cleared.

IN KARACHI

The High Commissioner's office in Karachi is intended to be India's Embassy in Pakistan and from the very beginning concerned itself with work of a purely diplomatic nature. Owing to acute housing scarcity in the Pakistan capital, both the High Commissioner and his deputy were forced to carry on their work in their rooms in a private hotel, but subsequently, they moved to Damodar Mahal, a palatial building, situated in the new Bunder Road extension of Karachi.

The first problem that this office had to tackle was the evacuation of 15,000 Central Government personnel scattered in Sind, Baluchistan, North-West Frontier and Bahawalpur. A transfer bureau was set up and evacuation of all personnel was completed on November 1, 1947. Although there was no rioting on the Punjab scale in these areas there were widespread outbreaks of violence in Quetta, Bahawalpur and Hyderabad (Sind) which led to a large exodus of Hindus and Sikhs from Sind beginning with August 15, 1947. The migration slackened about the beginning of December, but unfortunately, the disorders at Hyderabad (Sind) on December 17 and much more widespread disturbances in the Pakistan capital itself on January 6, 1948, led to a second wave of migration. With no military organisation to assist them, the energies of the officers of the Indian Embassy were taxed to the full as a lakh of Hindus and Sikhs had to be moved from Sind to India every month by train and sea and even by air. This large-scale evacuation raised questions relating to evacuees' property and allied problems. No custodian of evacuee property was appointed in Sind, but economic rehabilitation officers in Sind and Baluchistan carried out the functions of custodians of evacuee property. Although no accurate estimate of non-Muslim evacuee property in Western Pakistan could be had at present, it must be remembered that as the entire trade and commerce were in their hands in this part of the sub-continent, their economic stake must be very considerable.

One of the redeeming features of the Indo Pakistan relations since partition is the way both Governments had co-operated in solving their mutual difficulties in regard to food. India's Food Counsellor, Major-General A. C. Arnold was mainly responsible for this, had vacated his office of Regional Food Controller in Karachi in March 1947.

The following are among the more important members of the Indian High Commissioner's staff in Pakistan:

IN KARACHI

Deputy High Commissioner:—S. K. Kripalani.

Additional High Commissioner:—N. R. Malkani.

Food Counsellor:—Vacant.

Secretary to the High Commissioner:—Deshpande.

Attaches:—B. K. Massand; A. K. Roy; A. B. Bhadkamkar.

AT LAHORE

Deputy High Commissioner:—Sardar Sampuran Singh.

Officer on Special Duty:—K. L. Punjabi.

AT PESHAWAR

India's Liaison Officer:—K. L. Khana.

Pakistan Representatives Abroad

Quaide-Azam's Personal Representative in Afghanistan, Kabul, M. H. Quizilbash.

Charge d'Affaires, in Egypt, Alexandria, J. A. Rahim.

Charge d'Affaires, in Iran, Tehran, Mohammad Hassan.

Ambassador in the U.S.A., Washington., D.C., His Excellency Mirza Abul Hasan Ispahani.

Charge d'Affaires, in Burma, Rangoon, Ibne Hasan.

High Commissioner in the U.K., London, Habib I. Rahimtoola.

High Commissioner in India, New Delhi, Zahid Husain, C.I.E.

Trade Commissioner in Australia, Sydney, A. D. Azhar.

Foreign and Commonwealth Representatives

Country.	Station.	Designation.	Name.	Address.
		EMBASSIES IN INDIA		
BELGIUM.	New Delhi.	Ambassador Extraordinary and Plenipotentiary.	His Excellency Prince de Ligne.	Theatre Communications Buildings, Connaught Place, New Delhi.
		1st Secretary ..	M. Ch. Pigault de Beaupre.	
		Attache	Mons. Claude Schuind.	
BURMA.	New Delhi.	Ambassador Extraordinary and Plenipotentiary.	His Excellency U. Win.	
		1st Secretary ..	U. Kyaw Khine.	
NEPAL.	New Delhi.	Ambassador Extraordinary and Plenipotentiary ..	His Excellency Commanding General Shingha Shumshere Jung Bahadur Rana.	12, Bara Khamba Rd., New Delhi.
		Counsellor	Lieut.-Colonel G. S. Thapa.	
		1st Secretary ..	P. N. Pradhan.	
		Military Attache	Captain S. B. Basnyat.	
NETHERLANDS.	New Delhi.	Ambassador Extraordinary and Plenipotentiary.	His Excellency Monsieur A. T. Lamping.	4, Ratendone Road, New Delhi.
		1st Secretary ..	Jonkheer J. Q. Bas Backer.	
		2nd Secretary ..	Dr. B. J. Slingenberg.	
		Press Attache ..	Monsieur H. A. Googendoorn.	
UNITED STATES OF AMERICA.	New Delhi.	Ambassador Extraordinary and Plenipotentiary.	His Excellency Loy Henderson.	Bahawalpur House, New Delhi.
		Counsellor	Howard Donovan.	
		Counsellor for Economic Affairs.	Samuel H. Day.	
		Naval Attache ..	Captain James G. Atkins.	
		Military Attache.	Colonel Clarence W. Bennett.	
		Military Attache for Air.	Lieut.-Colonel Charles E. Caple.	
		Commercial Attache.	Joe D. Walstoom.	
		do.	James A. Ross.	
		2nd Secretary ..	T. Eliot Weil.	
		Do.	Henry T. Smith.	
		Do.	Cleveland B. McKnight.	
		Assistant Military Attache for Air.	Captain William M. Reynolds, Jr.	
		Information Officer.	Ernest H. Fisk.	
		3rd Secretary ..	Miss Mary E. Volz.	
		Consul	Patrick Mallon.	
		Do.	Robert M. Carr.	
		Do.	Henry T. Smith.	
		Do.	T. Eliot Weil.	
		Do.	J. Jefferson Jones III.	
		Vice-Consul ..	Miss Mary E. Volz.	
		Do. ..	Denis A. Baumhover.	
		Do. ..	Cleveland B. McKnight.	
		Do. ..	Miss Virginia Ellis.	

Country.	Station.	Designation.	Name.	Address.
UNION OF SOVIET SOCIALIST REPUBLICS	New Delhi.	Ambassador Extraordinary and Plenipotentiary.	His Excellency Monsieur Kiril Vasilevitch Novikov.	Imperial Hotel New Delhi.
		Minister	A. V. Vassiliev.	
		Counsellor.		
		1st Secretary ..	P. D. Erzin.	
		3rd Secretary ..	N. I. Ougolkova.	
		3rd Secretary ..	V. P. Popov.	
		Attache	P. V. Dmitriev.	
		Do.	M. Kourtgueldyev.	
		LEGATIONS IN INDIA		
SIAM.	New Delhi.	Charge d'Affaires.	Dr. Thanat Khoman.	Swiss Hotel, Delhi.
		3rd Secretary ..	Sonthi Dhanasunthon.	
		HIGH COMMISSIONERS IN INDIA		
AUSTRALIA.	New Delhi.	High Commissioner	Lieut.-General Sir Iven Mackay, K.B.E., C.M.G., D.S.O., V.D.	Connaught Place, New Delhi.
		Official Secretary.	J. C. G. Kevin.	
		Public Relations Officer.	J. D. Keating.	
		Assistant Official Secretary.	J. D. Petherbridge.	
		Accounting Officer.	C. A. Allen.	
		3rd Secretary ..	S. J. Dempsey.	
CANADA.	New Delhi.	High Commissioner	John D. Kearney.	4, Aurangzeb Road, New Delhi.
		Counsellor (Acting as High Commissioner).	S. Morley Scott.	
		2nd Secretary ..	Alfred J. Pick.	
PAKISTAN.	New Delhi.	High Commissioner	Zahid Hussain, C.I.E.	8-B, Hardinge Avenue, New Delhi.
		Deputy High Commissioner ..	Khan Bahadur Mian Abdul Aziz, C.B.E.	
		1st Secretary ..	Major A. C. K. Maunsell, O.B.E.	
UNITED KINGDOM.	New Delhi.	High Commissioner	Sir Terence Shone, K.C.M.G. (From November 1948—Sir Archibald Nye.)	6, Albuquerque Road, New Delhi.
		Deputy High Commissioner.	A. C. B. Symon, O.B.E.	
		Legal Adviser ..	The Hon'ble Mr. Justice C. H. A. Bennett.	
		Financial Adviser ..	A. K. Potter, C.B.E.	
		Adviser on Service Questions.	C. F. V. Williams, C.I.E.	
		Counsellor	C. A. Gault, O.B.E.	
		1st Secretary ..	G. D. Anderson.	
		Do. ..	V. T. Bayley.	
		Do. ..	L. A. C. Fry, O.B.E.	
		Do. ..	R. W. Selby.	
		Do. ..	J. S. H. Shattock, O.B.E	
		Do. ..	Lieut.-Col. C. J. Toyne.	
		Do. ..	A. W. T. Webb, O.B.E.	
		2nd Secretary ..	D. M. Clows, M.C.	
		Do. ..	T. L. Crosthwait, M.B.E.	
		Do. ..	E. M. Hadow.	
		Do. ..	A. Harnett.	
		Do. ..	E. G. Willan.	
		Air Liaison Officer.	Wing Commander E. A. Warfield, O.B.E., D.F.C.	
		Security Liaison Officer.	K. M. Bourne, O.B.E., M.C.	

Country.	Station.	Designation.	Name.	Address.
		REPRESENTATIVES IN INDIA		
CEYLON.	New Delhi.	Special Representative of the Govt. of Ceylon in India.	M. W. H. de Silva, K.C.	2, Scindia House, Queensway, New Delhi.
		Secretary	C. de Fonseka, C.C.S.	
		CONSUL-GENERALS IN INDIA		
AFGHANISTAN.	New Delhi.	Consul-General ..	Monsieur Ghulam Mohammad Khan.	24, Ratendone Road, New Delhi.
	Bombay.	Consul	Fazal Ahmed Khan.	115, Walkeshwar Road, Bombay.
		FOREIGN CONSULAR OFFICERS IN INDIA		
ARGENTINE.	Calcutta.	Vice-Consul ..	(Vacant). J. B. Thornbull is conducting the affairs of the Consulate.	No. 5, Fairlie Place, Calcutta.
AUSTRIA.	....	Hon. Consul ..	(Vacant).	
BELGIUM.	Bombay.	Consul-General ..	Mons. Georges Carlier.	"Morena" 11, Carmichael Road, Cumballa Hill, Bombay.
		Vice-Consul ..	Alfred Jacquet.	
		Do. ..	Jacques Boon.	
	Calcutta.	Consul-General ..	(Vacant).	
		Hon. Vice-Consul (In-charge of the Consulate-General)	Bouha.	
	Madras.	Hon. Consul ..	Colonel D. M. Reid, O.B.E., M.C., E.D. (On Military Service).	
		Hon. Consul ..	K. H. Chambers.	
BOLIVIA.	Calcutta.	Hon. Consul-General	B. Matthews.	
BRAZIL.	Bombay.	Hon. Consul ..	(Vacant) on leave.	Asian Building, Ballard Estate, Bombay.
		Vice-Consul ..	Frederick Joseph Heredia.	
CHINA.	Bombay.	Consul	(Vacant)	Co-operative Insurance Bldg., Sir P. M. Road, Fort, Bombay.
		Deputy Consul (In-charge of the Consulate).	T. C. Yu.	
		Vice-Consul ..	Wang Ai Tsiang.	
	Calcutta	Consul-General ..	Dr. W. P. Tsai.	
		Consul	Y. Y. Chen.	
		Do.	(Vacant)	
		Vice-Consul ..	W. K. Tcheng.	
		Deputy Consul ..	Yu Hwee-sen.	
		Vice-Consul ..	Ho Mien-shan.	
COLOMBIA.	Calcutta.	Hon. Consul ..	(Vacant).	
	Madras.	Hon. Consul-General	Senor Alfonso Tavera, G.	

Country.	Station.	Designation.	Name.	Address.
COSTA RICA.	Calcutta.	Hon. Consul ..	(Vacant)	
CUBA.	Bombay.	Do. ..	F. Mascarenhas.	Ready money Mansion, Churchgate St., Bombay.
	Calcutta.	Consul-General ..	(Vacant)	
CZECHOSLOVAKIA.	Bombay.	Do. ..	Mons. Josef Lusk.	87, Wodehouse Road, Colaba, Bombay.
		Consular Agent ..	G. S. Mohomed.	
		Vice-Consul (Provisional)	Prokop Maxa.	
	Calcutta.	Consul	(Vacant).	
DENMARK.	Bombay.	Consul (Acting Provisional)	Bertil Thorstenson.	Indian Mercantile Chambers, Nicol Road, Ballard Estate, Bombay.
		Trade Commissioner	Harry Toyberg-Frandzen.	
		Asst. Trade Commissioner	P. Manford-Hansen.	
	Calcutta.	Hon. Consul (Acting Provisional)	W. T. Holmgaard.	
		Hon. Vice-Consul	(Vacant).	
	Calicut.	Consul (Acting Provisional).	R. B. Robey.	
	Madras.	Consul (Acting Provisional)	Orla Christensen.	
DOMINICAN REPUBLIC.	Calcutta.	Hon. Consul ..	R. N. Roy.	
	Cochin.	Hon. Vice-Consul	(Vacant).	
		Do.	Do.	
ECUADOR.	Calcutta.	Hon. Consul (on leave)	L. W. Balcombe.	6, Lyons Range, Calcutta.
		Hon. Consul (Acting)	A. H. Hume.	
EGYPT.	Bombay.	Consul-General (on leave)	Mons. El Hosciny El Khatib.	Cumballa Building, 42, Queen's Rd., Churchgate Reclamation, Bombay.
		Consul (Provisional) In-charge of the Consulate-General	Mons. Ahmad Fathy Radwan.	
EL SALVADOR.	Calcutta.	Hon. Consul (Provisional)	Karanjaksha Bonerjee, M.A.	Rama Niketan, 10, P. K. Tagore St., Calcutta.
FINLAND.	Bombay.	..	Interests in charge of the Consulate Officers for Sweden.	
	Calcutta.	..	The Consul for Sweden is in charge of Finnish interests in Calcutta.	
FRANCE.	Bombay.	Consul (Provisional)	Mons. H. De Limairac.	Celandine, 87-B, Nepean Sea Road, Bombay.
		Vice-Consul ..	Mons. P. Papoussamy.	
	Calcutta.	Consul-General (Provisional)	Mons. R. Kolb-Bernard.	
		Consul ..	(Vacant).	
		Vice-Consul ..	Do.	
		Do. ..	Mons. H. Fourgeot.	
		Do. ..	Mons. P. Pequin.	
		Vice-Consul (Provisional)	Madame Eliane Prause.	
	Cochin.	Consular Agent (Provisional)	B. S. Holloway.	
	Madras.	Consular Agent ..	Yves Beoq.	

Country.	Station.	Designation.	Name.	Address.
GERMANY.	Consulate General for Switzerland at Bombay has agreed to continue to maintain provisionally the safeguarding of German ex-territorial premises and archives.			
GREECE.	Bombay.	Hon. Consul-General.	Mons. P. N. Philon.	17, Jiji House, Ravelin St., Fort, Bombay.
		Deputy-Consul ..	Mons. N. R. Pantazopilos.	
	Calcutta.	Hon. Consul-General.	B. Mathews	Wellesley House, 7, Wellesley Place
		Hon. Deputy Consul-General.	J. K. Gora.	Calcutta.
GUATEMALA	Bombay.	Hon. Consul ..	(Vacant).	
	Calcutta.	Do. ..	Do.	
HAYTI.	Calcutta.	Do.	Murari Churan Law.	
HUNGARY.	Bombay.	Do.	Swedish Consular Officers in India are in charge of Hungarian interests.	
	Calcutta.	Do.		
	Madras.	Do.		
IRAN.	Bombay.	Consul.	Mons. H. Bahadorie	45-G, Navroji Gamadia Road, Off Warden Rd., Bombay.
		Vice-Consul. ..	Mons. A. Rafaat.	
	Calcutta.	Consul	(Vacant).	
	Madras.	Do.	Do.	
IRAQ.	Bombay.	Consul-General ..	(Vacant).	" Panorama," 203, Walkeshwar Rd., Bombay.
		Consul	Do.	
ITALY.	Bombay.	Consul-General ..	Signor Mario Orsini Ratto.	" Cama Lodge," 19, Pedder Rd., Bombay.
JAPAN.	(Swedish Consular Officers in Bombay are in-charge of Japanese interests.			
LATVIA.	Bombay.	Hon. Consul ..	(Vacant).	
LEBANON.	Bombay.	Hon. Consul-General (Provisional).	Tarek El-Yafi.	Churchgate House, Churchgate St., Bombay.
LIBERIA.	Calcutta.	Consul	(Vacant).	
LUXEMBURG.	Bombay.	Hon. Vice-Consul (on leave).	Mons. Alphonso Alo.	2nd Floor, Taj Building, Hornby Rd., Bombay.
		Vice-Consul ..	R. C. L. Van Dama.	
MEXICO.	Calcutta.	Hon. Consul ..	(Vacant).	
MONACO.	Bombay.	....	Do.	
NEPAL.	Calcutta.	Consul-General ..	Prakhyat Trishakti Patta Pravala Gorkha Dakshina Bahu, Commander Colonel Daman Shamshere Jung Bahadur Rana, C.I.E., C.B.E.	25, Raja Santosh Rd., Calcutta.
NETHERLANDS.	Bombay.	Hon. Consul ..	Mons. G. Velthorst.	314, Hornby Rd., Empire of India Life Assurance Building, Bombay.
	Calcutta.	Consul-General ..	(Vacant).	
		Consul	Do.	
		Hon. Consul ..	Mons. C. E. Van Aken.	
		Vice-Consul ..	(Vacant).	
	Cochin.	Hon. Consul ..	Mons. C. J. J. Hardebeck.	
	Madras.	Do. ..	A. D. Charles.	

Country.	Station.	Designation.	Name.	Address.
NICARAGUA.	Bombay.	Hon. Consul (on leave).	C. H. A. Hardcastle.	Alice Building, Hornby Rd. East, Bombay.
		Hon. Consul (Acting).	J. K. Rege.	
	Calcutta.	Hon. Consul ..	(United States of America Consular representatives in Calcutta will protect the Nicaraguan interests for the specific purpose of certifying Consular invoices covering jute shipments).	
NORWAY.	Bombay.	Consul-General ..	Mons. E. Leodrup.	Imperial Chambers, Wilson Rd., Ballard Estate, Bombay.
		Hon. Consul ..	Mons. T. Ahlsand.	
		Vice-Consul ..	(Vacant).	
	Calcutta.	Consul-General ..	Mons. S. Gylseth.	
		Hon. Consul ..	(Vacant).	
		Hon. Vice-Consul	Do.	
	Cochin.	Hon. Vice-Consul (on leave). ..	William Jefferies.	
		Hon. Vice-Consul (on leave).	B. S. Holloway.	
		Vice-Consul (Acting)	A. Meadows.	
PANAMA.	The interests of Panama in Calcutta and Bombay are in charge of United States of America Consular Officers.			
PERU.	Calcutta.	Consul-General ..	(Vacant).	
POLAND.	Calcutta.	Hon. Consul ..	Do.	
PHILIPPINES.	Madras.	(Philippine interests in India are represented by the United States of America Mission and Consular Officers in India).		
PORTUGAL.	Bombay.	Consul	Senhor Joao Lucena.	17, Cuffee Parade, Colaba, Bombay.
		Additional Consul ..	Senhor Manuel Rodrigues Almeida Coutinho.	
		Hon. Vice-Consul ..	Senhor A. P. J. Fernandez.	
	Calcutta.	Hon. Consul ..	(Vacant). S. H. Tuly is carrying on the affairs of the Consulate from 22nd November 1947.	
	Madras.	Hon. Consul ..	Rev. Alberto Lopes.	
ROUMANIA.	(Roumanian interests are in Bombay.)	charge of the Consul-General		for Sweden at
SPAIN.	Bombay.	Consul (Provisional)	Senhor Don Gonzalo Sebastian Erice Y. O. Shea.	" Oceana " 153, Marine Drive, Churchgate Reclamation, Bombay.
		Hon. Vice-Consul (Acting) ..	Dr. D. S. Fraser.	
	Calcutta.	Hon. Vice-Consul.	(Vacant).	
	Madras.	Do.	Do.	
SWEDEN.	Bombay.	Consul-General ..	Mons. Mangus Hallenborg.	1, "Shangrila" Carmichael Rd., Bombay, 26.
		Hon. Consul .. (Provisional) ..	B. A. Thorstensson.	
		Vice-Consul ..	Carl Swartz.	
	Calcutta.	Hon. Consul ..	N. F. Tisell.	
		Hon. Vice-Consul ..	Mons. W. S. Tham.	
	Madras.	Hon. Consul ..	B. O. Ellis.	

Country.	Station.	Designation.	Name.	Address.
SWITZERLAND.	Bombay.	Consul-General (Provisional)	Dr. H. A. Sonderegger.	Manekji Wadia Building, 125, Esplanade Rd., Bombay.
		Vice-Consul (Provisional)	Dr. G. Bucher.	
	Calcutta.	Hon. Consul ..	(Vacant).	
		Do. (Acting) .	E. Wanner.	
	Cochin.	Hon. Consular Agent.	M. Kappelar.	
	Madras.	Hon. Consular Agent.	Mons. F. Hofmann.	
SYRIA.	(Interest being looked after by the Egyptian Consul.)			
TRANSJORDAN.	Bombay.	(Interests being looked after by the Iraqi Consul.)		
TURKEY.	Bombay.	Consul-General ..	T. R. Tokcinar.	
		Consul	Haluk Kocaman.	
	Calcutta.	Hon. Consul ..	L. C. Mousell.	
UNITED STATES OF AMERICA.	Bombay.	Consul-General ..	Howard Donovan.	Construction House, Nicol Rd., Ballard Estate, Bombay.
		Consul	Henry W. Spielman.	
		Do.	Roy M. Melbourne.	
		Vice-Consul ..	George W. Small.	
		Do. ..	Charles D. Withers.	
		Do. ..	James V. Martin (Jr.).	
		Do. ..	Albert A. Rabida.	
		Do. ..	Lennox Coombs Fogg (Jr.).	
		Do. ..	Morris Dembo.	
	Calcutta.	Consul-General ..	Charles H. Derry.	
		Consul	Eugene A. Gilmore.	
		Do.	(Vacant).	
		Do.	Douglas Flood.	
		Do.	Charles O. Thomson.	
		Vice-Consul ..	Miss Helen Randolph Sexton.	
		Do.	Miss Helen R. Nicholl.	
		Do.	Thomas S. Bloodworth.	
		Do.	Robert John Jantzen.	
		Do.	Stuart Blow.	
	Madras.	Consul-General ..	C. Porter Kuykendall.	
		Consul	Roy Edgar Belknap Bower.	
		Do.	Robert P. Chalker.	
		Vice-Consul ..	Miss Louise Schaffner.	
		Do. ..	Merritt M. Grant.	
		Do. ..	Raymond J. Becker.	
		Do. ..	Stanley R. Chartrand.	
VENEZUELA.	Calcutta.	Hon. Vice-Consul ..	(Vacant.) Bolivian Consul at Calcutta is in charge of the affairs of the Consulate.	

Foreign Representatives in Pakistan

Country.	Name	Appointment.	Station.
BURMA	U Pe Kin	High Commissioner ..	Karachi.
	U Zaw Win	1st Secretary	Do.
	Boh Tun Hla	2nd Secretary	Do.
	U Ohn Khin	3rd Secretary	Do.
EGYPT	Monsieur El Husein El Khatib ..	Charge d'Affaires ..	Do.
INDIA	Sri Prakasa	High Commissioner ..	Do.
	S. K. Kripalani	Deputy High Commissioner	Do.
	Bhadgamkar	Attache	Do.
	H. K. Massand	Hony. Attache	Do.

Country.	Name.	Appointment.	Station.
	Vacant	Counsellor (Food)	Karachi.
	Sen-Guota	Addl. 2nd Secy. (Food) ..	Do.
	Vaswaney	Addl. 3rd Secy. (Food) ..	Do.
IRAN	Monsieur M. Foroobar	Charge d'Affaires	Do.
ITALY	Dr. Augusto Assettai	Charge d'Affaires ..	Do.
UNITED KINGDOM.	Sir Lawrence Barton Grafftey-Smith, K.B.E., C.M.G.	High Commissioner ..	Do.
	R. R. Burnett, O.I.E., O.B.E. ..	Deputy High Commissioner.	Do.
	I. D. Scott, O.I.E.	First Secy. & Head of Chancery.	Do.
	J. R. Cotton, O.B.E.	First Secretary	Do.
	R. M. K. Slater	1st Secretary	Do.
	P. R. Oliver	2nd Secretary	Do.
	S. J. L. Oliver	2nd Secretary	Do.
	D. U. Jackson	2nd Secretary	Do.
	E. J. Ellis	Regional Information Officer.	Do.
	R. A. Mckenzie	Administrative Officer ..	Do.
	W. J. Trowsdale	Accountant	Do.
	B. G. Nash	Archivist	Do.
	Wing Commander P. A. Mc. Whannell, R.A.F.	Air Adviser	Do.
	A. K. Potter	Financial Adviser (India & Pakistan).	Do.
	G. T. Dow-Smith	Senior Trade Commissioner.	Do.
	A. H. Kemp	Trade Commissioner ..	Do.
	Miss B. de Cardi	Asst. Trade Commissioner.	Do.
	H. S. Stevenson	Deputy High Commissioner.	Lahore.
	Adair	Deputy High Commissioner.	Dacca.
UNITED STATES OF AMERICA.	Charles W. Lewis, Jr.	Charge d'Affaires	Karachi.
	H. Gordon Minnigerode	2nd Secy. & Consul ..	Do.
	James A. Ross	Commercial Attache ..	Do.
	Julian L. Nugent	2nd Secy. & Vice-Consul ..	Do.
	Frederick D. Leatherman ..	Vice-Consul	Do.
	Nicholas G. Thacher	3rd Secy. & Vice-Consul	Do.
	Richard D. Gatewood	Consul-General	Lahore.
	Thomas Winston Simons ..	Attache	Karachi.

Consular Officers in Pakistan

Country.	Name.	Appointment.	Station.
AFGHANISTAN ..	Monsieur Mohammad Qasim Khan.	Consul	Karachi.
BELGIUM ..	J. Longhurst	Consul	Do.
CANADA	G. A. Browne	Trade Commissioner ..	Do.
CZECHO-SLOVAKIA.	Captain G. B. Potts	Hon. Consul	Do.
DENMARK ..	E. J. Mc Nulty	Vice-Consul	Do.
FRANCE ..	T. C. Beaumont	Consular Agent	Do.
GREECE ..	Col. H. J. Mahon, C.I.E. ..	Consul	Do.
NETHERLANDS	Joseph Rasom	Do.	Do.
NORWAY ..	Joseph Rasom	Vice-Consul	Do
PORTUGAL ..	Dr. J. T. Alfonso	Hon. Vice-Consul	Do.
SPAIN	R. M. Weston	Vice-Consul	Do.
SWEDEN ..	G. Gow	Do.	Do.
SWITZERLAND ..	Joseph Rasom	Do..	Do.

Trade Commissioner Service

UNITED KINGDOM

THE United Kingdom Trade Commissioners are the representatives in India, Burma and Ceylon of the Board of Trade. The two departments of the Board which are mainly concerned with external economic relations are the Commercial Relations and Treaties Department, which is responsible for general external commercial policy, and the Export Promotion Department, which acts as the executive instrument for fostering export trade. Both departments are under the same ministerial direction—the Secretary for Overseas Trade—who is responsible to the President of the Board of Trade under whose guidance he is concerned with the whole field of external trade.

In foreign countries the counterpart of the work performed by Trade Commissioners is undertaken by Foreign Service Officers in Commercial Diplomatic and Consular posts. The Board of Trade is associated with the Foreign Office in the staffing of commercial posts in foreign countries. But the trade policy of the United Kingdom is a matter for the President of the Board of Trade acting, as do all other Ministers, in consultation and agreement with those of his colleagues whose interests are also concerned.

Function of United Kingdom Trade Commissioners. The primary duty of the United Kingdom Trade Commissioners consists in the giving of assistance to governments, organisations, firms and individuals who wish to establish contact with sources of supply in the United Kingdom. The Trade Commissioner, in addition, himself collects information in regard to trade opportunities which may arise within his territory. He reports to the Board of Trade on all matters affecting the trade, industry and commerce of the area entrusted to him. He is responsible for maintaining close personal relations with ministers and officials of governments in his area, with chambers of commerce, trade associations and the principal importers and manufacturers. He aims at visiting the principal commercial centres, reporting upon foreign competition, on financial and trade conditions, and new legislation affecting trade. He is also expected to maintain a regular flow of commercial information of all kinds to the Board of Trade, to maintain active correspondence with firms in the United Kingdom who wish to extend their trade, and to give all possible assistance to representatives of United Kingdom firms who may visit this territory.

The United Kingdom Trade Commissioners in India endeavour to maintain contact with United Kingdom representatives and agents in India. The offices are equipped with a wide range of directories and reference books of all kinds, including libraries of catalogues of the leading United Kingdom manufacturers. Firms desiring information with regard to specific manufacturers are invited either to call personally or to communicate their requirements in writing. It is hoped that local importers and buyers will not hesitate to make more extensive use of the information available in these offices, and to bring to the attention of the United Kingdom Trade Commissioners any cases where difficulties may have arisen over the harmonious development of trade between the United Kingdom and India.

On account of the partition of India, there is now a separate United Kingdom Trade Commissioner's organisation in Pakistan, with its headquarters at Karachi. There is also a United Kingdom Trade Commissioner in Burma, where an office has recently been opened at Rangoon.

Staff:

Delhi—Rowland Owen, United Kingdom Senior Trade Commissioner in India.
L. Harrison, United Kingdom Trade Commissioner at Delhi.
E. A. Midgeley, M.B.E., United Kingdom Trade Commissioner.
J. N. McKelvie, United Kingdom Trade Commissioner.
Address:—Eastern House, Man Singh Road, New Delhi.
Telephone No. 40011/5.
Telegrams:—TRADCOM.

Calcutta:—A. W. Burton, M.B.E., United Kingdom Principal Trade Commissioner at Calcutta.
K. E. Mackenzie, United Kingdom Trade Commissioner at Calcutta.
D. A. Bryan, United Kingdom Trade Commissioner.
Address: P. O. Box 683-4, Chittaranjan Avenue, Calcutta.
Telephone No. 6455.
Telegrams: TRADCOM.

Bombay:—John Stoodley, United Kingdom Trade Commissioner at Bombay.
Address: P. O. Box 815, Menkwa Building, 10, Outram Road, Fort, Bombay.
Telephone No. 6455.
Telegrams: TRADCOM.

Karachi.—W. Godfrey, United Kingdom Senior Trade Commissioner in Pakistan.
A. H. Kemp, United Kingdom Trade Commissioner at Karachi.
Address: Chamber of Commerce Building, Wood Street, Karachi.
Telephone No. 2886/8.
Telegrams: TRADCOM.

CANADA

The Canadian Department of Trade and Commerce comprises, as one of its principal divisions, the Foreign Trade Service, formerly described as the Commercial Intelligence Service. This service had its beginnings prior to the establishment of the Department in 1892 and has since undergone considerable expansion. Before the war it included a headquarters staff in Ottawa and thirty-four Trade Commissioner offices abroad, seventeen of these being in British and an equal number in foreign countries. Several of these were closed during the war years but are being progressively reopened and at the beginning of 1948 the service comprised offices in the United Kingdom, the Dominions, Newfoundland, Eire, the West Indian Colonies, the United States, Cuba, Egypt, the principal countries of Central and South America, the Netherlands, Norway, Sweden, Portugal, France, Belgium, Italy, and Greece. The Service still continues to expand both in respect to offices and trained personnel in order to assist in the transition of Canada's extensive wartime trade to a normal commercial basis.

In those countries where Canada has established diplomatic representation the Trade Commissioner's office has been incorporated into the Canadian embassy or legation.

The office of the Canadian Trade Commissioner for India, Burma and Ceylon was established in Calcutta in 1922 and was transferred to Bombay on April 1st, 1940. In the summer of 1947, the office of the High Commissioner for Canada was established at New Delhi where a Commercial Section is also located. Since September 1947, a Trade Commissioner office was established in Karachi to look after the requirements of the new Dominion of Pakistan. The services of Canadian Trade Commissioner offices are at the disposal of Canadian firms interested in the export of their goods to the Indian, Pakistan, Burma and Ceylon markets and to Canadian manufacturers and others who may be interested in the purchase of local products. These offices are also in regular touch with import houses in these countries and are prepared to co-operate as well with exporters interested in the Canadian market.

Office of the High Commissioner for Canada: 4, Aurangzeb Road, New Delhi.
Commercial Secretary: Richard Grew, P. O. Box 114, Telephone 40191, Cable Address: "CANADIAN", New Delhi.
Acting Canadian Government Trade Commissioner: C. R. Gadlow, Gresham Assurance House, Mint Road, Bombay, P. O. Box 886, Telephone 20672, Cable Address: "CANADIAN", Bombay.
Acting Canadian Government Trade Commissioner: G. A. Browne, P. O. Box 531, Karachi, Cable Address: "CANADIAN", Karachi.

AUSTRALIA

The Australian Government Trade Commissioner is located in Bombay and Calcutta and covers the territory of India and Burma.

The Trade Commissioners deal with enquiries received from India, Burma and place Indian Merchants and Firms in touch with manufacturers in Australia. They maintain a flow of trade information to the Department of Commerce, Australia, for dissemination to Australian exporters and information on specific openings for trade, including Government contracts and tenders for which Australian products might be suitable. They watch the demand for specific goods and gives information concerning competition to be met in their supply. An important function is to provide details of credit conditions and terms of payment. Market surveys on specific commodities are prepared and sent for the information of trade interests in Australia.

Information and literature is available on all aspects of trade with Australia.

Senior Australian Government Trade Commissioner in India and Burma: H. R. Gollan, D.S.O., M.C.—*Address:* Menkwa Building, Outram Road, P. O. Box 217, Bombay.
Australian Government Trade Commissioner: S. D. Shubart.—*Address:* Menkwa Building, Outram Road, P. O. Box 217, Bombay.
Australian Government Trade Commissioner: E. A. Benson.—*Address:* 2, Fairlie Place, P. O. Box 303, Calcutta.

NEW ZEALAND

Trade Commissioner in India: R. J. Inglis.—*Address:* 16, Churchgate Street, Bombay.

DENMARK

Office: Indian Mercantile Chambers, Nicol Road, Ballard Estate, Bombay.
Trade Commissioner: Harry Toyberg-Frandzen.
Asst. Trade Commissioner: P. Manford-Hansen.

Scientific Surveys

THE Botanical Survey Department of the Government of India was under the control of a Director. The Superintendent of the Royal Botanic Garden, Calcutta was *ex-officio* Director. The Director having retired since December 3, 1939, the Department is awaiting some reorganisation. The duties of the Director are distributed amongst (i) Dr. K. P. Biswas, M.A., D.Sc. (Edin.), F.R.S.E., Superintendent, Royal Botanic Garden, Calcutta and (ii) K. Sreenivasan, M.A., Curator, Industrial Section, Indian Museum. There is a staff at headquarters of one officer for systematic work and at the Indian Museum a Curator who is engaged in the development and maintenance of the Industrial Section.

A Trading Scheme for systematic and taxonomic work has been inaugurated by the Government of India with a view to developing the Botanical Survey of India in near future.

The existence of the Botanical Survey, like that of the Geological Survey, has both a cultural and an economic justification. On general grounds it is obvious that a progressive Government should acquaint itself with the vegetable resources of the area it administers, and although apart from the cinchona operations, the activities of the survey cannot be said to have much immediate economic applicability—consisting as they do of investigations and researches into the systematics, limnology, distribution of plants, ecology and economic botany of plant life—the work accomplished in pure and applied botany at the Royal Botanic Garden during the last century and a half has exercised a profound and far-reaching influence upon the development of Agricultural Science and Forestry in India. The irreplaceable dried plant materials obtained by botanical explorations and preserved for more than one hundred and fifty-six years at the Herbarium of the Royal Botanic Garden, Calcutta, and several thousands of indigenous and exotic trees, shrubs and herbs cultivated in the open, prove to be most useful in dealing with such questions of considerable State importance as naturalisation of useful plants, introduction of new vegetable products into the country, the adaptation of raw produce to the requirements of manufacturing industry, land utilisation, preservation of rural areas, provision of national parks, drainage, sanitation and public health.

Geological Survey.—The Geological Survey of India is one of the oldest Geological Surveys in the World. The present department, now under the Government of India, Department of Works, Mines and Power, was founded in 1851. Its primary function is the preparation of a geological map of India, the basis on which all geological work, including an appraisal of the mineral deposits of the country, must rest.

Up to the beginning of the present century, most of the geological maps prepared were on the small scale of 1" = 4 miles, many of the surveys being rather in the nature of geological reconnaissances with the object of obtaining a broad view of the geology of the country as a whole. During the last 40–50 years, mapping has, wherever possible, been on a standard scale of 1" = 1 mile, and in certain areas of special economic importance on larger scales.

The importance of geological work in connection with India's industrial development is now widely realised and, to meet enhanced demands, the gazetted cadre of the Department is being increased as rapidly as possible. The present sanctioned strength is the Director, 1 States Liaison Officer, 10 Superintending Geologists (including 2 Deputy Directors), 30 Geologists, 1 Petroleum Geologist, 50 Assistant Geologists, 2 Geophysicists, 1 Chemist, 9 Assistant Chemists, 1 Mining Engineer, 1 Deputy Mining Engineer, 1 Drilling Engineer, 1 Driller and 1 Registrar. This staff is divided into (i) Headquarters Division, and (ii) Field Staff. The Headquarters Division, with its office in Calcutta, includes 2 Deputy Directors (one in charge of General Administration, Publications, and Records and the other in charge of Mineral Development and Technical Administration), 1 Petrologist and 1 Curator with assistants who identify rocks and minerals submitted for examination by the public and superintend the Museum collections, 1 Palæontologist with assistants who are responsible for the identification of fossils and supervision of the fossil collections, and a chemical staff working in the Headquarters Laboratory. The office sections include, in addition to the general administrative sections, a Library section a Publication section and Drawing office, including map and process sections. Geological maps are prepared in the Drawing office and smaller maps are also printed there. The departmental Library is well-equipped with books and publications on geological and allied subjects. These may be consulted by the general public and in certain circumstances may be issued on loan.

The Field Staff, who spend about half of the year on geological fieldwork in any part of Indian Dominion and the remaining 6 months at headquarters, are deputed to work either in the Field Circles or in the Specialist Sections, the former consisting at present of 5 Circles, *viz.*, (1) Western Circle for Bombay and Rajputana; (2) Northern Circle for East Punjab, U. P. and Bihar; (3) Central Circle for C. P. & Orissa; (4) Eastern Circle for West Bengal and Assam and (5) Southern Circle for Madras and the latter of 6 Specialist Sections, *viz.*, (1) Mineral Development Section; (2) Engineering Geology and Ground Water Section; (3) Geophysical Section; (4) Drilling Section; (5) Mining Section and (6) Rare Mineral Section. The Field Circles each embrace one to several provinces, while the activities of the 6 Specialist Sections cover the whole of the Indian Dominion. Each Field Circle is under the supervision of a superintending Geologist. The individual Mapping Circles embrace one to several provinces while the activities of the two specialised circles cover the whole of India. The object of the Field Circles is to continue the detailed geological mapping of Indian Dominion. Officers in these Circles carry out preliminary investigations on such mineral occurrences as are found during the course of mapping, and also undertake the simpler types of

engineering geology and water-supply investigations. They also supply the geological guidance necessary in any geophysical work which may be carried out in their areas. Officers of the Mineral Development Circle are men who have specialised in the study of certain minerals, such as coal, mica, manganese, clays, gypsum, etc. Their work is of an all-India character, and they operate and give advice to provinces wherever their specialised knowledge is advantageous. Similarly, the work of the Engineering Geology Circle is of an all-India character, the members being highly specialised in the geological investigation of dam-sites, water-supply or any geological problems related to engineering.

With the present small staff, this section can take on only a limited number of investigations but it is hoped that it will be expanded to the required cadre as quickly as possible. It works in close co-operation with the Public Works Dept. of the various Provincial Governments. A small geographical staff has been appointed and is being equipped. The Geophysical Section is at present working mainly on water-supply and engineering geology problems, and on the location of small mineral deposits. The Drilling, Mining and the Rare Minerals Sections have just begun to function—additional staff is still being recruited. For work in connection with the testing of minerals deposits, exploring damsites and underground water resources, drilling equipment is being purchased.

Every year, before the programme of the field surveys is decided upon, the Provincial Governments are asked to give details of geological investigations, mineral surveys or engineering enquiries which they desire to have carried out. Such definite programmes of fieldwork may also cover the States, joining the Indian Union and may be carried out free of charge. If, however, any special problem has to be dealt with which does not come under the regular programme of the Department (*e.g.* a mineral survey of a particular area, an enquiry connected with a particular engineering project, or short term investigations involving specialised geological knowledge), a charge may be made for the services of the officers deputed for such work.

Recently a Mineral Information Bureau has been organised within the Geological Survey of India with the object of assisting the mineral industry in the country by disseminating in non-technical language the available information on Indian minerals and advising the public on the development and utilisation of mineral resources. The Bureau published a quarterly journal called "Indian Miners" in which information is couched in a simple form readable by the general public.

The results of the investigations and researches of the Department are published in—

(i) *Records* of the Geological Survey of India, which include the Annual Reports, Annual Mineral Review, and short papers. One volume of 4 parts is published annually. Every 5 years, a Quinquennial Review of the Mineral Production of India, is published as a separate volume of the *Records*.

(ii) *Memoirs* of the Geological Survey of India: in general each volume deals in detail with a *particular area and a particular mineral.*

(iii) *Palæontologia Indica*, which deals entirely with palæontological matters.

As a part of the *Records*, a series of Bulletins on particular minerals have been published in recent years. These Bulletins are intended to summarise the geological information available in India on commercial minerals. As each edition goes out of print, these Bulletins are revised and reprinted.

Thus to cater for the Mineral Industry, the Geological Survey of India publishes:

(*a*) An Annual Review of Mineral Production, the contents of which are mainly production statistics relating to the previous year.

(*b*) A Quinquennial Review of the Mineral Production of India, giving a review of the trend of the industry during the past 5 years.

(*c*) Bulletins, each giving a summary of geological knowledge on a particular mineral.

(*d*) A Semi-popular quarterly journal known as the "Indian Minerals" which contains articles on minerals and mining in India, mineral statistics and abstracts of world mineral news, etc.

During the War, the publication of the *Records* (except Bulletins) and *Memoirs* was suspended, but this has now been resumed.

The advice of the Geological Survey of India is taken by the Central Government and others on all questions of mineral policy. To encourage and assist the teaching of geology in classes and colleges, the Department presents collections of minerals, rocks and fossils and gives lectures to students and at times to the public with a view to popularising the study of geology.

The geological functions of the Mineral Utilisation Branch of the Department, which was established as a War measure, have been taken over by the Mineral Development Circle.

The Strategic Branch, which was formed during the War with a view to providing geological information and advice for the Allied Forces, has been dissolved.

Survey of India.—The first authoritative map of India was published by D'Anville in 1752, when the exploration of the then unknown India was still largely in French hands. It had been compiled from routes of solitary travellers and rough chart of the coast.

The Survey of India may be said to have been founded in 1767—ten years after the battle of Plassey—when Lord Clive formally appointed MajorJames Rennell, the first Surveyor General of Bengal, at that time the most important of the East India Company's possessions, though there were earlier settlements in Madras and Bombay.

Rennell's maps were originally military reconnaissances and latterly chained surveys based on astronomically fixed points, and do not

pretend to the accuracy of modern maps of India based on the rigid system of triangulation commenced at Madras in 1802 and since extended over and beyond India. Even now, however, the *relative* accuracy of these old maps makes them valuable in legal disputes, as for instance in proving that the holding of a Bengal landowner was a river area at the time of the Permanent Settlement of 1793, so that he is debarred from its benefits.

From these beginnings, this department has gradually become primarily responsible for all topographical surveys, explorations and the maintenance of geographical maps of the greater part of Southern Asia, and also for geodetic work.

Geodesy means the investigation of the size, shape and structure of the earth, and the geodetic work of the department consists of primary (or geodetic) triangulation, latitude, longitude and gravity determinations. From these the exact "figure" of the earth is obtained, whereby points fixed by triangulation can be accurately located on its curved surface. This system of fixed points holds together all topographical and revenue surveys, and the existence of such a system from the early days of the department has avoided the embarrassments caused in other countries where isolated topographical surveys have been started without a rigid framework, with the inevitable result that they could not be fitted together.

A geodetic framework is, therefore, essential in any large survey, but there are a number of other activities, all of them ultimately utilitarian which can be suitably combined with its execution, and the following are some of those which are carried out in India:

Precise levelling for the determination of heights;

Tidal predictions and publication of Tide Tables for thirty-nine ports between Suez and Singapore.

The Magnetic survey;
Observation of the direction and force of Gravity;

Astronomical observations to determine latitude, longitude and time;

Seismographic and meteorological observations at Dehra Dun.

Indian geodesy has disclosed widespread anomalies of gravitational attraction in the earth's crust, which have recently led to a reconsideration of the whole theory of isostasy.

Topographical Surveys.—In the past this department used to carry out the large scale revenue surveys for most of India, and was still conducting this work for Central and Eastern India in 1905.

Though revenue survey is primarily a record of individual property boundaries and is unconcerned with the surface features, ground levels and exact geographical position essential to a topographical survey, it was on the whole found economical to carry out both surveys together.

By 1905, however, all the Provinces had taken over the revenue surveys, for which they had always paid, and the Survey of India was enabled to concentrate its energies on a complete new series of modern topographical maps in several colours on the 1-inch to 1-mile scale as recommended by a commission which sat at that time to consider the existing maps of India.

This new series had been rendered necessary by the natural demand for more detailed information to be shown on maps, especially as regards the portrayal of hill features by contours and proper classification of communications.

While some of the unsurveyed places are in remote tracts like the Naga hills of Assam and the high Himalayas, most are accessible. Large areas in North Bihar, South Bombay, Gujrat, and Western Rajputana have yet to be mapped on modern lines.

The activities of the Survey of India have gone beyond the borders of India in the past. Nepal, for instance, was surveyed and mapped at the request of the local authorities in 1927.

Surveys and records of international, state and provincial boundaries have always formed an important item of topographical work.

Air Surveys.—The use of air survey has been progressively developed in this department and is now widely used both in support of the topographical survey programme and for special requirements of Irrigation Geology, Town-planning and other development works.

Air survey is, in certain types of terrain and for certain purposes, more speedy and more economical than ground survey and can be carried out by the department at almost any normally required standard of accuracy.

Paid for work.—In normal times the department is prepared to undertake or aid local surveys, on payment by those concerned, such as:

Forest and cantonment surveys;

Riverain, irrigation, railway and city surveys;

Surveys of tea gardens and mining areas, with such control levelling as is necessary for those operations:

Administrative assistance is also given, and executive officers lent, in aid of the revenue surveys of various Provinces and States.

Maps.—In addition to topographical maps on scales of 1 inch, ½ inch and ¼ inch to one mile and geographical maps on scale of 16 miles to one inch and smaller scales, the Department produces and holds for sale the following special maps:—

General maps of India, Provincial Maps, City and Town Guide Maps, Cantonment Plans, Manœuvre Maps and miscellaneous maps.

All departmental maps published are shown in the 'Survey of India Map Catalogue' which can be obtained for Re. 1 post free from the Director of Map Publication, Dehra Dun.

Administration is in the hands of the Surveyor General under the Ministry of Agriculture, Government of India.

The Headquarters office is at Delhi under the Deputy Surveyor General.

There are map printing offices at Dehra Dun and Calcutta, the resources of which may be made use of by Government Departments and the public for printing special maps, illustrations for reports, patents, diagrams, etc.

During the war, the Department was almost entirely devoted to work in direct support of the war effort and many of the civil activities outlined above were interrupted or suspended. These activities have now been resumed and intensified particularly in relation to development projects.

Zoological Survey of India.—The Zoological Survey of India was founded in 1916 on the basis of the Zoological and Anthropological Section of the Indian Museum which itself is a descendant of the Royal Asiatic Society of Bengal. The extensive Zoological collections cared for and maintained by the Zoological Survey of India partly belong to the Asiatic Society, mostly to the Trustees of the Indian Museum and partly to the Central Government. Besides the collections, which are rich in types and unique specimens of Indian fauna, the greatest asset of the Survey is its extensive Zoological library, probably the second best in the British Commonwealth and certainly the best in Asia. Under certain rules and regulations, the books are sent out to *bona fide* research students thereby encouraging Zoological research even in the remotest corners of India.

By conducting surveys of molluscs in connection with the spread of Bilharzia after the First World War both on the eastern and western frontiers of India and the surveys of rats in connection with the spread of Typhus in the Manipur Valley during the Second World War, the Zoological Survey of India justified the confidence reposed in it by the authorities. In recent years, it has supplied staff for the development and research in fisheries and for the Plant Protection Bureau of the Central Government. Certain sections of the Fisheries Research, and Plant Protection Bureau are now located in the Zoological Survey of India. Even from a purely utilitarian aspect the potentialities and aspects of the Survey are very much under-exploited.

The objects for which the Zoological Survey of India was founded are (*i*) to undertake faunistic studies so as to acquire all possible information on the geographical distribution of Indian animals, (*ii*) to maintain and add to the National Zoological collections started nearly a century and a half ago by the Asiatic Society of Bengal, (*iii*) to maintain and develop the public exhibits in the Zoological galleries of the Indian Museum at Calcutta, (*iv*) to identify specimens as required by investigators in any part of the country and (*v*) to advise the Government on zoological matters.

The Zoological Survey of India publishes *Records* and *Memoirs of the Indian Museum* which are journals of Indian Zoology and recently the publication of the *Fauna of British India* has also been transferred to the Survey. The Reports of the Zoological Survey of India published triennially are illustrated and informative.

The Anthropological Section of the Survey was budded off in December 1945 and formed the nucleus of the Anthropological Survey of India. With it the publication of "Anthropological Bulletins" was also transferred to that Department.

Since its establishment, the Survey had to weather many heavy storms, such as the Inchcape Retrenchment Committee proposals of 1923, the 1931 Retrenchment Committee proposals which crippled it completely, the shifting of the Survey from Calcutta to Benares in April-May 1942, the Varuna Flood of September 1943, and the depletion of its staff to meet the needs of Fisheries Development and Research. The report of Lt.-Col. R. B. Seymour Sewell, formerly Director, Zoological Survey of India, submitting proposals for the reconstruction and expansion of the Survey, issued in November 1946, is still under the consideration of the Govt. of India. As Zoological Departments are not well developed in most of the Indian Universities and as nature history studies are not much in vogue in this country, for the recruitment of staff, a Scheme for Training in Systematic Zoology has been in operation in the Zoological Survey of India since February 1946.

The Zoological galleries, which suffered heavy damage due to occupation of the Indian Museum by Army Authorities, are being reconstructed and restored. Some of them have been thrown open to the public since October 1947.

Forests

EVEN in the earliest days of the British occupation the destruction of the forests in many parts of the Indian sub-continent indicated the necessity for a strong forest policy, but, whether or not our early administrators realised the importance of the forests to the economic and physical welfare of the whole country, the fact remains that little or nothing was done to check uncontrolled destruction with its inevitable results in erosion and sterilisation of the fertility of the land.

The years between 1850 and 1857 witnessed the first beginnings of forest conservancy in Southern India. It was a Memorandum of the Government of India issued in 1855, arising as it chanced out of the annexation of the Province of Pegu in Burma which first laid down the outline of a permanent policy for forest conservancy in India. Exploration, demarcation and settlement, followed by efforts to introduce protection and some form of organised management, were long and laborious tasks, which are even yet not completed. Nevertheless, large tracts of forest were saved from ruin and were gradually brought under increasingly efficient management. It was in 1862 that the Governor-General in Council submitted to the Secretary of State detailed proposals for the administration of forests as a public estate for the welfare of the country as a whole. With the appointment of Brandis (later Sir Dietrich Brandis) as the first Inspector-General of Forests in 1863 commenced the scientific management of India's forest estate. Whatever may have been the opinions held in the past in some quarters regarding restrictions imposed by forest policy, there can now no longer be any doubt regarding the very substantial benefits which have accrued to the country through the formation of an extensive forest estate and that in her forests India now possesses a property of great value.

TYPES OF FOREST

More than one tenth of the total area of the Indian sub-continent is under the control of the Forest Departments. These areas are classified as reserved, protected or unclassed State forests. In the reserved forests rights of user in favour of individuals and the public are carefully recorded and limited at settlement while the boundaries are defined and demarcated; in the protected forests the record of rights is not so complete, the accrual of rights after settlement not being prohibited, and the boundaries are not always demarcated; while in the unclassed forests no systematic management is attempted, and as a rule the control amounts to nothing more than the collection of revenue until the areas are taken up for cultivation or are converted into reserved or protected forests. The total forest area of India and Pakistan under the control of the old Forest Department on 31st March, 1941, was 98,258 square miles or 11.4 of the total area. This was classed as follows: Reserved 72,936; Protected 6,772; Unclassed State 18,550.

Throughout this vast forest area, scattered over the length and breadth of the sub-continent, from the Himalayan snows to Cape Comorin, and from the arid Juniper tracts of Baluchistan to the Eastern limits of the Assam hills, there is an infinite variety in the types of forest vegetation, depending on climate, topography, soil and other local factors. Vegetationally, the greater part of the sub-continent, including the Indo-Gangetic Plain, must be considered as in the tropics, but wherever there are mountains, such as the Nilgiris in the south, and the Himalayas and Assam-Burma hills in the north, subtropical, temperate and, in the north, alpine zones must be distinguished, each supporting its own forest types.

Next to the major altitudinal effects, rainfall is the most important factor in the determination of the nature of the forests, and within each of the main zones, tropical, subtropical, temperate and alpine, there can be distinguished wet, moist and dry forest types. In addition, various edaphic and seral types occur, dependent on local conditions, such as littoral (beach), tidal, fresh-water swamp, and riverain forests.

The following is a brief description of the main forest types :—

I.—TROPICAL FORESTS

1. Tropical Wet Evergreen Forests.—These are dense forests, with a large number of tree species all mixed together, but according to their heights forming several canopies or layers. The upper canopy trees, among which *Dipterocarps* are usually characteristic, are often 150 to 200 feet high, and they very often have clear stems of 100 feet before the first branch is reached. These forests are found in the areas with the heaviest rainfall. In the southern or Peninsular region, they occur along the Western Ghats from a little south of Bombay to Tinnevelly, *i.e.*, in the western parts of Bombay, Madras, Coorg, Mysore, Cochin and Travancore. In the northern or Indo-Gangetic region, the type is to be found in the wetter parts of the Bengal area (the submontane and Chittagong areas), extending into the damper parts of the coastal strip of Orissa, and intermingled with the next two types over almost the whole of Assam. The type also occurs extensively in the Andamans.

2. Tropical Semi-Evergreen Forests.—These form an intermediate type between the wet and the moist types. They are fairly widely distributed in the Northern region, occurring all over Upper Assam and in North and South of East and West Bengal (Buxa, Jalpaiguri, Kurseong, Kalimpong, Chittagong), and in Orissa (Puri, Angul and some of the adjoining States). In the South, however, the type is not extensive, owing to the steep rainfall gradient in the Western Ghats, and it is limited to narrow strips just north of Bombay, near Goa, South Cochin and part of Coorg. Forming a dense forest of several canopies, there are again numerous evergreen species, but mixed with them are many deciduous species, such as the *Terminalias*, and the general height is somewhat less than in the wet evergreen forests.

3. Tropical Moist Deciduous Forests.—In these forests the trees are leafless for part of the year, and although the canopy is complete, the forests are not so dense, nor are the trees so tall as in the preceding types. The height of the dominant trees varies from 100 to 150 feet. In the southern region, *Teak* is the chief tree, mixed with *Terminalias* and many other species. The type is widely distributed all over the centre and south of India, in the Central Provinces, Bombay, Madras, Mysore, Coorg, Cochin and Travancore. In the North, *Sal* (*Shorea robusta*) is the dominant species, and the type extends extensively through East and West Bengal, Assam, Bihar, Orissa, and the United Provinces up to the eastern border of East Punjab.

4. Tropical Dry Deciduous Forests.—This type is found throughout the Peninsula, in Bombay, Central Provinces, Hyderabad, Mysore and Madras, and in the Indo-Gangetic Plain, from Orissa, through Bihar and the United Provinces to East Punjab, wherever the annual rainfall is from about 30 to 50 inches. In the South, the most important tree is again *Teak*, but there are many associates, which often become the dominant species. In the North, the forest is typically mixed, with *Sal* occurring only locally.

5. Tropical Thorn Forests.—The dry tract throughout the Peninsula, to the lee of the Western Ghats, from the extreme south to Indore and Bhopal, with a rainfall of only 20 to 35 inches per year, is characterised by a low open forest of thorny trees, of which various species of *Acacia* are especially common. The corresponding area in the North has an even lower rainfall, 10 to 30 inches per year. It extends throughout the western side of Upper India (except for areas of actual desert), from the North-West Frontier Province, through East and West Punjab and Rajputana, to Sind and Baluchistan, with eastern extensions into the drier parts of the United Provinces, especially on unfavourable soils. *Acacias* are again chracteristic, although less prominent than in the south and the related tree *Prosopis spicigera* is also generally distributed.

6. Tropical Dry Evergreen Forests.—A special type is met on the Carnatic coast, where the rainfall is 30 to 50 inches per year, largely from the retreating (north-east) monsoon in October and November. Here there is a low forest 30 to 40 feet high, consisting of small thick leaved evergreen trees, such as *Mimusops hexandra* and *Memecylon edule*.

II.—SOUTHERN SUBTROPICAL AND TEMPERATE FORESTS

These are represented only by wet types on the higher hills, such as the Nilgiris and Palni hills, where the rainfall is relatively high. The subtropical zone, from about 3,000 feet to 5,500 feet, has a dense evergreen forest of medium height (60 feet) in which *Eugenia* is a characteristic genus, with *Lauraceæ* and other families also well represented. Above this, in the temperate zone, rolling grassy downs are characteristic, as round Ootacamund, with patches of forest, known as *sholas*, occupying the sheltered folds in the hills. These forests, probably the relics of former much more extensive forests which have been reduced by burning, felling and grazing, are typically a relatively low but fairly dense evergreen type, 50 to 60 feet high, with a great variety of trees, among which *Ternstræmia*, *Eugenia* and *Mellosma* are typical general.

III.—NORTHERN SUBTROPICAL FORESTS

1. Subtropical Wet Hill Forests.—This type occurs on the lower slopes of the Eastern Himalayas and in the Assam-Burma hills, from a little under 3,000 feet to 6,000 feet. The forests are mostly of good height (up to 150 feet) and density, characterised by many species of evergreen *Oaks* and *Chestnuts*, with many other temperate trees, such as *Alder* and *Birch*, which are deciduous for short periods. *Pines* are typically absent, or are confined to drier sandy soils or well drained ridges, while *Dipterocarps* sometimes extend upwards from the tropical wet evergreen forests.

2. Subtropical Moist Hill Forests.—These extend to the whole length of the Western and Central Himalayas, from the North-West Frontier Province to Bhutan, mostly between 3,000 and 6,000 feet, but descending in places to 2,000 feet, and ascending on southerly aspects to 7,500 feet.

The principal tree is the *Chir* or *Chil* pine (*Pinus longifolia*), which forms almost pure forests over extensive areas. *Oaks*, *Rhododendrons* and other trees mix with or replace the *Chir* at the higher levels and in damper situations.

The type extends eastwards into the Khasi, Naga, Manipur hills, but instead of the *Chir* the dominant tree is the *Khasi pine* (*Pinus khasya*).

3. Subtropical Dry Evergreen Forests.—These are open low scrub forests of evergreen trees and thorny shrubs, in which the chief species is the *Olive* (*Olea cuspidata*). They occur from about 1,500 feet to 5,000 feet in the Himalayan foothills, the Salt Range and the Kala Chitta hills in the Punjab area, Kashmir and Hazara, extending westwards into Baluchistan and other countries. The forests have mostly been considerably impoverished by grazing, lopping and felling and with protection the general density becomes much better.

IV.—NORTHERN TEMPERATE FORESTS

1. Wet Temperate Forests.—These are found in the Eastern Himalayas from Nepal eastwards, extending through West and East Bengal into the higher hills of Assam from about 6,000 feet to 9,500 feet. They are typically fairly dense evergreen forests, in which several species of *Oaks* and *Chestnuts* predominate, but many other species are also present, including typically deciduous trees such as *Maple*, *Elm* and *Prunus*.

2. Moist Temperate Forests.—Along the whole length of the Himalayas from the North-West Frontier Province, through Kashmir, West and East Punjab, United Provinces, Nepal and the Darjeeling district to Sikkim and Bhutan, at altitudes from 5,000 to 11,000 feet, and with a rainfall from 40 to 100 inches per year, are to be found extensive coniferous forests similar to the temperate forests of Europe and North America. The chief trees

are *Spruce, Silver Fir, Cedar* (*Deodar*), *Blue Pine* (*Pinus excelsa*), and *Tsuga*. *Cypress* and *Yew* also occur to a less extent. Often these trees are mixed together, but pure crops of one or the other are generally more frequent, depending on the altitude, aspect and other conditions. Evergreen *Oaks* are also often present, particularly on southern aspects, while in the damper situations are often many broad leaved trees, also typical of European forests, such as *Maples, Hornbeam, Horse Chestnut, Birch, Elm*, etc.

3. Dry Temperate Forests.—In the inner ranges of the Himalayas, where the south-west monsoon is feeble, and the rainfall is usually less than 40 inches a year, and that is mostly in the form of winter snow, is to be found extending from 5,000 to 10,000 feet a drier and more open type of temperate forest. It consists chiefly of the conifers *Cedar* (*Deodar*), *Pinus gerardiana* and *Juniper* (*J. macropoda*), with some *Silver Fir* and *Blue Pine* at higher elevations. Broad leaved trees, such as *Maple, Ash* and the *Holm Oak*, occur scattered or in pure patches, while the *Olive* spreads up from the dry subtropical zone. The type occurs in Hazara, Kashmir, Chamba, Inner Garhwal and Sikkim. Among the herbs and shrubs present are many medicinal plants, such as *Artemisia* and *Ephedra*.

V.—ALPINE FORESTS

The uppermost forests of the Himalayas, from about 9,500 to 12,000 feet, consist of a dense growth of small trees and large shrubs, chiefly *Birch, Rhododendron* and dwarf *Juniper* with patches of coniferous overwood of high level *Silver Fir* and *Blue Pine*.

This gives place to an alpine scrub above, consisting of dwarf *Rhododendrons, Junipers* and other shrubs, interspersed with patches of grassland, which form excellent grazing areas in summer, when they are covered with a great variety of beautiful alpine flowers.

VI.—SPECIAL FOREST TYPES

Among various special edaphic and seral forest types, the following may be mentioned :—

1. Beach Forests.—All round the coast, wherever a fair width of sandy beach occurs, there is a fringe of forest in which *Casuarina*, originally introduced from Australia, is now often the most characteristic species. Elsewhere, small evergreen and deciduous trees form a low but fairly dense fringe along the shore.

2. Tidal Forests.—In the Sunderbans of the Ganges-Brahmaputra delta, and along the mouths of other large rivers, such as the Mahanadi, Godaveri and Indus, are to be found *Mangrove* (*Rhizophera, Brouguiera*, etc.) and *Sundri* (*Heritiera*) forests, typical of salt water swamps. Many of the trees have stilt roots for support, and "knees" or pneumatophores projecting upwards from the swamps to provide aeration for the roots.

3. Fresh-water Swamp Forests.—These are not very extensive, but are to be found above the salt water limit in the deltas of the large rivers, and also in depressions, often old river beds, in parts of Assam, West and East Bengal, the United Provinces and Madras. They are subject to prolonged annual flooding and have various species according to the locality. The delta type in Bengal supports the best of the *Sundri* forests, often over 100 feet high.

4. Riverain Forests.—Along all the larger rivers on the banks of new alluvium are to be found stretches of moisture-loving trees, such as *Lagerstræmia flos-regina, Terminalia myriocarpa* and *Salix tetrasperma*. On recently deposited gravels and sand, extensive stretches of which occur along many river courses both in the North and the South, are often to be found forests in various stages of succession, depending on how new or old is the deposit, on the rainfall and other local factors. Perhaps the most characteristic are the *Khair* (*Acacia catechu*), *Sissoo* (*Dalbergia sissu*) and *Tamarix* forests found throughout North from Assam to West Punjab. These forests are usually characterised by heavy grass, and with protection they slowly change to a more miscellaneous type of forest by the gradual colonising of other species.

VII.—THE BAMBOOS

No account of the forests of the sub-continent would be complete without a reference to the *Bamboos*, of which there are very many species occurring in the tropical, subtropical and temperate zones. Tall bamboos, such as *Bambusa arundinacea* and *Dendrocalamus hamiltonii*, often form a very dense undergrowth in the tropical semi-evergreen and moist deciduous forests, while *Dendrocalamus strictus* is locally abundant and economically important in the drier parts of the tropical moist deciduous forests and in some of the tropical dry deciduous forests. One of the important results of forest research is the utilisation of bamboos for the making of paper, but there are still extensive areas of forests with a dense undergrowth of bamboos, which are not at present economically exploitable and which often greatly hinder other forest operations.

FOREST POLICY

The general policy of the Government in relation to forests was definitely laid down in 1894 by the classification of the areas under the control of the Department into four broad classes, namely :—

(*a*) Forests the preservation of which is essential on climatic or physical grounds. These are usually situated in hilly country where the retention of forest growth is of vital importance on account of its influence on the storage of the rainfall and on the prevention of erosion and sudden floods.

(*b*) Forests which afford a supply of valuable timbers for commercial purposes, such, for example, as the teak forests of the centre and the south, the sal forests of the north, the centre and the north-east and the deodar and pine forests of the North-Western Himalayas.

(*c*) Minor Forests, containing somewhat inferior kinds of timber and managed for the production of wood, fodder, grazing and other produce for local consumption ; these forests are of great importance in agricultural districts.

(*d*) Pasture lands.—These are not "forests" in the generally understood sense of the term but grazing grounds managed by the Forest Department merely as a matter of convenience.

These four classes of forest are not always sharply divided from each other, and one and the same tract may to a certain extent be managed with more than one object.

Administration.—The forest business of the Governments of India and Pakistan is carried out in their Departments of Agriculture. The Inspector-General of Forests is the technical adviser to the Government in forest matters. Under the Constitution of 1919 Forests were made a transferred subject in Bombay where they had long been administered by the Provincial Governments, and in 1924 the Reforms Inquiry Committee presided over by the late Sir Alexander Muddiman, Home Member of the then Government of India, recommended that they be transferred in other provinces too unless any local Government on examination of the position could make out a convincing case against the transfer in its own province. After the Constitution of 1935 Forests were included in the schedule of Provincial subjects throughout India.

Territorial Charges.—The various Provinces are divided into one or more Forest Circles, each in charge of a Conservator of Forests; usually Provinces containing three or more circles also have a Chief Conservator who is the head of the Department for his Province. Circles are divided into a number of Forest Divisions, in charge of members of the Imperial or Provincial Forest Service. Each Division contains a number of Ranges in charge of junior members of the Provincial Service or of Forest Rangers or Deputy Rangers ; heavy Divisions are also sometimes divided into Sub-divisions. The Ranges are further sub-divided into a number of rounds and beats. These are protective as well as administrative sub-divisions held by Foresters and Forest Guards.

Non-Territorial Charges.—Apart from territorial charges there are various important posts of a non-territorial nature connected with Forest Research and Education, Silviculture, Utilisation and the preparation of Forest Working Plans.

The Forest Service.—The Forest Service comprises four branches :—

(1) The Indian Forest Service.—The I.F.S. in common with other Secretary of State Services is, on account of the constitutional changes, in the process of liquidation. Recruitment to this service ceased in 1932.

(2) The Indian Forest Engineering Service.—This service was created in 1919 but since 1922 no further recruitment has been made. Some of the Forest Engineers have been transferred to the Indian Forest Service or the Indian Service of Engineers and some have resigned or have retired.

(3) The Provincial Forest Service.—Till 1928, officers for the lower gazetted Forest Service were recruited for direct appointment as Extra Assistant Conservators of Forests, and were known as Provincial Forest Service Officers. They were trained at the Imperial Forest College, Dehra Dun. After the training of Indian officers for appointment to the Indian Forest Service was started at Dehra Dun in 1926, the training of the Provincial Forest Service officers was stopped in 1928.

With the advent of Provincial autonomy in 1935 and the consequent cessation of all further recruitment to the Indian Forest Service, Provincial Governments are now building up new Provincial Forest Services of their own to take the place of the Indian Forest Services. As a result the old Provincial Forest Services will disappear in due course.

(4) The Subordinate Forest Service.—These consist of Forest Rangers, Deputy Rangers, Foresters and Forest Guards.

The training of Forest Rangers for India is concentrated at the Indian Forest Ranger College, Dehra Dun ; but in addition to sending candidates to this college, Madras has its own Forest College for training Forest Rangers at Coimbatore.

The training of subordinates below the rank of Rangers is carried out in various local forest schools and training classes.

FOREST EDUCATION

Forest education in India first started with the founding in 1878 of a Forest School at Dehra Dun, for the training of forest rangers. But with the establishment of the new Indian Forest College, probationers are now being trained directly for the Superior Forests Services of the various Provinces and States of India also.

The original Forest School, established in 1878, came directly under the Government of India in 1884, when it became known as the Imperial Forest College, and trained Rangers at first for all the provinces. In 1912 the Madras Forest College was opened at Coimbatore, serving Madras, Bombay, the Central Provinces, Bihar and Orissa, and the South and Central Indian States, the Imperial Forest College at Dehra Dun serving the rest of India. The Madras Forest College was closed on 1st July 1939, but was re-opened for Madras candidates only in 1945. Apart from this Ranger students from all parts of India are being trained at Dehra Dun. The College at Dehra Dun has now been renamed the *Indian Forest Ranger College*, to distinguish it from the new *Indian Forest College* for the training of officers for the Superior Forest Services, opened in 1938.

Research.—The Forest School founded at Dehra Dun in 1878 became also a recognised centre of forest research in 1906.

In 1914 the first Forest Research Institute was opened on the Chandbagh Estate, Dehra Dun. Within a very few years the war demand for forest produce emphasised the scope and need for extensive research far beyond that for which accommodation had been provided. Plans were therefore made for a new Forest Research Institute on the Kaulagarh (New Forest) estate a few miles out of Dehra Dun, and it was opened on the 7th November, 1929.

The Forest Research Institute is under the administrative control of the President. There are five main branches of forest research, namely Silviculture, Forest Botany, Utilisation, Entomology and Chemistry and Minor Forest Products. Silviculture, which deals with all the production side of forestry, is under the direction of the Silviculturist. Much of the actual research work is, however, decentralised and done by local

provincial silviculturists in the provinces, but the Central Silviculturist co-ordinates their work, does all the statistical computing and acts as an information bureau on silvicultural matters for the whole of India.

Forest Products.—Forest produce is divided into two main heads—(1) Major produce, that is timber and firewood, and (2) Minor produce, comprising all other products such as bamboos, leaves, fruits, fibres, grass, gums, resins, barks, animal and mineral products, etc. The average annual outturn of timber and fuel from all sources averages about 306 million cubic feet. This was undertaken a few years ago at the initiation and development of certain large exploitation schemes, especially in Madras, which had indifferent success. It was hoped in Madras, by utilising modern American methods, to extract and utilise very large quantities of valuable timbers, but the final result proved that this extensive exploitation was justified neither by the stand of timber in the forests nor by the possibilities of satisfying markets. The Provincial Government after this experience adopted a more cautious policy.

In the Andamans notable developments have taken place. In the past, extraction of timber was done by elephant dragging with the result that only a fringe of the forests could be touched. Attempts were made in employing American methods of mechanical logging, for which machinery was bought and an American expert employed to take charge of the work. The costs of extraction, however, by these means proved too high. Recently the problem has been solved by means of light tramways, the trains of trucks being drawn by elephants which have been superannuated from ordinary work, and it has been found possible in this way to work large, hitherto inaccessible areas of forest very cheaply. Elsewhere in the sub-continent a great part of the trade in timber lies in the hands of contractors who are, on the whole, regarded trustworthy if sufficient control over their operations is exercised.

Forest Industries.—The important role which the forests of a country play in its general commercial welfare and in providing employment for its population is not always fully recognised. If accurate estimates were available for India or Pakistan they would no doubt show that apart from the jungle population which is directly dependent on the forests and the large numbers of wood-cutters, sawyers, carters, carriers, raftsmen and others working in and near them, employment on an enormous scale is provided to persons engaged in working up the raw products. Among these latter may be mentioned carpenters, wheelwrights, coopers, boat-builders, tanners, rope-makers, lac-manufacturers, basket-makers, and many other classes of skilled labourers. The census show over a million people and their dependents so employed in the two Dominions and nearly a further half million in the States, but these are probably below the actuals, as much forest labour is not wholetime labour, devoting seven or eight months in the year to forest work and the rest to agriculture. With the opening up of the forests, the extension of systematic working, the wider use of known product, and the possible discovery of new products, a steady and extensive development of industries dependent on the forests of India and Pakistan may be confidently anticipated in the future.

Financial Results.—The growth of forest revenue, expenditure and surplus during the past 70 years in India and Pakistan has been steady. Gross revenue, before the late world-wide depression caused a temporary disorganisation of all trades, steadily increased until it amounted to some Rs. 299 lakhs a year for both the Dominions, surplus revenue amounting to upwards of 26 per cent. of gross revenue. Most of the Provinces ordinarily show a steady increase of surplus. Figures of revenue, expenditure and surplus for the three years ending 1940-41 are as follows:—

Year.	Revenue.	Expenditure.	Surplus.
1940-41	37,105,052.	23,763,614.	133,41,438.
1939-40	30,202,818.	22,744,245.	74,58,573.
1938-39	30,097,367.	23,130,435.	69,66,932.

Agencies.—The general practice of the Forest Departments in the Government of India and Pakistan and the various Provinces is to conduct their own sales direct with timber dealers or large consumers though there are notable exceptions. Indian timber marketing in England (especially Andaman timbers) is now done under the direction of a Timber Adviser who is attached to the Office of the High Commissioner for India. Sales of Indian timbers and especially timbers from the Andamans are steadily increasing.

Bibliography.—A large number of bulletins and other publications has been issued by the Forest Research Institute, and of these a list can be obtained from the President, Forest Research Institute and College, New Forest, Dehra Dun, U.P.

Hydro-Electric Development

CHEAP motive power is one of the secrets of successful industrial development and the favourable initial conditions caused by the war, the enthusiasm for industrial development which has seized nearly all classes of educated Indians, and the special attention which the circumstances of the war have compelled Government to direct towards the scientific utilisation of Indian natural resources all point to a rapid growth of industrial enterprise in all parts of the sub-continent within the next few years. Indeed, the process, for which sound foundations had been laid before the war, is now rapidly under way. The sub-continent is severely handicapped compared with other lands as regards the generation of power by the consumption of fuel, coal or oil. These commodities are all difficult to obtain, and costly in the sub-continent except in a few favoured areas. Coal supplies for example are chiefly centred in Bengal and Chota Nagpur and the cost of transport is heavy. Water power and its transmission by electricity offer, on the other hand, good possibilities, both as regards the quantity available and the cheapness at which the power can be supplied, in certain parts of the sub-continent.

Water power schemes, pure and simple, are generally difficult because the power needs to be continuous, while the rainfall is only during a small portion of the year. Perennial rivers with sufficient water throughout the year are practically non-existent in the sub-continent. Water, therefore, must be stored for use during the dry season. Favourable sites for this exist in many parts in the mountainous and hilly regions where the heaviest rainfalls occur and the progress already made in utilising such opportunities by the electrical transmission of power affords encouragement for the future. Further, hydro-electric schemes can sometimes be associated with important irrigation projects, the water being used for both electricity generation and irrigation.

The Industrial Commission emphasized the necessity for a Hydrographic Survey of the sub-continent. On this recommendation the Government of India in 1918 appointed the late Mr. G. T. Barlow, C.I.E., then Chief Engineer, Irrigation Branch, United Provinces, to undertake the work, associating with him Mr. J. W. Meares, M.I.C.E., Electrical Adviser to the Government of India. Mr. Barlow died before completing the work; but Mr. Meares issued a preliminary Report in September, 1919, and a triennial Report in 1921, indicating that a minimum continuous water power of nearly 6 million kilowatts with a maximum of 13 million kilowatts could be developed in India. This excluded practically all the great rivers, which were then uninvestigated.

The Government of India has since formed a Central Technical Power Board for developing hydro-electric resources and for carrying out a systematic hydro-electric survey. The present stage of progress and some of the plans under consideration for development of hydro-electric power in the post-war period in some of the major provinces and states are indicated in the following paragraphs.

BOMBAY HYDRO-ELECTRIC WORKS

The greatest Hydro-Electric undertakings in the sub-continent are the three schemes developed and brought into operation by Tata Sons, Ltd., and continued under their management until 1929, when they were transferred to the management of the Tata Hydro-Electric Agencies, Ltd., in which Messrs. Tata Sons retained a substantial interest. These undertakings are:—

(*a*) The Tata Hydro-Electric Power Supply Company, Ltd. Supply started in 1915.

(*b*) The Andhra Valley Power Supply Company, Ltd. Supply started in 1922.

(*c*) The Tata Power Company, Ltd. Supply started in 1927.

The population of Bombay including suburbs at the 1941 census was 1,489,883 with a total population of approximately 4,000,000 in all the areas served by these companies. Its cotton mills and other factories consumed about 150,000 H.P., which until these Hydro-Electric Schemes came into operation, was entirely produced by thermal stations using fuel coming from great distances.

The favourable position of the Western Ghats which rise to a height of more than 2,000 feet above sea-level within a few miles of Bombay City, with their heavy rainfalls was taken full advantage of for providing Bombay City and vicinity with an adequate and economical power supply.

Khopoli.—The hydraulic works of the Tata Hydro-Electric Power Supply Company are situated near Lonavla at the top of the Bhor Ghats. The monsoon rainfall is stored in three lakes, namely Lonavla, Walwan and Shirawta, from which it is conveyed in open masonry canals to the Forebay at Khandala and thence through steel pipes to the Power House at Khopoli at the foot of the Ghats, where the head at turbine nozzles is 1,725 feet or approximately 750 lbs. per sq. inch. The normal capacity of the Power Station at Khopoli is 48,000 kW. This scheme was formally opened by the Governor of Bombay on the 8th of February 1915.

Investigations in 1917-18 led to the discovery of a site on the Andhra River just to the North of the Tata Hydro-Electric Supply Company's lakes, where additional power could be developed. These investigations resulted in the formation of the Andhra Valley Power Supply Co. and the construction of the schemes, the principal features of which consist of a reservoir formed by a dam about 190 feet high, across the Andhra River and a tunnel 8,700 feet long driven through solid trap rock to the scarp of the Ghats, from which the water is taken in steel pipes 4,600 feet long to the turbines in the generating station at Bhivpuri. The head of water at turbine nozzles is 1,740 feet or approximately 750 lbs. per sq. inch. The electrical

energy is transmitted to Bombay over a transmission line 56 miles long for augmenting the supply from Khopoli. The present installed capacity at this station is 48,000 kW.

INTEGRATED SYSTEM

The Tata Power Company's scheme on the Nila-Mula River to the South-East of Bombay was investigated and developed along lines similar to the Andhra Valley scheme and has a normal installed capacity of 106,000 kW. The power is transmitted to Bombay over a transmission line 76 miles long and is used to augment the supply of the two earlier companies to mills, factories and railways.

The Tata Hydro-Electric System, comprising the Tata Hydro-Electric Power Supply Company, the Andhra Valley Power Supply Company and the Tata Power Company, is operated as an integrated electric power system serving an area in the Province of Bombay of more than 1,000 square miles. It is the largest power system in the sub-continent having a fixed capital expenditure in excess of Rs. 16 crores and an annual output representing more than one-third of the total electricity production.

Electric service is rendered to the textile mills and other industries of Bombay and the suburban areas, to the railways for electric traction, to local authorities, and, in bulk for retail distribution, to the electrical undertakings supplying Bombay City and suburban districts, Poona and ten other localities within the area.

During the year 1946-47, the system generated 1,675,000,000 units of hydro-electric energy. The combined generating capacity of the three hydro-electric stations is approximately 230,000 kW. The system operated a total of 776 circuit-miles of high voltage electric lines and underground cables, including 458 circuit-miles of transmission lines of 100,000 volt capacity.

The rate for energy delivered to the Mills, Factories and Railways has, for several years, shown a steady decrease and now averages 0·32 of an anna per unit, the downward trend of which will continue as industries develop and individual consumptions increase. This power supply greatly enhances the natural advantages Bombay has as a great manufacturing, trading and shipping centre.

For the development of industries and agriculture in the northern portion of Bombay Presidency, the Bombay Government has embarked on the provision of an electrical grid scheme somewhat on the lines of the British Grid. Besides taking power from the Tatas' Hydro-Electric System and from some of the selected Steam Station, it is also proposed to construct initially two new hydro-electric stations at Bhandardara and Bhatgar for supplying power to this grid.

DEVELOPMENT IN PROVINCE

In the Province of Bombay, there are at present 68 licensees in operation. In the case of three of these, the licensees have hydro-electric stations, their installed plant capacity being 2,31,000 kW. These three licensees serve by bulk supply Bombay City, the Bombay Suburban District, Poona and about six other townships. Almost all the remaining 56 licensees generate their own electric energy. Of these, one has an installed capacity of 45,000 kW another 3,624 kW, the remaining have relatively small power houses. Most of the licensees operate in urban areas.

The objects with which the Government of Bombay have set up the Electric Grid Department are: (1) to rationalise the generation of electricity by generating it at a few selected stations having natural advantages, (2) to make available progressively large amounts of electricity at low rates, and (3) to bring the energy within reach of a progressively increasing number of the urban and rural population.

The objects are to be achieved by the establishment of an Electric Grid System in regions which lend themselves to such development economically under quasi-state control. New power stations—both hydro-electric and thermal—will be established. These and the existing efficient generating stations of licensees, wherever practicable, will be inter-connected by the Grid lines. Inefficient generating stations will be closed down and the licensees concerned supplied bulk power. Wherever possible, rural areas within the Grid regions will be supplied electricity from the system.

New Bill.—It is also intended to establish small Diesel Stations in isolated townships, which have some cottage industries and which cannot, within reasonable time, be served from the Grid.

To promote rapid development of the use of electricity by agriculturists and cottage and small scale industrialists specially in rural areas, it is proposed to assist them financially in acquiring electrical machinery and equipment on hire purchase terms.

Largely, at the initiative of the Government of Bombay, the Government of India introduced in the Central Legislature a Bill entitled "Electricity (Supply) Bill, 1946" during the Budget Session of 1946. When this measure is passed, Bombay Government proposes to set up the Bombay Electricity Board, which will be, under the provisions of the above enactment, charged with the work of rationalisation and development of Electric Supply in the Province.

Meanwhile, a Special Grid Department has been organised under the Electrical Commissioner with the Government of Bombay. The development programme under execution at present consists of: (1) North Gujarat Grid Scheme, (2) South Gujarat Grid Scheme, (3) Rural electrification and small town schemes based on small Diesel Stations.

NORTH GUJARAT GRID SCHEME

This scheme contemplates taking power in bulk from the power station of the Ahmedabad Electricity Company at Sabarmati and distributing it to centres of load in North Gujarat Area. The works comprise construction of about 70 miles of 66/100 kV line, 14 miles of 33,000 and 50, miles of 11,000 volt transmission lines and about 480 miles of distribution lines.

Constructon of a new power station by the Ahmedabad Electricity Company, initially consisting of two 15,000 kw steam turbo sets, negotiated by Government with the Company in the year 1944-45, is nearing completion. Arrangements have been made with the Company to order two more 15,000 kw sets to be installed in the new station as early as possible to meet the anticipated demand three or four years hence.

The order for construction of the 66/110 kv line from Ahmedabad to Baroda was placed with Messrs. British Insulated Callender's Cables Ltd. and they are pushing on with this work. The order for 33 and 11 kv line materials has been placed with the same Company. The required power transformers and sub-station control gear have been ordered out.

The original programme of completion of works has had to be drastically revised in the light of the delivery dates for sub-station control gear and other equipment, now reported by manufacturers in the U.K. According to present indications, it would appear that distribution of electricity in this region can be commenced in the second half of 1949.

SOUTH GUJARAT GRID SCHEME

This scheme comprises installation of a steam power station initially comprising two turbo alternator sets of 7,500 kw each near Surat for supply of power in areas from Surat to Bulsar, and Construction of an E.H.T. transmission line over a distance of about 46 miles from Surat to Bulsar.

The sites provisionally selected for this purpose are being investigated in regard to their suitability. Tentative designs for power house buildings, boiler house and other civil engineering works have been prepared. Work in connection with preparation of designs of transmission lines and sub-stations is in hand.

Orders for two turbo sets of 7,500 kw each and boiler house equipment have already been placed. Order for switchgear and other equipment has also been placed.

Owing to recent coal crisis in the U.K., manufacturers are unable to deliver machinery and equipment within the periods previously indicated. The programme of work originally prepared has, therefore, had to be drastically revised. According to present indications, it would appear that supply from the steam station can be commenced in 1950.

BARODA

The Baroda State Government has agreed to co-operate with the Government of Bombay by taking supply in Bulk at Kalol, Baroda, Navsari and Billimora for distribution within the State territory. Negotiations are in progress with the B.B. & C.I. Railway for the use of a common power system on a co-operative basis by the Railway for meeting its power requirements for traction between Ahmedabad and Bombay and by the Bombay Government for supplying electric service to urban and rural population residing within economic distance of the various sub-stations *en route*. If a mutually satisfactory agreement is reached, it will be necessary further to develop the power stations at Ahmedabad and Surat and the transmission system. The co-operation between Bombay Government, Baroda Government, the B.B. & C.I. Railway and the Ahmedabad Electricity Company is expected to be of appreciable benefit to all the parties and will tend to reduce the cost of electric service in the area covered.

Negotiations are also in progress with the G.I.P. Railway for the use of a common power system in the Nasik and Khandesh areas.

RURAL SCHEMES

The schemes so far sanctioned by Government consist of: (1) Electrification of the towns of Ratnagiri, Malvan, Vengurla, Chiplun, Islampur and Peth, (2) Electrification of certain villages in the Satara taluka based upon power being taken from the existing power house of the Satara Electricity Co., (3) Electrification of certain villages in the Bulsar taluka, based on bulk electricity being taken from the existing power house of the Bulsar Electricity Co. Later on, when power becomes available from the Government's own station in Surat, power will be supplied from that Station, (4) Extension of such schemes to other talukas is being examined.

Neither of these can at present supply any large industrial load, but when item (3) is linked up with the new Surat Steam Station, there will be scope for supplying power for industrial use.

In addition to those mentioned above, small Diesel stations may be established during the next five years in about 19 townships containing about 2,000 dwelling houses or more and having village industries, the production of which can be appreciably increased by the use of electric power. A list of the towns provisionally selected is given hereunder:

Sr. No.	Division	District	Town
1	Northern	Ahmedabad	Dholka
2	,,	,,	Dhanduka
3	Central	East Khandesh	Erandol
4	,,	,,	Parola
5	,,	,,	Dharangaon
6	,,	,,	Shendurni
7	,,	West Khandesh	Shahade
8	,,	Sholapur	Akluj
9	Southern	Belgaum	Chikodi
10	,,	,,	Gokak
11	,,	,,	Hukeri
12	,,	,,	Konnur
13	,,	,,	Sankeshwar
14	,,	,,	Bailhongal
15	,,	Bijapur	Guledgud
16	,,	,,	Ilkal
17	,,	,,	Sulebhavi
18	,,	,,	Hungund
19	,,	Dharwar	Gajendragad

Jog Power

In consideration of the consent given by the Government of Bombay to the Government of Mysore for the electric development of the waterfall at Jog under certain conditions, the latter has agreed to supply the Bombay Government, electric power upto 5,000 E.H.P. (3,730 kw) at Jog on reasonable terms to be mutually agreed upon. It has also been ascertained that power upto 10,000 E.H.P. would be available if there

is sufficient demand within a reasonable economic distance from the Jog power house. The proposal for the utilisation of this power has been investigated and the report is under the consideration of Government. A special Officer appointed by the Government of Bombay to study the industrial possibilities within an economic distance of the Jog power house has started investigation.

HYDRO-ELECTRIC PROJECTS

Salient features of the hydro projects which are likely to be undertaken within the next ten years are given hereunder :

Koyana Project.—This scheme when fully developed is capable of meeting a demand of the order of 250,000 kw. continuous after reserving part of the storage for irrigation. When finally developed, this would be one of the larger power stations in the sub-continent. Initially, about 48,000 kw. could be developed economically for supply to the Districts of Poona, Satara, Sholapur Bijapur and Ratnagiri as required. Electro-chemical industries and other similar loads could be established near the power station site with advantage and the plant progressively increased.

In December 1946, Government sanctioned detailed investigations and survey work to enable separation of estimates and designs of works connected with the project. This work was started early in 1947 and is progressing steadily and satisfactorily. A committee has been appointed by the Government to examine the question of utilising part of the storage for irrigation purposes in Bijapur District by high lift pumps located in a suitable position on the banks of the Krishna River. The Chairman of the committee in a preliminary note has estimated that when the lift irrigation scheme is fully worked out, the power requirements would be of the order of about 90,000 kw.

The possibilities of utilising the tailrace waters of the proposed Koyana hydro-electric power station will also be investigated.

Kalinadi Project.—Preliminary survey work connected with the scheme was sanctioned by the Government of Bombay in January, 1947. The work has been entrusted to Messrs. Associated Consulting Engineers (India), Bombay. The preliminary report indicates that 350,000 kw. continuous is available in the Kalinadi Basin, distributed in five power stations. The final report is awaited. The Districts of Dharwar, Karwar, Belgaum and Bijapur appear to be within economic reach of this source of power.

Bhatgar Hydro-Electric Project.—A demand of about 10,000 kw. can be met from this source, provided the power station is linked up either with Koyana when and if developed or Tata system at Poona. Consideration of this scheme will be taken up after 2 seasons' work has been put in on the proposed new irrigation dam at Vir, which will provide a balancing and supplementary reservoir.

Bhandardara-Randha Electric Scheme.—A demand of 16,800 kw. can be met from this source. In addition to this, a further 7,500 kw. can be obtained during the monsoon. This power can be firmed up by the establishment of a steam station of the installed capacity of 15,000 kw. in this area. The scheme was sanctioned by the Government of Bombay in 1945 but its execution had to be postponed as under the present conditions, development of this source of power cannot be undertaken economically. The question of its execution will be reviewed in due course.

Narbada-Tapti.—Governments of Bombay and India have also under consideration the possibility of developing Narbada and Tapti River Basins on multi-purpose basis. When these materialise an appreciable block of Electric Power will be available from these sources.

MYSORE HYDRO-ELECTRIC WORKS

The first Hydro-Electric Scheme of any magnitude undertaken in the sub-continent or indeed in the East, was that on the Cauvery River in Mysore State, which with its generating station, transmission line and distributing system was inaugurated in 1902.

The Cauvery River rises in the district of Coorg in the Western Ghats and flows across Mysore State. The principal object of this scheme was the supply of power to the mining companies on the Kolar Gold Fields about 92 miles from Sivasamudram, the site of the generating station. This transmission line was for a number of years the longest line in Asia. Since 1902 the supply of electrical energy from Sivasamudram has been provided for Bangalore and Mysore Cities and 226 other towns and villages in the State.

The initial undertaking has constantly been expanded and its total normal capacity now stands at 42,000 kw. This great increase has been made possible by the construction of the Krishnarajasagar reservoir, near Mysore City, which has a capacity of 44,000 million cubic feet of storage above the minimum draw off level.

The number of the consumers of all classes continues to increase rapidly every year with greatly increased power demands. The Government of Mysore have encouraged the use of electrical energy and have made a survey of hydro power resources of the State and prepared plans for the construction of a number of generating stations at the most economic sites in future.

Demands for large additional blocks of power made it necessary for Government in continuing its policies for the industrial development of the State, to sanction the consrtuction of a power station at the Shimsha Falls for the production of 17,200 kw. and the construction of a power station at the Jog Falls for the production at the first instance of about 48,000 kw. The power station at Shimsha Falls was completed in June 1940, thus bringing the total installed capacity of Sivasamudram and Shimsha Stations to about 59,200 kw.

At the Jog Falls on the Sharavathi River the construction of a power house and installation of machinery have made good progress and the first two units were expected to be in service, generating 24,000 kw. at 50 cycles by the middle of February 1948. The State Government have also sanctioned the extension of the Jog Falls scheme for an ultimate installed capacity of 120,000 kw. All the machinery required for the extension have been ordered.

The Government have also approved the adoption of the standard frequency of 50 cycles throughout the State except in the Kolar Gold Fields area and also the construction of transmission lines for transmitting 50-cycle supply generated at Jog to the various parts of the State.

The number of lighting and power consumers of all classes in the cities of Bangalore and Mysore and other towns and villages in the State has increased to more than 70,000.

The transmission system consists of over 900 route-miles of 78,000 and 37,500 volt lines with a total of 1,350 miles of circuits. The transmission system is extended to supply hydro-electric power to the four corners of State. With the construction of the new transmission lines and on the generation of power at Jog, over 600 miles of 110 kv. transmission lines will be in service.

The use of electricity for improving the transports facilities in the State forms an important item under the "Post-War Development Schemes" and it is expected that in the next five years, introduction of electric trolley buses in Bangalore and electrification of railways between Mysore and Bangalore will be an accomplished fact.

TRAVANCORE STATE

The first electrical undertaking to operate in the State was the Hydro-Electric Station established in the High Ranges by the Kanan Devan Hills Produce Co., Ltd., in 1905 which was intended to meet the power requirements of the Company for lighting and factory drive. It was towards the close of 1927 that Government initiated a programme of electrical development in the State. A start in this direction was made by the establishment of a thermal station at Trivandrum, the capital of the State, in March 1929. The rapid expansion of the Trivandrum Electric Supply served as an incentive to private enterprise to come into the field. A thermal station was started at Kottayam in 1932 for the supply of power to that town, under a license. Another private agency took up the supply of power at Nagercoil in 1934.

A scheme for the supply of power to Quilon was inaugurated by the Government towards the middle of 1934.

A license for the supply of power to the Taluks of Shencottah and Pathanapuram was granted to a private Agency in 1940 and the supply was inaugurated in 1941.

Expansion.—In view of the very large demand for electric supply being extended to several areas, the Government decided to initiate a large hydro-electric system to meet the growing demand for power. As a first step towards this objective, the Pallivasal Hydro-Electric Scheme was sanctioned by the Government in 1931 and the work was taken up immediately afterwards. The first stage of development was completed by the beginning of 1940 and the supply was commenced in March 1940. The scheme utilises the water of the Mudirapuzha River diverted at Munnar through a tunnel 9 ft. by 8 in. and 10,200 ft. in length. Two parallel steel penstock lines each 7,800 ft. in length take the water to the generating station. The generating plant consists of three 5,000 kva. Alternators generating at 11,000 volts directly coupled to Pelton wheels operating at 1,980 ft. head. Two of the machines are in normal service while the third serves as a stand-by. The normal generating capacity of the station is 9,000 kw, but during peak hours, the third unit is also commissioned to take up loads upto 1,500 kw, thereby raising the effective capacity of the station to 10,500 kw. The capacity of the station has now been increased by the installation of a fourth generating set. Power is stepped up to 66,000 volts for transmission to the plains. The transmission system as now brought under use consists of 420 circuit miles of 66 kv. lines on lattice steel towers, 42 circuit miles of 66 kv. lines on teak wood and concrete poles, taking power to 5 major 66 kv. sub-stations and 26 miles of 33 kv. lines, 350 miles of 11 kv. single circuit lines and 10.5 miles of double circuit lines connecting all the important centres in North and Central Travancore.

The availability of hydro-electric power in most of the important commercial and agricultural centres coupled with the impetus given to industrial and agricultural operations consequent on the situation created by the Second World War, has resulted in a steadily growing demand for power. The connected load is over 25,000 kw. with a maximum peak load of 13,300 kw. The total generation during 1946 was 75.42 million units. About 72.5 per cent of the power generated is used for industrial purposes and the rest for agricultural and domestic needs. Electrolitic production of aluminium, tea factories, fertilisers and chemicals, ceramics, textiles, paper, ply-wood, oil mills, saw mills, tile factories, mineral factories, engineering workshops, etc., constitute the main industrial load.

Three More Sets.—L. T. distribution is standardised at 400 230 volts. Ascu treated teakwood poles supplied by the State Forest Department and wooden cross-arms, have been standardised for all 11 kv. lines and a major part of the network.

The demand for power has been so pressing that action for augmenting the power supply was taken as early as 1941. Although the necessary orders for the plant were placed in 1941, the demands of the late War, which had necessarily to be given the highest priority, necessitated the execution of the orders being held in abeyance till 1944. The work of the installation of 3 more generating sets each of 7,500 kw. capacity in the Pallivasal Station is now in progress. One of these units, the fourth set, has been taken into service. Two more pipe lines to supply water to these three generating sets are also being laid. The erection of the third pipe line, 30-in. dia., is already completed and that of the fourth is in progress. The additional power generated is used mainly for aluminium production and for the manufacture of Ammonium Sulphate.

Dams.—To ensure a perennial supply of water for power development at Pallivasal and Sengulam, the construction of dams for storage of monsoon rain water has been taken up. One of these reservoirs, with a capacity of 270 million cubic feet, is located at Sethuparvathypuram, about 16 miles east of Munnar in the hizh ranges. The other dam at Madupatty, about seven miles from Munnar has been designed to impound 2,000 million cubic feet of water. It is now under construction.

Owing to the delay in augmenting the generating capacity of the Pallivasal Station, it was found necessary to resort to other arrangements for making available additional power to meet the demands arising out of commitments already made. As a result of the negotiations with the Government of Madras, it has been possible to get a block of 3,000 kw. of power from the Papanasam System. A 66 kv. single-circuit line connecting Kundara to Shencottah has been constructed and the supply from Papanasam has been inaugurated from the beginning of September 1946.

The demand for power as foreseen now is so heavy that it has become an urgent necessity to explore the possibilities for further hydro-electric developments. Two more schemes are already under investigation. The first of these, the Sengulam Scheme is proposed to be located 4½ miles lower down the present generating station. With the tail water of the main station, it is expected that the station could generate about 48,000 kw.

The other station is proposed to be located further lower down the same river. The tail water of the second station together with the discharge of two other tributaries of the Mudirapuzha River will supply the water for this scheme and the output of this station is estimated to be 40,000 kw. With the construction of suitable reservoirs for the collection of water, it is expected that the generating capacity of this station can be further augmented.

Growing Demand.—Power development from the Pampa River in Central Travancore is also under investigation. Preliminary forecasts show that it will be possible to develop about 100,000 hp. from this Scheme.

The situation created by the Second World War has given a strong impetus to industries in general and on the wake of it, a growing demand for power. During war-time, one of the major industrial concerns supplied with power from the Government System was the Indian Aluminium Co. Power was also being supplied to several industries engaged in war work. Special mention may be made in this connection regarding the role of electricity in food production activities both during and after the war as with the scarcity of fuel oil and oil engines, it has been necessary to resort to electric drive for de-watering operations in rice fields in the back-water areas and also for lift irrigation. Several thousands of acres of land both in Central and North Travancore have been put under cultivation with the aid of electric drive and as experience has shown that this is both economical and convenient, it is proposed to adopt this as a permanent arrangement.

MADRAS

Hydro-electric development in Madras until 1927 was confined to a few tiny plants in tea estates and to the small installation at Katori in the Nilgiris for making cordite. In recent years there has been significant progress and Madras now ranks next to Bombay in its hydro-electric power output. Three hydro-electric stations are now in operation. Besides extensions to the existing plants, two more stations are under construction.

The water power sites in the province are mostly in the Western Ghats especially in the region of the Nilgiris and the Palnis. Sites in the Eastern Ghats are few and some of them are on border streams. A close estimate of the available power has not yet been made. The continuous power output from the sites which are definitely known to be worth development is over 220,000 kw. It is likely that further survey and investigation would locate more sites. While it is unsafe at this stage to give an estimate of the maximum water power available in the province it may be assumed to be around 500,000 kw. continuous. This does not, however, include power that can be developed from future large irrigation dams like those projected at Polavaram on the Godavari.

Electric Power Grid.—To develop the available power resources in an orderly and rational way and make it available over the whole province cheaply and in abundance, an 'Electric Power Grid' for the province was conceived by the Madras Government over 15 years ago. It is a scheme of inter-connected power houses, both hydro and thermal, feeding a network of transmission and distribution lines serving towns and villages. Part of it is already in existence and the rest is to be built in appropriate stages corresponding to the industrial and social advance of the country.

The Grid in the south where it is well formed consists at present of three hydro-electric power stations, viz., those at Pykara, Mettur and Papanasam. A fair part of 12 districts from Chittoor to Tinnevelly and Chingleput to Malabar is covered. 45 Municipal towns and 910 villages receive supply. The installed generating capacity of the three stations totals 104,000 kw. The Grid owned by the Government Electricity Department has over 3,000 miles of high tension lines operating at voltages from 11,000 to 110,000 and 1,850 miles of low tension distribution lines. There are 24 extra high tension sub-stations of 110 and 66 kv. and sixteen of 33 and 22 kv. sub-stations with transforming capacity totalling 150,150 kva. and 770 distribution transformer stations with an aggregate capacity of 39,500 kva. The total load connected to the Grid is 185,200 kw. Among the important industries which are served are textile mills, cement factories, electro-chemical works, Steel-rolling mills and tea factories.

Rural Electrification.—Rural electrification on a fairly extensive scale has also been carried out with a connected load of over 32,800 kw. There are over 4,900 electric pumps for irrigation and 825 rural factories for ginning cotton, hulling rice, pressing oil seeds, shelling nuts, crushing cane and milling flour.

There are over 101,700 consumers of all classes: 79,800 served through the distributing licensees and 21,900 served by Government direct. The total power generated from the hydro-stations in 1946-47 was 298 million units representing 78 % of the total generation in the Province. The capital investment so far made is nearly Rs. 7.76 crores and the revenue in 1945-46 was Rs. 112 lakhs.

In the central and northern regions of the province the grid is yet to take shape. At present there are number of thermal stations each serving the local area but not inter-connected. When the big hydro-electric stations on the Machkund River in the Vizagapatam District and other extensions in progress are completed, the Grid will practically cover the whole province.

Pykara Scheme.—The scheme utilises the waters of the Pykara river which drains from the Nilgiri plateau having a catchment area of nearly 38 square miles and a fall of about 3,100 ft. The flow though perennial is very irregular and often drops to values around 20 cusecs during the dry season. The topography however embraces a number of feasible storage sites which could be developed according to the growth of power demand. The estimated potential capacity of the full development is around 40,000 kW continuous.

The first stage of development was commenced at the end of 1929 and was completed at the end of 1932. This stage utilised the regulated flow of the river with small storages of 58 million cubic feet in the forebay and 28 million cubic feet in the Glenmorgan Reservoir. The rapid growth of load necessitated the early construction of the Dam at Mukurti to store 1400 m.c. ft. with open spillways. The work was commenced in January 1935 and completed in June 1938. By installing automatic gates over the spillways the storage capacity has been raised to 1,800 m.c. ft. in April 1946. The final stage now sanctioned will provide a further increase of 2,000 m.c. ft. storage by the construction of a second dam across Pykara river.

Civil Works.—Water from the intake of the river is led by a flume to the forebay from whence it is led through a single 78″ diameter steel pipe 1,000 ft. long to a surge tank at the head of the penstocks. In the first stage two pipes each in 3 sections of diameter 27″ 24″ 21″ with a total length of about 9,300 ft. were laid. In the second stage a third penstock of 42″ 39″ 37½″ diameter was added.

The initially installed plant comprises three 7,810 kva., 3 phase, 600 r.p.m. alternators coupled to 10,900 hp. pelton wheels. Power is generated at 11,000 volts 50 cycles and stepped upto 110,000 volts by means of three 7,810 kva., 3 phase, 11 kv. 66-110 kv. transformers.

In 1939 two 12,500 kva., generating units and two 12,500 kva., transformers were added. The Pykara-Coimbatore transmission line was changed from 66 kv. to 110 kv. operation to suit the increased load demand. In 1947 two 5,000 kva., 11/66 kv. transformers were added to feed the 66 kv. lines to the West Coast.

Transmission and Distribution.—Power is transmitted to Coimbatore, which is the main receiving station and also the chief load centre by means of a 50 mile double circuit 110 kv. line. The line is extended therefrom at 66 kv. to Tiruppur, Erode, Udumalpet, Sembatti and Madura. At Erode and Madura tie is established with the Mettur and Papanasam Systems respectively. Power is now supplied from Pykara to Calicut and Cannanore through 66kv. lines.

This system has 1,278 miles of transmission lines of voltage ranging from 11,000 to 110,000 in service. There are 5 extra high tension sub-stations with transforming capacity of 70,750 kva., and 426 distribution transformer stations with an aggregate capacity of 22,465 kva.

Mettur Scheme.—The engineering features of the Mettur Hydro-Electric Scheme provide an interesting contrast to the Pykara Hydro-Electric Scheme. The Mettur Dam, one of the largest structures of its kind in the world is 176 ft. high and can impound a total of 93,500 m.c. ft. of water. This storage is primarily for irrigation purposes but part of the water let down for irrigation is utilised to the best advantage for the generation of hydro-electric power.

During construction of the dam 4 cast iron pipes 8′-6″ in diameter had been built into the structure and equipped with the necessary valves, gates, screens and other fittings. Each pipe is designed to discharge a maximum of 1,250 cusecs for power purposes.

Work on the initial installation with 3 units of 10,000 kw. each was commenced in the latter part of 1935 and the station started operation in June 1937.

The operating head varies from 160 ft. at full reservoir level to a minimum of 60 ft. The average head is 135 ft.

Power House.—The Power house is situated immediately below the Mettur Dam. The units are 12,500 kva., 250 r.p.m. generators coupled to overhung type twin horizontal Francis turbines one on each side. The turbines operate under a variable head from 60 to 160 ft. developing a maximum of 16,000 hp. each. Power is generated at 11,000 volts, 50 cycles, 3 phase and stepped upto 66,000 volts (110,000 volts later) for transmission to various load centres.

The fourth generating unit recently added was commissioned into service in October 1946.

Power is transmitted to Singarapet in the north and Erode in the south by means of two 66,110 kv. trunk lines (a total mileage of 100 miles) taking off from the Power Station. At Erode the Mettur System is linked with Pykara network. 66 kv. lines have been extended in the north to Vellore, Tiruvannamalai and Villupuram and in the south to Trichinopoly, Tanjore and Negapatam. To ensure proper voltage regulation two 2,500 kva. synchronous condensers are installed at Trichinopoly.

Considerable lengths of 11,22 and 33 kv. lines have been constructed for extending power to various places. 1,390 miles of high tension lines

of all voltages are now in service. There are 24 E.H.T. sub-stations with an aggregate transformer capacity of 52,400 kva. The number of distribution transformer stations are 259 and have a total capacity of 12,838 kva.

The Mettur Station is being linked with Madras thermal station by a 110 kv. line between Singarapet and Madras. This inter-connection will enable diversion of the surplus seasonal power at Mettur to Madras thereby saving coal. During dry months Madras will assist Mettur to enable larger firm demand being met in the Mettur System than is possible at present.

Papanasam Scheme.—This is the third hydro-electric scheme to be undertaken by the Madras Government. The first stage of the scheme was started in 1938 and the station commenced operation in July 1944.

The Tambraparni river drops about 300 ft. over the picturesque Papanasam falls at the foot of the Western Ghats in Tinnevelly District. The power development consists in regulating the river flow and harnessing the energy that was wasted over the falls. The catchment is benefited by both South-West and North-East monsoons, the latter generally preponderating.

Six miles above the falls a reservoir of 5,500 m.c.ft. is formed by constructing a masonry dam 170 ft. above river bed and 800 ft. long. About ¾ mile above the falls the water is diverted from the river course by a weir 1,350 ft. long and 35 ft. high giving a pondage of 28 m.c.ft. for daily regulation. Water is conducted by two 9 ft. low pressure steel pipes from the diversion weir to the surge tank at the edge of the cliff and from thence through four 66" penstock pipes 520 ft. long down the hill slope to the power house which is located near the Agastya temple at the foot of the Papanasam Falls. (One low pressure pipe and 3 penstocks only were installed in the first stage). The gross head developed is 330 ft.

Power House.—The generating plant consists of three vertical alternators of capacity 7,250 kva., 600 r.p.m. coupled each to a Francis reaction turbine of 9,850 B.P.H. The generation is at 11 kv., 3 phase, 50 cycle and power is stepped upto 66 kv. by means of three 7,250 kva., 1,166 kv. transformers.

To utilize fully the water that will be available in good rainfall years the fourth generator along with the second low pressure pipe line and penstock pipe are being installed now. They form the second stage of development at this site.

The transmission system extends to Tuticorin, Koilpatti and Madura, and is linked with the Pykara Hydro-Electric System at Madura. For purposes of voltage regulation two 2,500 kva., synchronous condensers are installed at Madura.

The system has 350 miles of high tension transmission lines, 8 H.T. sub-stations with transformer capacities totalling 24,750 kva., and 83 distribution transformer stations with an aggregate capacity of 4,142 kva.

Bulk power to the extent of 3,000 kw. is being delivered to the Travancore Government at the State borders near Shencottah.

Five-year Programme.—During the war years no progress could be made and there was practical stoppage of all new schemes and extensions. The only work done was to complete with great difficulty the few schemes already started. The Madras Government have sanctioned a five-year programme of construction of the following new schemes and extensions.

1. Machkund Hydro-Electric Scheme including extensions to the Vizagapatam and Bezwada Thermal auxiliary plants.
2. Nellore Thermal Scheme.
3. Madras Thermal Extension Scheme and inter-connection with Mettur Hydro.
4. Ceded Districts Scheme.
5. Moyar Scheme.
6. Pykara Hydro-Electric Scheme Extensions.
7. Madura Thermal Scheme.

Machkund Scheme.—This Scheme is for harnessing the Machkund river in the Vizagapatam District on the borders of Madras and Orissa, at the Duduma Falls where a gross head of 840 ft. is available. 100,000 kw. of power could be developed at this site, and the scheme is proposed to be worked out in stages.

The initial stage will comprise a diversion dam across the Machkund river, a flume channel, a 3,000 ft. long low pressure tunnel and three penstock pipes leading to the power house. The power station will have 3 generating sets each of 17,250 kw. In the later stage a dam is to be constructed at Jalaput and in the ultimate stage there would be 6 penstocks with generating units of capacity totalling 100,000 kw.

The civil works and power house have to be constructed in co-operation with the Orissa Government, and Madras has undertaken to execute the project works. The work on the scheme has been commenced and the initial stage is expected to be completed by 1951.

A 300 mile 110 kw. transmission line will carry the Madras share of power to Vizagapatam, Rajahmundry and Bezwada. This scheme will be adequate to supply the power needs of the Vizagapatam, Godavari, Kistna and Guntur districts. Pending its completion, additional generating plant totalling 9,000 kw. has been ordered for the Bezwada and Vizagapatam thermal stations to meet the interim demand of the region.

Nellore Scheme.—For the Nellore area a thermal station is planned at Nellore with two 2,500 kw. transportable power sets initially. The sets have been received and the plant will be working next year. The network of this area will be eventually linked with the Southern Grid.

Madras Thermal Extensions.—Supply for the Madras city area is now inadequate, on account of the load exceeding the capacity of the power house. The Madras city power undertaking of the Madras Electric Supply Corporation was acquired by the Government in August 47 and steps have already been taken to modernise the plant and increase its capacity. A new 150,000 kw. Turbo-alternator set has been ordered as also the associated boilers and they would be in service in 1949-50. To meet the growing demand in the meanwhile, two 2,500 kw. transportable power units are being installed as a temporary measure to supplement supply. These units will be in service by February 1948.

A 110 kv., 124 mile line inter-connecting the Madras Thermal Station with the Mettur Hydro Station is being constructed for mutual exchange of power. It will be completed by the middle of 1948.

Ceded Districts Scheme.—The Ceded Districts are proposed to be supplied with power purchased from the Mysore Jog Hydro-Electric Scheme. Supply will start early in 1949. When the Tungabhadra hydro power station is built—around 1952—it will take over the area and supply from Mysore will be stopped.

Moyar Scheme.—The Moyar Scheme for developing power from the tail water of the Pykara power station with a head of about 1,280 ft. available at the Moyar Slope, 9 miles lower down, is now under construction.

The main features of the scheme are : 1. A channel about 7,600 ft. long to divert the tail water from the Pykara power station to the adjacent Avarihalla valley. 2. A regulating reservoir of 28 m.c. ft. at Maravakandi 4 miles lower down. 3. A flume channel about 24,000 ft. long from the reservoir to the forebay and headworks at Guruva-Gowda Hundi. The forebay is to have a storage of 6 m.c. ft. 4. A 7 ft. diameter low pressure pipe from forebay to the surge tank at the head of the penstocks and 3 penstocks 2,880 ft. long in two sections of 45" and 42" to the power station. 5. A power station with three 12,000 kw. 428 r.p.m. alternators coupled to 18,000 h.p. two nozzle vertical type impulse wheels.

Power is to be generated at 11 kv., 3 phase, 50 cycle, stepped up to 110 kv. and transmitted to Pykara and Erode through 110 kv. double circuit transmission lines. This will be the 4th hydro-electric station of the Grid in the Southern part of the province and will meet the increasing demands of the Pykara and Mettur Systems for a few years.

Pykara Extensions.—The final stage of the Pykara project consisting of a second dam across the Pykara river to provide a storage of 2,000 m.c. ft. a new penstock, and two generating sets of 13,500 kw. each at Pykara station has been sanctioned. This will not only meet the power deficiencies of Mettur and Papanasam stations during periods of unfavourable water conditions but will also meet the demands arising out of the large scale industrial and agricultural developments in the southern districts in the near future.

Madura Thermal Scheme.—To supplement the output in the Hydro-Grid during water scarcity, a thermal auxiliary station at Madura with an initial capacity of 4,000 kw. is to be built shortly. The plant is under erection.

To handle the additional power that will be generated, additional transmission lines for reinforcing the Grid have also been sanctioned.

These schemes which are all now under construction cover a major part of the province and will result in doubling the existing generating capacity. They are scheduled to be completed before 1952 and will cost Rs. 15 crores.

KASHMIR

A scheme of much importance from its size but more interesting because of the developments that may be expected from it than for the part which its current supply already plays in the life of the countryside, is one installed forty years ago by the Kashmir Durbar utilising the river Jhelum, near Buniyar about fourteen miles from Baramulla.

The headworks of the Jhelum power installation is situated six and a half miles from the power house, at Mohora and the main connection between the two is a timber flume. These works and the forebay at the delivery end of the flume have a capacity for carrying water sufficient for the ultimate generation of 20,000 electrical horse-power. Four pipes 792 feet long lead from the forebay to the power house and from forebay to water wheels there is an effective head of 399 feet. There are four horizontal water-wheels, each coupled on the same shaft to a 1,000 kva., 3-phase, 2,300 volt, 25 cycle generator running at 500 r.p.m. The power house is of sufficient capacity to allow of 15,000 kw. generating plant being installed within it. Two transmission lines run side by side as far as Baramulla, 21 miles from Mohora at which point one terminates. The other continues to Srinagar, further 34 miles. The installation at Baramulla was originally utilised for three floating dredgers and two floating derricks, for dredging the river and draining the swampy countryside and rendering it suitable for cultivation.

The lighting of Baramulla has been taken in hand with satisfactory results and the power load is building up. At Srinagar, the line terminates at the State silk factory, where current is supplied not only for driving machinery and for lighting, but also for heating. The whole of Srinagar city is now electrically lighted and there are a number of power loads.

New Sources.—Besides the Jhelum power installation, there are two other schemes, the Muzafferabad hydro-electric installation utilising a tributary of the river Kishen Ganga and the Jammu hydro-electric installation. The Muzafferabad power house has one 130 B.H.P. pelton wheel directly coupled to a 110 kva., 3,300 volt, 50 cycle alternator. This serves Muzafferabad town and Domel on J. V. Road. The Jammu power house employs five generating sets. Of these, one 265 k.w. set is driven by a Diesel oil engine and the remaining four, generating among themselves 1,226·5 kw., are driven by water turbines.

In addition to the above schemes, new sources of power capable of feeding large-scale manufacture are being explored in view of the beginning of large-scale industries in Jammu and Kashmir State, being explored. The State has already provided funds from capital expenditure not charged to revenue for the improvement of the State's electrical system. The necessity for augmenting the power supply in the Jammu area being many, a steam turbine driven generating plant of 1,500 kw. capacity is being installed for being located at Miran Sahib and connected with Jammu by a 6,600 volt line. This will enable necessary supply of power being made available for Jammu, Jammu Cantonment and Miran Sahib industrialisation. The cost of the scheme is estimated at Rs. 8,41,200.

A hydro-electric scheme with an ultimate capacity for generating 9,000 kw. by harnessing the Sind River near Ganderbal is also under survey and a smaller scheme for supply of power at Pahalgam is now in progress, while other smaller schemes for Anantnag and Udhampur are under investigation. The utilisation of the Chenab River for developing a hydro-electric scheme on a large scale is also under consideration.

UNITED PROVINCES

The Ganges Canal Hydro-Electric Grid supplies power at attractive rates for domestic, industrial and agricultural purposes to 14 districts in the west of the Province and to Shahdara in Delhi Province. Seven of the ten falls available for electrification have been developed and stand-by steam power stations at Chandausi and Harduaganj with installed capacity of 19,000 kw. have been constructed. The Grid thus have no less than 38,000 kw. of installed capacity. A new hydro-electric station at Mohammadpur with an installed capacity of 9,300 kw. is under construction which is likely to go into commission during the winter of 1948. At Harduaganj steam station additional power plant is under erection which will raise the installed capacity of the station from 10,000 kw. to 20,000 kw. This is also likely to be completed by the winter of 1948. Besides supplying some 93 towns with current for light and fans and minor industries, the Grid provides energy for irrigation pumping from tube wells and open wells.

The Ganges Valley State Tube-Well Scheme comprises about 2,000 tube-wells, covering the districts of Moradabad, Bijnor, Budaun, Muzaffarnagar, Saharanpur, Meerut, Bulandshahr Aligarh and Etah, introducing irrigation on the volumetric system over approximately one million acres hitherto without any source of irrigation. This supply of cheap power from some 2,300 sub-stations is already having an important bearing on the economic disposal of crops and the development of minor industries in the urban centres and rural areas.

Investigations into the electrical and financial possibilities of a number of hydro-electric power generating stations have been completed and the work has already commenced on the Sarda Canal Hydro-Electric Scheme with an installed capacity of 42,500 kw. This station will be ultimately linked up with the large steam station at Cawnpore and the Ganges Canal Hydro-Electric Grid.

PUNJAB HYDRO-ELECTRIC PROJECT

Situated on a spur of the Dauladhar Range at elevations ranging between 6,000 and 4,000 feet above sea-level, and connected by means of a tunnel over 15,000 ft. long, are the works of what is known as the Uhl River Hydro-Electric or Mandi Scheme which is now operated by the E. Punjab P.W.D. Electricity Branch with its Headquarters formerly at Lahore.

This project owes its origin to the need which began to be felt in the old undivided Punjab during the War of 1914-18 for making energy available for industrial and agricultural purposes at rates cheaper than were then prevailing.

The site was discovered in the year 1922. A detailed project was prepared by 1923. Work on the construction of the first stage of this scheme was started in 1926. The total capital outlay on the scheme to the end of the year 1944-45 has been Rs. 730.6 lacs.

Due to the extensive nature of the construction works, it was found necessary to build two small temporary hydro-electric power stations one at Dhelu near Shanan and the other at Thuji near the headworks at Brot which were linked together and the combined installed capacity was 1,440 kw.

Water is withdrawn from the Uhl and the Lamba Dug Rivers at Brot and conveyed by a 9.25 ft. internal diameter concrete lined circular pressure tunnel which is one of the longest tunnels in the sub-continent and is the first steel mantle tunnel to be built in Asia. The tunnel is about 3 miles long and is designed for a normal full discharge of 600 cusecs (but it can carry up to 800 cusecs if required). The tunnel feeds steel penstocks which run down the slope to the Shanan Power Station near Jogindarnagar (Mandi State) so as to utilise 1,800 ft. of the total fall thus converting the snow fed waters of the Uhl and its tributary into electrical energy.

Transmission System.—**The initial installed capacity of Shanan Power Station is 48,000 kw. The plant consists of four 17,000 B.H.P. Pelton wheels, running at 428.5 r.p.m. each driven by a single jet of water and connected to a 12,000 kw. 11,000 volt, 3 phase, 50 cycle alternator.**

From the Shanan Power Station energy generated at 11,000 volts is stepped up to 132,000 volts which is the highest voltage adopted for this purpose in the sub-continent. The transmission system comprises a double circuit 132 kv. trunk transmission line supported on steel towers 80 ft. high normally set 1,000 ft. apart but with spans extending even upto 3,360 ft. in the hills. This line supplies sub-stations at Kangra, Pathankhot, Dhariwal, Amritsar and Lahore.

A single circuit 132 kv. line also runs from Amritsar to Jullundur and is continued at 33 kv. to serve Goraya and Ludhiana sub-stations. A 66 kv. single circuit line starts from Lahore and supplies sub-stations at Kasur and Ferozepur while a similar line from Lahore serves sub-stations at Shahdara, Sheikhupura, Chuharkana, Mohlan, Jaranwala and Lyallpur.

From these various sub-stations 11,000 volt lines radiate to supply between them about sixty towns and villages. In addition to serving 31,000 consumers directly from its own mains, the Branch also furnishes bulk supplies to the N.W.R. for its own Workshops and to the P.W.D. Central Workshops, to two licensees (the Amritsar Municipality and the Jullundur Electric Supply Co.) and also to the Kapurthala State at two points. The connected load at the end of March, 1945 was 59,289 kv. the total number of units generated being 125,530,190 and the revenue assessed 90.36 lacs for the year 1944-45.

POST-WAR SCHEMES

During the last World War, though the construction of any major new schemes could not be undertaken, the question of post-war power development in the Punjab area was seriously engaging the attention of the old undivided Punjab Government. As an outcome of detailed investigations a Five Year Post-War Development Plan was approved.

All these schemes, in addition to providing power for thousands of irrigation tube-wells throughout the area, will provide much needed additional power for industrial and economic development.

The possibility of introducing tube well irrigation in certain parts of the Punjab area adds to the interest of post-war hydro-electric projects. This would enable thousands of acres of hitherto uncommanded land to be brought under cultivation, thereby incerasing food supply and also lower the water table very considerably and tend appreciably to eradicate the menace of water-logging in many parts.

Rasul Hydel Scheme.—**This is a special priority scheme and provides for the development of 22,000 kw. of electric power at Rasul headworks from water to be dropped from the Upper Jhelum Canal to the Lower Jhelum Canal with an available average head of 84.75 ft.**

The Scheme is estimated to cost Rs. 818.53 lakhs and provides for the construction of a hydro-electric station at Rasul with two 11,000 kw. Kaplan generating sets. It also provides for a double circuit 132 kv. line from Shalamar (Lahore) to Rasul *via* Gujranwala, Gujrat and Jhelum and single circuit 132 kv. line on double circuit towers from Jhelum to Rawalpindi *via* Gujarkhan. It also provides for: (i) a double circuit 66 kv. line from Gujranwala to Lyallpur *via* Hafizabad, Sukheke, Sangla Hill and Chak Jhumra, (ii) a double circuit 66 kv. line from Rasul to Malakwal, (iii) and 66 kv. and 33 kv. single circuit lines between Lyallpur and Chiniot, Malakwal and Sargodha *via* Bhulwal, Rasul and Chakori, Malakwal and Bhabra, Hafizabad and Chinawan, Bhulwal and Bhera and Gujranwala and Sialkot *via* Daska.

This scheme is primarily meant for providing tube-well irrigation in some of the districts in the western and central parts and the available power is proposed to be utilised in the following manner: (i) Operation of 1800 tube-wells to be installed on the channels of the Northern Canals of the Irrigation Branch, (ii) Supply of electrical energy for industrial power and lighting in twenty-eight towns in the districts of Shahpur, Jhelum, Gujrat, Sialkot, Gujranwala, Sheikhupura, Lyallpur and Jhang, (iii) Supply of power to the Uhl River Grid to the extent of 5,000 kw. during the low water period in the Jogindarnagar catchment area.

The construction of this scheme has already started and it is scheduled to be ready for operation by the middle of 1949.

NANGAL SCHEME

The old Punjab Government had accorded administrative approval to what is known as the Nangal Power Project.

This project provides for a diversion weir from the Sutlej at Nangal in the North-East near Bhakra and a canal 37 miles long and of 10,000 cusecs capacity from Nangal to Rupar. At Rupar, one branch will lead to the Sirhind Canal while another branch will form the main line upper of the future Bhakra Canal. From a study of the discharge tables of the Sutlej river for the last 35 years it appears that 3,000 cusecs would be a safe minimum supply on which to count and the initial stage of the project is based on the utilisation of this minimum discharge.

After the Bhakra Dam is completed the canal, in addition to the free flow of the river, will take the releases from the Bhakra reservoir. The fair minimum discharge available will then be 6,000 cusecs and the firm power available will be doubled.

Situated on the canal will be 4 power houses with heads of 81,53.5, 53.5 and 51 ft. at minimum flow period, yielding a total of 66,400 kw. of primary power at 72% load factor. When the Bhakra Dam is completed and more water becomes available it is anticipated that, with the installation of a fifth power house at or below Rupar, it will be possible to develop approx. 1,32,000 kw. of primary power at 72 per cent. load factor.

The Plan.—**The project provides for: (1) A double circuit 132 kv. trunk line—on 220 kv. towers—from Nangal to Ambala and single circuit onward up to Delhi *via* Panipat. The towers between Ambala and Delhi, will be designed for 220 kv. and stringing of a second circuit in future, if necessary, (ii) A double circuit 132 kv. line—on 220 kv. towers—between Nangal and Jullundur, (iii) A single circuit 132 kv. line, on double circuit towers, between Jullundur, Ferozepur, Fazilka and Pakpattan, (iv) 66 kv. and 33 kv. branch lines connecting the 132 kv. trunk line grid sub-stations with Karnal, Abdullahpur, Patiala, Nabha, Bilaspur, Naraingarh (Sirmoor State), Khanna, Jagraon, Moga, Kot-Kapura, Bhatinda, Muktsar and Abohar towns, (v) 11 kv. lines and local distribution network for supplying the irrigation tube-wells and towns covered by the Scheme.**

The Nangal Power Project has been rendered urgently necessary to provide power for the construction of the Bhakra Dam; to provide power for the industrial and economic development of the area; and to provide for tube-well pumping to increase the irrigation supplies on the Sutlej Valley, Sirhind and Western Jumna Canal Systems as early as possible.

The subsidiary advantages of the Project are that: (i) It will obviate material interference with Rupar Head Works and the Sirhind Canal. Apart from the political difficulties thus escaped, there will be a saving of Rs. 165 lakhs. (ii) It will provide a balancing reservoir for the Bhakra Dam releases and, by stabilising diurnal variations, will enable the full development of Bhakra power.

The initial stage of the scheme *i.e.*, the development of 66,400 kw. of primary power, is estimated to cost Rs. 1,774 lakhs and expected to be completed by the middle of 1951. The

final stage, which is estimated to cost an additional sum of Rs. 191 lakhs, will not be taken in hand until after Bhakra power is available and the power position of the whole region has been thoroughly re-examined.

MANGLA HYDRO-ELECTRIC SCHEME

This project provides for the generation of 10,000 kw. of hydro-electric power at Mangla near the Irrigation Branch Head Works on the Upper Jhelum Canal from a head of 30 ft. and minimum flow of approx. 5,000 cusecs in the head reach of the canal. It also provides for the linking of this power station by a double circuit 132 kv. line with the 132 kv. Grid substation at Jhelum which would be constructed under the Rasul Hydel Scheme.

Addition of a pipe line and two 12,000 kw. pelton wheel generating sets at Jogindarnagar is an extension of the existing hydro-electric works of the Uhl River Scheme at Jogindarnagar and is meant for developing additional power which, in cold weather periods during shortage of water at the headworks at Brot, will be supplied by means of the Mangla Hydro-Electric Scheme but, when there is a shut down of that generating plant during summer, it will be supplied by these additional sets at Jogindarnagar power station which has an ample supply of water in summer to run five machines.

These two schemes are therefore primarily meant to supplement each other during the low water periods at the respective power stations, thus ensuring a constant supply of additional power all throughout the year. The schemes are estimated to cost Rs. 99.52 lakhs and scheduled to be completed in 1951.

THE BHAKRA PROJECT

This is the major post-war hydro-electric project in East Punjab and has been considered in many shapes and forms since it was first submitted about 30 years ago. The project involved protracted negotiations with various States through which the irrigation canals will run, ascertaining as to which of them would like to participate in the scheme and under what terms.

It was only very recently that these protracted negotiations reached a more or less final stage and serious attention could be given to detailed designs of the dam, canals, power station, etc. The work of designing the Dam has finally been entrusted to a firm of American Consulting Engineers headed by Mr. Savage, who is generally considered the best living authority on high dams and has been responsible for the design of such marvels of modern engineering as the Boulder Dam and Grand Coulie Dam in the U. S. A.

The scheme involves the construction of a 480 ft. high dam across the Sutlej at Bhakra in East Punjab and the creation of a reservoir for canal irrigation and development of hydro-electric power.

The Bhakra storage is estimated to have a live storage of approx. 3.4 million acre feet capable of discharging during the 270 days, when natural river supplies are non-existent, a mean discharge of about 6,300 cusecs. It will irrigate the dry famine stricken tracts of Hissar, Rohtak and the adjacent States where no canal irrigation is available at present. It will also generate about 1,88,000 kw. of electric power at 0.72 load factor (which is the average load factor of the Punjab Grid), with an installed capacity of 3,20,000 kw., *i.e.*, four machines of 80,000 kw. capacity. The generating station will be linked up with the transmission system of the Punjab Grid with extensions in the West Punjab up to Multan.

The construction of so stupendous a scheme is naturally a slow job, if full measures of safety and a reasonable economy are to be provided. The preliminary work has already been started but the scheme is not expected to be completed before 1956.

NIZAMSAGAR PROJECT

The Hyderabad State has decided to proceed with the Nizamsagar Hydro-Electric Project as an immediate post-war measure for bringing hydro-electric power to Hyderabad city. The scheme is intended to utilise the water stored in the Nizamsagar dam and it is expected that electric power varying from about 1,500 kw. as the minimum to about 11,500 kw. as maximum could be generated. It is proposed to install two 4,000 kw. hydro-electric generating sets and to construct 80 miles of 66 kw. transmission lines for supply to Hyderabad city. In this connection a sum of Rs. 85.20 lakhs has been provided in the budget for 1947-48.

There is another scheme known as the Godavari Valley Authority, which is modelled on T.V.A. It is a combined hydro-electric power-cum-irrigation project under which it is proposed to generate 55,000 kw. continuous and to bring under cultivation an additional acreage of 1.25 millions. The scheme also contemplates the creation of a model industrial town with a number of important industries located in its vicinity. A sum of Rs. 291.95 lakhs has been provided in the 1947-48 budget for this scheme.

Tungabhadra Project.—An agreement has recently been reached on the apportionment of the waters of the Tungabhadra river between the Governments of Madras, Mysore and Hyderabad. For the share of the waters, it will be possible for Hyderabad State to utilise three drops in the irrigation canal for generation of hydro-electric power, giving an initial output of about 15—25,000 kw. For this project a sum of Rs. 98.50 lakhs has been provided in the 1947-48 budget.

There are a number of hydro-electric power sites on the Manjeera, Kaddam and Purna tributaries of the Godavari and on river Dindi, a branch of Kistna river as well as on the upper and lower reaches of the Kistna. The actual power potentialities of these sites need detailed investigation.

These irrigation cum-hydro-electric schemes are making a fairly good progress so far as is permissible under existing limitations.

KOLHAPUR STATE

The Kolhapur State has embarked on the generation of electric power from the water stored in the Radhanagari dam which has been raised to the height of 50 feet. It will be further raised to 75 ft. for which construction is now in progress. The power house will be situated at the foot of the dam and the installation will comprise four 1,200 kw. Kaplan sets operating on 65/116 feet head. The power will be transmitted by means of 32 miles of 33 kv. lines to Kolhapur city for augmenting the water supply to the city, supply of energy to industrial concerns and take over the load from the existing oil engine station. The Radhanagari station will be supplemented by another Thermal 1,300 kw. station at Kolhapur. Both the stations will run in parallel. The scheme is also intended to provide an assured water supply for existing irrigation and new areas that will be put under cultivation by the installation of about 175 electric pump sets in the area served by the transmission lines and irrigating an area of 9,000 acres under sugar cane cultivation.

N.-W. F. P.

The possibility of generating electricity at Malakand was first recognised some 25 years ago. The waters of the Swat River to the north of Malakand are utilised for fertilising the north-eastern part of the Peshawar valley by driving a tunnel known as Benton tunnel under the Malakand pass and constructing a canal. It is recognised that by extending it by another half a mile upto a point above the upper Swat canal, advantage could be taken of a natural fall of some 250 feet for the production of electricity.

This scheme was sanctioned in 1934 and a new tunnel known as Burkit tunnel, 12 feet in diameter was constructed. From the tail of the Benton tunnel, water is discharged over a regulating weir into the new power tunnel from which it emerges through an open channel with silt extractor into the forebay. At the remote end of the forebay, a spilway syphon is provided to allow evacuation of excess water automatically in the event of sudden changes of load. From the forebay the water flows through penstock pipes 515 feet long with external diameter varying from 61 inches at the top to 55 inches at the bottom into the power house situated below at Malakand.

The available discharge is 800 cusecs with a total head of 250 feet. The generating plant consists of three reaction turbine sets each generating 3,200 kw. at 11 kv., 3 phase 50 cycles. The pressure is stepped up by transformers to 66 kv. and power transmitted by a 30-mile double circuit line to Mardan and thence by 74 miles of single circuit ring main to Peshawar Cantonment, one line passing through Charsadda and the other through Risalpur and Nowshera. 140 miles of 11 kv. branch lines are also provided for serving important towns and rural areas in the Province. The scheme came into operation in 1938.

The hydraulic works and the power house have been designed for the installation of three more generating sets at a future date. Two additional sets each of 5,000 kw. are on order and will be installed early in 1948.

An extension of the 66 kv. transmission system to Wah and Haripur is now in progress and a further extension to Kohat is proposed.

A 33 kv. transmission system is also proposed for Swabi and Saidu Sharif, the Capital of Swat State.

Irrigation

THE chief characteristics of the rainfall in the sub-continent are its unequal distribution over the country, its irregular distribution throughout the seasons and its liability to failure or serious deficiency. The normal annual rainfall varies from 460 inches at Cherrapunji in the Assam hills to less than three inches in Upper Sind.

The second important characteristic of the rainfall is its unequal distribution throughout the seasons. Except in the south-east of the Peninsula, where the heaviest precipitation is received from October to December, by far the greater portion of the rain falls during the south-west monsoon, between June and October. During the winter months the rainfall is comparatively small, the normal amount varying from half an inch to two inches, while the hot weather, from March to May or June, is practically rainless. Consequently it happens that in one season of the year the greater part of the country is deluged with rain and is the scene of the most wonderful and rapid growth of vegetation; in another period the same tract becomes a dreary, sun-burnt waste.

From the agricultural point of view however, the most unsatisfactory feature of the rainfall is its liability to failure or serious deficiency. The average annual rainfall over the whole country is about 45 inches and there is but little variation from this average from year to year, the greatest recorded being only about seven inches. But if separate tracts are considered, extraordinary variations are found. At many stations annual rainfalls of less than half the average are not uncommon, while at some less than a quarter of the normal amount has been recorded in a year of extreme drought.

Classing a year in which the deficiency is 25 per cent. as a dry year and one in which it is 40 per cent. as a year of severe drought the examination of past statistics shows that, over the precarious area, one year in five may be expected to be a dry year and one in ten a year of severe drought. It is largely in order to remove the menace of these years that the great irrigation systems in parts of the country have been constructed. In the arid tracts where the annual rainfall is less than 15", no cultivation is normally possible without irrigation.

THREE CLASSES

The Government irrigation works may be divided into three main classes, those provided with artificial storage, those dependent throughout the year on the natural supplies of the rivers and those receiving their supplies from the sub-unit. In actual fact, practically every irrigation work depends upon storage of one kind or other but, in many cases this is provided by nature without man's assistance. It is only in the north and in Madras, where the cold weather rains are even heavier than those of the south-west monsoon that the principal non-storage systems are found.

The expedient of storing water in the monsoon for utilisation during the subsequent dry weather has been practised from time immemorial. In their simplest form, such storage works consist of an earthen embankment or masonry wall constructed across a valley or depression, behind which the water collects, and those under Government control range from small tanks irrigating only a few acres each to huge reservoirs which are capable of storing over 20,000 million cubic feet of water.

Irrigation from wells has been practised from times immemorial. In recent years, however, Government has installed in some places in U.P. and Behar electrically driven tube wells for the supply of irrigation water to cultivators.

All irrigation works are divided into three classes—productive and unproductive, with the third class embracing areas irrigated by non-capital works. The main criterion to be satisfied before a work could be classed as productive is that it should, within ten years of the completion of construction, produce sufficient revenue to cover its working expenses and the interest charges on its capital cost. Most of the larger irrigation systems belong to the productive class. In recent years, the criterion mentioned above has been the subject of much criticism as it ignored the indirect benefits from irrigation projects.

Unproductive works are constructed primarily with a view to the protection of precarious tracts and to guard against the necessity for periodical expenditure on the relief of the population in times of famine. They are financed from the current revenues, generally from the annual grant for famine relief and insurance, and are not directly remunerative, the construction of each such work being separately justified by a comparison of the value of each acre protected (based upon such factors as the probable cost of famine relief, the population of the tract, the area already protected and the minimum area which must be protected in order to tide over a period of severe drought) with the cost of such protection.

Nearly one-eighth of the whole area irrigated from Government works is effected by minor works for which no capital account is kept.

GROWTH OF IRRIGATION

There has, during the last sixty years, been a steady growth in the area irrigated by Government irrigation works. From 10¼ million acres in 1878-79 the area annually irrigated in the Provinces of India and Pakistan rose to 19½ million acres at the beginning of the century and to 35 million acres in 1944-45.

The main increase has been in the class of productive works, which irrigated 4¼ million acres in 1878-79 and rose to 20,756,209 acres in 1926-27. During the year 1944-45 the areas irrigated by productive and unproductive works amounted to 26.05 and 5.0 million acres respectively.

The area irrigated in 1944-45 was largest in the Punjab (E. and W.) where 14.05 million acres were irrigated during the year, excluding the area irrigated through channels which lie in the States. The Madras Presidency came next, with an area of 6.51 million acres, followed by the United Provinces with an area of 5.37 million acres.

The total capital outlay, direct and indirect on irrigation and navigation works, including works under construction, amounted at the end of the year 1944-45 to Rs. 15,597 lakhs. The gross revenue for the year was Rs.2,094 lakhs and the working expenses 726 lakhs; the net return on the capital being, therefore, 8.77 per cent.

The return on capital invested in productive irrigation works was highest in the Punjab where the yield was 18.48 per cent. The return was 17.60 per cent. in Bombay, 15.93 per cent. in N.-W.F.P., 9.95 per cent. in Sind and 8.63 per cent. in the United Provinces.

Charges for Water.—The charges for water are levied in different ways in the various Provinces. In some, notably in Sind, the ordinary land revenue assessment includes also the charge for water, 9/10ths of this assessment being regarded as due to the canals. In others, as in parts of Madras and Bombay, different rates of land revenue are assessed according to whether the land is irrigated or not, and the assessment upon irrigated land includes also the charge for water. These methods may, however be regarded as exceptional. Over the greater part of the sub-continent water is paid for separately: the area actually irrigated is measured, and a rate is charged per acre according to the crop grown. Lower rates are often levied in cases where irrigation is by "lift", that is to say where the land is too high for the water to flow on to it by gravity and consequently the cultivator has to lift it on to his field.

Various other methods of assessment have been tried, such as by renting outlets for an annual sum, or by charging according to the volume of the water used, but these have never been successful. The cultivator fully understands the principle of "No crops, no charge" which is now followed as far as possible in canal administration, but has no confidence in a system under which his liability for water rate is independent of the area and quality of his crop.

The rates charged vary considerably with the crop grown, and are different in each Province and often upon the several canals in a single Province. Water rates on some important crops as assessed in some Provinces are as given under:

NAME OF PROVINCE	NAME OF CROP											
	Sugar-cane		Rice		Cotton		Wheat		Maize		Pulses and Millets	
	Rs. a. p.		Rs. a. p.		Rs. a. p.		Rs. a. p.		Rs. a. p.		Rs. a. p.	
N.-W.F.P.	7 2 0 to	10 8 0	4 0 0 to	8 0 0	3 4 0 to	5 12 9	3 4 0 to	4 12 0	3 0 0 to	4 10 0	2 2 0 to	4 10 0
Punjab (E. and W.)	7 0 0 to	11 1 6	5 4 0 to	6 8 10	4 8 0 to	6 4 0	3 8 0 to	5 0 0	3 12 0 to	4 4 0	2 12 0 to	3 8 5
United Provinces ..	5 0 0 to	12 0 0	4 0 0 to	7 8 0	2 8 0 to	5 8 0	3 0 0 to	5 0 0	3 0 0 to	5 0 0	2 4 0 to	3 4 0
Madras	7 8 0 to	17 8 0	6 4 0 to	10 0 0	3 2 0 to	10 0 0	....		3 2 0 to	10 0 0	3 2 0 to	10 0 0

Practically speaking, Government guarantees sufficient water for the crop and gives it as available. If the crop fails to mature, or if its yield is much below normal, either the whole or part of the irrigation assessment is remitted.

A somewhat different system, the long lease system, is in force in parts of Bengal (E. and W.) and the Central Provinces, under which the cultivators pay a small rate for a term of years whether they take water or not. In these Provinces where the normal rainfall is fairly high, it is always a question whether irrigation will be necessary at all, and if the cultivators have to pay the full rate, they are apt to hold off until water becomes absolutely essential, and the sudden and universal demand then usually exceeds the supply. By paying a reduced rate every year for a term of years they become entitled to water when required; consequently there is no temptation to wait till the last possible moment, and the demand is much more evenly distributed throughout the season.

Taken as a whole, irrigation is offered on extremely easy terms, and the water rates represent only a very small proportion of the extra profit which the cultivator secures from the water he receives.

CENTRAL BODIES

For the Dominion of India as a whole there are two central statutory bodies: the Central Board of Irrigation with a Research Committee and a Bureau of Information, and a Central Waterways, Irrigation and Navigation Commission which as the name indicates has a wider purview. The Board of Irrigation consists of the Chief Engineers of Irrigation, Hydro-electric and Waterways of the Provinces, of the States of Hyderabad, Mysore, Travancore and Gwalior and of representatives from Burma and Ceylon. The Board meets every year when papers of a technical nature are read and discussed. These papers are then published along with technical literature on specific questions in a monthly abstract and a quarterly journal which the Board brings out for the purpose. Of late the Board has broken new ground and has begun to issue little pamphlets for the layman explaining the works which are being undertaken by the Dominion engineers from time to time.

For purposes of research and experiment in irrigation and hydro-dynamics the Central Board has a station at Khadakvasla near Poona called the Indian Waterways Experiment Station. There is now a proposal to extend the range of activities of this station rename it as the Central Waterways, Irrigation and Navigation Research Station, and shift it to Delhi.

Besides the Government of India, seven Provinces, namely West Punjab East Punjab, United Provinces, Sind, West Bengal, and Madras, and two States namely Hyderabad and Mysore also maintain research stations.

The Bureau of Information of the Board maintains a library where literature on irrigation, hydro-electric engineering, river control and allied subjects, is collected from all parts of the world and indexed in detail for the supply of information to the Irrigation Departments of the Provinces and the States.

The Central Waterways, Irrigation and Navigation Commission was set up in 1945 and consists of a chairman and two full time and such part time members as are from time to time found necessary. Being a fact-finding, planning, and co-ordinating body for India as a whole it has much wider functions than the Central Board of Irrigation. The Central Commission prepares projects, initiates schemes for the training of Indian engineers in specialized fields such as waterways, navigation, irrigation, and finally advises the Government of India on disputes between Provinces or on the question of priority as between various projects of flood control, irrigation, navigation and so on. The Commission, of course, maintains a full time technical and administrative staff to carry on its functions.

IRRIGATION STATISTICS

The area irrigated by Government works in each Province is given in the table below:—

Province	Average area irrigated in triennium 1936-39 Acres	Area irrigated in 1944-45 Acres
Madras	7,396,100	6,509,399
Bombay	466,200	639,386
Bengal (East and West)	171,800	245,442
United Provinces	4,769,200	5,371,922
Punjab (East and West)	12,195,800	14,045,199
Bihar	679,500	744,948
C.P. (including Berar)	319,100	727,536
N.-W.F.P.	466,500	534,735
Orissa	366,400	798,179
Sind	4,692,900	4,256,587
Minor Administrations	*	46,416
Baluchistan	104,700	26,949
Total	31,628,200	34,946,698

* Not available.

KINDS OF WORKS

Here are a few figures for productive, unproductive and non-capital works for India and Pakistan:—

Province	Productive Works Area irrigated 1944-45	Unproductive Works Area irrigated 1944-45	Non-capital Works Area irrigated 1941-42
Madras	3,043,199	263,225	3,207,400
Bombay	11,954	437,176	207,500
Bengal (East and West)	....	231,598	31,800
United Provinces	3,826,689	1,531,981	5,500
Punjab (East and West)	14,110,148	726,882	29,600
Bihar	666,449	126,247	....
C.P. (excluding Berar)	....	676,476	44,900
N.-W.F.P.	220,592	309,143	....
Orissa	....	353,869	....
Sind	4,050,745	324,993	20,600
Rajputana	....	....	....
Baluchistan	124,123	22,330	....
Total	26,053,899	5,003,920	3,547,300

Taking productive works as a whole the capital invested in them was at the end of 1944-45 Rs. 10,169 lakhs. The net revenue for the year was Rs. 1,297 lakhs giving a return 12.76 per cent as compared with 9 per cent in 1918-19 and 9¼ per cent in 1919-20 and 7·68 per cent in 1937-38. In considering these figures it must be remembered that the capital invested includes the expenditure upon several works which have only lately come into operation and others which were under construction, which classes at present contribute little or nothing towards revenue. Moreover only the receipts from water rates and a share of the enhanced land revenue due to the introduction of irrigation are credited to the canals, so that the returns include nothing on account of the large additions to the general revenues of the country which follows in the wake of their construction.

Here are figures for costs and revenue:—

Province	Net area sown in 1943-44 Acres	Area irrigated by Government irrigation works Acres	Percentage of area irrigated to total area sown	Capital cost of Government irrigation and Navigation works to end of 1943-44 (lakh rupees)	Estimated value of crops raised on areas receiving state irrigation (lakh rupees)
Madras	31,890,989	6,461,450	20·26	2052.2	5214·02
Bombay	28,625,161	626,759	2·19	1079.4	*
Sind	5,700,383	4,511,110	79·14	2648·8	*
Bengal (East and West)	28,060,000	244,217	0·87	532·0	*
United Provinces	37,210,028	5,344,683	14·36	3076·9	7807·39
Punjab (East and West)	28,533,453	13,888,010	48·67	4259·5	11663·69
Bihar	17,658,400	780,104	4·42	356·1	*
C.P. and Berar	24,988,891	722,239	2·90	652·9	*
Orissa	6,296,451	828,277	13·15	328·0	*
N.-W.F.P.	2,300,551	528,359	22·97	316·5	*
Assam	6,928,175	*	*	*	*
Baluchistan	*	25,156	*	146·5	*
Minor Administrations	804,852	55,408	6·88	29·6	*
Total	218,997,334	34,015,772	15·53	15478·4	....

* Figures not available.

Among irrigation works should be mentioned the Ganga Tube-Wells Scheme in certain parts of western U.P. which enables the ground water reservoirs lying to a depth varying from 15′ to 45′ to be utilized for irrigating a vast area: canals of the normal type would be useless because of limitation of river water. The total number of State tube-wells running at the end of the year 1943-44 was 1649 and the total area irrigated was 665,046 acres. The total capital outlay on the whole scheme up to the end of 1943-44 was 1·89 crores and on the hydro-electric grid which is in operation throughout the area is 3·73 crores.

NEW WORKS

Planned development of natural regions such as river valleys is very much in the air. After the success of the T.V.A. in America such planned development has become part of the world's general thinking. So naturally, a great many Provinces in India were ready with plans at the end of the War for a fuller and a more efficient use of India's water resources. Some of the plans as in the Punjab for instance are irrigation projects pure and simple. Others have more purpose than one in view such as the production of electric power or the opening out of inland waterways for navigation and so on. But none of the projects so far formulated in India or Pakistan have either the sweep or the ambition of Roosevelt's enterprise in the Tennessee Valley in the early days of the New Deal, an enterprise in which engineers, architects, biologists, teachers, doctors and social workers worked together to recreate the whole life of a backward area.

Of all the projects for post-war development in India and Pakistan four are outstanding by reason of their size and ambition. They are the Damodar Project for southern Bihar and West Bengal; the Kosi Project for northern Bihar and Nepal; the Mahanadi Project for Orissa, C.P.; and last the Narbada-Tapti Project for C.P. and Bombay. (There is, of course, the Assam Project for the construction of 11 dams across the Brahmaputra but as the whole project is in a very nebulous condition it is not worth noticing here. Besides it has been planned on such an ambitious scale that it is estimated to cost over 50 crores while the budget of the Province is of the same dimensions as that of the City of Calcutta.)

The core of the plan in every case is a series of dams across the main course of the river for storing water, generating electric power, preventing periodical flooding, conserving the fertility of the soil and providing facilities for navigation. In the case of the Mahanadi Project, a further idea appears, the idea of rural uplift, of bringing a newer and a richer life into a backward area by providing the cultivator with model schools, houses and recreation centres.

Some of the areas selected for development in the country cut right across Provincial boundaries and inter-Provincial bodies have had to be set up, or quasi-autonomous organization on the lines of the T.V.A. had to be created by the Government of India as in the case of the Damodar Valley to prepare estimates and supervise construction.

It must be mentioned, however, that though the preliminary surveys and investigations are complete nowhere has work actually begun except once again on the Mahanadi Project where the Orissa Government have bought machinery and equipment worth about Rs. 25 lakhs to start with. When all the projects (big and small) are complete, which will be about 15 years India and Pakistan will have added 25 million acres to the existing cultivated area, 5 million kw. of electrical energy to the existing half a million kw. and produced extra food stuffs worth about 10 crores of rupees.

We shall now proceed to give a few facts about the more important irrigation projects undertaken by or under consideration of the various Provincial Governments.

THE BIG FIVE

Damodar Valley Project: On the Damodar River in south Bihar; 8 dams and 1 barrage; multi-purpose; irrigation, electric power, navigation, prevent soil erosion, afforestation, improve drainage, control malaria; location of barrage at Durgapore 15 miles from Raniganje from which two canals will take off, one on each side; capacity of reservoir 4.7 mln. acre ft.; will cultivate 760,000 acres of land; will generate 65,000 primary and 65,000 secondary kw. and another 150,000 from thermal generating plant linked up with it; cost 55 crores; plan worked out by Central Technical Power Board.

When the project is complete the *kharif* crop will increase to 400,000 tons of paddy and the *rabi*, now non-existent, will earn a gross income of 5 crores for the cultivator. The power generated will be used to develop the mineral resources of the area, and the resulting pools will make navigation possible from the head of the works at Ondal where the marshalling yard for Raniganj coal is situated right down to the Hooghly 30 miles above Calcutta. The Provincial Governments of Bihar and West Bengal have authorized the Central Government to set up a Damodar Valley Authority on the lines of the T.V.A.

Kosi Project: On the River Kosi in Nepal and north Bihar; 2 barrages: first barrage near Baraha Kshetra in Nepal; second near Nepal-Bihar border; multi-purpose; first dam 750 ft. high, capacity of reservoir 11 mln. acre ft. of water, will irrigate 1 mln. acres of land in Nepal, generate 1.8 mln. kw.; second dam: the highest in the world, will irrigate 2 mln. acres in Bihar; cost 85 to 95 crores; will take 10 to 15 years to build.

Survey work has just started, and when the project is complete navigation will be possible from the Kosi reservoir to the Ganga, which means that Nepal will be opened up and ships can pass from Calcutta right up to Nepal within a short distance of Khatmandu.

Mahanadi Project: On the River Mahanadi in Orissa; three dams as three separate units, Hirakud Dam, Tikarapara Dam, Naraj Dam, each with its own canal system and hydro-electric power installation, could be integrated later for development of valley as a whole; multi-purpose; together will cultivate 2½ mln. acres of land; Hirakud Dam to be constructed first, 9 mls. west of Sambalpur, 3½ mls. long, 125 ft. high, with 17 miles of low dykes on either side; capacity of 5.3 mln. acre ft.; will irrigate 800,000 acres of land in Sambalpur Dt.; will generate 350,000 k.w.; will cost 16 crores; 3 to 5 years to complete; work to start end of 1947; model villages, sanitary housing and anti-malarial measures, electric and water supply, schools, community centres, roads, cottage industries, dairy farms, fish culture; for dispossessed peasants land will be given instead of compensation in money.

Navigation will be possible from Hirakud right down to the sea 300 mls. away. The resulting electric power will be utilized to exploit manganese, iron, coal and bauxite deposits. A cement factory will also be set up.

Narmada-Tapti Project: On the Rivers Narmada and Tapti in C.P. and Bombay; still in the survey stage; 8 sites in C.P. selected; will cultivate 1 mln. acres in C.P. and 110,000 in the Surat and Broach Dts. of Bombay; will generate 1 mln. k.w. of electric power; will cost 200 crores; will take 15 years to complete; will be a source of great industrial wealth.

Ramapadsagar Project: On the River Godavari at Polavaram in the Presidency of Madras; one of the biggest; 150 ft. high, 200 ft. below foundation, 1¼ mls. long; capacity of 2 mln. acre ft; multi-purpose; will irrigate 2.3 mln. acres above delta; and produce 1 mln. tons of extra rice; will generate 100,000 kw. of electric power; will cost 80 crores; work will start at end of 1948 and take 20 years to complete.

SMALLER PROJECTS

Tungabhadra Dam: Work at Mallapuram in Bellari Dt. was started in 1945. This is a joint Madras-Hyderabad Project and work is being carried on in co-operation with the Nizam's Government. The dam will be 2,200 ft. long and 160 ft. high with a storage capacity of 2.6 mln. acre ft. When complete it will bring under cultivation an area of 300,000 acres of land and generate a considerable amount of electric power.

Besides Tungabhadra and Ramapadasagar the Government of Madras have plans for 130 smaller irrigation projects during 1947-48 in the Grow More Food Campaign which will bring under cultivation an area of 98,000 acres at a cost of Rs. 1,65,36,000. The Government of Madras have also under consideration a further four year programme of 170 irrigation schemes at a cost of 3 crores of rupees. This is exclusive of the Bhavani Project in Coimbatore Dt. and the Pennar Project at Gandikota in Cuddapa Dt.

Along with Madras we could group the plans for irrigation of the States of Mysore and Hyderabad. The most ambitious project of the Mysore Government is the Bhadra Reservoir near Lakhaballi in Kadur Dt. which is expected to make the State self-sufficient in food. The Bhadra Dam will be 320 ft. long. 185 ft. high with a storage capacity of 6125 mln. cubic ft. It will irrigate an area of 180,000 acres. The cost of the dam will be 888.45 lakhs.

Besides the Tungabhadra and Godavari, Hyderabad has several projects in hand of which the biggest is the Devnoor Project which will irrigate an area of 100,000 acres and generate 80,000 kw. of electric power. The cost of the project will be about 3½ crores. Preliminary surveys are being carried out.

Bombay: The Government of Bombay have five irrigation projects for Gujerat alone under consideration, estimates for which have been submitted. The Government, in fact, have a five-year programme for the Province as a whole which will cost them 9½ crores. In some of these projects the interests of States are involved and negotiations are in progress, for instance, with Baroda and Kolhapur. The five projects for Gujerat are Mahi (1½ crores), Watrak (75 lakhs), Meshwa (25 lakhs), Patas Dungri (20 lakhs) and Wardala (20 lakhs). Seven more projects are under contemplation which will cost 5 crores in all and which when complete will irrigate an area of 300,000 acres. When the larger Narmada-Tapti Project is also complete, it is calculated that 16 lakhs of acres in Gujerat out of the 30 which are now under cultivation will be irrigated by artificial means.

Belgaum Dt. will have the Daddi Dam on the Ghataprabha River to irrigate an area of 450,000 acres; Bijapur and Satara Dts. will have dams on the Rivers Koyna and Krishna to irrigate an area of 250,000 acres; and finally Nasik Dt. will have the Gangapur Dam on the river Godavari 8 miles north-west of Nasik. This last dam will cost 2 crores and will provide enough water to irrigate an area of 61,000 acres. Work will commence in a short time and the dam will take four years to complete.

Bengal: Before the partition the Government of Bengal had a triple project one on the river Tista, a second on the Ganga and a third on the Brahmaputra. The Tista Project still in the investigation stage contemplates building two dams, one at Gatikhola above Jaipalguri and the second a short distance below the first. The Project had a number of purposes in view such as better drainage, improved sanitation, soil conservation, fish culture, cheap navigation and so on. It was expected to generate 300,000 kw. of electric power and bring under cultivation an area of 1.5 mln. for *rabi*. The *kharif* crop alone was estimated to yield one million tons of paddy. It was also hoped that when the project was complete it would provide cheap transport for the forest wealth of the Darjeeling, Kalimpong and Sikkim hills. After the partition the fate of this triple project to develop large areas in northern, central and eastern parts of what was Bengal is probably in the balance.

But work on the other project called the Mor Reservoir Project has already started. This project contemplates the construction of a dam—on the river Moorakshy at Messenjone and a barrage near Suri in Birbhum Dt. The reservoir will have a capacity of 1 mln. acre ft. and irrigate an area of 600,000 acres of land. The scheme is estimated to cost over seven crores.

U. P.: A project in which the Governments of U.P., Bihar and the State of Rewa are interested is the Pipri Dam on the river Rihand, a tributary of the Son, in Mirzapur Dt. The scheme which is under preparation is a multi-purpose one which will not only provide water for irrigation but help in navigation and provide facilities for the exploitation of the mineral wealth of the area. The dam will be 600 ft. high and will form a lake 180 square miles

with a storage capacity of 9 mln. acre ft. of water. The dam will command an area of 600,000 acres for irrigation and produce electric power of 150,000 kw. The whole project will take six years to complete and will cost 16 crores of rupees. When it is complete a ship will be able to pass from Calcutta right into the heart of the Rewa State, a distance of 600 miles.

A second project which the U.P. Government have under contemplation is the Nayar Dam across the river Nayar near Marora in Garhwal Dt. The dam will be 600 ft. high and will have a storage capacity of 1.4 mln. acre ft. When complete it will generate primary power to the extent of 30,000 kw. and secondary power amounting to 70,000 kw. The estimated cost of the dam is 865 lakhs. A third project which is under contemplation of the U.P. Government is a dam across the Ramaganga river.

Punjab (E. and W.): The Punjab has been the classic home of irrigation projects of the modern type. The capital expenditure of the Punjab (East and West) on the major canals alone has been in the neighbourhood of 40 crores and the annual gross revenue has been about 6 crores. With the formal opening of the Thal Canal in January 1947 it may be said that the Punjab at any rate has reached a point when the water resources of its rivers have been utilized almost to the full. Development from now on must be along the difficult and expensive path of storage and pumping of sub-soil water by means of tube wells.

The Thal barrage which is situated at Daudkhel 3 miles from Kalabhag on the Indus in West Punjab will irrigate an area of 350,000 acres in the Dts. of Mianwali and Shahpur and produce 750,000 tons of food grain. With the opening of the Thal project the last available block of waste land in West Punjab has been brought into cultivation. The canals have been lined with concrete and the whole project has cost 2 crores of rupees.

For the water-logged parts of the Jhelum canal area 1,860 tube-wells are going to be constructed. The power for the operation of these wells will come from hydro-electric stations to be installed at Rasul by getting water drop from the upper to the lower Jhelum canal.

A scheme which is under investigation by the East Punjab Government is the Bhakra multi-purpose project. The dam will be 480 ft. high with a storage capacity of 3.5 mln. acre ft. and will command an area of about 4.5 mln. acres and generate 160,000 kw. of electric power. The project is estimated to cost 42 crores of rupees. The Government of Patiala State which can be linked up with East Punjab has also an irrigation project in view called the Dochi Project estimated to cost 5 crores.

In Sind which like the Punjab is well served by irrigation works two more dams are expected to be built one in Upper Sind and the other in Lower Sind. The Upper Sind barrage will be located at Gudu 90 miles above Sukkur. The total cultivable area commanded will be 2,323,600 acres while the estimated cost is about 12 crores. The Lower Sind barrage will be located at Hajipur. The total cultivable area commanded will be approximately 2,569,400 acres, while the estimated cost will be 12 crores.

Agriculture

THE agriculture of the sub-continent with its wide range of physical and climatological conditions, varies considerably in character and scope. There is scarcely any cultivated crop of the temperate, sub-temperate or tropical zone which cannot be grown in some part of this vast region from the warm humid coastlands to the perennially temperate altitudes of its mountain ranges.

The total area of cultivable land in the sub-continent is about 354 million acres, which is exclusive of a forest area of approximately 68 million acres. The total gross cropped area sown annually is roughly 245 million acres. Of this vast area, 198 million acres are under cereal and pulse crops of all kinds which supply food and fodder for a human population of 400 million and an animal population of 380 million head of cattle, sheep and goats.

In the sub-continent's agriculture, the dominant climatological factor is the monsoon and, in most parts of the country, the total annual rainfall is precipitated between the months of June and October. The winter and early summer months are generally dry and high temperatures prevail in the months of March to June, prior to the break of the monsoon rains. Thus the agricultural season is naturally divided into two main sub-divisions the Khariff season of the monsoon and the Rabi season of the cold weather. Each of these seasons has its own distinctive crops. The greater part of the Indo-Gangetic plain and the northern tracts of the Peninsula are served by the main monsoon which falls between June and October. During these months the average rainfall for the whole of the sub-continent is about 47 inches, varying from 15 (or less) to 50 inches in the main cultivated tracts. Rainfall in the cold weather season between December and March is generally not more than 2 to 4 inches. The bulk of the rainfall in the south of India, including most of the Madras Province and a large part of the territories of the States of Hyderabad and Mysore, is received from the north-east monsoon and falls during the period October to February.

SOILS

Four main soil groups can be recognised in the sub-continent, *viz.*, (1) the red soil derived from rocks of the Archæan system which characterizes Madras, Mysore and the south-east of Bombay and extend through the east of Hyderabad and the Central Provinces to Orissa, Chota Nagpur and the south of Bengal, (2) the black cotton or *regur* soils which overlie the Deccan tract and cover the greater part of Bombay, Berar and the western parts of the Central Provinces and Hyderabad with extensions into Central India and Bundelkand; the Madras *regur* soils though less typical are also important, (3) the great alluvial plains, agriculturally the most important tract in the sub-continent as well as the most extensive mainly the Indo-Gangetic plain embracing Sind, Northern Rajputana, most of the Punjab area, the plains of the United Provinces, most of Bihar and the Bengal area and half of Assam, and (4) the laterite soils which form a belt round the Peninsula and extend through East Bengal into Assam and Burma.

The increasing demands on the land from a constantly rising population have called forth greater attention to the question of more effective land utilisation. A considerable amount of scientific work is thus being done on all these groups to a greater or lesser extent throughout the sub-continent, both as regards their classification and their crop-producing power. Soil studies have been given a new orientation and have received fresh stimulus due to the concept of the "soil-profile" or entire vertical cut of the soil being taken as the unit of study instead of the superficial layer supporting vegetation.

Survey.—A notable instance of such work is the recent classification of the black cotton soils of the Bombay Canals and the investigations regarding their suitability for sugar cane crop. The importance of soil survey and soil-mapping by Genetic Methods is being gradually recognised in different parts of the country. In the Bombay Province such survey and mapping has been in progress in several sugar factory estates of the Bombay-Deccan since 1940 on a contract basis. By the end of March 1948, about 540,000 acres will have been surveyed and mapped showing soil types and other fertility factors will be completed, on the basis of which varietal, manurial and irrigational technique for maximising sugar production on economic limits will be worked out. A scheme for land utilisation survey for crop-planning of the Province as a part of Soil Conservation Research has been proposed for the maximum exploitation of the country's resources for making the Province self-supporting in respect of food, fodder and clothing.

At the Indian Agricultural Institute, Delhi, the collection of data on soil survey available in the various Provinces and States has now been completed after three years of work and will be shortly published. The important question of soil conservation and development is receiving greater attention and considerable work on both the aspects has been taken in hand, particularly in the Punjab area and in Bombay. The erosion survey carried over 34,000 acres in the scarcity areas of the Bombay Province has revealed that nearly 70 per cent. of the land has already been eroded.

Desert Soils.—In addition to the four main groups of Indian soils mentioned above, the desert soils of the sub-continent occupy a large tract in eastern Sind extending over the whole length of that Province, along the edge of the Indus alluvium, Rajputana and the south Punjab area of which the Thar—Rajputana desert—alone occupies an area of 40,000 square miles. Alkali soils also form an important group of Indian soils which are known as *reh* or *usar* in the United Provinces, *kalar* in Sind, *rakkar* and *thur* in the Punjab and *chopan* or *karl* in Bombay Province. Such soils are characterized by a high degree of impermeability and "stickiness" together with high alkalinity and frequent

presence of large excess of free salts. They are usually poor in nitrogen and humus and unsuitable for crop growing without previous reclamation. A considerable amount of working the reclamation of these soils has already been done in the Punjab area, Sind and Bombay which shows the possibility of bringing these unproductive lands back to cultivation. Forest soils occupy a large part of the sub-continent. Investigations on the nature of soil profiles of the Chaubatia Hill in U.P. and of the Kulu Forest in the Punjab area indicate that these soils belong to the Brown-Earth Podsol groups.

AGRICULTURAL EQUIPMENT

In the sub-continent farming is carried on with the minimum of capital and there is practically no outlay on buildings, fencing and agricultural machinery. The cultivators are for the most part illiterate and agricultural indebtedness is high and rates of interest on loans are heavy. During the past twenty years, much progress has been made by the co-operative credit movement in many provinces. In recent years, it was found necessary to supplement co-operative credit by the development of non-credit activities through multi-purpose societies and by organisation of purchase and sale societies, better farming societies, etc. Such societies have proved of great value to the cultivators and in combination with measures for debt redemption, etc., will contribute largely to improvement in the economic condition of the agriculturists. (*See article on 'The Co-operative Movement.'*)

Livestock.—Practically all cultivation in the sub-continent is done by bullocks and the efficiency and capacity of these in different districts varies considerably. The best types in common use are capable of handling what would be considered as light single-horse implements in Europe. Bullock power is also used for raising water from wells for field irrigation, for driving the chaff-cutter and the sugar-cane crusher and for treading out the grain in the threshing yard. In general, the Indian cultivator cares well for his draught bullocks which, in most cases, constitute the most important part of his moveable property.

Implements.—In general, cultivating implements are few and simple and remarkably well suited for the tillage operations for which they have been evolved. The ploughs are usually of wood, tipped with an iron or steel point, and stir rather than invert the soil. Iron ploughs are also extensively used in some districts. A heavy wooden beam is commonly employed to serve the combined purposes of roller, clod-crusher and soil-compactor. In the black cotton soil areas, the *bakhar*, a simple type of broad-bladed harrow, is in general use. In many Provinces, seed drills or seed tubes are utilised for drilling the crops in rows to facilitate inter-cultivation. In less advanced tracts, the seed is merely broadcast and ploughed into the soil. Practically no harvesting machinery is in use, the crops being cut or gathered by hand and threshed—in the case of grain crops—under the feet of bullocks. Cereal crops are winnowed by the agency of the wind although cheap mechanical winnowing machines, designed by agricultural engineers, are receiving attention from the more advanced cultivators.

With reference to the introduction of improved agricultural implements, this work is now being largely done by private business and agencies which are extending rapidly in the rural areas. Work on mechanical cultivation is still largely in an experimental stage though tractor ploughing has proved very effective in the eradication of deep-rooted weeds in the United Provinces, Bombay and certain States. One notable development of recent years in connection with agricultural implements is the large extent to which improved types are now being manufactured and sold by village craftsmen.

Land Development.—Considerable attention is paid in many areas of the country notably in Bombay and the Punjab area to land development measures designed to check erosion from torrential and excessive rainfall and to the preservation of soil and moisture, which are essential for the successful growing of crops. In Bombay a Land Development Section of the Agricultural Department was formed in the year 1943-44 and this has now been expanded into a separate Land Improvement Department on a permanent footing under a strong and expert staff. This Department is undertaking large scale projects of Land Improvements which include bunding or terracing of the cultivated lands and trenching and afforestation of uncultivable lands lying in the upper catchments or water-sheds—all on contour alignments. This provides labour for the scarcity or famine areas and will help to protect them from famine or scarcity in the future. The total acreage so far improved and protected in the Province is over six (6) lakhs of acres.

This Department has also a Dry Farming Section which attends to the biological part of soil conservation work and also the maintenance of the bunds or terraces. Dry Farming methods are introduced in all such areas which are improved by bunding. Experience gained during the last three years has demonstrated to the cultivators that terracing and dry farming give considerably increased yields both of grain and fodder. These beneficial effects tend to increase with time.

The original Bombay Land Improvement Schemes Act has now been considerably amended in the light of experience gained and is applied to several water-sheds.

CULTIVATION AND TILLAGE

The improvement of the ordinary cultivation and tillage methods in common use in the sub-continent offers a vast field for increasing the yields of field crops and, consequently, the profits of the agriculturists. In many parts cultivation is good but, particularly in the non-irrigated tracts and in areas liable to failure of rainfall, there is much room for improvement. The research work done on dry farming methods conducted under the auspices of the Indian Council of Agricultural Research points to the great benefits accruing from thorough cultivation including occasional ploughing and manuring, repeated harrowings and inter-culturings, wider spacing and lower seed rates.

The main object of tillage methods for *rabi*, i.e., for cold weather crops, is the conservation of soil moisture and the preparation of a good seed-bed to ensure germination of seeds. To achieve these objects, repeated harrowings are given which produce good surface mulch over a moist sub soil. The practice of drilling the crops with wider spacings permits inter-cultivation of the crops by bullock-implements and the use of low seed rates reduces the competition for moisture. For *kharif*, i.e., monsoon crops, the preliminary cultivation of the fields is less intensive. Dry farming researches so far done in the sub-continent deal mostly with cereal crops which are mostly erosion-permitting; and erosion-resisting crops like legumes have not been tried. Recently, these legumes, such as, groundnut, Matki (Phaseolus aconitifolius) and Hulga (Dolichos biflorus), have been found to be very successful in controlling erosion and run-off and in increasing crop yields when grown in strips on contours below the erosion-permitting crops. This technique, known as contour strip cropping, has now been taken up for detailed study in the Bombay Province.

Two economic factors which tend to keep down the standard of cultivation in many Provinces are the fragmentation and sub-division of holdings, resulting from Indian laws of inheritance, and certain systems of land tenure whereby the cultivator, as a tenant, has no interest in permanent improvement of his holding. In addition, the agriculturists rarely live on their lands but congregate in villages for mutual protection. Efforts are now being made in many Provinces to eliminate these factors, which contribute to a low standard of cultivation.

IRRIGATION

The chief characteristics of Indian rainfall are its unequal distribution throughout the country, seasonal irregularity of precipitation and liability to failure or partial deficiency in many tracts. The average annual rainfall for the whole country is about 45 inches and there is little variation from this average from year to year. But, within individual tracts, remarkably wide variations in total annual rainfall are found. At many recording stations, annual rainfall of less than half the average precipitation are not uncommon, and in cases of extreme drought, less than one quarter of average rainfall has been recorded in precarious tracts. Such tracts include practically the whole of the Punjab area and North-West Frontier Province, the United Provinces except the submontane regions, Sind, a large portion of Bihar, most of Madras and the Bombay Province, omitting the coastal belts, and portions of the Central Provinces. The canal system of the sub-continent is by far the largest in the world. Of the total cultivated area of 245 million acres, about 57 million acres are irrigated annually from one source or another. Of this huge area, 30 million acres are irrigated by canals, 14 million acres by wells and 13 million acres from tanks and other sources. Protective irrigation works have made agriculture stable instead of precarious in many districts.

(*For details see article on Irrigation*).

About one-quarter of the total irrigation of the country is got from lifting water from wells ranging in depth from a few feet to over fifty feet. Their numbers have greatly increased in recent years largely through Government advances for their construction. The recurring cost of this form of irrigation has, however, greatly increased owing to the high price of draught cattle and the increasing cost of their maintenance.

All agricultural departments are now giving increased attention to the better utilisation of underground water-supplies, existing wells being improved by boring and tube wells of large capacity installed and equipped with pumping machinery. In scarcity areas the large scale bunding operations undertaken by the Bombay Department of Agriculture will lead to the increase in the water-supply of wells. Efficient types of water lifts are rapidly replacing the old-fashioned *mhotsa*.

Tank irrigation is common in Central and Southern India. Large quantities of rain water are stored in lakes (or tanks) during the rainy seasons and distributed during the drier seasons of the year. Often the indirect effect of the tank in maintaining the sub-soil water level is as important as the direct irrigation.

Construction of temporary Bandharas across streams and small rivers after heavy monsoon period is over is also common in parts of Bombay and Madras Provinces for irrigation during the drier *rabi* period. The Government of Bombay has recently opened a separate Department for increasing such minor irrigation works throughout the Province.

Manures and Manuring.—The great bulk of Indian soils are deficient in organic matter. In other agricultural countries of the world, this want is usually met by the return of farmyard manure to the land or by the use of composts made from crop residues and similar waste organic materials. In India and Pakistan, however, cattle dung is largely utilised for village fuel but the practice of composting is now being rapidly developed in many areas. The cultivation of green manure crops is making headway, especially in the irrigated tracts, and many Provincial Governments allow concessions to encourage their extension. The use of certain oil-cakes, especially groundnut and castor cake, is on the increase and this method of manuring is now common with many irrigated crops. With regard to artificial fertilisers, nitrogenous organic manures, *e.g.*, ammonium sulphate and nitrate of soda, are being extended in use through the efforts of departmental and private agencies and the question of the manufacture of such manures is now receiving close attention of the Government of India and Provincial and State administrations. A factory for the manufacture of ammonium sulphate in India has been established at Sindhri in Bihar.

RICE

Rice is the most extensively grown crop in the sub-continent, and on an average, occupies about 28% of the total cultivated area. It preponderates in the wetter parts of the country *viz.*, East and West Bengal, Bihar and Orissa, and Madras. The area fluctuates slightly around 72 million acres and the yield is about 27 million tons. In 1941-42, total area under rice including Indian States was 73 million acres with a total yield of approximately 25 million tons. The crop requires for its proper maturing a moist climate with well assured rainfall. The cultivated varieties are numerous differing greatly in quality and in suitability for various conditions of soil and climate.

Rice is either broadcast, drilled or transplanted. Broadcast rice is grown generally on high lands of the paddy areas where moisture is less, and the crop is sown in the beginning of the monsoon with the help of the rain-water. Sprouted seed is also sown broadcast in standing water after the onset of the monsoons, particularly in the salt-land paddy areas.

For transplanted rice the seedlings are raised in the nursery generally located in a high lying portion of the field and the nursery is rubbed or burnt over with cowdung or brush wood and grass. The seedlings get ready for transplanting within 4-5 weeks after sowing. The soil is generally prepared after the arrival of the monsoon and is worked into a puddle before the seedlings are transplanted. The seedlings are planted either singly or in small bunches containing from 4 to 6 plants each and are simply pushed into the mud at distances of 6 to 9 inches apart. The rice-fields are kept more or less under water until the crop shows signs of ripening. The area under improved varieties of rice distributed by the agricultural departments is now over 4 million acres. As a result of various schemes for the intensification of research on rice in all the principal rice-growing provinces financed by the Indian Council of Agricultural Research improved varieties to suit different areas have been evolved and are being distributed now.

The sub-continent consumes more rice than it produces, the balance in the past having been provided almost entirely by Burma. **Imports in 1941-42 were 986,000 tons, mainly from Burma, Siam and French Indo-China.**

WHEAT

Wheat is grown widely throughout Northern India as a winter crop, the United Provinces and East and West Punjab supplying about two-thirds of the total area, and nearly three-quarters of the total outturn in the sub-continent. This crop occupies, on an average, about 10 per cent. of the total cultivated area in the country. The majority of the varieties grown belong to the species *Triticum vulgare*. Bombay mostly grows durum wheats in which a number of improved strains are evolved and are spreading rapidly. A new improved wheat, called Niphad-4, having the blood to durum, unigare and dicoceum wheat species has been recently evolved with exceedingly good baking quality. Indian wheats are generally white, red and amber coloured and are mostly classed as soft from a **commercial point of view. Most of the Indian wheats are soft weak wheats but there are some well-known Maccaroni wheats amongst them. The largest wheat acreage of recent years was that of 1933-34, namely, 36 million acres but the yield did not come up to the record harvest of 1939-40 which exceeded 10¼ million tons. Recent crops have averaged about 9 million tons per annum which is only slightly, if anything, above internal requirements.** With the development of irrigation from the Lloyd Barrage Canal in Sind and in the newer Punjab Canal Colonies a further increase in wheat production is certain. The crop is generally grown after a summer fallow and except in irrigated tracts, depends largely on the conservation of the soil moisture from the previous monsoon. On irrigated land 2 to 4 waterings are generally given. The crop is generally harvested in February to April and the threshing and winnowing go on up till the end of May. **The total area under improved varieties of wheat is now over 8 million acres. The Indian Council of Agricultural Research has appointed two Standing Committees to advise on problems connected** with rice and wheat. The rust epidemic causes great damage to the wheat crop and a comprehensive scheme to check this menace is being financed by the Government of India.

MILLETS

These constitute one of the most important groups of crops in the country, supplying food for the poorer classes and fodder for the cattle. The varieties vary greatly in quality, height and suitability to various climatic and soil conditions. Perhaps the two best known varieties are Jowar (*Sorghum vulgare*) the *great* millet, and Bajra the Bulrush millet (*Pennisetum typhoideum*) **which, between them, occupy about 50 million acres annually.**

In 1941-42, the total area under jowar and bajra in the sub-continent was 36 million acres excluding the States. Generally speaking the jowars require better land than the bajras and the distribution of the two crops follows the quality of the soil. Both the crops are generally sown in the beginning of the monsoon and so they require to be thoroughly weeded. It is often grown mixed with the several pulses especially *Arhar* (*Cajanus cajon*—pigeon pea) and other crops, and is commonly rotated with cotton. The subsidiary crops are harvested as they ripen either before the millet is harvested or afterwards. In some provinces like Bombay *rabi* juar is also an important crop.

Pulses.—Pulses are commonly **grown** throughout the sub-continent in great variety and form the backbone of agriculture, since even **the present moderate degree of soil fertility could not be maintained without leguminous rotations.** They are **a primary necessity in the food of a vegetarian population. The yields on the whole are fairly good, mixed cropping is common. The principal pulses are *Arhar* (*Cajanus cajon*), gram (*Cicer aristinum*), various species** of *Phaseolus* and *Pisum*. The Indian Council of Agricultural research is financing co-ordinated schemes with the object of evolving high-yielding disease-free and draught-resistant strains of millet and pulses. These schemes are in operation in various provinces and States.

COTTON

Cotton is one of the most important commercial crops in the sub-continent. The average area under cotton in the quinquennium ending 1938-39 was 24.6 million acres and the average yield 5.5 million bales of 400 lbs. each. During the five-year period ending 1944-45 the average annual acreage and yield decreased to about 20.4 million acres and 5.2 million bales respectively. In 1945-46 the estimated area and yield were 14.8 million acres and 3.4 million bales respectively. The ascertained area under improved varieties of cotton in 1945-46 was about 8.6 million acres. The consumption of Indian cotton in mills in India amounted to 3,871,000 bales in 1945-46. The principal export is of short staple cotton below 7/8" in staple but there is also in normal years an export of medium and long staple Indian cotton, of staple length 7/8" to 1-1/16", such as Punjab-American.

There is no Indian cotton belt; Bombay Province, the Punjab area, the Central Provinces and Berar, Madras Province, Sind and United Provinces and the States of Hyderabad and Baroda, all have important cotton tracts producing distinct types. Sowing and harvesting seasons are equally diverse, the former extending from May to December in different parts of the country and the latter from October to May and June.

Yields very greatly; in the best irrigated tracts the normal yield is about 200 lbs. of ginned cotton per acre, and yields much above this have been recorded, whilst in the poorest unirrigated tracts 60 lbs. per acre is a good crop. Of recent years, as the result of the work of the Agricultural Departments and the Indian Central Cotton Committee, the quality and yield of staple cottons have improved and also the yield and cleanliness of the produce from the short staple tracts.

The Cotton Transport Act, the Cotton Ginning and Pressing Factories Act, the Bombay Cotton Markets Act (now the Bombay Agricultural Produce Markets Act), the Central Provinces Cotton Markets Act, the Madras (Commercial Crops) Markets Act and the Punjab Agricultural Produce Markets Act have all been passed at the instance of the Committee and are doing much to check adulteration and promote better marketing. In certain provinces, legislation has been enacted, or is under consideration, with the aim of preventing the growing of very inferior varieties and of stopping certain malpractices which affect the quality and reputation of Indian cotton. Agricultural Departments have continued their campaign of cotton improvement apart from improvements in methods of cultivation.

SUGARCANE AND SUGAR

The Indian sub-continent which was, only a decade before, a large importer of sugar is now one of the most important sugarcane growing and sugar producing countries in the world. The area under sugarcane cultivation in 1946-47 was estimated to be 4,108,000 acres as against 4,004,000 acres in 1945-46 and 3,435,000 acres in 1932-33. The crop is mostly grown in the United Provinces, Bihar and Bombay Presidency; more than half the area being in the United Provinces. The seedling canes of high quality, mainly the production of Imperial Sugarcane Breeding Station, Coimbatore have now replaced the indigenous hard, thin canes. The total areas under improved varieties of cane in 1945-46 and 1944-45 were estimated to be 3,377,255 acres and 3,603,562 acres representing approximately 84.35 and 83.71 per cent. respectively of the total area.

With a view to improving and developing sugarcane in India the Indian Central Sugarcane Committee has sanctioned a sum of Rs. 53.75 lakhs under the five year development scheme submitted by the Government of Assam, Bihar, Bombay, the Central Provinces, Madras, Orissa and the United Provinces. An advance of Rs. 1,50,000 has also been promised to East Punjab. A high power sub-committee has also been formed to help and guide the Indian Central Sugarcane Committee in all matters of vital importance to the sugar industry and to ensure that research schemes are efficiently and expeditiously implemented.

OILSEEDS

The crops classified under the heading are chiefly groundnuts, linseed, sesamum and the cruciferous oilseeds (rape, mustard, etc.). Although oilseeds are subject to great fluctuation in price and the crops themselves are more or less precarious by nature, they cover an immense area. The Indian Council of Agricultural Research has been financing the co-ordination schemes on breeding, control of pests and diseases and storage in different Provinces and States. High-yielding strains have been evolved under these schemes and these are being popularized among the cultivators. Control measures for various diseases and pests embracing all oil seeds are recommended under the co-ordinated schemes. The work relating to oil seeds has now been taken over by the newly created Indian Central Oilseeds Committee.

The sub-continent has the largest area under groundnuts in the world. Madras ranks first, claiming more than 50 per cent. of the acreage and production, and is followed by Bombay and Hyderabad. The area under this crop in 1941-42 was 7 million acres. In that year the yield was approximately 3 million tons.

Linseed requires a deep and moist soil and is grown chiefly in the Central Provinces, Bihar and United Provinces. The crop is grown for seed and not for fibre and therefore, has developed a shorter and branching habit of growth. The yield varies from 400 to 500 lbs. per acre. It is grown chiefly for export. Since the outbreak of the Second World War, the area under this crop has fallen considerably owing to the stoppage of exports. The area under linseed was 3,348,000 acres with a yield of 361,000 tons in 1941-42.

Sesamum (Gingelly) is grown all over the sub-continent. In some places it is grown as a monsoon crop and in others as a winter crop. In 1941-42, it occupied an area of 4,145,000 acres with a yield of 414,000 tons.

The Cruciferous Oilseeds form an important group of crops in the north of the sub-continent **where they grow freely and attain a fair state of development. The area under rape and mustard, including an estimated figure for the area grown mixed with other crop is about 5½ to 7 million acres annually. Production in 1941-42 was 1,094,000 tons from an acreage of** 6,204,000 acres. **A large portion of the crop is crushed locally for domestic consumption.**

JUTE

Jute is one of the most important cash crops. The fibre is obtained from two species of annual plants called *Corchorus capsularis and Corchors Olitorius.*

Jute is grown in the alluvial soils of East Bengal (Pakistan), West Bengal, Bihar, Assam and Orissa. East Bengal contributing about 96 per cent. of the total acreage. In 1947-48 the acreage in India (West Bengal, Bihar, Assam

and Orissa) was 0.65 million acres and in Pakistan (East Bengal) 2 million acres, the output being 17 lakhs and 68 lakhs bales (one bale = 400 lb.) respectively for India and Pakistan. It is a rainy season of *kharif* crop and is sown broadcast during February to May on well prepared seedbeds. Two to three inches of rainfall during sowing and alternate periods of sunshine and moderate rainfall (about one or two inches every week) thereafter, seems ideal for a good growth of the crop. It responds well to weeding and thinning processes which are usually given 2 or 3 times during the growing season.

The plants often grow to a height of 12 feet or more. Four to five months after sowing when they are in flower the plants are cut close to the ground. Cut plants are tied up into bundles and steeped under water for retting. In 12 to 25 days, the retting is complete ; the fibre is then carefully separated out from the stalks, washed and dried. It is then ready for various commercial uses. The outturn of dry fibre of jute generaby varies from 12 to 25 mds. with an average of 15 md. per acre, depending upon soil fertility and other factors.

Quality in jute is judged by its strength, fineness, colour, lustre, length and uniformity. The types of goods ordinarily manufactured from jute fibre in India are hessians, sackings, canvas and tarpaulins ; certain 'specialities' for example, rugs and carpets, linoleum hessians, jute blankets, etc., are also made on a small scale. Since the commencement of the Second World War, however, jute has been put to many new lines of manufacture in India., *e.g.*, sand bags, union fabrics (jute-cotton), tents, hoodcloth, netting, cords, etc.

India and Pakistan together practically hold a monopoly of production of raw jute. Attempts have been made and are still being made in different parts of the world to grow jute but not with any degree of success.

Compulsory restrication of jute acreage in the Bengal area came into force in 1941. Total areas under the crop in India and Pakistan together during the years 1944, 1945 and 1946 were 2,103,955, 2,421,670 and 1,880,010 respectively, and the corresponding yields were 6,203,205, 7,991,070 and 5,550,465 bales respectively. The average area and the yield of the crop for a period of teu years ending in 1940 was 2,914,000 acres and 8,454,000 bales respectively.

The annual world consumption of jute during the period from 1933-1934 to 1944-1945 varied from 77 to 126 lakhs of bales of 400 lbs. each, the average being about 98 lakhs of bales. The jute trade of 1946-47 was restricted mainly on account of the short crop of that year.

TOBACCO

Tobacco is grown here and there all over the country chiefly, however, in the Bengal area, Bihar, Bombay, and Madras. Of the two varieties cultivated *Nicotiana Tabacum* is by far the more common. Maximum crops are obtained on deep and moist alluvium soils and a high standard of cultivation including liberal manuring is necessary. The seed is germinated in seed beds and the young plants are transplanted when a few inches high, great care being taken to shield them from the sun till they are well established. The crop is very carefully weeded and hoed. It is topped after attaining a height of say, 2 ft., and all suckers are removed. The crop ripens from February onwards and is cut just before the leaves become brittle. The greater part of the tobacco grown in the sub-continent is intended for *Hookah* smoking and is coarse and heavy in flavour. Lighter kinds are also produced for cigar and cigarette manufacture. Of recent years there have been important developments in the production, in commercial quantities of better quality cigarette tobacco both in Madras and in Bihar. The area under tobacco in the sub-continent in 1944-45 was 10,89,000 acres as against 981,000 acres in 1943-44. The total yield of dried leaf was 412,000 tons in 1944-45 as against 363,000 tons in the preceding year. Bombay is known for the production of a good quality of bidi tobacco.

LIVE-STOCK CENSUS

The report on the 5th quinquennial Census of live-stock in the sub-continent, taken in January 1940, shows that these were then excluding United Provinces, Bihar and Orissa, 110 million heads of bovine cattle, made up roughly of about 87 million heads of oxen and 22 million heads of buffaloes.

For draught purposes mainly cattle are used everywhere though male buffaloes are important as draught animals in the rice tracts and damper parts of the country. For dairy purposes, the buffalo is important, the milk yield being high and the percentage of butter fat considerably above that in cow's milk. The best known breeds are the Murrah buffaloes of the Punjab area, the Jafferabadi buffaloes of Kathiawar, and the Surti and Pandharpuri buffaloes of the Bombay Province. The cattle and buffalo population in the sub-continent is abnormally high amounting to over 60 per cent. of the human population. The spread of cultivation has diminished the grazing grounds, insufficient fodder crops are raised and many of the cattle are small, ill-fed and inefficient. Nevertheless the best Indian breeds have many merits. Of the draught types, the best known breeds are the Hissar (Punjab), Hansi (Punjab), Bhaganari (Baluchistan), Nellore (Madras), Amrit Mahal (Mysore), Kankrej (Gujarat), Kangayam (Madras), Kherigarh (U.P.), Malvi (C. I.), Khillar (Deccan), Nimar (East Khandesh), and Dangi (Konkan). The Dangi and Nimur breeds of the Bombay Province have the potentialities to be developed into dual purpose breeds. The Government of Bombay have established a Dangi Cattle Breeding Farm at Igatpuri (district Nasik) for improving the breed in that direction. Amongst the best milking breeds are: the Sahiwal (Punjab), the Gir (Kathiawar), and Scindi (Sind). Of the dual-purpose (*i.e.* draught and milk combined) the best known breeds are Hissar (Punjab), the Hariana (Punjab and U.P.), the Tharparkar (Sind), the Kankrej (Gujarat), and the Gir (Kathiawar).

On the Government cattle-breeding farms pedigree herds are being built up and from these selected bulls are issued, preferences being given to special breeding areas, to villages which undertake to exclude 'scrub' bulls and where serious efforts to maintain a good strain of cow are made. Once established such breeding areas rapidly produce a supply of superior bulls for general distribution and in this way the valuable bulls from Government herds are used to advantage. The premium bull system is also working well in some tracts.

IMPROVING QUALITY

The sub-continent possesses some very fine breeds of cattle, each breed being peculiarly suited to the area to which it is indigenous. To mention some, there is the heavy cast Kankrej breed in Gujarat, admirably suited to the sandy deep rutted roads found in this part. Then we have the Dangi or Kala Kheri born and bred in the hilly, heavy rainfall area of the Western Ghats. Rain and water logged conditions do not affect this breed ; indeed, the more the rain, the better it thrives. On the plateau of the Central Deccan, we have the Khillar, a light fast draught animal which thrives on very meagre pastures and is essentially suited to the hard stony in country which it is reared.

A good deal has been done for the improvement of cattle. The various Provinces have farms in which pedigree bulls are bred and reared. These are placed out in suitable villages on a premium system. In the Province of Bombay, Herd Registers are maintained for 8 of the breeds of the Province, shows are held annually so that progress is noticed in those areas in which such work has been undertaken. In addition, the Bombay Live-stock Improvement Act of 1933, known as the "Castration Act" which is intended to prevent promiscuous breeding by undesirable male stock in the villages has now been applied to 213 villages in the Province.

It has been estimated that the number of sheep in the sub-continent is in the neighbourhood of 4½ crores and that the total quantity of wool produced is 8¼ crores pounds annually. The production of wool per sheep varies greatly in different parts of the sub-contitnent. In the North-West Frontier Province, Baluchistan, Sind, the Punjab (E. and W.), United Provinces, Rajputana and Western India States, the annual production per sheep is estimated at between 1.1 lbs. and 4 lbs., while in the rest of the Provinces it does not exceed 1 lb. The average for the whole of the sub-continent is in neighbourhood of 1.9 lb. per sheep per year. This would indicate the vast scope for increasing wool production.

The improvement of finer qualities of wool has been engaging the attention of the Indian Council of Agricultural Research since 1933, and a systematic breeding of the five principal Indian breeds of sheep was undertaken in the Punjab area (Hissar), Madras (Hosur) and Bombay (Poona), and promising results achieved.

The breeding programme of the research stations is based on the evaluation of wool quality by the following standard methods of estimation of the different attributes by the wool fibre. The pedigreed stock bred at these stations is being spread in the rural areas under the Post-War Reconstruction programme undertaken by the different provinces.

DAIRYING

India and Pakistan are still far behind other countries in the matter of dairy industry, although many of the Provincial Governments have now been taking keen interest in its development. The main difficulty is the low milk productivity of the Indian dairy animal, which has to be improved by systematic and scientific methods of breeding, feeding and management. Factors such as the climatic conditions and the vastness of the country have, no doubt, been obstacles but, unless the individual dairy animal is improved and arrangements made to dispose of the milk economically, it would not be possible to put the dairy industry on sound footing.

Most of the provinces have now appointed special Dairy Development Officers for dealing with the problems effectively and, in the Province of Bombay, Government have been considering plans to improve dairying on co-operative lines as well as through private enterprise. For this the Province has been divided into zones such as : (*i*) the city areas, that is the areas within 30 to 40 miles radius of each town where milk will be produced on co-operative lines and supplied to cities, (*ii*) concentrated cattle breeding and milk producing areas where there are natural facilities for raising the dairy stock economically and where milk produced can be converted into products through co-operative creamaries, and (*iii*) the remaining areas where demands of milk would be met by producing milk locally.

If this is done it would be possible to breed more and better dairy animals in the villages and to supply milk to towns more efficiently and at cheaper rates.

The different Agricultural Colleges have been imparting instruction in Dairy Husbandry. They have been in many instances carrying out research in Dairy Science, although much of this work is being done at the Indian Dairy Research Institute at Bangalore. This Institute, in addition to research work, also trains students for Indian Dairy Diploma Course and a post-graduate course in Animal Husbandry and Dairying.

There is not a big market in the sub-continent for western dairy products, such as cream, butter, cheese, etc., although their demand is constantly growing. In the absence of more milk, however, and the small units of dairy farming, the Indian peasant manufactures small lots of 'Desi' butter ; Dehi, Ghee, etc., purely as a cottage industry.

ANIMAL HUSBANDRY

Details of the steps taken and progress made in the control of disease and improvement of stock are given in a biennial review of animal husbandry in India.

The control of contagious diseases of live-stock is carried out by the Civil Veterinary Departments in the Provinces and major States. The staffs of these departments are, for the most part, recruited from among the graduates of the Veterinary Colleges of which there are seven, *viz.*, one each at Lahore, Patna, Calcutta, Bombay, Muther (U.P.), Hyderabad (Deccan), and Madras. One more

college is proposed to be opened at Jabbulpore. Many of the colleges have now been affiliated to Universities and impart training up to the graduate standard, as against licentiate training which they have imparted uptill now. The chief research centre is the Indian Veterinary Research Institute at Mukteswar in the United Provinces and its branch at Izatnagar, near Bareilly. This institute is maintained by the Government of India and has recently been considerably expanded, the latest additions being a poultry research station and a nutrition institute and genetics section. A certain amount of research is also conducted at the Provincial Colleges.

In addition to research, the Imperial Veterinary Research Institute also manufactures large quantities of sera and vaccines for the use of the Provincial Departments in their fight against disease and until recently was the only manufacturing centre for these products. Serum institutes have, however, been opened in recent years at Madras and Bangalore, mainly for the manufacture of biological products for the use of the Madras and Mysore Civil Veterinary Departments respectively. Many Provinces are now opening their own vaccine and serum centres.

The chief diseases that the Civil Veterinary Departments have to deal with are glanders and surra in equines, and rinderpest, foot and mouth disease, hæmorrhagic septicæmia, black quarter and anthrax in ruminants while tuberculosis, Johne's disease and contagious abortion are assuming greater importance than in the past. Glanders and surra are both scheduled diseases under the Glanders and Fracy Act. Glanders is incurable but surra can now be successfully treated with Naganol. This disease (surra) also affects camels, cattle and dogs and in recent years its importance as a bovine disease has been more widely recognised.

Treatment of Diseases—Of the diseases of ruminants mentioned, all, with the exception of foot and mouth disease, can now be controlled either by the inoculation of protective sera or by vaccination.

The successful manufacture of anthrax "spore" vaccine at Mukteswar is another advance of great importance in the fight against live-stock disease.

Indian poultry are also subject to several contagious diseases. The dreaded "Ranikhet" disease is fairly wide-spread and its ravages have seriously interfered with the poultry industry. A chick-passaged vaccine has now been developed at the Indian Veterinary Research institute and trials conducted in the field have been very encouraging. Fowl pox and fowl cholera vaccines are available for the protection of poultry against these diseases.

The sub-continent is protected from foreign infection by the application of the Live-stock Importation Act at all ports at which the landing of animals is permitted.

In addition to their duties in connection with disease control, the Civil Veterinary Departments also conduct the treatment of animals in hospitals and dispensaries. The institutions are for the most part maintained by Local Boards with financial assistance from Government, the professional staff usually being provided by Government. In most Provinces, the Veterinary Dispensaries are now being taken over by Government.

AREA CULTIVATED AND UNCULTIVATED IN 1942-43 IN EACH PROVINCE

The Statistics given in the following pages are the latest available.

Provinces	Area according to survey	Deduct States	Net Area	
			According to survey	According to village papers
1	2	3	4	5
	Acres	Acres	Acres	Acres
Ajmer-Merwara ..	1,561,330	..	1,561,330	1,561,330
Assam	44,304,280	7,880,960	36,423,320	36,423,320 (a)
Bengal (E. and W.) ..	50,078,605	..	50,078,605	50,078,605
Bihar	44,327,205	..	44,327,205	44,327,205
Bombay	48,721,814	..	48,721,814	48,721,814
Central Provinces and Berar	63,087,360	..	63,087,360	63,078,046
Coorg	1,012,264	..	1,012,264	1,012,264
Delhi	370,611	..	370,611	370,611
Madras	79,930,649	..	79,930,649	80,011,546
North-West Frontier Province	8,437,594	..	8,437,594	8,576,541
Orissa	21,094,576	..	21,094,576	20,653,921
Punjab (E. and W.) ..	61,001,600	..	61,001,600	60,200,514
Sind	30,207,758	..	30,207,758	30,207,758
United Provinces ..	67,848,920	..	67,848,920	68,053,788
Total ..	521,984,566	7,880,960	514,103,606	513,277,263 (a)

(a) Includes an area of 844,800 acres of the newly constituted district of Tirap (Frontier Tract) for which details for cols. 1-6 are not available.

CLASSIFICATION OF AREA IN EACH PROVINCE IN 1942-43

Provinces	Forests	Not available for cultivation	Other uncultivated land excluding current fallow	Current fallows	Net area actually sown	Culturable area included in "other uncultivated land excluding current fallows"*
	1	2	3	4	5	6
	Acres	Acres	Acres	Acres	Acres	Acres
Ajmer-Merwara ..	46,981	628,752	251,528	194,469	439,600	..
Assam	4,311,846	4,577,400	17,975,114	1,869,360	6,844,800	..
Bengal (E. and W.)	4,575,724	8,352,274	6,124,307	4,662,600	26,363,700	902,498
Bombay	8,094,580	5,999,725	817,785	5,836,406	27,973,318	284,105
Central Provinces & Berar	15,835,097	4,873,014	13,961,243	4,137,962	24,270,730	4,974,697
Coorg	331,095	359,474	16,025	154,820	150,850	..
Delhi	..	83,002	63,564	9,599	214,446	..
Madras	13,468,365	14,116,144	11,754,090	9,348,567	31,324,380	..
North-West Frontier Province ..	352,932	2,667,951	2,819,056	373,739	2,362,863	..
Orissa	2,605,676	7,097,508	3,482,394	1,274,791	6,193,552	..
Punjab (E. and W.)	1,934,368	12,857,192	13,247,760	2,547,166	29,614,088	3,762,778
Sind	709,283	12,716,917	5,217,978	5,961,665	5,601,915	..
United Provinces ..	9,280,445	9,778,698	9,666,595	2,347,528	36,980,552	..
Total ..	68,153,277	90,579,824	91,889,153	45,882,545	215,927,664	9,924,078

*Figures given in this column represent areas definitely known to be culturable.

AREA UNDER DIFFERENT CROPS CULTIVATED IN 1942-43 IN EACH PROVINCE

Provinces	Food Grains				
	Rice	Wheat	Barley	Jowar or cholum (great millet)	Bajra or cimbu (spiked millet)
	Acres	Acres	Acres	Acres	Acres
Ajmer-Merwara	121	22,815	45,588	92,987	46,014
Assam	5,495,701	..	..	..	..
Bengal	23,293,900	178,600	135,600	10,700	1,200
Bihar	9,291,200	1,280,100	1,269,100	73,300	60,100
Bombay	2,112,872	1,329,512	16,151	7,403,047	5,283,044
Central Provinces and Berar	5,654,057	2,548,831	13,625	5,307,123	125,349
Coorg	88,367	..	..	..	..
Delhi	14	49,450	17,960	20,157	71,684
Madras	10,382,419	13,347	1,756	4,849,633	2,658,253
North-West Frontier Province	35,732	1,117,989	194,158	109,998	182,924
Orissa	5,035,378	4,005	360	37,637	4,799
Punjab	1,100,454	10,462,554	942,830	887,331	4,408,991
Sind	1,139,163	1,466,064	24,826	485,456	885,348
United Provinces	7,032,644	7,545,847	4,217,618	2,589,706	3,040,219
Total ..	70,662,022	26,014,114	6,879,572	21,867,075	16,767,925

Provinces	Food Grains				
	Ragi or marua (millet)	Maize	Gram (Pulse)	Other food grains and Pulses	Total Food Grains
	Acres	Acres	Acres	Acres	Acres
Ajmer-Merwara	27	69,732	(*b*) 26,330	110,361	413,975
Assam	..	434	..	273,950	5,770,085
Bengal (E. and W.) ..	6,400	122,200	427,900	1,684,100	25,860,600
Bihar	543,300	1,651,900	1,446,500	3,947,400	19,562,900
Bombay	622,577	169,893	424,548	3,166,833	20,528,477
Central Provinces and Berar	14,766	150,466	1,068,058	5,746,859	20,624,134
Coorg	3,211	2	..	1,351	92,931
Delhi	..	1,631	59,884	8,805	229,585
Madras	1,823,285	59,902	(*a*) 50,823	6,538,444	26,377,862
North-West Frontier Province	5	481,015	185,037	99,038	2,405,896
Orissa	254,732	39,410	17,472	693,644	6,087,437
Punjab (E. and W.) ..	33,476	1,301,334	4,833,216	1,520,326	25,490,512
Sind	199	3,138	359,762	284,024	4,647,980
United Provinces	265,328	2,433,360	6,079,512	6,626,817	39,831,051
Total ..	3,567,806	6,484,417	14,979,042	30,701,952	197,923,425

(*a*) Relates to Bengal gram. (*b*) Included under "Other food grains and pulses".

AREA UNDER DIFFERENT CROPS CULTIVATED IN 1942-43 IN EACH PROVINCE

Provinces	Oil-Seeds							
	Linseed	Sesamum (til or jinjili)	Rape and mustard	Ground-nut	Cocoa-nut	Castor	Other Oil-seeds	Total Oil-seeds
	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres
Ajmer-Merwara ..	150	18,553	110	..	..	..	..	18,813
Assam	17,791	24,330	342,906	..	..	8,587	..	393,614
Bengal (E. and W.) ..	157,400	172,100	884,700	3,400	13,100	200	28,400	1,259,300
Bihar	567,400	118,000	473,600	..	..	35,500	311,200	1,505,700
Bombay	56,314	195,334	12,102	1,264,428	29,197	48,857	469,918	2,076,150
Central Provinces and Berar	1,033,577	460,781	50,712	234,081	..	29,203	270,659	2,079,013
Coorg	..	..	..	..	..	..	..	..
Delhi	62	9	8,934	..	..	..	106	9,111
Madras	2,083	839,519	2,345	3,382,126	598,054	277,238	36,830	5,138,195
North-West Frontier Province	74	2,432	95,143	..	..	..	1,661	99,310
Orissa	5,603	110,858	26,441	13,019	28,425	19,230	86,197	289,773
Punjab (E. and W.) ..	36,443	84,000	874,027	44,539	..	199	3,101	1,042,309
Sind	10	8,946	420,225	2	25	3,698	3,593	436,499
United Provinces ..	150,794	264,269	189,930	116,461	..	10,706	29,702	761,862
Total ..	2,027,701	2,299,131	3,381,175	5,058,056	668,801	433,418	1,241,367	15,109,549

Provinces	Condiments and spices	Sugar		Fibres			
		Sugar-cane	Others*	Cotton	Jute	Others	Total fibres
	Acres	Acres	Acres	Acres	Acres	Acres	Acres
Ajmer-Merwara ..	3,922	426	..	12,143	..	50	12,193
Assam	..	44,524	..	31,736	320,510	..	352,246
Bengal (E. and W.) ..	191,200	302,600	61,600	80,200	2,704,100	54,000	2,838,300
Bihar	27,600	402,900	..	40,900	232,800	10,500	284,200
Bombay	213,194	105,655	1,224	2,833,970	..	79,517	2,913,487
Central Provinces and Berar	109 757	26,498	..	3,272,504	..	122,788	3,395,292
Coorg	9,595	4	..	..	..	..	..
Delhi	1,246	1,600	..	519	..	569	1,088
Madras	640,774	121,673	88,040	2,209,889	..	249,385	2,459,274
North-West Frontier Province	6,532	77,476	..	16,353	..	1,276	17,629
Orissa	20,947	33,662	811	8,605	23,505	22,086	54,196
Punjab (E. and W.) ..	72,795	446,988	..	2,319,567	..	46,651	2,366,218
Sind	3,463	7,229	216	699,488	..	298	699,786
United Provinces ..	129,282	1,864,766	..	311,486	6,356	282,654	600,496
Total ..	1,430,307	3,436,001	151,891	11,837,360	3,287,271	869,774	15,994,405

* Area under sugar-yielding plants other than sugarcane.

AREA UNDER IRRIGATION IN 1942-43 IN EACH PROVINCE

Provinces	AREA IRRIGATED					
	By Canals		By tanks	By wells	By other Sources	Total area Irrigated
	Government	Private				
	Acres	Acres	Acres	Acres	Acres	Acres
Ajmer-Merwara ..	229	199,248	27,901	91,988	119,889	439,255
Assam ..	(a) 3,346	..	1,070	34	611,243	615,693
Bengal (E. and W.)	287,065	247,417	826,292	47,202	1,886,683	3,294,659
Bihar ..	630,392	1,129,379	1,553,698	735,323	5,106,634	9,155,426
Bombay ..	302,352	59,116	154,558	625,118	1,168,341	2,309,485
Central Provinces & Berar ..	1,381,139	..	(a) 1,547	196,762	62,115	1,641,563
Coorg ..	..	..	..	..	1,620,016	1,620,016
Delhi ..	31,593	..	2,046	23,065	4,893	61,597
Madras ..	4,098,528	128,460	3,035,078	1,577,999	56,704	8,896,769
North-West Frontier Province ..	430,276	880,483	2,155	79,378	9,083,398	10,475,690
Orissa ..	375,208	55,899	447,264	21,467	961,952	1,861,790
Punjab (E. and W.)	12,109,550	454,504	37,517	3,862,368	729,090	17,193,029
Sind ..	4,289,846	13,306	42	19,437	162,590	4,485,221
United Provinces ..	3,842,649	26,784	11,662	5,559,799	1,628,926	11,069,820
Total ..	26,481,061	4,055,735	6,100,828	12,839,940	16,616,529	66,094,093
					5,601,915	
					11,266,899	

(a) Included under "Private canals".

AREA UNDER IRRIGATION IN 1942-43 IN EACH PROVINCE

Provinces	CROPS IRRIGATED*					
	Rice	Wheat	Barley	Jowar or cholum (great millet)	Bajri or cumbu (spiked millet)	
	Acres	Acres	Acres	Acres	Acres	Acres
Ajmer-Merwara ..	6	11,846	83,282	1,077	410	119,889
Assam ..	590,019	..	..	..	..	611,243
Bengal (E. and W.)	1,713,267	13,694	3,811	7,600	200	1,886,683
Bihar ..	3,069,417	342,208	233,656	6,701	1,549	5,106,634
Bombay ..	229,067	169,804	8,343	280,690	80,274	1,168,341
Central Provinces & Berar ..	1,388,063	74,829	1,915	2,450	2	1,641,563
Coorg ..	4,893	..	..	..	..	1,620,016
Delhi ..	7	25,347	4,139	1,003	413	4,893
Madras ..	8,067,272	5,976	2	467,427	319,284	56,704
North-West Frontier Province ..	35,684	381,077	63,610	19,556	11,270	8,896,769
Orissa ..	1,458,020	908				10,475,690
Punjab (E. and W.)	800,300	6,739,302				1,861,790
Sind ..	1,139,163	1,496,064	316,570	172,754	834,591	17,193,029
United Provinces ..	557,074	4,063,947	24,826	485,456	885,348	4,485,221
			2,317,219	66,519	12,511	11,069,820
Total ..	19,142,852	12,305,060	8,007,353	1,511,233	2,145,852	66,094,093

*Includes area irrigated at both harvests.

AREA UNDER IRRIGATION IN 1942-43 IN EACH PROVINCE

Provinces	CROPS IRRIGATED*						
	Maize	Other cereals and pulses	Sugarcane	Other food crops	Cotton	Other non-food crops	TOTAL
	Acres	Acres	Acres	Acres	Acres	Acres	Acres
Ajmer-Merwara	32,614	23,323	35	15,204	8,348	5,426	131,521
Assam	..	1,046	..	9,974	..	10,204	611,243
Bengal (E. and W.)	6,180	53,870	30,046	120,888	900	11,788	1,962,244
Bihar	185,367	876,492	140,050	207,269	2,011	102,084	5,166,834
Bombay	23,293	95,695	104,733	167,341	13,345	152,566	1,345,811
Central Provinces and Berar ..	213	14,551	23,576	109,344	525	4,548	1,620,016
Coorg	..	..	..	..	..	..	4,893
Delhi	206	4,971	1,585	5,622	386	13,025	56,704
Madras	12,345	1,090,948	116,201	302,163	301,586	558,854	11,242,058
North-West Frontier Province ..	273,933	34,640	77,383	37,964	12,479	134,723	1,082,319
Orissa	1,315	79,645	25,318	58,436	507	14,065	1,638,212
Punjab (E. and W.)	576,686	1,649,293	366,491	331,063	2,170,828	3,811,950	16,859,828
Sind	3,138	643,986	7,229	61,742	699,488	732,225	6,148,665
United Provinces	121,227	2,531,732	1,358,537	388,110	155,585	495,403	12,057,864
Total ..	1,236,517	7,100,192	2,251,184	1,815,120	3,365,988	6,046,861	59,928,212

*Includes area irrigated at both harvests.

AREA UNDER DIFFERENT CROPS CULTIVATED IN 1942-43 IN EACH PROVINCE

Provinces	Dyes and Tanning materials		Drugs and Narcotics					Fodder Crops
	Indigo	Others	Opium	Tea	Coffee	Tobacco	Other Drugs & Narcotics *	
	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres
Ajmer-Merwara ..	..	..	..	..	...	62	..	8,8
Assam	..	..	..	440,917	..	19,562	..	14,60
Bengal (E. and W.) ..	..	..	..	199,900	..	303,900	4,500	137,90
Bihar	2,100	..	..	4,100	..	114,100	..	45,64
Bombay	6	16	..	5	5	127,785	27,677	2,554,
Central Provinces and Berar	1	76	..	..	..	7,502	522	468,9
Coorg	..	..	..	415	38,692	4	410	..
Delhi	..	14	..	..	..	1,080	..	36,27
Madras	40,756	2,435	..	77,914	61,157	284,787	152,365	372,84
North-West Frontier Province	45	110	..	..	..	12,631	..	138,807
Orissa	1	775	..	..	130	29,864	774	16,187
Punjab (E. and W.) ..	9,512	20,934	1,819	9,399	...	70,507	894	4,988,393
Sind	..	232	..	..	..	3,385	95	219,316
United Provinces ..	2,751	229	29,985	6,468	..	78,009	3,010	1,604,218
Total ..	55,172	24,821	31,804	739,118	99,984	1,053,178	190,247	10,606,407

*Includes Cinchona and Indian hemp also.

AREA UNDER DIFFERENT CROPS CULTIVATED IN 1942-43 IN EACH PROVINCE

Provinces	Fruits and Vegetables including root crops	Miscellaneous Crops		Total area sown	Deduct area sown more than once	Net area sown
		Food	Non-food			
	Acres	Acres	Acres	Acres	Acres	Acres
Ajmer-Merwara	815	30,665	20,838	510,582	70,982	439,600
Assam	635,179	(a)	158,377	7,829,134	984,334	6,844,800
Bengal (E. and W.) ..	902,900	248,500	93,600	32,404,800	6,041,100	26,363,700
Bihar	324,400	510,300	250,200	23,034,100	5,441,200	17,592,900
Bombay	205,640	2,308	6,567	28,762,576	789,258	27,973,318
Central Provinces and Berar	158,470	3,055	616	26,873,920	2,603,190	24,270,730
Coorg	8,799	..	..	150,850	..	150,850
Delhi	6,101	471	202	286,772	72,326	214,446
Madras	741,002	38,100	143,024	36,740,203	5,415,823	31,324,380
North-West Frontier Province	37,858	12,587	667	2,809,548	446,685	2,362,863
Orissa	106,563	76,248	111,093	6,828,461	634,909	6,193,552
Punjab (E. and W.) ..	323,875	129,511	15,015	34,988,681	5,374,593	29,614,088
Sind	56,065	1,998	72,401	6,148,665	546,750	5,601,915
United Provinces	618,026	281,254	18,106	45,829,513	8,848,991	36,980,522
TOTAL ..	4,125,693	1,334,997	890,706	253,197,805	37,270,141	215,927,664

(a) Included under "Miscellaneous non-food crops".

AGRICULTURAL STATISTICS—(*Figures in thousands of acres.*)

	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.*	1940-41.*	1941-42.*	1942-43.
Area by professional survey ..	512,190	512,212	511,512	511,964	511,794	512,664	512,702	512,923	512,995	514,104
Area according to village papers ..	511,722	511,745	511,022	511,484	511,302	511,877	511,902	512,074	512,127	513,277†
Area under forest	66,008	67,029	67,333	67,164	68,001	68,184	68,112	68,280	68,366	68,153
Area not available for cultivation.	92,947	92,820	92,882	93,535	92,402	91,811	89,314	86,718	91,093	90,580
Other uncultivated land excluding current fallows	93,872	94,581	93,967	92,230	91,969	94,180	97,188	97,860	92,230	91,889
Fallow land	43,988	48,498	47,181	44,836	45,437	48,802	47,328	45,253	47,149	45,882
Net area sown	214,007	208,817	209,709	213,719	213,493	209,400	209,960	213,289	213,289	215,928
Irrigated area	48,946	49,048	49,881	50,158	52,833	53,662	55,077	56,789	56,750	55,734
Area under Food-crops—										
Rice	67,504	66,832	67,386	69,044	69,455	69,918	70,101	68,849	69,405	70,662
Wheat	27,556	25,608	25,089	25,189	26,633	26,781	26,128	28,446	26,093	30,014
Barley	6,724	6,587	6,178	6,531	6,911	6,200	6,101	6,328	6,587	6,880
Jowar	20,807	21,231	20,986	23,481	20,702	20,833	21,677	21,249	21,970	21,867
Bajra	13,138	13,102	13,069	11,451	12,498	12,776	13,362	14,085	14,183	16,768
Ragi	3,732	3,738	3,585	3,585	3,475	3,491	3,408	3,507	3,493	3,567
Maize	5,837	5,944	5,968	5,742	5,633	5,722	5,766	5,730	5,622	6,484
Gram	16,335	13,472	14,554	15,532	13,662	11,683	11,690	12,707	12,744	14,979
Other food-grains and pulses.	20,028	29,429	28,831	28,791	28,393	28,853	28,817	28,247	29,033	30,702
Total Food-grains ..	191,661	185,943	185,595	189,346	186,762	186,257	187,050	187,148	189,140	197,923
Sugar	3,311	3,462	3,976	4,382	3,859	3,154	3,629	4,562	3,497	3,588
Other food-crops (a)	6,820	7,336	7,124	7,038	6,701	6,760	6,772	6,736	6,791	6,891
Total Food-crops ..	201,792	196,741	196,695	200,766	197,322	196,171	197,451	198,446	199,428	208,402

* Figures for 1939-40, 1940-41 and 1941-42 are subject to revision.

(a) Condiments and spices, fruit and vegetables and miscellaneous food-crops.

† Includes an area of 844,800 acres of the newly constituted district of Tirap (Frontier Tract) in Assam, for which details are not available.

AGRICULTURAL STATISTICS—(*Figures in thousands of acres.*)

	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.*	1940-41.*	1941-42.*	1942-43.
Area under non-food crops—										
Linseed	2,067	2,127	2,121	2,342	2,489	2,478	2,438	2,326	2,015	2,028
Sesamum (til or jinjili) ..	2,577	1,954	2,144	2,288	2,438	2,421	2,198	2,216	2,201	2,299
Rape and Mustard	3,317	2,851	2,916	3,313	3,001	2,977	3,538	3,685	3,303	3,381
Other Oilseeds	7,540	5,525	6,269	7,622	9,057	8,311	8,120	8,474	6,987	7,402
Total Oilseeds ..	15,501	12,457	13,450	15,565	16,985	16,187	16,294	16,701	14,506	15,110
Area under—										
Cotton	14,054	14,028	15,242	14,839	15,359	13,887	13,344	14,083	14,764	11,837
Jute	2,494	2,476	1,936	2,540	2,847	3,125	3,119	4,296	2,111	3,287
Other fibres	632	625	769	759	738	714	775	831	841	870
Indigo	42	60	39	43	38	39	37	66	51	55
Opium	18	10	10	10	9	10	7	6	18	32
Coffee	95	96	98	98	98	96	95	96	100	100
Tea	724	728	731	738	739	737	738	739	741	739
Tobacco	983	1,151	1,121	1,048	1,138	1,155	1,181	1,126	1,197	1,053
Fodder crops	9,972	10,079	10,544	10,573	10,411	10,371	10,467	10,466	10,358	10,607
Other non-food-crops *.. ..	1,552	1,534	1,163	1,213	1,179	1,092	1,067	1,128	1,047	1,106
Total non-food-crops ..	46,067	43,244	45,103	47,426	49,541	47,413	47,124	49,538	45,734	44,796
Total food & non-food-crops ..	—	—	—	—	—	—	—	247,984	245,162	253,198

STATEMENT SHOWING YIELD OF PRINCIPAL CROPS.

(*Source:*—Estimates of Area and Yield of Principal Crops, 1940-41.)

Crop	Yields in.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.‡	1938-39.‡	1939-40.‡	1940-41.	1941-42.
Yield in thousands of—												
Rice	*tons.*	26,201	25,730	25,719	23,209	27,824	26,699	23,969	25,364	25,734	22,000	25,021
Wheat	,,	9,455	9,370	9,729	9,434	9,752	10,764	9,963	10,752	10,767	10,027	10,037
Coffee	*lbs.*	33,037	34,601	32,776	41,172	34,045	33,516	40,110	@	34,822	31,442	33,709
Tea¶	,,	433,669	383,674	399,251	394,429	395,181	430,250	451,861	452,596	452,596	463,881	501,087
Cotton	400 *lb. bales.*	4,618	5,057	4,797	5,867	6,234	5,722	5,051	4,909	4,909	6,080	6,223
Jute¶	,,	7,987	8,500	7,215	9,611	8,656	6,819	9,738	12,547	13,172	5,460	9,047
Linseed	*tons.*	406	376	420	388	420	461	442	466	466	434	361
Rape and Mustard ..	,,	1,042	943	900	957	964	1,021	923	1,120	1,116	1,101	1,087
Sesamum (til)	,,	486	474	352	413	439	405	396	416	415	433	414
Groundnut	,,	2,846	3,186	1,740	2,114	2,714	3,501	3,219	3,148	3,165	3,702	2,545
Castor seed	,,	151	143	105	121	128	104	111	97	97	105	93
Indigo	*cwt.*	11	8	10	7	7	7	6	5	5	11	8
Cane-sugar (Gur) ..	*tons.*	4,676	4,896	5,140	5,931	6,476	5,403	3,387	4,590	4,661	5,803	4,376
Rubber ¶	*lbs.*	1,803	5,048	26,443	27,554	30,448	32,297	31,066	31,391	31,391	34,397	35,758

* Figures for 1939-40, 1940-41 and 1941-42 are subject to revision.
@ Figures not yet available.
Note.—The acreage of crops given in this table is for what was British India only, but the yield includes the crops in certain Indian States also.
¶ The statistics of the production of Tea, Jute and Rubber are for calendar years. ‡ Exclusive of Burma.

Improvement of Agricultural Marketing

IN view of the importance of agricultural marketing as an aid to the general economic recovery of the country, the Government of India decided to give effect to the recommendations made by the Royal Commission on Agriculture and generally endorsed by the Central Banking Enquiry Committee regarding marketing surveys. After consultation with Provincial Governments, it was decided that the first step should be the appointment of a highly qualified and experienced marketing expert with practical knowledge of agricultural marketing in other countries.

Directorate—In accordance with this decision, the office of the Agricultural Marketing Adviser to the Government of India (recently redesignated as Directorate of Marketing and Inspection) was constituted with effect from 1st January, 1935, at Delhi, with Mr. A. M. Levingstone as the first Agricultural Marketing Adviser. After more than six years of useful activities in India, he reverted in 1941 to the Ministry of Agriculture of His Majesty's Government in the United Kingdom. The present incumbent of the post is Dr. T. G. Shirname, M.Ag., Ph.D. (Wales), F.S.S.F.R. Econs. (Lond).

The name of the office has recently been changed into "Directorate of Marketing and Inspection", and it has now taken over all the functions of the Directorate of Inspection of the Ministry of Food.

The Agricultural Marketing Adviser to the Government of India is assisted by a Deputy and this post is at present held by Dr. B. C. Sen, D.Sc. The technical gazetted staff consists of 1 Supervising Officer (Grading Stations) and 15 Assistant Marketing Officers. In addition, the Agricultural Marketing Adviser is assisted in the quality control inspection work for internal and for export trade under the Agricultural Produce (Grading and Marking) Act, 1937, by 2 Chief Inspectors and 20 Inspectors. Apart from the large subordinate personnel engaged on quality control work.

With the help of suitable subsidies from the Indian Council of Agricultural Research, the Provincial Governments established similar organisations in their respective areas and have, in some cases, further added to their staffs to meet the growing demand for developmental work of a practical nature. Certain leading Indian States have also co-operated by appointing full time officers in their States and over 200 States have nominated officers to deal with marketing questions. In Provinces and States which have no Senior Marketing Officers the Director of Agriculture supervises the work of the marketing section. The Central Marketing staff are responsible for the survey work in a large number of States which do not have staff of their own. They also have to advise and assist the local marketing staffs in carrying out their work.

All-India marketing survey reports, in respect of wheat, linseed, eggs, tobacco, grapes, coffee, potatoes, milk (second edition), groundnuts, rice, hides, sugar, citrus fruits markets and fairs, co-operative marketing, lac, skins, coconuts, gram, bananas, cashewnuts, barley, sheep and goats, fish, cattle, wool and hair, castor seed have been published while the reports on ghee and other milk products, rape seed, mustard and toria, stone and small fruits and the supplement to the wheat report which brings the data and information given in the report published in 1938 up-to-date are in the press. The report on some other commodities like maize and millets, sann hemp, sesamum and niger seed, meat, poultry, mangoes, pulses, fibres and chillies are in preparation.

Reports—'A Handbook on the Quality of Indian Wool' which is intended to serve as a guide to wool trade and persons interested in wool and a 'Preliminary Guide to Indian Fish, Fisheries and Methods of Fishing and Curing, have also been published.

During the year 1943, at the instance of the Government of India, rapid marketing surveys were also conducted in respect of (i) certain English vegetables (peas, beans, cabbage, cauliflower, tomatoes and carrots) and certain important pulses; (ii) bones and bonemeal; and (iii) India's requirements of agricultural implements and machinery and the relevant reports were submitted to Government. In 1944, the Directorate similarly carried out a rapid survey of milk production and distribution in Delhi Province in connection with a scheme for the supply of milk to Government servants in Delhi and New Delhi and submitted the report to Government. In 1945 a rapid survey on Cardamoms was carried out and the report thereon is at present in the press. A similar survey was carried out on Arecanuts in 1945-46 and the report is in the press.

Hitherto, the All-India marketing survey reports have dealt with the problem as it related to the entire undivided India. In fact, the earlier reports had included Burma as well. With the partition of the country all these reports have to be revised and brought up-to-date for the Dominion of India. To begin with it is proposed to revise forthwith the reports on rice, groundnuts and milk.

Surveys—Surveys are in progress in Provinces and States on several commodities such as

MARKETING SCHEME

"The Marketing Scheme was originally sanctioned for a period of five years and the organisation was given the twofold task of (i) carrying out marketing surveys and publishing reports describing in detail the present system of marketing of agricultural and animal husbandry products with recommendations regarding the lines of future improvement and (ii) drawing up suitable grade specifications after examining chemical, physical and other commercial characteristics of market samples of such commodities and testing their working under practical conditions.

cotton and safflower seed; turmeric, pepper and ginger; animal fats and by-products, dried fruits and nuts, melons and water-melons, fruit and vegetable products, root vegetables, bulb and cole crops and honey and bees wax. The relevant marketing survey reports on the above commodities will be issued as soon as the investigation work is complete.

Arrangements have also been made to issue abridged editions of marketing survey reports in Hindustani for the use of the general public. The translation of abridged reports on milk, co-operative marketing and potatoes has been completed.

Storage and Transport—A report on cold storage and transport of perishable produce in Delhi Province was published in 1937. With a view to studying the commercial possibilities of cold storage transport of perishable products like fruits, etc., certain refrigerated transport trials were conducted during 1940-41 on two N.W.R. cold storage wagons. All-India survey work on cold storage was also carried out in part during that period. In view, however, of the recent transport difficulties and the consequent shortage of wagons, the experiment and survey on cold storage has had to be postponed for the present. A separate Directorate of Storage and Plant Protection has now been set up by the Ministry of Agriculture to take up immediately on more intensive scale work on ordinary and cold storage construction and refrigerated transport.

GRADING AND MARKING

In dicussing steps which might be taken to improve the general level of quality, the Royal Commission thought that organised trade associations in India could give great assistance in applying effective pressure to secure improved quality from the producers. This view was fully borne out by the preliminary marketing surveys and two general lines of action were decided upon first, the physical grading and packing of commodities such as fruits, eggs, etc., on the basis of statutory standards and, secondly, the standardisation of contract terms for staples such as cereals and oilseeds. The former involved legislation and the Agricultural Produce (Grading and Marking) Act, 1937, was passed in February 1937, for defining standards of quality and methods of marking in respect of prescribed grade designations applied to schedule products.

As a result of consultation with provincial governments and representative trade and manufacturing interests, further commodities were added to the schedule to the Act, which now includes fruits, vegetables, eggs, dairy produce, tobacco, coffee, hides and skins, fruit products, *atta*, oilseeds, vegetable oils (including hydrogenated oils and vegetable fats), cotton, rice, lac, wheat, sann hemp, sugar-cane gur (jaggery), myrobalans and *bura*. The grading and marking rules in respect of most of these commodities have been duly prepared and notified. Tentative grade specifications and rules for several varieties of rice and fruits have also been drawn. Several States have adopted similar legislation and are applying the AGMARK to the commodities graded in their areas.

The development of trading on the basis of the standard methods of grading is definitely "catching on". In the early stages experimental grading stations are operated on the basis of provisional standards; subsequently the process of grading and marking is done commercially on a voluntary basis by packers holding a Certificate of Authorisation issued by the Agricultural Marketing Adviser. The authorised packer may be the primary producer or co-operative society or an association of primary producers, village collectors and processors or the individual larger packer or manufacturer holding a key position in the process of distribution.

Standardised Grading—"By the close of the year 1946, the standardised grading and marking of the many commodities referred to above was being carried out commercially by as many as 513 packers. During 1946 alone, more than Rupees 12 crores worth of produce were sold under the Agmark as compared with about Rupees 7 crores in the previous year as per details below:—

Commodity	*Value of quantity graded*	
	1945	1946
Ghee	4,76,37,001	5,65,85,078
Butter	40,62,768	40,46,780
Edible Oils ..	48,85,916	77,71,575
Hides	9,42,292	10,09,050
Eggs	17,41,335	7,96,113
Tobacco	33,08,801	4,06,95,966
Sugar-cane gur ..	49,011	66,955
Bura	446	—
Cotton	40,55,041	40,19,246
Sann Hemp ..	46,92,000	51,25,200
Fruits	2,14,765	2,18,806
Fruit Products ..	1,38,895	—
Total ..	7,31,28,271	12,03,34,802

It will incidentally be seen from the above statement that in the case of a majority of commodities the grading scheme has held its own satisfactorily in spite of the abnormal conditions like scarcity, transport, movement and control restrictions. Certain commodities like rice, atta and bura could not be graded during 1946. Fruit products are now not graded under the Agmark, as their quality as been standardised under the Fruit Product Control Order, 1946. The value of eggs graded declined. The number of ghee grading stations increased considerably in the United Provinces from 1944 onwards as a result of a decision of the Provincial Government to ban all exports of ghee out of the province except for a limited quantity of Agmark graded ghee for civilian consumption in deficit areas like Bengal and Bombay.

At present, the grading of ghee is most popular in the United provinces and Bihar among the Provinces and in the Kathiawar States like Porbandar, Junagadh, Nawanagar, Gwalior and Patiala. Recently, the Government of Madras who had so far banned the grading of ghee under the Agmark in the province have relaxed the ban and it is hoped that along the grading of this commodity would be extended to this Province.

Compulsory Grading—Sometime in 1944, the United Province Government also fixed higher prices for Agmark graded mustard oil as against the ungraded oil. The grading output of this commodity, therefore, recorded a certain amount of increase but as such a premium for the graded commodity was not reflected in the price structure allowed to mustard oil at Calcutta with imports of the bulk of the oil from the United Provinces were directed, the increase in the graded output has not been quite sustained.

The Egg Grading and Marking Rules were further amended reducing the number of grades from six to four in order to facilitate rapid marketing. That the advantages of grading marketable produce are being appreciated all over the country has been recently exemplified by the introduction of a scheme of compulsory grading of eggs by the Mysore city muncipality within its jurisdiction. An interesting experiment for marking the date of grading on the shell of graded eggs was initiated at Delhi and was attended with a fair amount of success. It has however been recognised that such a measure could be practised with advantage only at the stage where the graded eggs are sold out to the consumers. It has accordingly been decided only to pursuade egg graders who import eggs for grading to adopt the principle as far as possible.

Fruit, Vegetables—Staples like rice and atta are not graded at present on account of their being subjected to rationing and controlled distribution. Towards the close of 1943 an experiment was initiated in Madras Province to grade rice according to *ad hoc* war quality specifications and to link up such grading with the activities of the local Civil Supplies Department. The scheme expanded considerably but had to be closed down towards the close of 1944 due to low arrivals in the market of good quality rice. The Department also decided recently to abandon the atta grading scheme as it was not considered to be of direct benefit to the producers. The view has generally been adopted that as far as possible the grading of commodities, the quality of which could not be verified by definite chemical tests, should not be allowed to expand on any considerable scale. An exception has, however, been made in regard to commodities like fruits and vegetables, sugar cane gur and bura, when graded by producers' organisations only. The task of assisting the formation of such organisations is also being pursued vigorously.

Special mention should be made here of the scheme for the grading and marking of sann hemp introduced towards the close of 1942. The scheme was drawn up as a result of complaints received from the Hemp Controller in the United Kingdom regarding the low quality of exports of hemp from India. The scheme follows the general lines of all other grading schemes under the Agmark in that grading is done by authorised packers holding certificates of authorisation issued by the Agricultural Marketing Adviser to the Government of India. The Government of India have, by a notification under the Sea Customs Act, prohibited the export of sann hemp not graded under the Agricultural Produce (Grading and Marking) Act, 1937. In order to ensure that grading is done correctly and in accordance with the Act and the Rules, a special inspectorate staff consisting of one Chief Inspector and 8 Inspectors (including 3 Asstt. Marketing Officers temporarily diverted to work as Inspectors) has been appointed at stations at Shiupur (Benares), Calcutta, Vizianagram and Bombay. The major portion of the cost of this staff is recovered from the trade by means of a charge of twelve annas per bale. The Vice-President of the London Hemp Association visited India towards the close of 1944 and discussed the scheme with the Agricultural Marketing Adviser and the Inspectorate staff.

As a result of these discussions and the decisions arrived at the various Conferences held with the trade, certain modifications have been made in the Sann Hemp Grading and Marking Rules, 1942 so as to bring about improvement in the quality of the exported hemp and to establish a proper and acceptable correlation between the grades represented by private trade marks and the corresponding grades under the Agmark of Sann Hemp exported out of India. The Department generally takes the advice of importers abroad and the exporters in the country before making any such modification in the scheme.

Tobacco Grading—In the beginning of 1944 a conference of tobacco interests convened at Guntur decided that the quality of exports of all types of tobacco from India should be controlled and that no tobacco should be exported on consignment account unless it conformed to Agmark specifications. Accordingly, early in 1945, the Central Government banned under S.19 of the Sea Customs Act, the export of flue-cured Virginia, sun-cured Virginia, sun-cured Natu and Motihari tobaccos to a foreign country other than the U.K., unless it was graded under the Tobacco Grading and Marking Rules, and certified as such by the Inspectors appointed for the purpose. They also sanctioned the posts of one Chief Inspector and 8 Inspectors to be stationed at Guntur and other centres for purposes of quality control.

Later, at a conference of the trade presided over by the Supply Member of the Government of India and attended by a representative of the Tobacco Leaf Section of the London Chamber of Commerce, it was decided to extend the scheme of restricted exports to the U.K. also, and accordingly the Government of India issued a notification withdrawing the exception allowed in the case of exports to the U. K. from the operation of their former Notification banning the export of ungraded tobacco. The result is that the four varieties of tobacco mentioned above cannot be exported to a foreign country unless they are graded according to Agmark specifications. The ban on the exports of tobacco unless graded under Agmark has further been extended to another three varieties, *viz.*, Sun-cured Jati, Sun-cured Jutti and Sun-cured Jati Bishrath.

The Indian Central Tobacco Committee, who were placed in charge of all developmental and marketing schemes concerning tobacco, accordingly sanctioned an additional staff of 1 Senior Inspector and 10 Inspectors for exercising quality control. The entire tobacco grading scheme is now being financed by the Committee from the funds placed at their disposal by the Government of India.

The Chief Inspector and all Inspectors, except two, are stationed at Guntur, which is an important virginia tobacco centre, and certain other places situated close to it. Two Inspectors are stationed at Cocanada and Trichinopoly the former exercising control over the exports from that port and the latter on the exports from the Southern Districts of the Madras Province.

In order to further tighten up control, two posts of Vigilance Inspectors have been created. The scheme has been in operation for more than two years and has brought about a definite improvement in the quality of exports which is evidenced by the general appreciation by foreign buyers in the United Kingdom and other countries. It is hoped that this scheme will not only lead to the expansion of India's external trade in tobacco, but also enhance the reputation of the country for delivering goods in the international markets exactly in accordance with standards of grades.

Early in 1944 a conference of fruit products manufacturers convened by the Central Agricultural Marketing Department decided in favour of legislative action for standardisation of minimum quality of fruit products manufactured in India and for the enforcement of higher standards of hygiene and sanitation in the factories. The decision was duly considered by the Government of India and towards the end of 1945 they promulgated the Fruit Products Control Order, 1945. According to the order no manufacturer could produce on or after 1st July, 1946 any kind of fruit or vegetable products in India without holding a licence granted on fulfilment of certain conditions with regard to hygiene, sanitation, quality, specifications, etc.

In order to ensure adequate control of quality and proper grading, several persons in the provinces and States were authorised by the Agricultural Marketing Adviser to inspect graded produce and grading centres. The co-operation of agricultural, veterinary and allied departments in all provinces was sought for in this connection and several of their officers were provided with the necessary authority to inspect grading stations and graded produce. Arrangements have also been made for controlling the quality of graded produce by systematically analysing samples collected by the inspecting staff both from the packers' premises as well as from the markets. Nearly 10,000 samples of ghee and quite a large number of edible oil samples were analysed at the Central Control Laboratory Cawnpore, during the calendar year 1946. Samples of graded butter and gur are also periodically analysed there by two assistant chemists appointed for the purpose.

In the earlier stages, the analysis of atta samples was done by the Cerealist, Agricultural College, Lyallpur and to a limited extent by the Agricultural Chemist to the Government of the Central Provinces. In 1943 an Atta Analyst was appointed to assist the Cerealist at Lyallpur in this work. A Rice Analyst was also added to the headquarter staff and the entire analytical work on rice samples was made over to him. Since, however, these two commodities are now rationed and are not graded, no work in this connection is being done. For the purpose of keeping a vigilant watch on the quality of Agmark eggs put in Delhi market, an Egg Grading Demonstrator was appointed as a result of which the quality standards further improved. But on account of scarcity of eggs and the imposition of controls by the local administration, grading of eggs could not be continued in Delhi and this useful activity had to be withheld. The work would be, however received as soon as trade becomes free of controls.

The exercise of quality control by examination of samples at these laboratories naturally involves a certain amount of unavoidable expenditure. This is partly offset by the sale of AGMARK labels to authorised packers. It was, however, observed that the Agricultural Produce (Grading and Marking) Act, 1937, under which such recoveries were being made, did not permit the levy of any further charges than what the labels, etc., were costing to the Department. In order, therefore, that a portion, if not the whole, of the inspection cost could be recovered from the packers who were the chief beneficiaries from the grading scheme, the Act was amended in about the middle of 1943 so as to permit recoveries on labels for this purpose as well as for arranging any special publicity with regard to particular commodities. In the early stages, before the grading of a particular commodity has passed the experimental stage and proved its merit, it has not always been found possible to get the packers to agree to contribute in this way. Steps are being taken, however, to make quality control as far as possible self-supporting, particularly with regard to commodities mainly produced for export, *e.g.*, sann hemp, or commodities like *ghee*, the grading of which has now become definitely established. With the same view the Edible Oils Grading and Marking Rules were recently amended so as to provide for an enhanced rate of charges on Agmark labels and to provide for the application of these labels to bigger containers like drums and railway tank wagons.

Ensuring Purity—Expansion in the grading of ghee and the increasing general demand for graded ghee has also committed the Department to ensure that proper arrangements are instituted or existing ones stiffened in order to provide for an adequate check on the quality of the graded products. Certain new measures have accordingly been instituted. Firstly, vigorous tests have been introduced for examining the purity of ghee and ensuring its freedom from adulteration. To detect unmistakably the commonest adulterant—vegetable fat—the Central Control Laboratory, Kanpur, where samples of ghee are analysed, has been equipped with Phytosteryl Acetate test apparatus and arrangements are under way to instal this appraratus at the laboratories of the authorised packers. The policy of appointing Government Chemists at the laboratories of authorised packers so as to ensure freedom from possible influences, initiated in 1945 has been working satisfactorily in the United Provinces and Bihar. The scheme is likely to be extended to the Central Provinces and Madras shortly. At a conference of ghee packers held on the 21st April, 1945 these measures were generally agreed to and the conference further agreed to a proportionate increase in the charges levied on the graded ghee so as to make the scheme self-supporting.

As a further measure of improving the existing quality control arrangements, it was also decided to divide the areas in which the ghee grading centres are located into zones, each zone being placed under the charge of an Inspector. For this purpose four posts of Inspectors have been sanctioned. The Inspectors exercise vigilant control on the quality of ghee in their respective areas by visiting the grading stations frequently and by collecting check samples of graded ghee from the premises of the packers and from the market, for examination. As a result of the various quality control measures the reputation of the purity of Agmark ghee is on the increase.

Owing to the fact that the Kathiawar States contributed a large proportion to the ghee graded in the country it was found necesary to establish a Subsidiary Control Laboratory in Kathiawar for doing the immediate work connected with the analysis of samples. The increasing popularity of Agmark products has brought to light ingenious efforts on the part of unscrupulous persons at illegally imitating and counterfeiting the Agmark labels and manipulating and adulterating the contents of graded products. This in its turn, has demonstrated the need for strengthening the quality control measures still further. In order to safeguard against the misuse of Agmark, proposals are under consideration for the enhancement of penalties provided for the violation of rules made under the Agricultural Produce (Grading and Marking)Act, 1937.

Standard Contract Terms—The Standard Contracts terms for wheat and linseed, were finally agreed to by the Grain and Oilseeds Conference, 1938, and similar terms for groundnuts were settled at an informal Conference held at Bombay in January 1939. A fairly satisfactory measure of agreement has been obtained regarding the adoption of the terms and while certain trading associations have started trading on this basis, unanimous support was not forthcoming, owing partly to the existence of an excessive number of small "futures" trading associations scattered all over the country and partly to the opposition of one or two important trading institutions and certain influential exporting and importing interests.

With a view to bringing about uniformity in the different contract terms for wheat and linseed (including the Standard Contract) adopted by the trade, an informal Conference of the representatives of 3 important trade associations of Bombay was convened in February 1941. Besides suggesting certain changes in the tolerances and limits of rejection for damaged, slightly damaged and shrivelled grains, the Conference made 2 important recommendations, *viz.*, that (1) 25 tons should be adopted as an alternative to 500 maunds as the minimum unit of transaction, and (2) that the wt. should be adopted as an alternative to the maund as the unit of quotation. In the case of linseed, the Conference further suggested that the cleaning charge under "Refraction" should be covered. These latter suggestions were circulated to the trade interests concerned and they have been accepted.

In the case of wheat, it has been decided to amend the Standard Contract for wheat as finally agreed to in 1938 and thereby implement the abovementioned recommendations.

The Standard Groundnut Contract was examined at the Bombay Conference, 1941, and several minor changes were suggested. These were afterwards circulated to the trade interests concerned. As regards Hand Picked Selected Groundnuts (kernels and nuts in shell), the Contract terms agreed to at a Conference held in 1940, were further revised and accepted by 2 leading trade associations of Bombay. Three leading exporters of groundnuts in Madras adopted the Standard Groundnut Contract from the beginning of 1942 and they have reported that the Contract terms have been readily accepted both by the sellers and purchasing agents and that they worked very well during the period of adoption. The question of enforcing the standard contract terms for groundnuts by legislation was examined at a conference of groundnut interests convened at Bombay in August 1944 under the joint auspices of the Central Agricultural Marketing Department and the Imperial Council of Agricultural Research. The conference agreed upon the various terms except in regard to driage and methods for estimating it, and recommended that the point be examined by the Oilseeds Committee of the Indian Council of Agricultural Research and till then the driage clause may be omitted. It was also felt that the trade should adopt the standard contract terms voluntarily, compulsion being introduced only if the trade fail to do so. The question of framing legislation to make the adoption of standard contract terms compulsory has been referred to Provincial Governments and is under their consideration at present. The question of introducing legislation for regulating produce exchanges is also under consideration.

Standard Containers—For most commodities the containers used in the sub-continent are very variable in size. Owing to their fragile nature the contents are subject to appreciable damage which also varies in extent. To overcome these difficulties, trials on a commercial scale were carried out in Madras, Travancore, old undivided Bengal, old undivided Punjab, the North-West Frontier Province, Assam, Rampur State, United Provinces, etc., with boxes of standard patterns for use in transit of eggs and fruits. Careful records were kept of the results for comparing the standard and the ordinary containers.

In the Travancore experiment conducted during 1939 and 1940 covering about 300,000 eggs, the loss by damaged and broken eggs in the standard boxes was only 0.52 per cent. as compared with damage and loss through pilferage of 1.77 per cent. in the ordinary baskets. As a result of the experiments, almost the entire exports of eggs from the State to other markets like Madras were packed in the improved containers in 1941. This was facilitated by the grant of suitable concessions in freight rates by the railway companies. In the Bengal trials the total wastage in the standard boxes was 0.5 per cent. as compared with 2.5 per cent. in the case of baskets. The experiments conducted by the Rampur State revealed that in 3 out of 4 containers of eggs consigned to Nainital in

August 1941, the contents were absolutely undamaged, while in the case of the fourth, the damage was only about 1 per cent. Such reductions in the physical loss of produce are of small magnitude, but even a saving of 1 per cent. on this score alone would represent an economy of something like Rs. 5½ lakhs in the cost of distribution of the eggs put on the market. These experiments, however, received a set-back during 1942 owing to transport difficulties created by the War.

Legislation Regulating Markets—The draft model bill for the regulation of markets circulated by the Agricultural Marketing Adviser in the year 1938 formed the basis for necessary legislation in Provinces and States. Agricultural Produce Markets Acts are now in force in the Punjab area, North-West Frontier Province, Sind, Madras, Bombay, Central Provinces, Mysore, Baroda, Gwalior and Hyderabad and the question is under consideration in other Provinces and States where no legislation already exists.

The Regulated Markets are, however, mostly in respect of particular commodities which are of local importance. For instance, in Amraoti in the C.P. the number of regulated markets for cotton is significant. It rose from 36 in 1942 to 39 in 1945, and the number of other agricultural markets from 5 in 1942 to 7 in 1945. In Madras, the Madras Commercial Crops Markets Act, 1933 is in operation, and is applicable to cotton markets in Tirupur, Adoni and Nandyal, to groundnuts at Cuddalore, and to tobacco markets in Guntur district and Bezwada taluk. The most rapid expansion in the organisation of regulated markets has been in Bombay during the past few years. In Sind and old undivided Punjab, the regulated markets are in respect of cereals and pulses. Among the States, Hyderabad and Gwalior occupy premier places, the former having at present 28 regulated markets and the latter 36. It is however, observed that due to abnormal conditions legislation relating to regulate markets is not making the desirable progress. It is however gratifying to note that the necessity for organising regulated markets has recently been stressed by the Central Food Advisory Council and attention of the Provinces and States has been drawn to the draft bill proposed by the Central Agricultural Marketing Department in 1938 in this connection.

A bill for the introduction of Regulated Markets in the Centrally Administered Areas is also at present under the consideration of the Government of India.

The attempts at regulating the markets were fittingly strengthened and supplemented by the passage on the 28th March 1939, by the Central Government of the Standards of Weight Act, 1939. The Act came into force with effect from the 1st July 1942 and the Standards of Weights Rules, 1942 have also been prepared. The Rules will be enforced as soon as sets of standard weights are ready for distribution to the Provincial and State Governments.

Broadcasting Market Quotations—The dissemination of reliable up-to-date and accurate market intelligence is an essential function of the marketing department. The solution of the problems of food administration and price control would have been facilitated if a properly co-ordinated All-India Market News Service had been in existence from the beginning. Unfortunately, due mainly to lack of funds, the Central Agricultural Marketing Department had to rest content with a skeleton service of limited value. Similarly, except in the United Provinces, where a fairly comprehensive market intelligence service is being run under a special marketing staff, the arrangements in this behalf in the various Provinces and States are totally inadequate.

The Central Agricultural Marketing Department at present arranges for the broadcast of (1) the daily market rates of a number of commodities at Hapur market, (2) a weekly market report dealing with the fluctuations in pulses of commodities like wheat, rice, oilseeds, pulses and several graded articles at various centres in India. During the year 1943, at the instance of the Food Department arrangements were made to broadcast daily the market rates for coarse grains at a number of selected centres all over India; but this broadcast was discontinued after a short time. The Department is also issuing a monthly review of prices and stocks relating to various commodities. Consequent on the establishment of the Directorate of Economics and Statistics under the Ministry of Agriculture this work has been transferred to that Directorate.

Publicity for Agmark—The necessity for publicity for any scheme of agricultural improvement should be obvious. Efforts are accordingly being made to keep the public informed of the activities of the Department through the medium of newspapers, exhibitions of special posters at railway stations and other suitable public places, and by putting up demonstration stalls at the various agricultural and industrial exhibitions in the Provinces and States. In these exhibitions, public demonstrations are given of the technique of grading by exhibiting illustrative maps, diagrams and charts relating to the production, supplies and prices and by sale of actual graded commodities. A brief pamphlet on the "Story of Agmark" has also been prepared for distribution to the public. In the recent period, publicity of the above sort has however been modest as it was not considered desirable to increase the demand for Agmark products when it might not be possible to meet it due to scarcity conditions. At the same time it was found necessary to arrange for special publicity if any section of the trade in a particular commodity wanted it and was prepared to contribute towards the cost. The Agricultural Produce (Grading and Marking) Act, 1937, has therefore been suitably amended to recover the cost. In this connection the Directorate reorganised control, arrangements for grading ghee in the United Provinces were extended, advertised in the more important newspapers in the United Provinces, the Bengal area and Delhi Province. A proposal for the preparation of an Agmark Ghee film is also under consideration.

The question of setting up departmental AGMARK stalls was examined recently and it was considered necessary that their establishment and efficient running would be best facilitated only if the Agricultural Produce (Grading and Marking) Act, 1937, was suitably amended. Proposals for the same have accordingly been submitted to the Government of India recently.

Development of Export Markets—The Royal Commission on Agriculture and more recently the Indian Government Trade Commissioners abroad have pointed out repeatedly that the main obstacle in the way of attempts at pushing Indian agricultural products abroad was lack of standardisation in the quality and have stressed the need for an organised attempt to improve the quality of exported goods. The Directorate of Marketing and Inspection has from the beginning paid close attention to this problem. A scheme for the grading and marking of seedlac exported out of India was initiated in 1941 and during the period from July 1941 to January 1942, 2 consignments of graded seedlac weighing about 2,194 maunds were sent to the United States of America. Though the report on the first consignment was favourable, the experiment had to be abandoned due to the abnormal conditions consequent on the War.

Complaints about uncertainties of quality of lac have been increasing and there has been since recently a tendency on the part of foreign users to go in for substitutes. Proposals for regulating the quality of exports on the basis of standard Agmark grades are therefore under consideration. A reference has already been made to the scheme for Agmark grading and marking of sann hemp and tobacco before export. Both these schemes have been working satisfactorily and assisted in building up reputation of the country for delivering goods in foreign markets according to standards. Markets for tobacco could be extended to many countries and similar results are soon expected for sann hemp as well.

Goat Hair, Wool—In the recent past, contact was made with the Australian importers of goat skins and information was obtained with regard to their requirements of quality in Indian goat skins. Similar enquiries were also addressed to the Trade Commissioners at New York and London. Samples of goat hair collected from different parts of the country were sent to the Indian Government Trade Commissioner in Australia for being shown to buyers in that country. It was found that while the Australian merchants were generally satisfied with Indian goat hair, they would require it in a specially dressed form if they were to take Indian goat hair on any large scale for commercial use. A specimen of this dressed hair as used in Australia was obtained and shown to the trade interests in India in order to find out whether such dressing could be done as a matter of course before exporting hair from India. The trade in India felt that such dressing was not possible in the absence of the necessary mechanical means and technical knowledge. With great difficulty some more information was secured on the point and a consignment of samples of dressed hair was sent to Australia for evaluation. The samples were greatly appreciated by the trade in that country. As a result of this, tentative grade specifications for goat hair have been drawn up. These have been generally approved by importers in foreign countries and the question of finalising them now in consultation with the trade in India is under consideration.

Recently ten bales of cleaned and washed wool were collected by the Directorate from Ajmer and Jodhpur and sent to the Indian Government Trade Commissioner, New York, for purposes of evaluation by the Incorporated Carpet Manufacturers' Association, New York. The quality of this wool sent was highly appreciated by the Association. In view of this success a scheme for the grading of wool under the Agmark with a view to developing foreign markets and bringing about improvement in the local quality and for the appointment of the necessary Inspectorate staff is under consideration. In order to ascertain the views of the trade in the matter a Conference of the important wool traders in the country was convened in January, 1946, and as recommended by the Conference, an *ad hoc* wool committee was constituted by the Government of India in order to examine the question.

Edible Nuts—Some time in 1942 the Directorate collected certain samples of edible nuts, such as groundnuts in shell, cashewnuts, almonds and apricot stones, and sent them to the Indian Government Trade Commissioner in Canada in order to find out whether there would be any possibility of their utilisation in Canada for the preparation of chocolates, etc. The nuts were shown to the importers and were approved. A consignment of similar samples of wool, seedlac, shellac, cashewnuts, peanuts, almonds and walnuts has been sent to the Indian Trade Commissioner in Canada with a view to exploring possibilities of development of trade in those commodities. Further developments are awaited. Samples of different commodities were also sent to the Imperial Institute, London, for exhibition purposes. A few samples of Indian wool were also sent to the Indian Government Trade Commissioner in Australia and New Zealand in May, 1947 for exhibition at the Sydney Show. The samples were considered as 'wonderful collection of Indian wool varieties' and were retained by Sydney Technical College as a permanent collection.

As a result of complaints received from the Indian High Commissioner in London regarding the quality of Indian curry powder and ginger exported to United Kingdom a scheme for its compulsory grading is under consideration. Representative samples have been collected and are being analysed for the determination of quality factors. Similar scheme for the compulsory grading of castor oil is also under examination and the drawing up of grade specifications on the basis of the results of analysis of samples is in progress.

In order to safeguard the reputation in foreign markets of all kinds of agricultural produce exported out of the country, a comprehensive Bill styled the Agricultural Produce Exports (Quality Control) Bill to provide for legislation for the compulsory grading of all such produce has been proposed by the Directorate of Marketing and Inspection and is at present under the consideration of the Government of India.

Apart from the activities detailed above, the

Central Marketing Staff has to deal with numerous enquiries of a general nature. The marketing staffs in several provinces are also closely connected with price control activities and are required to supply useful information regarding the availability of several agricultural commodities in India for the use of the Defence Services. The Central Marketing Staff are frequently called upon to supply information regarding stocks, production, prices, etc., of various commodities to the Supply and Food Departments of the Government of India. The Department also offered material assistance to the Defence Services by arranging supplies of various foodstuffs to the military. For instance, several thousand maunds of Agmark ghee and butter were purchased by the Supply Department for the Defence Services during the last few years. Graded eggs in large numbers were supplied to the Army, Internment camps, hospitals, etc.

The above is only a brief sketch of the activities of the marketing staff. The detailed accounts, given in the published annual reports of the Agricultural Marketing Adviser, show that the scheme has recorded steady progress in spite of several difficulties such as lack of adequate funds and personnel and reluctance and hesitation on the part of the trade to follow new methods.

Early in 1945 the Government of India set up a Marketing Sub-Committee of the Policy Committee No. 5 on Agriculture, Forestry and Fisheries to examine the entire question of the improvement of agricultural marketing in India, the maintenance of standards of purity and quality, the establishment of warehouses and the organisation and functions of the Central and Provincial Marketing Departments. The Sub-Committee have submitted their Report to the Government of India which is at present under their consideration. The future policy with regard to agricultural marketing will largely depend on the decisions taken by the Government of India on the various recommendations contained therein.

List of the Central Marketing Officers and the Senior Marketing Officers in the Provinces and States :—

A.—Central Marketing Staff

Agricultural Marketing Adviser to the Government of India.—T. G. Shirname, B.Ag., Ph.D. (Wales), F.S.S., F.R.Econs. S. (Lond.).

Deputy Agricultural Marketing Adviser to the Government of India.—Dr. B. C. Sen, D.Sc.

Senior Superintendent.—P. S. Visvanathan, B.Sc. (Ag.).

Senior Marketing Officers.— K. H. Advani, M.Sc. (Agri.); H. S. Bawa, M.R.C.V.S.

Marketing Officers.—Triyugi Prasad, M.A., LL.B.; K. N. Vasvani.

Supervising Officer, Grading Stations.—K. P. Jain, B.Sc., A.H.B.T.I.

Assistant Marketing Officers.—S. C. Chakravarty. B. Ag.; V. P. Anantanarayanan, M.Sc.; Parduman Singh, B.Sc. (Agri.); R. N. Chaturvedi, B.Sc. (Agri.); B. D. Joshi, B.Sc. (Agri.); M. B. Nayar, M.Sc.; Syed Ali Imam Naqvi, B.Sc. (Agri.); H. G. Mathur, M.Sc. (Agri.); R.V.S. Rao, B.Sc. (Agri.); R. S. Bhatnagar, B.Sc. (Agri.); V. P. Kachwaha, M.A., LL.B. M. R. Sharma, M.A.; R. T. Mirchandani, B.Ag.; T. T. Mulvani; P. M. Idnani, B.Sc. (Agri.).

Inspectorate Staff (Quality Control) Ghee.—L. K. Shukla, B.Sc., A.H.B.T.I., Inspector, Ahmedabad; V. Chandramouly, B.Sc., Inspector, Patna; B. S. Dane, B.Sc., A.H.B.T.I., Inspector, New Delhi.

Inspectorate Staff under Sann Hemp Scheme.—Pratap Singh, B.Sc. (Agri.), Chief Inspector; R. N. Murty, Inspector, Calcutta; O.N. Garg, B.A., Inspector, Vizianagram; P. L. Mukherjee, M.Sc., Inspector, Shiupur.

Inspectorate Staff under the Tobacco Grading Scheme.—P. L. Tandon, B.Sc. (Wales), F.R. Econs. S. (Lond.). Chief Inspector; P. R. Parthasarathy, L.Ag., Senior Inspector; M. Hanumantha Rao, B.A., Vigilance Inspector; E. Partha, Vigilance Inspector.

B.—Provincial Marketing Officers

Madras.—S. N. Venkataramana Ayyar, B.Sc. (Agri.).

Bombay.—V. D. Karkhanis, B.A. (Hons.), G.D.C.A., Chief Marketing Officer; R. K. Apte, Marketing Research Officer.

West Bengal—N. C. Ray, M.Sc., Dip. (Agri.) (Edin.).

United Provinces.—Shri Ram Singh (Food grains).

East Punjab.—Prita n Singh Diol.

Bihar.—A. K. Sarkar (Asstt. Marketing Officer-in-Charge).

Orissa—D. Chottray.

Central Provinces—R. N. Gadre.

C.—Minor administrations

Ajmer-Merwara.— Officer-in-Charge, Marketing Office.

Coorg.—P. M. Changappa, Dip. (Ecc) C. H. D. (Mech.).

Delhi.—Asstt. Registrar, Co-operative Societies, Delhi.

D.—States Marketing Officers

Hyderabad.—Rai Mohindra Bahadur.

Mysore.—M. D. Venkata Urs., B.A.

Patiala.—S. B. S. Harchand Singh, L.Ag.

Bhopal.—Jamil Mohd. Khan., BSc., LL

Baroda.—Dr. M. J. Patel

Gwalior.—N. R. Jatar.

Kashmir.—Economic Assistant, (name available)

Jodhpur.—R. S. Kishen Puri, B.A., LL.B.

Bikaner.—The Marketing Officer. (name available)

Indian Council of Agricultural Research

IN Chapter III of their Report, the Royal Commission on Agriculture in India held that agricultural research in the sub-continent was still in its infancy; that however efficient the organisation which was built up for demonstration and propaganda it could not achieve a full measure of sucess unless it was based on research; that lack of co-ordination in agricultural research had prejudicially affected progress; that there was a wide field open for the co-operation of the Central Government and of Provincial Governments in regard to agricultural research; and that it was the duty of the Government of India in the discharge of the ultimate responsibility for the welfare of the vast agricultural population of the country, to advance research in every way possible without encroaching upon the functions of Provincial Governments in that sphere.

The Royal Commission, after discussing the possible methods by which closer contact might be established between scientific investigators working in the Institutions under the Central Government and investigators employed under the Provincial Governments, recommended the establishment of an Imperial Council of Agricultural Research to which the Imperial Agricultural Research Institutions and the Provincial Agricultural Research Institutions would stand in exactly the same relation.

In the late Department of Education, Health and Lands Resolution No. 826-Agr., dated 23rd May, 1929, the Government of India decided that the Imperial Council of Agricultural Research should be registered under the Registration of Societies Act, XXI of 1860, and the Council was accordingly registered as a Society under the provisions of that Act. The name of the Council has since been changed to "Indian Council of Agricultural Research" and its work is now limited to the Dominion of India.

The Royal Commission on Agriculture envisaged that the primary function of the Council should be to promote, guide and co-ordinate agricultural, including veterinary research in the sub-continent and to link it with agricultural research in other parts of the Empire and in foreign countries. It should make arrangements for the training of research workers, should act as a clearing house of information in regard not only to research but also to agricultural and veterinary matters generally and should take over the publication work which was being carried out by the Imperial Agricultural Department. In the light of the experience gained during the years the Council has been in existence, it has recently been decided that the Council's functions should be enlarged to include work connected with the application of the results of research to field practice and the Council's function is now to undertake, aid, promote and co-ordinate agricultural and animal husbandry education, research and its application in practice, development and marketing in India by all means calculated to increase scientific knowledge of the subjects and to secure its adoption in everyday practice.

The Commission recommended that the Council should be entrusted with the administration of a non-lapsing fund of Rs. 50 lakhs to which additions should be made from time to time as financial conditions permitted. The Government of India decided that an initial lump grant supplemented by a fixed minimum grant annually should be made to the Council. They decided that the initial grant should be Rs. 25 lakhs of which Rs. 15 lakhs would be provided in the budget for 1929-30 and from the next financial year onward the annual recurring grant would be fixed at Rs. 7.25 lakhs per annum of which Rs. 5 lakhs would be devoted to the furtherance of the scientific objects of the Council and the remaining Rs. 2.25 lakhs to the cost of its staff and Secretariat. In 1940 the Agricultural Produce Cess Act was passed under which a cess of ½ per cent *ad valorem* on certain commodities was levied for the purpose of providing funds for carrying out the general research programme of the Council. The proceeds of the cess were expected to yield in a normal year about Rs. 14 lakhs.

Constitution—As regards the constitution of the Council, the Government of India decided that the Council should be divided into two parts, a Governing Body which would have the management of all the affairs and funds of the Council subject to certain limitations and an Advisory Board the functions of which would be to examine all proposals in connection with the scientific objects of the Council which might be submitted to the Governing Body.

The Governing Body of the Council consists of the Member of the Governor-General's Council in charge of the portfolio of Agriculture who is the ex-officio Chairman, the Vice-Chairman, I.C.A.R., the Ministers of Agriculture in the Provinces, one representative from the Council of State, two representatives from the Legislative Assembly, one representative of European business community and one representative of the Indian business community, two representatives of the Advisory Board, the Secretary to the Government of India in the Department of Agriculture and such other persons including nominees of States as may be appointed from time to time by His Excellency the Governor-General.

The Advisory Board consists of the Vice-Chairman of the Society (ex-officio Chairman) the Agricultural and Animal Husbandry Commissioners, the Directors of the I.A.R.I., the I.V.R.I. and the Indian Institute of Science, Bangalore, the Directors of Agriculture and members of the Society representing the Provincial Veterinary Departments of the Provinces, a representative of minor administrations, a representative of the Forest Research Institute, a representative of the Co-operative Department, a representative of the Indian Research Fund Association, four

representatives of Indian Universities, a representative of the Indian Tea Association and the United Planters' Association of Southern India, representatives of the All-India Commodity Committees, persons nominated as members on the ground of scientific knowledge or other special qualifications and such other persons including nominees of States as may be appointed from time to time by His Excellency the Governor-General.

Personnel.—At present the following States are affiliated to the Council, *viz.*—

Hyderabad, Mysore, Travancore, Bhopal, Cochin, Kashmir, Baroda, Gwalior, Bikaner, Patiala and Jaipur.

Officers of the Council:—

Chairman.—The Honourable Jairamdas Daulatram, B.A., LL.B.

Vice-Chairman.—Sardar Bahadur Sir Datar Singh.

Secretary.—Rai Bahadur S. C. Sarkar, B.A.

Agricultural Commissioner.—Rai Bahadur R. L. Sethi, I.A.S.

Animal Husbandry Commissioner.—Rai Bahadur P. N. Nanda, M.R.C.V.S.

Assistant Agricultural Commissioner.—I. B. Chatterji, M.Sc. (Agri.), L.Ag.

Assistant Animal Husbandry Commissioner.—H. K. Lall, B.Sc., M.R.C.V.S.

Statistical Adviser.—Dr. P. V. Sukhatme, D.Sc., Ph.D.

Statistician (Agriculture).—V. D. Thawani, M.A.

Statistician (Animal Husbandry).—A. R. Roy, M.A.

Statistician (Training).—R. D. Narain, M.Sc.

Agricultural Marketing Adviser.—Dr. T. G. Shirname, Ph.D.

Assistant Secretary.—H. C. Thapar, B. A. (Hons.)
Registrar, Central Herd Book.—K. P. R. Kartha, B.Sc.

Editor, Council's Journals.—Dr. U. N. Chatterji, B.Sc. (Hons.), M.Sc., D.Ph., D.Sc., F.N.A.

Chief Superintendent.—B. S. Dasarathji, B.Sc. (Hons.).

Indian Institute of Sugar Technology, Kanpur

The Indian Sugar Committee of 1920 recommended *inter alia* the establishment of a Central Research Institute as necessary for the proper development of the Sugar Industry.

The recommendation of the Sugar Committee was accepted and the Imperial Institute of Sugar Technology was started at Kanpur by the Government of India on 1st October, 1936, to carry out research in the different branches of Sugar Technology and to help the Indian Sugar Industry in various ways by rendering technical assistance to Sugar Factories, by training students in all branches of Sugar Technology, by providing short term courses to technical men already engaged in the Industry, etc. On the 1st March, 1945, the control of the Institute passed to the Indian Central Sugarcane Committee, formed by resolution of the Governor General in Council and registered under the Registration of Societies Act XXI of 1860. The Committee is constituted by members from every section of the Industry, *viz.*, cane growers, sugar manufacturers, sugar merchants and Sugar Technologists.

The Institute is financed by grants from the Sugar Excise Fund.

The work of the Institute has been organized under two broad heads, (*a*) office work including general administration and (*b*) research and teaching. The former includes the technical, the statistical and general sections; the latter consists of three main sections—Sugar Technology, Sugar Engineering and Sugar Chemistry, the last comprising of Sugar Chemistry, Organic Chemistry, Physical Chemistry and Bio-Chemistry. The laboratories are well equipped with instruments required for research on sugar and allied products. Attached to the Institute are the Experimental Sugar Factory, workshop, Sugar Engineering and Chemical Engineering laboratories, Sugar Research and Testing Station, Bilari, Bureau of Sugar standards and the research scheme for the manufacture of sugar candy in India.

The functions of the Research and Testing Station at Bilari are (*i*) testing of existing plants and processes in use in the open pan industry, (*ii*) undertaking research work for introducing improvements in the plants and processes, (*iii*) giving demonstration of new machines and improved processes. In this connection it may be mentioned that the Indian Central Sugarcane Committee have since 1945 constituted a gur and khandsari sub-committee for advising on the lines of work to be carried out at the Research Station.

Technical Assistance.—Apart from the technical work under the Sugar Production Rules (1935) technical assistance and advice on various aspects of the sugar industry are given by the Institute to sugar factories, private parties and provincial Governments within the Indian Dominion and the States acceding to it. The Institute endeavours to meet all technical requirements of factories so far as its staff and equipment permit. The more important types of work which the Institute undertakes for rendering technical assistance to sugar factories are (*a*) advice to promoters of new factories, (*b*) advice relating to extensions and alterations of existing factories, (*c*) advice relating to improvements in working of plant, (*d*) advice relating to improvements in manufacturing process, (*e*) technical control of manufacturing operations (*f*) advice regarding working expenses and cost of production, (*g*) investigations into special problems and (*h*) analytical work.

The sugar Trade Information Service under the control of the Director is run to meet the requirements of the sugar trade and industry in India.

The scope of the work of the Institute was brought to the notice of all persons interested in the sugar industry through a booklet entitled "Functions and Activities". In order to establish and maintain contact with the sugar factories and enable them to be in touch with research work carried out at the Institute and developments elsewhere, arrangements have been made for issuing brief summaries on matters of technical interest under the title of "Sugar Notes". Description and results of various experimental and research work carried out in the Institute are being published annually in the publication entitled "Scentific Reports of the Indian Institute of Sugar Technology".

The Institute trains a limited number of men every year and gives them a thorough and up-to-date training in their respective subjects. For most courses, a period of factory training is an essential condition for the grant of diploma or certificate. There are six regular courses of training for students desiring to qualify for technical posts in sugar factories, *viz.*, Fellowship and Associateship courses in Sugar Technology and in Sugar Engineering and the Sugar Engineering Certificate Course, the Sugar Boilers Certificate Course. Beside, facilities are provided for men already engaged in the industry to have the necessary technical training during the off-season provided they have the requisite educational qualifications. The off-season courses are (*a*) Chemical Control, (*b*) Bacteriology, (*c*) Pan Boiling, (*d*) Fuel and Boiler Control, (*e*) Statistical Methods (for research students), (*f*) Statistics (for sugar students), (*g*) Milling Plant operation and control.

In order to afford adequate facilities to the Sugar Factories in India for selecting properly qualified staff and at the same time to reduce unemployment amongst the educated technical workers in the sugar industry, the Institute maintains an Employment Bureau which collects authentic information about the qualifications and experience of those seeking employment in the Sugar industry and makes it available free of charge to factories on receipt of enquiries.

AREA CULTIVATED AND UNCULTIVATED IN 1941-42 IN EACH PROVINCE.

The Statistics given in the following pages are the latest available.

Provinces.	Area according to survey.	*Deduct* Indian States.	NET AREA; According to survey.	NET AREA; According to Village Papers.
1	2	3	4	5
	Acres.	Acres.	Acres.	Acres.
Ajmer-Merwara	1,561,330	..	1,561,330	1,561,330
Assam	43,375,360	7,890,560	35,484,800	35,484,800
Bengal	50,373,332	..	50,373,332	50,373,332
Bihar	44,327,205	..	44,327,205	44,327,205
Bombay	48,709,134	..	48 709,134	48,709,134
Central Provinces and Berar ..	63,087,360	..	63,087,360	63,073,546
Coorg	1,012,264	..	1,012,264	1,012,264
Delhi	368,717	..	368,717	368,717
Madras	80,006,543	..	80,006,543	80,059,541
North-West Frontier Province.	8,437,618	..	8,437,618	8,576,744
Orissa	20,582,576	..	20,582,576	20,141,921
Punjab	61,001,600	..	61,001,600	60,200,908
Sind	30,193,559	..	30,193,559	30,193,559
United Provinces	67,848,920	..	67,848,920	68,043,677
Total ..	520,885,518	7,890,560	512,994,958	512,126,678

Food

TO give the population an adequate and balanced diet, the Indian Union needs to increase her food production by 10 million tons a year, according to the Food Grain Policy Committee, which, under the chairmanship of Sir Purshottamdas Thakurdas, was appointed towards the end of 1947 to investigate the country's requirements and make recommendations for policy during the next five years. The Committee pointed out that on the basis of a cereal ration of 16 and 12 ounces per person per day for rural and urban population respectively, the country required 44·4 million tons of grain a year. Total production is 39·9 million tons, leaving a shortage of 4·5 million tons which does not, however, allow for an adequate and balanced diet.

The Committee's analysis of the situation shows that the food supply of the Indian Union has not been considerably affected by the partition of the country. Though the Pakistan provinces of Sind and the West Punjab are major food grain producers, their surpluses have to be offset against the deficits in the N.W.F.P. and East Bengal.

FOOD COMMITTEE REPORT

While criticising the shortcomings of the "Grow More Food" campaigns initiated during the last war, the Food Grain Policy Committee's recommendations for stepping up cereal production by 10 million tons in the next five years relied on much the same methods—more irrigation, more cultivation of waste lands, more manure, better seed and the formation of a Central Land Reclamation Organisation with a capital of Rs. 50 crores subscribed by the Central Government.

Direction of food production would be in the hands of a Central Board of Agricultural Planning on which provinces and states would be represented. Agriculture was to remain a provincial subject, though the responsibility for feeding the country rested with the Centre.

These plans were put forward at a moment when it seemed as though the food crisis, through which India had been passing since 1942, was easing. In December 1947, the Government of India accepted the Food Grain Policy Committee's preliminary recommendation that there should be gradual decontrol of cereals and limitation of imports. To this end, governments of provinces and states were advised to reduce their commitments under controlled distribution and rationing. They were left free to devise their own means of procurement and to fix their own prices. In order to encourage production and procurement the Central Government promised to pay a bonus of eight annas a maund to every provincial government for grain procured inside its territory and an additional eight annas for every maund exported. This bonus was intended to cover any losses incurred in distribution and expenditure on production. These steps were taken in the belief that decontrol would make it possible for hoarded grain to come to market. During the first six months of the revised policy it seemed likely that the experiment would be a success. Certainly there was none of the chaos which the critics had expected. For example, the complete decontrol of sugar saw a doubling of its price, but no scarcity.

Rural rationing ceased over large areas, but at the middle of 1948 there was no sign that the 12-ounce ration in the larger towns of the deficit areas could be abolished or even increased. Much, however, depended on the results of the 1948 monsoon and on the continued flow of imports.

India's food thus continued to be administered more or less on the lines laid down in 1943 by the Food Grains Policy Committee which, after critically examining each area's production, imports and exports, evolved a Basic Plan of procurement and distribution, supplemented by imports of one million tons of grain a year, plus a buffer stock of half a million tons. This annual import target was not reached till after war ended.

A CRITICAL YEAR

During 1944 and 1945 the extension of rationing, first pioneered in Bombay in 1943, accompanied by good crops, prevented the development of serious crisis. However, hopes that rice imports would be resumed very soon after the Far Eastern War ended failed to materialise and a poor crop in India made 1946 a critical year and both rationing and crop levies were extended in many parts of the country. Early in the year the standard cereal ration was reduced to 12 ounces a day and by February scarcity areas had been announced in the Bombay Deccan and other southern areas. India sent a Food Mission to London and Washington in an attempt to secure better imports than the totally inadequate allotments made by the Combined Food Board. Main shipments of food were wheat from Australia and mostly coarser grains from the Americas. A ray of hope came when rice began to arrive from Burma and Indonesia.

DR. PRASAD'S PLAN

Towards the end of the year Dr. Rajendra Prasad, the then Minister for Food and Agriculture, said in a review of the situation that a further cut in cereal rations might be necessary to tide over the country till the *kharif* harvest. Grave difficulty had been experienced in obtaining supplies from overseas and there had been a serious shortfall in the arrival of promised shipments. His review was not altogether well received, owing to an impression that Central Government officials had not exerted the maximum amount of pressure to obtain overseas supplies, and that provinces with surpluses were holding unnecessarily large reserves. Owing to high prices of imported food, the Central Government spent Rs. 15·5 crores on subsidising the sale of imported food during 1946.

The year 1947 opened with prospects of severe shortages of both wheat and rice owing to the failure of the *kharif* and *rabi* crops in 1946. To some extent this gloom was offset by the allocation of 410,000 tons of rice to India by the International Emergency Food Council, the bulk to come from Burma. Dr. Prasad put forward a five year plan for better agriculture, intended to wipe off India's annual deficit of 1·5 million tons of cereals which was expected to increase to 7 millions by 1951. His aim was to raise average production from 10 maunds an acre to 11¼ maunds. Approximately 159 million people were subject to cereal rationing at the beginning of the year.

In May, it was announced that India had demanded 4 million tons of cereals from overseas. It was estimated that the Central India wheat crop had suffered a million tons damage due to rust, and that there had been a total deficit of 2 million tons on the *kharif* crops and the same amount on the *rabi* crops. This state of affairs necessitated reductions in the proportions of wheat and rice available in rations in many areas.

Though a period of acute shortage was officially expected in the latter half of the year, before the *kharif* crop came in, it also became apparent that there were considerable supplies of grain available wherever an open market enabled it to reach consumers. In view of this, the United Provinces Government lifted rationing from 15 towns in July. Eventually the increasing pressure of un-official supplies caused the Central Government to introduce their decontrol policy.

Famine

Food production in the sub-continent has through the ages periodically failed to meet the needs of the people. The sub-continent's history has consequently been punctuated by disastrous famines, the worst of which have killed millions of people and left wide tracts of country desolate. Famines may be said to arise when large groups of people fail to produce enough food for their own needs and lack the means of obtaining it from other sources. Such conditions may be precipitated either by successive failures of the monsoons, on which four-fifths of the sub-continent's agriculture depends even today; by natural disasters such as floods or earthquakes or by human agencies such as war and grain market speculation.

References to famine are found early in the sub-continent's history. Little is known of these early disasters; details are based on tradition and until late in the eighteenth century such visitations were regarded as natural calamities which man was powerless to prevent. The first definite outbreak known to historians was in 650 A.D. when famine raged throughout the country. There was another series of famine in 941, 1022, and 1033, when whole provinces were depopulated and men were driven to cannibalism, according to tradition. The years 1148-1159 saw almost continuous famine. In 1344 famine was rampant in Upper India. The Emperor Muhammad Tughlak was unable to obtain necessaries for his own household and ordered the evacuation of Delhi's population to Deogiri (modern Daulatabad) in the Deccan. From 1396-1407 the Durga Devi famine devastated the Deccan and so reduced the population that land went out of cultivation for years. The years 1595-98 saw famine in the north.

The Gujerat famine, one of the first about which precise details have survived, broke out in 1630. Towns and districts were stripped of inhabitants. In 1631 a Dutch merchant reported that only 11 of the 260 families at Swally had survived.

In 1769-70 ten million people (one-third of the population) are estimated to have perished in a famine in the Bengal area. In 1783 came the Chalisa famine in the north, followed by the Doji Bara, or Skull, Famine in the Deccan in 1790-92. The Doji Bara is reputed to have been the severest famine ever known in the sub-continent. It extended over Bombay, Hyderabad and the northern districts of Madras where relief works were opened, the first of their kind in the country. That is only a brief list. Between 1660 and 1750 there were 14 major famines about which little is known.

The causes of these famines were those already stated. Practically the whole of the food production was dependent on the vagaries of the monsoon. Internal wars were common and often coupled with them were widespread pillage, trade dislocation and general devastation. The fast communications of the nineteenth and twentieth centuries were not available for relief to be brought from outside the famine area. Between 1838 and 1899 there were eight major disasters. The famines of 1838 and 1861 were in the U.P. In 1838, 800,000 people are estimated to have perished. In 1861 relief was provided in time.

SOUTH INDIAN FAMINE

Orissa was the scene of the next famine, in 1865-67. It affected 180,000 square miles and 47,500,000 people. The Bengal Government was slow in appreciating the need for action, but later food was poured into the area in prodigious quantities. Thirty-five million units were relieved (a unit is one person supported for one day) at a cost of Rs. 95 lakhs. The mortality was very heavy, and it is estimated that a million people or one-third of the population died in Orissa alone. This was followed by the Madras famine of 1866, and the famine in Western India of 1868-70. The latter famine introduced the sub-continent to the great migration from Marwar which was such a distinguishing feature of the famine of 1899-1900; it is estimated that out of a total population of a million and a half in Marwar, one million migrated. There was famine in Behar in 1873-74, then came the great South Indian Famine of 1876-78. This affected Madras, Mysore, Hyderabad and Bombay for two years and in the second year extended to parts of the Central and United Provinces and to a small tract in the Punjab. The total area affected was 257,000 square miles and the population 58,500,000. Warned by the excessive expenditure in Behar and actuated by the desire to secure economy, the Government relief programme was not successful. The excess mortality in this famine is said to have been 5,250,000 in British territory alone. Throughout British India 700,000,000 units were relieved at a cost of Rs. 8½ crores. Charitable contributions from Great Britain and the Colonies aggregated Rs. 84 lakhs.

THE FAMINE CODES

The experiences of this famine showed the necessity of placing relief on an organised basis. The first great Famine Commission which sat under the presidency of Sir Richard Strachey, elaborated the Famine Codes, which, amended to meet later experience, form the basis of the famine relief system today. They recommended (1) that employment should be given on the relief works to the able-bodied at a wage sufficient for support, on the condition of performing a suitable task; and (2) that gratuitous relief should be given in their villages or in poor houses to those who are unable to work. They recommended that the food supply should be left to private agency, except where that was unequal to the demands upon it. They advised that the land-owning classes should be assisted by loans, and by general suspensions of revenue in proportion to the crop failure.

Provincial codes were drawn up, and were tested by the famine of 1896-97. In that disaster 307,000 square miles were affected, with a population of 69,500,000. The numbers relieved exceeded 4,000,000 at the time of greatest distress. The cost of famine relief was Rs. 7¾ crores. Revenue was remitted to the extent of Rs. 1¼ crores, and loans given aggregating Rs. 1¼ crores. The charitable relief fund amounted to about Rs. 1¾ crores; of which Rs. 1¼ crores were subscribed in the United Kingdom. The actual famine mortality in British India was estimated at 750,000. The experiences of this famine were examined by a Commission under Sir James Lyall, which reported that the success attained in saving life and the relief of distress was greater than had ever been recorded in famines, comparable with it in severity, and that the expense was moderate. But before the Local Governments had been given time to digest the proposals of this Commission, or the people to recover from the shock, the great famine of 1899-1900 began.

THE FAMINE OF 1899-1900

This famine affected 475,000 square miles with a population of 59,500,000. In the Central Provinces, Berar, Bombay, Ajmer, and the Hissar district of the Punjab famine was acute; it was intense in Rajputana, Baroda, Central India, Hyderabad and Kathiawar and was marked by several distinctive features. The rainfall over the whole of India was in extreme defect, being eleven inches below the mean. In several localities there was practically no rain. There was in consequence a great fodder famine, with a terrible mortality amongst the cattle. The water-supply was deficient; and brought a crop of difficulties in its train. Then districts like Gujarat, where famine had been unknown for so many years that the locality was thought to be immune, were affected. The people clung to their villages, in the hope of saving their cattle, and came within the scope of the relief works when it was too late to save life.

A very large area in the Indian States was affected, and the Marwaris swept from their impoverished land right through Central India like a horde of locusts, leaving desolation in their train. For these reasons relief had to be given on an unprecedented scale. At the end of July, 4,500,000 persons were supported by the State, Rs. 10 crores were spent on relief, and the total cost was estimated at Rs. 15 crores. The famine was also marked by a widespread acceptance by Indian States of the duty hitherto shouldered by the Government of India alone—the supreme responsibility of saving human life. Aided by loans to the extent of Rs. 3½ crores, the Indian States did a great deal to bring their administration into line with that in British India. Although actual deaths from starvation were insignificant, the extensive outbreaks of cholera, and the devastating epidemic of malaria which followed the advent of the rains induced a famine mortality of approximately a million.

1943 BENGAL FAMINE

Localised famine conditions have recurred fairly frequently since 1901, but until 1943 it seemed that the procedure laid down by the Famine Codes was capable of dealing with all eventualities. Unfortunately, conditions in which the difficulty of obtaining relief supplies would be so great that the Codes' provisions could not be filled, were not envisaged. This state of affairs, however, arose in Bengal early in 1943. The province is estimated to be 83 per cent. self-sufficient for food and before 1942 imported most of the balance of its needs from Burma. The cutting off of this supply was followed by a series of natural disasters, including the Midnapore hurricane which late in 1942 devastated a wide area and is estimated to have destroyed 1,500,000 tons of rice. During the monsoon of 1943, when famine was already present in Bengal, floods in the Damodar river held up relief supplies from the U.P. and Punjab at a critical period. Public nervousness over the fall of Burma, the denial policy, by which boats and the larger stocks of rice were removed from East Bengal to prevent their use by the Japanese, and the general shortage of food in most consuming centres in the country were all contributory causes of the famine. When shortages became apparent in Bengal their effect was intensified by speculation on a most outrageous scale. A few areas such as Midnapore, were short of food from natural causes. Most of the other famine-stricken districts suffered because rice prices were far beyond the reach of the people, because speculators had drained the area of stocks, or because the available grain was hoarded by its owners.

According to the Famine Codes, assistance should have been provided from outside. In 1943 the problem was two-fold. Very large supplies were not readily available elsewhere owing to the general dislocation of Indian grain markets; the movement of supplies into Bengal was difficult owing to the congested state of the railways. A fairly steady stream of grain did, however, reach Calcutta from July onwards, but the Bengal Government did not evolve a satisfactory plan of distribution. Many famine areas in the province were virtually without relief until the army assisted the civil authority to organise food distribution and medical relief in November, 1943. This relief, coupled with a record rice crop, which became available in January-February, 1944, overcame the immediate crisis.

Famine conditions were accompanied by epidemics of cholera, malaria, smallpox and dysentery which probably caused as many deaths as starvation itself.

ENQUIRY COMMISSION

The Famine Inquiry Commission, headed by Sir John Woodhead, was appointed in 1944 and published a separate report on Bengal. The Commission estimated that 1,500,000 people died in Bengal as a result of the famine and its accompanying epidemics. They considered 6,000,000 people, or one-tenth of the population of the province, were affected—practically all of them belonging to the poorer classes in the rural areas. Though the basic cause of the famine was the failure of the 1942 winter rice crop, the Commission considered that high prices were at least as important as crop failures in causing starvation. Their report clearly exposed the failure of both the Bengal Government and the Government of India to take timely measures to keep the province's food situation under control. Not only was control of the procurement and distribution of food defective, but even medical relief, which could otherwise have mitigated the epidemics, was inadequate.

During 1943 famine broke out in the Bijapur district of Bombay and in the Ceded Districts of Madras. There were also acute food shortages in Orissa, in Travancore and Cochin and the Madras district of Malabar. In none of these areas did conditions approach the severity of the Bengal famine, mainly owing to the energy of the local authorities in organising relief and in controlling supplies and prices of food.

Fisheries

THE fisheries of the sub-continent, potentially rich, as yet yield a mere fraction of what they could were they exploited in a fashion comparable with those of Europe, North America or Japan. The fishing industry, particularly the marine section, has certainly expanded considerably within the last 50 years concurrently with improvement in the methods of transport and increase in demand for fish, cured as well as fresh, from the growing population of the great cities within reach of the seaboard.

The caste system, however, exerts a blighting influence on progress. Fishing and fish trade are universally relegated to low caste men who alike from their want of education, the isolation caused by their work and caste and their extreme conservatism, are among the most ignorant, suspicious and prejudiced of the population extremely averse to changing the methods of their forefathers and almost universally without the financial resources necessary for the adoption of new methods, even when convinced of their value. Higher caste capitalists have hitherto fought shy of associating with the low caste fishermen, and except in large operations on new lines, the capitalists cannot be counted upon to assist in the development of Indian fisheries. As in Japan, it appears that the general conditions of the industry are such that the initiative must necessarily be taken by Government in the uplift and education of the fishing community and in the introduction and testing of new and improved apparatus and methods.

Baroda

THE fishery resources of the Baroda State to-day, while mainly relating to true fish, both marine and freshwater, include the crustaceans and molluscs; among the latter are the conches and the oysters, one species of oyster being valued for the cheap pearls yielded. To tap these resources a Department of Fisheries, started in September 1937, is being organised by Dr. S. T. Moses, the Director, whose services have been lent by the Government of Madras. Apart from fishery and biological surveys conducted, the main achievements so far are the successful departmental working of the Windowpane Oyster Pearl Fishery for two seasons and the subsequent revival of the lease, along with that of the conch fishery; the demonstration of the utilisation of these 'Piacuna' pearls, previously used only in medicine, for making jewellery; preparation of oystergrit for poultry from the shells of the edible oyster; conservancy of manure from (1) fish offal, (2) prawn and other crustacean offal and (3) marsh plants (samphire and seablite); preparation of prawn meal dust and the manufacture and sale of Shark Liver Oil with vitamin contents of 2,000 international units per gramme of A and 200 of D.

Gradual attempts to introduce freshwater fish culture as a subsidiary occupation for the ryot are being made and studies of larvicidal and cyclopecidal fish, both local and imported, have been started. In Baroda City a Fish Market was erected and the Aquarium in the Public Park was revived. Alterations and additions to the aquarium as to include Laboratory facilities have been included in the post-war scheme starting this year. Schemes now functioning area "Prawn Farm" in the Dadhar River, the curing, pickling and smoking of fish in the Kodinar area, and the biological studies of our marine fauna and flora and experiments in their industrial uses and in emulsification, deodorisation, etc., of Shark Liver Oil and by-products.

As the famous fishing grounds off Kodinar, which supply almost all pomfrets for Bombay are exploited mainly by outside fishermen who merely camp in the State during the season, a colonisation scheme has just been begun under which the fishermen are induced to settle permanently at Kotdah by grant of concessions (residential huts, curing yards, salt and even lands for cultivation) ashore and (use of motor launch and loan of nets, etc.) afloat. The first batch of fishermen arrived from Beyt in March 1944. A co-operative society was recently started for the benefit of the Kodinar Vachiaras who are now for the first time for many years working the Pomfret and Hilsa Fisheries on their own.

Schemes held up by the War include the Velan Backwater Fishfarm for mullets, salmon and edible oysters, the Muldwaraka Fish Hatchery for Hilsa and a five-year plan of fishery development in Port Okha, which included the erection of a Biological Station; an Aquarium; a fish liver oil factory and cold storage station; a fish-meal factory; a cannery and the starting of power fishing. Recently a company the Western India Fisheries Ltd. has been floated with a capital of 5 lakhs, 20 per cent of which will be contributed by the State Government with the intention of launching large scale fishery operations under departmental guidance installing cold storage stations, cannery, smokehouse, manure and meal factories etc., putting up huts for fishermen, supplying their vocational requirements such as boats, nets and tackle including modern equipment down to power vessels for quick transport and deep sea fishing. This company when it starts working will take over power fishing in its entirety and the preservation of fish and Industrial experiments in part. The departmental activities under the post-war scheme costing 4½ lakhs will thus, besides industrial activities at other centries comprise. 1. training of men both in India and abroad. 2. biological and technological research in aquaria, farms and laboratories and 3. fish, prawn, oyster etc. culture including measures aiming at fish conservation and reduction of depletion.

Bengal (East and West)

THE value of the fisheries of this extensive deltaic region lies primarily in the enormous area occupied by inland waters—rivers, creeks, jeehls, odd swamps,—to say nothing of paddy-fields and tanks. These swarm with fish and, as the Hindu population are free to a large extent from the aversion to fish-diet which is widely prevalent among certain castes in the South, the demand for fish is enormous. Rice and fish are indeed the principal mainstay of the population and no less than 80 per cent. of the people consume fish as a regular item of diet. It is calculated that 1.6 per cent. of the population is engaged in fishing and its connected trades, a percentage that rises to 2.6 in the Presidency, Rajshahi and Dacca Divisions. 490,865 persons in Bengal subsist by fishing and 272,579 are maintained by the sale of fish.

As a freshwater fisherman, the Bengali is most ingenious, his traps and other devices exceedingly clever and effective—in many cases, too effective—so eager is he for immediate profit however meagre this may be. The greatest inland fishery is that of the hilsa (Hilsa ilisha) which annually migrates from the sea and estuaries in innumerable multitudes to see spawning grounds in the Ganga and the other great rivers. Other valued and abundant river and tank fishes are the rohu (Lobeo rohita), the Katla (Catla catla) and mrigal (Cirrhina mrigala). Prawns and shrimps abound everywhere. Of important fishes taken in the lower reaches of the rivers and in the great network of creeks spread throughout the Sunderbans, the bhetki or bhekti (Lates calcarifer) and the mullets are the most esteemed. Apart from these estuarine fishes the most valuable sea-fishes are the Mango-fish or Thread-fish or Indian Salmon (Polymemus) and pomfrets. The sea-fisheries are as yet little exploited. Taking everything into consideration it can safely be stated that the fishery wealth of Bengal is enormous and is far in excess of any other Province.

History.—Following the inquiry begun in 1909 by Sir K. G. Gupta, an investigation of the steam trawl potentialities at the head of the Bay of Bengal was undertaken, the trawler Golden Crown being employed for the purpose. The results showed that there are extensive areas suitable for trawling and capable of yielding large quantities of high class fish. Much attention was devoted during these trawl cruises to the acquisition of increased knowledge of the marine fauna, the results being published in the Records and Memoirs of the Indian Museum. But as the intention of Government was only to explore the fishery resources of the Bay of Bengal and not to embark upon any commercial undertaking themselves the Golden Crown was ultimately sold after a successful trawling for more than 18 months. It was conclusively proved by facts and figures that trawling in the Bay was a commercial possibility even at that time, and Government sincerely hoped that private trade would soon take up the venture.

Originally one Fisheries Department served the needs of the two Provinces of Bengal and Bihar and Orissa. Separation was effected in 1920 after which fisheries in Bengal were administered by the Director of Agriculture. The Bengal Fishery Department was abolished under retrenchment in 1923.

During the 14 years after the closure of the Fisheries Department, the price of fish in Calcutta soared consequent on the rapidly increasing demand and the unhealthy monopoly exercised by a small group of vested interests. The economic condition of the fishermen gradually became worse due to exploitation by capitalists and the fisheries in general were getting depleted due to various causes. As distress increased the public began to clamour for the re-establishment of the Fisheries Department to protect the fisheries interests and to organise and develop the fishing industry on modern lines. The Bengal Government therefore appointed a Fisheries Expert to survey the existing condition of the fishing industry in the Province and to suggest schemes of development with a view to augmenting the fish supply, to examine ways and means of bringing about a reduction in the ruling prices of fish, to stimulate commercial enterprise in speedier transport and better marketing and to establish cold storage plants and factories for the utilization of bye-products. The services of Dr. M. Ramswami Naidu of the Madras Fisheries Department were requisitioned by the Bengal Government. He surveyed the Industry and submitted a report to the Government as a result of which a Department of Fisheries was started in May 1942 with Rai Bahadur Dr. S. L. Hora of the Zoological Survey of India as its Director, to organise the fish trade under the War emergency conditions, to conserve the existing supplies and to conduct investigations on tank fisheries with a view to increasing the food supply in the Province.

With ever-increasing demand for fish in Calcutta and the concurrent rise in prices, the prospects of remunerative steam-trawling are now much brighter. As a matter of fact one big limited concern has already commenced trawling in the Bay of Bengal with Calcutta as headquarters: and it is expected that several other companies will soon follow suit.

Freshwater mussels are used extensively at Dacca in the manufacture of cheap pearl buttons and in many cases pearls are also found in the mussels which the pearl dealers gather and sell in the various parts of the Indian sub-continent. The Dacca bangle factories constitute an important local industry of very ancient standing; their material is almost entirely obtained from South India and Ceylon chank fisheries already referred to.

Potentialities.—Bengal's fisheries are a veritable gold mine; the Bay of Bengal has been described on good authority as the second best fishing ground in the world (the best fishing ground in the world being the Barent Sea). In the past, however, they have remained largely neglected, insufficiently explored or wastefully exploited. The Government has started a Technological Laboratory at Jaunpur near the Contai sea-coast for demonstration among ignorant fishermen of modern processes of drying fish and also for proper utilisation of shark-liver oil (a

rich source of Vitamin A) which is now being wasted by the local fishermen as fuel. The laboratory would also be used as a temporary marine base for the introduction of mechanised shark fishing and other improved methods for both off-shore and fore-shore fishing. There would appear to be good prospects for a few floating canneries, with equipment for the manufacture of fish by-products, working at the head of the Bay of Bengal and in the estuaries, as enormous catches of prime fish are made in those parts during the season which lasts from September-October to March-April. Fresh water and estuarine fisheries are vast and very important and only require to be developed scientifically.

The importance of the fresh water fisheries of Bengal is evident from the fact that their production is more than fifty per cent of the total fresh water production of the Indian sub-continent and in money value it is almost 60 per cent of the grand total. The Government have recently sanctioned a large-scale experimental scheme whereby the extensive and properly embanked paddy-fields in the Sundarban Abads will be used for the culture of carps and salt water Bheries of the nature of English mulletries will be improved for the culture of bhekti, mullets, prawns, etc.

One of the most important reasons why many of the tanks in the rural areas are not stocked with fish is the non-availability of fry. Even when fry are available they are not always of the suitable type, and the result seldom comes up to expectation. The owners of the tanks who take to pisciculture, therefore, give up their venture in despair after a year or two. To supply this want, the Government are working a plan for supplying departmental fry at 50 per cent of the cost of production to those tank-owners who undertook to stock their tanks in accordance with the advice of the technical officers of the Fisheries Directorate. Under this scheme Nursery Units are being set up in 14 districts and fry are being distributed therefrom. This roused a good deal of enthusiasm among tank-owners in the rural areas and many of the tanks which had been lying derelict for a long time past, have come to be stocked with fry. Reports so far received from the departmental officers indicate that the fish liberated in the tanks are growing well.

It is intended to stimulate production by the free distribution of fry of suitable species and to advance loans for the improvement of derelict fisheries.

Owing to shortage of meat, there is a heavy demand for fish from the civil population of Calcutta and other urban areas. Unfortunately the supplies are limited on account of refrigeration and transport difficulties, but schemes are under preparation whereby efforts will be made to augment supplies to an appreciable extent.

In recent years, as a result of fishery investigations carried out by the staff of the Zoological Survey of India and by the Zoology Department of the University of Calcutta, much progress has been made regarding the bionomics and life-histories of several species of commercial importance. Particular mention should here be made of the discoveries regarding the breeding grounds of Hilsa and the extensive trade in the young of this valuable species. As a result of these studies, it may now be possible to take protective measures for the conservation of the Hilsa fishery.

Bombay

WHEREAS Bengal's fisheries are at present confined principally to inland waters, those of Bombay are concerned, save in Sind, almost entirely with the exploitation of the wealth of the sea. Bombay is favoured with a coast line abounding in excellent harbours for fishing craft, a fair-weather season lasting for some seven months, and a fishing population more alive to their opportunities and more daring than those of the sister Presidencies. Bombay sea-fisheries are of very great importance financially as well as economically and, there is ample scope for most useful work in improving curing methods, in introducing canning and in the development of minor fishery industries, particularly those connected with the utilization of by-products.

The more important sea-fish in Bombay are pomfrets, sciæ and sea-perches, among which are included the valuable Jew-fishes (*Sciæna* spp.) often attaining a very large size and notable as the chief source of "fish-maws" or "sounds," largely exported for eventual manufacture into isinglass.

FISHING BOATS

The finest of the Bombay fishing boats are from the coast between Bassein and Surat. These boats are beautifully constructed, attain a considerable size, and are capable of keeping in the sea for weeks together. In the season the men fish principally off the Kutch and Kathiawar coasts and in the mouth of the Gulf of Cambay. Their main method of fishing is by means of huge anchored stow nets, which are left down for several hours and hauled at the turn of the tide. The chief catches are bombil (Bombay duck), pomfrets and Jew-fishes. The first named are dried in the sun after strung through the mouth upon lines stretched between upright posts.

South of Bombay the fishermen of Ratnagiri and Rajapur make use of another and lighter class of fishing boat specially designed for use in drift-net fishing. Fine hauls of *bonito seer* (a large form of mackerel) and allied fishes are often made during the season from September to January. Later sharks and rays predominate. For the latter specially large and powerful nets are employed. For part of the fair season, when fishing is not usually remunerative, many of the larger Bombay fishing boats are employed as small coasters, a fact which shows how big their size is.

FRESH WATER FISHERIES

With a view to developing fresh water fisheries of the Province a survey of different sheets of water and their fish fauna was undertaken which revealed that although there were

extensive irrigation reservoirs and tanks for commercial fish culture, there was hardly any indigenous fish suitable for the purpose.

Experiments on growing both indigenous and exotic varieties of fish in natural tanks and a study of their rate of growth, feeding and breeding habits, have revealed that selected varieties of carps occurring in the rivers of Northern India fatten satisfactorily under local conditions and are most suitable for stocking ponds, lakes, etc. The experiments have shown that a suitable tank of about four acres in area can grow about 2,000 lb. of fish and that the financial returns are most encouraging.

The main difficulty, however, in undertaking stocking operations on a large scale is that fry and fingerlings of suitable carps have to be imported from such distant places as Patna, Calcutta, etc. and consequently there is great uncertainty about the supplies. The future of the fresh water fisheries in this Province, therefore, depends on whether a reliable source of supply can be established at hand. In order to obviate the difficulty of importing fry and fingerlings from outside the Province, perennial sheets of water are being annually stocked. These waters include the Ulhas River, Visapur Reservoir, Tata Lakes and Powai Lake.

It is expected that the fish introduced in these waters will grow and breed so that the resulting fingerlings will be utilised for stocking other ponds. The work, however, will have to be continued for a number of years before any tangible results can be obtained.

SORLEY'S REPORT

A special department exists in Bombay for the development of the fisheries of the Province and their organisation on progressive lines. The department is in charge of the Director of Fisheries and has been specially constituted with effect as from the financial year beginning April 1, 1945. Till then the administration of fisheries was the responsibility of the Director of Industries who administered the subject of 'Fisheries' from 1918 and had for a time two officers in the department engaged upon fishery investigation and development.

No survey of the fishing industry can be complete without a reference to the so-called Sorley's Report (published in 1933) which is a store-house of information and also the starting-point of all subsequent measures for the improvement of the industry. Among its more important recommendations were 1. the establishment of a marine acquarium, 2. the opening of a bureau of fisheries information, 3. the encouragement of marine biological research and 4. the employment of motor launches for the transport of fish to consuming centres.

The experiment in mechanical transport was first conducted at Danda in co-operation with the head of the local fishing community. A launch obtained on loan from the R.I.N. was used with suitable modifications. The experiment was such a great success, the fishermen were so highly impressed with the speed with which fish could be transported that today there are no less than 30 vessels engaged in the carrying trade. The launches operate between Bombay and the fishing fields both in the north and south of it, and the total quantity of fish brought into the city during 1946-47 was 3,086,500 lb.

DEEP-SEA FISHING

Something even more important, however, is a scheme financed on a 50 50 basis by the Governments of India and Bombay for deep sea fishing. For this purpose a vessel Tapase has been put into operation, manned entirely by the members of the fishing community. The Government of India are also independently operating a steam trawler in which improved fishing methods such as trawl nets, purse-seine nets and Danish seine nets are being tried out along the Bombay coast.

Certain private concerns are also conducting experiments, of whom two may be mentioned. Messrs. India Fisheries Ltd. with a capital of over Rs. 20,00,000 will operate a purse-seine fishing vessel bought in America and manned by an American Master Fisherman and a crew of four. And second, Messrs. Western Fisheries Company who are using a 71 footer motor fishing vessel purchased from the Navy for trawler experiments conducted with the help of three Italian experts. Yet another private trawler 'Tongkol' which arrived in Bombay from Karachi in July made five voyages during the monsoon and landed about 23 tons of fish.

The Fisheries Department have designs for vessels with a much wider cruising range than was possible before. In accordance with the wishes of the fishermen these vessels will be deckless but will have arrangements for the installation of engines and the storage of fish. Two of such 45 vessels which are now ready have been offered to the fishermen's co-operative societies on a subsidy-cum-loan basis. If the vessels prove popular it is proposed to build 30 more at a cost of Rs. 8,00,000 in the next five years and make them available to as many fishing centres as possible.

It is clear that any experiment with the trawlers will be worthless if they have to be operated by technicians who do not belong to the fishing community. So part of the whole scheme is to train youths of the fishing community to run and maintain motor launches so that the whole trade can be confined to the community itself. Schools have been started for this purpose and an apprentice gets as much as Rs. 30 a month as stipend.

REFRIGERATING FACILITIES

Larger supplies of fish made available by the launches have induced the flow of private capital into channels intimately bound up with the fishing trade. Several ice factories and cold storage plants have since been set up at Malwan on the Ratnagiri coast and Chendia on the Karwar coast. In Bombay, a quick-freezing plant employing the Z-process has been installed by a Russian technician at the Kermani market at Delisle Road and an ice factory and a cold storage plant have also been set up on the east side of Crawford Market (Bombay). A feature of the plant mentioned last is that it has a number of small chambers which are hired out at

small fees either to one individual or to several collectively. This plant also provides for the quick-freezing of fish.

Several ice factories have been set up with the help given by the Department in releasing machinery, building material, etc. This has obviated the need for obtaining ice from remote centres in the City. The existence of two ice factories and one cold storage plant at the Sassoon Dock is a welcome facility to the fishermen who are now able to store catches at any hour of the day or night when retail vendors are not on the spot.

As there is still a great need for the extension of refrigerating facilities the Government have imported machinery from the U.S.A. for two ten ton and one eighteen ton ice-making plant in addition to cold storage and quick-freezing equipment.

FISH CURING

The control of the fish curing yards was transferred to the Department of Industries on July 1, 1936, prior to which they were administered by the Salt Department of the Government of India. There are 34 such yards in Bombay, 20 in the Ratnagiri District and 14 in the Kanara District. At these yards duty-free salt is stored in salt kothars from where it is issued to fish curers to cure fish.

Since the transfer of the yards the Fisheries Department has been devoting special attention to effecting improvements in the methods of curing. Cement concrete platforms were constructed at the Karwar yard for curing fish. The fishermen have realised the advantages resulting from such platforms, with the result that the fishermen at other yards have approached the Department for similar platforms at their own yards. As a result of this, cement concrete platforms have been provided at Harwada in the Kanara District, and Mirkarwada, Ratnagiri and Malwan in the Ratnagiri District.

To demonstrate improved methods of curing fish, the Department also constructed model fish curing sheds with cement concrete floors and Mangalore tiled roofs which will replace the present thatched sheds and sandy floors. This step will ensure the curing of fish in accordance with sanitary principles and increase the food value of the cured fish.

Smoking of fish is another method of preserving fish which has recently been introduced.

CO-OPERATIVE SOCIETIES

The value of co-operative societies cannot be gainsaid. And as a result of vigorous propaganda several co-operative societies of fishermen have come into existence at Binga, Ankola, Nandangad and Kodibag in the Kanara District, Bagmundla, Venguria, Jaitapur, Vijaydurga and Shiroda in the Ratnagiri District, Satpati, Murbe, Kharekuran, Shirgaon and Uttan in the Thana District, Danda in Bombay Suburban and Lower Colaba in Bombay City. These Societies will receive Government help for the acquisition of motor launches, trucks, ice plant and also financial help in the form of loan or subsidy.

Allied to co-operation are the fishery schools, of which four have been established at Ratnagiri, Karwar, Ankola and Satpat. The growing attendance at these schools is proof that they meet a long-felt need. Steps have also been taken to establish six more schools—at Kolak and Umarsadi in Surat, Jaithapur, Mithbao and Deobag in Ratnagiri and Majah in Kanara.

Five other items which need to be mentioned are the fisheries information bureau, the marine acquarium, the fish farm, the marine biological station and technological laboratory at Sassoon Dock and the exploitation of the by-products of the fishing industry. The last item will be dealt with at some length, while the others will be dealt with briefly.

A fisheries information bureau has been set up. The function of this bureau is to collate and supply information connected with the local and other fisheries. The information collected by the bureau is useful to the fishing industry, as it furnishes information not available to them before.

The establishment of marine acquarium has been made possible by a munificent donation of Rs. 2 lacs by Mr. and Mrs. Vicaji D.B. Taraporwala. The Government has accepted the donation and allotted a commanding plot of land for it along the Marine Drive. The scheme has been admitted as a post-war reconstruction measure and it is hoped that the acquarium will be ready in April 1949. A feature of the acquarium will be that the exhibits will include both fresh water and marine forms found along the coast of the Province. In addition, the acquarium will have facilities for marine biological research and investigations.

A scheme for setting up of a fish farm to remedy the lack of precise scientific data regarding the breeding habits of various indigenous and exotic food fishes, their rate of growth, food requirements, etc., has been sanctioned by the Government. The farm which will be established at Khopoli on the Tata tail race is expected to come into existence early next year. A scheme to establish two marine biological stations at Ratnagiri and Karwar respectively has also been sanctioned. This is a part of a five-year plan of post-war development programme involving a capital expenditure of Rs. 2,30,000 and an average annual expenditure of Rs. 73,500.

FISH OILS

A Fisheries Technological Laboratory has been established at Sassoon Docks for conducting research on problems relating to ancillary industries like shark-liver oil, gelatin, glue fish meal, etc. To ensure quick and clean extraction of oil a sharple's super centrifuge, a fish liver boiler, and a steam boiler have been imported. A deodorizer will also be installed to eliminate the disagreeable fishy odour of the oil. One piece of work which the Laboratory does is to test samples of shark-liver oil from the public for their vitamin A content, the number of samples so tested average over 300 a year.

The Second World War led to an investigation of the possibilities of the manufacture of oil from shark-livers to replace the dearth of supplies occasioned by the stoppage of imports of Cod-Liver Oil from Norway.

A simple process of oil extraction, not involving the use of any complicated machinery, was devised and demonstrated by the Department to the local fishermen and to the fishermen of Ratnagiri, Jaitapur, Malwan and Shiroda. The demonstrations were largely attended and the fishermen were greatly impressed by the fact that a new occupation and fresh source of income had been opened out to them. As a result of the demonstrations the fishermen earnestly took up the work of oil extraction and have regularly been sending to the Fisheries Department oil extracted by them. This is refined by the Department and later sold to chemists in Bombay.

During 1946-47 the output of neat shark-liver oil delivered to the Department was 3,000 gallons with an average vitamin A potency of 15,000 International Units per gramme. The oil when processed was capable of yielding 400,000 lb. of Oleum vitaminatum of B.P. standard. Besides this there is the oil disposed of by the fishermen directly which will not be less than 1,500 gallons. This is how the year's (1946-47) supplies were disposed of: 1. 1,967 gallons of neat oil with an average vitamin 'A' potency of 20,000 International Units per gramme and valued at Rs. 46,612 was supplied to the Haffkine Institute, 2. of the 2,246 gallons of shark-liver oil (B.P. standard) half was supplied to civil surgeons of Government hospitals in and outside the Bombay Province 3. 4,860 ten oz. bottles of shark-liver oil, Bombay Brand were sold to the public, 4. The Department has also put on the market shark-liver oil in a concentrated form under the name of 'Elasmin'. A small quantity of neat shark-liver oil was supplied to the medical profession for dressing wounds and to industrial concerns for curing leather and tempering steel.

The technique of the manufacture of shark-liver oil is capable of great improvement, especially in the matter of extraction, refinement and processing of the product. The value of training in the West for this purpose cannot be gainsaid, for the shark-liver oil industry is likely to play an even larger part than hitherto in the country's fishing industry. For this purpose the Government got one of the Superintendents trained at the British Cod Liver Oil Producers in Hull. The training acquired by the Superintendent is proving very helpful.

The superiority of Bombay's shark-liver oil over other varieties is unquestioned. Oils from *Carcharieas melanopterus* and *Pristis perrotteti*, for instance, yielded a vitamin A potency of 140,000 and 40,000 international units per gramme respectively. This is many times more potent than cod-liver oil which, according to the British Pharmacopoeia standard, is between 500 and 1,500 international units per gramme.

Cochin State

THE maritime State of Cochin, South India, has three types of fisheries, namely, marine, estuarine and freshwater. Its 85 mile coastline includes 19,700 acres of backwater abounding in different varieties of fish, brought in through the natural openings in Cochin and Cranganore. Thanks to the heavy monsoon months bearing down rich feed from the mountain and forest tracts of the interior, the State has her best sea-fishing during the rainy half of the year.

Marine and Estuarine Fishing.—The State has over 800 sea-going boats which bring in on an average 2½ lakhs maunds of fish every year, consisting of Sardine and Mackerel (through gillnets), miscellaneous varieties like butter fish, ribbon fish, sole fish, silver bellies and horse mackerel (caught by boat-seine) and sharks, rays, seer and other bigger varieties (by hauling).

The bulk of the monsoon catch is needed to meet the demand within the State itself, while a fraction is salt-cured and exported to the markets of Travancore and other parts of the sub-continent. The annual export trade in cured fish amounts to about Rs. 5 lakhs per year.

Prawn Fishing.—The sea, the extensive lagoons and the paddy lands on the cost produce various types of prawn during different parts of the year. All the varieties are nourishing and tasty. Before the war Burma in general and Rangoon in particular used to provide the best market for hard-dried prawn pulp from the State, the annual export amounting to Rs. 15 lakhs. The Department of Fisheries has now resources for preserving prawns in air-tight tins which keep the product well preserved for periods ranging from 8 months to one year. In the post-war era it is quite likely that the State's rich crop of prawns may form raw materials for building up a canning industry within the State.

Preservation.—Salt curing is the most widespread and perhaps the only preservation process which is dependent on the sun. Artificial drying or dehydration is generally resorted to during the monsoon. Smoking of fish is also encouraged as there is a demand for this. The Department has devised a plan for using smoke and heat from a common oven for smoking and dehydrating separate lots of fish in different chambers.

Fish Oil Industry.—Shark-liver oil and Ray-liver oil are now being produced by the Department. The hammer-heads and saw fishes are famous for the healing qualities of their oil, particularly in ophthalmic and pulmonary troubles. Shark-liver oil which has a very high percentage of Vitamin A has an exceedingly good market in the State. The cruder form of this oil is used for caulking boats and polishing leather. The stearin is made into insecticidal soaps and lotions.

Shell Fish Industry.—This industry is confined to the collection of little heaps of shells washed ashore. Shells are calcined in kilns to produce lime as a cottage industry. Near Wellington Island in the State, oysters are available, their meat being used as a specific in wasting diseases and also as a delicacy. The Fishery Department is now exploring the possibilities of making face powder out of oyster shells.

Fish Farming.—Estuarine fish farming is another contribution made by the Department in the development of the fishing industry. A

splendid ground for the culture of mugilis and milk fish has been discovered by transforming the unused land for paddy or coconut into a sort of nursery. Separate areas for fishes such as the Bekhti, the Indian salmon and Jew Fish which appeal to the sporting angler and the eater alike, are also marked and planned for systematic operations.

Deep Sea Fishing.—The State is working on a scheme for the operation of the boat-seine of Malabar with the basal platforms of net for mackerel; and of drift nets and hook and line for bigger fishes like seer, chornimus, rays and sharks.

The socio-economic activities of the Department are directed towards the liquidation of illiteracy amongst fisherman, by establishing five fishery schools manned by teachers from the fisher community trained in fisheries technique. Canals and roads for facilitating transport of fish are also being opened by the Department. Co-operative Societies have also been established and are being under the auspices of the Department.

Hyderabad (Deccan)

THE Hyderabad Fisheries Department was established in 1941. Since then investigations and preliminary surveys of many tanks and reservoirs have been carried out and about 100 varieties of fishes have been collected.

The chief sources of fish are the perennial rivers Godavari, Kistna and Manjera, but their tributaries are not so useful as most of them dry up during the summer. There are also many big reservoirs and more than 35,000 big tanks besides thousands of small ones, in which fishing is done.

Murrel is the most common and popular fish and it is obtained in large numbers during the hot season. But there is always a scarcity during the other parts of the year.

Breeding and culture of fishes is the most important part of the work, which is done by the Fisheries Department. Fish-farms where besides indigenous fishes, other fishes like Gourami, Etroplus and Mullets are kept for breeding, are being established in certain parts of the State. Hosainsagar fish-farm, for instance, is already functioning; and three others in Nizamabad, Medek and Atraf-e-Balda are under way. In the near future, fishfarms will be opened in other Districts too. The stocking of tanks has also started and a large number of them have already been stocked with fingerlings of fishes to increase production.

Besides breeding and culture the Department is concerned with improving the technique of fishing. Deep-water netting, for instance, has been introduced in one of the reservoirs as an experimental measure and if successful it will be extended to other reservoirs in the near future. An item in the post-war programme is the preservation of fish through refrigeration.

Incidentally the Fisheries Department is helping the Health Department to fight malaria with larvicidal fishes as at Trimalapur in the Nizamabad District.

The Fisheries Department is active not only on the production side but also on the marketing side. It supplies the Hyderabad city markets with fish in conjunction with the Hyderabad Co-operative Central Trading Society, Ltd. The needs of the District, however, are not overlooked for it is only the fish which are in excess of the needs of the District that are being sent to the City. The money for the purchase of the fish is provided by the Department but part of the idea is to encourage the growth of co-operative enterprise. The ultimate object is to entrust the whole work of supply as well as of sale to the Co-operative Society. With this end in view Societies are being formed in the Districts, and tanks instead of being given to individuals are now being leased out to these Societies on nominal payments.

Madras

THE Madras Coast line of 1,750 miles is margined by a shallow-water area within the 100 fathom line of 40,000 square miles; outside of the mere fringe inshore, this vast expanse of fishable water lies idle and unproductive. The surf-swept East Coast is singularly deficient in harbours whereon fishing fleets can be based, and so from Ganjam to Negapatam, the unsinkable catamaran, composed of logs tied side by side is the only possible easy-going fishing-craft. Its limitations circumscribe the fishing power of its owners and consequently these men are poor and the produce of their best efforts meagre compared with what it would be if better and larger boats were available and possible.

The West Coast is more favoured and contributes to more than three-fourths of the total landings of sea fish in the Province. From September till April weather conditions are good enough to permit even dugout canoes to fish daily. No difficulty is found in beaching canoes and boats throughout this season.

The fishing population is a large one. In the census taken by the Department of Fisheries in 1930-31, the fisher-population on the West Coast totalled 138,294.

Kinds of Fish.—During 1946-47 46,76,795 maunds of fish were landed on the West Coast of which important varieties were as follows:—

Mackerel 26,29,645 maunds valued at Rs. 1,17,12,485.

Silver-bellies 2,87,935 maunds valued at Rs. 12,16,471.

Soles 2,30,281 maunds valued at Rs. 5,48,576.
Prawns 1,69,594 maunds valued at Rs. 6,42,661.
Gogglers 1,16,123 maunds valued at Rs. 3,45,090.
Catfishes 77,729 maunds valued at Rs. 6,02,866.

Ribbon-fish 47,402 maunds valued at Rs. 2,14,903
Sharks 44,614 maunds valued at Rs. 3,52,683.
White sardines 33,488 maunds valued at Rs. 97,252.

On the East Coast Sardines, White-bait, Ribbon fish, Jew fish, Prawns, Catfish, Pomfret and Seer form the bulk of the fishery.

Fishing on both coasts is mainly by seine nets, drift nets and wall nets and also by hooks and lines. The most common craft used are the dug out canoe on the West Coast and the Catamaran and masula boat on the East Coast. Fishing outside the 5 fathom line is little in evidence save by Bombay boats (Ratnagiri) which are engaged in drift netting for bonito, seer and other medium-sized fishes. These strangers are enterprising fishers and bring large catches into Malpe and Mangalore and other convenient centres: the material is largely cured for export.

The Department.—As Government attention has been given in Madras over a longer period to the improvement of fisheries, and a larger staff concentrated upon the problems involved than elsewhere, this Presidency has now the proud position of knowing that her fisheries and collateral industries are better organised and more progressive than those in other provinces. It was in 1907 that a fisheries bureau was created. Later it developed into a separate Department of Government. It now forms part of the Department of Industries and Commerce.

The activities of the Department are so varied that it is difficult even to enumerate them in the space available, much less to give details. So far its most notable success has been the reform of manufacturing processes in the fish-oil trade, and the opening of an oyster farm conducted under hygienic conditions.

Madras practically led the way in developing the shark-liver oil industry in the country. Oil from a South Indian shark-liver is ascertained to be about thirty-five times richer in Vitamin A than an average sample of medicinal cod-liver oil. When cod-liver oil could not be imported in any quantity during the war, an opportunity was provided for developing an indigenous industry for the production of fish liver oil rich in Vitamin A, and also for manufacturing malt extracts and emulsions and various preparations of this kind. The manufacture of shark-liver oil is undertaken at the fish curing yards and oil extraction centres and in 1946-47, 8,399 gallons of crude oil were manufactured and sent to the Government Oil Factory, Calicut, for purification and blending. The amount of refined oil manufactured was 11,343 gallons and the amount sold was 10,400 gallons in 1946-47. The product, both in the blended and standardised bulk form and in the vitamin concentrated form of "Adamin" has stood its test very well and is facing a useful post-war stabilisation.

Fish Curing.—Fish curing is practised extensively everywhere on the Madras coasts: its present success is due primarily to Dr. Francis Day who, after an investigation during 1869-71 of the fisheries of the whole of the sub-continent, pressed for the grant to fishermen of duty-free salt for curing purposes within fenced enclosures. His salt suggestions were accepted by the Madras Government, and from 1882 a gradually increasing number of yards or bounded enclosures were opened at which powdered salt is issued as and when necessary to the curers. At present there are 112 fish curing yards scattered along the coast. During the year 1946-47, 24,72,305 maunds of fresh fish were brought to these yards for curing and 3,84,664 maunds of salt, were issued for the purpose.

Besides salt curing, the department started, in 1944, the smoking of fish, mainly for supplying the Army. During the year 1944-45, 124,320 lbs. of smoked mackerel, pomfret and seer were supplied to the Army and 5,382 lbs. to the civilian population, from the seven centres of production. The supply to the Army has since been stopped and at present smoking of fish is done on a small scale at the Fisheries Technological Station, Calicut, where researches on the efficient and economic methods of preserving and transporting fish are being carried out.

Two fish factories for processing prawns are subsidised by the Indian Council of Agricultural Research; they manufacture semi-dried prawns from inland lakes.

Pearl Fisheries.—Off the coasts of Tinnevelly and Ramnad Districts of the Presidency lie the valuable pearl oyster beds which, owing to a complex of causes yield at long intervals, an irregular supply of the oysters. With a view to elucidating and controlling the fluctuations to the best advantage, the life history of the oyster with correlation to oceanographic factors is studied by the Marine Biological Section of the Department. The rearing of pearl oysters in captivity, started in 1933 at the Krusadai Biological Station, Pambar has been very successful and a highly promising technique of pearl production by artificial inducement is being developed here. During 1946-47 the stock of Oysters at Krusadai were replenished with 1,000 Oysters from the Tuticorin banks.

Allied to the Pearl fisheries are the Chank fisheries of the maritime districts, both being crown monopolies. Besides the precious sacred chanks, the ablution chanks and Pooja conches, lakhs of chank shells feeding the flourishing chank ornament industry in the north come mostly from the seas of this Province. A total of 59,663 chanks were fished during the year 1945-46. Experiments in marking chanks started in 1931 to study the rate of growth and migration of the chank in its natural haunt is continuing and up to 30th June 1946, 5,374 chanks have been marked and liberated.

The Marine Aquarium.—Perhaps a word is necessary about the Marine Aquarium at Madras. Ever since its opening, being the first institution of its kind in Asia, it has been immensely popular with the public. On account of war emergency, the Marine Aquarium was closed on 8th March 1942. The immediate opening of a larger Aquarium on more up to date lines is now under consideration.

Deep Sea Fishing.—It is now agreed that Indian fishing requires improvements so as to cover more of ground as well as of catch. The survey ofdeep sea fisheries by the trawler "Lady Goschen," though brief, disclosed the existence of important off-shore fisheries unsuspected before. The wealth of fish off Negapatam reported by the trawler was of sufficient importance to attract the notice of Japanese fishermen thousands of of miles away. Even then it was realised that if Madras was to benefit by the survey, the allied duty of enabling the local fishermen to exploit the off-shore fishing grounds by suitable craft and tackle must be shouldered by the Department.

In 1944, the Department initiated deep sea fishing operations in different centres in the Presidency, mainly to augment the output of sharks to feed the growing shark-liver oil industry and also to demonstrate off-shore fishing. The operations resulted in a catch of about 9,000 maunds of fish in 1946-47. Meanwhile in December 1945, a new fishing method had been attempted, *viz.*, schooner fishing. The Pearl Fishery Inspection Vessel, "Lady Nicholson" was engaged in off-shore fishing with handlines and longlines and took four local fishing boats on tow. The catches made during the 4 months of the trial were 29,549 lbs. of fish. Further experiments are under way. The Department has acquired 8 motor fishing vessels from the Navy and they are now operating at Vizagapatam, Cocanada, Madras, Adihampatnam, Pamban, Tuticorin, Calicut and Mangalore.

A special craft and tackle section has been opened to devise, demonstrate and popularise improved fishing methods for different types of water, including inland waters.

The Inland Fisheries.—The fisheries of the numerous, extensive backwaters along the coastal belt of the Peninsula, the various rivers and the innumerable irrigation tanks, wells, canals, artificial reservoirs, natural lakes and domestic ponds distributed all over the land are of considerable magnitude, though in several cases the non-perennial nature of the water causes their fisheries to be ignored except during the summer drought when the streams shrink to pools and the tanks to puddles and the owners or the lessees of the fishing rights turn out to catch fish. The major waters are, however, provincialised, and their fisheries systematically developed and exploited directly or through a lease system. With a view to conserving fish seed, great congregations of breeder carps and their young below the Mettur Dam on the Cauvery and her tributaries, of spawning Hilsa below the anicuts in the Godavari, the Kistna, the Cauvery and the Coleroon rivers and of immature mullets in the coastal backwaters, are protected by legislation against their indiscriminate capture. Destructive methods of fishing such as poisoning, dynamiting, etc., are also penalised.

The chief freshwater fishes of economic importance are, the ubiquitous Murrel (*Ophicephalus striatus, O. marulius* etc.) notable for its ability to live for a considerable period out of water, the various carps (*Catla catla Cirrhina cirrhosa, C. reba, Labeo calbasu, L. fimbriatus, L. kontius, Barbus dubius, B. carnaticus* and the well known favourite of sportsmen in India, the Mahseers), the catfishes (*Wallagonia attu, Mystus seengala, M. aor, M. punctatus, Pangasius pangasius, Clarios magur, Saccobranchus fossilis, Silonia silundia* the eel (*Anguilla*) the spiny eels (*Mastacembelus Spp.*), *Notopterus notopterus*, the climbing perch (*Anabas scandens*) and the Hilsa (*Hilsa ilisha*). To these have been added a number of valuable exotic fish which have been successfully acclimatised to the waters of the Province. Thus the giant Gourami, acclaimed as the best freshwater table fish in the world has been introduced from Java and successfully reared and bred in the Departmental farms from where it has been distributed to Bombay, E. and W. Bengal, the E. and W. Punjab and other places. In the Nilgiris the English Carp, the Tench and the Rainbow Trout have been acclimatised and thrive well. The Government working in conjunction with the Nilgiri Game Association maintain a hatchery at Avalanche where quantities of trout fry are hatched and reared for replenishment of the streams of the plateau. The Mirror Carp which was introduced from Newara Eliya, Ceylon, in 1939, is thriving well in the Nilgiris and is now extensively used for stocking other upland waters of the Presidency. From Madras it has now been distributed to Bangalore, Bombay and the Kumaon Hills in the United Provinces. Semi-exotic forms like the Rohu (*Labeo rohita*) and the Mrigal (*Cirrhina mrigala*) have been recently introduced from the delta of the Ganga. The attempts of the Department to introduce Catla, the quick growing carp, into the Cauvery river were successful and this fish which was unknown to the South of the Kistna is now established in the Cauvery System.

Methodical attempts to augment the stock by local fingerling collection and distribution, acclimatisation of salt water forms like the mullets (*Mugil spp.*), the Pearlspot (*Etroplus suratensis*), the milkfish (*Chanos chanos*), the cock-up (*Lates*), etc., and hatchery operations for Hilsa, carps and the Trout have all been very successful in the building up of the Inland Fisheries of the Province.

Research.—In addition to the existing departmental fish farms, a fresh scheme of District Rural Fishery Demonstration has been put in operation in all the districts for a systematic survey and utilisation of every piece of cultivable water for aquiculture and, through Demonstration Fish Farms to educate the ryots and make them interested in fish farming as well as to maintain and distribute fish seed.

For the biological control of "water-borne" diseases like malaria, filariasis and guinea worm, small mosquito-cidal and cyclops-cidal fishes are collected, reared and distributed in thousands to municipalities and other local authorities at a nominal price for introduction into mosquito-haunted sheets of water these anti-malarial operations have proved successful in places where the local authorities have given proper attention to the directions issued.

Marine Biological Research with special reference to applied fisheries Science is being carried at the three Research Stations, one on the West Coast at West Hill and the other two on the East Coast at Tuticorin and Krusadai. Krusadai is a small coral islet situated near the island of Rameswaram and has been popularly called the "Biologists Paradise". Every year biology students from various institutions in India frequent this station for field studies. Investigations on the occurrence, migrations, feeding and spawning habits and development of the various food fishes as also the physico-chemical factors which influence their life are being carried out in all the three stations. Research on the life history of the Pearl Oyster and Chank is an important item of work at Krusadai and Tuticorin. Experiments are also being conducted at the Krusadai biological station in the culture of pearls under controlled conditions.

An estuarine research station has been set up at Ennore, near Madras to study important fishes like Mullets, Bekti and Threadfins which generally frequent the estuaries.

The Inland fisheries of Madras had also long been without a regular research section. After an experimental stage in Rural Pisciculture a regular Freshwater Biological Research Station, the first and only one of its kind in India, has been opened in Madras since 1942, with a subsidy from the Indian Council of Agricultural Research. The work of the station is directed towards investigating the bionomics, feeding and breeding habits and biometry of the important food fishes of the Province and the varied aspects of Ecology and Hydrology with a view to determining and promote the optimum conditions of maximum fish production. Two special wings, one Hydrological and the other Phytological have been added to the Research Station for special attention to physcico-chemico and floral studies towards the increase of aquatic productivity and the solution of pollution problems. The foundation stone of the new Hydrobiological Laboratories proposed for the Station was laid by Dr. Rajendra Prasad on May 13, 1947.

Welfare Work.—A remarkable feature in the work of the Madras Fisheries Department is the energy which it devotes to the improvement of the condition of the fisherfolk. On Sir Frederick Nicholson's initiative, the Department has always recognised the duty of spreading among them education and the habits of thrift, temperance and co-operation. The work has been specially successful on the West Coast. The number of fishermen's co-operative societies in 1944-45 on the West Coast was 59.

The Committee on Fisheries recommended that all co-operative work among fishermen both on the West and East Coasts in the Presidency should be done by the Fisheries Department and that, on the analogy of the system in vogue in the Labour Department, staff of Inspectors of Co-operative Societies should work under the Fisheries Department, the Co-operative Department supplying trained Inspectors and auditing the books of the societies. The Government partially accepted the recommendations and sanctioned the deputation of a Sub-registrar of Co-operative Societies and 3 Inspectors for exclusive work among fishermen under the department.

To promote the education of fisherfolk, the department runs a number of schools for fisher children where free education and midday meals are given. There are at present 60 Fishery schools with a strength of over 10,000 pupils. A unique feature of this movement is a Fisheries Technical High School, which is perhaps the only one of its kind in India.

While these service institutions of the department have been catering to the needs mainly of the marine fishermen, the diffused distribution of the inland fishermen has been one of the difficulties in the way of equally rapid progress in their rehabilitation work. Preparatory statistics of inland fisherfolk are however, being collected.

The educational work of the Department is becoming one of its most important branches in training men in the technology of curing, oil manufacture, etc., in co-operative propaganda and in general fisheries Science. In the past Fisheries Officers of most Provinces and States have received training in the Madras Fisheries. Till very recently the Fisheries Training Institution in Madras, under the subsidy of the Government of India, trained batches of graduates and post-graduates in an half-yearly course of general fishery work, while a Popular Short Term Course trains interested persons in the art of fish farming, to enable them to run private farms on efficient lines. Arrangements are made for the training of skilled workers at the Marine Fisheries Technological Institute, Tuticorin while Fisheries Technology has been included in the subjects taught in the Polytechnic recently opened at Cocanada. The Fisheries Station at Ennur supplies zoological specimens for the use of college classes and museums and is contributing materially to the advancement of the study of Zoology throughout India.

A Fisheries Information Bureau has recently been set up by the Department to disseminate information on all fishery matters, to answer enquiries and for popularising scientific methods of fish farming, production, exploitation and utilization. Besides, the Bureau maintains a Central Fisheries Museum and a well equipped Library. A Fishery Marketing Unit has been opened recently with a view to effecting a speedy survey of the existing marketing conditions of fish and fishery products, to draw up a working plan for the rational utilisation and equitable distribution of the produce assuring a fair return to the producer and to arrange necessary transport facilities, by road, rail and water.

Mysore State

THE Fisheries Section in Mysore is an adjunct to the Department of Veterinary and Animal Husbandry Services and was started in 1940. A survey of the fisheries of the State was first of all undertaken with a view to studying the existing condition of the fisheries, *i.e.*, the extent of fishing done at present, and the scope for the improvement of the fishing industry.

Fisheries development work, namely the adoption of conservation measures, the establishment of fish-sanctuaries and the stocking of tanks and river with good species of food fishes has been organised in three suitable areas of the State. They are Shimoga, Krishnarajasagar and Kolar Fishery Divisions. Results achieved have been sufficiently striking to justify expansion of the scope of the work to the whole State.

Two Fish Farms have been established one at Markonahalli and the other at Markandeya where fishery investigations are being carried out. Three varieties, *viz.*, Catla, Pearlspot and Gowrami were first introduced into the nursery ponds of these farms and after sufficient rearing disseminated into selected fisheries of the State. The varieties have well aclimatised themselves and have bred in the reservoirs and spread themselves over certain areas. These results are highly satisfactory and justify large scale stocking operations.

Mysore State is also noted for its game fishing resources. The famous large carp "Masheer" is the main game variety. Measures are being devised to conserve and develop game fisheries in the State.

The Fisheries Department today has two objects in view: one is to effect proper conservation on scientific lines, so as to increase production of food fishes and the other is to ameliorate the economic condition of the fishermen of the State.

Orissa

THE fishery wealth of Orissa is enormous. The East Coast line, the Chilka lake and large areas of inland waters yield all the 3 types of fish, i.e. (i) marine, (ii) estuarine, (iii) inland.

(i) *Marine.*— Due to lack of communication facilities, the fishing is scattered along the sea coast, the most important fishing centres being Chandbali, Chandipur, Talpada, Puri, Aryipalli, Gopalpur, Markandi and Sonapur. Fish is consumed locally, the surplus being simply sun-dried or salted. Whitebait, sardine, mackerel, seer, hilsa and pomfrets, are the principal varieties. 12 Fish curing yards in Orissa which used to provide duty free salt to fishermen are to be converted since the abolition of duty on salt to centres for demonstration of better fish curing methods.

Catamarans are used throughout the year, the sea being too rough for larger boats. Podows, i.e., country boats, are used in winter for the shore-seine net. Fishing gear employed are hooks and lines, drift nets, drag nets and seines of crude types. These are made locally. Middlemen control the fishery although there are some co-operative societies.

Lack of harbour and cold storage facilities and capital to introduce better fishing methods make improvement of marine fisheries a very difficult problem. The standard of living of the sea-fisherman is extremely low and calls for improvement. In some fishing centres the fishermen live on fish alone for days together. Improvement of the financial position of the co-operative societies, legislation limiting the middle men's activities, establishment of fishery schools are some of the measures which Government has to take.

(ii) *Estuarine.*—The Chilka lake forms a compact fishing area and yields extremely tasty fish and prawns. The lake is leased out by Zamindars to merchants who have built up an organised fishing industry. The export averages 50,000 mds. per annum and consists of mullets, bhekti, pomfrets, mackerel, Indian salmon, etc. The fish is packed in ice and exported mainly to Calcutta. Other estuarine fishing centres are Kirtaniakhati, Kujang, Chowmuhan and Sonapur. Lately, due to intensive fishing, there has been a scarcity of adult-sized fish in the Chilka lake. Problems of controlling the mesh of nets after studying the life history of important fishes are under consideration of the I.C.A.R. and the Government. Prohibition of indiscriminate fishing, killing of immature fish, observance of close season, etc., are post-war problems to be tackled. An estuarine biological station is being established at Balugam and the trade has to a great extent been diverted to Co-operative Societies bringing in considerable profit to the fishermen.

(iii) *Inland.*—The rivers and tanks form a great potential source of fishing though Hilsa in Orissa is not as tasteful as that in the Ganges. Rohee, catla and mrigala are the economic species. These breed only in rivers and in large bunds which resemble rivers during rains as in the Sambalpur District. Collection of fry is carried on every year in Balasore, Cuttack and Sambalpur. An organised fry trade exists in Lakhannath in the Balasore District. Government fry distribution supplies 20 centres and the supply which used to average 2,00,000 fingerlings annually has been raised to 15,00,000.

The fisheries are owned mostly by private individuals. Government fisheries are controlled by the Revenue Department. Although people realise that pisciculture is profitable, the multiple owners of water areas prevent active development. The activities of the Fishery Department have been confined to propaganda which, without executive authority, have not led to appreciable results. The prohibition of killing of fry in canals, paddy fields, etc., by legislation and of letting of sewage into inland waters, the construction of dams with fish ladders and the placing of Government fisheries under the control of the Fisheries Department are under contemplation. The post-war inland fisheries development scheme now in operation envisages rapid cleaning and stocking of tanks by forming co-operative fish farms. 10 such farms are now in operation on the results of which would depend the large scale adoption of establishment of collective fish farms.

Punjab (East and West)

THIS is the first full year of the work of the reorganized Fisheries Section of the Agricultural Department. On the staff are a Warden of Fisheries, four Deputy Wardens, 29 Assistant Wardens, Fisheries and 125 Fisheries Watchers. There is also a Fisheries Research Officer with a small staff to conduct Research on Fisheries.

The section has been provided with a Government lorry, a driver and a cleaner to facilitate transport of fry from the fry farms to the fish farms and the young fish from the fish farms to the streams and rivers.

The activities of the Fisheries Department have been directed to :—1. Conservation, comprising conservation by (i) Legislation, (ii) Providing fish ladders at the Canal Headworks, (iii) Creating fish sanctuaries (iv) Eradication of fish enemies. 2. Culture and propagation, comprising (i) Culture of exotic species *e.g.* Trout etc. (ii) Culture of indigenous species *e.g.* Carp etc. 3. Marketing and exploitation, comprising (i) Survey of rivers (ii) Improvement of socio-economic condition of fishermen (iii) Marketing of fish. 4. Miscellaneous, comprising (i) Propaganda and (ii) Anti-Malarial Activities.

CONSERVATION

The number of fishing licences issued during the year was 11,620 as compared with 10,724 of the last year. The increase is due to expansion of watch and ward staff and activities of the newly appointed staff of Assistant Wardens.

The number of netting licences and their fishing licence fee in the Kulu valley remained restricted as it was in 1944-45.

The receipts from Fisheries in 1945-46 amounted to Rs. 1,96,234 as compared with Rs. 1,81,394 in 1944-45.

The total number of fishing offences reported during 1945 was 436 as compared with 331 in 1944.

The catches of fishermen were satisfactory in all the districts. Some of the Fish Ladders were not working satisfactorily. The working of the Fish Ladders was discussed with the Executive Engineers concerned who made suggestions for their proper functioning.

No violation of rules in the sancturies has been reported and the fish are progressing satisfactorily except in Machiali Stream and Bheral in the Palampur Tehsil of Kangra district which have been silted up. The restriction on fishing near the bridges as a war measure was removed under Punjab Government Notification No. 3643-Agr., dated 20-11-45.

CULTURE AND PROPAGATION

There are at present 12 natural rearing ponds in Kulu Valley. The growth of fry in these ponds is extraordinarily rapid. Some of them have grown 8 times more than those kept at the hatchery.

The stripping of Brown Trout commenced towards the end of 1945. 71 female fish were stripped yielding 1,24,000 ova. After fertilisation 85,230 became eyed and 60,000 of them were planted in the different rivers and streams in Kulu Valley, and 25,230 were allowed to hatch at the farms. Out of this number 21,000 hatched successfully and were also planted in various streams keeping about 1,000 at the farms.

82 angling licences were issued in Kulu waters during the year under report as against 137 of last year. The decrease is due to the fact that very few anglers visited the valley on account of heavy floods which occured during July and August 1944 and caused deterioration of trout fishing.

Trout in the Paber and Baspa rivers in Bashahr State are flourishing. Due to the remoteness of the streams only one angler came to fish in the Baspa River during 1945-46 and he caught 10 fishes varying from 14" to 20" in size.

The carp does not usually spawn in confined waters but having refused to spawn in the Chhenawan fish farm tanks for a number of years, they have begun to spawn there during the last three years at the time of heavy rains and floods. Eggs were laid this year on the flooded banks of the tanks and not in the field. These eggs were collected and put in other ponds for hatching in the Khori tank. The carp also spawned and the fry attaining a size of 6-8 inches within four months and were then successfully transferred for stocking other ponds. Spawning also took place at various other places and the eggs were collected for stocking different ponds. 73 spawning grounds have so far been located in the various districts in the Province.

Fry Farms.—The number of fry farms so far established is 73. Most of these fry farms are the pools left in the spawning grounds where fry collect after the flood subsides. In addition, controlled, fry farms have also been established in some districts. 3,800 fry were supplied, free of cost to the Manager, Khasa Distillery at Amritsar, who has a large tank and also to the B.C.G.A. Farms tanks at Khanawal. Transport, however, was charged.

Village ponds are also now being stocked with fish. The total number of such village ponds, which have been leased by Government for fish propagation, is 78, and all have been stocked with fish.

The total number of fish farms so far established in the fish consuming districts is 30. Most of these fish farms are large permanent tanks and are mostly rain-fed, while a dozen or so are Canal-fed, and two of them near Batala are kept filled with water by means of a tube-well. The Shemsher Khan Tank at Batala is fully stocked with fish and licences are issued for fishing purposes. 199 licences were issued this year for fishing in this tank, and the Anglers caught 1,195 fish.

The number of tanks stocked during the year was 46 and the number of carp fry planted in them was 52,526. The transport of fry from the fry farms to the fish farms was done in oxygen carriers over long distances in the Government lorry. Sales of fish from such tanks have commenced.

Salvage of fry in the drying pools after floods is an important function of the section. If such fry is not salvaged after floods they perish. 1,17,874 such carp fry were salvaged during 1945-46 and put into other tanks and shallow streams.

MARKETING AND EXPLOITATION

The Fisheries staff has completed survey of all the rivers and streams in their jurisdiction.

At present there are about 6 credit and co-operative societies in Gurdaspur and Hoshiarpur districts but only a very small percentage of fishermen have joined. In the remaining districts there are no such societies. Efforts are being made to open credit and supply societies throughout the licence issuing districts. Some difficulty has been felt by fishermen in obtaining the necessary amount of yarn to make nets or to mend their old ones. The department has been able to get the yarn for the fishermen.

By starting fish farms and stocking of village tanks, etc., it has become possible to establish new markets for the sale of fish. Such fish markets now exist at Campbellpur, Jhelum, Pind Dadan Khan, Sialkot, Amritsar, Wazirabad, Lahore, Ferozepur, Mianwali, Jullundur, Multan and Sargodha. Efforts are being made to have at least one fish market at the Headquarters of each district. The President and Executive Officers of the Municipal Committees have been requested to undertake the construction of fish markets at suitable places in their jurisdiction.

Although it is difficult to collect exact information regarding the total quantity of fish brought into the markets as fishermen do not give accurate information for fear that their licence fee may be raised, yet whatever information has been collected shows that not less than 46,573 maunds of fish became available for consumption during the year.

Vigorous propaganda is being done by the Fisheries Staff in the villages in connection with the propagation of fish and contact has been made with landlords who have been impressed with the utility of fish culture. The interest of the people to start fish culture has greatly increased and many are looking forward for the supply of fry which will be made available after August, 1946 when the fish have spawned.

The value of Colisa as larvicidal fish is well known. It is being reared at the Government Farm, Chhenawan. 20,000 Colisa were supplied during 1945-46 to the Public Health Department for stocking in ponds situated in localities where malaria fever prevails.

Sind

TAKING into consideration the limited sea-board and the number of fishing villages, Sind has a rich sea fishery.

The fishing grounds are located not only around Karachi, but as far away to the south east as Kutch and towards north as Sonmiani and even Pasni, Ormara, Gwadar up to the Persian Gulf. Vigorous drift net fishing is carried on in the sea-board specially up to 20 fathoms contour line even as far as 120 miles due south of Karachi and an equal distance in the north towards the Persian Gulf for important economic fish like Ghol, Surmai, Sole, Rawas, Choki, Kargoon, Pitho, Hiro, Sang, Sangro, Gissur, Kanderi, Kar, Liaro, etc., etc.

Extensive fish curing operations were carried on with the duty free coloured salt manufactured in Sind till the day on which the duty on salt was abolished.

A scheme for starting Government fish curing yards has been approved. To begin with 5 yards at Cape Monz, Karachi, Ibrahim Hydri, Sonneri and Mull on the sea coast and one at Buback for fresh water fish in Munchur Lake have been sanctioned, where curing will be done under Government supervision with clean white duty free salt in cemented tanks under hygienic conditions. Plans are ready for 18-19 yards all along the coast. But owing to financial difficulties and limitations in the P.W.D.'s building capacity only 2 yards are proposed to be constructed this year.

The best market for Sind's dry fish is Colombo, where in the year 1943-44, 95,000 cwts. of dry fish and cured prawns were sold. Fresh fish packed in ice is also exported to up-country places like Simla, Lahore, Peshawar, Rawalpindi, Quetta. In the year 1944-45 about 30,000 mds. of fish were exported to these places.

New Schemes : In August 1944 the Sind Government appointed Dr. M. Ramaswami Naidu of the Madras Fisheries Department as Fisheries Expert with a view to making a survey of the fisheries of this province, both marine and inland, and to examine the possibilities of developing them. In the meantime the following schemes for the development of the fishing industry were prepared by him and submitted to Government.

1. Edible oyster culture and establishment of an oyster park.
2. Development of prawn fishery and manufacture of semi-dried prawns.
3. The establishment of smoke houses for smoking Hilsa and other fishes.
4. The establishment of five Government fish curing yards in the Sind coast for production of good quality cured fish.
5. Stabilising the fishing industry and improving the socio-economic conditions of the fisher-folk.
6. The establishment of Hilsa Hatchery and a freshwater fishery research station.

7. The establishment of a Marine Acquarium in Karachi.
8. Deep sea fishing experiments with modern type of power crafts and tackle and introduction of fish carrier launches for expeditious transport of fish.
9. Establishment of demonstration plants for the manufacture of fish manure and fish meal by the utilisation of fish waste and non-conomical fish.
10. Establishment of a Marine Biological and Technological station at Karachi.
11. Establishment of an up-to-date wholesale fish market with cold storage and ice packing facilities close to the new fish harbour at Karachi proposed by the Port Trust.
12. State control of the production of shark-liver oil and its other products.

Of the above schemes the first four, the eighth and the twelfth have already been sanctioned by the Government of Sind and are being put into execution.

Of those which are sanctioned one edible oyster park has already been started at Ibrahim Hydri where experiments for the collection of oysters spats and to increase the output of oysters are being conducted.

22 maunds of "semi-dried" prawns were also manufactured. But owing to the unexpected tidal wave disaster which occurred at the height of the prawn fishery season practically two or three fishing settlements along a 40 mile coast were completely destroyed, 113 fisher folk were drowned, and the prawn fishery was adversely affected. Last year the manufacture of semi-dried prawns was carried on a larger scale. Its continuance this year is also sanctioned.

A smoke house for smoking "Palla" (Hilsa) fish has just been completed at Sukkur near the Lloyd Barrage and experiments in smoking Palla fish will be started soon. A few hundreds of "Hilsa" (Indian Shad) were also smoked and sold.

Two motor fishing launches, one 75 footer with 160 H.P. Diesel engine and another 95 footer with 260 H.P. Diesel marine engine, both fitted with a power winch, have just been purchased by the Sind Government from the naval base at Cochin and will be utilized as fish "carriers" to fetch fish caught in distant places in the sea up to the Persian Gulf in the west and Kutch in the South-East, and also probably for deep sea fishing. One of the M.F.V.'s, a 90-footer has been brought to Karachi and is being equipped for fishing with trawl net, and provision for a cork-insulated fish-hold is also made.

A Master Fisherman to demonstrate the modern methods of fishing from rover vessels recruited for the purpose has also arrived here and will soon be starting deep-sea fishing with this vessel.

Besides the above trawler, another steel built 75 foot trawler "Ala" with gear, refrigeration plant, insulated fish-hold, echo sounding machine and wireless, allotted to the Pakistan Dominion has just arrived from Lowestoft (U.K.) with a European skipper and engineer. This trawler is also proposed to be handed over to the Sind Department of Fisheries for deep-sea fishing experiments : she will be put into commission in one or two weeks.

A Fishermen's Co-operative Purchase and Sale Society has been started at Karachi and is working very well. The Society has exported a first consignment of 1286 cwts. of cured fish to Colombo. The old, undivided Government of India gave this Fishermen's Co-operative Society a special Licence Quota of 18,000 cwts. for the export of dry fish abroad.

Arrangements are being made to instal a cold store for fish at Karachi.

Other schemes for the conservancy and development of freshwater fisheries of the province are under preparation.

Steps have also been taken to improve road communications for expeditious transport of fresh fish from fishing centres to consuming centres.

The important fishing villages in Sind are :—

		Fishing population.
Khudda.	(in Karachi)	3,000
Kaliri.	,,	2,500
Baba Island.	,,	2,500
Bhit Island.	,,	1,600
Ibrahim Hydri.		4,000
Rerhi.		2,000

Besides, there are other less important fishing villages in the deltaic areas of the Sind Coast.

Prawn Fishery.—Seasonal fishery, which commences from the month of November and ends by end of March, is also a very important fishery of this province. On an average 40,000 mds. of cured prawns are exported every year to Colombo and other places.

The important fishing areas for prawn fishery are :—

Kurangi creek
Phiti creek
Kudi creek
Patiani creek
Dhabo creek
Chaan creek

Of the above, Phiti, Patiani and Dhabo creeks are the most prolific among the prawn fishing areas.

The prawns caught in Sind waters belong to a big marine group "Penaeidae" which are normally inhabitants of sea but migrate into estuaries of lower salinity in quest of their food which is predominantly diatomaceous in character.

The prawns comprise the following three kinds. The names are naturally in the local language.

1. "Jhairo"	the biggest	5"-9"
2. "Kaliri"	the medium	4"-6"
3. "Kidi"	the small	2"-4"

A good number of sharks (Saw fish, Hammer Head, and several other ordinary sharks) are captured specially during the months of August, September and October and again February and March. One variety, the "Basking" shark

(Rhinodon typicus) which grows as large as 60 feet, is occasionally fished with harpoons. Its liver yields a large quantity of oil.

There are at present two private shark-liver oil factories and they are manufacturing a fairly good refined oil, fit for therapeutic purposes which is being marketted both as concentrated (20,000 i.u.s.) and standardised oil (1,600 i.u.s.).

There are two distinct oyster-fisheries in Sind,—both present in the creeks which constitute the mouth of the Indus and its network, specially between Karachi and Ketibunder. These are (1) edible oyster and (2) the window-pane oyster which yields pearls. An auction held in the year 1944-45 yielded Rs. 800.

The most popular fish from the Indus is the Pulla or Palloh (the well-known Indian Shad). This is under the control of the Revenue Department who lease out different stretches of the Indus. The Dumbra and other fresh-water carps and prawns are other items in the Indus fisheries.

The Hub River which forms the boundary between Sind and Baluchistan, contains the well-known sporting fish—Mahseer (Barbustor

Aphanius Dispar (Cyprinodon Dispar-Day) a well-known mosquito larvivorous fish is present in freshwater pools around Karachi and is used to a certain extent to combat malaria.

Travancore

THE Department of Fisheries an independent department is now under the direct control of Government.

The coast line of Travancore is 172 miles long and is margined by a shallow water area, within the 100 fathom line, of nearly 3,900 square miles. Out of this vast-expense of fishable waters, only a distance of 5-7 miles is exploited at present and the value of the industry to the State at present is estimated at Rs. 1,20,00,000 per year. The surf swept coast is singularly deficient in harbours and during the monsoon months the fury of the breakers is a source of great hindrance to fishing. From Cape Comorin to Trivandrum the unsinkable catamarans composed of logs tied side by side is the only possible easy going fishing craft. From Quilon to the northern most boundary of the State, small country made canoes are used and from October to June, when weather conditions are favourable seine nets are extensively employed.

The esteemed table fish of the coast consists of pomfrets, seer fish, several species of horse-mackerel, tunny, Jew fish, whiting, mackerel and thread fins. In economic importance, however, shoal fish and fish of inferior quality such as butter-fish, sardines, white bait and ribbon-fish take precedence. Butter-fish, sardines and prawns are abundant in the northern half of the coast, while cat-fish, white bait and ribbon-fish are predominant in the southern half. This conspicuous difference in the distribution of shoal fish has been found to be mainly due to the differences in the nature of the sea bottom. During favourable seasons, butter-fish, white bait, ribbon-fish and cat-fish are so greatly in excess of the local food requirements that large quantities are salted and dried both for inland consumption and for export. Travancore exports annually about Rs. 53,00,000 worth of salted fish, the greater part of which is sold in the adjoining tamil districts and Ceylon.

As the important shoal fish are seasonal in their appearance certain months are more favourable for fishing than others. During these favourable seasons large catches are landed daily along the coast and the only method of conservation of the large unsaleable surplus is salting and drying. But realizing that salted fish is devoid of some of the essential properties of fresh fish, the Government opened a refrigerating plant in the metropolis for the preservations and storage of fresh fish.

The Department also succeeded in devising a cheap and efficient method of packing frozen fish for transport over distances within 72 hours by rail. Although, by this means, it was found possible to send frozen fish to all important inland towns in South India, the method did not prove a commercial proposition owing to its high cost and the competition of iced fish from Malabar; consequently it had to be abandoned for the duration of the war. Now there are proposals to work the Cold Storage Plant.

Fish Curing.—The prevalent methods of fish curing being imperfect and very often unhygienic, the salted and dried fish produced in India are usually inferior in quality, which accounts for the low prices they fetch and the limited demand for them. In order to stimulate demand by improving the quality, the Department of Fisheries has prepared a scheme of hygienic methods of curing and experiments on dehydration of fish are in progress.

Shark Liver Oil.—The Department started the manufacture of shark-liver oil in 1939, and the oil is offered in the market under the trade name 'Sharliverol'. The oil is roughly standardized to ensure Vitamin 'A' potency of 6,000-8,000 international units and is sold in the pure form after eliminating traces of free acids and sterine. Since maintenance of a high standard of quality is the guiding principle of the Department, only oil extracted by special methods is used in the manufacture of shark liver oil in order to maintain a high standard of quality and no attempt is made to blend it with cheap vegetable oils. During the last twelve months, about 14,500 lbs. of oil was produced, the greater part of which was exported to British India and Ceylon. Though some degree of success has been achieved in the manufacture of Shark liver oil, the need for further improvement has not been overlooked. Researches on oil technology and determination of the specific properties of the oil obtained from various species of sharks are in progress in collaboration with the Department of Industrial Chemistry, with a view to improve methods of manufacture and suitable standardization.

The demand for other marine oils has also been steadily increasing. Sardine oil as was very scarce during the past year but it was more or less supplemented by turtle oil and the oil extracted from Balistis, popularly known as leather jackets.

Other marine products also came into prominence. The war situation stimulated investigation of the commercial possibilities of some of the common sea weeds found along the coast of Travancore. The extraction of iodine from Sargossum and of Agar from Gracillaria was attempted by the Department of Industrial Chemistry which undertakes a survey of the distribution of sea weeds, as a result of which the manufacture of Agar Agar has been started on a commercial scale.

Lake Fisheries—The lake fisheries constitute an important section of the industry. A chain of interconnected lakes extends from the borders of Cochin to Trivandrum. The largest of them is about 30 miles long and ten miles across, at its broadest part. Their greatest advantage is their proximity to the sea and their temporary or permanent communication with the sea, which bring them under tidal influence. Certain varieties of fish and prawns migrate into these lakes periodically either in search of some special type of food or suitable spawning grounds. The most important of these migratory forms is prawn, the annual catch of which is estimated at Rs. 25,00,000, out of which about Rs. 15,00,000 worth of dried prawn pulp was being exported to Burma and Singapore. But after the fall of Burma, the prawn industry was confronted with an unprecedented slump which threatened the economic welfare of a large section of the fishing population who depended mainly on prawn fishing; but the crisis was averted to some extent by discovery of new markets in British India and Ceylon through Departmental propaganda. Experiments were also conducted for improving methods of preservation and for the preparation of new products out of prawn. As a result of these pendeavours, a new product called powdered prawn, suitable for making prawn cutlets, chutnies, pastes and curries has been produced and will soon be placed on the market. A better method of preservation which will prolong the keeping qualities from two months, which is the normal period now, to eight months is also being demonstrated to the public.

Shell Fish Industry.—The shell fish industry of the lakes is now confined mainly to the collection of lime shells from certain regions of two of the major lakes. These supply all the lime required for building purposes in the State and recently a scheme has been drawn up for exploiting these extensive resources for the manufacture of cement.

Large beds of edible oysters are also found in three of the lakes. At present these are not very popular as an article of food but investigations are under progress for culturing them on the same principles as those followed in Europe and for finding out markets for liver oysters outside the State.

While in the rest of India inland fisheries are very unfavourable situated as many of the rivers and tanks dry up in summer, in Travancore fresh water fisheries are a source of perennial fish supply. There are about 120 varieties of fresh water fish some of which grow to very large size.

Research Activities.—A combined Aquarium and Marine Biological Laboratory was recently completed under the auspices of the University of Travancore. The Aquarium which is one of the largest in Asia is open to the public and the Laboratory, in addition to training students for post-graduate research degrees will also function as a bureau of fisheries.

The Marine Biological station of the Department has so far completed seven pieces of research relating to marine and backwater fisheries, the most noteworthy of which are the "Food habits of the Shoal fishes of the coast," "A survey of the prawn fisheries" and "The causes of spoilage in dried prawns." The department also read three papers at the last session of the Science Congress and contributed a few short notes to the *Current Science*. At present there are five Research Students working in the Marine Biological Laboratory.

United Provinces

FISHERIES investigations in the United Provinces date back to the sixties when Dr. Day, as Inspector General of Fisheries made a survey of the inland fisheries of India. His report on the freshwater fisheries of India (1876) includes replies to his questionnaire to District and Taluq officers in the United Provinces which contain valuable information, most of which still holds good. One of the results of Day's investigation was the enactment of the Government of India Fisheries Act of 1897.

The possibilities of developing fisheries in the U.P. however was for the first time considered by the Government of the U.P. in 1920 in connection with a reference from the Punjab Government about the regulation of fishing in the Jumna. The Government decided to institute an investigation into the possibility of establishing a Fisheries Industry in the U.P.

An inquiry was conducted by Mr. Edye whose report was published in 1923. Despite the general impression that Mr. Edye dealt mainly with sporting fish and not with fish as food for the general public, his investigations were comprehensive and his recommendations sound. Due to this general misunderstanding resulting from Edye's own imperfect summary of his recommendations in the report and his unrealised hope that extensive imports of sea fish were about to commence which might render the development of inland fisheries unnecessary, no serious attention was paid to his report. The only concrete action taken by Government appears to be with reference to the conservation of the sporting fish Mahseer and Trout in hill streams and the general recommendation to the Municipal and District Boards and to the Co-operative Department to develop local fisheries.

In 1943 as part of the programme for post-war reconstruction and more immediately to provide against the prevailing shortage of food caused by the War, the development of fisheries received consideration. It was, however, felt that exploitation of the fisheries to increase the supply of fish to towns and the Army was the immediate need and should take precedence of fisheries survey, and fisheries research. The Government therefore decided to take immediate

steps to provide a regular, abundant and cheap supply of reasonably good quality fish in the market in Lucknow and in the other important cities. Energetic action was taken by the Government through the Co-operative Department, War Supply staff :—

To improve the existing sources of supply by encouraging market contractors to increase supplies and where this was not possible by directly recruiting fishermen supplying them with boats and nets and intensively fishing rivers, tanks and Jhils, to seek and develop new sources of supply hitherto unexploited.

To improve transport by the provision of ice and refrigeration vans, and

To improve the marketing of fish by direct sale to the public and the Army at equitable rates far below the ruling market prices.

Post-War.—The scheme which was put through at Lucknow, Allahabad, Benares and Naini Tal was extended to other large consuming centres in 18 out of 48 districts. The Government however decided to wind up the marketing scheme by 31st Oct. 1947.

In March 1944 the need for a technical expert was felt and a Fisheries Development Officer was appointed in the Department of Animal Husbandry to help immediately in the proper expansion of the supply scheme which had been launched and ultimately to plan a Scientific Department of Fisheries for the United Provinces.

A comprehensive five years' plan of post-war development was drawn up by the Fisheries Department Officer and has been approved by the Government.

In response to the general demand to grow more food a scheme for stocking as many suitable tanks as possible in the 6 districts of Benares, Mirzapur, Jaunpur, Allahabad, Banda and Jhansi was sanctioned jointly by the Government of India and the U.P. Government early in 1945 and some tanks have so far been cleared of predaccous fish and stocked with the fry of quick-growing carp. The scheme has since been extended to 18 districts.

Rivers being the primary source of supply of food fish it was realized that side by side with intensive culture and exploitation the conservation and control of river fisheries should receive attention. A staff of 6 wardens, 15 assistant wardens and 21 watchers has been sanctioned and has been partially recruited to patrol the rivers. A fisheries research laboratory at Lucknow has been established for continuous study of conditions obtaining in the rivers and tanks and to initiate suitable measures of fish conservation and culture which will keep pace with intensified exploitation. A suitable site at the Tanda Falls (Mirzapur) has been selected for a research fish farm. As waters above 3000 ft. are devoid of food fish the well-known mirror carp of Europe which has done remarkably well in Ceylon and on the Nilgiris has been brought to the Kumaon Division for stocking rivers.

Public Health

THE history of the public health administration in the sub-continent may be traced back to the appointment of the Royal Commission in 1859, which recommended measures for the amelioration of the health of the army and the civil population. In accordance with its suggestions "Commissions of Public Health" were established in the provinces of Madras, Bombay and Bengal in 1864. This led to the appointment of Sanitary Commissioners. In 1888 the Government of India issued a resolution "drawing the attention of local bodies and village unions to their duties in the matter of sanitation."

The success achieved by such efforts was negligible except in the larger cities. Owing to the vast number of the sick the main emphasis was laid on curative medicine; preventive medicine did not receive proper attention. The outbreak of plague in 1896 had a great effect on the people and the Government, awakening them to the need of overhauling the public health machinery in the country.

The report of the Plague Commission in 1904 was a landmark in the history of public health administration. It recommended the strengthening of public health services and the establishment of laboratories for research and the preparation of vaccines and sera, but the total effect of the measures adopted in pursuance thereof was small. Attention was directed mainly to urban centres while about 90 per cent of the population lived in villages.

Under the Government of India Act, 1919 the health administration was transferred to Provincial Governments making it a subject directly under Ministers responsible to the Legislatures. This position continues under the Government of India Act, 1935 and the Provincial Governments are unfettered in the development of health and sanitation in areas under their jurisdiction. The effect of this transfer are summarised by the Health Survey and Development Committee in its report as follows :—

"Ministers were anxious to promote the growth of Education, medical relief and preventive health measures as far as funds permitted. Indeed, there has been, since the Reforms, far greater public health activity in the provinces than ever before."

VITAL STATISTICS

The sub-continent's population growth is characterised by high levels of fertility and mortality. Interconnected with this feature is the high infantile mortality. Thus, her birth rate, death rate and infantile mortality rate are much higher than those of Western Countries.

Birth rates.—The five yearly averages for the pre-war period 1937-41 was 33.2 and for the war years 1941-45 was 28.0. This noticeable fall in the birth rate was shared by almost all the individual provinces. The birth rate of 28.9 in 1946 suggests an improvement, increases in the rate of an order of 2 per mille or more having been recorded in Ajmer-Merwara, Assam, Sind and pre-partition Bengal.

Death rates.—The five yearly averages of 22.8 in 1937-41 and of 22.5 in 1941-45 show that disparity in the death rates was not so marked as in the case of birth rates, the only instance of an increase of over 2.0 per mille being Bengal which went through the great famine of 1943. It seems therefore reasonable to hold that, in spite of the stress and strain which war conditions brought to bear on community life, the rise in mortality over the sub-continent as a whole was not appreciable. The death rate in 1946 was 18.4. Although the high cost of living and difficulties in respect of Food continued in 1946, it is gratifying to note that the recorded death rates show an appreciable fall in every province in comparison with the five year period, the decrease being 4.1 per mille in the sub-continent as a whole and over 5 per mille in the provinces of pre-partition Punjab, Delhi, Central Provinces, Coorg and Ajmer-Merwara.

Infantile mortality rates.—The five yearly averages for 1937-41 was 160.4 and for 1941-45 was 160.8. Here again, the war years did not produce a rise in the sub-continent as a whole, while some of the individual provinces recorded varying reductions in the infantile mortality rate in comparison with the five year period before the war. The infantile mortality rate of 135.8 in 1946 shows an appreciable fall in comparison with the five yearly averages. This decrease is shared by almost all the provinces and, in some cases the fall has been appreciable.

Normal Conditions.—The rise in birth rate during 1946 even though it was slight, and the simultaneous decline in death and infant mortality rates would seem to justify a guarded optimistic view that an improvement of the public health was recorded during the year. From 1941 to 1944 the vital statistics presented the dual characteristic of a rapidly declining birth rate and an increasing death rate which would generally be interpreted as indicative of adverse health conditions in the country. The corresponding rates for 1946 show an appreciable advance in the birth rate in many provinces and an equally noticeable fall in the general and infantile mortality rates and it may well be that the year 1946 marks the stage of a return to more normal health conditions.

EPIDEMICS

During the year under review the incidence of epidemic diseases was mild throughout the country. There were epidemic outbreaks in Bombay, Madras, U.P., and Bihar and to a minor extent in the Central Provinces, but they did not take on the explosive and extensive nature of the previous two years. Perhaps, the prophylactic inoculation campaigns introduced in anticipation of the seasonal rises by the various provinces after their experience of the last two years may account for keeping the epidemic under check through the building up of an immune population.

Except in the cases of cholera, smallpox and plague morbidity statistics for the general population are as a rule not collected in the sub-continent. Whatever information in this direction

can be gathered is restricted to the Hospital and Dispensary statistics. Mortality statistics relating to the general population, however, are collected in several details, *e.g.* by age, sex and community. Deaths by different causes are also recorded but there is not much uniformity in the details adopted by the various provinces, as for instance deaths from tuberculosis or malaria are not recorded separately for rural areas by a number of provinces. These statistics of deaths by causes besides suffering from all the shortcomings common to the Indian vital statistics are collected under the further difficulty of lack of facilities for proper diagnosis.

Statistics of cholera, smallpox and plague are collected throughout the sub-continent and as their symptoms are understood by the general public we have comparatively reliable figures for these diseases. However, all these three diseases usually do not account for more than 5 per cent of the total mortality in any province. Owing to the general unreliability of the classification of causes of death, the Public Health Commissioner with the Government of India presents the Indian mortality statistics other than those relating to cholera, smallpox and plague under the broad groupings of fevers, dysentery and diarrhoea, respiratory diseases and "all other causes." Of these the most important group is that of fevers under which is shown 50 per cent to 75 per cent of the total mortality in most of the provinces. This group includes a variety of heterogenous diseases and a large number of unclassified conditions which for want of proper facilities for diagnosis are catalogued by the persons, usually illiterate, actually reporting the death. Owing to the unsatisfactory manner of collection of vital statistics, the health administrator is handicapped by the lack of precise knowledge of the extent and nature of his problems.

LEPROSY

Leprosy has been prevalent in the sub-continent for many centuries, being recognised and described by ancient Hindu Physicians. The *Susharate, Samhita* written 2,500 years ago describes the different forms of leprosy, and its treatment with chaulmoogra oil, the mainstay in its present-day treatment.

The 1931 census report recorded 150,000 persons suffering from leprosy. Investigations carried out by expert leprosy workers indicate that at a conservative estimate the number of cases is about 1 million (10 lakhs). About three-fourth of these cases are of the mild type and are not infective. The disease is found throughout the sub-continent, but is most prevalent in parts of Assam, pre-partition Bengal, Bihar, Orissa, Central Provinces, Madras, Hyderabad and Travancore.

Leprosy relief work has been going on for a long time. Apart from the Central and Provincial Governments, and some local organisations, the Mission to Lepers and the Indian Council of the British Empire Leprosy Relief Association have played an important role in this field.

Founded by Wellesley Bailey, the first asylum was built at Chamba, Punjab, in 1875. The Mission now runs about 30 leper homes with about 10,000 inmates. It has done very noble work and has given a lead in various ways. The Provincial Governments assist the Mission by making grants on a *per capita basis.*

Leprosy Relief Association.—The introduction of new methods of treatment of leprosy led to the foundation in the year 1924 of the British Empire Leprosy Relief Association in London followed by the foundation of the Indian Council of the Association in 1925; later, provincial branches were formed in most of the provinces of India. At the inauguration of the Indian Council, Lord Reading, the then Viceroy and Governor-General of India, issued an appeal on behalf of the Association, and collected a sum of over Rs. 20 lakhs, which forms the Capital Fund of the Indian Council.

The work of the Association has greatly stimulated interest in leprosy in the sub-continent, resulting in knowledge of the disease, of its prevalence, clinical forms, prognosis, spread and the factors influencing its spread. The medical profession as a whole is now taking a keen interest in the leprosy problem. H.E. the Governor-General of India is the President of the Indian Council and the Director-General of Health Services, the Chairman of the Governing body; K. Sanjiva Row, O.I.E., and Sardar Bahadur Balwant Singh Puri, O.B.E., the Honorary Treasurer and Secretary respectively. Dr. Dharmendra, an officer of the Medical Research Department, Government of India, is at present the Research Worker of the Association.

The research work of the Association is carried out at, or directed from, the School of Tropical Medicine, Calcutta, and is done in collaboration with the Endowment Fund of the School and the Indian Research Fund Association. The main activities of the Association are:—

(*i*) *Research.*—This includes clinical, histological, bacteriological, therapeutic, epidermiological and immunological studies. Recent studies of the only immunological test the "lepromin test" or the "Mitsuda Reaction" by Dr. Dharmendra at the School of Tropical Medicine, Calcutta, have resulted in a great improvement in the test, and have thrown considerable light on the mechanism of the reaction.

(*ii*) *Post-graduate Training in Leprosy.*—Special post-graduate training classes for training doctors in the diagnosis and treatment of leprosy are arranged annually at the School and over 1,000 doctors from the sub-continent, and not a few from abroad, have attended these special courses. In addition, lecture-demonstrations in leprosy are given to the L.T.M. and D.T.M. classes at the School.

(*iii*) *Leprosy Surveys.*—In the early years, Survey Party carried out rough sample surveys in different parts of the sub-continent in order to get an idea of the incidence and distribution of the disease. More recently, intensive surveys of small selected areas have been carried out in different parts of the country in order to collect information about the factors that favour the spread of the disease and in order to study the possibility of evolving suitable methods of isolation of infective cases for the control of the disease.

(*iv*) *Publication and Propaganda.*—"Leprosy in India," a quarterly journal published by the Association, is a record of the study of leprosy and of anti-leprosy work in the sub-continent and other places. Recently a new propaganda book entitled "Popular Lecture on Leprosy" by Dr. Dharmendra has been published, which gives the main facts about leprosy in simple and non-technical language.

The Treatment of Leprosy.—The mainstay in the treatment of leprosy has been injections of chaulmoorga (hydnocarpus) oil or its preparations. Recently encouraging results have been reported by the use of certain sulphone drugs such as "Promin" and "Diasone." It is yet too early to assess the value of this group of drugs in the treatment of leprosy. The treatment with chaulmoorga oil is of value in individual cases. It cannot be expected to control the spread of leprosy with treatment alone.

Control of Leprosy.—Leprosy can be controlled by raising the general economic and social conditions of the population and, by preventing contact of infective patients with healthy people, specially children. The only sure method of preventing contact with infective cases is the isolation of these cases in leprosy hospitals, sanatoria, or colonies, etc. Great difficulty is experienced in providing institutional accommodation for all the infective cases in the country. The total accommodation in all the institutions at present is for about 15,000 patients whereas a rough estimate of infective cases places the figure at 2½ lakhs. So some other methods of isolation are urgently needed to supplement the institutional isolation.

The two alternatives are the isolation of the patient in his home, and the isolation of all the patients of a village or a group of villages in huts made in the outskirts of the village. Home isolation is practicable only in families with sufficient financial resources. Village isolation appears to be specially suited to the sub-continent, with its big leprosy problem and limited resources. It is desirable that methods of village isolation should be developed in suitable areas and then widely applied.

Under Dr. Cochrane, now Director of the Leprosy Campaign of Madras Province, rural preventive units have been established since 1939, the object of which was to deal with the problem of leprosy in rural areas. Each unit consists of an administrative block, including treatment centres and staff quarters, and a segregation area where patients sleep at night and where evening meals are provided. All infective cases of leprosy in villages served by the preventive unit are required to sleep in the segregation area, thus preventing contact with their families during night. In the villages where such control methods have been adopted, there has been a marked decrease in the gross incidence of leprosy over the period 1939 to 1945, whereas in villages where such control had not been established, the incidence of leprosy had increased, in one case to more than twice the 1939 figures. The decrease was particularly marked amongst infective cases and children.

With the advances in knowledge of infectiousness of leprosy there has been some change in the existing restrictions on patients suffering from leprosy, and the leprosy Section of the Madras Public Health Act (1939) has been considerably modified, the amended act of 1944 allowing considerable liberty to patients suffering from leprosy while at the same time ensuring adequate protection for the public.

MALARIA

Malaria is by far the most important disease in India and Pakistan, both from the point of view of sickness and of mortality. It has been estimated that in both the Dominions at least 100 million persons suffer from this disease annually, and that out of 8 million deaths from all causes every year, it is responsible for at least 2 million deaths due to its direct and indirect effects. In addition, 25 to 75 million cases, primarily debilitated from attacks of malaria are finally reported under other diseases. The loss in man-hours of these millions employed in all types of labour in industry and agriculture runs into colossal figures resulting in much avoidable wastage of potential wealth.

Malaria is primarily a disease of the rural areas, as the mosquito that transmits it, breeds in fresh water collections more often associated with rural rather than urban conditions. Ninety per cent of the population living under rural conditions following agricultural pursuits, are exposed to the risk of suffering from this disease. While malaria has been successfully controlled in some urban and industrial areas like the coalfields, railway colonies and tea estates, where the population lives in compact colonies and is subject to some degree of discipline, in rural areas, with a sparse and scattered population, the *per capita* cost of its control has so far been considerably high. Experiments carried out in recent years in Delhi and Bombay provinces have shown that this cost can be materially reduced, and which has been made possible by the new powerful weapons like, DDT and Gammexane as insecticides, and new synthetic anti-malarial drugs, such as Paludrine, and Chloroquine. The advantage of the new insecticides over the pyrethrum sprays lies in the former's prolonged residual toxic action.

The special importance of malaria lies in the fact that it hampers the full exploitation of natural resources and in fact, the development of large tracts of land is held up owing chiefly to the prevalence of this disease. To implement the policies of Grow More Food and rehabilitation of the displaced populations, it is essential that these tracts be reclaimed and to achieve this end, properly planned and adequately staffed anti-malaria organisations must be created.

PLAGUE

Plague in the sub-continent first appeared in Bombay in 1896 and within a short time the disease spread widely throughout the country. Its incidence reached the maximum in 1904 with a total mortality of 9,64,577 in the sub-continent. Since then there has been a gradual decline and now the incidence of the disease has been reduced very considerably. In 1940, the total deaths recorded in the sub-continent were 19,799 which

figure came down to 11,984 in 1941 and 10,577 in 1942. In 1943 the figure went up to 13,578 and since then there has been a steady rise in the recorded mortality with 21,525, 29,751 and 32, 977 deaths respectively in 1944, 1945 and 1946. During the years 1940-46 the provinces mainly affected were the United Provinces, Bihar, the Central Provinces, Bombay and Madras. Of these, the United Provinces recorded the highest number of deaths and had epidemic outbreaks in 1940, 1944, 1945 and 1946 with 11,725, 15,454, 14,024 and 18,199 deaths respectively. The incidence in Bihar and the Central Provinces was not of any special significance except for the sudden epidemic outbreak in Bihar in 1946 with 8,689 deaths as compared with 1,523 deaths in 1945. Bombay had epidemics in 1940 and 1941 and again in 1944, in the last quarter, the total deaths in these years being 5,573, 5,311 and 2,514 respectively. The disease prevailed in severe form in several districts in 1945 resulting in 11,779 deaths. In 1946 the mortality came down to 3,405 which was slightly above the normal incidence. Madras had a severe epidemic in 1943 was with 4,885 deaths. The incidence in 1945 was about the normal level with 1,644 deaths, while in 1946 a slightly higher incidence was recorded with 2,254 deaths. There are certain endemic centres situated in the cool and moderately damp areas running from the Himalayas in the north through Central and Eastern India to the Deccan and the province of Madras.

However, the history of plague through the centuries serves as a warning against taking a complacent view of the reduced prevalence of the disease in the country. It is known that the disease can smoulder in its endemic homes for long periods and that on certain occasions, it acquires an increased striking power and spreads far and wide in epidemic waves into distant lands, to retreat again after a while to those areas where it permanently resides. While, therefore, it is gratifying that plague as a public health problem has been of decreasing importance within the past decade, the fact that endemic foci exist makes it imperative that no slackening of effort for its complete eradication should be permitted.

BLINDNESS

In olden days the blind were generally regarded as incapable of participating in the ordinary activities of life, and were left to depend upon begging for their existence.

Extent of Blindness.—An estimate of the sub-continent's blind population places it at 2 millions, of whom 50% are totally blind and the remaining blind to the extent of requiring welfare services. The chief causes are inflammatory diseases of the eye, smallpox, venereal diseases, nutritional deficiencies, glaucoma and cataract.

Treatment of Eye Diseases.—The treatment of eye diseases has, and is, being carried out in the eye wards of Government Hospitals, and Hospitals under the control of Local Authorities in the Provinces and local centres, mission hospitals, a few travelling eye dispensaries, camp eye hospitals and eye fairs, and in small local dispensaries to the limit of their resources.

Existing Schools and Societies for the Blind.—These mostly owe their existence to philanthropic and missionary organisations. There are 21 schools for the blind only, 5 for deaf mutes as well as blind, 1 is in combination with a poor asylum, and 2 are departments of missionary establishments. The majority of them receive a small measure of Government and/or Municipal aid. They have a total enrolment of 1,139 blind people.

Special Officer Appointed.—In January, 1943 the Government of India appointed Lt.-Col. Sir Clutha Mackenzie as a Special Officer "to investigate the extent of blindness in India and its cause, and to carry out a survey of the existing societies for the education of blind children and of the means of employing trained blind men and women in sheltered industries, and to prepare a scheme for the creation of a national organisation for the blind of India."

Special Joint Committee.—Later in the year a Special Joint Committee on Blindness was appointed, which comprised of 2 sub-committees, the Education Sub-Committee, and the Medical Sub-Committee, for purposes of discussing the technical details of their respective fields. The report and evidence collected by Sir Clutha Mackenzie formed the basis of its deliberations. Their report and recommendations have now been published by the Government of India, under the title "Report on Blindness in India, 1944" and measures are being taken to implement the recommendations.

Recommendations.—The chief recommendation is that an Indian Council on Blindness should be created at the Centre, representative of the Government, of the philanthropic public and of the blind themselves. There should be two committees, one to deal with Prevention and Treatment, and other with Welfare of the Blind. The Secretary to the first Committee would be the Adviser in Ophthalmology, and of the second, the Adviser in Blind Welfare. An officer designated as Assistant Educational Adviser (Blindness) has already been appointed in the Ministry of Education, Government of India.

It is contemplated that similar committees will be set up by Provincial Governments and by the larger Indian States.

Tasks which lie ahead.—(1) The elimination as far as possible of the causes of blindness. (2) The extension of the facilities for treatment of eye diseases, both in quantity and in quality. (3) The rehabilitation of the blind, by providing facilities for education, employment, care and recreation. (St. Dunstan's Institute at Dehra Dun under the able direction of Sir Clutha Mackenzie, an officer blinded in the war of 1914-18 is an outstanding example of what can be done.)

YELLOW FEVER

All aircraft from the west are required to land at Bombay, (Santa Cruz) where an elaborate organisation has been set up by the Government of India to deal with them.

TUBERCULOSIS

The first co-ordinated effort in Tuberculosis control on an All-India basis, was the inauguration of the King George Thanksgiving (Anti-Tuberculosis) Fund to commemorate the recovery of His late Majesty King George V from a serious illness in 1929. This fund was utilised to stimulate activities in the preventive and curative aspects of this disease, and in the specialised training of doctors and Health visitors.

In 1937, Lady Linlithgow, the then Vicerene, issued an appeal for the King Emperor's Fund for Tuberculosis. This marked the next step forward, and resulted in the formation in 1939 of the Tuberculosis Association of India.

Of the sum of over Rs. 85 lakhs collected as a result of Lady Linlithgow's appeal, 95 per cent was returned to the various Provinces and States that had contributed, to enable them to proceed with their own Anti-Tuberculosis plans, in co-operation with, and with the advice of the Central Association at New Delhi, the President of which is Lady Mountbatten. This Central Association issues its recommendations for the policy to be carried out in the Anti-Tuberculosis campaign in the sub-continent. Through its Technical Adviser, expert advice on all aspects of Tuberculosis-work is available to all the branches of the Association in the Provinces and Indian States, and to any official and non-official bodies engaged in such work. It is hoped thereby to facilitate standardization and to prevent waste of effort and money.

Through this Central Committee, in addition to Technical advice, the other aspects of the war against Tuberculosis are brought into prominence. These include publicity and propaganda, the training of Tuberculosis workers, the convening of Conference, and the liaison with the work of 34 affiliated associations in the sub-continent and similar associations abroad.

In 1945 there were 124 Tuberculosis clinics and 70 Hospitals and Sanatoria with 4,384 beds in the total number of such Institutes. That this is only the beginning of the task which lies before the Dominions can be realised when it is stated that the estimated annual deaths from this disease are 5,00,000 and that there are 2¼ million open cases (*i.e.* in an infective stage) in the country.

New Organization.—The third stage of the campaign will come with the adoption of the recommendations of the Health Survey & Development Committee in the post-war period. This report recommends a comprehensive and integrated tuberculosis organisation, which should include:—

(1) a domiciliary service to organise a home isolation and treatment scheme,

(2) improvement of housing conditions which entails working hand in hand with local authorities,

(3) increasing the number of tuberculosis clinics,

(4) the development of hospital accommodation to meet the requirements of the sub-continent on the five year plan of one 200-bedded tuberculosis hospital for each unit of 10 million population. This will be followed by development on a larger scale,

(5) the establishment of after-care colonies,

(6) the provision of institutions for the care of patients who have passed beyond the curable stages,

(7) the establishment of travelling tuberculosis units for the needs of the remote rural areas,

(8) instituting post-graduate training centres in tuberculosis for doctors.

As a preliminary to implementing the recommendations of the Bhore Committee, the Government of India appointed an Adviser in Tuberculosis in the Directorate-General of Health Services in July, 1946. This officer toured the provinces and some of the States of the Indian Union and Pakistan, surveyed the existing arrangements for tuberculosis control in the country and submitted his report and suggestions to the Government.

The Delhi University instituted a Diploma Course in Tuberculosis disease with the approval and financial assistance of the Government of India. The first course commenced in March, 1947.

There is every reason to hope that the Anti-Tuberculosis Campaign will be pursued vigorously by the Government of India and Pakistan in spite of the troubles that beset them and the financial difficulties caused thereby.

CENTRAL ADVISORY BOARD OF HEALTH

In April, 1937, the Government of India acting under Section 135 of the Government of India Act constituted a Central Advisory Board of Health. The aim of the Board is to ensure co-operation between the Centre and the provinces and between province and province in matters related to health which are of common concern. In addition the Board is designed so as to be representative of the States. Work is done through standing or *ad hoc* committees which permits the Board to act as a central information bureau. It advises on all matters referred to by the Central or Provincial Governments and makes suggestions to the Central Government on any matter affecting public health to which it considers Government's attention should be drawn.

The Public Health Commissioner with the Government of India was Secretary to the Board.

The first meeting was held in 1937 when *ad hoc* committees were appointed to report on:

(1) the maternity and child welfare work in the sub-continent including the training of maternity and child welfare workers and the organisation of schemes in urban and rural areas,

(2) to examine the question of food adulteration with reference to legislative measures now in force in different provinces and such additions and amendments to these as may be considered advisable.

The Maternity and Child Welfare Committee met in Simla in October, 1938 and its report was widely circulated. The Food Adulteration Committee produced two reports one on the technical aspect dealing with standards for purity in regard to different foods and the standardisation of the technique to be employed in food analysis, while the other dealt with the

legislative aspect of the problem including an examination of the various Acts and Regulations with suggestions for their improvement.

The second meeting of the Central Advisory Board of Health was held in Madras in 1939 and recommended the appointment of a sub-committee to examine the possibility of introducing a system of compulsory inoculation of pilgrims against cholera. It also appointed an *ad hoc* committee to prepare a report on leprosy and its control in the sub-continent. The first of these committees met and reported in June, 1939 and the second in October, 1941.

The third meeting of the Board was held in Poona in July, 1940. The meeting recommended the appointment of a special committee to report on the questions of teaching of hygiene in schools and of the Medical inspection of school children. This special committee met in December, 1941 and reported.

The fourth and the fifth meetings of the Board were held in January, 1942 and October, 1943. An important outcome of the fifth meeting of the Board was the appointment of a joint committee of the Central Advisory Boards of Education and Health to examine the problem of blindness in the sub-continent. A report on this subject was published in 1944 which deals with the two main aspects of blindness, viz., its prevention and cure and the education, employment and general welfare of the blind.

As a result of the recommendations of the Health Survey and Development Committee, the Medical and Public Health Departments were amalgamated on the 15th August, 1947 and consequently the post of the Public Health Commissioner with the Government of India merged with that of the Director-General of Health Services. That Committee has further recommended the establishment of a Central Board of Health which, if and when established, will take the place of the existing Central Advisory Board of Health.

BHORE COMMITTEE'S PLAN

A Health Survey and Development Committee was appointed by the Government of India in October, 1943 under the chairmanship of Sir Joseph Bhore, K.C.S.I., K.C.I.E., O.B.E., to make a survey of existing health conditions in the sub-continent and to formulate plans for future health development. The Committee was quite representative in its composition and consisted of 9 officials and 16 non-officials. The Committee had, further, the advantage of discussing its problems with certain distinguished workers in the field of health from the United Kingdom, the United States of America, the U.S.S.R. and Australia, who came to India for this purpose on the invitation of the Government of India.

The Committee's Recommendations.—In putting forward its recommendations the Committee kept in view certain objectives. They are:—

(1) the scheme, when fully developed, should provide each individual in the country with adequate medical care, curative and preventive, irrespective of his ability to pay for such services;

(2) the medical aid made available to the rural is much less than that provided in urban areas.

(3) the active co-operation of the people should be secured in the development of the health programme.

Taking these objectives into consideration the Committee has drawn up a long-term programme which will provide the country with a modern health service based on the newer and expanding conceptions of modern health practice.

The district health organisation will have as its smallest unit of administration a primary unit which will normally serve a population of 10,000 to 20,000. About 15 to 20 such primary units will together constitute a secondary unit and a varying number of the latter (3 to 5) will form the district health unit, the designation suggested by the Committee for the district health organisation. At each of the headquarters of the district, secondary and primary health units will be established a Health Centre from which will radiate the different forms of health activity into the territory covered by each type of unit. The provision made for medical relief and preventive health work at each of these Health Centres will increase in scope and efficiency from the primary unit to the district health unit.

The District Health Centre will possess general and special hospitals with a total bed strength of about 2,500 and all the consultant and laboratory services required for the diagnosis and treatment of disease on up-to-date lines. The Secondary Health Centre will have a hospital with 650 beds and the primary unit headquarters a 75-bed hospital. A system of ambulances and telephone connections between these three types of hospitals will help to promote the fullest utilisation of the higher types of service available at the larger institutions by the people living in the remoter parts of the district.

Healthy Environment.—These hospitals will also take an active part in the preventive health campaign. They will be linked with the field health organisations in respect of such services as those for tuberculosis, for mothers and children or for venereal diseases in order to ensure that the remedial and preventive health work carried out in the homes of the people receive the full benefit of the treatment and diagnostic facilities available at the hospitals.

The Committee has stressed that preventive and curative health work should be dovetailed into each other in order to produce maximum results. It has, therefore, suggested extensive changes in the existing training programme for doctors and has laid emphasis on equipping him for preventive health work. It has also made elaborate proposals for a considerable expansion of training facilities for the different types of other health personnel required for meeting the the sub-continent's needs.

The Committee has made it plain that no health development plan can produce adequate results unless sufficient measures are taken for the provision of a healthy environment for community life, such as safe water supply, hygienic houses, a satisfactory system of conservancy and proper supervision over the production, distribution and sale of food intended for public consumption. Specific recommendations have been put forward in respect of these.

In order to secure the active support of the people the establishment of a Health Committee

in every village has been recommended. Such Committees are intended to stimulate local effort for the improvement of environmental sanitation, control of infectious disease and the steady development of a programme of health education.

Government of India have accepted in principle all the recommendations of the Bhore Committee, and have started their implementation with regard to the following items:—

1. *Scholarship Scheme*—A medical scholarship scheme was initiated in 1945. Under this scheme a limited number of medical and dental graduates and nutrition workers are selected annually for post-graduate training abroad at Government expense in medical and allied subjects, dentistry and nutrition.

2. *All-India Medical Institute Advisory Committee.*—A Committee met in January 1947 with Sir A. L. Mudaliar, Vice-Chancellor, University of Madras, as Chairman to advise on the establishment of an All-India Medical Institute, which will be a multi-purpose medical training centre. The report of the Committee is awaited.

3. *Provincial Governments' 5 year plans*—The Provincial Governments' 5 year medical and public health development schemes are being examined in the light of the recommendations of the Bhore Committee and approved for the grant of the Central Government contribution in respect of the approved schemes. The Provincial Governments submit periodical progress reports regarding the execution of these development schemes.

4. *Committee on Indigenous system of Medicine.*—A Committee under the chairmanship of Sir R. N. Chopra, met in January, 1947 to enquire and report on the ways to improve the facilities for research and training on indigenous systems of medicine. The Committee is also entrusted with task of considering the means of effecting a synthesis of indigenous and scientific medicines. The report is awaited.

The Maternity and Child Welfare Movement

Among the most pressing problems of health is that presented by the appalling maternal and infant mortality. The figures for maternal mortality are not accurately known, but some 1,50,000 mothers lose their lives each year as a result of pregnancy and child birth. The number of mothers who suffer from ill health and are disabled temporarily or permanently as a result of the normal physiological function of child bearing is at least 20 times the annual maternal deaths. Every year more than 2¼ million Indian children die before the age of 5 years, while many others survive only to grow weak and feeble from unhygienic surroundings during infancy and childhood.

The maternity and child welfare movement which aims to promote maternal and child health and to reduce deaths, owes much to the All-India Maternity and Child Welfare League initiated by Lady Chelmsford in 1918 and also since 1920 to the Indian Red Cross Society. The amalgamation of these two bodies in 1931 forming the Maternity and Child Welfare Bureau, Indian Red Cross Society, has undoubtedly increased and developed the work.

The Maternity and Child Welfare Bureau, Indian Red Cross Society, is the only body voluntary or official at present working on a continental basis. The Bureau is managed by a technical committee representing the medical and public health services, the nursing profession and voluntary organisations and individuals working in fields allied to maternity and child welfare. The Director of the Maternity and Child Welfare Bureau, Indian Red Cross Society, an officer of the Women's Medical Service, acts as Secretary. The Bureau administers the Victoria Memorial Scholarships fund for the training of dais, the Lady Chelmsford League fund for maternity and child welfare and the funds of the Lady Reaping Health School.

The income from the funds is expended on (1) the maintenance of a central Bureau of information on all aspects of maternal and child health throughout the sub-continent, (2) on training schemes for workers in the maternity and child welfare field, doctors, health visitors, midwives, nursery school teachers and nursery nurses, (3) on propaganda, literature and publicity and (4) on grants-in-aid of experimental schemes.

The care needed by the wives and children of soldiers in the Indian Army is being increasingly realised, and nowhere more than the units themselves. The result has been in the last few years, the opening of much work in this direction. Much of it is purely medical work, which, in the absence of family hospitals for the Indian soldiers, is a necessity. But genuine child welfare activities are also present in some centres.

Army Child Welfare was formerly an activity of the Maternity and Child Welfare Bureau under the Lady Birdwood Fund, but to all rapid expansion of welfare activities for the Indian Troops, a special committee, "The Indian Fighting Forces Maternity Child Welfare" took over the management of Indian Army Centres in the year 1942. The Secretary of the Indian Red Cross Society and the Director of the Bureau are members of this Committee. A remarkable feature of the whole movement is the keeness of the men themselves to aid it, realising as they do the benefits to their own women and children. There are very few cantonments where some work of this kind is not going on.

In all the provinces and most of the States, Welfare activities for the care of mother and child now exist, the activities differ in the nature of the work undertaken, and the amount of organisation displayed. The Health Survey and Development Committee appointed by the Government of India in 1942 has studied the existing Maternal and Child Health services and have made their recommendations for its future developments. The Committee has emphasised the need for organising the services and an integral part of the medical and public health services of the province and state and much emphasis has been laid on the preparation of workers. Much excellent work is still being done by voluntary organisations such as Branches of the Indian Red Cross Society in Assam, Bengal, Madras, N.-W. F.P., Orissa, Punjab, Central Provinces, United

Provinces, and Sind. In Bihar the work is undertaken by the Bihar Maternity and Child Welfare Trust and in Bombay two influential bodies the Bombay Mofussil Maternity, Child Welfare and Health Council; and the Bombay Presidency Infant Child Welfare Society have recently amalgamated their resources under the title "Bombay Mothers and Children's Welfare Society' for the better Co-ordination and development of the work. The pace of the transition from voluntary to official direction has been accelerated in recent years and medical women are now employed in the offices of the Directors of Public Health in Madras, Bombay, Orissa, Assam, Delhi and the East Punjab; and in several of the larger states. A similar post has been established in the Central Provinces and one will shortly come into being in the United Provinces. These developments are noteworthy since the work is best co-ordinated and most energetically carried on where such appointments have been made. The Government of India have recently sanctioned a post for a medical woman in the office of the Director-General, Health Services.

WELFARE WORK IN INDUSTRY

The industrial concerns of recent years have realised the importance of providing special facilities for the employees and an increasing number of industries are now maintaining comprehensive welfare schemes for women and children. The Government of India have instructed authorities in the coal mines to establish creches and provide such minimum requirements regarding building staff and equipment as are detailed in their circular.

So far the schemes have devoted their attention to educating women in the elements of mothercraft and attempting to preserve infant lives and improve child health. In a land of so many languages and difficulties progress will necessarily be slow and the Dominions have yet to decide whether they will work intensively to try to rear a few well-developed children, as far as adolescence or extensively attempt to bring a large number of infants through the first critical months, only to have them perish at a later stage from the many ills to which children are heirs.

In Western lands the Child Welfare Movement has no more marked characteristic than its inability to stop expanding. Its ramifications know no bounds. Its inevitable corollaries are endless, and like the banyan tree it will no doubt in the sub-continent also develop innumerable fresh roots such as medical supervisions, dental clinics, better housing, open air playgrounds, etc. But these are not yet. Its preliminary task is to educate the mothers of India and Pakistan to the enormity of allowing two million babies to perish every year and to convince them of the equally important fact that a high death rate always spells a high damage rate of sickly, under-developed, incompetent citizens.

VICTORIA MEMORIAL SCHOLARSHIPS

The Victoria Memorial Scholarships Fund was founded in 1903 by Lady Curzon, with the object of securing better standards of midwifery practice by the dais of the sub-continent. A sum of about Rs. 6½ lakhs was secured by public subscription in 1903 and a further sum of Rs. 1,39,000 was added to the Fund in 1935 from Their Majesties' Silver Jubilee Fund.

The Fund is now administered by the Maternity and Child Welfare Bureau, Indian Red Cross Society and the income is expended as grants-in-aid of training schemes for dais and midwives maintained by voluntary organisations, generally branches of the Indian Red Cross Societies in the Provinces and States of the sub-continent. The Director of Maternity and Child Welfare, I.R.C. Society, an officer of the Women's Medical Service, is Secretary to the Fund.

In spite of continuous efforts in the training of dais since the beginning of the present century, no appreciable improvement has yet been made in the midwifery services in the rural areas. It is, therefore, necessary to extend the training to rural areas taking care that only the required number are trained and allowed to work under supervision until such time as they can be replaced by properly trained midwives.

Insanity and Mental Hospitals

In the sub-continent facilities for the care and treatment of persons suffering from mental disorders are very inadequate. To serve a population of over four hundred million, there are only 20 institutions with an accommodation for about 15,000 patients. While accurate figures are lacking regarding the actual number of mental patients in the two Dominions, even at a conservative estimate of two per thousand of the population, as against 3.5 in England, and 5 in America, the figures run into over two millions. This does not take into account the mental defectives, who are not less than two millions and the psycho-neurotics, who are about twice this number, needing intensive treatment.

The Bhore Committee, to which reference has been made has recommended amongst other measures, the starting of new and well-equipped mental hospitals, and these are likely to be given effect to by the Provincial Governments concerned, in the near future.

At present, the institutions at Ranchi, Madras, Poona, and Bangalore can be regarded as Mental Hospitals. The others function chiefly as places for detention and custodial care of patients.

The Mental Hospital, Bangalore (Mysore State) is the most modern hospital in the sub-continent, modern in building, outlook, and treatment. Built in 1938 and gradually added to, it consists of a series of pavilions, constructed of granite and has cost over ten lakhs. It has accommodation for 400 early cases of mental disorder.

All the modern methods of treatment are undertaken, including electric shock, insulin and cardiozal treatment, psycho-analysis, with or without sodium penthithal, and relevant brain surgery, Pre-frontal leucotomy, lobectomy, and in epileptics ventricular puncture and exploration of the brain. While in the other hospitals several methods of treatment are available, the Mental Hospital, Bangalore, is probably the only institution in the sub-continent where the medical, surgical and psychological treatment of patients is so well integrated.

Posts and Telegraphs

THE control of the Posts and Telegraphs of India or Pakistan is vested in an officer designated Director-General of Posts and Telegraphs whose office is attached to the Ministry of Communications of the Government of India and of Pakistan respectively. The following is a summary of the position in regard to India. But it applies *mutatis mutandis* to Pakistan as well. For financial and budget matters there is a Joint Secretary, Ministry of Finance (Communications). The superior staff of the Direction, in addition to the Director-General himself, consists on the postal side of one Senior Deputy Director-General, one Deputy Director-General, Postal Services, two Assistant Directors-General, Establishments, one Assistant Director-General, Postal Services, one Assistant Director-General, Planning, and eleven Assistant Dy. Directors-General.

For postal purposes, India is divided into eight circles, namely, West Bengal, Bihar and Orissa, Bombay, Central, Madras, East Punjab, United Provinces and Assam. Each of the first seven is in charge of a Postmaster-General and the Assam Circle is controlled by a Director, Posts and Telegraphs. The Central Circle comprises roughly the Central Provinces and the Central India and Rajputana Agencies.

The Heads of Circles are responsible to the Director-General for the whole of the postal arrangements in their respective circles, including those connected with the conveyance of mails by railways, inland steamers, and air services. All the Postmasters-General are provided with Deputy and Assistant Postmasters-General while in the Assam Circle the Director is assisted by Assistant Directors. The eight Postal Circles are divided into Divisions, each in charge of a Superintendent of Post Offices or Railway Mail Service as the case may be and each Superintendent is assisted by a certain number of officials styled Inspectors.

Generally there is a head post office at the headquarters of each revenue district and other post offices in the same district are usually subordinate to the head office for purposes of accounts. The Presidency Postmasters of the Calcutta, Bombay and Madras General Post Offices, the Chief Postmaster of the Delhi General Post Office and Postmasters of the larger of the other head post offices are directly under the Postmasters-General. The Presidency Postmasters have one or more Inspecting Postmasters subordinate to them. When the duties of the Postmaster of a head office become so onerous that he is unable to perform them fully himself, a Deputy Postmaster is appointed to relieve him of some of them, and if still further relief is required, one or more Assistant Postmasters are employed.

The more important of the offices subordinate to the head office are designated sub-offices and are usually established only in towns of some importance. Sub-offices transact all classes of postal business with the public, submit accounts to the head offices to which they are subordinate incorporating therein the accounts of their branch offices, and frequently have direct dealings with Government local sub-treasuries. The officer in charge of such an office works it either single-handed or with the assistance of one or more clerks according to the amount of business.

Branch offices are small offices with limited functions ordinarily intended for villages, and are placed in charge either of departmental officers on small pay or of extraneous agents, such as school-masters, shop-keepers, land-holders or cultivators who perform their postal duties in return for a small remuneration.

The audit and accounts work of the Post Office is entrusted to the Accountant-General, Posts and Telegraphs, who is an officer of the Indian Audit Department and is not subordinate to the Director-General. The Accountant-General is assisted by Deputy Accountant-General, all of whom, with the necessary staff of clerks, perform at separate headquarters the actual audit and accounts work of a certain number of postal circles.

In accordance with an arrangement which has been in force since 1883, a large number of sub-post offices and a few head offices perform telegraph work in addition to their postal work and are known as combined offices. The policy is to increase telegraph facilities everywhere and especially in towns by opening a number of cheap telegraph branches of sub-post offices.

Inland Tariff

Inland Tariff is applicable to Aden, Nepal, Ceylon and Portuguese India except as indicated below and is as follows:—

	When the postage is prepaid	When the postage is wholly unpaid	When the postage is insufficiently prepaid
Letters	Anna Pies		
Not exceeding one tola	1 6	Double the pre-paid rate (chargeable on delivery)	Double the deficiency (chargeable on delivery)
And every additional tola	1 0		
Book and pattern packets.			
For the first five tolas or fraction thereof	0 9		
For every additional two and a half tolas, or fraction thereof, in excess of five tolas	0 3		

Postcards

Single	6 pies
Reply	1 anna

(The postage on cards of private manufacture must be prepaid in full. Reply postcards cannot be sent to Nepal.)

Parcels (prepayment compulsory)

Parcels not exceeding 12½ seers (1,000 tolas) in weight:—

	Rs. a.
Not exceeding 40 tolas	0 6
For every additional 40 tolas or part of that weight	0 6

Registration is compulsory in the case of parcels weighing over 440 tolas.

All parcels to Aden should be registered. There is no parcel service to Nepal. These rates are not applicable to parcels for Ceylon and Portuguese India.

Registration fee	Rs. a.
For each letter, postcard, book or pattern packet, or parcel to be registered	0 8

Ordinary Money Order fees

For every sum of Rs.10 or fraction thereof 0 2

In the case of money orders for Ceylon and Portuguese India, the rates prescribed for foreign rupee money orders are applicable. There is no money order service to Nepal.

Telegraphic Money Order fees.—The same as the fees for ordinary money orders *plus* a telegraph charge calculated at the rates for inland (the cost of the telegraphic advice to Aden and Ceylon in respect of those countries) telegrams for the actual number of words used in the telegram advising the remittance, according as the telegram is to be sent as an "Express" or as an "Ordinary" message. In addition to the above a supplementary fee of two annas is levied on each telegraphic money order.

There is no telegraphic money order service to Nepal or Portuguese India. In the case of Ceylon the telegraph charge is calculated at the rates shown below:—

Express—Rs. 2-8-0 for the first 12 words and 3 annas for each additional word.

Ordinary.—Rs. 1-4-0 for the first 12 words and 2 annas for each additional word.

Value-payable fees.—These are calculated on the amount specified for remittance to the sender and are the same as the fees for ordinary money orders.

Insurance fees	Rs. a.
Where the value insured does not exceed Rs. 100	0 4
Where the value insured exceeds Rs. 100 but does not exceed Rs. 200	0 5½
Where the value insured exceeds Rs. 200 but does not exceed Rs. 300	0 8
For every additional Rs. 100 or fraction thereof over Rs. 300 and upto Rs. 1,000	0 2
For every additional Rs. 100 or fraction thereof over Rs. 1,000	0 1

As regards Aden, Ceylon and Portuguese India see Foreign Tariff.

Acknowledgment fee.—For each registered article 1 anna.

Foreign Tariff

FOREIGN TARIFF is not applicable to Aden, to Ceylon, to Nepal or to Portuguese India except as indicated below and is as follows:—

Letters.—To Aden, Ceylon, Nepal and Portuguese India—Indian inland rates. To Burma—2 annas for the first tola and 1 anna for every additional tola or part thereof.

To all other countries.—3½ annas for the first ounce and 2 annas for each additional ounce or part of that weight.

Postcards, Single	2 annas.
,, Reply	4 annas.
Postcards to Burma: Single 1 anna and reply	2 annas.

Printed Papers.—½ anna for every 2 ounces or part of that weight.

Business Papers.—For a packet not exceeding 10 ounces in weight .. .. 3½ annas.

For every additional 2 ounces or part of that weight .. .. .. ½ anna.

Samples.—1½ annas for first 4 ounces and ½ anna per 2 ounces thereafter.

Printed Papers, Business Papers and Samples.—To Burma, 9 pies for the first five tolas and 6 pies for every additional 5 tolas or part of that weight.

Parcels

Parcel postage varies for different countries as shown in the Foreign Post Directory included in the Post and Telegraph Guide. Information relating to the rates of postage on parcels for Great Britain and Northern Ireland is given below:—

(i) Parcels not exceeding 22 lbs. in weight and addressed to Great Britain and Northern Ireland are forwarded as mails to the British Post Office, the rates of postage applicable to such parcels being as follows:—

For parcel	*Via* Gibraltar. Rs. a. p.
Not over 3 lbs.	1 11 0
Over 3 lbs. but not over 7 lbs. ..	3 5 0
,, 7 ,, ,, ,, ,, 11 ,, ..	5 2 0
,, 11 ,, ,, ,, ,, 22 ,, .	8 5 0

Registration is compulsory. Registration fee is as. 3.

These parcels are delivered by the post office and the postage paid carries them to destination.

Limits of weight

Letters.—4 lbs. 6 oz.

Printed Papers and Business Papers.—To Great Britain and Northern Ireland, and Ireland, British Australasian Colonies, Togo (British), the Union of South Africa, Rhodesia and the Bechuanaland Protectorate—5 lbs.

To Aden or Ceylon—No limit.

To all other destinations—4 lbs. 6 oz.

Samples.—To Great Britain and Northern Ireland, and Ireland, Togo (British), the Union of South Africa, Rhodesia, and Bechuanaland Protectorate—5 lbs.

To Aden or Ceylon—200 tolas.

To all other destinations—1 lb. 2 oz.

Parcels.—11 lbs., 20 lbs. or 22 lbs.

Limits of Size

Letters.—35 inches in length, breadth and thickness taken together and 23½ inches in any one direction. If in form of roll, 39 inches in length plus twice the diameter and 31 inches in any one direction.

Printed Papers and Business Papers.—To Aden and Ceylon—2 feet in length by 1 foot in width or depth. If in form of roll, dimensions are 30 inches in length and 4 inches in diameter.

To all other destinations—35 inches in length, breadth and thickness taken together and 23½ inches in any one direction. If in form of roll, 39 inches in length plus twice the diameter and 31 inches in any one direction.

Note.—Printed papers sent open, *i.e.*, without a cover or wrapper in the form of cards, whether folded or not should not measure less than 4 inches in length and 2½ inches in width.

Samples.—To Great Britain and Northern Ireland, and Ireland, Togo (British), the Union of South Africa, Rhodesia and the Bechuanaland Protectorate—2 feet in length by 1 foot in width or depth. If in form of roll, dimensions in all cases are 39 inches in length *plus* twice the diameter and 31 inches in any one direction.

To all other destinations—35 inches in length, breadth and thickness taken together and 23½ inches in any one direction. If in form of roll, dimensions in all cases are 39 inches in length plus twice the diameter and 31 inches in any one direction.

To Aden or Ceylon—2 ft. in length by one foot in width and depth.

Money Orders

To countries on which money orders have to be drawn in rupee currency, the rates of commission are as follows:—

	Rs. a.
On any sum not exceeding Rs. 10 ..	0 3
On any sum exceeding Rs. 10 but not exceeding Rs. 25	0 6
On any sum exceeding Rs. 25	0 6

for each complete sum of Rs. 25 and 6 annas for the remainder, provided that, if the remainder does not exceed Rs. 10, the charge for it shall be only 3 annas.

To countries on which money orders have to be drawn in sterling, the rates are as follows:—

	Rs. a.
On any sum not exceeding £1	0 4
,, ,, exceeding £1 but not exceeding £2	0 7
,, ,, ,, £2 ,, ,, £3	0 10
,, ,, ,, £3 ,, ,, £4	0 13
,, ,, ,, £4 ,, ,, £5	1 0
,, ,, ,, £5	1 0

for each complete sum of £5 and 1 rupee for the remainder, provided that if the remainder does not exceed £1, the charge for it shall be 4 annas; if it does not exceed £2, the charge shall be 7 annas; if it does not exceed £3, the charge shall be 10 annas; and if it does not exceed £4, the charge shall be 13 annas.

Registration fee

For each letter, postcard and packet of printed or business papers and samples ..	3 annas.

Insurance fees (for registered letters and parcels only).

For insurance of letters and parcels to Aden and Ceylon and of letters to Portuguese India.—Insurance fees mentioned under "Inland Tariff."

For insurance of letters and parcels to Burma, British Somaliland, Mauritius, Seychelles, and parcels to Portuguese India.

	Annas
Where the value insured does not exceed Rs. 200	5½
For every additional Rs. 200 or fraction thereof	5½

Note.—Insurance service to Burma and British Somaliland has been temporarily suspended.

For insurance of letters and parcels to Great Britain and Northern Ireland and to British Possessions and foreign countries (other than those mentioned above) to which insurance is available.

	Annas
Where the value insured does not exceed £14	5½
For every additional £14 or fraction thereof	5½

Acknowledgment fee.—3 annas for each registered article. 1 anna in the case of registered article addressed to Aden, Ceylon or Portuguese India.

Air Mails

Letters, postcards and packets can be sent by air in the inland post as well as to certain foreign countries on payment of special Air Mail fees. Such letters can be registered. Insured articles cannot be sent by Air Mail except to Burma and Ceylon. The Inland Air fees are as follows:—

(i) For a postcard, 6 pies *plus* ordinary postage.

(ii) For a letter and packet, 1 anna for each tola or part thereof *plus* ordinary postage.

For Air fees to foreign countries, *see* the *Post and Telegraph Guide.*

Air Letter Service—A new light weight "Air Letter" service for use by civilians has been introduced from the 1st December 1944, which is available for writing to most of the

Empire countries and H.M.'s Forces overseas. It has been extended to U.S.A. from 1st June 1947. The postage rate is 6 annas per air letter except for U.S.A., Canada and Newfoundland for which the rate is 8 annas.

A special air letter form is available from post offices at a cost of 6 annas per form. Similar forms of private manufacture, bearing an indication that they have been approved by the Head of a Circle, can also be used, but they should be prepaid with the prescribed charge.

Air letters cannot be registered or insured, nor are any enclosures permitted. No other facility, such as express delivery, is available.

AMOUNT OF BUSINESS

At the close of 1945-46, there were 1,28,211 permanent and 34,318 temporary Post and Telegraph officials, 25,916 post offices and 1,62,232 miles of mail lines. During the year, 1,978 million articles, including 67·5 million registered articles were posted; stamps worth Rs. 15·2 crores were sold for postal purposes; about 66·1 millions of money orders of the total value of Rs. 198·1 crores were issued; 1,681 thousand Indian Postal orders to the value of Rs. 100 lakhs were sold; a sum of Rs. 27·08 crores was collected for tradesmen and other2 on V.P. articles, about 3·5 million insured articles valued at 148 crores of rupees were handled. Customs duty aggregating over 159 lakhs was realised on parcels and letters from abroad; pensions amounting to about 256 lakhs were paid to Indian Military pensioners and over 6,000 lbs. of quinine and 8,688,600 tablets of substitutes for quinine (*e.g.* Mepacrine) were sold to the public. On 31st March 1946, there were 3,507,000 Savings Bank Accounts with a total balance of Rs. 115 crores and 92,685 Postal Life Insurance Policies with an aggregate assurance of Rs. 18·9 crores.

TELEGRAPHS

Up to 1912 the telegraph system in the sub-continent was administered as a separate department by an officer designated Director-General of Telegraphs who worked in subordination to the Government of India in the Department of Commerce and Industry. In that year it was decided to vest the control of Posts and Telegraphs in a single officer as an experimental measure with a view to the eventual amalgamation of the two Departments.

In pursuance of this policy an experimental amalgamation of the two services was introduced in the Burma and Central Circles on the 1st July 1912. The fundamental principles of this scheme which followed closely the system in force in the United Kingdom and several other European countries were that the traffic and engineering work of the Telegraph Department should be separated, the former branch of work in each Circle being transferred to the Postmaster-General assisted by a Deputy Postmaster-General and a suitable number of attached officers and the engineering branch being controlled by a Director of Telegraphs subordinate to this officer there were several Divisional Superintendents who were assisted by a number of attached officers.

Amalgamation.—In 1914 the complete amalgamation of the two Departments was sanctioned by the Secretary of State and introduced on 1st April. The superior staff of the Direction, in addition to the Director-General himself now consists of the engineering (including wireless) side of a Chief Engineer, Post and Telegraphs, with one Deputy Director-General Telegraph Staff and Establishments, two Deputy Chief Engineers and two Asstt. Chief Engineers. For Engineering Construction work, there is one Addl. Chief Engineer with three Directors of Telegraphs, and some Divisional Engineers, Telegraphs. For traffic work there is a Deputy Director-General with one Controller of Telegraph Traffic and one Assistant Deputy Director-General. To assist in Telephone work there is one Deputy Director-General (Telephones) and two Assistant Deputy Directors-General, Telephones, and in Wireless matters there is one Assistant Dy. Director-General (Wireless). There are also one Assistant Deputy Director-General (Maintenance) and two Asstt. Divisional Engineers, Telegraphs under the Deputy Chief Engineer (Maintenance).

In the Circles the scheme which has been introduced follows closely on the lines of the experimental one referred to above. For telegraph engineering purposes the sub-continent was formerly divided up into five Circles, each in charge of a Director. These five Circles were divided into eighteen Divisions each in charge of a Divisional Engineer. In 1922 Sind and Baluchistan Circle was formed with its headquarters at Karachi. This Circle is now under the charge of a Director of Posts and Telegraphs in the Pakistan P. & T. Deptt. On the 31st March 1924 there were 7 Circles and 20 Divisions. With a view to complete fusion of the three branches of work, the engineering work of the Bombay and Central Circles was brought under the control of the respective Postmaster-General in 1925 and this unification was gradually extended to other Circles. The fusion was completed in March 1930. In 1946 the Bengal and Assam Circle was divided into two Circles, namely Bengal Circle and Assam Circle, in charge of a Postmaster-General, and a Director, with headquarters at Calcutta and Shillong respectively. The telegraph traffic and the engineering branches in the Circle are controlled by the Postmaster-General, Calcutta and the Director of Posts and Telegraphs, Shillong the former officer now having under his control the West Bengal P. & T. Circle, which lies within the Indian Dominion. There is also one Deputy Director of Telegraph Traffic each at Calcutta, Bombay and Madras to look after the speedy disposal of traffic. There are now 18 Engineering Divisions. With effect from 1-7-1939, the Superior Telegraph Engineering and Wireless Branches have been amalgamated into a Single Service, *viz.*,—Telegraph Engineering Service—Class I.

There has been much expansion on the Telephones side of the Department consequent on the acquisition of the telephone systems at Bombay, Calcutta, Madras, Karachi and Ahmedabad by Government. Separate Telephone Districts which are quite independent of the respective Postmasters-General were created at Bombay, Calcutta and Madras with effect from 1st April 1943. The Ahmedabad Telephone system has been placed under the administrative charge of the Bombay District. The Chief Officers of the Bombay and Calcutta Districts are designated General Managers, Telephones. Recently a new Telephone District has also been formed at Delhi where there has been considerable telephone expansion during the war.

The audit and accounts work of the Telegraph Department is, like that of the Post Office, entrusted to the Accountant-General, Posts and Telegraphs, assisted by a staff of Deputy and Assistant Accountants-General.

INLAND TARIFF

Telegrams sent to or received from places in India or Burma or Ceylon are classed as Inland telegrams. The tariff for Inland telegrams is as follows:—

	For delivery in India *Private and State* Express.	Ordinary.
	Rs. a.	Rs. a.
Minimum charge	1 10	0 13
Each additional word over 8..	0 2	0 1

	For delivery in Burma *Private and State* Express.	Ordinary.
	Rs. a.	Rs. a.
Minimum charge	2 12	1 6
Each additional word over 8	0 4	0 2

	For delivery in Lhasa (Tibet). *Private and State.*		For delivery in Ceylon. *Private and State.*	
	Express.	Ordinary.	Express.	Ordinary.
	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Minimum charge.	2 0	1 0	2 8	1 4
Each additional word over 12..	0 2	0 1	0 3	0 2

The address is charged for.

Additional charges

Minimum for reply-paid telegram	Minimum charge for an ordinary telegram except in the case of Burma, for which the minimum amount pre-payable is Rs. 2-12-0 for Express and Rs. 1-6-0 for Ordinary.
Notification of delivery..	Minimum charge for an ordinary telegram.
Multiple Address telegrams, copying fee for each 100 words or less in each copy beyond the first	4 annas.
Collation	..One half of the charge for an ordinary telegram of same length.
For acceptance of an Express telegram during the hours when an office is closed.	Rs. If both the offices of origin and destination are closed .. 2 If only one of the offices is closed. 1 If the telegram has to pass through any closed intermediate office, additional fee in respect of each such office.
Boat hire	..Amount actually necessary.

Press telegrams	For delivery in India.		For delivery in Ceylon.
	Express.	Ordinary.	Express.
	Rs. a.	Rs. a.	Rs. a.
Minimum charge ..	1 8	0 12	1 8
Each additional 5 words over 40 in respect of India, each additional four words over 32 in respect of Ceylon ..	0 2	0 1	0 2

The address is free.

Greetings Telegrams.

Inland Greetings telegram service has been suspended as a temporary measure.

Inland De Luxe Telegrams.

Senders of Greetings telegrams to or from offices in India may use their own phraseology in such telegrams on payment of 2 annas in addition to the charge appropriate to the class of message (Express or Ordinary).

These telegrams will be delivered in specially printed artistic forms and envelopes.

This DE LUXE service is not applicable to telegrams for Burma.

The sender of a DE LUXE telegram should write before the address the special instruction =LX= which will not be charged for.

FOREIGN TARIFF

The charges for foreign telegrams vary with the countries to which they are addressed. The rates per word for telegrams to countries in Europe, America, etc., are as follows:—

Cables are not now accepted to the following countries:—

Japan, Karafuto, Corea, Manchuria, Kwangtung leased territory, Formosa, Marian or Ladrone Islands, Marshall, Palaos and Caroline Islands,

Chefoo in China. Wake Island, and portions of New Guinea.

	Ordy. Rs. a.	Defd. Rs. a.	D.L.T. Rs. a.
Europe *via* I. R. C.—			
Great Britain and Northern Ireland	0 13	0 6½	0 4½
Ireland	0 13	0 6½	0 4½
Belgium	1 2	0 9	0 6
Holland	1 2	0 9	0 6
Germany	1 4	0 10	0 7
Switzerland	1 4	0 10	0 7
Spain	1 4	0 10	0 7
France	1 3	0 9½	0 6½
Italy, City of the Vatican	1 5	0 10½	..
Other Offices	1 4	0 10	0 7
Norway	1 4	0 10	0 7
Bulgaria	1 5	0 10½	..
Russia	1 5	0 10½	0 7
Turkey	1 5	..	..
Czecho-Slovakia.. ..	1 5	0 10½	0 7
Union of South Africa and S. W. Africa *via* I.R.C.	0 13	0 6½	0 4½
Canada (all Zones).. ..	0 13	0 6½	0 4½
United States of America. ..	1 0	0 8	0 5½
South America			
Buenos Aires	3 4	1 10	1 1½
Rio de Janeiro	3 2	1 9	1 1
Valparaiso	3 4	1 10	1 1½
West Indies			
Jamaica *via* I. R. C.-Imperial	0 13	0 *6½	0 2½
Havana	2 5	1 2½	0 14½

Urgent Telegrams—

Rate double of ordinary rate.

Daily Letter Telegrams—

One-third ordinary rate with a minimum charge for 25 words.

Code telegrams (except for the U.S.A. and countries within the British Empire) are accepted at 3/5th of the ordinary rate. Code telegrams for countries within the British Empire and for the U.S.A. are accepted at 2/3rds of the ordinary rate (*Vide clause* 425, *P. & T. Guide*).

Telegrams are accepted at all Government Telegraph Offices.

Usual rules apply regarding Registration of abbreviated addresses, Reply Paid, etc.

Full lists published in Post and Telegraph Guide.

Radio Telegrams.—

For radio-telegrams addressed to ships at sea from offices in India and transmitted *via* the coast stations at Bombay, Calcutta, Karachi or Madras the charge is thirteen annas per word (ordinary) or eight annas per word (code) in nearly all cases.

The following are the charges (excluding supplementary charges) for radio-telegrams from offices in India transmitted to ships at sea through the coast stations mentioned in the preceding paragraph:—

	Total charge per word Ordinary. Rs. a.	Code. Rs. a.
(1) All Government or Private Radio-telegrams, excepting those mentioned in (2) and (3) below ..	0 13	0 8
(2) Radio-telegrams to His Britannic Majesty's Ships of War or Ships of the Royal Indian Navy ..	0 8	0 5
(3) Radio-telegrams to Spanish or Swedish ships ..	0 12	0 7½

The sender of a radio-telegram may prepay a reply. He must insert before the address, the instruction "R.P." followed by mention in Rupees and annas of the amount prepaid, *e.g.*, R.P. 7-8. This expression counts as one word.

Daily Letter-Telegrams

Daily Letter-Telegrams in plain language, which are dealt with telegraphically throughout are accepted for non-Empire countries and Australasia on any day of the week, and are ordinarily delivered to the addressee on the morning of the second day following the day of booking. They are subject to the conditions prescribed for Deferred Foreign telegrams with certain exceptions as stated below.

The charge for a Daily Letter-Telegram is ordinarily one-third of the charge for a full rate telegram of the same length and by the same route subject to a minimum charge equal to the charge for 25 words at such reduced rate including the indication DLT.

The late fee system does not apply to Daily Letter-Telegrams and such telegrams are not accepted during the closed hours of an office.

On Indian lines Daily Letter-Telegrams are transmitted after Deferred Foreign telegrams.

The only special services admitted in Daily Letter-Telegrams are Reply paid, Poste Restante, Telegraph restante, Multiple addresses, de Luxe and telegraph redirection under orders of the addressee.

The class prefix for Daily Letter-Telegrams will be DLT.

Night Letter-Telegrams

Night Letter-Telegrams (NLT) are accepted for all Empire countries, except Australasia, with which the Daily Letter-Telegram Service (DLT) remains in force, at the same rates and under the same conditions as prescribed for Daily Letter-Telegrams, except as follows:—

(i) They will be delivered on the morning of the day following the day of booking.

(ii) The special instruction and the class prefix for Night Letter-Telegrams will be NLT.

Empire Social Telegrams

Empire Social Telegrams (GLT) conveying solely greetings, family news or non-commercial personal affairs can be availed of throughout the year at special reduced rates, for all Empire countries except Sudan.

Empire Social Telegrams (GLT) for the purpose of transmission and delivery to a territory or place to which NLT service is available is deferred until the morning of the day following the day of acceptance; where there is no NLT service but a DLT service is available, an Empire Social Telegram is deferred and delivered on the second day following the day of acceptance or as soon as possible thereafter. Minimum charge for an Empire Social Telegram is Rs. 3-6-0 for the first 12 words (excluding the Special Instruction-GLT-which will not be charged) and 4½ annas for every additional word.

The only Special Services admitted in Empire Social Telegrams are "Reply Paid" and "De Luxe."

De Luxe Telegrams

Telegrams relating to happy events or greetings may be sent to certain foreign countries for delivery on an artistic form in an envelope of the same character. A supplementary charge of four annas per telegram in addition to the charge at the appropriate rate according to the class (*i.e.*, Urgent, Ordinary, Code, Deferred, DLT., etc.), is charged for such telegrams.

Greeting Telegrams (Foreign).

Telegrams conveying Christmas and New Year wishes are accepted for most non-empire countries from the 14th of December to the 6th Jan. inclusive at special reduced rates, subject to a minimum charge for 10 words per telegram. To all Empire countries except Sudan, such greetings may be conveyed by means of Empire Social Telegrams.

Growth of Telegraphs.

At the end of 1897-98 there were 50,305 miles of line and 185,088 miles of wire and cable. Compared to this, there were 116,700 miles of line including cable and 1,192 800 miles of wire including conductors on the 31st March 1946. The numbers of departmental telegraph offices were 257 and 90 respectively, while the number of telegraph offices worked by the Post Office rose from 1,634 to 4,010.

The increase in the number of paid telegrams dealt with is shown by the following figures:—

		1897-98.	1945-46.
Inland	Private ..	4,107,270	21,312,248
	State ..	860,382	5,512,383
	Press ..	35,910	787,031
Foreign	Private ..	735,679	3,227,719
	State ..	9,896	241,707
	Press ..	5,278	94,297
		5,754,415	31,175,445

The outturn of the workshops during 1945-46 depresented a total value of Rs. 1,89,78,000.

Wireless.

The number of messages handled during the year 1945-46 by departmental wireless stations in India was nearly 287,000. This shows a decrease of about 55,000 over the previous year.

Telephones.

With effect from 1-4-43 the Licensed Telephone Systems at Calcutta, Bombay and Madras and with effect from 1-9-43, the Licensed Telephone Systems at Ahmedabad and Karachi were acquired by Government. On the 31st March 1946, there were about 2,700 exchanges and 126,130 Telephones operated by the department and licensed system. About 4·5 million trunk telephone calls were handled during the year 1945-46.

Posts and Telegraphs.

The capital outlay of the Indian Posts and Telegraphs Department during and to the end of the year 1945-46 was Rs. 2,17,81,000 and Rs. 34,25,16,000 respectively. The receipts for the year ended 31st March 1946 amounted to Rs. 33,47,30,400 and charge (including interest on capital outlay) to Rs. 22,16,53,800, the result being a net gain of Rs. 11,30,76,600.

Broadcasting

FOR several years limited broadcasting services were maintained by radio clubs in Calcutta, Bombay and Madras. Although the transmitting sets employed by them were of very low power, the broadcasts were popular. The clubs were assisted financially by a government contribution based upon the revenue from licence fees, but this did not nearly suffice to cover the cost of the transmissions, and great credit is due to the members of those clubs for the sporting manner in which they provided additional funds and undertook the entire responsibility for the programmes.

After negotiations extending over several years, an Indian Broadcasting Company was granted a licence to establish broadcasting services upon lines similar to those of the British Broadcasting Corporation, and transmitting stations were erected at Bombay and Calcutta, the service from the former being inaugurated by the Viceroy in July 1927 and the latter by the Governor of Bengal a month later. These stations had each an aerial input of one and a half kilowatts, the same as that of the 2LO stations in London, of which they were practically duplicates. The programmes were so arranged that both Indian and European music were broadcast daily and the news bulletins and market and weather reports were read in two languages.

Owing to financial difficulties the Indian Broadcasting Company went into liquidation with effect from March 1, 1930. Since then the Government of India have been controlling broadcasting in this country. Government for this purpose formed an Indian State Broadcasting Service, now called All-India Radio, and instituted a Central Broadcasting Advisory Committee.

In 1934, Government felt justified in embarking on a policy of development and, as a first step, a sum of Rs. 2,50,000 was granted for a 20-kW mediumwave station to be established at Delhi. This station was actually opened on January 1, 1936.

In the year 1936 a special fund of Rs. 40,00,000 was created for the development of Broadcasting in India. At that time there was, in addition to the mediumwave centres at Bombay, Calcutta and Delhi, a 0.25 kW mediumwave centre at Peshawar which was being operated by the N.-W. F. P. Government.

Orders for extensive new equipment for implementing the scheme of expansion were placed in January 1937. It included 10 transmitters which were put into operation as follows:—

Lahore 5-kW mediumwave: December 16, 1937; Delhi 10-kW shortwave: December 16, 1937; Bombay 10-kW shortwave: February 4, 1938; Lucknow 5-kW mediumwave: April 2, 1938; Delhi 5-kW shortwave: June 1, 1937; Madras 10-kW shortwave: June 16, 1938; Madras 0.2-kW mediumwave: June 16, 1938; Calcutta 10-kW shortwave: August 16, 1938; Trichinopoly 5-kW mediumwave: May 16, 1939; Dacca 5-kW mediumwave: December 16, 1939.

Peshawar, which was taken over from the N.-W. F. P. Government on April 1, 1937, was converted into a 10-kW mediumwave centre on July 16, 1942.

In the year 1942, India became an important operational base for the Far Eastern theatre of World War II. Consequently the British Government requested All-India Radio to install at Delhi five shortwave transmitters including one 100-kW transmitter as an urgent war measure. These projects were undertaken and completed according to schedule.

A 100-kW transmitter capable of providing a broadcasting service to countries outside India which was opened on May 1, 1944 constituted another technical development of great importance in AIR's history.

After the partition of India, the regional stations at Peshawar, Lahore and Dacca were handed over to the Pakistan Broadcasting Service.

All-India Radio.—All-India Radio is an "attached" office of the Department of Information and Boadcasting, of the Government of India. Its head is the Director-General, All-India Radio, whose office is located in Broadcasting House, Parliament Street, New Delhi. Other officers at headquarters: Chief Engineer, three Deputy Directors-General (Administration, Home and External programmes), Director of Administration, Deputy Chief Engineer, Public Relations Officer, Assistant Director of Administration, Assistant Solicitor, Director of Programmes, and three Officers on Special Duty (Programmes, Administration and Engineering).

Regional Stations.—The regional stations are situated at Delhi, Lucknow, Patna, Calcutta, Cuttack, Madras, Trichinopoly and Bombay. Each regional centre consists of studios and office buildings, transmitter installations and receiving centre installations. The technical facilities at the studios provide for simultaneous programme transmissions, channels for rehearsals and tests, listening rooms, recording facilities, etc. The studios at Delhi, Bombay, Madras and Calcutta are air-conditioned. All the centres are equipped with mediumwave transmitters which furnish a first-grade service for listeners located within 50 to 100 miles radius. At Delhi, Bombay, Madras and Calcutta, shortwave transmitters have also been provided for serving the whole of the zone in which the station is situated. The receiving centre at each station is the link between the Central News Organisation at Delhi and the station itself, and is used for relaying news bulletins and important broadcasts from Delhi.

The stations transmit for about seven to eleven hours a day. This is generally split up into three daily transmissions, morning, afternoon and evening. Programmes are planned by Station Directors with the assistance of their Programme Executives and Programme Assistants. Details are worked out well in advance of their schedule dates and are published in the fortnightly journals of All-India Radio. Programmes are broadcast in 13 Indian languages and in English. The general programme consists of Indian music, talks, plays, feature programmes and programmes for women and children. Rural programmes are broadcast from all stations with the exception of Calcutta which broadcasts a special programme for industrial areas. Educational broadcasts are radiated from Bombay, Calcutta, Madras, Trichinopoly and Delhi.

Broadcasting House.—Probably the largest centre of broadcasting activity in the East was completed in 1943. Architecturally, Delhi's newest and one of its most striking sites, it represents from the point of view of equipment, the latest in radio engineering. With its soft-shaded studios, each with an individual acoustic pattern to suit every variety of sound reproduction, its control room—a compact of up-to-the-second scientific efficiency—its dramatic control panels and its luxury-liner corridors between studios, it constitutes a landmark in every sense of the word in the history of Indian broadcasting.

Central News Organisation.—This is situated at Delhi and provides (*a*) news bulletins for Home programmes (in English and seven Indian languages) and (*b*) external programmes. All the news bulletins are prepared in the Central News Organisation and broadcast from the transmitters at Delhi set apart for news. Each station relays the bulletins suitable for its listening areas. A few minutes are set apart at each station for local news. This period accommodates news of purely local interest.

CENTRAL NEWS SERVICES

Language	Relayed by	Number of bulletins.	Total duration of news (in hours)
English	All stations of AIR ..	1,460	304
Hindustani	Delhi, Bombay, Lucknow, Jullundur, Amritsar and Patna	1,460	242
Tamil	Madras and Trichinopoly ..	1,095	183
Telugu	Madras	1,095	183
Bengali	Calcutta	1,095	183
Marathi	Bombay	1,095	183
Gujerati	Bombay	1,095	183
Kannada	Bombay	92	23
*Special East Punjab ..	Jullundur and Amritsar ..	242	20
	TOTAL	8,729	1,504

Bulletins in Oriya, Assamese and Malayalam are being included in 1948.

* At present in simple Hindustani. These bulletins are shortly to be turned into Punjabi.

External Services.—The external broadcasts from the Central News Organisation consists of daily services in Mid-Eastern and Far-Eastern languages, programmes for Indians Overseas and programmes for the forces. All these are radiated from Delhi but they are distinct from the programmes of the Delhi (regional) station. Altogether fifty-nine news bulletins a day in twenty-one languages—fourteen foreign and seven Indian—are broadcast from Central News Organisation at fixed times of the day. The languages used in External Services include Burmese, Thai, Kuoyu, Amoy, Cantonese, Japanese, French, Arabic, Persian, Afghan-Persian, English, Hindustani, Tamil, Gujerati, Tonkinese, Cochin-Chinese and Italian.

EXTERNAL SERVICES

Language	Areas covered	Total duration (Hours)	No. of bulletins (News)	Total duration News (Hrs.)	Music (Hrs.)
1	2	3	4	5	6
1. Hindustani ..	Ma'aya, Burma, East and S. Africa	845	730	122	546
2. English ..	Japan, W. China, Central China, East China, Indonesia, Ma'aya, Burma, Afghanistan, Iran, Iraq, Arabia, East & S. Africa ..	1095	2190	365	365
3. Tamil ..	Indonesia, Ma'aya, Burma, East and S. Africa ..	612	730	122	371
4. Gujerati ..	Malaya, East & South Africa	182·5	365	61	56
5. Burmese ..	Burma, Indonesia, Ma'aya ..	365	730	122	182
6. Indonesian ..	Indonesia, Malaya	92	365	61	13·5
7. Chinese General)	West China	273	..	..	273
8. Kuoyu ..	Central China	182·5	365	61	103·5
9. Kuoyu* ..	East China	182·5	..	..	..
10. Cantonese ..	Indonesia	182·5	365	61	103·5
11. Amoy ..	Malaya	182·5	365	61	103·5
12. Japanese ..	Japan, Burma	182·5	..	..	..
13. Siamese ..	Siam, Indonesia	92	..	..	..
14. Persian ..	Iran, Afghanistan	273	365	61	183·5
15. Afghan-Persian	Afghan (Kabul)	273	365	61	183·5
16. Arabic ..	Arabia, Iraq, Transjordan, Palestine, Persian Gulf ..	182·5	365	61	56
17. Pushtu ..	Tribal areas, N.-W. F. P., Afghanistan, Baluchistan ..	395	1095	213	86·5
18. Kashmeri ..	Kashmere, Jammu,	273	365	61	183·5
19. Dogri	N.-W.F.P. Tribal areas ..	92	365	61	31
	TOTAL ..	5957·5	9125	1554	2841

*Composite programmes consisting of News, Commentaries, Music, etc., relayed from the BBC.

Research and Maintenance Departments.—These two departments of the Engineering Division are located at Delhi. The Research Department deals with all technical problems, concerning reception and transmission and is also responsible for the continuous study of ionosperic data and forecasting transmission conditions, so that the most suitable wavelengths can be chosen in advance for long-distance services. The Maintenance Department handles problems which arise in the upkeep and day-to-day operation of the engineering equipment used by All-India Radio.

Radio Journals—A.I.R. publishes programme journals in English (Indian Listener), Urdu (Awaz) and Hindi (Sarang) from Delhi. Bengali (Betar Jagat) from Calcutta and Tamil (Vanoli) from Trichinopoly. The following figures give the circulation of the journals:—

	Indian Listener	Awaz	Sarang	Betar Jagat	Vanoli	Total
1930-31 ..	2,750	..	..	1,520	..	4,270
1931-32 ..	2,750	..	..	2,000	..	4,750
1932-33 ..	3,600	..	..	1,700	..	5,300
1933-34 ..	4,500	..	..	1,700	..	6,200
1934-35 ..	8,000	..	..	1,750	..	9,750
1935-36 ..	13,500	500	..	1,900	..	15,900
1936-37 ..	16,500	2,190	..	2,400	..	21,090
1937-38 ..	18,500	5,500	..	2,800	500	27,300
1938-39 ..	21,250	5,000	2,500	3,100	1,250	33,100
1939-40 ..	18,500	8,250	5,000	3,900	3,230	38,880
1940-41 ..	20,000	13,250	7,500	4,350	6,250	51,350
1941-42 ..	24,000	14,750	8,500	5,500	8,800	61,550
1942-43 ..	23,500	14,500	7,250	6,650	9,150	61,050
1943-44 ..	22,750	15,000	7,250	7,000	10,150	62,150
1944-45 ..	23,200	17,250	8,250	6,900	11,150	66,750
1945-46 ..	22,500	17,500	8,250	6,825	12,100	67,175
1946-47 ..	28,900	24,000	11,000	8,693	17,496	90,089

Monitoring Office.—In order that all news bulletins may be prepared with a knowledge of what is being broadcast by other important stations of the world a Monitoring Office has been established at Simla.

Public Relations.—For establishing and maintaining contact between All-India Radio and its listeners there is a Public Relations Officer at headquarters and a Liaison Officer and a Listener Research Officer at each Station.

Advisory Committees, established at the broadcasting centres in consultation with the Provincial Governments, keep the Director-General, All-India Radio, in touch with local public opinion in the matter of programme construction and advise him on such matters. For advising the Director-General All-India Radio, on the choice of a generally acceptable vocabulary for Hindustani, a Hindi-Urdu Standing Advisory Committee was formed in 1946. The first meeting of the Committee was held in May and June 1946.

Post-War Plan.—In November 1944 a Basic Plan for the development of broadcasting in India was drawn up and submitted to the Government of India as a post-war scheme. This was revised in September 1945 to include a scheme for External Broadcast and for the re-organisation of the Central Directorate and other units located at Delhi.

The objects of the scheme, as outlined in the basic plan, are:

(*i*) To provide two different broadcast services—an urban service in large cities and towns and over thickly populated areas of urban character, and a rural service for the whole of India on two different sets of transmitters.

(*ii*) (*a*) Under urban service to provide urban programmes in 19 major languages.

(*b*) Under rural service to provide rural programmes in 125 different rural languages and dialects spoken in the rural areas.

(*iii*) To provide an alternative urban service (zonal programme) over certain areas where the density of urban population is high.

This post-war broadcasting scheme, in general, seeks to provide, among other things, each of the villages with a community receiving radio set and over 130 transmitting stations broadcasting instructional and entertainment programmes.

As the first stage in the scheme for the Development of Broadcasting in this country, the Government of India have formulated an eight-year plan which has been taken up for immediate implementation. This plan has been approved by the Development Board and by the Standing Finance Committee of the Legislature. It covers the following:

(*i*) Establishment of new broadcasting centres at Cuttack, Nagpur, Shillong-Gauhati, Ahmedabad, Bezwada, Calicut and Dharwar.

(*ii*) Installation of high-power medium-wave transmitters at Delhi, Bombay, Madras, Calcutta and Allahabad.

(*iii*) Construction of studio buildings at Madras and Calcutta.

(*iv*) Provision of additional studio facilities at the existing broadcasting centres.

In their choice of new centres, the Government of India have been guided by the following factors:

(*i*) Demands of the linguistic areas hitherto unprovided with a service and the importance of the language from the literary point of view and from the size of population speaking the language.

(*ii*) Demands of the various provinces.

(*iii*) Density of urban population within the service area of the broadcasting centre and its potentialities in bringing in increased revenue.

(*iv*) Importance as an educational and cultural centre, and availability of programme talent at the centre or within easy reach thereof.

(*v*) Density of rural population and distribution of villages and hamlets within the service area, which will determine the centre's usefulness as a rural centre.

All the services now to be provided will be on the mediumwave.

The total estimates capital cost of the entire scheme will be Rs. 3, 64,70,000. Works costing Rs. 3,01,70,000 would be completed within the first five years.

Because of the various factors involved in the opening of new stations, such as, acquisition of sites, construction of new buildings, etc., a certain amount of delay is inevitable. In order to provide an interim service until the complete plans for each centre are carried out, the Government of India have undertaken the construction of "pilot" stations at the new centres mentioned above. These pilot stations are to form the nucleus of the future services and, in addition to the meeting of the immediate needs of the areas concerned, they would help to cultivate the potential talent at the centre and also make the people more radio-minded. Such a pilot station has already been opened at Cuttack and two more are under construction at Shillong-Gauhati and Nagpur.

Licences.—Broadcast receiver licences are issued at all head and sub-post offices at a fee of ten rupees per year, and cover the use of receiving sets throughout India. Licences for fixed stations for transmitting and experimental purposes are much sought after, and despite a careful scrutiny of the applications, a considerable number have been issued. The number of traders in wireless apparatus who are required to take out special import licences has increased considerably during recent years.

Broadcast Receiver Licences are issued to Municipalities or other public bodies for the reproduction of broadcast programmes in public places by the Postmaster-General of the Province. A licence issued for this purpose covers the use of one wireless receiver and any number of loudspeakers at one place only but does not cover any external wiring erected outside the premises of the licensee.

A commercial Broadcast Receiver Licence is, however, necessary in the case of clubs, institutions, messes, etc., for reproducing broadcast programmes at subscriptions, dances, concerts, bazaars, etc., to which the public are admitted. This licence is also issued by the Postmaster-General at a fee of Rs. 25 and is valid for one year.

While the number of wireless receiver Licensees in India has increased, the total for British India numbering 252,899 on July 1. 1947. is negligible, when one considers the vast population, about 388,097,955, or when one compares it with the progress in Europe, America or Japan where it has become an indispensable dynamic social institution.

Taking the figures of wireless licences, there was an increase of 11,000 between January 1933, and July 1935. The number in April 1937 was 43,351, in April 1938, 53,810, in April 1939, 73,698, in April 1940, 100,388, in April 1941, 128,087, in April 1942, 156,793, in April 1943, 168,236, in April 1944, 181,848, and 205,130 in April 1946. At the end of March 1946 there were 47,492 licence holders in the Punjab and North-West Frontier Province Postal Circle which had the largest number in old undivided India, the Bombay Postal Circle coming next with 45,144.

The growth of Broadcast receiver licences at the end of March of each year beginning with 1933 is given below which will indicate the interest evinced in radio :

Year	*Licences.*
1933	9,275
1934	12,037
1935	17,881
1936	28,066
1937	42,152
1938	52,883
1939	72,282
1940	97,537
1941	1,25,347
1942	1,55,735
1943	1,67,123
1944	1,80,660
1945	1,99,589
1946	2,05,130
1947 (July) ..	2,52,899

Radio Imports—The imports of wireless receivers into India have increased rapidly in recent years, though lately there has been some decline.

RADIO RECEIVERS IMPORTED
(*upto* 31-3-1947)

Year	Number	Value Rs.
1936-37 ..	26,925	25,17,442
1937-38 ..	29,567	28,11,415
1938-39 ..	28,110	25,85,528
1939-40 ..	43,684	40,62,138
1940-41 ..	38,866	35,31,956
1941-42 ..	52,416	41,73,266
1942-43 ..	18,930	19,70,027
1943-44 ..	5,384	7,43,919
1944-45 ..	895	1,50,947
1945-46 ..	5,982	7,04,197
1946-47 ..	1,07,111	1,69,61,790

ALL-INDIA RADIO BROADCASTING SYSTEM.

Station.	Type.	Power in K.W.	Call Sign.	Frequency in Kc/s.	Wave-length in metres.	Trans-mission No.	Transmission Time (Indian Standard Time) (Subtract 5½ hrs. for G.M.T.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Delhi ..	M.W.	10	VUD	886	338·6	*i.*	0730–0930 (0730–1000)
						ii.	1230–1430
						iii.	1700–2300
Delhi ..	S.W.	10	VUD 2	7290	41·15	*i.*	0730–0930 (0730–1000)
				9630	31·15	*ii.*	1230–1430
				7290	41·15	*iii.(a)*	1700–1830
				4960	60·48	*iii.(b)*	1845–2300
Delhi ..	SW.	5	VUD 3	9670	31·02	*i.*	0710–0915
				17760	16·89	*ii.*	1230–1430
				17760	16·89	*iii.(a)*	1745–1815
				9670	31·02	*iii.(b)*	1830–1900
				9670	31·02	*iii.(c)*	1915–2200
				7210	41·61	*iii.(d)*	2230–2315
Delhi ..	S.W.	10	VUD 4	11850	25·32	*i.*	0710–0915
						ii.	1230–1430
						iii.(a)	1745–1900
						iii.(b)	1915–2300
Delhi ..	S.W.	100	VUD 5	15190	19·74	*i.(a)*	0710–0830
				15190	19·74	*i.(b)*	0845–1215
				15190	19·74	*ii.(a)*	1245–1345
				15190	19·74	*ii.(b)*	1415–1830
				9590	31·30	*iii.(a)*	1900–2130
				9590	31·30	*iii.(b)*	2145–2300
				7290	41·15	*iv.*	0400–0455

Station.	Type.	Power in K.W.	Call Sign.	Frequency in Kc/s.	Wave-length in metres.	Trans-mission No.	Transmission Time (Indian Standard Time) (Subtract 5½ hrs. for G.M.T.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Delhi ..	S.W.	100	VUD 7	15160	19·79	*i.(a)*	0710–0820
						i.(b)	0845–1300
						ii.	1345–1500
						iii.(a)	1530–2015
						iii.(b)	2030–2130
						iii.(c)	2145–2300
Delhi ..	S.W.	7·5	VUD 8	21510	13·95	*i.*	0845–1300
						ii.	1530–1900
						iii.(a)	1930–2140
						iii.(b)	2145–2300
Delhi ..	S.W.	7·5	VUD 9	11870	25·27	*i.*	0845–1300
						ii.(a)	1410–1430
						ii.(b)	1500–1900
						iii.(a)	1930–2140
						iii.(b)	2145–2300
Delhi ..	S.W.	20	VUD 10	9630	31·15	*i.(a)*	0710–0730
				17830	16·83	*i.(b)*	0845–1300
				21510	13·95	*i.(c)*	1345–1415
				17830	16·83	*ii.*	1500–1730
				6010	49·92	*iii.*	1830–2000
Delhi ..	S.W.	20	VUD 11	11760	25·51	*i.(a)*	0710–0830
				15290	19·62	*i.(b)*	0845–1100
				15290	19·62	*ii.(a)*	1200–1215
				15290	19·62	*ii.(b)*	1230–1430
				15290	19·62	*iii.(a)*	1530–1730
				15290	19·62	*iii.(b)*	1745–1815
				6110	49·10	*iii.(c)*	1830–1900
				7290	41·15	*iii.(d)*	1915–2140
				9660	31·06	*iii.(e)*	2230–2315
2. Bombay ..	M.W.	1·5	VUB	1231	243·7	*i.*	0730–0930
						ii.	1200–1430
						iii.	1620–2300
Bombay ..	S.W.	10	VUB 2	7240	41·44	*i.*	0730–0930
				9550	31·41	*ii.*	1200–1430
				7240	41·44	*iii.(a)*	1620–1915
				4880	61·48	*iii.(b)*	1930–2300
3. Calcutta	M.W.	1·5	VUC	810	370·4	*i.*	0630–0830
						ii.	1230–1500
						iii.	1700–2300
Calcutta ..	S.W.	10	VUC 2	7210	41·61	*i.*	0630–0830
				9530	31·48	*ii.*	1230–1500
				9530	31·48	*iii.(a)*	1700–1830
				4840	61·98	*iii.(b)*	1845–2300
4 Madras ..	M.W.	0·5	VUM	1420	211·3	*i.*	0700–0900
						ii.	1230–1500
						iii.	1600–1700
						iv.	1730–2230
Madras ..	S.W.	10	VUM 2	7260	41·32	*i.*	0700–0900
				9590	31·30	*ii.*	1230–1500
				9590	31·30	*iii.*	1600–1700
				4920	60·98	*iv.*	1730–2230
5 Lucknow ...	M.W.	5	VUW	1022	293·5	*i.*	0730–0930
						ii.	1230–1340
						iii.	1730–2300
6. Trichinopoly	M.W.	5	VUT	758	395·8	*i.*	0715–0900
						ii.	1300–1445
						iii.	1700–2230
7. Jullundur ..	M.W.	0·25		1333	225	*i.*	0800–0930
						ii.	1800–2130
8. Patna ..	M.W.	5·0		1131	265·3	*i.*	0730–0900
						ii.	1230–1400
						iii.	1700–2230
9. Cuttack ..	M.W.	1·0		1355	221·4	*i.*	0700–0900
						ii.	1300–1400
						iii.	1700–2130
10. Amritsar ..	M.W.	·05		1305	229·9	*i.*	0800–0930
						ii.	1800–2130

Pakistan Service

ON the creation of the Dominion of Pakistan, three regional broadcasting stations were handed over to the P.B.S. These were: One 5-kW medium-wave station at Lahore, one 10-kW medium-wave station at Peshawar, and one 5-kW medium-wave station at Dacca. These stations have a comparatively small range and are primarily intended to meet local needs.

NEW TRANSMITTERS.—It is proposed to install five more transmitters in the near future. Of the two 50-kW short-wave transmitters to be installed at Karachi, one will be used for internal broadcasts and a centralised news service, and the other for external broadcasts. These two transmitters will cover not only the whole of Eastern and Western Pakistan, but also certain countries in the Middle East and Europe.

Two more 10-kW medium-wave transmitters are also earmarked for Sind. Of these, one will be installed at Karachi. It will meet only the local needs of the town. As Karachi is bounded by sea on one side and desert on the other, this transmitter will not be able to serve the whole of Sind. It is, therefore, possible that the other medium-wave transmitter may be installed at Hyderabad.

One 7.5-kW short-wave transmitter to be installed at Dacca, in addition to the existing 5-kW medium-wave transmitter, will not only serve the whole of the East Bengal, but also connect East Bengal with Western Pakistan and will be heard in Western Pakistan.

It is not proposed to set up a radio station at Chittagong in the near future as the short-wave transmitter to be installed at Dacca will be heard throughout East Bengal and will be able to cater for the needs of Chittagong also.

RURAL EDUCATION.—No scheme for the establishment of a large number of transmitting radio centres for rural propaganda and education has so far been prepared, mainly because of financial reasons. The expenditure involved would be very large and the Provincial Governments who are generally responsible for installing radio sets in rural areas, may not be able to find the necessary funds for the purpose for some time to come.

There are also practical difficulties in implementing a scheme of this kind on account of the generally undeveloped state of the rural areas and lack of means of communication. In the vast majority of towns and villages, there is no electricity and in most cases one will have to depend on battery-operated radio sets. These sets cannot be installed without making elaborate arrangements for their maintenance and servicing. There are no workshop facilities for re-charging batteries in most of the mofussil districts.

The new installations will bring about an appreciable expansion in the activities of Radio Pakistan. The existing radio stations at Lahore and Peshawar are already broadcasting rural programmes. No rural programmes are being broadcast from the Dacca Station as the Provincial Government of undivided Bengal did not provide Dacca and its vicinity with radio sets.

British Broadcasting Corporation

THE British Broadcasting Corporation maintains a small office in New Delhi, to act as a liaison point between its broadcasting headquarters in London and the broadcasting organisations of India, Pakistan and Ceylon, as well as to maintain contact with listeners in these countries to the B.B.C's Overseas Programmes.

Its function is purely one of liaison. No transmitting of programmes takes place outside London.

The office in New Delhi was first established in 1942 with the then primary object of conducting listener research for the B.B.C's Overseas Programmes broadcast from London, in both English and in five Eastern languages.

Early in 1943, the scope of the office was slightly expanded with the appointment of a senior B.B.C. Representative from London, to handle all matters of co-operation, interchange of ideas and material and public relations, between the B.B.C. and its sister broadcasting organisations in India.

Pakistan and Ceylon have since been added to the scope of its contacts, but the general shape of the office remains the same, with, as its two main strands of work, Listener Research and Public Relations.

With Listener Research, the office helps to form a liaison between listeners to the BB.C. Programmes in these countries and the broadcasting planners and artists working in London. It aims to ensure that the B.B.C's Eastern Service—which is broadcast especially for the three Dominions and which can be heard daily between 7 p.m. and 9 p.m.—satisfies the needs of its audience; keeps up-to-date with changing opinions and requirements. It aims to keep listeners in touch with news and trends of thought in the Western countries; and by reporting back to London the views of listeners, helps to introduce new features and programmes which meet with the interests and needs of the listeners in these communities.

It aims too to maintain a similar contact between the planning departments in London and the listeners in these countries to the B.B.C's General Overseas Service broadcast in English over the twenty-four hours daily and which is directed specially to India, Pakistan and Ceylon every day from 6-30 a.m. to 10-30 p.m.

In carrying out this work, the B.B.C. Listener Research Officer has toured most areas in the three Dominions enquiring at first hand into the reception of the programmes and assessing from suggestions, appreciations and frank criticisms, how far they are fulfilling the listeners' needs.

EXCHANGE OF IDEAS

One method of promoting cordial relations is by a constant interchange of ideas, scripts and through reciprocal arrangements for the rebroadcasting of news, cultural items and great public occasions. So, through such co-operation, the B.B.C. was enabled to rebroadcast the ceremonies of August 14 and 15 and similarly, there were rebroadcasts in the Dominions on such occasions as the Royal Wedding in November, 1947.

Such rebroadcasts often require careful planning in terms of timings and technical facilities and the work of the B.B.C. Office in New Delhi helps to meet these arrangements.

Also, by means of recordings made by the B.B.C. Transcription Service, of programmes broadcast in London on any of the Home or Overseas Services, the B.B.C. can offer broadcasting concerns all over the world, records of outstanding items such as concerts of Western Music, or talks given by authorities on matters of general cultural and educational interest. Being in recorded form, other broadcasting concerns can use them in their programmes at times best suited to the habits of their audiences.

So a link can be formed between the East and the West especially in the spheres of thought and culture.

Similarly through the co-operation of such broadcasting organisations as All India Radio the B.B.C. Office can also send recordings of the Indian Scene back to London for broadcast to the English people and so foster and maintain an exchange of ideas between the Dominions and Great Britain.

The B.B.C. also maintains a News Correspondent in New Delhi whose work is to report to London for inclusion in B.B.C. News Bulletins, news items from the three Dominions. The present holder of this post is H. R. Stimson. The present B.B.C. Representative is B. W. Cave-Browne-Cave.

The address of the B.B.C. Office is: Post Box 109, New Delhi.

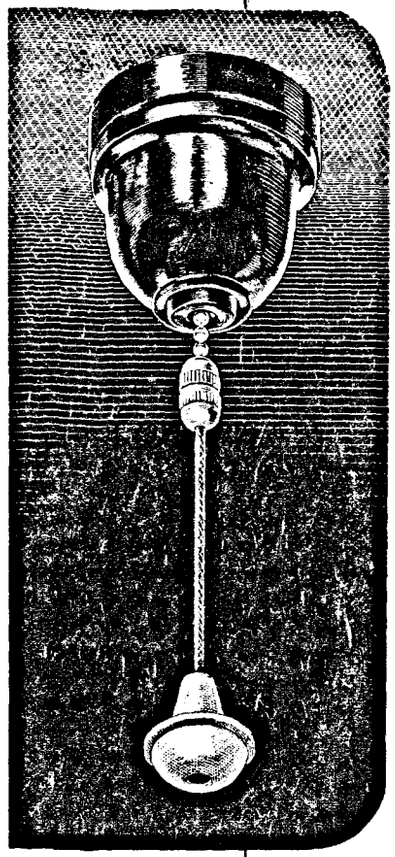
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daily service between Dacca and Calcutta with prospects of extension to Assam. Under a ten-year contract with the Government of India, they also instituted a weekly service from Lahore to Karachi, to link with the Imperial Airways London-Karachi services. The Rangoon and Dacca services from Calcutta were abandoned in 1935 owing to lack of public support.

Before all these developments, however, the first move had taken place in the west of the sub-continent through the enterprise of Tata Sons Ltd. Under a ten-year contract with the Government of India, a feeder service was started in 1932 between Karachi, Bombay and Madras, connecting at Karachi with the London-Karachi service. From the beginning of 1935, Imperial Airways London-Karachi service, and with it the Trans-India service to Calcutta and the feeder services, Karachi-Lahore and Karachi-Bombay-Madras, were operated twice weekly. The second Trans-India service was extended to Australia in 1936.

EMPIRE AIR MAIL SCHEME

The initiative in this development was taken by the British Government. In September 1936 an agreement was reached with the Government of India and the Government of India simultaneously negotiated with the Government of Ceylon for the extension of the Karachi-Madras service to Colombo. The new services were inaugurated on the 28th February 1938, with four services a week each way from London to Calcutta. The frequency of the two feeder air mail services in India, *viz.*, Karachi-Madras-Colombo and Karachi-Lahore was simultaneously increased to four, each service maintaining connection with the easterly and westerly flights of the main trunk service. The frequency was increased to five when the services in the Australian section were augmented at the end of July 1938 and all first class mails to Empire participating countries were conveyed by air. On the Empire system of air services, Imperial Airways and its associated companies, including Indian Trans-Continental Airways Ltd. flew a total distance of approximately 7,000,000 miles in 1938 as against 4,300,000 in 1937 and the total load carried rose from 6,315,400 to 12,302,000 ton-miles. In the early months of 1939, 550 tons of mail consisting of 50,000,000 letters were carried, each letter travelling on an average of 4,750 miles.

The Empire Air Mail scheme was suspended in September 1939 on the outbreak of the war with Germany, but a restricted service was maintained until June 1940 when, on Italy's entry into the war, air mails to the United Kingdom were totally suspended. In December 1940 the possibilities of introducing a direct air link between Britain and Durban were investigated and a "short circuiting" route was inspected by Major J. R. McCrindle, Deputy Director General of the British Overseas Airways. Air Service to England was renewed in August 1945. The Empire Air Mail scheme was finally abandoned with effect from the 1st April 1947.

India-England Airgraph Service—This new service was inaugurated on February 2, 1942. The airgraphs were photographed on a miniature film measuring about half an inch square. The films were sent throughout by air, and a photograph fascimile, measuring about five inches by four inches, of the original letter, was made from the film and delivered to the addressee. The rate of postage originally fixed at fourteen annas was reduced to eight annas on March 2. The airgraph service was discontinued in July 1945.

INTERNAL AIR SERVICE

In 1937 Messrs. Tata Sons Ltd. established a service between Bombay and Delhi, calling at Indore, Bhopal and Gwalior. This service operated twice weekly during the fair season.

Air Services of India Ltd., Bombay, inaugurated in November, 1937 an air service from Bombay to Bhavnagar, Rajkot, Jamnagar and Porbandur in the Kathiawar States. The service was terminated in 1940. The twice weekly Bombay-Poona-Kolhapur line was also terminated due to war in 1940.

During the period of the war and up to the end of 1945 Tata Airlines, Bombay, and Indian National Airways, New Delhi, the only active operating companies in India at that time, were operating a number of trunk and feeder air services with lend-lease aircraft loaned to them under the wartime contracts with the Government of India who controlled the entire load capacity on the said air services and met the cost of operations from defence estimates. Civilian traffic was carried only when space was available after meeting the military demands.

Concurrently work had been proceeding during the war years and Sir Frederick Tymms was placed as Officer on Special Duty for producing a Post-War Plan for the development of Civil Aviation in India. Soon after the termination of the war, on the 1st January, 1946, the lend-lease aircraft loaned to the two companies were withdrawn and replaced by surplus Dakota type aircraft purchased from the United States Army and Navy Liquidation Commission. With these aircraft the two companies commenced commercial operations under agreements with the Government of India. Under these agreements Government guaranteed the companies a fixed percentage of the capacity revenue on their services. In return control was exercised over a portion of the load capacity required for Government priority traffic. The following services were operated under the terms of this contract:—

TATA AIRLINES

Karachi - Ahmedabad - Hyderabad (Dn.)-Madras-Colombo daily.

Bombay-Ahmedabad-Delhi daily.

Bombay - Nagpur - Calcutta (from 1st April 1946, twice a week).

INDIAN NATIONAL AIRWAYS

Delhi-Cawnpore-Allahabad-Calcutta daily.

Delhi-Jodhpur-Karachi daily.

Delhi - Lahore - Rawalpindi - Peshawar three times a week.

Civil Aviation

THE development of internal air services in the sub-continent was first essayed by Lord (then Sir George) Lloyd during his Governorship of Bombay (1918-23). The first air service was organised by the then undivided Government of India between Karachi and Bombay and was operated by the Royal Air Force. It was a purely Government venture and was established as a temporary and experimental measure during the fair-weather season of 1920, with the object of testing the extent to which air mail service was likely to be used by the public. It was closed down as soon as sufficient data as to running expenses had been collected and its continuance as a purely commercial concern was not advocated.

The general attitude of the Government or some time after this was that as no air services in the world had yet been run without a Government subsidy and as India had no money available for such a purpose, a general development of air services must await more prosperous times. The pressure of external conditions in favour of Indian aviation enterprise gradually increased. The inauguration of French and Dutch air services across the sub-continent, as well as the institution of a regular weekly service between England and Karachi, and the general increase of civil aviation in all parts of the world and of visits of flyers of different nations to the sub-continent, stimulated both Government and public opinion. India had become a party to the International Commission for Air Navigation and under this she was under an obligation to provide ground facilities for aircraft from other countries.

The problem of internal air services was freshly taken up by the Government of India in the Department of Industries and Labour when Sir Bhupendranath Mitra was member of Government holding that portfolio.

Non-official members of the Assembly, under the leadership of Dr. Moonje, then an elected member, for some time strongly pressed Government to institute a practical system for the training of young Indians in civil aviation.

With the intervention of the war, flying had to be confined to war work but this enabled India to skip over two generations of gradual progress since numerous aerodromes originally built for defence purposes are now in use as civil aerodromes. The network of radio and meteorological facilities established during war served as a nucleus in building up the post-war facilities on a much expanded scale. As a result of this on the 1st January 1946 it became possible to commence the operation of daily air services on many trunk air routes in the sub-continent, not operated before the war, with aircraft obtained from the disposals stocks and suitably converted to meet the requirements of scheduled air services.

HISTORY OF AIR SERVICES

To take up the thread from where we left Sir Bhupendranath Mitra was in due course obliged to reconsider the question of assisted internal air services in the sub-continent. An arrangement was made by which the Imperial Airways' Services between Croydon and Karachi was, on 30th December, 1929, extended to New Delhi, mails from and for Europe being carried to and fro each week. This conveyance of mails between New Delhi and Karachi was performed under a special arrangement, the chief point of which was that the service was conducted by the Government of India and that Imperial Airways chartered to them machines for the purpose. This meant, in effect, that the Western service of Imperial Airways continued to Delhi, but technically the service from Karachi eastwards belonged not to them but to the Government of India. Passengers as well as mails were carried.

On the expiration of the period for which the contract on these lines was arranged, the Government of India decided not to renew their charter with Imperial Airways and adopted the alternative course of contracting with the Delhi Flying Club to carry the weekly Karachi-Delhi air mail. Passengers were also carried by this service. This, like the earlier special arrangement with Imperial Airways, was obviously a transitional plan. It came into operation early in 1932. Sir Bhupendranath Mitra was succeeded by Sir Joseph Bhore and the latter entered with enthusiasm into the problem. Its solution was largely assisted by a great deal of spade work carried out by Col. Shelmerdine before he resigned his appointment as D.C.A. in order to take up the corresponding post in England. A scheme was worked out under the direction of Sir Joseph Bhore for the institution of a weekly air service between Karachi and Calcutta in connection with the weekly arrivals and departures of air mails conveyed by Imperial Airways Ltd. from and to England.

The acute financial stringency following on the world depression, necessitated the abandonment of the Government Karachi-Calcutta service in 1931.

TRANS-CONTINENTAL AIRWAYS

Efforts to attain the desired result were revived successfully in 1933. Arrangements were made with the British Government and Imperial Airways Ltd. for the extension of the London-Karachi air service across the sub-continent from Karachi to Singapore, as a link in the England-Australia air service. A private company called the Indian Trans-Continental Airways Limited was formed with a majority of Indian Directors, in which Imperial Airways Ltd. held 51 per cent of the shares, Indian National Airways Ltd. 25 per cent and the Government of India 24 per cent. This company then operated jointly with Imperial Airways a weekly service from Karachi to Singapore, where it connected with Qantas Empire Airways' weekly service from Singapore to Australia.

Indian National Airways Ltd. was established largely through the efforts of Mr. R. E. Grant Govan, C.B.E. to participate as a shareholder in Indian Trans-Continental Airways and to develop feeder and other internal air services in the north of the sub-continent. They opened a bi-weekly service between Calcutta and Rangoon and a

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Apart from these services, operated under the guarantee arrangements, the following new services were also commenced:

AIR SERVICES OF INDIA LTD.

Bombay-Jamnagar-Bhuj (from 25th June 1946, three times a week).

Bombay-Bhopal-Nagpur-Lucknow (from 28th June 1946, once a week).

INDIAN NATIONAL AIRWAYS

Delhi-Rampur-Lucknow (from 7th February 1946 daily).

DECCAN AIRWAYS LTD.

Delhi-Gwalior-Bhopal Nagpur-Hyderabad-Madras (from 1st July 1946, three times a week).

Hyderabad-Bangalore (from 1st July 1946, twice a week).

In pursuance of the provision made in Rule 135 of the Indian Aircraft Rules 1937, an Air Transport Licensing Board was constituted in July 1946, since under rule 134 of the said Rules no scheduled air services could be operated after the 1st September 1946 except under a licence granted by the Board. Upto the 31st December, 1946, the Air Transport Licensing Board had granted provisional licences for the operation of the following air services:—

	ROUTE	*COMPANY*
1.	Bombay-Ahmedabad-Delhi	Air-India Ltd.
2.	Karachi-Ahmedabad-Bombay-Hyderabad-Madras-Colombo	" " "
3.	Bombay-Nagpur-Calcutta	" " "
4.	Delhi-Bhopal-Nagpur-Hyderabad-Madras	Deccan Airways Ltd.
5.	Hyderabad-Bangalore	" " "
6.	Bombay-Jamnagar-Bhuj-Karachi	Air Services of India.
7.	Bombay-Bhopal-Cawnpore-Lucknow	" " " "
8.	Porbander-Jamnagar-Ahmedabad	" " " "
9.	Bombay-Bhavnagar	" " " "
10.	Lahore-Bikaner-Jodhpur-Ahmedabad	Indian National Airways Ltd.
11.	Delhi-Lucknow	" " " "
12.	Delhi-Jodhpur-Karachi	" " " "
13.	Calcutta-Allahabad-Cawnpore-Delhi-Lahore-Rawalpindi-Peshawar	" " " "
14.	Karachi-Quetta-Lahore	" " " "
15.	Bombay-Nagpur-Calcutta	Mistri Airways Ltd.

A total of 97 applications from 20 air transport companies for operating air services on 78 routes, covering the whole of what was British India and many states, was received by the Air Transport Licensing Board during the year 1946.

The grant of provisional licences by the Board was continued during 1947 and following further provisional licences were granted. In addition various changes in the frequencies and routes of scheduled air services were authorised.

	ROUTE	*COMPANY*
1.	Madras-Bangalore-Cochin-Trivandrum	Air-India Ltd.
2.	Bombay-Baroda-Ahmedabad	Ambica Air Lines Ltd.
3.	Bombay-Rajkot-Morvi	" " " "
4.	Hyderabad-Bombay	Deccan Airways Ltd.
5.	Bombay-Poona	" " "
6.	Calcutta-Vizagapatam-Madras-Bangalore	Airways (India) Ltd.
7.	Bombay-Gwalior-Delhi	Air Services of India Ltd.
8.	Calcutta-Gaya-Lucknow-Delhi	Bharat Airways Ltd.
9.	Calcutta-Akyab-Rangoon	Orient Airways Ltd.
10.	Delhi-Amritsar	Indian National Airways.
11.	Calcutta-Rangoon	" " "

PRESENT POSITION

On 1st June 1948, the network of Indian scheduled air services was as the following statement.

AIR SERVICES OPERATED BY INDIAN AIR TRANSPORT COMPANIES

(As on 1st June, 1948).

S.No.	COMPANY.	ROUTE.	FREQUENCY.
1.	AIR INDIA LTD., BOMBAY	Bombay-Calcutta	Daily.
		Bombay-Delhi (Direct)	Daily.
		Bombay-Ahmedabad-Jaipur-Delhi	Daily.
		Bombay-Karachi (Direct)	14 Weekly
		Bombay-Ahmedabad-Karachi	Daily.
		Bombay-Hyderabad-Madras-Colombo	Daily.
		Bombay-Madras	5 Weekly Ex. Bom: Sun/Tue/Thr/Fri Sat. (Ex. Mad: Sun/Tue/Thr/Fri Sat).
		Madras-Bangalore-Coimbatore-Cochin-Trivandrum	6 Weekly (Daily except Sunday).
2.	INDIAN NATIONAL AIRWAYS LTD., NEW DELHI	Delhi-Amritsar	4 Weekly (Sun/Mon/Wed/Fri).
		Delhi-Lahore	Daily.
		Delhi-Jodhpur-Karachi	Daily.
		Delhi-Calcutta	Daily.
		Calcutta-Rangoon	6 Weekly (Daily except Sunday).
3.	AIR SERVICES OF INDIA LTD., BOMBAY.	Bombay-Bhavnagar-Ahmedabad	3 Weekly (Mon/Thr/Sat).
		Bombay-Gwalior-Delhi	3 Weekly (Ex. Bom.: Tue/Thr/Sat). (Ex. Del.: Wed/Fri Sun).
		Bombay-Jamnagar-Bhuj-Karachi	Daily.
		Jamnagar-Mandvi	3 Weekly (Tue/Thr/Sat).
		Bombay-Keshod-Jamnagar-Bhuj	1 Weekly (Monday).
		Bombay-Keshod-Porbandar-Jamnagar	3 Weekly (Tue/Thr/Sat).
		Jamnagar-Ahmedabad	1 Weekly (Tuesday).
4.	DECCAN AIRWAYS LTD., BEGUMPET	Delhi-Bhopal-Nagpur-Hyderabad-Madras	Daily.
		Hyderabad-Bangalore	Daily.
		Hyderabad-Bombay	Daily.
5.	INDIAN OVERSEAS AIRLINES, BOMBAY	Bombay-Nagpur-Calcutta	Daily.
		Nagpur-Hyderabad-Bangalore-Madras	2 Weekly (Ex. Nag.: Wed/Sun). (Ex. Mad.: Mon/Thu).
		Nagpur-Jubbulpore-Allahabad-Kanpur-Lucknow	2 Weekly (Ex. Nag.: Mon/Fri). (Ex. Luck.: Tue/Sat).
6.	AMBICA AIRLINES, BOMBAY	Bombay-Baroda-Ahmedabad-Deesa-Jodhpur-Bikaner-Amritsar	Daily.
		Bombay-Rajkot-Morvi-Ahmedabad.	Daily.
7.	AIRWAYS (INDIA) LTD., CALCUTTA	Calcutta-Bhubaneswar-Vizagapatam-Madras-Bangalore.	3 Weekly (Ex. Cal: Mon/Fri Sun) (Ex. Bang.: Mon/Tue/Sat).

AIR SERVICES OPERATED BY INDIAN AIR [illegible] COMPANIES.—*Contd.*

	Company.	Route.	Frequency.
8.	BHARAT AIRWAYS LTD., CALCUTTA	Calcutta-Patna-Benares-Lucknow-Delhi.	3 Weekly { (Ex. Cal.: Mon, Wed, Fri). (Ex. Del.: Tue/Thr Sat).
		Calcutta-Gaya-Allahabad-Kanpur-Delhi.	4 Weekly { (Ex. Cal.: Tue, Thr, Sat, Sun). (Ex. Del.: Mon Wed Fri Sun).
		Delhi-Amritsar.	3 Weekly (Tue, Thr, Sat).
9.	DALMIA JAIN AIRWAYS.	Delhi-Amritsar-Srinagar.	Daily.
		Amritsar-Srinagar	Daily.
		Amritsar-Srinagar (Freight only)	3 Weekly (Mon/Wed, Sat).
10.	JUPITER AIRWAYS LTD.	Delhi-Nagpur-Vizagapatam-Madras.	3 Weekly { (Ex. Del.: Wed Fri Sun). (Ex. Mad. :Tue, Thr Sat).

TRAFFIC STATISTICS

Some interesting statistics of the traffic carried by Indian air services, scheduled and non-scheduled, during 1946 and 1947 are given below: —

Particulars	1946.	1947.
(A) SCHEDULED SERVICES		
Miles flown	4,520,046	9,361,673
Number of passengers carried	105,251	260,209
Mail carried in lbs.	1,026,403	1,404,050
Freight carried in lbs.	1,318,153	6,140,172
Capacity Ton-Miles operated	8,536,457	18,596,778
Load Factor	74.8%	79.4%
Regularity (percentage of the number of services operated to number of services scheduled)	96.8%	97.3%
(B) NON-SCHEDULED FLIGHTS		
Miles flown	509,495	3,804,737

NATIONALISATION

A Civil Aviation Conference was held on the 1st February, 1947, under the Chairmanship of the then Hon'ble Minister for Communications Sardar Abdur Rab Nishtar. The object of this conference was to obtain the views of the various parties concerned on the subject of nationalisation of air services: a subject which had previously been debated in the Legislative Assembly. No final decision was, however, made. Again in 1948 this question was referred to the Standing Advisory Committee for Communications by the present Hon'ble Minister for Communications, Mr. Rafi Ahmed Kidwai. The Advisory Committee reported that a beginning should be made by Government undertaking the operation of one route themselves as an experimental measure in order to gain operating experience and obtain further data. A committee was consequently appointed by the Hon'ble Minister for Communications to go into this question and the recommendations of the committee have been made to Government.

Non-Scheduled Air Services—A sudden demand was made upon the operating Companies for providing aircraft for the evacuation of refugees from Western Pakistan to India during the disturbed period following Partition and for the transport of personnel and material to Kashmir to deal with the situation arising from tribal attacks on the State. The operating Companies fully co-operated in providing machines and crews for these operations. The number of persons evacuated by air from Western Pakistan exceeded 50,000. For the purpose of air evacuation, a fleet of 20 aircraft was also specially chartered from B.O.A.C.

EXTERNAL AIR SERVICES

The question of India starting her own external air services to other countries had been occupying the attention of the Government of India ever since the end of the war, but the first concrete step was taken only about the end of 1947, when the Government approved a scheme for the establishment of an Indian air service between India and the United Kingdom. A new company was formed for this purpose under the name of Air-India International Ltd. The Government of India hold 49 per cent. of the share capital with an option to increase this to 51 per cent. at any time. On the Board of Directors of this company, Government have their own nominee as a "Special Director" who has certain over-riding powers. During an initial period of five years any losses incurred by this company will be made good by Government but any payment so made shall have to be repaid out of subsequent profits made by the company. The India-United Kingdom service, equipped with the most modern type of Lockheed Constellation 40-seater aircraft, commenced operation on June 8, 1948 on the route Bombay-Cairo-Geneva-London when the 'Malabar Princess' took off from the Santa Cruz airport with 35 passengers, and 164 bags containing about 1,700 lb. of letter mail.

As a result of bilateral air transport agreements negotiated with various countries, foreign air services passing through India have largely increased in number. At the present time services to and across India are operated by Pan-American Airways, Trans-World Air Lines, British Overseas Airways Corporation, Air-France, K.L.M., Qantas Empire Airways and Indian National Aviation Corporation.

AERODROMES

In 1939 there were only 12 civil aerodromes in India with aerodrome staff and other necessary facilities. During the war, the Defence Department took over the control of all civil aerodromes and the services of all Air Traffic Control Officers were loaned to the Air Forces. The Air Forces continued to exercise control over these aerodromes till 1945 when, due to improvement in the war situation, gradual transfer of the aerodromes to civil aviation commenced. During the war, the development of aerodromes was rapid, with the result that at the end of the war India had several hundreds of aerodromes, many with 2,000 yard paved runways.

Under the post-war plan of the Government of India, framed before the partition, it was proposed to develop 4 International, 10 Major, 12 Intermediate and 57 Minor aerodromes in India. Because of the partition in August 1947, these plans had to be modified and under the revised scheme it was proposed to have 3 International, 7 Major, 13 Intermediate and 22 Minor aerodromes in the Indian Dominion. At present all these aerodromes except 14, mostly Minor, are already staffed and equipped to deal with aircraft operations. Additionally, there are 20 aerodromes in the various Indian States which have acceded to India.

Since partition, Bombay Airport (Santa Cruz) has become the first port of entry from the West for the Indian Dominion and is provided with customs, immigration and health facilities. Extensive development works are in progress at Bombay Airport to cope with the anticipated increase in air traffic. To meet the demands of the increasing International air traffic through the Calcutta (Dum Dum) Airport, India's gateway to the East, considerable expansion of the airport is planned.

Night Lighting Equipment—Twenty-four aerodromes are at present equipped for night-flying operations. The night flying equipment in use at some of the stations at present is of the emergency type consisting of paraffin flares, lanterns and glim lamps. Portable electric flare paths are provided at two stations and it is proposed to acquire more of these sets to be installed at other stations. Schemes are in hand to provide permanent electric runway lighting, taxiway lighting, and approach lighting, etc., at all the Major and International airports.

Operations—At the close of war, the Civil Aviation Department took over by stages operational control of a number of aerodromes including those originally belonging to it before the war. The technique of Air Traffic Control during the war was developed to a very high standard to ensure safety of aircraft operations. Air Traffic Control was brought under three heads namely, Area Control, Approach Control and Airfield or Local Control. Of these, with a view to minimising the staff, Approach and Local Controls have, for the present, been combined together. Area Control Centres have been established at Delhi, Calcutta, Bombay and Madras.

NAVIGATIONAL AIDS

Thirty-seven Aeronautical Communications Stations—25 of which are operated by the Director-General of Civil Aviation and 12 by Airline Operating Companies on an agency basis—have been established by the Government of India.

On an average, there are at present seven Navigational Aids and seven Air-Ground Communication Channels available at the International airports in conformity with the pattern laid down by International Civil Aviation Organisation. Provision has been made, in the future plan, for further augmentation of navigational aids by installation of up-to-date methods of Instrument Landing System, Ground Control Approach System, Air-Ground Control Radar at all International airports. Long-range navigational aids have also been planned for Bombay, Calcutta and Madras to give coverage to an aircraft flying over the sea. At the other airfields, almost all the navigational aids and aircraft communication channels recommended by the International Civil Aviation Organisation have been provided. In addition, facilities exist for point to point communication on both radio telegraphy and telephony between the adjacent airfields and also between the International airfields. These point to point links will be further expanded to improve communication between the stations in India as well as between the International airports in India with those in the adjacent countries. It has

been planned to provide aerodrome service in the nature of Inter-communicating Tele-Talk System. Public Address System and Speech Recording Apparatus at Control Towers for recording the telephonic communication with aircraft.

There are three important ancillary units within the Communication organisation of the Civil Aviation Department. These Units are known as Radio Construction Unit, Radio Stores Depot, and Radio Development Unit. The new installations and major repairs are carried out by the Construction Unit. Radio Stores Depot is the central stores responsible for distribution of all equipment to the stations. Radio Development Unit, which came into existence in January, 1948, is engaged in carrying out research and development work on problems pertaining to the Aeronautical Communication Service.

AIR TRAINING

Facilities exist in the aeronautical communication service for the training of operating and technical personnel at the Civil Aviation Training Centre at Saharanpur. During the year 1947, this Centre had trained nearly 350 trainees. This Training Centre is probably the best-equipped establishment of its kind in South-East Asia. Various instructional courses are provided at this Centre for personnel ranging from the new recruits to those with limited previous experience.

It is also proposed to start Flying and Air Traffic Controllers Schools at Allahabad and an Engineering School at Barrackpore for the training of Commercial Pilots, Aerodrome Officers, Control Operators and Ground Engineers, in the near future. The output in the first three years of operation of these schools is estimated to be 280 Commercial Pilots, 300 Aerodrome Officers, 300 Control Operators and 300 Ground Engineers.

During the year 1947, a handbook entitled 'AERADIO giving details of radio facilities and many other useful information was compiled. The first edition of this handbook was published in July, 1947.

In order to facilitate exchange of ideas and co-ordinate the requirements of Airline Operating Companies with regard to Navigational Aids and Communication facilities in Civil Aviation, a body known as Communication Consultative Committee was formed at the end of 1946. The Civil Aviation Department and Airline Operating Companies are represented in this Committee. The meetings of this Committee are held every year and have already proved its usefulness in co-ordinating the requirements of Navigational Aids and Communication facilities in the country.

Details are also being finalised for the establishment of an Indian Aeronautical Society for the advancement of Aeronautical Science and Engineering. It is hoped that this Society will be formed by the end of this year.

Flying Clubs—Flying Clubs provide facilities for ordinary citizens to learn to fly at concessional rates. To a limited extent they also give flying training for commercial aviation. There are, at present, 7 subsidized Flying Clubs in India with Headquarters at Delhi, Bombay, Madras, Barrackpore, Patna, Bhubaneshwar and Lucknow, and three non-subsidized Flying Clubs, *viz.*—the State-assisted Flying Clubs at Jodhpur, Trivandrum and Hyderabad. It is proposed to open and subsidize three more Flying Clubs, namely the Northern India Flying Club at Jullundur, the C.P. and Berar Flying Club at Nagpur and a Club at Gauhati in Assam during 1948-49. During 1947-48, the Clubs carried out 18,112 hours flying. During 1948-49, it is proposed to revise Gliding activities by subsidizing the Indian Gliding Association Ltd., Poona.

Aeronautical Maps—The preparations of a series of aeronautical maps on the scale of 1/1,000,000 has been undertaken by the Survey of India. Hitherto, there have been two series of general maps in this scale, namely the "Carte Internationale" Series and the "India and Adjacent Countries" Series. In order to facilitate the work of keeping the maps up-to-date, it was decided to concentrate on "Carte Internationale" Series only. The Government have also undertaken to print aeronautical maps covering Indian territory conforming to the I.C.A.O. recommendations. The 4th Session of Map Division Meeting of I.C.A.O. was held at Brussels in March 1948 in which India participated. The recommendations made therein are awaiting approval of the I.C.A.O. Council.

India is a member of the International Civil Aviation Organisation and has been elected to its Council. Mr. K. M. Raha was the first Representative of India on the Council of I.C.A.O. followed by Mr. B. M. Gupta and Mr. D. Chakravarti. India took part in all the Assembly meetings and was represented in important Committee and Division meetings. India has invited the Organisation to hold the I.C.A.O. South-East Asia Regional Air Navigation Meeting in New Delhi during November/December 1948.

India has also entered into bilateral air transport agreements with U.S.A., Netherlands, France and Sweden. Agreements with Pakistan and Switzerland have been finalised and await signature by the respective Governments. Negotiations are in progress for the conclusion of a bilateral air transport agreement with U.K.

MANUFACTURE

There were no aircraft manufacturing activities in India before the last World War and engineering activities were limited to the overhaul and repair of aircraft and engines by various Companies such as Tata Airlines, Bombay, now Air-India Limited, Indian National Airways Ltd., Delhi, Air Services of India Ltd., Bombay, Indian Air Survey and Transport Co. Ltd., Calcutta and De Havilland Aircraft Company, Karachi.

An Aircraft Factory for the manufacture of aircraft was a strategic necessity after the outbreak of War. The Hindustan Aircraft Company was started in the Year 1940 as a commercial venture, by Mr. Walchand Hirachand in association with the Government of Mysore initially for the assembly and ultimately for the manufacture of aircraft. In the year 1941 the Government of India decided that they should

themselves take a more active part in the Company's affairs and equal shares were held by the Government of India and Government of Mysore and Messrs. Walchand Hirachand. The scheduled manufacturing programme could not progress very much, as the material was not reaching the factory due to shipping difficulties. A limited number of aircraft were constructed from the material and components imported between the period 1940-43, and the Director General of Civil Aviation was responsible for the inspection of this project on behalf of the Government of India.

With the Allied Air Forces in India making increasing demand for service and overhaul work, it became necessary for the Government of India to secure the control of the Aircraft Factory. Subsequently the Government of India bought over Walchand's interest. Later on the Factory was handed over to the U.S.A.A.F. under a managing agent's agreement for the duration of the War. At the end of 1943 the management reverted to the Government of India and Mysore State. During the War this Factory carried out repair, overhaul, maintenance and servicing of American Air Force aircraft and engines. At one time it employed about 13,000 people. On the conclusion of the war with Japan in 1945, the Factory was reorganised by the Government of India under the Department of Industries and Supply for the conversion and overhaul of Army Dakotas for the use of Civil Airlines. It is now engaged on the conversion and overhaul work both for Civil Aviation and the Air Forces. It has also a programme of assembling and manufacturing of Trainer aircraft for the Air Forces. It is the policy of the Government of India to develop this Factory into a manufacturing concern.

A Limited liability Company called Portsmouth Aviation Company, Nawanagar is in the course of being established at Sika in Nawanagar State. It is a sister Company of Portsmouth Aviation Limited, England. The principal product of the Company will be the assembly and manufacture of an all-metal twin-engined 5 Seater aircraft called the "Aero-Car", which will be suitable for feeder line communication, executive travel or air-ambulance work. The Aero-Car aeroplane will be first assembled in India from parts fabricated in U.K. and later on manufactured in India in stages. The Company is going to set-up an Aero-Engine overhaul Shop backed up by a Machine Shop. To begin with the key technical personnel will be obtained from U.K. It is expected that the Company will be completely Indianised in a few years.

The following other Aero-material and parts are now being manufactured by the undermentioned Companies in India. They are approved for this purpose by the Director General of Civil Aviation in India. The inspection of the manufacture is carried out in accordance with standard aeronautical practice in U.K. and U.S.A.

Aero-Aluminium Sheets—The Aluminium Production Company of India Ltd., P. B. 361, 5 Council House Street, Calcutta is approved for the manufacturing, storing and distribution of Aircraft Aluminium Sheets to British Standard Specifications 2L4, 2L16, and 2L17.

Aero-Tyres and Tubes—The Dunlop Rubber Company (Ltd.), Sahagunj, Hoogly District, is approved for the manufacture, repairing and remoulding of aircraft tyres and tubes.

The Firestone Tyre and Rubber Company of India Ltd., Hay-Bunder Road, Sewree, P.O. Box No. 197, Bombay, is approved for the manufacture of Aircraft Tyres and Tubes.

Aircraft Solders—The Eyre-Smelting Co., Ltd., Hide Road, Kidderpore, P.O. Box No. 10602, Calcutta, is approved for the manufacture, storing and distribution of Aircraft Solders.

Wooden Airscrews—The Forest Research Institute, Dehra Dun, is approved for the manufacture and repair of Wooden Airscrews.

Aircraft Gaskets—Messrs. Hardcastle, Waud & Co., Ltd., Alice Buildings, Hornby Road, Bombay, is approved for the manufacturing of Gaskets.

Plywood—Plywood-Products, Sitapore, is approved for the manufacture of aircraft Plywood to Aeronautical Specification D.T.D. 427.

Aeroplane Cotton Fabric—To specification D.T.D. 407 will be undertaken by Messrs. Buckingham & Carnatic Co., Ltd., and Binny & Co., Madras Ltd. as soon as the new machinery which has been received by them has been installed.

RESEARCH

Research and development work in Aeronautics is still in its infancy in India. The pressing need for it has not been felt so far since aircraft operations in this country in the past have been of limited scope and the aircraft industry remained in an undeveloped state. The position has changed today and aircraft design and manufacturing activities have been started in Hindustan Aircraft Limited and elsewhere; and as a consequence the necessity has arisen for initiating research on advanced problems of aircraft design, for developing materials of indigenous origin and for the introduction of advanced aeronautical engineering training in Universities and technical institutions. Recent advances in civil air transport design and practice have also brought in their wake complicated problems relating to air-worthiness and safety in operations. In view of these developments, the necessity for a separate research and development branch in the Civil Aviation Department was anticipated even during the war. A small Research and Development Organisation was created in April, 1946. The work of this organisation so far has been mainly concerned with engineering problems relating to modification and repair of aircraft, operational problems concerning aircraft performance at various aerodromes, development and use of Indian materials for aircraft construction, advice on advanced aeronautical education and training, the encouragement of fundamental research in aeronautics and the formation of an aeronautical society for the advancement and diffusion of knowledge of aeronautical science.

A post-graduate course in aeronautical engineering was introduced in the Indian Institute of Science, Bangalore, in December, 1942 and since then the Institute has been the only

advanced training centre for aeronautical engineers in India. The Department of Aeronautics of the Institute is equipped with a wind tunnel and apparatus for structural research. The Institute will be the centre of fundamental aeronautical research in this country. Wind tunnel research at the Institute is being supported by an annual grant from the Department of Civil Aviation.

It is proposed to establish a research laboratory under the aegis of the Civil Aviation Department where practical problems of particular interest to Civil Aviation will be investigated. One such experimental problem is the collection of data on flight loads by means of V.G. Recorders installed in transport aircraft. There are many other problems of tropical operations such as temperature accountability in aircraft performance, power plant protection, development of special safety devices, the evaluation of the effects of turbulence, etc., which could advantageously be investigated in the research laboratory with a view to ensuring greater safety in operations. The research laboratory will also be engaged in certain aspects of civil aircraft design development work and will eventually have to undertake the examination of 'prototype" aircraft for purposes of type certification.

Considerable progress in original aircraft design work is being made at Hindustan Aircraft Limited, Bangalore and advances in this field will require the services of a research and development establishment organised on the lines of the Royal Aircraft Establishment in England and the N.A.C.A. Laboratories in America. The proposed research laboratory of the Civil Aviation Department is intended to serve as the nucleus around which future aeronautical research and development activities may grow in such manner as to be of maximum benefit to the aircraft industry for evolving original aircraft designs and for developing and perfecting the methods of fabrication.

Railways

IT was only after the railways had proved to be a definite asset to the nation in England that their construction in the sub-continent was contemplated. And then to test their applicability to Eastern conditions three experimental lines were sanctioned in 1845. These were from Calcutta to Raniganj (120 miles), the East Indian Railway; Bombay to Kalyan (32 miles), Great Indian Peninsula Railway; and Madras to Arkonam (39 miles), Madras Railway.

Indian Railway building on a serious scale dates from Lord Dalhousie's great minute of 1853; wherein, after dwelling upon the great social, political and commercial advantages of connecting the chief cities by rail, he suggested a great scheme of trunk lines linking the Presidencies with each other and the inland regions with the principal ports. This reasoning commended itself to the Directors of the East India Company, and it was powerfully reinforced when, during the 1857 flare-up the barriers imposed on free communication were severely felt by the authorities as there was no private capital in the sub-continent readily available for railway contruction. English Companies, the interest on whose capital was guaranteed by the State, were formed for the purpose.

By the end of 1859 contracts had been entered into with eight companies for the construction of 5,000 miles of line, involving a guaranteed capital of £52 millions. These companies were (1) the East Indian; (2) the Great Indian Peninsula; (3) the Madras; (4) the Bombay, Baroda and Central India; (5) the Eastern Bengal; (6) the Indian Branch, later the Oudh and Rohilkund State Railway and now part of the East Indian Railway; (7) the Sind, Punjab and Delhi, now merged in the North-Western Railway; and (8) the Great Southern of India, now the South Indian Railway. The scheme laid the foundations of the whole railway system of the sub-continent as it exists today.

EARLY DISAPPOINTMENTS

The main principle in the formation of these companies was a Government guarantee on their capital, for this was the only condition on which investors would come forward. This guarantee was a five per cent. return coupled with the free grant of all the land required; in return the companies were required to share the surplus profits with the Government, after the guaranteed interest had been met; the interest charges were calculated at 22*d*. to the rupee; the Railways were to be sold to Government on fixed terms at the close of twenty-five years and the Government were to exercise close control over expenditure and working.

The early results were disappointing. Whilst the Railways greatly increased the efficiency of the civil administration, the mobility of the troops, the trade of the country, and the movement of the population, they failed to make profits sufficient to meet the guaranteed interest. Some critics attribute this to the unnecessarily high standard of construction adopted, and to the engineers' ignorance of local conditions, the result was that by 1869 the deficit on the Railway budget was Rs. 16½ lakhs. Seeking for some more economical method of construction, the Government secured sanction to the building of lines by direct State Agency, and funds were allotted for the purpose, the metre-gauge being adopted for cheapness.

Funds soon lapsed and the money available had to be diverted to converting the Sind and Punjab lines from metre to broad-gauge for strategic reasons. Government had therefore again to resort to the system of guarantee, and the Indian Midland (1882-85), since absorbed by the Great Indian Peninsula; the Bengal-Nagpur (1883-87); the Southern Maharatta (1882); and the Assam-Bengal (1891) were constructed under guarantees, but on easier terms than the first companies. Their total length was over 4,000 miles.

FAMINE AND FRONTIERS

In 1879, embarrassed by famine and by the fall of the exchange value of the rupee, Government again endeavoured to enlist unaided private enterprise. Four companies were promoted:—the Nilgiri, the Delhi-Umballa-Kalka, the Bengal Central, and the Bengal and North-Western. The first became bankrupt, the second and third received guarantees, and the Tirhut Railway had to be leased to the fourth.

A step of even greater importance was taken when the States were invited to undertake construction in their own territories, and the Nizam's Government guaranteed the interest on 330 miles of line in the State of Hyderabad. This was the first of the large system of Indian State Railways. In the first period up to 1870, 4,255 miles were opened, of which all save 45 were on the broad-gauge; during the next ten years there were opened 4,239, making the total 8,494 (on the broad-gauge 6,562, the metre 1,865, and narrow 67).

Then ensued a period of financial ease. It was broken by the fall in exchange and the costly lines built on the frontier. The Penjdeh incident, which brought Great Britain and Russia to the verge of war, necessitated the connection of our outposts at Quetta and Chaman with the main trunk lines. The sections through the desolate Harnai and Bolan Passes were enormously costly: it is said that they might have been ballasted with rupees; the long tunnel under the Khojak Pass added largely to this necessary, but unprofitable, outlay.

REBATE TERMS ESTABLISHED

This induced the fourth period—the system of rebates. Instead of a gold subsidy, companies were offered a rebate on the gross earnings of the traffic interchanged with the main line, so that the dividend might rise to four per cent. but the rebate was limited to 20 per cent. of the gross earnings. Under these conditions, there were promoted the Ahmedabad-Prantej, the South Behar, and the Southern Punjab, although only in the case of the first were the terms strictly adhered to.

The Barsi Light Railway, on the two feet six inches gauge, entered the field without any guarantee, and with rolling stock designed to illustrate the carrying power of this gauge. The rebate terms being found unattractive in view of the competition

of 4 per cent. trustee stocks they were revised in 1896 to provide for an absolute guarantee of 3 per cent. with a share of surplus profits; or rebate up to the full extent of the main line's net earnings in supplement of their own net earnings, the total being limited to 3½ per cent. on the capital outlay. Under these terms, a considerable number of feeder line companies was promoted, though in none were the conditions arbitrarily exacted. As these terms did not at first attain their purpose, they were further revised, and in lieu was substituted an increase in the rate of guarantee from 3 to 3½ per cent. and of rebate from 3½ to 5 per cent. with equal division of surplus profits over 5 per cent. in both cases. At last, the requirements of the market were met, and there was for a time a mild boom in feeder railway construction and the stock of all the sound companies promoted stood at a substantial premium.

Conditions changed after the war and the Acworth Committee so far from approving of this system, considered that the aim of the Government should be to reduce by amalgamation the number of existing companies and that it should only be in cases where the State cannot or will not provide adequate funds that private enterprise in this direction should be encouraged.

The existing Branch Line Companies have ceased for some time to raise additional capital for capital requirements. They have either obtained overdrafts from various Banks for this purpose at heavy rates of interest or issued debentures at special rates of interest (usually about 7 per cent.) or in several cases asked for money to be advanced to them by the Railway Board. So far, therefore, from reducing the amount that the Government of India have to raise in the open market, they were increasing the amount. For the above reasons, the Government of India have abolished this system and are now prepared themselves to find the capital required for the construction of extensions or branches to existing main line systems. They have also announced their readiness to consider the question of constructing branch or feeder lines which were not expected to be remunerative from the point of view of railway earnings upon a guarantee against loss from a Local Government or local authority which might desire to have such lines constructed for purely local reasons or on account of administrative advantages likely to accrue in particular areas.

This proposal was put forward as affording a suitable method of reconciling the interests of the Central and the Local Governments and of providing for local bodies and for Local Governments a method of securing the construction of railways which may be required for purely local reasons and which, while not likely to prove remunerative on purely railway earnings, are likely to give such benefits to Local Governments and local bodies as will more than repay the amounts paid under the guarantee. Some such arrangements have already been made with Local Governments in Madras, the Punjab area, Assam and Bombay.

RAILWAYS BEGIN TO PAY

Meantime a much more important change was in progress. The gradual economic development of the sub-continent vastly increased the traffic, both passenger and goods. The development of irrigation in the Punjab area and Sind transformed the North-Western Railway. Owing to the burden of maintaining the unprofitable Frontier lines this was the Cinderella of the Railways in the sub-continent—it had become the chief target of the critics who protested against the unwisdom of constructing railways from borrowed capital. But with the completion of the Chenab and Jhelum Canals, the North-Western became one of the great grain lines of the world, choked with traffic at certain seasons of the year and making a large profit for the State. In 1900 the railways for the first time showed a small gain to the State. In succeeding years the net receipts grew rapidly. In the four years ended 1907-08 they averaged close upon £ 2 millions a year.

In the following year there was a relapse. Bad harvests in India, accompanied by the monetary panic caused by the American financial crisis, led to a great falling off in receipts just when working expenses were rising, owing to the general increase in prices. Instead of a profit, there was a deficit of £1,240,000 in the railway accounts for 1908-09. But in the following year again there was a reversion to a profit, and the net railway earnings continued to increase steadily till they reached a figure of over £10 millions in 1918-19. This era of profits ended with the close of the year 1920-21 and in 1921-22 there was a loss of over £6 millions.

These changes in the fortunes of the railways affected the Budget of the Central Government rather seriously and in 1924-25 the Railway finances were separated from the General Budget. The terms of the separation are referred to in a later paragraph while the profits of the railway in the years from 1924-25 onwards are given below:

Year.	Contribution to General Revenues.	Transferred to Railway Reserve Fund.†	Total Gain or Loss.*
	Rs.	Rs.	Rs.
1925–26	5,49,00,000	3,79,00,000	9,28,00,000
1926–27	6,01,00,000	1,49,00,000	7,50,00,000
1927–28	6,28,00,000	4,57,00,000	10,85,00,000
1928–29	5,23,00,000	2,58,00,000	7,81,00,000
1929–30	6,12,00,000	—2,08,00,000	4,04,00,000
1930–31	5,74,00,000	—10,93,00,000	—5,19,00,000
1931–32	—	—4,95,00,000	—9,20,00,000
1932–33	—	—	—10,23,00,000
1933–34	—	—	—7,96,00,000
1934–35	—	—	—5,06,00,000
1935–36	—	—	—4,00,00,000
1936–37	—	—	1,21,00,000
1937–38	2,76,00,000	—	2,76,00,000
1938–39	1,37,00,000	—	1,37,00,000
1939–40	4,33,00,000	—	4,33,00,000
1940–41	12,16,00,000	6,30,00,000	18,46,00,000
1941–42	20,17,00,000	—	28,08,00,000
1942–43	20,13,00,000	8,86,00,000	45,07,00,000
1943–44	37,64,00,000	13 20,00,000	50.84,00,000
1944–45	32,00,00,000	17,88,47,209	49,88,47,209
1945–46	32,00,00,000	6,20,03,676	38,20,03,676

† Figures preceded by a — indicate a withdrawal from the Railway Reserve Fund.

*Figures preceded by a — indicate a loss.

1933–34 is the first year to show some signs of recovery since the depression. The earnings of the State-owned lines increased from Rs. 84 crores in 1932-33 to Rs. 86 crores in 1933-34 and to Rs. 95·48 crores in 1936-37; but the net result of the year's working showed a gain of Rs.121 lakhs.

CONTRACTS REVISED

One factor which helped to improve the financial position was the revision of the original contracts under which the guaranteed lines were constructed. The five per cent. dividend guaranteed at 22*d.* per rupee, and the half-yearly settlements made these companies a drain on the State at a time when their stock was at a high premium. The first contract to fall in was the East Indian, the great line connecting Calcutta with Delhi and U.P. and Bihar. When the contract lapsed, the Government exercised their right of purchasing the line, paying the purchase-money in the form of terminable annuities, derived from revenue, carrying with them a sinking fund for the redemption of capital. The railway thus became a State line; but it was released to the Company which actually worked it.

Under these new conditions the East Indian Railway Company brought to the State in the ten years ended 1909 after meeting all charges, including the payments on account of the terminable annuity by means of which the purchase of the line was made, and interest of all capital outlay subsequent to the date on purchase, a clear profit of nearly ten millions. No other railway shows results quite equal to the East Indian, because, in addition to serving a rich country by an easy line, it possesses its own collieries and enjoys cheapcoal.

But with allowance for these factors, all the other guaranteed companies which have been acquired under similar conditions as their contracts expired, have proportionately swelled the revenue and assets of the State. It is difficult to estimate the amount which must be added to the capital debt of the sub-continent's railways in order to counter-balance the loss during the period when the revenue did not meet the interest charges. According to one estimate it should be £50 millions. But even if that figure be taken, Government have a magnificent asset in their railway property.

IMPROVING OPEN LINES

These changes induced a corresponding change in railway policy. Up to 1900 the great work had been the provision of trunk lines. But with the completion of the Nagda-Muttra line, providing an alternative broad-gauge route from Bombay to Delhi through Eastern Rajputana, the trunk system was virtually complete.

There does not exist any through rail connection between India and Burma, although several routes have been surveyed: the mountainous character of the region to be traversed, and the easy means of communication with Burma by sea, rob this scheme of any living importance. Further survey work was undertaken between 1914 and 1920, the three routes which were surveyed being the coast route, the Manipur route, and the Hukong valley route.

These works are, however, subordinate to the necessity for bringing the open lines up to their traffic requirements and providing them with feeders. The sudden increase in the trade of the sub-continent found the main lines totally unprepared. Costly works were necessary to double lines, improve the equipment, provide new and better yards and terminal facilities and to increase the rolling stock. Consequently the demands on the open lines altogether overshadowed the provision of new lines. Even then the railway budget was found totally inadequate for the purpose, and a small Committee sat in London, under the Chairmanship of Lord Inchcape, to consider ways and means. This Committee found that the amount which could be remuneratively spent on railway construction was limited only by the capacity of the money market. They fixed the annual allotment at £12,000,000 a year. Even this reduced sum could not always be provided.

GOVERNMENT CONTROL

As the original contracts carried a definite Government guarantee of interest, it was necessary for Government to exercise strong supervision and control over the expenditure during construction, and over management and expenditure after the lines were open for traffic. For these purposes a staff of Consulting Engineers was formed and a whole system of checks and counter-checks established, leading up to the Railway Branch of the Public Works Department of the Government of India. As traffic developed, the Railways outgrew this dry nursing, and when the original contracts expired, and the interests of Government and the Companies synchronised, it became not only vexatious but unnecessary.

Accordingly in 1901-02 Thomas Robertson was deputed by the Secretary of State to examine the whole question of the organization and working of the Indian Railways, and he recommended that the existing system should be replaced by a Railway Board, consisting of a Chairman and two members with a Secretary. The Board was formally constituted in March 1905. The Board was made subordinate to the Government of India in which it was represented by the Department of Commerce and Industry. It prepared the railway programme of expenditure and considered the greater questions of policy and economy affecting all the lines. Its administrative duties included the construction of new lines by State Agency, the carrying out of new works on open lines, the improvement of railway management with regard both to economy and public convenience, the arrangements for through traffic, the settlement of disputes between lines, the control and

promotion of the staff on State lines, and the general supervision over the working and expenditure of the Company's lines.

Certain minor changes have taken place from time to time since the constitution of the Railway Board. In 1908, to meet the complaint that the Board was subjected to excessive control by the Department of Commerce and Industry, the powers of the Chairman were increased and he was given the status of a Secretary to Government with the right of independent access to the Viceroy; he usually sat in the Imperial Legislative Council as the representative of the Railway interest. In 1912 in consequence of complaints of the excessive interference of the Board with the Companies, an informal mission was undertaken by Lord Inchcape to reconcile differences. Various changes were introduced during the years 1912-1920 such as the modification of the rule that the President and members of the Railway Board should all be men of large experience in the working of railways due to the importance of financial and commercial considerations in connection with the control of railway policy. This decision was, however, revised in 1920 and an additional oppointment of Financial Adviser to the Railway Board created instead. The question of the most suitable organization was further fully examined by the Acworth Committee in 1921 and a revised organization which is described later was introduced on 1st April 1924.

Some Difficulties.—Some of the difficulties involved in the constitution of a controlling authority for the railways may be realized from a study of the "Notes on the Relation of the Government to Railways in India" which was being printed as appendix 'B' to Volume I of the Annual Report by the Railway Board on Indian Railways upto the Report for the year 1938-39. These notes bring out the great diversity of conditions prevailing which involve the Railway Department in the exercise of the functions of—

(*a*) the directly controlling authority of the State-worked systems aggregating 21,356 miles on the 31st March 1943,

(*b*) the representative of the predominant owning partner in systems aggregating 19,169 miles,

(*c*) the guarantor of many of the smaller companies and

(*d*) the statutory authority over all railways in the Dominion.

Moreover in all questions relating to railways or extra municipal tramways in which Provincial Governments are concerned, the Railway Department is called upon to watch the interests of the Central Government and is frequently asked to advise the Local Governments.

Its duties do not end there. The future development of railways depends largely on the Government of India and the Railway Department is therefore called upon to plan out schemes of development, to investigate and survey new lines and to arrange for financing their construction.

The evolution of a satisfactory authority for the administration of these varied functions has proved extremely difficult and the question was one of those referred to the Railway Committee (1920-21) presided over by Sir William Acworth who recommended the early appointment of a Chief Commissioner of Railways whose first duty should be to prepare a definite scheme for the reorganization of the Railway Department and Mr. C. D. M. Hindley, formerly Agent of the East Indian Railway and Chairman of the Calcutta Port Trust, was appointed Chief Commissioner on November 1st, 1922.

THE RAILWAY BOARD

The principal constitutional change involved in this appointment is that the Chief Commissioner who takes the place of the President of the Railway Board is solely responsible—under the Government of India—for arriving at decisions on technical matters and for advising the Government of India on matters of railway policy and is not, as was the President, subject to be out-voted and overruled by his colleagues on the Board. The detailed reorganization of the Railway Board in accordance with the Chief Commissioner's proposals required careful consideration but one of the most important of his recommendations namely the appointment of a Financial Commissioner was considered of particular urgency and the Secretary of State's sanction was therefore obtained to the appointment with effect from 1st April 1923.

The Railway Board as then reconstituted consisted of the Chief Commissioner, the Financial Commissioner and two members. The proposal of the Acworth Committee that the Indian Railways should be sub-divided into 3 territorial divisions with a Commissioner in charge of each was not accepted and the work of the Members of the Board was divided on the basis of subjects.

The reorganization carried out in 1924 had for one of its principal objects the relief to the Chief Commissioner and the Members from all but important work so as to enable them to devote their attention to larger questions of railway policy and to enable them to keep in touch with Local Governments, railway administrations and public bodies by touring to a greater extent than they had been able to do in the past.

This object was effected by the following new posts which in some cases supplemented the existing ones and in other cases replaced them. Directors of Civil Engineering, Mechanical Engineering, Traffic, Establishment and Finance and 11 Deputy Directors and 2 Assistant Directors are working under them.

SUBSIDIARY BODIES

The necessity of some central organisation to co-ordinate the publicity carried out on railways and to undertake work on the many forms of railway publicity which can be best organised by one central body led to the inauguration of the Central Publicity Bureau under a Chief Publicity Officer in 1927. The Bureau was a great success and the organisation was made permanent from January 1st, 1929.

In the slump of the 4th decade of the present century however, it was found difficult to maintain this. Moreover when the war of 1939 came on, it had its own effects. The Central Publicity Bureau was ultimately shifted to Calcutta on 1st July, 1940, and amalgamated with the Publicity Offices of the East Indian and Eastern Bengal now the B. & A. Railways.

The growing importance of Labour questions necessitated the organisation of a new branch in the Railway Board's office and to the appointment in 1929 of a third member whose main duties are connected with the satisfactory solution of labour problems and the improvements of the conditions of service of the staff generally and of the lower paid employees in particular.

During the depression which began with the thirties it was decided to hold in abeyance many superior posts including those of Member Traffic; Member, Engineering; Director, Civil Engineering and Director, Mechanical Engineering. Some of these posts have since been revived and on the recommendations of the Indian Railway Enquiry Committee—presided over by Sir Ralph Wedgewood—the Central Accounts organisation of railways was taken over by the Railway Board. The present superior staff in the railway Board, therefore, consists of the Chief Commissioner, the Financial Commissioner, 3 Members, 10 Directors, a Secretary and 33 deputies and assistants.

Under the Railway Board's policy of progressive standardisation, a Central Standardisation Office was established in 1930 under a Chief Controller of Standardisation to provide the means whereby such standardisation would be progressively effected in accordance with changing conditions and as the result of practical experience. The technical Officer under the Railway Board was transferred to this office as a Deputy Controller. This office was made permanent in 1935.

ACCOUNTS

The question of transferring the supervision of railway accounts of State Railways from the Finance Department to the Railway Board was under consideration for some time and in accordance with a resolution adopted, by the Legislative Assembly in September 1925, a start was made with the transfer of the supervision of railway accounts on the East Indian Railway. At the same time a separate Audit Staff was appointed reporting directly to the Auditor-General. As it was found that the separation of Audit from Accounts led to greater efficiency, a similar organisation was introduced on other State-managed railways during 1929. The supervision of Accounts Officers was placed under a Controller of Railway Accounts reporting to the Financial Commissioner of Railways and that of Audit Officers under a Director of Railway Audit reporting to the Auditor-General. These two duties were previously combined under the Accountant-General, Railways, reporting to the Auditor-General. The Chief Accounts Officers on railways are now under the General Managers and the Controller of Railway Accounts has been made a Director under the Railway Board.

There are two important systems of administration organisation on the Railways—the Divisional system and the Departmental system. In the divisional system the railway is divided into divisions, each under a Divisional Superintendent, who in turn has officers of all departments like Civil Engineering, Transportation, Commercial, Accounts, Stores, the running and operation portion of Mechanical Engineering and on some railways even the Medical, working under him in his division. In the departmental system the railway is divided into smaller portions called districts by each department (and districts of the various departments need not be co-terminus) and each of these districts is under a District Officer reporting direct to the head of his department in the Headquarters Office.

Railway Conference.—A Clearing Accounts Office, with a Statutory Audit Office attached thereto, was opened in December 1926 to take over work relating to the check and apportionment of traffic interchanged between State-managed Railways. The work of the different railways was gradually transferred to this office, the North Western Railway being taken over first on the 1st January 1927, the East Indian Railway following on the 1st April, the Eastern Bengal Railway on the 1st January 1928, and the Great Indian Peninsula and B. B. & C. I. Railways later.

During 1927-28 demonstrations explaining the Clearing Accounts Office procedure were given to the representatives of the Press as well as to the representatives of the various railways who visited the office to study the new procedure.

In order to facilitate the adjustment of domestic questions, the Railway Conference was instituted in 1876. This Conference was consolidated into a permanent body in 1903 under the title of the Indian Railway Conference Association. It is under the direct control of the railways. It elects a President from amongst the members, and has done much useful work.

THE GAUGES

The standard gauge is five feet six inches. When construction was started the broad-gauge school was strong, and it was thought advisable to have a broad-gauge in order to resist the influence of cyclones. But in 1870, when the State system was adopted it was decided to find a more economical gauge, for the open lines had cost £17,000 a mile. After much deliberation, the metre-gauge of 3 feet 3⅜ inches was adopted, because at that time the idea of adopting the metric system for India was in the air. The original intention was to make the metre-gauge lines provisional; they were to be converted into broad-gauge as soon as the traffic justified it; consequently they were built very light. But the traffic expanded with surprising rapidity, and it was

found cheaper to improve the carrying power of the metre-gauge lines than to convert them to the broad-gauge. So, except in the Indus Valley, where the strategic situation demanded an unbroken gauge, the metre-gauge lines were improved and they became a permanent feature in the railway system.

Now there is a great metre-gauge system north of the Ganges connecting Assam with the Rajputana lines and Kathiawar and another system in Southern India serving large tracts of the Bombay and Madras Presidencies and the States of Hyderabad, Mysore and Travancore. These two systems are not yet connected, but the necessary link from Khandwa by way of the Nizam's Hyderabad-Godaveri railway, cannot be long delayed.

Certain feeder and hill railways have been constructed on the 2'-6" and 2'-0" gauges and since the opening of the Barsi Light Railway which showed the possible capacity of the 2'-6" gauge, there has been a tendency to construct feeder lines on this rather than on the metre-gauge.

RAILWAY MANAGEMENT

The relative advantages and disadvantages of State and Company management of the railways owned by Government which comprise the great bulk of the railway mileage in the subcontinent have been the subject of discussion in official circles and the public press for many years. Here the question is complicated by the fact that the more important companies have not in recent years been the owners of the railways which they manage and the headquarters of their Boards are in London.

The subject was one, perhaps the most important, of the terms of reference of the Acworth Railway Committee. That Committee was unfortunately, unable to make a unanimous recommendation on this point, their members being equally divided in favour of State management and Company management. They were, however, unanimous in recommending that the present system of management by Boards of Directors in London should not be extended beyond the terms of the existing contracts and this recommendation has met with general public acceptance. During the year 1922-23, the question was again referred to certain Local Governments and public bodies and opinions collected and discussed.

The subject has also been discussed on many occasions in the Central Legislature. The old undivided Government of India, however, followed a uniform policy of increasing the scope of direct State-management. The East Indian Railway was taken over for State-management on 1st January, 1925, and from then on the policy continued, the latest additions to State-management being the Bengal and North Western and Rohilkund and Kumaon Railway which were taken over on the 1st January 1943. From the same date the two were amalgamated and the combined system named as the Oudh and Tirhut Railway.

At the end of 1929-30 the Nizam's Guaranteed State Railways system which was the property of the Company, was acquired and its management taken over by His Exalted Highness the Nizam's Government and is now known as His Exalted Highness the Nizam's State Railway.

SEPARATE FINANCES

The question of the separation of the railway from the general finances was under consideration for some time and as a result of the recommendations of the Acworth Committee in 1921, the question was further examined by the Railway Finance Committee and the Legislative Assembly but it was decided to postpone a definite decision for the present.

The question was examined afresh in connection with the recommendation of the Retrenchment Committee in 1923, that the railways should be so worked as to yield an average return of at least 5½ per cent on the capital at charge and it was decided that a suitable time had arrived when this separation could be carried out. A resolution was accordingly introduced in the Assembly on the 3rd March 1924, recommending to the Governor-General in Council:—that in order to relieve the general budget from the violent fluctuations caused by the incorporation therein of the railway estimates and to enable the railway to carry out a continuous railway policy based on the necessity of making a definite return over a period of years to the State on the Capital expended on railways:—

(1) The railway finances shall be separated from the general finances of the country and the general revenues shall receive a definite annual contribution from railways which shall be the first charge on railway earnings.

(2) The contribution shall be a sum equal to five-sixths of 1 per cent. on the capital at charge of the railways (excluding capital contributed by Companies and Indian States and Capital expenditure on strategic Railways) at the end of the penultimate financial year *plus* one-fifth of any surplus profits remaining after payment of this fixed return, subject to the condition that if any year railway revenues are insufficient to provide the percentage of five-sixths of 1 per cent. on the capital at charges surplus profits in the next or subsequent years, will not be deemed to have accrued for purposes of division until such deficiency has been made good. From the contribution so fixed will be deducted the loss in working, and the interest on capital expenditure on strategic lines.

Reserves.—(3) Any surplus profits that exist after payment of these charges shall be available for the Railway administration to be utilised in—

(a) forming reserves for,

(i) equalising dividends, that is to say, of securing the payment of the percentage contribution to the general revenues in lean years,

(ii) depreciation,

(iii) writing down and writing off capital,

(b) the improvement of services rendered to the public,

(c) the reduction of rates.

(4) The railway administration shall be entitled, subject to such conditions as may be described by the Government of India, to borrow temporarily from capital or from the reserves for the purpose of meeting expenditure for which there is no provision or insufficient provision in the revenue budget subject to the obligation to make repayment of borrowings out of the revenue budgets of subsequent years.

(5) In accordance with present practice the figures of gross receipts and expenditure of railways will be included in the Budget Statement. The proposed expenditure will, as at present, be placed before the Legislative Assembly in the form of a demand for grants and on a separate day or days among the days allotted for the discussion of the demands for grants the Member in charge of the Railways will make a general statement on railway accounts and working. Any reductions in the demand for grants for railways resulting from the votes of the Legislative Assembly will not ensure to general revenues, i.e., will not have the effect of increasing the fixed contribution for the year.

(6) The Railway Department will place the estimate of railway expenditure before the Standing Finance Committee for Railways on some date prior to the date for the discussion of the demand for grants for railways.

STANDING FINANCE COMMITTEE

This resolution was examined by the Committee appointed by the Legislative Assembly on 3rd March 1924 to examine the proposals for the separation of railway from general finances. The final resolution agreed to by the Assembly on September 20th, 1924, and accepted by Government differed from the original resolution in that the yearly contribution had been placed at 1 per cent. instead of 5/6th per cent. on the capital at charge and if the surplus remaining after this payment to General Revenues should exceed 3 crores, only ⅓rd of the excess over 3 crores were to be transferred to the Railway Reserve and the remaining ⅓rd was to accrue to General Revenues.

At the same time a Standing Finance Committee for Railways was to be constituted to examine the estimate of railways expenditure and the demand for grants, the programme revenue expenditure being shown under a depreciation fund. This committee was to consist of one nominated official member of the Legislative Assembly as Chairman and 11 members elected by the Legislative Assembly from that body. This would be in addition to the Central Advisory Council which will include the Members of the Standing Finance Committee and certain other official and non-official members from the Legislative Assembly and Council of State.

These arrangements were to be subject to periodic revision but to be provisionally tried for at least 3 years. They would, however, only hold good as long as the E. I. Railway and the G. I. P. Railway and existing State Managed Railways remain under State-management and if any contract for the transfer of any of the above to Company management was concluded against the advice of the Assembly, the Assembly would be at liberty to terminate the arrangements in this resolution.

The Assembly in an addendum recommended that the railway services and the Railway Board should be rapidly Indianised and that the stores for the State Managed Railways should be purchased through the organisation of the Indian Stores Department.

Reorganisation Problems.—The principles allocation of surplus laid down in the above resolution has since been amended by a subsequent resolution passed by the Legislative Assembly on 2nd March 1943 which provided, *inter alia* that from 1st April 1943 so much of the convention as provides for the contribution and allocation of surplus to general revenues ceases to be in force and until a new Convention is adopted by the Assembly, the allocation of the surplus on commercial lines between the railway reserve and general revenues shall be decided each year on consideration of the needs of the railways and general revenues, the loss, if any, on strategic lines being recovered from general revenues.

The growing complexity of railway administration and the evolution of new methods of controlling traffic have given a stimulus to the efforts of various railways to revise their organisations. The general direction in which this reorganisation is being considered is that of consolidation into one department of the operating or transportation work of the railways, including the provision of power. This system is invariably in existence on those railways which have adopted the Divisional organisation. It is also being adopted by some railways where the general organisation is still on the Departmental basis.

THE POPE COMMITTEE

When the railway finances were in a bad way, a Committee under the Chairmanship of Mr. F. A. Pope, General Executive Assistant to the President of the L. M. S. Railway, was formed to investigate and inaugurate a detailed analysis of every important achievement of railway operation. The Committee started work during 1932-33 and among other things, perfected a system of detailed investigation into individual items of railway working which came to be known as '*Job Analysis.*'

Mr. Pope returned to India in 1933-34 and prepared a second report based upon the progress of the work and on further possibilities of economy.

The most important recommendations of the second report related to:—

1. Intensive use of locomotives.
2. Intensive use of coaching stock.
3. Intensive use of machinery and plant.

4. Disposal of Uneconomical wagons.
5. Combining resources between railways.
6. Handling and transport of smalls traffic and of traffic to be transhipped at break of gauge stations.
7. Ticketless travel.
8. Methods of increasing earnings.

As a result of the 1st report of the Pope Committee, special 'Job Analysis' Organisations were set up on most of the important Railways. Their main purpose was to investigate in detail by special methods individual aspects of railway working and suggest means whereby economies may be achieved or the efficiency of operation increased.

Now that the methods of working on the railways by stages have been overhauled these organisations have been abolished.

RAILWAY ENQUIRY COMMITTEE, 1937

As a result of the recommendation of the Public Accounts Committee, the Railway Enquiry Committee was appointed in October 1936. This Committee was under the Chairmanship of Sir Ralph L. Wedgewood, C.B., C.M.B., Chief General Manager of the London North Eastern Railway. Its terms of reference were:

To examine the position of State-owned railways and to suggest such measures as may, otherwise than at the expense of the general budget,

(i) secure an improvement in net earnings, due regard being paid to the question of establishing such effective co-ordination between road and rail transport as will safeguard public investment in railways, while providing adequate services by both means of transport; and

(ii) at a reasonably early date, place railway finances on a sound and remunerative basis.

The report was submitted in June 1937 and duly considered by the Railway Board. Early action was taken to implement such of the recommendations as could be accepted without further examination. Where special investigation was considered necessary this was arranged for R. E. C.

RAILWAY ENQUIRY COMMITTEE, 1947

As a result of the recommendations of the Railway Standing Finance Committee, the Government of India appointed the Railway Enquiry Committee, 1947 which assembled on 24th of April, and consisted of: —

Chairman: Hon'ble Mr. K. C. Neogy, then M.L.A. Central and *Members*: Khan Mohammed Yamin Khan, then M.L.A. Central; Prof. Humayun Kabir, Labour Leader; Col. N. D. Balantine, American Rail-Road Consultant; Sir George Cuffe, Ex-General Manager; J. N. Nanda, Ex-General Manager; K. R. Rama Iyer, Additional Financial Commissioner and *Secretary*: M. N. Chakravarti, Railway Traffic Officer.

The following were the terms of reference:— (1) Suggesting ways and means of securing improvement in net earnings by: (*a*) economies in all branches of railway administration, and (*b*) by any other means. (2) Ascertaining the extent of staff surplus to requirements and suggesting practical methods of absorbing them in railway service.

Within a few months of the assembly of the Committee, the sub-continent entered a period of unprecedented political and communal unrest and the climax was reached when Partition was decided upon. As conditions were not at all favourable for arriving at firm and useful conclusions, in regard to staff surpluses and measures for economy and securing improvement in net earnings, it was decided to disperse the Committee temporarily by the middle of October, 1947. It was also decided that when conditions became more favourable the Government would reassemble the Committee to enable them to complete their report.

K. C. Neogy, the Chairman, had to leave the Committee on his appointment as the Minister, Relief and Rehabilitation of Refugees. The new Chairman is Pandit Hridayanath Kunzru.

RATES ADVISORY COMMITTEE

The Railway Rates Advisory Committee continued during the year 1947-48 with Khwaja Sir Mohamed Noor as its President.

The functions of the Committee are to investigate and make recommendations on:—

(1) Complaints of "undue preference"—Section 42(A) of the Indian Railways Act;

(2) Complaints that rates are unreasonable in themselves;

(3) Complaints or disputes in respect of terminals—Section 46 of the Indian Railways Act;

(4) Complaints in respect of conditions as to packing of articles specially liable to damage in transit or liable to cause damage to other merchandise;

(5) Complaints in respect of conditions as to packing attached to a rate; and

(6) Complaints that railways do not fulfil their obligations to provide reasonable facilities under Section 42(3) of the Indian Railways Act.

The closest possible contact between the Railways and the business community was maintained by means of the Central and Local Advisory Committees, which were first introduced in 1923, meetings with Chambers of Commerce, Trade Associations and personal contact by railway officers with business firms.

The inauguration of the electrified main line section of the G. I. P. Railway from Kalyan to Poona took place on the 5th November 1929, and constituted the first entirely main line of track to be electrified in the sub-continent. This scheme involved the elimination of the Bhore Ghat Reversing Station.

Class I Railways.

Commodity	1945–46. No. of tons originating (in millions)	1945–46. Earnings. Rs. (in crores)	Increase (+) Decrease (—) in earnings compared with the preceding year. Rs. (In lakhs)
Increases.			
Fuel	23·56	15·04	+ 87
Rice	3·48	4·01	+ 23
Gram and pulses	1·69	2·81	— 3
Sugar, refined and unrefined	1·01	2·18	— 19
Oil seeds	2·29	4·05	+ 14
Cotton, raw, pressed	0·83	3·52	+ 73
Fodder	1·14	0·79	+ 10
Fruits and vegetables, fresh	3·03	1·60	— 4
Gur, Jagree, Molasses, etc.	1·01	1·68	— 48
Jute raw	0·73	1·23	+ 16
Iron and Steel, wrought	1·54	3·35	+ 53
Kerosene oil in tins	0·32	1·16	— 25
Petrol in tins	0·05	0·19	+ 2
Tobacco	0·30	1·04	+ 19
Provisions	1·29	4·18	+ 4
Vegetable oils	0·53	1·60	+ 16
Other commodities	9·16	23·80	+237
Military traffic	12·23	17·26	—382
Live stock	0·25	0·81	— 2
Railway materials	2·84	0·61	+ 8
Decreases.			
Wheat	1·80	2·66	+ 3
Jowar and Bajra	0·66	0·98	— 13
Other grains	0·69	0·79	— 5
Marble and Stone	2·36	0·96	— 3
Salt	1·78	3·25	+ 29
Wood unwrought	1·47	1·20	+ 17
Metallic ores	2·77	0·85	+ 10
Petrol (in bulk)	0·32	1·46	— 32
Kerosene oil (in bulk)	0·19	0·63	+ 33
Cement	1·36	1·44	+ 47
Cotton, raw, unpressed	0·05	0·06	— 1
Cotton manufactured	0·68	3·22	+ 16
Jute manufactured	0·27	0·70	— 11
Material Stores on Revenue Account	15·03	4·15	+ 61
Total	96·72	118·34	+ 230

All Railways

Open Mileage.—The total route mileage on 31st March 1946, was made up of—

Broad-gauge	.. ..	20,686·60 miles.
Metre-gauge	.. ..	16,004·23 ,,
Narrow-gauge	.. ..	3,827·08 ,,

Under the classification adopted for statistical purposes, this mileage is divided between the three classes of railways as follows:—

Class I	.. .. ..	36,899·48 miles.
Class II	.. .. ..	2,557·08 ,,
Class III	.. .. ..	1,061·35 ,,

During the year 1945-46 no new constructions were undertaken though some new surveys were sanctioned.

Class I Railways.	Number of seats in passenger carriages—1944-45.			
	1st	2nd	Inter.	3rd
5′–6″ ..	20,658	40,696	56,593	615,741
3′–3½″ ..	9,054	11,324	16,864	289,286

Finances.—The gross traffic receipts of the Indian Government Railways (including worked lines) amounted to Rs. 225.74 crores in 1945-46 or an increase of 9.36 crores over the previous year.

Statement showing calculations of contributions to General Revenues accruing to Railway Reserve Fund during the year 1945-46.

	Commercial.	Strategic.	Total.
(i) Receipts (1945-46)—Gross traffic receipts	2,23,41,79	2,31,97	2,25,73,76
Subsidised Companies, Govt. share of surplus profits, etc.	3,01	..	3,01
Interest on Depreciation Reserve Funds and Reserve Fund Balances	4,77,30	15,29	4,92,59
Railway Miscellaneous Receipts	23,93	..	23,93
	2,28,46,03	2,47,26	2,30,93,29
Expenditure—Working expenses	1,58,51,40	3,62,22	1,62,13,62
Payments to worked lines	2,36,39	..	2,36,39
Indian States and Railway Companies' share of surplus profits	1,28	..	1,28
Interest—			
On capital outlay	25,99,01	1,10,32	27,09,33
On capital contributed by Railway Companies	8,38	..	8,38
Land and Subsidy	—29	..	—29
Miscellaneous Railway Expenditure	1,03,03	1,51	1,04,54
Total Expenditure ..	1,87,99,20	4,74,05	1,92,73,25
(ii) urpSius	40,46,83	—2,26,79	38,20,04
Payments to General Revenues	34,26,79	—2,26,79	32,00,00
Transferred to Railway Reserve	6,20,04	..	6,20,04

After meeting all interest and annuity charges Government therefore received a net profit of 1937 lakhs on the capital at charge of the State *minus* the net receipts, that is the gross receipts *minus* the working expenses, have in recent years given the following returns:—

	Per cent.
1924–25	5·85
1925–26	5·31
1926–27	4·95
1927–28	5·30
1928–29	5·22
1929–30	4·35
1931–32	*Nil*
1932–33	*Nil*
1933–34	*Nil*
1934–35	*Nil*
1937–38	0·29
1938–39	0·07
1939–40	0·43
1940–41	2·24
1941–42	3·47
1942–43	5·47
1943–44	6·04
1944–45	5·80
1945–46	4·27

OPERATING RATIOS

An examination of the latest available figures of operating ratios of foreign countries brings out results not unfavourable to Indian Railways.

	Year.	Operating Ratio.
United States of America	1930	74 per cent.
France	1925	84·15 ,, ,,
English Railways	1928	79·40 ,, ,,
South African Railways	1928–29	77·80 ,, ,,
Argentine Railways	1927	71·05 ,, ,,
Canadian Railways	1929	81·21 ,, ,,
India	1913–14	51·70 ,, ,,
	1925–26	62·69 ,, ,,
	1926–27	62·04 ,, ,,
	1927–28	61·39 ,, ,,
	1928–29	62·77 ,, ,,
	1929–30	65·02 ,, ,,
	1931–32	71·08 ,, ,,
	1932–33	71·61 ,, ,,
	1933–34	71 ,, ,,
	1934–35	69·9 ,, ,,
	1935–36	69·5 ,, ,,
	1936–37	65·2 ,, ,,
	1937–38	65·3 ,, ,,
	1938–39	66·8 ,, ,,
	1939–40	65.6 ,, ,,
	1940–41	58·0 ,, ,,
	1941–42	56·4 ,, ,,
	1942–43	51·6 ,, ,,
	1943–44	57·9 ,, ,,
	1944–45	65·1 ,, ,,
	1945–46	70.7 ,, ,,

The output of Railway-owned collieries during 1945-46 was 3,583,521 tons. This represent an increase of 21.7 per cent over the output of 1944-45.

During the year 1945-46, the output of Railway Collieries represents 37 per cent. of the total coal consumed on locomotives on Indian Railways.

STAFF

The total number of employees on Indian Railways at the end of the year 1945-46 was 990,869 as compared with 701,307 at the end of 1938-39. The following table shows the number of employees by Communities on 31st March 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945 and 1946—

Date.	Europeans.	Indians.					
		Hindus.	Muslims.	Anglo-Indians and Domiciled Europeans.	Sikhs.	Indian Christians.	Other Communities.
31st March							
1936 ..	3,219	504,977	155,439	13,423	8,740	16,824	9,742
1937 ..	3,121	504,983	154,535	13,416	8,734	17,253	8,838
1938 ..	2,692	494,272	153,794	12,843	8,114	17,311	1,597
1939 ..	*2,508	*501,628	*155,389	*12,973	*7,795	*17,771	*3,243
1940 ..	2,333	506,220	157,857	13,099	8,106	18,045	3,362
1941 ..	2,143	521,171	160,912	13,239	8,503	18,758	3,373
1942 ..	*1,018	*538,840	*172,085	*12,260	*8,705	*20,039	*3,259
1943 ..	*1,823	*587,925	*190,916	*12,270	*9,442	*20,872	*3,956
1944 ..	*1,747	*626,118	*208,014	*12,286	*9,330	*22,093	*4,415
1945 ..	*1,633	*680,810	*232,108	*12,248	*9,983	*23,513	*4,224
1946	1,516	704,564	234,949	12,151	9,958	23,979	3,752

* Revised figures: Due to changes made by the Railway administration in the figures published last year.

INDIANISATION

Superior services, following the recommendation of the Lee Commission that recruitment in the sub-continent be advanced as soon as practicable up to 75 per cent of the total number of vacancies in the Superior Services of the Railways, the various Railway Companies managing State and other railway lines followed the Government lead. As far as concerns State-managed Railways, the direct recruitment during the year included no European while 18 Indians were appointed.

Accidents.—The following table shows the number of passengers, railway servants and other persons killed and injured in accidents on the Railways, excluding casualties in railway workshops, during the year 1945-46 as compared with the previous year:—

Cause.	Killed.		Injured.	
	1944-45.	1945-46.	1944-45.	1945-46.
A.—Passengers.				
In accidents to trains, rolling-stock, permanent way, etc.	40	89	234	253
In accidents caused by movements of railway vehicles exclusive of accidents to trains ..	664	716	2,346	2,309
In accidents on railway premises not connected with the movement of railway vehicles.. ..	2	..	56	4
Total ..	706	805	2,636	2,566
B.—Railway servants.				
In accidents to trains, rolling-stock, permanent way, etc.	46	53	183	211
In accidents caused by movements of railway vehicles exclusive of accidents to trains ..	274	286	6,714	7,384
In accidents on railway premises not connected with the movement of railway vehicles.. ..	43	42	16,655	19,565
Total ..	363	381	23,552	27,160
C.—Other than passenger and railway servants.				
In accidents to trains, rolling-stock, permanent way, etc.	71	64	153	153
In accidents caused by movements of railway vehicles exclusive of accidents to trains ..	3,072	3,167	1,297	1,017
In accidents on railway premises not connected with the movement of railway vehicles ..	27	21	136	116
Total ..	3,170	3,252	1,586	1,286
Grand Total ..	4,239	4,438	27,774	31,012

AMENITIES

Railway administrations in peace time are constantly endeavouring to make railway travel, especially in the lower classes, more attractive and the amenities afforded necessarily cover a large and varied ground. Improved booking facilities by setting up additional booking offices and out-agencies, provision of clean and adequate accommodation in trains, avoidance of overcrowding, arrangements for the vending of wholesome refreshments at reasonable rates in railway premises and trains, amenities to the public waiting at stations in the shape of waiting rooms and covered platforms and measures for ensuring the security of women passengers are some of the main directions in which progress continues to be made from year to year. But both by the size and scale of arrangements required and its primary necessity to the passenger, the most important of all is the adequate supply of wholesome drinking water to the travelling public, particularly in the hot season, for which, in addition to the existing permanent arrangements, a hot weather (special) establishment is drafted every year.

With the termination of war, the conditions have not shown much change and consequently the restoration of pre-war facilities to the public is necessarily a slow process.

The Chief Railways

Assam-Bengal

The Assam-Bengal Railway, which is constructed on the metre-gauge, starts from Chittagong and runs through Surma Valley across the North Cachar Hills into Assam. It was worked under a limited guarantee by a company.

The Eastern Bengal Railway was promoted under the original form of guarantee and was constructed on the broad-gauge. The first portion of the line running to Calcutta over the Ganges was opened in 1862. In 1874 sanction was granted for the construction on the metre-gauge of the Northern Bengal State Railway, which ran from the north bank of the Ganges to the foot of the Himalayas on the way to Darjeeling. These two portions of the line were amalgamated in 1884 into one State Railway.

The Assam-Bengal Railway has come under State-management and has been amalgamated with the E. B. Rly. with effect from 1st January 1942 and the combined system is named as Bengal-Assam Railway.

The Dibru-Sadiya Railway was purchased by the Government and amalgamated with the Assam-Bengal Railway from 1st April 1945.

1945-46

Mileage open	3,554.81
Capital at charge ..	.. Rs. 87,34,35,000
Net earnings ..	.. Rs. 4,73,11,000
Earnings per cent.	5.42%

Bengal-Nagpur

The Bengal-Nagpur Railway was commenced as a metre-gauge from Nagpur to Chhatisgarh in the Central Provinces in 1887. A company was formed under a guarantee which took over the line, converted it to the broad-gauge and extended it to Howrah, Cuttack and Katni. In 1901 a part of the East Coast State Railway from Cuttack to Vizagapatam was transferred to it and in the same year sanction was given for an extension to the coal-fields and for a connection with the Branch of the East Indian Railway at Hariharpur.

The State took over the line from October 1, 1944.

1945-46

Mileage open	3,388.14
Capital at charge ..	Rs. 81,91,26,000
Net earnings	Rs. 1,69,67,000
Earnings per cent. ..	2.07%

Bombay, Baroda and Central India

The Bombay, Baroda and Central India Railway is one of the original guaranteed railways. It was commenced from Surat *via* Baroda to Ahmedabad, but was subsequently extended to Bombay. The original contract was terminable in 1880, but the period was extended to 1905; and then renewed under revised conditions. In 1885 the Rajputana-Malwa metre-gauge system of State railways was leased to the Company and has since been incorporated in it. On the opening of the Nagda-Muttra, giving broad-gauge connexion through Eastern Rajputana with Delhi the working was entrusted to this Company. On the acquisition of the Company in April 1907 the purchase price was fixed at £11,685,581.

The State has taken over the management with effect from January 1st, 1942.

1945-46

Mileage open	3,404.23
Capital at charge ..	Rs. 77,45,65,000
Net earnings ..	Rs. 7.10,04,000
Earnings per cent.	9.17%

East Indian

The East Indian Railway is one of the three railways sanctioned for construction as experimental lines under the old form of guarantee. The first section from Howrah to Pandua was opened in 1854 and at the time of the Mutiny ran as far as Raniganj. It gives the only direct access to the port of Calcutta from Northern India and is consequently fed by all the large railway systems connected with it. In 1880 the Government purchased the line, paying the shareholder by annuities, but leased it again to the company to work under a contract which was terminable in 1919.

The contract was not terminated until January 1st, 1925, when the State took over the management. From July 1st, 1925, the Oudh & Rohilkhund Railway was amalgamated with it.

1945-46

Mileage open	4,063.55
Capital at charge ..	Rs. 1,56,88,000
Net earnings ..	Rs. 12,47,34,000
Earnings per cent.	7.95%

Great Indian Peninsula

The Great Indian Peninsula Railway is the earliest line undertaken in India. It was promoted by a Company under a guarantee of 5 per cent. and the first section from Bombay to Thana was open for traffic in 1853. Sanction was given for the extension of this line *via* Poona to Raichur, where it connects with the Madras Railway, and to Jubbulpore where it meets the East Indian Railway. The feature of the line is the passage of the Western Ghats, these sections being 15¾ miles on the Bhore Ghat and 9¼ miles on the Thul Ghat which rise 1,131 and 972 feet. In 1900, the contract with the Government terminated and under an arrangement with the Indian Midland Railway that line was amalgamated and leased to a Company to work.

The contract was terminated on June 30th, 1925, when the State took over the management.

1945-46

Mileage open	3,581.26
Capital at charge ..	Rs. 1,18,50,99,000
Net earnings ..	Rs. 11,34,39,000
Earnings per cent.	9.57%

Madras and Southern Mahratta

The Madras Railway was the third of the original railways constructed as experimental lines under the old form of guarantee. It was projected to run in a north-westerly direction in connection with the Great Indian Peninsula

Railway and in a south-westerly direction to Calicut. On the expiry of the contract in 1907 the line was amalgamated with the Southern Mahratta Railway Company, a system on the metre-gauge built to meet the famine conditions in the Southern Mahratta Country and re-leased to a large Company called the Madras and Southern Mahratta Railway Company.

The contract was terminated and it was decided to bring the railway under State-manage. ment on the 1st April 1944.

1945-46

Mileage open ..	..	2,940.31
Capital at charge ..	Rs.	56,17,31,000
Net earnings ..	Rs.	8,82,26,000
Earnings per cent. ..	..	15.71%

North-Western

The North-Western Railway began its existence as the Sind-Punjab-Delhi Railway, which was promoted by a Company under the original form of guarantee and extended to Delhi, Multan and Lahore and from Karachi to Kotri. The interval between Kotri and Multan was unbridged and the railway traffic was exchanged by a ferry service. In 1871-72 sanction was given for the connection of this by the Indus Valley State Railways and at the same time the Punjab Northern State Railway from Lahore towards Peshawar was begun. In 1886 the Sind-Punjab-Delhi Railway was acquired by the State and amalgamated with these two railways under the name of the North-Western Railway. It is the longest railway in India under one administration.

1945-46

Mileage open ..	..	6,881.27
Capital at charge ..	Rs.	1,53,04,70,000
Net earnings ..	Rs.	9,02,32,000
Earnings per cent. ..	..	5.90%

Oudh-Tirhut

The Bengal and North-Western Railway was constructed on the metre-gauge system by a company without any Government assistance other than free land and was opened to traffic in 1885. The system was begun in 1874 as the Tirhut State Railway. In 1890 this line was leased by Government to the Bengal and North-Western Railway. Since then extensive additions have been made in both sections. It is connected with the Rajputana metre-gauge system at Cawnpore and with the Bengal and Assam Railway at Katihar and the East Indian Railway at Benares and Mokameh Ghat.

The Rohilkund and Kumaon Railway was constructed on the metre-gauge and opened for traffic in 1884. Later on extensions were added between 1906 and 1916.

The Bengal and North Western and the Rohilkund and Kumaon Railway have come under State-management from 1st January 1943. From the same date the two were amalgamated and the combined system is named as Oudh-Tirhut Railway.

1945-46

Mileage open ..	..	2,679.67
Capital at charge ..	Rs.	30,54,75,000
Net earnings ..	Rs.	5,07,13,000
Earnings per cent. ..	..	16.60%

South Indian

The South Indian Railway was one of the original guaranteed railways. It was begun by the Great Southern India Railway Company as a broad-gauge line ; but was converted after the seventies to the metre-gauge. This line has been extended and now serves the whole of the Southern India, south of the south-west line of the Madras Railway. Between Tuticorin and Ceylon a ferry service was formerly maintained, but a new and more direct route to Ceylon *via* Rameshwaram was opened at the beginning of 1914. As the original contract ended in 1907, a new contract was entered upon with the Company on the 1st of January 1908.

The contract was terminated on 1st April 1944, when the State took over the management.

1945-46

Mileage open ..	..	2,349.25
Capital at charge ..	Rs.	46,92,94,000
Net earnings ..	Rs.	5,78,71,000
Earnings per cent. ..	..	12.33%

THE STATES

The principal Indian State Railways are the following :—

Bikaner State

The line is owned by the Bikaner Government. It was worked by the Jodhpur-Bikaner Railway Administration upto 31-10-1924, when it was taken over by the Bikaner Government.

Total mileage open 883.05

Jodhpur

The railway, which was worked by the Jodhpur-Bikaner Railway Administration upto 31-10-1924, is now worked by the Jodhpur Durbar. At present the Railway consists of 318.74 miles of Indian section and 806.95 miles of Durbar lines.

Total mileage open 1,125.69

Mysore State

These lines are the property of the Mysore Government. Of the 9 lines 5 sections were worked by the Madras & Southern Mahratta Railway. Of these 3 lines were taken over by the Mysore Government from 1-10-1919 and the other two from 1-1-1938. It consists of 609.47 miles of metre-gauge and 128.80 miles of narrow-gauge lines.

Total mileage open 738.27

H. E. H. The Nizam's State

The Railway was constructed by a company under a guarantee from the Hyderabad State, which took over the management from 1-4-1930. It consists of 57·82 miles of Indian sections and 1,302·16 miles of Hyderabad State lines.

Total mileage open 1,359.98

India and Ceylon

The possibility of connecting India and Ceylon by a railway across the bank of sand extending the whole way from Rameswaram to Mannar has been reported on from time to time, and since 1895 various schemes have been suggested.

The South Indian Railway having been extended to Dhanushkodi, the southernmost point of Rameswaram Island, and the Ceylon Government Railway to Talaimannar, on Mannar Island, two points distant from each other about 20 miles across a narrow and shallow strait, the possibility of connecting these two terminal stations by a railway constructed on a solid embankment raised on the sand bank known as "Adam's Bridge," to supersede the ferry steamer service which has been established between these two points, is one of the schemes that has been investigated.

In 1913, a detailed survey was made by the South Indian Railway Company, and the project contemplates the construction of a causeway from Dhanushkodi Point on the Indian side to Talaimannar Point on the Ceylon side, a length of 20·05 miles of which 7·19 will be upon the dry land of the various lands, and 12·86 will be in water. The sections on dry land will consist of low banks of sand pitched with coral and present no difficulty. The section through the sea will be carried on a causeway which it is proposed to construct in the following way. A double row of reinforced concrete piles, pitched at 10 feet centres and having their inner faces 14 feet apart, will first be driven into the sand. These piles will then be braced together longitudinally with light concrete arches and chains and transversely with concrete ties, struts and chains. Behind the piles slabs of reinforced concrete will be slipped into position, the bottom slabs being sunk well into the sand of the sea bottom. Lastly, the space enclosed by the slabs will be filled in with sand.

The top of the concrete work will be carried to six feet above high water level, and the rails will be laid at that level. The sinking of the piles and slabs will be done by means of water jets. This causeway, it is expected, will cause the suspended sand brought up by the currents, to settle on either side bringing about rapid accretion and eventually making one big island of Rameswaram Island and Mannar Island.

Indo-Burma Connection

The raids of the Emden in the Bay of Bengal in 1914 and the temporary interruption of communications between the sub-continent and Burma, stimulated the demand for a direct railway connection between India and Burma. The old undivided Indian Government accepted the position and appointed Mr. Richards, M. Inst. C.E., to be the engineer-in-charge of the surveys to determine the best route for a railway from the sub-continent to Burma.

The coast route appears to be the best one but at present would not be remunerative. This would start from Chittagong, which is the terminus and headquarters of the Assam-Bengal Railway and a seaport for the produce of Assam. The route runs southwards through the Chittagong district, a land of fertile rice fields intersected by big rivers and tidal creeks and it crosses the Indo-Burma frontier, 94 miles from the town of Chittagong. For about 160 miles further it chiefly runs through the fertile rice lands of Arrakan and crosses all the big tidal rivers of the Akyab delta. These include the Kaladan river which drains 4,700 miles of country and even at a distance of about 30 miles from its mouth is more than half a mile wide. About 260 miles from Chittagong the railway would run into the region of mangrove swamps which fringe the seacoast north and south of the harbour of Kaukkphu stretching out into the mangrove swamps like ribs from the backbone. Innumerable spurs of the Arrakan Yoma have to be crossed.

Yoma is a mountain ridge which extends from Cape Negrais northwards until it loses itself in a mass of tangled hills east of Akyab and Chittagong. At its southern end the height of the ridge is insignificant but it has peaks as high as 4,000 feet before it reaches the altitude of Sandway and further north it rises much higher. It is a formidable obstacle to railway communication between the sub-continent and Burma.

This route is estimated to cost about £7,000,000 and would have to be supplemented by branch lines to Akyab where there is at present a considerable rice traffic and the cost of this would have to be added to the £7,000,000 already referred to.

The other routes examined have been the Hukong Valley route and the Manipur route which were surveyed by the late R. A. Way many years ago. The Manipur route was estimated to cost about £5,000,000 as it has to cross three main ranges of hills with summit levels of 2,650, 3,600 and 8,900 feet. Altogether there would be about four miles of tunnelling through the three main ridges and through other hills and more than 100 miles of expensive undulating railway with grades as steep as 1 in 50 and 11,000 feet of aggregate rise and fall.

The Hukong Valley route is only about 284 miles long and it presents fewer engineering difficulties than either the Coast or the Manipur route. One hundred and fifty miles of this route lie in open country capable of cultivation though at present it is only very thinly populated. Only one range of hills has to be crossed and this can be negotiated with a summit tunnel 5,000 feet long at a height of 2,500 feet. There are less than fifty miles of very heavy work and only about 4,500ft. aggregate of rise and fall. The Hukong Valley route although cheaper than the Manipur route is not a practical financial proposition.

Main results of working of all the sub-continent's Railways treated as one system.

	Particulars.		1938-39.	1939-40.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
1	Mileage open at close of the year ..	Miles.	41,133·73	41,155·88	41,051·93	40,477·37	40,525·04	40,512·31	40,500·26	40,517·91
2	Total Capital outlay, including ferries and suspense, on open lines (in thousands of rupees)	..Rs.	8,47,82,21	8,52,59,34	8,53,78,17	8,48,05,51	§8,49,92,16	§8,58,53,83	§8,64,36,75	8,72,67,97
3	Gross earnings (in thousands of rupees)	.. „	1,07,14,96	1,11,50,28	1,26,36,32	§1,44,69,87	§1,67,88,74	§1,99,32,35	§2,32,90,43	2,43,59,15
4	Gross earnings per mean mile worked..	.. „	25,612	26,676	30,198	34,916	§40,777	§48,546	§56,755	59,327
5	Gross earnings per mean mile worked per week	.. „	491	510	579	670	782	§928	§810,91	1,141
6	Gross earnings per train-mile	.. „	5·40	5·64	6·33	7·10	9·61	§11·7	13·1	13·0
7	Total working expenses (in thousands of rupees)	.. „	71,15,32	72,17,09	73,15,89	§80,29,58	§86,49,10	§1,14,08,20	§1,48,78,07	1,69,30,72
8	Working expenses per mean mile worked per week	.. „	....	330	335	371	402	§531	§697	792
9	Working expenses per train-mile ..	.. „	3·58	3·65	3·66	3·93	4·94	§6·69	8·37	9·00
10	Percentage of working expenses to gross earnings	Per cent.	66·44	64·75	57·92	55·51	§51·53	§57·25	§63·89	69·52
11	Net earnings (in thousands of rupees)	..Rs.	35,99,64	39,33,19	53,20,43	§64,39,79	§81,39,64	§85,24,15	§84,12,35	74,28,43
12	Net earnings per mean mile worked ..	.. „	8,619	9,427	12,746	15,578	§19,815	§20,804	§20,528	18,125
13	Net earnings per train-mile	.. „	3·58	1·99	2·67	3.17	4·67	§5·02	§4·74	3·96
14	Percentage of net earnings on total capital outlay (item 2)	Per cent.	4·24	4·61	6·23	7·59	9·57	§9·93	§9.73	8·51
15	Passenger train-miles (in thousands).	Steam Electric.	93,420 1,357	91,963 1,368	91,589 1,408	89,660 1,446	§67,698 1,320	§64,130 §1,635	§68,309 1,737	75,244 1,959

§ Revised figures.

Main results of working of all the sub-continent's Railways treated as one system—*contd.*

	Particulars.		1938-39.	1939-40.	1940-41.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
16	Goods train-miles (in thousands)	Steam Electric.	60,028 634	68,434 700	65,683 775	72,519 999	70,223 1,057	§ 68,750 § 894	71,088 808	74,630 864
17	Mixed train-miles (in thousands)..	„	29,059 ..	28,372 ..	28,448 *Nil*	§ 27,424 *Nil*	§ 21,499 *Nil*	§ 21,873 § 1	21,371 1	21,232 2
18	Total, including miscellaneous train-miles (in thousands) ..	„	188,209 2,017	190,004 2,087	192,039 2,199	§ 196,154 2,477	§ 166,095 2,455	§ 162,280 § 2,608	§169,382 2,621	179,236 2,870
19	Passenger mileage of passengers (in thousands)	..	18,847,246	18,522,052	19,928,619	22,020,108	§24,352,756	§32,506,067	§37,628,709	41,335,766
20	Freight ton-mileage of goods (in thousands)	..	22,158,340	23,492,464	25,288,502	§ 28,043,122	28,106,504	§28,379,064	§28,441,186	29,166,453
21	Average miles a ton of goods was carried	Miles	250·8	254·9	272·6	289·1	295·1	§ 293·5	§278·5	289·8
22	Average rate charged for carrying a ton of goods one mile ..	Pies	5·98	5·93	6·19	6·14	6·64	§ 6·98	§7·73	7·65
	Average miles a passenger was carried.									
23	1st class	Miles	215·7	214·6	254·1	253·6	252·3	§ 246·7	§215·9	190·4
24	2nd class	„	78·0	76·9	82·3	86·1	92·8	85·3	73·8	64·2
25	Intermediate class..	„	50·9	51·0	50·6	52·6	§ 58·4	§ 60·8	60·7	59·6
26	3rd class	„	34·5	34·2	33·7	34·2	§ 37·5	39·3	§38·6	37·6
27	Total	„	35·3	35·0	34·6	35·3	§ 39·1	41·2	40·6	39·6
	Average rate charged per passenger per mile.									
28	1st class	Pies	17·8	17·4	17·2	15·8	15·9	§ 15·7	16·3	16·4
29	2nd class	„	8·49	8·59	8·94	9·04	9·44	9·52	9·65	9·61
30	Intermediate class..	„	4·08	4·07	4·31	4·47	§ 5·31	5·31	5·20	5·17
31	3rd class	„	2·95	2·97	3·08	3·20	§ 3·46	3·52	3·37	3·49
32	Total	„	3·15	3·16	3·29	3·46	§ 3·85	3·97	§3·91	4·03

§ Revised figures.

Route Mileage of Railway Lines contained in the Class I Railway Systems in the sub-continent

Railway.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Bengal Assam	....	3,457·47	3,459·74	3,456·80	3,554·81
Assam Bengal	1,308·12	Included in B. & A. Ry.	....	....	....
Bengal & North Western ..	2,092·20	2.093·58	Included in O. & T. Ry.	....	....
Bengal Nagpur	3,380·06	3,377·59	3,375·76	3,378·62	3,388·14
Bikaner State	883·05	883·05	883·05	883·05	883·05
Bombay, Baroda & Central India.	3,482·80	3,370·24	3,403·94	3,404 23	3,404·23
Eastern Bengal	2,147·67	Included in B. & A. Ry.	....	....	....
East Indian	4,106·20	4,078·95	4,061·94	4,063·55	4,063·55
Great Indian Peninsula	3,564·86	3,564·42	3,530·17	3,530·17	3,531·26
Jodhpur	1,125·69	1,125·69	1,125·69	1,125·69	1,125·69
Madras & Southern Mahratta ..	2,939·47	2,939·47	2,941·31	2,940 31	2,940·31
Mysore State	738·22	738·27	738·27	738·27	738·27
Nizam's State	1,359·91	1,359·98	1,359·98	1,359·98	1,359·98
North Western	6,814·78	6,885·24	6,885·24	6,881·27	6,881·27
Oudh Tirhut	....	....	2,684·19	2,683·94	2679·67
Rohilkund Kumaon	569·88	569·88	Included in O. & T. Ry.	....	....
South Indian	2,348.30	2,348.80	2,348·90	2,349·25	2 349·25
Total ..	36,861·21	36,792·63	36.798 18	36.795·13	36.899·48

After Partition

As a result of the decision to partition the sub-continent two important Railways had had to be divided between Pakistan and India. This was done in conformity with the boundaries defined by the Radcliffe Boundary Commission. The Railways affected were the N. W. Railway and the combined B. A. Railway. Roughly, the position is that those portions of the N. W. Railway which traverse the districts Jullundur, Ambala, Ludhiana and all Eastern Punjab districts, certain portions of Amritsar and Ferozepore districts of the undivided Punjab and of the Delhi Province have been formed into what is called the Eastern Punjab Railway and is administered by the Chief Administrative Officer, E. P. Railway, who functions as the General Manager for that Railway.

Similarly a certain portion of the Eastern Bengal Railway (broad-gauge) and a considerable portion of the old A. B. Railway (metre-gauge), both of which formed parts of the amalgamated Bengal Assam Railway have been allotted to Pakistan.

So far as India is concerned the residual portions of these two railways have been merged partly with the O. T. and E. I. Railway systems of India and the portion of the metre gauge which traverses the north of the Brahmaputra Valley and lies in India is now renamed the Assam Railway, and is administered by the Chief Administrative Officer, Assam Railway, who functions as the General Manager for that Railway.

1948-49 BUDGET

The table below shows the principal figures of the budget estimates for 1948-49 :—

(In lakhs of rupees)

Gross Traffic Receipts	19,000
Working Expenses	
Ordinary Working Expenses	1,47,15
Appropriation to Depreciation Reserve Fund	11,18
Payments to Worked Lines	1,45
Total Working Expenses ..	1,59,78
A.—Net Traffic Receipts	30,22

Miscellaneous Transactions

Receipts	3,16
Expenditure	1,00
B.—Net Miscellaneous Receipts	2,16
Net Railway Revenue (A + B) ..	32,38
Interest Charges	22,53
Net Surplus	9,85

Some Particulars

No Increase in Fares.—There would be no increases in fares and freights. The question arises : what is to be done with the net surplus of Rs. 985 million for the year 1948-49 ? First of all, there is the question of the contribution payable by the Railways to General Revenues. That question of contribution payable to general revenue is at present determined by a Resolution which the Legislature passed in 1943, which practically lays down that the contribution to General Revenues is to be fixed with reference to the requirements of the Railways and of General Revenues in each particular year. A Committee has been appointed consisting of three Members of the Standing Finance Committee under a Chairman. Pending the receipts of the finding of this Committee, Government do not propose to make any allocations out of the surplus.

[*This Committee has since reported and according to its recommendations, Rs. 45 million has been allocated to General Revenues.*]

Workshop Position.—In regard to workshop, that is to say, locomotive position, chiefly, of the total number of locomotives that India possesses today, about a third are over-age locomotives which have done their normal period of service and which, if locomotives were available in the world market, would be replaced almost immediately.

There are two elements of importance in connection with the workshops. First of all, there is the question of the availability of spare parts. There is secondly the question of labour and the amount of output that one can expect from labour. As regards spare parts there has been a perceptible improvement in the delivery of orders from the United Kingdom. Secondly, it has been possible to utilise increasingly the spare capacity for manufacturing these small parts in Indian ordnance factories. The position will be illustrated by the fact that in 1948 the orders that have been placed in India for spare parts show an improvement of nearly 37 per cent over the orders placed in India in 1947.

Labour.—As regards the question of labour, on practically all principal Railways there is an improvement in the number of man-days worked in the workshops. But the quantum of work which is being done during the normal prescribed period is considerably below what one might reasonably expect. There are two ways of meeting that problem. First of all, one has to provide administrative devices which would automatically secure that each labourer renders his full quota of work. There is, secondly, the co-operation to be secured from labour organisations themselves.

Taking the question of the improvement in respect of the availability of spare parts and the improvement in respect of attendance in the workshops, the result of these two factors is necessarily reflected in the turn-round figure. Turn-round, is the period which a wagon takes to perform a journey and return to take up fresh traffic. When an estimate was made last time (Nov. 1947) it was found that the period of turn-round of a broad gauge wagon was 48 days. The latest figure is 45.9. On metre-gauge lines, the old average was 51. The latest figure is 60.7. The reason for the deterioration is the disturbances at Ajmer, where the biggest metre-gauge workshop is situated. If Ajmer is left out, then the average figure for the turn-round of metre-gauge wagons comes to 45, as against the old figure of 51.

Wagon Movement.—Another factor which has been becoming increasingly important in recent months is the undue detentions of wagons at destinations by customers, factories, trade and sometimes by Government Departments in Povinces and States. As against this position the measures that the railways have taken are : reduction of free time allowed for demurrage purposes from 9 hours of daylight to 6 hours. After that demurrage will be charged. Sundays are to count for demurrage purposes. The demurrage fees on some Railways like the E.I. Rly. and B.B. & C.I. and the G.I.P. Railways are also being raised.

Optimistic Outlook.—As regards prospects for the year 1948-49, a marked improvement by March 1949 is expected. My reasons for saying so are these. In view of a vast diversion of traffic that has been occurring recently, line capacity and marshalling capacity are being overstrained. As regards the line capacity, we have already taken in hand various schemes for doubling the line capacity, at various heavy congestion lines—Itarsi-Bhopal, Lucknow-Bareilli, Cawnpore-Etawah, the Moradabad section and others—has already been taken in hand. A target for completing these works by March 1949 has been set and if the target is achieved it would be possible to relieve congestion at some of the most important points on our railway system. A couple of months ago was reopened what used to be called the Dufferin Bridge, now called the Malviya Bridge, which was regirded and has now been opened for double-line traffic. It is a very important gateway of railway communication in the U.P. and its doubling will make considerable difference to the movement of traffic.

With regard to the remodelling and the extension of marshalling yards, there are a number of schemes in hand all of which are expected to be completed by March 1949—Ujjain, Lucknow, Cawnpore, Tundla, Gorakhpur, Arkonam and Tuticorin in the South and it is hoped that the extension and remodelling of the station yard at New Delhi will be taken in hand soon.

Next some figures with regard to the additional rolling stock which is expected to be produced in the course of 1948-49 may be given. The number of general service wagons which are scheduled to be delivered by the manufacturers in India by the end of 1948 is 4,050. In addition to that it is expected that oil-tank wagons of the order of about 150 will also be delivered by the end of 1948. Then oil-tank wagons from Canada are expected to be delivered by March 1949. There are other classes of wagons numbering about 177, all scheduled to be delivered by the end of 1949. All of which comes to a total of over 4,000 wagons. In the present strained conditions in India regarding labour and material, it would not be possible for manufacturers to

deliver these things according to schedule. But if it is possible to put on the lines at least two thousand additional wagons in the course of the next year, it would make a perceptible improvement. Similarly it is expected 146 new locomotives will be delivered in the course of 1948 and this together with the improvement which is noticeable in the workshop position must make a difference for the better as regards locomotives.

The third reason for being hopeful about 1948-49 is that the shipping position appears to show some improvement. If it is possible in 1948-49 to divert to the sea route some of the heavy traffic from Calcutta to Bombay which now goes by rail it would very considerably ease the railway position.

With all this, however, it will not be possible to achieve normalcy in less than three years.

Passenger Traffic Improvement.—The great problem regarding passenger traffic today—and when one considers the question of amenities the problem that worries everyone most—is that of overcrowding. Today there are more than twice the number of passengers that the railways used to carry in 1938-39; but the amount of passenger train capacity that the railways are in a position to offer today is 14.5 per cent less than in 1938-39. That gives one straightaway in statistical terms the problem of overcrowding. It is one of the most interesting features of passenger traffic on the railways today that there is a steady decrease in the average distance travelled by III Class passengers. If there is a steady decrease in the average distance travelled by passengers the inevitable result is that at any point of time one will find a steadily decreasing congestion.

People who would ordinarily have travelled short distances by bus are now travelling by train. And until it is possible to restore the bus position short distance travel by train will remain. Apart from that in 1948-49 the railways expected to place on the lines somewhere about 700 to 800 new coaches; 350 of them are coaches that the railways have ordered and a little over 400 coaches would, it is expected be returned by the Defence Department whom they have been loaned.

Ticketless Travel.—Another factor which is going to react on overcrowding is ticketless travelling. The problem is particularly acute in the United Provinces; and in consultation with the U.P. Government a scheme has been started there which consists of a considerable police force and a considerable complement of special magistrates devoted entirely to the problem of ticketless travel. The scheme was started on January 15 and the results so far have been definitely encouraging.

Similar arrangements are contemplated for West Bengal, Bihar and for Assam.

Then there are the passenger guides that we have been appointing recently. Conditions of third class travelling today provide an enormous scope for social service of the highest quality. The railways in consultation with various recognised social service organisations will select people with the right training, the right spirit and the right outlook to take up this work. A beginning has already been made.

Railway Rates Tribunal.—There was a proposal to set up a Railway Rates Tribunal by the first of April. On examination it was found that unless this tribunal was vested with statutory authority it would not be able to function in the way in which it ought to. So a Bill would be placed before the Legislature for the purpose of setting up a tribunal with a much wider scope than the present Rates Advisory Committee and with a mandatory and not merely an advisory jurisdiction.

Roads

THE sub-continent's road system may be briefly described as follows.

There exist four great trunk roads, stretching diagonally across the sub-continent which from the framework with which most of the important subsidiary roads are linked. These trunk roads have been in existence for an immense period and are rich in historical association. The most famous is the ancient marching route—known as the Grand Trunk Road—which stretches right across the northern part of the sub-continent from the Khyber to Calcutta; the other three connect Calcutta with Madras, Madras with Bombay and Bombay with Delhi, and the four of them together account for about 5,000 out of the 95,000 miles of metalled road in the sub-continent.

None of these roads however can be considered safe "all weather" trunk roads according to modern standards. The Madras-Calcutta Road in particular is far from being bridged throughout its entire length. The other three roads also require a great deal of improvement; on the Grand Trunk Road from Calcutta to the North-West Frontier for example, there is as yet no road bridge over the river Sone in Bihar, and on all of them there are places where floods are liable to cause serious interruption to traffic.

As regards the subsidiary roads, the best and most numerous are to be found in Southern India. As one would expect, the worst served regions are Rajputana, Sind and parts of the Punjab on the one hand, and Orissa and Bengal on the other, the former owing to its aridity and sparse population, and the latter because of the numerous unbridged and mostly unbridgeable waterways which dissect it. In addition there are numerous other parts of the country, such as the lower Himalayas, which suffer from a dearth of communications owing to the difficult terrain. Besides surfaced roads, there is a very large mileage of "kutcha" roads amounting to approximately 201,000 miles, some of which are good for motor traffic during the dry weather.

DEVELOPMENT COMMITTEE

On the whole it is reasonable to say that the sub-continent's road system, even before the advent of motor transport was altogether insufficient for its needs and it is the increasing realisation of this fact that led to the appointment of the special Road Development Committee in 1927 whose functions were to examine the question of the development of road communications in view of the increasing use of motor transport and suggest ways and means of financing it.

The recommendations put forward by the Committee were carefully considered by the Government of India, whose conclusions upon them were embodied in a resolution and provided that the increase from four to six annas per gallon in the import and excise duties on motor spirit, which had been effected in March 1929, should be maintained for a period of five years in the first instance, and that the additional duty should be allotted as a block grant for expenditure on road development, and credited to a separate Road Development Account, whose unexpended balances should not lapse at the end of the financial year.

Allocation to Provinces.—The original resolution dealing with the disposal of the Road Development Account has since been amended thrice, the resolution at present in force having been passed by the Dominion Legislature in November 1947. Its main features may be described as follows: The special tax on petrol introduced in 1929 shall continue to be levied for road development, the proceeds of which, after retaining a reserve of 15% for administration, research and special grants-in-aid, shall be allocated for expenditure in the different provinces, States, etc., in the ratio of the petrol consumption in the various areas. These sums may be spent on the construction, re-construction or substantial improvement of roads and bridges including the cost of preparation of road schemes—but not for ordinary road upkeep or maintenance—on interest and amortization charges on road loans sanctioned hitherto by the Government of India and also on administration of Provincial Boards of Communications and establishment connected with the control of motor transport.

With the levy of a surcharge on petrol, the share of the petrol duty available for the Road Fund was increased from 2 annas to 2¼ annas per gallon with effect from October 1, 1931. Upto the end of March 1945, the Fund had received Rs. 22¼ crores, and after transferring Rs. 4.4 crores to the Reserve, the sum available for distribution to Provinces, Minor Administrations and States was Rs. 18.1 crores or Rs. 17.3 crores excluding Burma's share prior to separation. Of this, the actual distribution upto 31st March 1945 to the Provinces was Rs. 12.8 crores and to the Minor Administrations Rs. 67¼ lakhs, as per details given in the accompanying statement. The States in addition received Rs. 2.2 crores.

Feeder Roads.—Upto the introduction of the Road Fund in 1929, all Provincial Roads were financed exclusively from the general revenues of the provinces and local roads from local revenues supplemented by provincial grants. The object of creating the Road Fund in 1929 was to supplement and not to replace the normal expenditure from provincial and local revenues, but unfortunately the ten years following the introduction of the Fund were marked by acute financial stringency, with the result that Provincial Governments and local bodies had to make drastic curtailments in the allotments made for roads from their revenue.

The effect of these curtailments was to starve the construction and development of feeder roads, as the Road Fund was originally being used exclusively for roads of inter-provincial and inter-district importance. The Government of India, however, subsequently laid down that at least 25 per cent. of the provincial shares in the Road Fund should be used on Feeder Roads and that not more than 25 per cent. can be used on roads which compete with the Railways.

Thus, in spite of the inauguration of the Central Road Development Fund, the total expenditure on roads suffered a decrease. The expenditure

in 1938-39, which amounted to Rs. 602·1 lakhs in the Governors' Provinces, was Rs. 41·7 lakhs less than in 1928-29.

The revenue from motor transport was steadily increasing in these years. In 1938-39, the total revenue of the Central Government and Provincial Governments from this source was Rs. 960 lakhs, representing an increase of Rs. 358 lakhs over the total road expenditure in the year.

WAR IMPROVEMENT

The war however brought about a slight change in the situation. Some works of road improvement were taken in hand to facilitate the operation of motor transport during the war years and are being continued. At the same time the cost of works, both in respect of road improvements and ordinary road maintenance, has risen through the general increase in cost of materials and labour.

As regards road revenue, on the other hand, petrol rationing restricts any large increase in Government's total receipts.

Nevertheless, in the year ending 31st March 1945, the total revenue from motor transport was over Rs. 11 crores in British India and the total road expenditure was less than Rs. 10 crores, as per particulars below:

Road Transport Revenue, 1944-45.

(The figures are in lakhs of rupees).

	Rs.
Central Government:	
Duties on motor spirit	359
Excise duty on tyres	114
Import Duty, motor vehicles	95
„ „ Tyres & Tubes	1
	569
Provincial Governments:	
Taxes and fees, motor vehicles ..	213
Petrol Sales Taxes	329
Total ..	1,111
Road Expenditure	
on P.W.D. Roads from Provincial Revenue—	
Road Improvements	157
Road Maintenance	442
	599
on P.W.D. Roads from Central Road Fund	92
Total on P.W.D. Roads	691
Expenditure on Local Board Roads, estimated	290
Total ..	981

ROAD MILEAGE

On the administrative side roads are a provincial subject and may be divided into two main classes, Provincial Roads under the Public Works Department and Local Roads in charge of local bodies. The extent to which the administration of roads has been delegated to local bodies varies considerably from province to province but in the Dominions as a whole about 80 per cent of the extra-municipal mileage is under the charge of District Boards or District Councils, including a certain mileage, mainly in the Central Provinces which is termed "Provincial" but maintained under their agency. Within Municipal areas, all roads, other than sections of main roads passing through the towns, are controlled by the respective Municipalities.

The grand total of the mileage of extra-Municipal roads maintained by public authorities in the sub-continent including the States was 296,468 on March 31, 1943; of this the total mileage for Governors' Provinces amounted to 218,066, for Centrally administered areas 8,057 and for the States 70,345.

The total mileage of roads with modern surface, either bituminous or cement roads, was 15,121 and the total mileage of waterbound macadam roads was 79,933, making a total mileage of roads which were either modern surfaced or waterbound macadam of 95,054.

The total mileage of lower types of roads was 201,414. These roads are of three types: firstly, roads with artificially admixed granular material, gravel, moorum, etc., on natural soil; secondly, roads of natural soil which are motorable in fair weather; and thirdly, roads of natural soil which are unmotorable.

The total mileage of roads that are motorable was thus 221,690, out of which 126,374 miles were motorable throughout the year, and the remaining 95,316 miles motorable in fair weather.

Out of the 226,123 miles of roads in British India, no less than 178,008 miles of roads were maintained by local bodies, while the P.W.D. and M.E.S. maintained 48,115 miles.

The province with the greatest road mileage was Madras with 38,047, out of which, however, only 464 was modern surfaced, while the province with the greatest mileage of modern roads was the Punjab with 4,983 miles, out of a total provincial mileage of 25,245.

There were, in addition, the roads maintained by Municipalities, the length of which was approximately 18,433 miles, made up of 10,840 miles of metalled roads and 7,593 miles of unmetalled roads.

BUILDING PROGRAMME

Considerable interest began to be taken before the end of the war in the need for an extensive programme of road development both for the purpose of assisting the transition from war to peace and for fostering the economic advancement of the sub-continent. In December 1943 the Chief Engineers of the various provinces and important States met in Conference at Nagpur and recommended that the country should be ready for a programme involving the improvement of the entire road system and designed to increase the road mileage to 400,000. This was estimated to cost Rs. 450 crores. If this scheme, known as the Nagpur Plan, is carried through, the sub-continent's total road

mileage, on completion of the plan, will be as under: National Highways 18,000; Provincial Highways 72,000; Major District Roads 60,000; Other District Roads 100,000 and village roads 150,000.

FIVE-YEAR PROGRAMME

While the Government of India as well as the Provincial Governments and States endorsed these recommendations in general terms, there was no general acceptance of a time-limit for the accomplishment of the plan. However five-year programmes for commencement from April 1947 and representing varying proportions of the Nagpur scheme were prepared by the Provinces for their respective areas in 1945-46. These Programmes, exclusive of National Highways (*i.e.* main arterial roads of all-India importance) were estimated to cost Rs. 146 89 crores over the five-year period, the following being the allotments (in crores of rupees) proposed by the individual provinces: U.P 30.72; (old undivided) Bengal 23.34; Bombay 20.80; Madras 20.77; Bihar 13.60; (old undivided) Punjab 12.49; Sind 8.85; C.P. & Berar 7.00; Assam (before detachment of part of Sylhet) 5.32 and Orissa 4.00. The Programmes embrace the construction or improvement of 80,000 miles of roads as under:

Provincial & District Roads.

Mileage improvement	33,393
Mileage, new construction	17,509

Village Roads.

New construction & improvement ..	30,093

Some of the provinces, particularly Bombay and Madras, have since announced that their five-year programmes are being revised and the allotments reduced.

NATIONAL HIGHWAYS

The Central Government, as part of their contribution towards post-war development in the provincial field and as part of a concerted plan for the co-ordinated development of land transport as a whole, have accepted liability for the construction and maintenance of the National Highways outside the States with effect from 1st April 1947. Of the 18,000 miles of National Highways at present delineated, 15,000 are in India & Pakistan and the remaining 3,000 in Indian States.

The Government's five-year plan for the development of National Highways is estimated to cost Rs. 36 crores. Although financed by the Centre, the actual execution of the work will be carried out through the Provincial P.W.D's. It is expected that as a result of this expenditure, about 5,421 miles of National Highways will be improved and 787 miles of new National Highways constructed in the Governors' Provinces.

The largest new construction of National Highways will be undertaken in Bihar the Punjab area and the Bengal area—260 miles, 110 miles and 100 miles respectively. In the States it is planned to construct, during the next 15 years, 264 miles of new National Highways and to improve 2,654 miles, but the allocation of the cost between the Central Government and the States has not yet been settled. For the present, Rs. 2 crores have been provisionally earmarked for expenditure by the Central Government on National Highways in the States during the next 5 years.

Vehicles:—Civilian motor vehicles on the country's roads in March 1946 (excluding the States) numbered 144,694 made up of 10,142 motor cycles, 74,846 cars, 8,065 taxies, 20,321 passenger buses, 30,194 goods lorries and 1,126 miscellaneous vehicles. There are also 6,292,000 bullock carts in use.

ALLOCATIONS MADE FROM THE CENTRAL ROAD FUND AND EXPENDITURE INCURRED THEREFROM UP TO THE END OF 1944-45

Name of Province	Cost of schemes approved upto 31-3-1945 against provincial allocations.	Allocations upto 31st March 1945 in respect of revenue to end of September 1943	Expenditure reported upto 31st March 1945	Balance on 1st April 1945	Probable allocations for 1944-45 in respect of the revenue for the period from Oct. 1943 to September 1944	Unspent balance on 1-4-45 (i.e Col. 5) expressed in terms of No. of years' receipts on the basis of expected receipts in 1944-45
1	2	3	4	5	6	7
GOVERNORS' PROVINCES	Rs. lakhs.	Rs. lakhs.	Rs. lakhs.	Rs. lakhs.	Rs. lakhs.	Rs. lakhs.
Madras	264·60	241·37	183 13	58·24	12·83	4½
Bombay	330·98	312·01	300·63	11·38	26·55	1½
Bengal (E. and W.)	234·17	220·46	195·38	25·08	15·86	1½
United Provinces	109·41	111·31	114·95	3·64	12·59	..
Punjab (E. and W.)	177·65	156·53 + 8·45*	163·89	1·09	17·48	..
Bihar	41·65	60·44	39·61	20·83	8·09	2½
C.P. and Berar	55·80	52·92	52·53	0·39	3·61	..
Assam	39·46	51·99	39·59	12·40	11·22	1
N.-W.F.P.	33·84	30·44 + 3·29*	33·59	0·13	1·47	..
Orissa	4·14	6·25	1·95	4·30	0·68	6½
Sind	42·05	35·98	39·35 -10·03†	6·66	4·74	1½
TOTAL GOVERNORS' PROVINCES	1,333·75	1,279·70 ·73*	1,154·57	136·86	115·12	..
CENTRALLY ADMINISTERED AREAS						
Delhi	21·80	32·09	21·91	10·18	3·70	..
Baluchistan	6·91	12·01	6·68	5·33	1·77	..
Ajmer-Merwara	3·52	4·16	3·30	0·86	0·22	..
Coorg	1·49	1·71	1·33	0·38	0·12	..
N.-W.F.P. Tribal Areas	1·00	1·39	1·00	0·39	0·04	..
Mysore Assigned Tract (Bangalore C. & M. Station)	1·39	1·72	1·72	..	0·15	..
Hyderabad Administered Areas	6·37	10·28	6·26	4·02	1·92	..
C. I. Administered Areas	2·96	3·62	2·89	0·73	0·82	..
Rajputana Administered Areas	0·40	0·40	0·40	..	..	..
Bombay and W. I. Administered Areas	0·12	0·12	0·12	..	..	..
TOTAL CENTRALLY ADMINISTERED AREAS	45·96	67·50	45·61	21·89	8·74	..
Grand Total Governors' Provinces and Centrally Administered Areas	1,379·71	1,358·93	1,200·18	158·75	123·86	..

*Advance allocations to meet excess expenditure will be adjusted against future allocations. † Represents expenditure met from grant of Rs. 11 lakhs from the Reserve in the Central Road Fund.

Provinces	Modern surfaces Bitumen, Cement, etc.	Waterbound Macadam.	Total Metalled.	LOWER TYPES: IV (a) Artificially admixed granular material, etc.	LOWER TYPES: IV (b) Natural soil motorable in fair weather.	LOWER TYPES: IV (c) Natural soil unmotorable.	Total unsurfaced roads.	Grand Total.	Total P.W.D. & M.E.S.	Total local Bodies.
	1	2	3	4	5	6	7	8	9	10
	Mileage	Mileage	Mileage	Mileage	Mileage	Mileage	Mileage	Mileage	Mileage	Mileage
Madras	463	23,257	23,721	5,190	4,424	4,712	14,326	**38,047**	3,215	34,832
Bombay	710	10,334	11,044	4,071	4,338	1,883	10,292	**21,336**	7,159	14,177
Bengal (E. and W.)	1,109	2,554	3,663	384	13,998	10,542	* 24,924	**28,587**	2,059	26,528
United Provinces	1,320	6,715	8,035	41	9,571	14,339	23,951	**31,986**	4,691	27,295
Punjab (E. and W.)	4,983	434	5,417	137	10,000	9,691	19,828	**25,245**	6,127	19,118
Bihar	1,267	2,719	3,986	2,845	15,419	9,246	† 27,510	**† 31,496**	1,283	30,213
C.P. & Berar	399	5,350	5,749	1,940	1,132	..	3,072	**8,821**	7,251	1,570
Assam	455	332	787	1,961	3,408	6,087	11,456	**12,243**	5,630	6,613
N.W.F.P.	1,159	119	1,278	781	1,307	332	2,420	**3,698**	2,682	1,016
Orissa ‡	19	1,984	2,003	869	877	1,126	2,872	**4,875**	1,504	3,371
Sind ‡	143	120	263	308	6,480	4,681	11,469	**11,732**	635	11,097
Total Governors Provinces	12,028	53,918	65,946	18,527	70,954	62,639	152,120	**218,066**	42,236	175,830
Delhi	127	1	128	1	98	..	99	**227**	127	
Baluchistan	523	38	561	1,739	1,044	1,567	4,350	**4,911**	3,861	1,050
Ajmer-Merwara	128	266	394	5	107	87	199	**593**	486	107
Coorg	46	291	337	68	798	1	267	**1,204**	326	878
N.W.F.P. Tribal Areas	289	75	364	549	209	..	758	**1,122**	1,079	43
Total for C.C's Provinces	1,113	671	1,784	2,362	2,256	1,655	6,273	**8,057**	5,879	2,178
Total British India	**13,141**	**54,589**	**67,730**	**20,889**	**73,210**	**64,294**	**158,393**	**226,123**	**48,115**	**178,008**
States	1,980	25,344	27,324	10,431	22,106	10,484	43,021	70,345	70,345	..
Grand Total	15,121	79,933	95,054	31,320	95,316	74,778	201,414	296,468	..	..

* Does not include 66,200 of village roads. (Bengal)
† Does not include 10,000 miles of village roads. (Bihar)
‡ 1938 figures. (Orissa and Sind)

Inland Water-Ways

IN pre-railway days inland navigation was highly developed in the sub-continent. But unfortunately it has not progressed in parallel with rail and road development as it has done in other countries like France or Germany or the U.S.A. There are several reasons for this but the most important single reason is the lack of a co-ordinating authority to maintain the water-ways and provide the appropriate navigation facilities. There is no question that the provision of navigable conditions on the water-ways is essential if we want to induce industrial and agricultural traffic to use the quickest and cheapest form of transport for heavy goods and bulk cargoes from the interior to the ports, both for internal distribution and export to world markets.

If we consider conditions in the old days on the main water-ways of India and Pakistan we find that the Indus was navigable from the sea to Attock, a distance of about 1,000 miles, the Chenab as far as Wazirabad, 800 miles, and the Sutlej as far as Ludhiana, 800 miles. The Ganges was navigable up to Kanpur as late as 50 years ago, and only a hundred years ago the Jumna was navigable as far as Agra. All these rivers are unnavigable today. Navigation on the Indus and other Punjab rivers is restricted to short distances up and down stream of the Sukkur Barrage and steamers seldom ply on the Ganges up-stream of Patna.

There are, of course, parts of the sub-continent where canal navigation is still active. In the Madras Presidency for instance, the Godavari Canals, including the Dummagudan Canal, the Kistna Canals, the Buckingham Canal, the Kurnool-Cudappah Canal, the West-Coast Canals and the Vedaranniyam Canals are important high-ways for water-borne traffic. The Godavari and Kistna Deltas are indeed the chief means of transport in that region and afford a cheap and ready mode of access to all markets. The Buckingham Canal has played an important part in the trade of the country traversed by it, and in particular during the last war when the traffic was heavy it afforded considerable relief to railways. On the West Coast the water-ways form the chief means of communication and transport in the interior of the country. In Orissa, too, there are some 250 miles of navigable canal in constant use.

Then there are the important water-ways of Bengal, East and West. The records of imports and exports into and from Calcutta show the extent to which the largest sea-port in India depends upon its water-way communications. Dealing first with imports, about 25 per cent. of the merchandise which flows into Calcutta from the rest of India is water-borne of which no less than 63 per cent. comes from Assam. As regards exports from Calcutta about 32 per cent. is carried by water and of this 72 per cent. goes to Assam. The total inland water-borne traffic of Calcutta amounts to approximately 45,00,000 tons of which 34 per cent. is carried by inland steamers and 66 per cent. by country boats. In 1945, 1,04,00,000 passengers were carried by steamer service in East and West Bengal.

Altogether it has been estimated that the amount of boat traffic over Government maintained channels is in the neighbourhood of 250 mln. ton-miles per annum. But this figure works out to little more than one per cent of the pre-war goods traffic by railway It is therefore obvious that as matter stand to-day inland water transport from an insignificant proportion of the nation's transport services. This becomes doubly clear when we consider the tremendous scope for expansion which still exists for the water-borne traffic of the sub continent. The total length of water-ways in India and Pakistan which afford perennial flow amounts to about 25,000 miles comprising 10,000 miles of rivers and 15,000 miles of canals. Of the former, as many as 6,000 miles are navigable to a minimum of about three feet draught and of these again about 5,000 miles are in the north-east of India comprising the Provinces of old Bengal and Assam. The canals are mostly for irrigation but is estimated that about 4,000 miles would be suitable for power-driven craft, and the remaining 11,000 could be utilized for boat traffic.

THE FUTURE

The question of improving India's natural water-ways is receiving close attention of the local Governments, and the Central Water-ways Irrigation and Navigation Commission is endeavouring to co-ordinate these efforts on a country-wide as well as multi-purpose basis It is deplorable that in some areas navigation has been completely neglected for the over ruling benefits of irrigation. Possible extension of navigation can only obtain fruition by consideration of the multi-purpose use of our water wealth on a regional basis irrespective of political boundaries.

Conservation of water resources on a multi purpose basis offers the following potential new navigable water-ways, or the resuscitation of old ones :—

i. **Bengal (East and West)**

a. A new canal to connect the coal-fields of Bengal and Bihar with the port of Calcutta.

b. Resuscitation of the Bhagirathi route to the Ganges.

c. Resuscitation of the inner boat route connecting Calcutta to East Bengal to shorten the existing route by 50 per cent.

d. Resuscitation of the river routes to North Bengal as visualized in the Tista Valley Project.

e. Resuscitation of the old Brahmaputra and Dhalleshwari Rivers in the Dacca and Mymensingh Districts.

ii. **Assam**

Resuscitation of the Dihing, Dihu, Dhansiri and Kalung Rivers in Upper Assam.

iii. **Bihar**

a. Resuscitation of the Gandak and Kosi series of rivers.

b. Extension of navigation on the Son River for about 150 miles as visualized in the Sone Valley Project.

iv. **United Provinces and Central India**

a. Resuscitation of the Gogra River which would afford navigation facilities up to Fyzabad as in former days.

b. Flood control on the Betwa and Chambal rivers holds promise of ample discharge in the dry season, to permit navigation on the Jumna from Ettawa to Allahabad, and on to Calcutta via the Ganges.

v. **Central Provinces**

The Narbada and Tapti pass through the Central Provinces and a number of States before they join the Arabian Sea in the Bombay Presidency. Investigations are in progress to assess the value of these rivers for multi purpose development including navigation.

vi. **Madra**

Possible development of the Godavari, Pranhita, Wardha, and Wainganga rivers suggest other main lines of communication and taking into consideration the possible development of the Tapti river it may be found practicable to obtain a transcontinental line by connecting the Wardha and Tapti rivers.

vii. **Orissa**

a. The Orissa coastal canal between the Hooghly and Dhamra rivers, together with an extension of the Mahanadi delta system to link with the Madras Canal system would afford inland navigation from Assam to Madras.

b. The Mahanadi Project visualizes the provision of navigational facility on the Mahanadi river to Sambalpur about 300 miles from the sea.

viii. **East Punjab, West Punjab, Sind**

Resuscitation of the rivers Indus, Chenab and Sutlej would restore 2,600 miles of river communication to their former navigability, but the interests of established irrigation may stand in the way of reviving these communications to any extent.

Ports

BOMBAY

THE Port of Bombay is over 75 square miles in extent and is a comparatively modern creation. The decision of Government to constitute a Trust to administer the affairs of the Port originated in the apprehension of Government that the interests of trade were being seriously endangered by the monopoly of landing and shipping facilities being acquired by private companies holding large tracts of foreshore land, most notably the Elphinstone Land and Press Company, which was accordingly purchased by Government in the year 1869 and placed in the hands of a public trust.

During the first few years of its existence, however, the Board was faced with increasing deficits owing to competition from private wharff-owners holding the remainder of the foreshore land. The rights of these private wharff-owners were also, therefore, acquired by Government and vested in the Board in 1879, since when the Port of Bombay has been progressively developed and expanded.

The Board consists of a whole-time Chairman appointed by Government, and twenty-one members, of whom five are elected by the Bombay Chamber of Commerce, five by the Indian Marchants' Chamber, two by the Bombay Municipality, one by the Millowners' Association and the remaining eight, which include one representative of labour, are nominated by Government.

The entire administration of harbour conservancy and lighting, pilotage, docks, bunders, railway and land estates is vested in this Board and is subject to the provisions of the Bombay Port Trust Act, 1879.

HARBOUR

Bounded on the north and east by the mainland of India and on the west by a narrow peninsula which forms a natural break-water, the harbour is naturally protected from the violence of the south-west monsoon and provides secure and ample shelter for shipping at all seasons of the year. It is about 12 miles long, 4 to 6 miles wide with a minimum of 32 feet at low water in the entrance fairway. Spring rise above datum is 14 feet 1 inch and the range between mean low and mean high water spring tides is 11 feet 6 inches so that the Port is well-endowed by Nature to accommodate deep-draft shipping.

The Port and its approaches are well-lighted, being served by the Prongs, Kennery and Sunk Rock Light Houses, an unattended Floating Light Vessel, the South Entrance and Prongs Reef Light Buoys, and other subsidiary lights, the more important of which are the Dolphin Rock and Tucker Beacon Lights. The first two light-houses are directly connected by wireless with the Pilot Vessels and the Port Signal Station on the tower of Ballard Pier, while the Wireless Beacon installed on Kennery Island enables ships fitted with direction-finding gear to take bearings from its signals when approaching Bombay.

PASSENGER FACILITIES

Trans-oceanic passenger traffic is mostly dealt with at the Ballard Pier Station. Coastal and Harbour Passenger traffic is dealt with at the New Ferry Wharf.

The total number of overseas passengers embarking and disembarking at Bombay in 1946-47 exceeded 110,000 while the number of passengers carried by the coastal and ferry services was over 1,700,000.

WET DOCKS

There are three wet docks, the main features of which are as follows :—

Name and date of completion	Width of entrance	Maximum available depth on sill at M.H.W.N.	Water area	Lineal feet quayage	Number of Berths
Prince's Dock (1880) ..	66'-0"	24'-9"	30 acres	6,910	9
Victoria Dock (1888) ..	80'-0"	26'-9"	25 ,,	7,805	13
Alexandra Dock 1914 ..	100'-0"	33'-9"	49½ ,,	16,055	20 (plus 6 berths for ferry steamers.)

Movement into and from Alexandra Dock is not restricted, ships being able to pass through an entrance lock 750'-0" by 100'-0" at all states of the tide.

The Victoria and Prince's Docks are connected by a communication passage. These Docks which were affected by the fires and explosions of April 1944 are in the course of reconstruction and are being provided with modern transit sheds.

The three Docks together have a water area of 105 acres and about 6 miles of quayage; extensive open storage and shed and warehouse accommodation for the reception and storage of goods, exists.

DRY DOCKS

The main features of the two Dry Docks are as follows :—

Name of Dry Dock and date of completion	Length	Width	Depth on sill at mean high water neaps	Remarks
Hughes Dry Dock (1914).	1000'-0"	100'-0"	32'-9"	Divisible into two compartments so that 2 ships can be accommodated at a time.
Merewether Dry Dock (1891).	525'-0"	65½'-0"	24'-9"	....

Bunders and Timber Ponds.—Beyond the Docks are the "bunders" or open wharves and basins, where coasting and country craft traffic and overside cargo from the Docks and stream are handled. These bunders have an aggregate quayage of nearly 5 miles and are equipped with cranes, sheds and other facilities for loading, unloading and storing cargo, but the labour for handling cargo at the bunders is not provided by the Port Trust and so the wharfage charges are much lower than in the Docks.

The bunder traffic is an important item in the trade of the Port, over 12½ lakhs tons or roughly one-fourth of the total tonnage of the Port being handled annually over the bunder-wharves.

Adjoining the bunders are the Timber Ponds covering an area of over 60 acres, where every facility for storage and handling of timber is provided.

Bulk Oil Depots.—There are three groups of bulk oil installations, one each for liquid fuel and lubricating oil, kerosene oil, and petrol, all on land, aggregating 83 acres in extent, leased by the Port Trust.

Ample storage space is available within the Port area for grain (80 acres), cotton (127 acres, 1,000,000 bales), and manganese ore (30 acres, 300,000 tons). Large areas have also been reserved for the landing and storage of other commodities such as Coal, Bricks and Tiles, Building Stones and Iron.

PORT TRUST RAILWAY

The Port maintains its own railway system which handles nearly 50 per cent of the rail-borne goods traffic of Bombay. Its yearly traffic to and from the trunk Railways amounts to over 2,000,000 tons, and its local station-to-station traffic is approximately the same in volume. The principal commodities carried are cotton, grain and seeds, oil cake, manganese ore, sugar, kerosene and other bulk oils, coal, charcoal and china clay.

Though only 7¼ miles in actual length, it comprises nearly 120 miles of main lines and sidings all directly linked with the inter-railway exchange yard at Wadala, the various storage depots and the Docks and Wharves.

REVENUE AND EXPENDITURE FOR THE YEAR 1946-47

——	General Account	Pilotage Account	Special Receipts or Special Expenditure
Revenue	4,68,15,722	6,26,652	53,61,204
Expenditure	3,89,13,858	9,11,662	53,61,204
Surplus	74,01,863	....	....
Deficit	....	2,85,011	....

STATISTICS SHOWING CARGO HANDLED DURING THE PERIOD
1937-38 to 1946-47

Year	Imports	Exports	Total
	Tons	Tons	Tons
1937-38	3,190,000	1,877,000	5,067,000
1938-39	3,209,000	1,837,000	5,096,000
1939-40	3,350,000	1,975,000	5,325,000
1940-41	2,849,000	2,184,000	5,033,000
1941-42	3,244,000	2,895,000	6,139,000
1942-43	3,521,000	2,835,000	6,356,000
1943-44	4,437,000	2,189,000	6,626,000
1944-45	4,573,000	1,595,000	6,168,000
1945-46	4,548,000	1,902,000	6,450,000
1946-47	3,776,000	1,499,000	5,275,000

Statistics showing the volume of shipping handled during the period 1937-38 to 1946-47.

Year	No. of vessels entered docks and berthed at Harbour Walls	Net registered Tonnage
1937-38 ..	1,866	5,001,521
1938-39 ..	1,862	5,041,888
1939-40 ..	1,797	5,200,545
1940-41 ..	1,579	5,143,010
1941-42 ..	1,877	6,098,905
1942-43 ..	2,343	6,654,964
1943-44 ..	2,137	6,451,200
1944-45 ..	1,631	5,268,719
1945-46 ..	2,247	6,510,343
1946-47 ..	1,671	5,226,808

BOARD OF TRUSTEES

Nominated by Government : Chairman, V. S. Bhide, I.C.S., *Brigadier F. J. Dillon, O.B.E., M.C., Commodore H. R. Inigo-Jones, C.I.E., R.N., K. G. Jacob, W. Hood, O.B.E., N. S. Sen, M.Inst.T., A. H. Mirza, J. S. Bharucha, B. K. Patel, I.C.S.

Elected by the Bombay Chamber of Commerce : R. W. Bullock, C. J. Damala, A. D. Finney, C. W. Warrington, V. F. Noel-Paton.

Elected by the Indian Merchants' Chamber : M. A. Master, Sir Behram Karanjia, Ramdas Kilachand, J. C. Setalvad, Madanmohan R. Ruia.

Elected by the Municipal Corporation : †Madhavlal M. Bhatt, †P. M. Chinai.

Elected by the Millowners' Association : Krishnaraj Madhavjee Damodar Thackersey.

* Resigned; Nomination of a new Trustee by the Government is awaited.
† Resigned; Election of a new Trustees by the Corporation is awaited.

ADMINISTRATION

Secretary, A. S. Bakre.
Deputy Secretary, E. H. Simoes.
Chief Accountant, C. F. Lynn.
Deputy Chief Accountant, V. D. Jog (on deputation).
Deputy Chief Accountant, O. V. B. Hyde. (Ag.).
Chief Engineer, F. M. Surveyor.
Deputy Chief Engineer, P. E. Golvala.
Docks Manager, F. Seymour-Williams.
Deputy Docks Manager, G. K. Dukes, V. Vaz, Shaik A. K. M. Jafar, V. A. Kashikar.
Railway Manager, H. A. Gaydon.
Deputy Manager, Operation, P. M. Boyce.
Deputy Manager, Commercial, M. E. A. Kizilbash.
Deputy Conservator, R. C. Vint.
Harbour Master, H. W. L. T. Davies.
Manager: Land and Bunders Department, H. G. Doshi.
Deputy Manager, E. M. Bhacka.
Controller of Stores, R. C. Master.
Chief Medical Officer, Dr. M. L. Mistry.
Health Officer, Dr. A. J. Mhatre.
Labour Welfare Officer, Batuk H. Mehta.
Legal Adviser, S. D. Nariman.

CALCUTTA

Calcutta, the principal port in India is situated on the left bank of the River Hooghly which is formed by the uniting of three offtakes from the parent River Ganga. The port is about 80 miles from the mouth of the river and 126 miles from the Western Channel Light Vessel at Sandheads. Calcutta is both a receiving and distributing centre for Assam and the northern and central parts of the sub-continent. It is fed by products brought by a network of railways as well as by the water-borne traffic of the Ganga and Brahmaputra Rivers.

The River Hooghly is subject to strong tides and sudden alterations in the depths on the bars and pilotage is compulsory. To compensate for these sudden changes the Commissioners maintain a permanent River Survey Service and in addition to the daily publication of charts, maintain Tidal Semaphores and Track Boards to indicate the latest depths available. The bars are sounded to the nearest 3 inches and the pilots allot draughts to the same limit. Pilots board the vessels at the Sandheads from the Pilot Brigs which are fitted with W/T and D.F. gear. The largest vessel to enter the Port was 16,600 tons gross tonnage but the normal limit is 520 feet in length and 25-29 feet draught at spring tides depending on the time of year.

Navigation for small craft is not difficult as the channel is well marked but ignorance of the local rules may cause grave danger to seagoing vessels using the channel. Arrangements have been made by which small naval craft navigate from Sandheads to Diamond Harbour without a pilot but above that point all ships over 100 tons must have pilots. Approaches to the river can be mined.

Anchorages are available at Saugor Roads, Haldia, Kalpi, Diamond Harbour, Ulubaria and Garden Reach of which Haldia, Ulubaria and Garden Reach are available only for ships on passage to and from the Port or in emergency.

In the Port ships lie to moorings when in the stream or alongside jetties with cables forward and aft. The largest man-of-war so far accepted in the Port has been 10,000-ton cruiser class and one berth is available for this class of ship. No experience has been gained by holding these ships during bore tides and it is considered that this would entail considerable risk.

Accommodation in the docks is not suitable for passenger ships as sanitary arrangements are provided for lascar crews only. Special arrangements can be made if notice of arrival is given.

Quayage and Docks.—The Kidderpore Docks and the King George's Dock are the two important docks in the Harbour. The former consist of Nos. 1 and 2 Docks and Turning Basin. There is a lock entrance 580 feet long by 80 feet wide from the river which gives access to the Dock system. Dock No. 1 is 2,700 feet in length by 600 feet wide, with a depth of 30 feet of water and has twelve berths serving single-storey cargo sheds. Dock No. 2 has a length of 4,500 feet by 400 feet and also provides a depth of 30 feet of water. It has five general berths serving double storey sheds and five coal berths. In addition three new general berths totalling 1,880 feet in length with a depth of water of 30 feet have been completed in Dock No. 2; the berths serve single storey transit sheds. One new coal berth and horse jetty in Kidderpore Dock No. 2, 488'-6" in length with a depth of water of 35'-0" has also been added.

King George's Dock comprises a lock entrance 700 feet long by 90 feet wide, five import berths, one export berth, a berth for the discharge of non-dangerous petroleum in bulk which is also equipped with 2 cranes of 2-ton capacity each and which can be used as a laying up berth. Three of the import berths are served by three storey sheds, two import berths by single-storey sheds, and the export berth by a two-storey shed. Each berth is 600 feet long and can accommodate vessels drawing up to 30 feet of water. The petroleum berth is 600 feet long. One laying up berth 500 feet long with a depth of water of 17 feet is provided. Three lighter berths, total length 900 feet with a depth of water of 8 feet, are situated on the South Bank and these berths are complete and in use. One heavy lift berth for Lighter 400 feet long with a depth of water of 7 feet is close by.

The River entrance to the Dry Docks has been permanently closed by the construction of a wall of steel sheet piling at the river end of the Dock. This permits removal of the caisson and increase the effective length of Dock No. 2 to 680 ft.

Five dry docks, owned by the Port Commissioners, are available for the use of shipping, three in Kidderpore Docks and two in King George's Dock. In the Kidderpore Dry Docks one 4-ton crane is located between Nos. 1 and 3 Dry Docks. Breakdown cranes of 15 tons capacity can be brought close to No. 2 Dry Dock. A five ton crane is available at 13 Berth for lifting material ashore on to trucks for use by No. 2 Dry Dock, and in the King George's Dry Docks four 3-ton cranes are available two on each side of the dry docks.

Jetties.—The Garden Reach Jetties consist of a coaling jetty for ships up to 460 feet in length and four jetties for ships up to 600 feet

the transit sheds are double storey. One jetty is at present unusable owing to a sunken vessel lying close to the quay face. Calcutta Jetties are situated on the riverside below Howrah Bridge. There are nine jetties with a total length of 4,735 feet, but only seven of them are available for ocean-going steamers, one berth is used for loading lighters and country flats and one berth is used as a workshop by the Commissioners' Engineering Department. The depth of water available below M.L.W.S.T. varies according to the season of the year.

Petroleum Wharves at Budge Budge are situated some 14 miles below the entrances to the docks. There are five pontoon jetties for ocean-going vessels and one for flats and barges at which non-dangerous petroleum and its products are discharged. Of the five pontoon jetties, one is reserved for the discharge of dangerous petroleum.

Warehouses.—The floor area of covered space under control of the Calcutta Port Commissioners is approximately: Transit Sheds 3,997,000 sq. ft.; Warehouses 2,840,000 sq. ft.; under construction Transit Sheds 77,000 sq. ft.

Coal.—There are at present six coaling berths at Kidderpore Dock No. 2 and one at Garden Reach Jetty. Two of the Dock berths are fitted with mechanical coal loading gear. One additional coal loading berth is at present under construction in Kidderpore Docks for manual loading, the completion date for this berth is 1st April 1945. The rate of supply to ships is 1,500 to 2,000 tons per day at the Labour Berths and 4,000 tons per day and night at the Mechanical Berths. At Garden Reach Jetties, 4,000 tons per day and night.

Water Supply.—Drinking water is supplied in the stream and in Kidderpore Docks, King George's Dock and at Jetties in the river. Ten crafts are available for supply of water to ships. Direct supplies from quays and jetties where hydrants are available are controlled by the Port Commissioners or the Calcutta Corporation. These supplies are obtained partly from Corporation mains but largely from tube wells recently constructed in the Dock Area and operated by the Commissioners.

Unfiltered water is supplied to ships in Kidderpore Docks, G. R. Jetties and at "B" Berth, King George's Dock at the rate of 18 tons per hour. Ships at Kidderpore Docks, King George's Dock and G. R. Jetties wanting unfiltered water for boiler use, pump it from the dock or the river with their own pumps, the rate of pumping depending on the capacity of the vessels' pumps.

Overall Capacity of Port.—The average daily deadweight tonnage, for the month of February 1945, of all import cargo discharged in the Port of Calcutta was 14,700, average daily export tonnage for the same period was 9,900. These figures can be taken as representing the average capacity of the port in a peak month. Coal exports for this period were appreciably below pre-war figures for other types of cargo were correspondingly higher. The maximum tonnage for both imports and exports on any one day during February 1945 was 30,000.

The Port is administered by a Port Commission with jurisdiction under the Calcutta Port Act, from Buj Buj to Konnagar and under Indian Ports Act from Sandheads to Kalna about 56 miles above Calcutta.

Commissioners for the Port of Calcutta.—N. M. Ayyar, C.I.E., I.C.S., *Chairman*; S. L. Dass, *Deputy Chairman*.

Elected by the Bengal Chamber of Commerce.—A. T. Orr Deas, J. F. Elton, H. D. Cumberbatch, A. J. Elkins, C.B.E., J. Morshead, N. Brodie. *Elected by the Calcutta Trades Associations:*—C. Ortner; *Elected by the Bengal National Chamber of Commerce.*—Dr. S. B. Dutt, Bar-at-Law, S. M. Bose; *Elected by the Indian Chamber of Commerce.*—G. L. Mehta; *Elected by the Muslim Chamber of Commerce.*—Noor Mohamed Elias; *Elected by the Municipal Corporation of Calcutta.*—Purnendu Sekhar Basu; *Nominated by the Government.*—Commander (E) A. B. Collins, R.I.N., Khan Bahadur G. Faruque, C.I.E., O.B.E., T. H. Morris, O.B.E., S. C. Satyawadi.

Principal Officers—*Secretary.*—P. C. Mitter; *Traffic Manager.*—K. Mitter, O.B.E.; *Chief Accountant.*—A. J. Rose, A.C.R.A.; *Chief Engineer.* J. B. Murray, M. Inst., C.E.; *Controller of Stores.*—R. A. Delahanty; *Chief Mechanical Engineer.*—N. M. Irvine, B.Sc., M. Mech. E; *Deputy Conservator.*—Lt.-Comdr. E. L. Pawsey, R.N. (Retd.); *Medical Officer.*—Lt.-Col. F. J. Anderson, M.C., C.I.E., M.B.B.S., F.R.C.S., I.M.S. (Retd.); *Consulting Engineers and London Agents.*—Messrs. Rendel Palmer & Tritton.

COCHIN

The Port of Cochin, one of the six major ports in India, is a natural Harbour lying on the direct route to Australia and the Far East from Europe. It is open for deep-water traffic in the worst monsoons and provides a splendid anchorage at all times of the year. Any ship passing through the Suez Canal can enter the port even in the roughest weather. It has a strategic importance in South East Asia. It serves a vast hinterland of industrial planting areas comprising the States of Cochin and Travancore and the Southern districts of the Madras Province. Foreign and coastal steamer lines touch the Port regularly and Cochin is the passenger port for the United Kingdom, etc., in South India.

The Port consists of an area of 120 sq. miles of sheltered backwaters behind an opening 400 yards wide. Partly in Indian Dominion and partly in Cochin in State, its location is lat. 9° 58' and long. 76° 14" E.

A Broad gauge railway connects the Port through the Cochin State and S. I. Rlys. to all the main cities in India. Willingdon Island aerodrome situated in Port area is a place of halt for Air India Service between Madras and Trivandrum.

The development of the harbour involved the cutting of a passage through the bar which blocked the entrance from the sea to an extensive backwater. The first cut through the bar of a wide and deep channel was made in 1928. The entrance channel is 450 ft. wide and about 3 miles long, buoyed on both sides according to regulations. The activities of the Port are mainly centred in Willingdon Island which has been

reclaimed in the back-waters by dredged soil from the inner channels. Since 1930 the harbour has been in regular use. A powerful tug has been provided for the convenience of shipping. A hotel on modern lines run by Spencer & Co. has been constructed by the Port to provide accommodation for passengers and other visitors to the Port.

Inside the harbour there are eighteen fore and aft berths, one swinging berth, one passenger berth and three warf berths. 12 level luffing wharf cranes have been provided at the wharf berths, capable of lifting weights upto 3 and 10 tons. A floating crane for lifts upto 30 tons is also available. Sailing craft are moored with their own gear in a separate anchorage. One ware-house and eight sheds in Willingdon Island are available for storage of goods. There are three sheds at the main wharf for the handling of goods in transit. Vessels are brought into or taken out of harbour at practically any state of tide, day or night. There is a boat wharf with one 5-ton and three 2-ton hand cranes. There is a dry dock 240 ft. long and 44 ft. wide, suitable for vessels of less than 14½ ft. draft but this is mainly intended for docking craft close to the dry dock and there is fitting out wharf alongside, 300 ft. long with 11 ft. depth of water at L.W. Bunker coal, Diesel and fuel oil are available, Fresh water from tank barge is supplied at the rate of Rs. 1-8-0 per ton during day, night or holiday, with a minimum of Rs. 30-0-0 per vessel per day delivered on board.

The principal imports are foodgrains, mineral oils, coal, piece goods, hardware, metals and provisions.

The principal exports are coir and coir products, tea, rubber, cashew kernels, ginger, pepper and spices.

STATISTICS SHOWING THE GROWTH OF THE PORT FROM 1943-44 TO 1945-46

Year	Imports	Exports	Total
	Tons	Tons	Tons
1943–44 ..	89,339	82,177	1,71,516
1944–45 ..	2,26,118	71,257	2,97,375
1945–46 ..	3,80,564	1,11,991	4,92,555

The affairs of the Port are under the administrative control of the Ministry of Transport of the Government of India and under the immediate control of the Administrative Officer and Chief Engineer appointed by that Government and advised by an Advisory Committee representing the Governments of India, Cochin and Travancore, the local Chambers of Commerce and Municipalities.

Administrative Officer and Chief Engineer.—A. G. Milne, C.I.E., M.Inst.C.E., M.I.Mech.E.; *Executive Engineer.*—Rao Sahib V. Srinivasan, B.A.,B.E., A.M.Inst.C.E.; *Port Officer.*—H. G. Fletcher, J.P.; *Harbour Master.*—B Brook; *Traffic Manager.*—Topen Bhose, B.A.; *Chief Accountant.*—A. N. Ayyaswami, M.A.; *Port Health Officer.*—Dr. B. Gopalakrishna Prabhu, L.M.S., B.Sc., D.T.M.(Cal.); *Mechanical Superintendent.*—R. Bazely.

KARACHI

LIGHTHOUSE on Manora Point is in Latitude 24° 47′ 37″ N.; long. 66° 58′ 36″ E.

Accommodation.—Entrance channel High Water Spring Tides 38½ ft., at mean neaps 35 ft. 11 in. Vessels drawing 30 ft. can enter port during monsoon season; but Dy. Conservator may allow vessels of deeper draft to enter at discretion. During fair season vessels drawing 31 ft. to 32 ft. can enter or leave at 8 ft. tide.

Steamer wharves can accommodate three steamers of 375 ft., with 32 ft. dft., and one of 600 ft., with 34 ft. dft., nine steamers of 550 ft., two of 500 ft., one of 470 ft., three of 450 ft., one of 400 ft., and one of 430 ft., with 26 to 29 ft. of water alongside and one of 325 ft. with 18 ft. dft.

There are eleven electric cranes of 2 tons, five electric cranes of 3 tons, one steam Derrick Crane of 5 tons; eighty-nine hydraulic cranes of 35 cwt., four of 30 cwt., one of 30 tons on the wharves and one 30-ton Floating Crane self propelled.

Boat Basin, at the south end of the wharves, contains the Commissariat Wharf length of quayage, 150 ft.; depth at High water 17½ ft.; low water 8 ft.; One 30-cwt. hydraulic crane; the Passenger Landing Pier (length of quayage 450 ft.; depth at high water 16 ft. low water 16½ dft.).

The Railway Wharf—length of quayage, 800 ft.; depth at high water 19½ ft. low water 10 ft. Three 30-cwt. hydraulic cranes.

Bulk oil Pier lies south of the Boat Basin; length of the quayage 403 ft.; vessels 550 ft. can be berthed alongside; depth of low water 31 ft. Pipes are laid down from the pier to the oil installations, which are in the immediate neighbourhood. Liquid fuel pipes and connections are available from the Return Wharf and berths 1 to 11 of the Keamari wharves and are connected to the oil installations, permitting two ships to be bunkered with oil fuel simultaneously, or one ship being bunkered and one tanker discharging simultaneously, in addition to the service from the oil pier. A liquid fuel barge with a capacity of 450 tons is also available for bunkering and discharging ships at other berths and in the stream.

At the North-east end of the harbour are the Juna Bundar (length of quayage 1,235 ft.; depth at high water 17½ to 22½ ft.; low water 8 to 13 ft.), with five hydraulic cranes of 35 cwt.; one of 30 cwt.; one stationary hydraulic crane of 14 tons, one fixed 14 ton Hydraulic crane and the Napier Mole Boat Wharf (length of quayage, 1,824 ft.; depth at high water 21½ ft.; low water 12 ft.), with three hand cranes of 1-ton each. Five lightering piers and two lightering berths of 377 ft. and 519 ft. length and depth at low water of 6 to 10 ft. and at high water of 14½ and 18½ ft.; with one fixed 25-ton electric derrick crane at the shorter berth, for landing and shipping stores.

The Heavy Lift Pier north of ship wharves accommodation barges, at High Water 15 ft., at low water 5½ ft. One hydraulic crane of 10 tons. One ship repairing berth with a length of 300 ft. between dolphins and depth of 16 ft. and 25½ ft. at low water and high water respectively.

Seaplane Port at the West Wharf Reclamation with a slipway for the flying boats in connection with the Empire airmail service and a jetty for the landing and shipping of mails, general merchandise and passengers' luggage (not in use). Harbour moorings; five swinging moorings with a draft of 24 ft., and thirteen fixed moorings

for vessels of 500 to 600 ft., of which two are with a draft of 17 to 23 ft., four of 32 ft., and seven of 27 to 28 ft.

Dry dock, length on blocks, 236½ ft.; breadth at entrance 50 ft.; depth on sill at High Water Ordinary Spring Tides 12½ ft. Coaling performed at the wharves and from lighters.

Cargoes are discharged into and loaded from railway wagons at the steamer wharves on the east side. On the west side cargo is loaded from and discharged into both railway wagons and transit sheds.

Charges.—Port dues on sea-going vessels on entering the port, 2 annas per net registered ton once in the same month (month reckoned from the first day (inclusive) of one month to the first (exclusive) of the next month, or from the second day (inclusive) of one month to the second day (inclusive) of the next, and so on. Moorings fixed or swinging Re. 1 per day, or part thereof, per 100 tons net registered or part thereof, with a minimum charge of (a) Rs. 40 for the period of stay of every vessel under 1,500 tons, (b) Rs. 20 per day or part of a day for every vessel of 1,500 tons and over, with maximum Rs. 40. Berthing fees Rs. 1-8-0 per day or part thereof, per 100 tons net registered or part thereof (1) with a minimum charge of Rs. 40 for the period of stay of every vessel under 1,500 tons, (2) maximum charge of Rs. 40 per day, or part of a day, for every vessel of 1,500 tons and over. Additional charges of Rs. 10 per hour or part of an hour, and Rs. 50 for every 24 hours, or part thereof for use of pipelines, are payable by vessels bunkering and discharging petroleum respectively. Water supplied to vessels in the stream at Rs. 7-6-0 per 1,000 gallons, and to vessels at the wharves at Rs. 4-6-0 per 1,000 gallons.

Pilotage.—Charge on sea-going vessels of 200 tons net reg. and upwards. Fair season, 300 tons and under Rs. 35; monsoon season (15th May to 30th September), Rs. 52-8-0. For every additional 100 tons, or part thereof, Rs. 4. Pilots board incoming vessels day or night about 2 miles off breakwater. For services of a tug for assisting in berthing or unberthing, Rs. 75.

Towage.—In or out, 3 annas per net reg. ton. Sailing vessels when towed in or out are charged half pilotage. Vessels not under stream towed from one part of the port to another: for use of one tug, Rs. 100, for every additional tug, Rs. 75. From 1st May to 30th September towage is compulsory for vessels leaving the wharves; charge Rs. 75. From 1st May to 30th September towage is N.C. in the case of vessels of 1,000 tons and under, and in case of vessels using the west wharf, but if a tug is used a charge of Rs. 50 is levied in the case of vessels of 1,000 tons and under; Rs. 75 for vessels over 1,000 tons.

The principal commodities imported and exported through the Port of Karachi are as under:—

Imports.—Coal, Iron & Steel, Kerosene Oil, Liquid Fuel, Petrol, Sugar, Textiles, Machinery, Vehicles and Liquors.

Exports.—Bones, Cotton Raw, Flour, Grams, Hides & Skins, Oil Seeds, Wheat, Wool, Cement, Rice.

The income and expenditure for financial year ending 31st March 1947 was Rs. 1,14,85,176 and Rs. 1,27,56,982 respectively.

STATISTICS SHOWING THE GROWTH OF THE PORT FROM 1942-43 TO 1946-47

Year.	Imports	Exports	Total
	Rs.	Rs.	Rs.
1942–43	14,38,34,999	13,31,03,735	27,69,38,734
1943–44	9,65,20,982	18,60,94,566	28,26,15,548
1944–45	20,29,43,563	25,50,08,512	45,79,52,675
1945–46	22,28,33,635	33,69,41,613	55,97,75,248
1946–47	28,21,68,099	37,23,53,100	65,47,21,197

TRUSTEES

Chairman.—Amin-ud-din, I.C.S.

Vice-Chairman (Elected by the Board).—H. K. C. Hare (Ralli Brothers Ltd.) (Elected by the Karachi Chamber of Commerce).

Appointed by Government.—Divisional Superintendent, N. W. Railway, Karachi; Principal Officer, Mercantile Marine Department, Karachi District; Commander, Karachi Sub-Area; Collector of Customs; *Labour representative appointed by Government.*—Kazi Mujtaba, M.L.A.

Elected by the Karachi Chamber of Commerce.—G. O. Pike, J.P. (Messrs. Burmah Shell Oil & Storage Distributing Co. of India Ltd.); B. R. Graham (Messrs, Anchor Line, Ltd.); G. D. Longhurst (Messrs. Mackinnon Mackenzie & Co.).

Elected by the Indian Merchants' Association.—Lala Jagannath Ralaram Tondon, B.Sc., J.P. (R.B. Ralaram Jagannath); Dwarkadas Tekchand, B.Sc., LL.B. (Messrs. Menghraj Newandaram).

Elected by the Buyers' and Shippers' Chamber.—Haridas Lalji, M.L.A.; Navinchandra T. Khandwalla (Bombay Steam Navigation Co., Ltd.).

Elected by the Municipal Corporation of Karachi.—Doongermal B. Fatnani, J.P. (Messrs. Murlimal Santaram & Co.).

Principal Officers of The Port.—*Chief Engineer.*—E. L. Everatt, M.I., C.E., M.I.Mech.E.; *Traffic Manager.*—M. A. Raymond, M.A., (Cantab.) Bar-at-Law; *Chief Accountant.*—P. C. Jaidka, B. com. (Birm.) A.C.A.; *Dy. Conservator.*—Capt. R. R. Caws. (R.I.N.) (Rtd.); *Secretary.*—N. M. Dhalla, B.A., F.C.C.S. (London); *Chief Storekeeper.*—C. J. T. Rozario; *Labour Welfare Officer.*—Iqbal A. Qureshi, B.A.

MADRAS

The Madras Harbour is an artificial one formed by two arms projecting from a low, sandy coast. There is a lighter fleet consisting of 57 crafts which include licensed and unlicensed crafts owned by firms and others. Two tugs are available for assisting vessels and two for towing the lighter fleet. Loading and discharging by means of lighters are effected on a frontage of about 5/8 of a mile partly ferro concrete wharves and partly at the West Quay equipped with steam, electric and hydraulic cranes. There are about 8.2 acres of transit shedding alongside the quays for the accommodation of all types of cargo and also 9.6 acres of warehouses for lease to exporters or importers. There is a slipway for the repairs of small craft up to 900 tons. Ships get their water alongside the quays or from water boats. Large passenger vessels habitually use the quays which have direct railway connection with the neighbouring railways. Coal for bunkers and oil fuel are always available.

The affairs of the Port are administered by a Board of Trustees which operates under the Madras Port Trust Act.

The Port is about 3/5 mile square (excluding Boat Basin, etc.) with an area of approximately 200 acres.

There is accommodation for 18 vessels inside the harbour, 9 at Moorings and 9 at Quays. The depth at moorings ranges from 30 ft. to 31 ft. 6" and at quays from 26 ft. to 30 ft. Pilotage is compulsory. There are no navigational difficulties and the Port is approached direct from the open sea.

The Income and Expenditure for the year 1946-47 were Rs. 105,11,559 and Rs. 66,34,239 respectively.

The Chief imports are coal and coke, food grain, mineral oils, railway materials, metals, timber, building and engineering materials, cement, etc., Government stores, Motor cars, provisions, cycles and parts and accessories of cars and trucks, beer and wines, paper and stationery, tanning substances, including wattle bark, glass and glass ware, hardware and chemical manures. Seeds and nuts, hides and skins, vegetables and provisions, cotton, oil cake, bone meal, piece goods, food grains, turmeric, ores, and tobacco are the principal exports.

STATISTICS SHOWING THE GROWTH OF THE PORT FOR THE LAST TEN YEARS FROM 1937-38 TO 1946-47

Years	Imports	Exports	Total
	Tons	Tons	Tons
1937-38 ..	746,544	371,189	1,117,733
1938-39 ..	763,702	385,343	1,149,045
1939-40 ..	895,651	391,955	1,287,606
1940-41 ..	625,109	289,126	914,235
1941-42 ..	573,296	297,372	870,668
1942-43 ..	337,188	158,591	495,779
1943-44 ..	696,007	374,079	1,070,086
1944-45 ..	2,053,006	511,461	2,564,467
1945-46 ..	1,833,496	658,332	2,491,828
1946-47 ..	1,400,229	336,674	1,736,903

Trustees of The Port: *Appointed by Government.*—G. P. Alexander, C.I.E., M.Inst.C.E.; *Chairman.*—W. G. W. Reid, General Manager, M & S. M. Rly.; Sir Jeffery Reynolds, C.I.E., General Manager, S. I. Rly.; R. K. Vaish, M.A., Collector of Customs; M. T. Raja, I.C.S., Director of Industries and Commerce; S. Guruswami (Representative of labour).

Elected by Commercial Bodies.—(Representing Chamber of Commerce, Madras): G. b. Gourlay, D. M. Passmore, E. Barrington-Smyth; (Representing Southern India Chamber of Commerce, Madras): M. M. Syed Mohamed Rowther, R. K. Murthi, A. M. M. Arunachalam; (Representing the Madras Trades' Association): A. E. Thompson, M.L.A.; (Representing the Andhra Chamber of Commerce): M. V. P. Sastri; (Representing the Corporation of Madras): G. Rajamannar Chetti, M.L.A.; (Representing the Southern India Skin and Hide Merchants' Association): K. M. Akbar Badsha Sahib; Mohamed Musthan Sheriff Sahib.

Principal Officers.—Port Engineer.—G. P. Alexander, C.I.E., M.Inst.C.E.; *Deputy Conservator of Port.*—Lt.-Col. A. D. Berrington; *Chief Accountant.*—G. Venkataraya Pai, M.A., F.I.A.C., M.I.B.A.; *Traffic Manager.*—M. S. Venkataraman, B.A.; *Executive Engineer.*—S. Nagabhushanam, B.A., M.E., A.I.E.E.; *Mechanical and Electrical Engineer.*—S. W. White, M.I.Mar.E., A.M.I.N.A., A.M.I.Mech.E.

VIZAGAPATAM

Vizagapatam Harbour was created in order to supply an outlet for a large area of fertile country adjacent to the east coast of India, with considerable mineral resources and no alternative access to the outside world. The scheme was first formulated many years ago in the days of the East India Company, but was not actually taken up before 1925. In 1933, the Harbour was first opened for sea-going vessels, and it now, provides the following facilities:—

An Entrance Channel, sheltered by hills, with a minimum depth sufficient to admit vessels drawing 28½ feet of water on any day of the year, gives access to a completely sheltered inside harbour, provided with three quay berths, each 500 feet long, and equipped with fully portal electric cranes, transit sheds, and railway lines, both behind and on the quay-side of the transit sheds. Two of these berths are specially equipped for the rapid shipment of manganese ore in bulk; one of them is also equipped as an auxiliary coal bunkering berth. In addition, a special coal bunkering jetty berth is provided, at which coal is carried on board ships direct over adjustable gangways. Four mooring berths are also provided, at which vessels are served by a fleet of lighters operated by the Port. A timber jetty berth for bunkering fuel oil has been provided. Behind this, oil storage tanks are installed.

Storage Sheds, for lease to import and export merchants, are provided with water frontage and rail service in the rear. From these sheds, export cargo can be carried directly alongside vessels by means of lighters.

The hauling equipment of the Harbour consists of four tugs of 1,000, 600, 450 and 400 H.P.

A graving dock with an entrance 60 feet 6 inches wide is provided; but in view of the fact that its length is at present limited to 366 feet, it is used principally for docking the craft of the Port, although it is also used by a certain number of small size vessels of other ownerships. The construction of another Dry Dock to take ships upto 600 ft. in length is being contemplated. The port has a floating crane and can deal with lifts upto 50 ton capacity.

There is a special railway connection, linking it with the Central Provinces. Additional Railway lines for development of the hinterland are being surveyed.

INCOME AND EXPENDITURE OF THE PORT FOR THE YEAR 1946-47

	Receipts. Rs.	Expenditure. Rs.
Port Fund ..	32,54,829	33,32,884
Pilotage Fund ..	67,306	62,275

STATISTICS SHOWING THE GROWTH OF THE PORT FROM 1944-45 TO 1946-47

Year	Imports	Exports	Total
	Tons	Tons	Tons
1944-45 ..	1,19,675	2,85,480	4,05,155
1945-46 ..	57,987	4,10,842	4,68,829
1946-47 ..	99,909	5,38,675	6,38,584

The Port is administered by the Government of India, Railway Department (Railway Board), through the Bengal Nagpur Railway.

Principal Officers.—*Port Conservator.*—S. J. P. Cambridge, General Manager, B.N.Rly., Calcutta; *Port Administrative Officer & Port Engineer.*—S. Nanjundiah, Vizagapatam; *Chief Accountant.*—E. R. A. Dent.

Other Ports

ALLEPPEY

Alleppey, the premier port and commercial centre in Travancore, is situated about 50 miles North of Quilon, and 35 miles South of Cochin. Alleppey is an open port. There is a mud bank off and near the Pier which affords smooth water for shipping operations. A canal connects the port with the interior backwaters. Its warehouses are a convenient depot for the storage and disposal of all fresh produce, and it possesses a roadstead affording safe anchorage during the greater part of the year.

Port dues 9 pies per registered ton.

The chief exports are copra, cocoanuts, coir fibre and matting, cardamoms, ginger and pepper.

Principal Port Officer.—P. N. Gopala Pillai, B.A.

BALASORE

Balasore, situated on the right bank of the Burabalang river and headquarters of the district of that name, was the only port of which Orissa could boast until the opening up of the country after the great famine of 1866. It was frequented at that time by vessels with cargoes of rice from Madras and with cowries, then largely used for currency, from the Laccadives and Maldives. The port is of historical interest as being one of the earliest European Settlements in India, factories having been established here in the 17th century by English, Dutch, French, Danish and Portuguese Merchants.

Balasore as a port is practically defunct. Foreign ships have ceased to visit since 1904 and coastal ships since 1910. An occasional country craft of negligible tonnage enters during the cold weather season for paddy, but beyond that there is no sea-borne trade. There is no import trade.

BEDI

Bedi Bandar, the principal port in Nawanagar State, is situated a few miles from the city of Jamnagar, at the head of a tidal creek some eight miles long. Near the mouth of the creek is the roadstead called Rozi, in which ocean-going vessels lie at anchor.

There is at the head of the creek a spacious basin equipped with warehousing accommodation and railway connections offering facilities to merchants for the effective conduct of extensive trade. Goods are transhipped between the basin and steamers which lie in the Gulf of Cutch by means of lighters which are towed up and down the creek by tugs as the state of the tide permits.

The consistent encouragement of the Ruler and the number and importance of the merchant class in Jamnagar with their trade connections at other places in Kathiawar and beyond, have all assisted in developing a large and important traffic.

No merchandise is handled at Rozi. Its landing stage, connected by road and rail to Jamnagar, is used exclusively for mails and passenger traffic to and from Cutch.

BHAVNAGAR

Bhavnagar, the capital of Bhavnagar State, lies half way up the Gulf of Cambay on its western side. The Gulf is defined by a very great range of tide, attaining as much as 40 feet at Bhavnagar, which is situated on a creek several miles from the open waters of the Gulf. The port facilities comprise an anchorage 8 miles or more from the port proper, between which and large vessels at the anchorage goods are moved in lighters while the port itself can accommodate small coasting steamers which lie on the mud at low tide. There is ample warehouse accommodation and good direct railway communication with the whole of India.

BIMLIPATAM

Bimlipatam is 22 miles north-west of Waltair. It is connected by good roads with Vizianagram and Vizagapatam. The harbour is an open roadstead and ships lie about a mile off the shore and loading and unloading is effected by lighters. There were considerable exports of Bimlipatam jute, myrobalans, niger seeds, gingelly seeds and groundnut kernels.

Coastwise imports and exports are of little importance.

No steamers called at this Port from 3-7-1940 to end of war. Vessels anchor from 6 to 8 fathoms abreast the river 'Gousthani' during the south west monsoon, and a little further to north in the other monsoon (Bearings are different). Bottom is sandy and rocky.

Dues to be paid at this Port: Port dues as per schedule, overtime fees, ground rent, and boat license fees.

The Principal Officer in charge of the Port is the Port Conservator.

CALICUT

Calicut, the capital of the Malabar District, is some 42 miles south of Tellicherry and about 90 miles north of Cochin. It is 413 miles by rail from Madras. The Port is practically closed during the South-West Monsoon from the end of May until the latter half of August. The sea is very shallow and steamers anchor about three miles from the shore, connection being maintained by lighters and small boats. Nativecraft of 150 tons and below lie about 800 yards off the shore.

Beypore, seven miles to the south of the mouth of the river of that name, is regarded as a wharf of Calicut Port. It has a number of wharves along the river bank and native craft of 150 tons burthen are able to anchor half a mile from the mouth.

The principal exports are coir, coir fibre, copra, coffee, tea, pepper, ginger, rubber, groundnut, raw cotton and fish-manure. The foreign import trade, which is insignificant, consists chiefly of metals.

CHANDBALI

Chandbali, situated on the left bank of the Baitarani River, is a port of some importance on the Orissa Coast. It has a flourishing coasting trade with Calcutta but there is no direct foreign trade as in former days. The exports consist mainly of rice and the imports are cotton twist, piecegoods, kerosene oil, salt and gunny bags.

CHITTAGONG

Chittagong in Eastern Bengal, lying on the right bank of the river Karnafuli at a distance of 9 miles from the sea, was already an important Port in the sixteenth century, when the Portuguese gave it the name of Porto Grande. The construction of the Assam-Bengal Railway has facilitated the trade with Assam and Eastern Bengal for which the Port of Chittagong is the natural outlet. Chittagong, Bengal, Lat. 22° 21'N; Long. 91° 50 E. 1947. Pop. Over a lac.

The Chief imports are salt, Mineral oil, machinery, tea estate stores, rice, coal and railway material. The principal exports are wax, jute, tea, hides, cotton, capas, rice, paddy, eggs, poultry and live-stocks.

Vessels of any size can proceed 9 miles up the Karnafuli to Chittagong at H.W. draught of 21 ft. to 26 ft. There are five berths for ocean-going vessels at the Eastern Bengal Railway Jetties, also one set of fixed moorings. Jetties are 2,205 ft. long, provided with hydraulic cranes 17 to lift 35 cwts. and 4 to lift 10 tons, ample shed accommodation, and jetties are in direct rail communication with the Eastern Bengal and Assam Railway systems, cargo in bulk being dealt with direct into wagons. Depth at jetties are about 26 feet at L.W.S.T. Fresh provisions, good drinking water and coal are obtainable.

Conditions over the three river bars have been improved by river training works so that dredging has been practically eliminated.

The Port will have its berthage expanded during this year to accommodate five 500-foot ships at the jetty, it is learnt. Berths for salt ships will also be constructed.

The number of berths will be increased to a total of eleven thus giving the port an annual capacity of about three million tons.

Port dues 4 annas 6 pies per reg. ton. Harbour Master's fee Rs. 64, mooring and unmooring in fixed berths Rs. 64, swinging berths Rs. 32. Berth alongside jetties Rs. 80 per day, night work and holidays extra.

Towage is done by Port Commissioners' Tug.

The Commissioners for the Port of Chittagong constitute the port authority.

Principal Officers.—*Deputy Conservator.*—Capt. J. T. Denley; *Port Engineer.*—F. J. Green, B.Sc., M.I.C.E., & Co.; *Secretary and Chief Accountant.*—P. Das Gupta, B.Sc., A.S.A.A.; *Lloyds Agents.*—James Finlay & Co.

COCANADA

Cocanada, is situated on the Cocanada Bay, just north of the Godavari River, about 80 miles south of Vizagapatam and 270 miles north of Madras. In spite of several disabilities, it ranks fifth in importance among the ports of the Madras Presidency. Large steamers anchor about 6 to 7 miles from the shore and service is maintained with lighters which land cargo at the numerous small wharves and jetties constructed on the banks of the Cocanada Canal.

The principal shipments to Europe are raw cotton and groundnuts and castor-seeds. The import trade consists chiefly of kerosene from America, sugar from Java and metals from the United Kingdom, Germany and Belgium.

CUDDALORE

Cuddalore, is situated about 15 miles south of Pondicherry. Steamers anchor about a mile off-shore, and the harbour wharves are situated on the western bank of the Uppanar Backwater and have been provided with a quay wall to facilitate the loading and unloading of cargo boats therefrom.

The export trade consists principally of groundnut kernels and coloured piecegoods in small quantities. The coasting trade consists mainly of grain, pulse and coal. The foreign import trade is chiefly of boiled betelnuts from the Straits.

CUTCH MANDVI

The Harbour is situated in the Gulf of Kutch, is protected against westerly winds by the Albert Edward Breakwater, 1,850 feet long, and craft of from 9 to 10 feet draught can enter the harbour at High Water Neaps. There is also a pier and pitched slope where country craft can secure alongside and work cargo.

The Port is unfortunately exposed to the full blast of the South-west Monsoon gales, and is closed for maritime traffic from about the end of April until the month of September.

During the fairweather season, coastal steamers of the B.I.S.N. Coy. and the B.S.N. Coy. call regularly and anchor about 1½ miles south of the port, passengers and cargo being discharged into small craft for conveyance between steamers and shore.

Cutch Mandvi Lighthouse. A Light is exhibited at an elevation of 115 feet from a white masonry tower 56 feet in height situated on the south-west bastion of Mandvi Fort. A Light is also exhibited at an elevation of 39 feet from the end of the Breakwater.

The trade of the Port amounts to Rs. 135 Lacs annually. Recent commercial undertakings include a Match Factory, Oil Mills and Metal Works.

CUTTACK

Cuttack, is situated 253 miles from Calcutta at the apex of a triangle formed by the Mahanadi and Katjuri rivers. It is on the main line of railway running between Madras and Calcutta and is connected by canal with Chandbali between which a small inland steamer trade exists and which links Cuttack with Calcutta. A short distance up the coast from Cuttack lies the port of False Point which has been closed since 1924, as the seaborne trade had entirely disappeared.

The decline of the small ports is said to be due to a variety of reasons and usually the chief reason quoted is that the Ports have silted up but this is not actually the case. The Ports have declined for two main reasons namely the coastal Railway which has automatically cut out the sea trade since it cannot assist it and secondly that larger deep draft steamers have taken the place of the smaller coasting steamers and sailing ships of 30 years ago. The long and deeper draft steamers cannot enter such small ports as Balasore, Chandbali and False Point and hence the trade which at one time found its way by sea has now been caught by the railway and carried to the larger ports like Calcutta from where it is distributed elsewhere.

DHANUSHKODI

Dhanushkodi is the terminus of the South Indian Railway on the South East extremity of the Island of Rameswaram at the junction of Palk Strait with the Gulf of Mannar and connected with Talaimannar in Ceylon 21 miles distant by steamer service, the journey being made in about two hours. The port is equipped with a pier belonging to to the S.I.R. Cargo is loaded direct from the railway trucks on the pier into steamer batches.

The Port is an open roadstead. The ferry steamers of the S.I.R. are moored at their own pier. No other steamers call here.

There are no channels or anchorages at the Port.

Port dues are collected on the net tonnage of vessels calling under the Indian Ports Act XV of 1908. No other charges are collected at the Port.

Average annual receipts of the Port are Rs. 1,200 and charges Rs. 3,000.

The chief exports are fish (dry and salted), cotton piecegoods and beedies, and imports—arecanuts, cocoanuts, hides and skins and hardware.

IMPORTS & EXPORTS DURING 1946-47

	No. of packages	Tons
Imports ..	1,36,270	7,244
Export ..	6,99,249	28,130

The Port Conservator, Dhanushkodi, is the principal Officer of administration of the Port.

DWARKA

Just below Port Okha is Dwarka, a famous place of pilgrimage. After the development of Port Okha, Dwarka has lost its importance as a port. Consequently the ocean-going steamers between Bombay and Karachi at present generally do not touch at Dwarka but at Port Okha. Steamers lie off at some distance from the shore and the traffic is chiefly local.

GOPALPUR

Gopalpur in the Ganjam District is situated ten miles from Berhampur on the B.N.Rly. It lies between Lat. 19°13'N; long. 84°52'E. R of T. Sp. 6½ ft., Neap 4½ ft.

The chief imports are provisions, grain, tobacco, corriander seeds, soap nuts, empty bottles, potatoes, ginger, matches, cocoanut oil, and the exports are paddy, pigs, rice, gingelly seeds, dry leaves, horse grain, prawns, skins, and chuva oil. There is passenger trade with Burma.

The port is an open roadstead. Cargoes are landed and shipped on beach. Anchorage in 6 to 7 furs., sand and mud.

Port dues: Foreign vessels 3 annas per ton per voyage; coasting vessels, 1 anna per ton once in 30 days. Working cargo, about 4 annas per ton and launching and shipping about Re. 1-4-0 per ton.

Port Conservator: A. D. Bhavanasi; Lloyd's Agents, The Coromandel Co. Ltd.

KANDLA

Kandla Creek forms a natural harbour with good anchorage and sufficient depth of water for large ocean-going cargo steamers. The Port was opened for traffic in 1931 and has been recognised in Admiralty Chart No. 43 in the Gulf of Kutch.

The port area consists of 13,70,000 square feet of reclaimed land and has immense space for extension of reclamation.

The port has 6 miles of anchorage with depth of water at L.W.M.O.S.T. of over 36 feet and with ample swinging space. The reinforced

concrete pier can berth 2 ships at a time. Steamers over 300 feet in length are moored along the outside of the pier. There is also a timber jetty which can accommodate vessels upto 800 tons. This jetty is also used for embarkation and disembarkation of passengers at any state of tide.

All over the Kutch coast there are well equipped lighthouses which are efficiently maintained. The Channel leading from the Gulf of Kutch into the Port is well defined by Buoys and Beacons erected in the foreshore. Pilots meet steamers at the outer Tuna Buoy. There are sufficient facilities for warehousing and more are being provided. The Port is connected by telephone and telegraph and rail with the hinterland There is a dispensary, a dharamasala and a guest-house.

Port charges are very moderate and it is the policy of the State to encourage shipping. Port dues are Re. 0-1-0 per nett registered ton. Pier dues vary from Rs. 5 to Rs. 24 per day according to the tonnage of a ship. Lighthouse dues of Re. 0-1-0 per nett registered ton are recovered once in six months.

The income from port dues and other port charges for the year 1946-47 was Rs. 57,000 and expenditure for general maintenance of the port was Rs. 49,000.

Year	Imports	Exports	Total
	Tons	Tons	Tons
1945-46 ..	7,449	8,810	16,259
1946-47 ..	35,812	43,634	79,446

Port Commissioner & Harbour Engineer.—Capt. E. Barry, M.Inst.C.E.; *Collector of Customs.*—T. H. Butani, B.A.; *Port Engineer.*—P. K. Dave, B.E. (Civil).

KETI BANDAR, SHAH BANDAR AND SOKHI BANDAR

These are the three minor ports in Sind. They are under the jurisdiction of the Collector of Customs, Karachi. None of them however is of sufficient importance to deserve detailed mention.

MANGALORE

To the South of Goa lies the Madras district of South Kanara whose district headquarters is Mangalore, open to the coasting trade of Karwar, Honavar and Bhatkal. Mangalore is situated at the junction of the Gorpur & Netravati Rivers, about 1·0 miles south of Mormugao. It is a tidal port served chiefly by backwater communication with the hinterland. It is the North-Western terminus of the South Indian Railway.

It is an open roadstead, steamers anchor about 2 miles off the shore in 5 to 6 fathoms of water. Native craft of small draft enter the backwater at all states of the tides and anchor in the inner anchorage. Vessels of low tonnage berth at the wharves. Vessels above 60 tons anchor in backwater, and the cargo is conveyed by lighters from the anchorage to the wharves. The length of the landing and shipping wharves at present is 3,156 ft. and an extension of 880 ft. opposite the Railway Goods shed is under construction to facilitate rail-cum-sea traffic. There are three hand cranes at this Port. One of 5 tons within Customs enclosures and the other two 1½ tons at North and South reclamation respectively. For the use of 5 tons crane a fee of 12 annas per ton lift, is charged by this department.

Motor Launch 'Mangalore' is available for towing lighters and vessels from backwater to sea and *vice versa* and conveying passengers and ship's papers to and from the steamers at the outer anchorage. In addition there are also 3 private launches available at the Port for hire.

The chief exports to Europe are pepper, tea and cashew kernels (exported also to the United States) from neighbouring areas, coffee and sandalwood from Mysore, rubber to Ceylon and tiles, rice, salt fish, dried fruits and fish manures to Ceylon, Goa and the Persian Gulf. The foreign import trade is steadily increasing.

Mangalore is the favourite port on the coast for the Laccadive and Amindivi Islanders, who bring their coir and other cocoanut produce there for sale.

The income and expenditure for the Minor Ports Fund for 1946-47 were Rs. 27,800 and Rs. 34,000 respectively.

MASULIPATAM

Masulipatam is the principal port in the delta of the Kistna River. It is an open roadstead. A flashing light is exhibited. There is a conical buoy 4 miles eastward of the Lighthouse marking the Position for boats to wait outside the bar in order to communicate with vessels approaching the Port. The roadstead is capacious and holding ground good. A convenient anchorage is in depths of 5½ fathoms, about 5½ miles east-south-eastward of the Lighthouse.

Port dues at Rs. 0-4-0 per ton. Landing or shipping fees are charged at Re. 0-6-0 per ton of cargo.

Average annual income is about Rs. 25,000 and expenditure is Rs. 20,000.

Chief commodity of export is groundnuts to foreign countries and ordinarily averages about 150,000 tons a year. Imports are small, mainly timber from Burma.

A port officer is in charge of the Port.

Port Officer.—L. G. Hardas.

NAVLAKHI

Navlakhi is the Chief Port of the State of Morvi and has a fine situation on the coast of Kathiawar. Ships anchor two miles from the pier. Navlakhi is the terminus on the metre-gauge line of the Morvi Railway and is thus directly connected with Delhi, Rajputana, Gujarat and Kathiawar. The port is open throughout the year and has been greatly developed in the last decade.

NEGAPATAM

Negapatam, the Chief Port in the Tanjore District is about 13 miles South of Karikal. The harbour is equipped with wharves and other facilities for the landing and shipment of goods and the considerable foreshore to the north is utilized for the storage of timber. Nagore is the eastern terminus of a branch of the South Indian Railway and a siding runs into the harbour premises at the Negapatam Beach Station. The port is further connected by river and canal with the tobacco growing areas to the south. The harbour is situated at the junction of the Kaduvaiyar River with the sea. Nagore, 5 miles to the north, a great place of pilgrimage for Muhammadans, is a wharf of Negapatam. Steamers anchor in the roads about a mile off from the shore and cargo is transported between ship and shore by country crafts of which abundant supply is available locally. The depth on the bar varies from 1½ feet to 3½ feet L.W.O.S.T. according to season.

Port dues two to six annas per ton. Landing and shipping dues 6 to 12 annas per ton.

The principal exports from Negapatam are groundnuts for Europe and coloured cotton piecegoods, tobacco and fresh vegetables for Penang, Singapore and Colombo, the port being the chief provisioning centre for the coolies who are constantly leaving by this route to work on rubber and tea estates in Ceylon and the Federated Malaya States.

The principal imports are betelnuts and lunamedella logs.

Port Officer.—M. L. Advani.

OKHA

Port Okha, situated in a detached portion of Baroda State far distant from the Gaekwar's main territories in Gujarat is dissimilar from other Kathiawar ports. It is an entirely modern conception, begun and completed with enterprise for the express purpose of dealing with ocean-going traffic and commodities.

It lies in a strategic position at the extreme north-east point of the Kathiawar Peninsula, readily accessible to all steamers trading along that coast. The Harbour scheme has been well designed; there is an excellent ferro-concrete jetty, served by railway lines and trains, alongside which large vessels can lie at all states of the tide, and there are also swinging moorings for other vessels in a protective position. The warehouse accommodation and railway connections are good. Okha is far removed from the large centres of population, being 231 miles from Wadhwan Junction through which railway centre its traffic must pass.

The State is rapidly pursuing a scheme of expansion by extending the pier to accommodate three vessels and creating two more mooring berths.

The Port has an area of 2 sq. miles and the harbour 6 sq. miles.

One R.C.C. pier which can accommodate ships up to 539 ft. long with a draft of up to 28½ ft. at all states of tide. There is also a single mooring buoy. Two to three coasting steamers can also lie at their own anchors in the harbour in stream. The berths at the mooring buoy and anchorage in stream are restricted to a draft of 18 ft. at present but as soon as a dredger is available, these berths will be able to accommodate steamers up to 26 ft. draft.

Steamers that cannot enter the harbour due to deep draft, are, weather permitting, allowed to discharge cargoes at the outer anchorage and barges can be supplied if asked for.

Ships are navigated during day light hours only. Small coasting steamers can enter and leave the harbour at any state of tide. The larger ships however have to wait for slack water.

Port dues Rs. 0-1-0 per ton, Pier dues Rs. 20 per day and Pilotage charge Rs. 100 each way.

The wharfage charge on cargo is recovered according to railway classification. It is very nominal and includes services of handling goods, warehousing and insurance against fire for six months.

Statistics of imports and exports of principal goods.—The principal commodities of export are, cement, salt, oil seeds and heavy chemicals. About 60 thousand tons of cement and salt each are exported. The imports comprise all varieties from coal, petroleum products, heavy and light machinery, railway materials and all types of merchandise, hardware, glassware to wines and spirits.

Principal Officers.—*Port Officer.*—B. M. Desai; *Harbour Engineer.*—B. C. Mehta; *Harbour Master.*—Capt. D. V. Singh.

Statistics showing the growth of the Port.:—

TRAFFIC HANDLED IN TONS.

Year	Tons	Year	Tons	Year	Tons
1926-27	2,591	1933-34	1,49,521	1940-41	1,69,366
1927-28	15,194	1934-35	1,95,220	1941-42	2,49,116
1928-29	35,785	1935-36	1,98,713	1942-43	2,74,702
1929-30	28,872	1936-37	1,78,831	1943-44	2,09,125
1930-31	38,017	1937-38	2,32,188	1944-45	2,39,602
1931-32	1,08,647	1938-39	1,75,182	1945-46	2,05,550
1932-33	1,32,394	1939-40	2,37,408	1946-47	2,51,583

The expansion of the Port and trade is carried out on systematic lines. Areas are set apart for residential purposes where plots of suitable sizes are given on generous terms,—industrial area linked up with railway sidings to the Port and station with sea frontage, suitable for industries of various magnitude, from ship-building yard to oil mill, offers great facility for enterprise

PORBANDAR

The Capital town of Porbandar State is situated half way between the Ports of Bombay and Karachi. Ocean-going steamers anchor at about 1.2 mile from the shore. Port of Porbandar is an important regular Port of call for the B.I.S.N.Co. Ltd's steamers to embark and disembark passengers to and from Africa. It has been so for the last 25 years. The cargo is discharged into lighters at the open roadstead which are towed to the creek by Port tugs. The length of the quay wall, which runs throughout the length of the creek, is about 1,000 yards. The wharf area is more than one square mile. There is metre-gauge railway line running right along the quay wall, which connects Port of Porbandar with various important business centres in the interior of India, such as Delhi, Ahmedabad, Bombay. The Port being an open roadstead is closed for steamship traffic between 15th May and 15th September being the period of high seas and monsoon on this coast.

The principal imports at this port are wet and dry dates, timber, coal, sugar, machinery, petrol, kerosene, cocoanuts, jaggery, etc. The exports are salt, cement, ghee, white clay powder and stone.

During the War the trade of Porbandar was chiefly coastwise.

Commissioner of Ports & Chief Customs Officer, Porbandar State: R. S. Raja Iyer, B. Com.

QUILON

Quilon, the "Coilum" of Marco Polo, has been a trading centre from very early times. It is connected with Alleppey by backwater, and is on the Shencottah-Quilon-Trivandrum branch of the South Indian Railway. Vessels anchor about ¾ miles from the shore and a railway siding runs up to the landing place.

The chief exports are coconut oil, coir mats, timber, and fish, but the foreign trade is insignificant.

SURAT

Surat is situated 14 miles from the sea with which it is connected by a river negotiable only by small country craft. Surat was one of the earliest and most important of the East India Company's factories, and its trade was very considerable in agricultural produce and cotton, the value of which was estimated in 1801 at over £1,000,000. A hundred years later this total had contracted to £200,000 and in the last fifteen years the decrease has been even more marked, most of the trade being now transferred to Bombay owing to the linking up of the two ports by the Bombay, Baroda and Central India Railway.

TELLICHERRY

Tellicherry is situated on the Calicut-Mangalore extension of the South Indian Railway and is about 94 miles south of Mangalore and 14 miles south of Cannanore a town of about the same size with much smaller foreign trade.

Steamers which anchor about two miles off the shore can work at Tellicherry even during the monsoon when all the other Ports on the Coast are closed, owing to the natural backwater provided by the rocky approaches to the Port. Facilities for landing and shipping of cargo are provided. There is a pier with 4 one-ton cranes and one five tons crane, wharf wall extending to nearly 600 feet on either side of the pier.

The principal exports are coffee and pepper brought down from interior areas connected with roads, copra, cocoanuts, sandalwood, tea, ginger, timber, rosewood and chief imports are grains and pulses, salt, kerosene oil, piece-go ds, metals and glassware.

Port dues: Steamers foreign 4 annas; coasters 4 annas for western group for 30 days; sailing ship 2 annas per ton for 60 days at a Port, landing or shipping dues varying as per commodities.

TUTICORIN

Tuticorin, an important port of southern India, is situated near the southern edge of the Coromandel Coast. It has the largest trade in South India next to Madras and Cochin. The Port is open all through the year and ships have to anchor in open roadstead 5 to 6 miles off the shore. Hare Island upon which the lighthouse is situated affords considerable protection to lighters and other craft used for landing and shipping and the work is seldom interrupted by bad weather. The Port commands a very large import and export trade and is a direct link to Colombo, other coastal ports in India and foreign ports.

The chief articles of export are cotton, senna leaves, onions, chillies and livestock. The South Indian Railway runs along side the landing and shipping wharves from which goods can be transhipped to launches and lighters.

The port has an area of 15.7 acres.

Vessels anchor in open roadstead 5 or 6 miles from shore. There is a boat channel 400′ wide from shore to deep water with depth of 11′-0″ L.W.O.S.T. For handling the cargo from cargo boats, there are six piers of lenghts 315′, 478′, 138′, 288′ 328″ and 255′. Cargoes up to 5 tons can be handled by cranes.

The port is safe for ships all through the year. There are two lighthouses one at Hare Island and the other at Devil's point. The light at Hare Island is an Aga white light 1 second. eclipse 9 seconds, visibility 14 miles and candle power 1,000 British Candles. The light at Devil's point is a flash light giving 30 flashes per minute, visibility 11 miles and candle power 207 British candles.

Landing and shipping dues of Rs. 0-11-3 per ton are charged generally. Foreign steamers—3 annas per ton; coasting steamers—2 annas per ton; sailing vessels—1 anna per ton.

The Income and expenditure as per the Administration Report for 1945-46 were Rs. 5,31,873 and Rs. 3,16,010 respectively.

The Port stands second in rank among minor ports and third in the Province.

A total 1,48,613 tons of goods were imported in 1945-46; the chief imports being grains, coal, cotton and machinery, 1,30,078 tons of goods were exported in 1945-46, the principal exports being onions, chillies, cotton, yarn, fibre, senna and salt.

The Port is administered by a Board of thirteen trustees.

Chairman, Port Trust.—T. S. Dhanaraj, B.A.; *Port Officer and Secretary and Traffic Manager, Port Trust.*—W. A. Dow Sainter.

Finance

THE gradual evolution of the present financial organisation of India is in many respects a reflection of her constitutional development. In the earliest days of British rule, the Provinces, and especially the older Presidencies, were for all practical purposes independent of the central government and responsible only to the authority sitting in London. After the middle of the nineteenth century the process was reversed, and the Government of India became all-powerful, controlling the Provinces down to the smallest items of their expenditure. This centralization reached its highest point during the long Viceroyalty of Lord Curzon, who was so jealous of his supreme authority that he sought to deprive the Presidency Governors of their right to correspond direct with the Secretary of State for India. This system was found to be too top-heavy in the days of his successors, and a continuous process of devolution set in. In the matter of finance the measures took the form of long-term "contracts" with the Provincial Governments, and later in the assignment of definite heads of revenues to the Provincial Governments, thus removing the dual authority and responsibility which had clogged progress. A much clearer cut was made when the reform scheme embodied in the Government of India Act of 1919 was passed. Here, for all practical reasons, Provincial finance was entirely separated from the finances of the Government of India. The system of provincial contributions to the centre disappeared for the first time from the Budget in 1928-29.

Federal Finance Committee

The financial organisation was again reviewed in 1931 as part of the work of the Round Table Conference. A sub-committee of the Federal Structure Committee was appointed under the Chairmanship of Lord Peel to examine the question of federal finance and the principles embodied in the sub-committee's report were endorsed by the parent Committee as a suitable basis. A Federal Finance Committee with Lord Eustace Percy as Chairman was appointed at the end of 1931 to subject to the test of figures, the suggested classification of revenues by the Peel Committee and to estimate the probable financial position of the Federal and of the Provincial Governments under the proposed scheme.

In the course of their report the Federal Finance Committee said that the transfer to the Provinces of taxes on income though defensible in principle would leave the Centre in deficit. Therefore the Peel Committee suggested a method of transferring to each Province a percentage of the share of income-tax estimated to be attributable to it. But in view of the incomplete data on which the estimates were made, a special review was held to be necessary at the time federation is established in order to fix the initial percentages. A strict allocation on a percentage basis would still leave some Provinces in deficit and so to right their finances the Committee suggested spreading the charge over the other Provinces by giving them back less of the income-tax proceeds than they were entitled too.

Niemeyer Report

A necessary prelude to the introduction of the Constitutional Reforms was an investigation of their safety in the light of the financial situation and prospects of India. The investigation was carried out by Sir Otto Niemeyer whose report was published in April 1936. The Report proposed immediate financial assistance from the beginning of provincial autonomy to certain provinces partly in the form of cash subventions, partly in the form of cancellation of the net debt incurred previous to April 1, 1936, and partly in the form of distribution to the jute growing provinces of a further 12½ per cent. of the jute tax.

Annual cash subventions are as follows: To the U. P. Rs. 25 lakhs for 5 years only, to Assam Rs. 30 lakhs, to Orissa Rs. 40 lakhs, to the N.-W. F. Province Rs. 100 lakhs (subject to reconsideration after 5 years), and to Sind Rs. 105 lakhs to be reduced by stages after 10 years.

The total approximate annual relief in lakhs aimed at by Sir Otto Niemeyer is as follows:—Bengal 75, Bihar 25, C.P. 15, Assam 45, N.-W.F. Province 110, Orissa 50, Sind 105, and U. P. 25, extra recurrent cost to the Centre Rs. 192 lakhs.

Orissa is to get a further non-recurrent grant of Rs. 19 lakhs and Sind of Rs. 5 lakhs by six equal steps beginning from the sixth year from the introduction of provincial autonomy, but subject to a proviso to section 138 (2) of the Act. The Centre is to distribute the income-tax to the provinces so that finally 50 per cent. of the distributable total has been relinquished in the intermediate five years, so long as the portion of the distributable sum remaining with the Centre, together with any contribution from the Railways, aggregates 13 crores.

As regards the provincial share of the proceeds from income-tax, Sir Otto Niemeyer recommended that half of the proceeds should remain with the Centre, while the other half should be distributed among the provinces on the following percentage division:—Madras 15, Bombay 20, Bengal 20, U. P. 15, Punjab 8, Bihar 10, C. P. 5, Assam 2, N.-W. F. Province 1, Orissa 2 and Sind 2.

Sir Otto Niemeyer suggested that the Centre would not be in a position to distribute any part of income-tax proceeds for the first five years from the beginning of provincial autonomy but that it might be in a position to distribute some of the proceeds, though not necessarily the percentage allocated, within the first ten years of provincial autonomy. But this, he said, largely depended on the financial condition of the railways and their ability once again to contribute to general revenues.

RECENT INDIAN FINANCE

India, in common, with other countries of the world, felt the full impact of the economic blizzard which began in 1930 and attained its maximum the following year. The net result from the view point of the Government of India was the introduction in 1931 of two budgets, the ordinary budget in the spring and a supplementary budget containinng fresh taxation proposals in September. In the following two years, there was no change; but in 1934-35 the need for improving

the revenue by Rs. 1,53 lakhs was felt. The proposals included an excise duty on sugar, a reduction in the import duty on silver by as. 2¼ to as. 5 an ounce and the abolition of the export duty on raw hides, handing over half the proceeds of the jute export duty to the jute producing provinces, and the levy of an excise duty on matches.

In 1935-36 budget the estimated surplus of Rs. 1,50 lakhs was used for lowering the silver duty to as. 2, abolition of export duty on raw skins, restoration of the emergency cuts in pay and reduction in surcharges on income-tax, leaving a nominal surplus of Rs. 6 lakhs. Further improvement in the finances helped the Government of India in 1936-37 to cut the surcharges by half, to abolish the income-tax on incomes below Rs. 2,000 and to raise the weight of the one anna letter from half to one tola and to adopt a scale of an additional half anna for every additional tola.

The improvement in finances proved short-lived and the 1937-38 budget, estimating a prospective deficit of Rs. 1,58 lakhs owing to trade depression after transferring Rs. 1,84 lakhs from the revenue reserved fund, forced an increase in the sugar duties on a graduated scale import and excise duties from as. 2 to as. 3 per ounce, and in postal rates.

The budget of 1938-39 preserved the *status quo* in regard to taxation but provided for finance for the inauguration of provincial autonomy.

Second World War

On the basis of the maintenance of existing taxation and the adoption of the new system of income-tax embodied in the Income-Tax (Amendment) Act of 1939 and the "slab system" of assessment, the budget for 1939-40 estimated a revenue of Rs. 82,15 lakhs and an expenditure of Rs. 82,65 lakhs. To meet the prospective deficit, import duty on raw cotton was doubled to one anna per lb. From then on the growing need for financing war expenditure and counteracting inflation became the key-note of Government's taxation policy. The first measure was an excess profits tax to provide for an impost of 50 per cent. on abnormal war profits above Rs. 30,000. For the same year (1940-41) petrol duty was raised by as. 2 per gallon and the excise duty on sugar from Rs. 2 to Rs. 3 with a corresponding increase in import duty on sugar. The supplementary budget of November 1940 imposed a surcharge of 25 per cent. on all taxes on income and an increase in postal rates and telegram and telephone charges. The 1941-42 budget raised the E.P.T. from 50 per cent. to 66⅔ per cent. and the surcharges on income-tax and super-tax from 25 per cent. to 33⅓ per cent. Other proposals covered a 100 per cent. increase in match duty, an increase in import duty on artificial silk yarn and thread by as. 2 to as. 5 per lb. and an excise duty on pneumatic tyres and tubes.

The intensification of the tempo of the war in 1942-43 necessitated a further increase of 16⅔ per cent. in surcharge on taxation of incomes, a levy of 20 per cent. surcharge on import duties excepting cotton, petrol and salt, a 25 per cent. increase in petrol tax and a rise in post and telegram rates. In the following year the surcharges on taxation of income were raised to 66 per cent. and were applied uniformly over all levels of incomes.

The budget for 1944-45 placed the revenue deficit at Rs. 78,21 lakhs almost equally to the pre-war revenue. The Finance Member, Sir Jeremy Raisman, therefore, introduced (1) the system of advance payments of tax on incomes from which tax was not deducted at source and (2) the increase in compulsory deposit from 1/5 of the E.P.T. to 19/64 of the tax, and (3) a rise in the scale of income-tax and surcharges on tobacco and spirits under customs duties, and (4) brought betelnuts, coffee and tea under Central Excise besides raising the excise duty on tobacco. The latter duty was further raised in the following year along with an increase in the rate for postal parcels from as. 6 for the first 40 tolas and as. 4 for every 40 tolas thereafter to a uniform basis of as. 6 for every 40 tolas, an increase in the surcharge on telephone rentals from ¼ to ½, on trunk calls fees from 20 per cent. to 40 per cent., and on telegrams by one anna for ordinary and two annas for express ones. A feature of the budget was the recognition of the practice prevailing abroad of differentiating between earned and unearned incomes.

War-Time Budgets

To understand the implications of the change in the wartime finance, it may be noted, that (a) the aggregate war expenditure in India, including recoverable war expenditure during the period 1939-40 to 1945-46 came to Rs. 3,484 crores, India's share being Rs. 1,744 crores or about 50 per cent. and (b) that the over-all Governmental outlay (war and civil expenditure) amounted to Rs. 3,996 crores of which Rs. 1,462 crores or 37 per cent. was met out of revenue, the balance being partly reflected in the accumulation of sterling balances and partly in the form of an addition to India's public debt which increased by Rs. 1,077 crores. The following table gives an idea of the change brought about by the war in India's public revenue, expenditure and debt between 1938-39 and 1945-46 :—

(Rs. in Crores)

	1938-39	1944-45	1945-46
I—Central Government Budget :			
Revenue	84·52	335·57	360·67
Expenditure	85·15	496·71	484·57
Deficit	—0·63	—161·14	—123·90
II—Total Governmental Outlay	85·15	970·38	894·20
A. On India's Account :			
(i) Civil Expenditure	38·97	101·22	124·84
(ii) Defence Expenditure	46·18	458·32	395·32
B. Recoverable War Expenditure	—	410·84	374·54

(Rs. in Crores)

	1938-39	1944-45	1945-46
III—Central Government Debt at the end of year—			
(i) Sterling Loans	464·94	34·19	33·84
(ii) Rupee Loans	437·87	1,212·14	1,492·20
(iii) Small Savings	141·45	159·18	221·52
(iv) Treasury Bills and Ways and Means Advances	46·30	86·70	83·33
(v) Total Interesting Bearing Advances.	1,205·76	1,860·44	2,282·38

General Rise

Total revenue, both tax and non-tax, increased during this period rapidly. Customs receipts in contrast began to shrink owing partly to transport difficulties as the war reached its climax. From being the main source of revenue in 1938-39. at Rs. 40,51 crores, it dwindled to Rs. 25,12 crores in 1942-43, although it recovered to Rs. 39,76 crores by 1944-45. Central excise duties expanded during war years to a remarkable extent reflecting the increased purchasing power in the hands of the public. This expansion was secured not only by enhancing the rate on existing items but also by adding new items such as tobacco, vegetable products, betelnuts, coffee and tea.

The largest expansion in yield was, however, from direct taxation under corporation, income and excess profits taxes. These three taxes contributed from 20.2 per cent. in 1940-41 to 49.1 per cent. in 1944-45. From 1942-43 to 1945-46 one half to three fifths of the total revenue came from these taxes. Total tax revenue increased from Rs. 72.34 crores in 1938-39 to the peak figure of Rs. 282.67 crores in the revised estimates for 1945-46. Non-tax revenue also spurted up, specially after 1940-41, owing mainly to increased contributions from Railways and Post and Telegraphs and the larger profits of the Reserve Bank of India.

The expenditure under Defence mounted up steadily, especially after 1941-42, *i.e.*, after the entry of Japan into the war. From Rs. 49.54 crores in 1939-40 it rose to the peak figure of Rs. 458.32 crores in 1944-45, the last full year of the war. The charges for the servicing of debt more than doubled from Rs. 14.12 crores in 1938-39 to Rs. 22.21 crores in 1944-45 and Rs. 33.85 crores in the revised estimates for 1945-46 and this might have been larger still but for decreases in the effective rates of interest.

Deficits on revenue account grew in size from Rs. 6.53 crores in 1940-41 to Rs. 12.69 crores in 1941-42 and Rs. 112.17 crores in 1942-43 reaching the peak figure of Rs. 189.78 crores in 1943-44. With the deficit of Rs. 161.14 crores during 1944-45 and Rs. 144.95 crores in the following year, the total volume of deficits during the period 1940-41 to 1945-46 came to Rs. 627.26 crores.

Post-War Period

The year 1946-47 may be regarded practically as the first post-war year. Governmental finances in India, as in other belligerent countries reflect in some respects, the effects of the termination of the war. Defence expenditure was reduced appreciably, enabling Government to afford a measure of relief to the tax payer and also to reduce substantially the huge wartime deficits on revenue account. But the budget for 1947-48, despite the new taxation imposed under it, discloses a deficit of about Rs. 20 crores which is partly explained by the fact that India's revenue in the post-war years has tended to fall from the wartime high levels. The Finance Member, therefore, stressed the need on the part of the Centre as well as the provinces for exploiting to the full their tax resources with due regard to the part played by private enterprise in the scheme of the country's industrial development.

The year 1946-47 had also for its background the possible effects on the country's economy of a steep fall in wartime expenditure and income levels, as well as the continued need closely to watch and control the position arising from the wartime legacy of inflation. The budget therefore, laid stress on subordinating fiscal policies to the broader aims of national economy with revenue receipts at Rs. 311.65 crores and total expenditure at Rs. 355.71 crores. The deficit envisaged was of the order of Rs. 44·06 crores, after taking into account new taxation measures and the transfer to revenue of the balance in the two war Risks Insurance funds amounting to Rs. 26·10 crores.

The new taxation proposals for 1946-47 offered a number of substantial concessions to industry and to persons of moderate means. Such concessions to industry included (1) the complete abolition of the Excess Profits Tax after the 31st March 1946, (2) the grant of special initial depreciation allowances of 10 per cent. on new buildings and 20 per cent. on new plant and machinery as well as allowances for expenditure on scientific research for purposes of income tax; the scope of the obsolescence allowance will be widened so as to include the loss of an asset by destruction or demolition, and also extended to buildings, (3) the relief from Customs duty on raw materials imported for industry and reduction of rates on such imported plant and machinery as are now dutiable, (4) a net reduction of 1¾ annas in the present total rate of Super Tax and Income Tax (payable by a company) from 7¾ annas to 6 annas, as a result of the lowering of Super Tax by 2 annas and the raising of the Income Tax by ¼ anna and (5) the exemption from Income Tax for two years in the case of buildings for residential purposes and an initial depreciation allowance of 15 per cent. for buildings used as business premises. In

addition, the total rate on life insurance companies has been reduced from 5 annas 3 pies to 5 annas.

Other Concessions

Other concessions included (1) the reduction of the rate on the second slab of income of Rs. 3,500 from 15 pies to 12 pies and the rate on the third slab of Rs. 5,000 from 2 annas 1 pie to 2 annas, and (2) the raising of the earned income allowance from one-tenth of the earned income, (subject to a maximum of Rs. 2,000) to one-fifth (subject to a maximum of Rs. 4,000). Similarly in the Super Tax range there will be differential treatment in favour of earned income at the rate of 1 anna in the rupee between Rs. 25,000 and Rs. 2 lakhs and of ½ anna between Rs. 2 lakhs and Rs. 5 lakhs.

Under indirect taxation, the duty on kerosene oil was reduced by nine pies from 4 annas 6 pies to 3 annas 9 pies per imperial gallon, and on motor spirit from 15 annas to 12 annas per imperial gallon, the latter as an incentive to increased motor transport.

The following further concessions estimated to cost Rs. 5·12 crores to the Central Exchequer were announced by the Finance Member during the course of discussion on the Budget: (1) reduction in the duty on kerosene by an anna and half instead of only 9 pies as was originally proposed, (2) reduction in the excise duty on betel nuts from two annas to one anna per lb., (3) reduction by 6 pies of the increase in the customs duty on betel nuts originally proposed in the budget and (4) reduction in the duty on cinematographs film (not exposed) from 6 pies per linear foot as originally proposed to 3 pies. Other concessions announced were a reduction in the price of a match-box from 9 pies to 6 pies and a similar reduction in the price of a post-card from 9 pies to 6 pies to come into force respectively from August 1 and July 1, 1946.

Reductions in expenditure arising from the cuts by the Legislative Assembly amounted to Rs. 93·34 lakhs on revenue account and Rs. 3·46 crores under capital disbursements. In consequence of the changes in taxation and expenditure, the deficit of Rs. 44·06 crores for 1946-47 was expected to move up by Rs. 4·19 crores to Rs. 48·25 crores, with revenue at Rs. 341·87 crores and expenditure at Rs. 390·12 crores.

An innovation in the budget was the presentation of a Capital Budget separately from the Revenue Budget.

The 1947-48 Budget

The budget estimates for 1947-48 placed expenditure at Rs. 327.88 crores as against the revised estimate of Rs. 381.48 crores for the preceding year and Rs. 484.57 crores being the actual for 1945-46. The revenue, on the other hand, was placed at Rs. 279.42 crores on the basis of existing taxation as compared with Rs. 336.19 crores in the revised estimates for the preceding year and Rs. 360.67 crores in the actual for 1945-46.

In his budget speech, the Finance Member stated that the proposals he was making, whether involving the abolition of existing taxation or the levy of fresh imposts, were based not merely on financial considerations but the need to achieve certain social objectives the chief of which was the reduction as far as possible of the glaring disparities of income between the classes and the masses. Proposals to afford relief to the lower income groups included the abolition with effect from 1st April, 1947 of the salt duty, involving a net loss to revenue of Rs. 8.25 crores, and the raising of the minimum exemption limit in respect of Tax on Incomes from Rs. 2,000 to Rs. 2,500, involving a loss of Rs. 25 lakhs. In view of the loss to revenue on account of these two measures, the deficit of Rs. 48.46 crores estimated on the basis of existing taxation would be increased to Rs. 56.96 crores (excluding any additional expenditure that may be incurred in giving effect to the recommendations of the Central Pay Commission). Of this gap, about Rs. 40 crores (apart from Rs. 4 crores which would go to the provinces as their share) was proposed to be met by additional taxation as shown below:—

	Estimated yield. Crores
1. A special Income Tax of 25 per cent. on business profits exceeding Rs. 1 lakh	Rs. 30·00
2. A graduated tax on capital gains exceeding Rs. 5,000 made in recent years from the disposal of capital assets ..	3·50
3. A change in the scale of super tax so as to reach the maximum of 10½ annas in the rupee at Rs. 1·2 lakhs for unearned income and at Rs. 1·5 lakhs for earned income	2·50
4. Doubling of the rate of Corporation Tax to 2 annas	4·00
5. An increase in the export duty on tea from 2 annas per lb. to 4 annas ..	4·00
6. A further tightening up of the Dividend Tax imposed last year ..	NIL

The reports of the Select Committee on the bills relating to business profits tax suggested *inter alia* an abatement of five per cent. of the capital at charge in the case of non-director controlled companies or Rs. 1 lakh or whichever is greater and a similar abatement of six per cent. in the case of director-controlled companies and also for the raising of the exemption limit in the case of Hindu undivided families as well as partnership firms. As regards the capital gains tax, the Committee recommended for the raising of the exemption limit from Rs. 5,000 to Rs. 15,000 and for the fixation of the rate of tax at one anna in the rupee on the whole of Capital gains up to Rs. 50,000, rising by stages upto a rate of as. 5 in the rupee on the whole amount of capital gains exceeding Rs. 10 lakhs.

Further concessions were given in the final acts including (a) a reduction in the rate of business profits tax from 25 per cent. under the original proposal to 16⅔ per cent. (b) the fixation of a uniform abatement at six per cent., of the capital at charge or Rs. 1 lakh or whichever is greater in place of the different criteria for companies and (c) the exemption from the capital gains tax of gains from personal effects.

As regards Government's loan programme for 1947-48 the amount expected to be raised by market borrowing was placed at Rs. 150 crores as against Rs. 112 crores in the revised estimates, and Rs. 250 crores in the budget estimates for 1946-47. The small savings movement was also to be pursued more vigorously.

Referring to the financial aspect of post-war planning the Finance Member stated that the latest estimate showed that the total resources of the centre, including borrowing, in the first quinquennium for purposes of reconstruction would fall substantially below Rs. 1,000 crores estimated by Government in 1944-45.

Public Debt

With a further reduction in war-time expenditure and increased efforts towards minimising the gap between government revenue and expenditure, there was a comparatively smaller addition to the rupee debt of the Central Government in 1946-47 than in the preceding year; the increase in the debt amounted to Rs. 203 crores against Rs. 366 crores in 1945-46. The market borrowings during the year amounted to Rs. 112 which, however, fell short of the figure for long-term borrowing of Rs. 250 crores envisaged in the budget for 1946-47 owing to preoccupation of Government with the conversion operations of the 3½ per cent. non-terminable loans, the prevalence of disturbed conditions over a wide part of the country particularly towards the latter part of the year, and the emergence of stringent conditions in the money market.

An important feature of the current year's addition to the debt related to the creation and issue of special floating loans, in the shape of non-negotiable, non-interest bearing securities for Rs. 139.25 crores for paying subscription to the International Monetary Fund and for a part payment for buying India's quota of shares in the International Bank.

The proportions of the outstandings of undated and dated loans and treasury bills to total rupee debt declined respectively from 14.7 per cent., 62.4 per cent. and 4.3 per cent respectively at the end of 1945-46 to 11.9 per cent., 59.3 per cent., and 3.6 per cent. at the end of 1946-47. The proportion of postal savings and other obligations, however, showed a rise from 18.6 per cent. to 25.1 per cent. over the same period.

The public debt of India (including the unfunded debt and other obligations) registered a further increase of Rs. 198.17 crores at the end of March, 1947, with the total outstanding rising to Rs. 2,198.82 crores from Rs. 2,000.65 crores at the end of 1945-46. The sterling debt showed a slight decline from Rs. 63.70 crores at the end of 1945-46 to Rs. 59.06 crores made up of loans amounting to Rs. 55.44 crores and service funds Rs. 3.62 crores.

According to the Explanatory Memorandum on the Central Government budget for 1947-48, the total interest-bearing obligations of the Government of India increased by Rs. 1,176 crores from Rs. 1,206 crores at the end of 1938-39 to Rs. 2,382 crores at the end of 1946-47(revised). The figures include *inter alia* liabilities in respect of the British war loan suspended since 1931-32, and the balances of depreciation and Reserve funds of Railways, Posts & Telegraphs and Income-Tax. After excluding these liabilities, the total regular interest-bearing debt would amount to Rs. 2,032 crores at the end of 1946-47 (revised) as compared with Rs. 1,158 crores at the end of 1938-39; according to the budget estimates it is expected to amount to Rs.2,189 crores at the end of 1947-48.

Assets.—As against the total interest-bearing obligations of Rs. 2,382 crores at the end of 1946-47, the assets of the Government of India aggregate Rs. 1,515 crores comprising (1) the capital outlay on Railways, Rs. 808 crores, (2) the capital advanced to other commercial departments of the Central Government provinces and States, etc. Rs. 122 crores, (3) the debt from Burma, Rs. 48 crores, (4) the deposits with His Majesty's Government for redemption of Railway Annuities Rs. 22 crores, and (5) the cash and securities held on treasury account, Rs. 514 crores.

The transactions in respect of the repatriation of sterling stocks during the year related, as during the preceding year, to the repayment of stocks not surrendered earlier. Of the total amount of £ 324 million repatriated since 1937-38 at the purchase value of £ 322 million (Rs. 430 crores), stocks of the value of Rs. 156.76 crores were cancelled while rupee counterparts have been issued in respect of the balance of Rs. 273.58 crores. During the year 1946-47 stray lots of the face value of £ 0.76 million were repatriated a cost of Rs. 1.06 crores, the rupee counter-parts at created being Rs. 1 lakh.

General Statement of the Revenue and Expenditure

(In lakhs of Rupees.)

	Accounts 1945-46	Revised Estimates 1946-47	Budget Estimates 1947-48
Revenue—			
Customs	73,61	87,50	89,00
Central Excise Duties	46,36	42,78	40,93
Corporation Tax	75,73	69,53	44,14
Taxes on Income other than Corporation Tax ..	1,02,30	87,47	90,86
Salt	10,20	9,10	9,25
Opium	99	1,50	1,40
Interest	1,67	1,33	1,27
Civil Administration	3,33	3,35	3,85
Currency and Mint	16,75	15,75	15,67

General Statement of the Revenue and Expenditure—*contd.*

(In lakhs of Rupees.)

	Accounts 1945-46	Revised Estimates, 1946-47	Budget Estimates, 1947-48
Civil Works	78	68	74
Receipts from States	60	62	62
Other Sources of Revenue	13,79	36,06	5,13
Posts and Telegraphs :—			
Net Contribution	11,31	4,78	4,22
Railways—Net Contribution	32,00	5,61	7,50
Deduct—Share of Income-tax revenue payable to provinces	—28,75	—29,87	35,16
Total Revenue	3,60,67	3,36,19	2,79,42
Deficit	1,23,90	45,29	48,46
	4,84,57	3,81,48	3,27,88
Expenditure—			
Direct Demands on the Revenue	9,16	10,11	10,45
Irrigation, Embankments, etc.	16	20	14
Debt Services	33,66	41,95	43,44
Currency and Mint	1,49	1,91	1,80
Civil Works	61	6,15	6,05
Defence Services Net	3,60,23	2,38,11	1,88,71
Miscellaneous	10,30	27,52	19,84
Contributions and Miscellaneous Adjustments between Central and Provincial Governments	9,74	1,71	1,71
Civil Administrations, Extraordinary Payments, etc.	59,22	53,82	55,74
Total Expenditure charged to Revenue	4,84,57	3,81,48	3,27,88

Note : The budget estimates for 1947-48 do not take into account the taxation proposals.

Receipts and Disbursements of the Government of India under Capital Heads

(In lakhs of Rupees.)

	Budget 1946-47	Revised 1946-47	Budget 1947-48
Receipts—			
New Loans	2,50,00	3,75,09	1,50,00
Treasury Bills	14,00	4,13	20,00
Special Floating Loans	—	1,39,25	6,60
Small Savings	57,50	51,68	45,45
Other Unfunded Debt	3,95	1,19	98
Railway Depreciation Fund	1,78	4,78	75
Railway Reserve Fund	11,94	16,67	4,99
Railway Betterment Fund	15,26	13,81	75
P. & T. Renewals Reserve Fund	49	33	6
Other Reserve Fund	7	2	4
Appropriation for Reduction or Avoidance of Debt	5,00	5,00	5,00
E. P. T. and Income-tax Deposits	19,82	22,81	55,94
Discount Sinking funds	1,23	1,14	1,27
Payment by Reserve Bank for Rupee coin	5,00	5,00	5,00
Repayment of Loans by Provinces	5,58	6,68	2,84
Other Deposits and Advances	38,30	94,70	33,80
Total	3,05,24	5,01,72	2,20,01
Deficit on Capital Account	—	61,52	—
Grand Total	3,05,24	5,63,24	2,20,01

Receipts and Disbursements of the Government of India under Capital Heads—*Contd.*

(In lakhs of Rupees.)

	Budget 1946-47	Revised 1946-47	Budget 1947-48
Disbursements—			
Capital Outlay :			
Railways	19,54	13,42	29,06
Vizagapatam Port	—	7	15
Posts and Telegraphs	6,23	5,04	3,98
Industrial Development	3,98	2,67	7,04
Aviation	1,39	1,11	3,83
Currency	—	1,52,19	6,62
Civil Works	6,56	58	12,50
Commutation of Pensions	11	6	25
Payment to Retrenched Personnel	35	4	5
Defence Capital Outlay	1,57	2,00	—
Grants to Provinces for Development	35,00	25,00	45,00
Other Civil Heads	3,88	2,61	9,11
Discharge of Permanent Debt	70,36	3,39,14	64,48
Advances to Provincial Governments	17,50	11,50	32,00
Other Loans and Advances (Net)	3,47	7,93	4,78
Total	1,69,72	5,63,24	2,18,35
Surplus on Capital Account	1,35,52	—	1,66
Grand Total	3,05,24	5,63,24	2,20,01

AUGUST 15, 1947

Following the political division of the country on August 15, 1947, Mr. Shanmukham Chetty, first Finance Minister of the Dominion of India presented the budget for the period August 15, 1947 to March 31, 1948 to the Constituent Assembly (Legislative). He announced: (1) For the present both the Dominions will continue the existing taxes and duties, (2) Till the end of September 1948, the two Dominions will remain under a common currency system managed by the Reserve Bank, although from April 1 next Pakistan will have its own over-printed notes and coin, (3) The initial liability for the ouststanding loans, guarantees and financial obligations of the late Central Government at the time of the partition and for the pensions chargeable to it has been placed by law on the Indian Dominion subject to an equitable contribution from Pakistan, (4) The net deficit on revenue account, with a revenue of Rs. 171.15 crores and a revenue expenditure of Rs. 197.39 crores in the period covered by these estimates will be Rs. 26.24 crores; but the final figure may be higher, (5) The expenditure estimates include Rs. 22 crores for the evacuation and relief of refugees and inflated defence expenditure, (6) The existing export duty of three per cent. on cotton cloth and yarn will be replaced by a duty of as. 4 per square yard on cotton cloth and as. 6 a lb. on cotton yarn.

"This is the eighth consecutive deficit budget" said the Finance Minister, presenting the estimates. He added : "I do not wish in any way to minimise our present difficulties but once we reach fairly normal conditions,....we should be able to balance the budget. It will be too optimistic to expect normal conditions for the next year." He also assured the Assembly that it has not been the intention of Government to so arrange its taxation policy as to stifle the growth of industries in the country.

General Statement of the Revenue and Expenditure of the Indian Dominion.

(Rs. in lakhs)

	Budget Estimates, 1947-48
Revenue—	
Customs	52,15
Central Excise Duties	22,08
Corporation Tax	42,71
Taxes on Income other than Corporation Tax	45,24
Salt	50
Opium	89
Other Revenue	1,83
Railways	—
Irrigation	—
Posts and Telegraphs	2,03
Debt Services	66
Civil Administration	2,26
Currency and Mint	1,41
Civil Works	15
Miscellaneous	89
Total Revenue	1,72,80
Deficit	24,59
Total	1,97,39
Expenditure—	
Direct Demands on the Revenue	5,33
Irrigation	7
Debt Services	20,52
Civil Administration	20,24
Currency and Mint	1,20
Civil Works	6,21
Miscellaneous	48,70
Defence Services	92,74
Contributions and Miscellaneous Adjustments between Central and Provincial Governments	45
Extraordinary Items	1,92
Total Expenditure from Revenue.	1,97,39

General Statement of the Capital Receipts and Disbursements of the Central Government

	(Rs. in lakhs) Budget Estimates, 1947-48
Receipts—	
Capital Accounts not met from the Revenue	—
Permanent Debt (Net)	—
Floating Debt (Net)	10,00
Unfunded Debt (Net)	15,64
Depreciation and other Reserve Funds (Net)	—
Appropriation for Reduction or Avoidance of Debt (Net)	5,00
Other Deposit Transactions (Net)	—
Loans and Advances by the Central Government (Net)	—
Total Capital Revenue	30,64
Deficit on Capital Account	1,34,83
Total	1,65,47
Disbursements—	
Capital Accounts not Met from Revenue	
Railway Capital	17,63
Posts and Telegraphs	2,69
Industrial Developments	5,31
Civil Aviation	1,59
Civil Works	3,67
Schemes of State Trading	2,33
Grants to Provincial Governments for Development	20,39
Other Items	2,98
Total Capital Account	56,59
Permanent Debt (Net)	19,63
Floating Debt (Net)	—
Unfunded Debt (Net)	—
Depreciation and other Reserve Funds (Net)	9,98
Appropriation for Reduction or Avoidance of Debt (Net)	—
Other Deposit Transactions (Net)	51,53
Loans and Advances by the Central Government (Net)	27,74
Total Capital Disbursements.	1,65,47

General Statement of the Receipts and Disbursements of the Central Government

	(Rs. in lakhs)
Receipts—	
Revenue Surplus	—
Surplus on Capital Account	—
Miscellaneous Deposits and Advances (Net)	1,69
Remittances (Net)	75
Total Receipts	2,44
Opening Balance	3,10,40
Total	3,12,84
Disbursements—	
Revenue Deficit	24,59
Deficit on Capital Account	1,34,83
Total Disbursements	1,59,42
Closing Balance	1,53,42
Total	3,12,84

LAND REVENUE

The principle underlying the land revenue system in the sub-continent has been from time immemorial on the basis that government is the Supreme Landlord and the revenue derived from land is by way of rent. The official term for the method of collection is "Settlement". These are of three types. The permanent *Zamindari* System is mainly found in the Bengal area, Bihar, the U. P. and parts of Madras and covers roughly an area of 120 million acres equivalent to 19 per cent. of the total agricultural area of the two Dominions. In the second group are the temporarily settled Zamindars such as *Malguzari, Maharwari, Khoti, Narvadari, Bhagdari, Inami* and *Talugdari*. These are found mostly in the C.P. the Punjab area, Sind and parts of the U.P the Bengal area and Bombay covering about 30 per cent. of the area of the two Dominions. The remaining 51 per cent. or approximately 285 million acres are under the *rayatwari* system covering parts of Bombay and most parts of Madras, Berar, Sind, Assam and the Punjab area.

The Governments of E. Bengal, W. Bengal, Bihar and the United Provinces have accepted on principle that the Zamindari system should be abolished. The Government of Madras have also moved in that direction. The U.P. Government have fixed the compensation at six times the annual income of the property. The C.P. Government have adopted legislation for the abolition of the *Malguzari* system. The Bill to amend the Khoti Settlement Act, 1880, which became law in the Bombay Province in 1946, lays down that the Khoti villages will lapse to Government in the event of the co-sharers concerned failing to nominate a managing Khoti for two successive years. Towards the end of 1946, the Bombay Fragmentation (Prevention) and Consolidation of Holdings Bill was published for eliciting public opinion. The Bill seeks to prevent fragmentation and to achieve consolidation of scattered holdings and has now become Law.

INCIDENCE OF THE REVENUE

The incidence of the revenue charges varies according to the nature of the settlement, the class of tenure, and the character and circumstances of the holding. Under the Permanent Settlement in the old undivided Bengal Government derive rather less than £3,000,000 from a total rental estimated at £12,000,000. Under Temporary Settlements, 50 per cent. of the rental in the case of *Zemindari* land may be regarded as virtually a maximum demand. In some parts the impost falls as low as 35 and even 25 per cent. and only rarely is the proportion of half the rental exceeded. In regard to *Ryotwari* tracts it is impossible to give any figure that would be generally representative of the Government's share. But one-fifth of the gross produce is the extreme limit, below which the incidence of the revenue charge varies greatly.

About sixty years ago, the Government of India were invited in an influentially signed memorial to fix one-fifth of the gross produce as the maximum Government demand. In reply to this memorial and other representations the Government of India (Lord Curzon being Viceroy) issued a Resolution in defence of their Land Revenue Policy. In it was stated that "under the existing practice the Government is already taking much less in revenue than it is now invited to exact" and "the average rate is everywhere on the down grade." This Resolution, together with the statements of Provincial Governments on which it was based, was published as a volume; it is still the authoritative exposition of the principles controlling the Land Revenue policy of the Government of India.

In a series of propositions claimed to be established by this Resolution the following points are noted:—(1) In *Zemindari* tracts progressive moderation is the keynote of the Government's policy, and the standard of 50 per cent. of the assets is more often departed from on the side of deficiency than excess; (2) in the same areas the State does not hesitate to interfere by legislation to protect the interests of the tenants against oppression at the hands of the landlords; (3) in *Ryotwari* tracts the policy of long-term settlements is being extended, and the proceedings in connection with new settlements simplified and cheapened; (4) local-taxation (of land) as a whole is neither immoderate nor burdensome; (5) over-assessment is not, as alleged, a general or widespread source of poverty, and it cannot fairly be regarded as a contributory cause of famine. At the same time the Government laid down as principles for future guidance—(*a*) large enhancements of revenue, when they occur, to be imposed progressively and gradually, and not *per saltum*; (*b*) greater elasticity in revenue collection, suspensions and remissions being allowed according to seasonal variations and the circumstances of the people; (*c*) a more general resort to reduction of assessments in cases of local deterioration.

EXCISE

The Excise revenue in the sub-continent can be classified into two divisions—one derived from the Central Excise Duties and belonging to the Central Government's finance and the other derived from the manufacture and sale of intoxicating liquors, hemp drugs, toddy and opium. The latter is a provincial revenue. The revenue from the Central Excise Duties has increased by six times during the past decade. As against a comparatively small revenue of Rs. 7,66 lakhs in 1937-38 and Rs. 12,79 lakhs in 1942-43, the actuals for 1945-46 totalled Rs. 46,36 lakhs. The budget for 1947-48 estimated the revenue at Rs. 40,93 lakhs. These duties are at present levied on motor spirit, kerosene, sugar, matches, steel ingots, tyres, tobacco, vegetable product, betel-nut, coffee, tea and coal cess.

The Budget of the Government of India for 1944-45 brought in force important changes in the field of Central Excises. It raised the rates of duty on unmanufactured tobacco and on cigars and cheroots and included in the Central Excise Tariff betel-nuts, coffee and tea.

A further change in respect of tobacco was proposed in the following year. Accordingly, the highest class of flue-cured tobacco in the excise tariff was sub-divided into three and subjected to a duty of Rs.7-8, Rs.5 or Rs.3-8 per lb., according as it was intended for use in manufacturing cigarettes containing more than 60 per cent. more than 40 but not more than 60 per cent. or more than 20 but not more than 40 per cent. by weight of imported tobacco. In order to avoid double incidence, some of the provincial governments reached an agreement with the Centre by which they withdrew the provincial excise duty on tobacco in lieu of a share in the proceeds from the Centre's tobacco excise. Tobacco excise has been responsible for nearly half the receipts under Central Excise Duties.

As the result of the discussion in the Legislature on the budget for 1946-47, the duty on kerosene has been reduced from 4 annas six pies to 3 annas per imperial gallon. The duty on motor spirit has been lowered by three annas to 12 annas and that on betel-nuts from 2 annas to 1 anna per lb. A reduction in excise duty on matches was also announced with a view to lowering the price of a match-box from 9 pies to 6 pies.

The provincial excise revenue in the sub-continent is derived from the manufacture and sale of intoxicating liquors, hemp drugs, toddy and opium. The percentage of excise to total revenues of the provincial Government increased from 16·0 to 24·5 between 1938-39 and 1945-46. Since then, however, excise revenue has been pushed into the background by the prohibition policy of the provincial governments. The budget estimates for 1948-49 foreshadowed a loss of over Rs. 9 crores in revenue of which Rs. 8.41 crores would be in Madras, Rs. 60 lakhs in the United Provinces and Rs. 37 lakhs in C.P. & Berar.

PROHIBITION

After the introduction of provincial autonomy in April 1937, it became the avowed policy of all provincial Governments to discourage the consumption of alcoholic beverages; but the Congress administrations which held office in seven provinces until September 1939 went further and, before they resigned, adopted an active policy of enforcing prohibition within a period of years. The measures taken by them varied from province to province, but generally speaking, they took the form of declaring certain areas, either urban or rural, "dry" and banning the production, sale and consumption of liquor within those areas. Thus in Madras four districts were declared "dry"; a special excise regime was set up and active steps were taken to wean the people from the use of liquor. In the United Provinces, Bihar, Orissa, the Central Provinces, Sind and Assam similar steps were taken to prevent the people of certain areas from drinking alcohol. In order to discourage the consumption of alcohol in the United Provinces, the provincial government enhanced the excise duty in 1946-47. In Bengal and the Punjab before the partition (where Coalition Government were in office), on the other hand, there was no actual prohibition but only temperance propaganda.

In Bombay, the Congress scheme went further than elsewhere. The capital city Bombay and the second largest city Ahmedabad were declared "dry," subject to an elaborate system of personal "permits" for Europeans, Parsees and "confirmed addicts." The ban on sales of

foreign liquor was withdrawn as from July 2, 1940, and that on country liquor was modified subject to severe restrictions.

The restoration of provincial autonomy in the middle of 1946 was followed by a revival of the old policy of prohibition in the Congress provinces. The Madras Government have chalked out a two-year plan for complete prohibition. The C.P. Government have introduced prohibition in certain districts. A feature of their plan is to have a shopless zone of 10 miles round the "dry" areas.

The Government of Bombay have decided to have total prohibition in the province within four years beginning from April 1947. It is proposed to reduce the yearly consumption of all types of intoxicants by 25 per cent. and by closing the shops for progressively longer periods every year. For the first three years, it will be a sort of temperance arrangement which will evolve prohibition in the fourth year. On the financial side assessment duties on all types of liquors will be doubled. As a result there is likely to be a gain of nearly Rs. 175 lakhs in the first year; but the progressive diminution in revenue will result in the total disappearance of Rs. 752 lakhs of revenue from this source in the fourth year.

DRUGS

The narcotic products of the hemp plant consumed in the sub-continent fall under three main categories, namely, ganja or the dry flowering tops of the cultivated female hemp plant; charas, or the resinous matter which forms an active drug when collected separately; and bhang, or the dried leaves of the hemp plant whether male or female cultivated or uncultivated. The main features of the existing system are restricted cultivation under supervision, storage in Bonded Warehouses, payment of a quantitative duty before issue, retail sale under licenses and restriction on private possession. Licenses to retail all forms of hemp drugs are usually sold by auction. The sale of charas has been prohibited in the Bombay Presidency since 1922.

The general practice is to sell opium from the Government Treasury, or a Central Warehouse, to licensed vendors. The right of retail to the public is sold by annual auction to one or several sanctioned shops. Further legislation against opium smoking in clubs and dens is now under contemplation.

The revenue from opium is derived mainly from exports of what is called provision opium to foreign countries and from the sale to Provincial Governments of excise opium for internal consumption. The entire quantity is now exported under the system of direct sales to foreign and Colonial governments, the system of auction sales in Calcutta to traders for export to foreign countries having been stopped with effect from 7th April 1926. In no case are exports permitted without an import certificate by the Government of the country of import as prescribed by the now defunct League of Nations.

It was originally decided to reduce the total of the opium exported since the calendar year 1926 by 10 per cent. anually in each subsequent year until exports were totally extinguished at the end of 1935. The war, however, witnessed the revival of the trade.

Excise opium is sold to Provincial Governments for internal consumption at a fixed price based on the cost of production. This opium is retailed to licensed vendors at rates fixed by the Provincial Governments and varying from Province to Province. The price of opium was raised in 1946-47.

Opium, which was an important source of revenue till 1933-34, receded in importance gradually and became a burden on the general revenues in 1943-44 and in the following two years. Since then a slight recovery has been noted.

SALT

The salt revenue was inherited by the British Government from Pre-British rule, together with a miscellaneous transit dues. These transit dues were abolished and the salt duty consolidated and raised. The demand for the abolition of salt duty was pressed by Mahatma Gandhi in 1928 who later launched a Civil Disobedience Movement to enforce it. Under the Gandhi-Irwin Pact, the right of an individual to manufacture salt for his own needs without paying the duty was recognised. The establishment of the Interim Government was, however, followed by the Local abolition of the duty with effect from April 1, 1947.

There are four great sources of supply; rock salt from the salt range and Kohat Mines in the N.-W.F.P.; brine salt from the Sambhar Lake in Rajputana; salt brine condensed on the borders of the lesser Rann of Cutch; and sea salt factories in Bombay, Madras and at the mouth of the Indus. Broadly, one-half of the indigenous salt is manufactured by Government Agency; and the remainder under license and excise systems. In the Punjab before the partition and Rajputana today the salt manufactories are under the control of the Northern India Salt Department, a branch of the Commerce and Industry Department. In Madras and Bombay the manufactories are under the supervision of Local Governments. Special treaties with States permit of the free movement of salt except from the Portuguese territories of Goa and Daman, on the frontiers of which patrol lines are established to prevent the smuggling of salt into Dominion Territory.

From 1888-1903 the duty on salt was Rs. 2-8 per maund of 82 lbs. In 1903, it was reduced to Rs. 2; in 1905 to Rs. 1-8-0; in 1907 to Re. 1 and in 1916 it was raised to Rs. 1-4-0. The successive reductions in duty have led to a largely increased consumption, the figures rising by 25 per cent. between 1903-1908. In 1923 the duty was doubled bringing it again to Rs. 2-8. In 1924 it was reduced to Rs. 1-4-0. The duty remained at Rs. 1-4-0 from March 1924 to 29th September 1931. It was raised to Rs. 1-9-0 with effect from 30th September 1931. Prior to 17th March 1931, the excise duty and import duty on salt were always kept the same, but by the Indian Salt (Additional Import Duty) Act XIV of 1931, a temporary additional customs duty of 4½ annas per maund was imposed on foreign salt. In March 1933 the customs duty was reduced by two annas. With the last change the duty on salt manufactured in or imported by land stood at 1-9-0 per maund.

CUSTOMS

Import duties have varied from time to time according to the financial condition of the country. Before the 1857 upheaval they were five per cent.; in the days of financial stringency which followed they were raised to 10 and in some cases 20 per cent. In 1875 they were reduced to five per cent.; but the opinions of Free Traders, and the agitation of Lancashire manufacturers who felt the competition of the Indian mills, induced a movement which led to the abolition of all customs dues in 1882. The continued fall in exchange compelled the Government of India to look for fresh sources of revenue and in 1894 five per cent. duties were reimposed.

Since the Great War of 1914-18, there has been a growing tendency towards larger reliance on Customs duties to meet the financial needs of the Centre. Between 1913-14 and 1924-25, a certain amount of shifting of the burden from the richer class to the masses was evident. Then came the policy of discriminating protection and of Imperial Preference in terms of the Ottawa Trade Agreement of 1932, which, in addition to the financial consideration shaped the Customs tariffs. The Customs schedule had been completely recast in the Budget of 1916-17 in order to meet the budgetary deficit and the tariffs were raised again in 1921-22 to fill in the large gap between the revenue and the expenditure. The Supplementary Finance Act of 1931 imposed fresh increases in the import duties and the Tariff Amendment Act of January 1, 1933 provided for giving effect to the Ottawa Agreement.

On the eve of the First World War, the revenue from Customs duties had totalled only Rs. 11.13 crores. By 1929-30 it reached Rs. 51.28 crores when the law of diminishing returns became operative and by 1938-39 it declined to Rs. 40.51 crores following the reduction in the international trade in the subsequent years of the war. The proceeds from the Customs duties in 1942-43 amounted to only Rs. 25.12 crores being the lowest for a quarter of a century. Since then, however, there has been a reversal of the trend and the revised estimates for 1946-47 placed the receipts at Rs. 87¼ crores as against Rs. 73.61 crores for the preceding year, Rs. 93 crores being the budget estimates for 1947-48.

The upward trend of receipts after 1942-43 is partly due to the improved situation in regard to imports and exports; but in the main it is to be traced to the surcharge imposed in that year and raised thereafter.

Important Changes.—Important changes affecting the policy underlying this tax were announced by the Finance Member in his budget speech for 1947-48. He met the demand for the relief from Customs duty of raw materials imported for industry and to reduce the rates on imported plant and machinery to the extent it was practicable without injury to the Indian manufacturers of similar goods. He proposed to give effect to the decisions by a notification under the Sea Customs Act.

While continuing the general surcharge for one more year, the Finance Act as finally passed has made the following important changes: (*a*) Reduction in the duty on kerosene from as. 4½ to as. 3 per imperial gallon, (*b*) Reduction in the duty on motor spirits from as. 15 to as. 12 on imperial gallon, involving a loss of Rs. 120 lakhs, (*c*) Increase in the surcharge on "wines" from one-fifth to one-half, (*d*) Replacement of *ad valorem* duty by specific duty in respect of cinematograph film, the duty on unexposed film being reduced from half an anna per linear footage as originally proposed to three pies, (*e*) Fixation of duty on imported betelnuts at as. 5 (without any surcharge) a pound as against the original budget proposal for as. 5½, to yield Rs. 155 lakhs, (*f*) Consolidation of the customs duty on raw cotton and that levied under the Cotton Fund Ordinance so as to raise the duty to as. 2 per pound, (*g*) Imposition of a specific duty on gold bullion and coin at the rate of Rs. 25, a tola of 180 grains fine to be varied from time to time by a notification under the Sea Custom Act in order to attain in an orderly manner a reasonable measure of approximation to world prices, and (*h*) Increase in the existing duty of silver of three annas an ounce, with a surcharge of 7½ pies, to eight annas an ounce without any surcharge. No revenue provision has been made on account of the change in silver duty.

The 1947-48 budget made certain changes in the export tariff by adding fresh duties on export tariff by adding fresh duties on export of jute, raw cotton, tea and rice.

INCOME-TAX

Income-tax was first imposed in India in 1860, in order to meet the financial dislocation caused by the 1857 upheaval. It was levied at the rate of four per cent. or a little more than 9½d. in the pound on all incomes of five hundred rupees and upwards. Many changes have from time to time been made in the system, and the present schedule was consolidated in the Act of 1886. This imposed a tax on all incomes derived from sources other than agriculture which were exempted. On incomes of 2,000 rupees and upwards the rate was five pies in the rupee, or about 6¼d. in the pound; on incomes between 500 and 2,000 rupees the rate was four pies in the rupee or about 5d. in the pound. In March 1903 the minimum taxable income was raised from 500 to 1,000 rupees. The income-tax schedule was completely revised, raised, and graduated in the Budget of 1916-17 in the general scale of increased taxation imposed to meet the deficit arising out of war conditions.

Since then the process has been almost continuous and in every financial difficulty the authorities have turned to the Income-Tax as a means of raising fresh revenue.

The Supplementary Finance Bill of 1931 imposed surcharges on income-tax and super-tax to meet the emergency of that year. The surcharges were subsequently scaled down in succeeding years, but were not completely abolished until after the passage of the Income-Tax (Amendment) Act of 1939.

Taxation on income under Corporation, Income and Excess Profits Taxes provided the largest expansion in yield during the war. These three taxes contributed an increasingly higher portion of the total revenue, from 20·2 per cent. in 1940-41 to 49·1 per cent. in 1944-45. In 1945-46 it was as much as 57.2 per cent., whence it started declining. The rise in the rates of

income-tax and the introduction of the Excess Profits Tax were the main contributory factors.

Relief to Industry.—The financial proposals for 1946-47 marked an important step in the direction of giving relief to the industry and the ordinary tax payer, though the year witnessed the amalgamation of the surcharges with the basic rates of income-tax and super-tax. These measures include.—(1) the grant of special initial depreciation allowances of 10 per cent. on new plant and machinery as well as allowances for expenditure on scientific research, (2) widening the scope of depreciation allowance so as to cover the loss of the asset by destruction or demolition and its extention to buildings, (3) the exemption from income-tax for two years in the case of buildings for residential purposes and an initial depreciation allowance of 15 per cent. for buildings used as business premises, (4) a net reduction of 1¼ annas in the present total rate of income-tax and super-tax payable by a company from annas 7¾ to annas 6 and additional-super-tax at steepening rates on div lends, other than those payable at a fixed rate, in excess of 5 per cent. of the capital of a company (other than a private company) including reserves or 30 per cent. of the total income, whichever is higher, with a view to keeping the dividends within reasonable limits and encouraging the ploughing back of profits into industry, (5) reduction in the rate of tax in lower ranges and increase in the earned income allowance from one-tenth of the earned income, subject to a maximum of Rs. 2,000 in terms of income to one-fifth, subject to a maximum (in terms of income), of Rs. 4,000, (6) carry-over of the differential treatment in favour of earned income to the super-tax range at the rate of one anna in the rupee between Rs. 25,000 and Rs. 2 lakhs and of half an anna in the rupee between Rs. 2 lakhs and Rs. 5 lakhs, (7) an increase in the rate of income-tax on the balance of the income above Rs. 15,000 from annas 4-9 to annas 5-0, (8) an increase in the number of slabs subject to super-tax, resulting in a more gradual steepening of the rates, which will be more severe on the largest incomes than at present. (9) a reduction of the rate on life insurance companies from annas 5¼ to annas 5, and (10) discontinuance of the provision for funding a portion of the tax in the case of income upto Rs. 6,000. In the following year, the minimum exemption limit was raised to Rs. 2,500.

OTHER TAXES ON INCOME

The Excess Profits Tax.—Was introduced in the budget proposals for 1940-41 when an impost of 50 per cent. on all abnormal War profits above a taxable minimum of Rs. 30,000 earned since September 1, 1939 was introduced. These excess profits were calculated on the basis of a standard year between 1935-36 and 1939-40 at the option of the assessee. In the following year the tax was raised to 66⅔ per cent. The total collection under this head since its introduction in April 1940 to the end of 1946-47 (Budget) amounted approximately to Rs. 3,50 crores or 43 per cent. of the total taxes on income or 19.3 per cent. of the total revenue during these years before deducting the provincial share. The tax was completely abolished after March 31, 1946. It might be noted that this tax was in force in 1919 and 1920.

The Business Profits Tax.—Was imposed in 1947-48. In justification of the proposal, the Finance Member stated that the complete abolition of the Excess Profits Tax in the last years' budget was premature. The object of the Bill was to impose a special income-tax on the profits exceeding Rs. one lakh of business, professions and vocations. The charge proposed was 25 per cent. of the taxable profits; but the exemptions to agricultural income, life insurance business etc. granted by the Excess Profits Tax were continued. The final Act reduced the rate of tax from 25 per cent. to 16⅔ per cent. and fixed a uniform abatement at 6 per cent. of the Capital or charge or Rs.1 lakh or whichever is greater in place of the different criteria for companies and, for the purpose of computing abatement, the inclusion under paid-up capital of so much of the premia realised by a company for the issue of any of its shares as is retained in the business.

The Capital Gains Tax.—Was also imposed in April 1947 by the amendment of the Income-Tax and Excess Profits Tax Act. The Finance Member justified this proposal on the ground that the levy on Capital gains was based on the U.S. model and would affect only incomes which might properly be described as unearned increment. The Bill sought to ignore capital gains upto Rs. 5,000 as well as distribution of assets on the dissolution of a firm or a company or under a gift or transfer on trust. The Select Committee watered down the exemption limit from Rs. 5,000 to Rs. 15,000 and recommended the levy of one anna in the rupee on the whole of capital gains upto Rs. 50,000 rising by one anna by stages upto a rate of five annas in the rupee on the whole amount of capital gains where that amount exceeded Rs. 10 lakhs. In the final Act further concession was given by exempting gains from the sale of personal effects.

The Taxation of Income (Investigation Commission) Bill—Was also passed by the Legislature with certain amendments, recommended by the Select Committee, the most important of which is in regard to the initiative for investigtion which will rest entirely with the Central Government who will refer to the Commission for investigtion and report any *prima facie* case of tax evasion. "It is notorious", stated the statement on objects and reasons of the Bill "that recently businesses and properties have changed hands for very large sums of money. Government are anxious to know how in spite of very high rates of taxation the large fortunes which these transactions imply have been accumulated." Towards the end of 1947, the Government of India announced the personnel of the commission.

Progress of Revenue.—Prior to 1914, the receipts from taxation on income were hardly Rs. 3 crores; but they went up to Rs. 22 crores in 1921-22 owing to the increases in the rates. The industrial depression however, resulted in a setback in the following years and even in 1938-39, it did not exceed Rs. 17.28 crores. The war period witnessed a strong emphasis on this source for the purpose of Governmental finance and the revenue from this source realised in 1945-46 amounted to Rs. 178.03 crores representing 49.4 per cent of the total revenue.

Guide to Taxes on Income (1947-48)

RATES OF INCOME-TAX

A.—In the case of every individual, Hindu undivided family, unregistered firm and other association of persons not being a case to which paragraph B of this Part applies :—

	Rate.
1. On the first Rs. 1,500 of total income.	*Nil.*
2. On the next Rs. 3,500 of total income.	One anna in the rupee.
3. On the next Rs. 5,000 of total income.	Two annas in the rupee.
4. On the next Rs. 5,000 of total income.	Three and a half annas in the rupee.
5. On the balance of total income.	Five annas in the rupee.

Provided that—

(*i*) no income-tax shall be payable on a total income which, before deduction of the allowance, if any, for earned income, does not exceed Rs. 2,500;

(*ii*) the income-tax payable shall in no case exceed half the amount by which the total income (before deduction of the said allowance, if any, for earned income) exceeds Rs. 2,500;

(*iii*) the income-tax payable on the total income as reduced by the allowance for earned income shall not exceed either—

(*a*) a sum bearing to half the amount by which the total income (before deduction of the allowance for earned income) exceeds Rs. 2,500 the same proportion as such reduced total income bears to the unreduced total income, or

(*b*) the income-tax payable on the income so reduced at the rates specified in this Schedule,

whichever is less.

B.—In the case of every company and Local authority, and in every case in which under the provisions of the Indian Income-tax Act, 1922, income-tax is to be charged at the maximum rate—

	Rate.
On the whole of total income.	Five annas in the rupee.

RATES OF SUPER-TAX

A.—In the case of every individual, Hindu undivided family, unregistered firm and other association of persons, not being a case to which paragraph B or paragraph C or paragraph D of this Part applies—

	Rate, if income wholly earned.	Rate, if income wholly unearned.
On the first Rs. 25,000 of total income.	*Nil.*	*Nil.*
On the next Rs. 5,000 of total income.	Two annas in the rupee.	Three annas in the rupee.
On the next Rs. 5,000 of total income.	2¼ annas in the rupee.	3¼ annas in the rupee.
On the next Rs. 10,000 of total income.	3 annas in the rupee.	4 annas in the rupee.
On the next Rs. 10,000 of total income.	4 annas in the rupee.	5 annas in the rupee.
On the next Rs. 10,000 of total income.	5 annas in the rupee.	6 annas in the rupee.
On the next Rs. 10,000 of total income.	6 annas in the rupee.	7 annas in the rupee.
On the next Rs. 15,000 of total income.	7 annas in the rupee.	8 annas in the rupee.
On the next Rs. 15,000 of total income.	8 annas in the rupee.	9 annas in the rupee.
On the next Rs. 15,000 of total income.	9 annas in the rupee.	10 annas in the rupee.
On the next Rs. 30,000 of total income.	10 annas in the rupee.	10¼ annas in the rupee.
On the balance of total income	10¼ annas in the rupee.	10¼ annas in the rupee.

B.—In the case of every Local Authority—

	Rate.
On the whole of total income ..	Two annas in the rupee.

C.—In the case of an association of persons bein a co-operative society, other than the Sanikatta Saltowners' Society in the Bombay Presidency, for the time being registered under the Co-operative Societies Act, 1912, or under an Act of the Provincial Legislature governing the registration of co-operative societies—

	Rate.
On the first Rs. 25,000 of total income.	*Nil.*
On the balance of total income.	Two annas in the rupee.

D.—In the case of every company—

	Rate.
On the whole total income.	Two annas in the rupee.

and in addition, in respect of that part of the total income (as reduced by the amount of dividends payable at a fixed rate) which does not exceed the amount of dividends, not being dividends payable at a fixed rate, declared in British India in respect of the whole or part of the previous year for the assessment for the year ending on the 31st day of March 1947—

on the amount by which such part—	Rate.
(*a*) exceeds 30 per cent., but does not exceed 40 per cent., of the total income as so reduced.	Three annas in the rupee.
(*b*) exceeds 40 per cent., but does not exceed 50 per cent., of the total income as so reduced.	Five annas in the rupee.
(*c*) exceeds 50 per cent., of the total as so reduced.	Seven annas in the rupee.

Provided that—

(*i*) no additional super-tax shall be payable where such part is less than, or equal to, five per cent. on the capital of the company;

(*ii*) where such part is more than five per cent. on the capital of the company, the additional super-tax payable shall be reduced by the amount of additional super-tax which would, but for the provisions of clause (*i*) of this proviso, have been payable had such part been equal to five per cent. on the capital of the company;

Explanation.—For the purposes of the paragraph,—

(*a*) the expression "capital of the company" shall be deemed to mean the paid-up share capital at the beginning of the previous year for the assessment for the year ending on the 31st day of March 1948 (other than capital entitled to a dividend at a fixed rate) plus any reserves other than depreciation reserves and reserves for bad or doubtful debts at the same date as diminished by the amount on deposit on the same date with the Central Government under section 10 of the Indian Finance Act, 1942, or section 2 of the Excess Profits Tax Ordinance, 1943.

(*b*) the expression "dividend" shall be deemed to include any distribution included in the expression "dividend" as defined in clause (6A) of section 2 of the Indian Income-tax Act, 1922, and any such distribution made during the year ending on the 31st day of March 1948 shall be deemed to have been made in respect of the whole or part of the previous year.

Guide to Taxes on Income (1948-49)

RATES OF INCOME-TAX.

A. In the case of every individual, Hindu undivided family, unregistered firm and other association of persons, not being a case to which paragraph B, C or D of this Part applies—

	—	Rate.
1.	On the first Rs. 1,500 of total income	*Nil.*
2.	On the next Rs. 3,500 of total income	One anna in the rupee.
3.	On the next Rs. 5,000 of total income	Two annas in the rupee.
4.	On the next Rs. 5,000 of total income	Three and a half annas in the rupee.
5.	On the balance of total income	Five annas in the rupee.

Provided that—

(*i*) no income-tax shall be payable on a total income which, before deduction of the allowance, if any, for earned income, does not exceed Rs. 3,000;

(*ii*) the income-tax payable shall in no case exceed half the amount by which the total income (before deduction of the said allowance, if any, for earned income) exceeds Rs. 3,000;

(*iii*) the income-tax payable on the total income as reduced by the allowance for earned income shall not exceed either—

(*a*) a sum bearing to half the amount by which the total income (before deduction of the allowance for earned income) exceeds Rs. 3,000 the same proportion as such reduced total income bears to the unreduced total income, or

(*b*) the income-tax payable on the income so reduced at the rates herein specified,—

whichever is less.

B. In the case of every company, not being a company to which paragraph C of this Part applies—

—	Rate.
On the whole of total income	Five annas in the rupee.

Provided that in the case of an Indian Company—

(*a*) where the total income, as reduced by seven annas in the rupee and by the amount, if any, exempt from income-tax, exceeds the amount of any dividends (including dividends payable at a fixed rate) declared in respect of the whole or part of the previous year for the assessment for the year ending on the 31st day of March, 1919, and no order has been made under sub-section (*1*) of section 23A of the Indian Income-tax Act, 1922 (XI of 1922), a rebate shall be allowed at the rate of one anna per rupee on the amount of such excess;

(*b*) where the amount of dividends referred to in clause (*a*) above exceeds the total income as reduced by seven annas in the rupee and by the amount, if any, exempt from income-tax, there shall be charged on the total income an additional income-tax equal to the sum, if any, by which the aggregate amount of income-tax actually borne by such excess (hereinafter referred to as "the excess dividend") falls short of the amount calculated at the rate of five annas per rupee on the excess dividend; and

(*c*) the income-tax payable, after deducting any rebate permissible under clause (*a*), but without including any additional income-tax chargeable under clause (*b*), shall not exceed the aggregate of—

(*i*) the income-tax which would have been payable under the provisions of paragraph C of this Part if the total income had been Rs. 25,000, and

(*ii*) half the amount by which the total income exceeds Rs. 25,000.

For the purposes of clause (*b*) of the above proviso, the aggregate amount of income-tax actually borne by the excess dividend shall be determined as follows:—

(*i*) the excess dividend shall be deemed to be out of the whole or such portion of the undistributed profits of one or more years immediately preceding the previous year as would be just sufficient to cover the amount of the excess dividend and as have not likewise been taken into account to cover an excess dividend of a preceding year;

(*ii*) such portion of the excess dividend as is deemed to be out of the undistributed profits of each of the said years shall be deemed to have borne tax,—

(*a*) if an order has been made under sub-section (*1*) of section 23A of the Indian Income-tax Act, 1922, in respect of the undistributed profits of that year, at the rate of five annas in the rupee, and

(*b*) in respect of any other year, at the rate applicable to the total income of the company for that year reduced by the rate at which rebate, if any, was allowed on the undistributed profits.

C. In the case of every Indian Company the total income of which does not exceed Rs. 25,000—

—	Rate.
On the whole of total income	Two and a half annas in the rupee.

Provided that where the total income, as reduced by four and a half annas in the rupee and by the amount, if any, exempt from income-tax, exceeds the amount of any dividends (including dividends payable at a fixed rate) declared in respect of the whole or part of the previous year for the assessment for the year ending on the 31st day of March, 1949, and no order has been made under sub-section (*1*) of section 23A of the Indian Income-tax Act, 1922, a rebate shall be allowed at the rate of half anna per rupee on the amount of such excess.

D. In the case of every local authority and in every case in which, under the provisions of the Indian Income-tax Act, 1922, income-tax is to be charged at the maximum rate—

—	Rate.
On the whole of total income	Five annas in the rupee.

Explanation.—For the purposes of this Part,—

(*a*) the expression "dividend" shall be deemed to include any distribution included in that expression as defined in clause (6A) of section 2 of the Indian Income-tax Act, 1922, and any such distribution made during the year ending on the 31st day of March, 1949, shall be deemed to have been made in respect of the whole or part of the previous year;

(*b*) the expression "Indian Company" shall have the meaning assigned to it in clause (7A) of section 2 of the Indian Income-tax Act, 1922.

RATE OF SUPER-TAX.

A. In the case of every individual, Hindu undivided family, unregistered firm and other association of persons, not being a case to which any other paragraph of this Part applies—

—	Rate, if income wholly earned.	Rate, if income wholly unearned.
1. On the first Rs. 25,000 of total income	*Nil.*	*Nil.*
2. On the next Rs. 15,000 of total income ..	Two annas in the rupee.	Three annas in the rupee.
3. On the next Rs. 15,000 of total income ..	Three annas in the rupee.	Four and a half annas in the rupee.
4. On the next Rs. 15,000 of total income ..	Five annas in the rupee.	Six annas in the rupee.
5. On the next Rs. 15,000 of total income ..	Six annas in the rupee.	Seven annas in the rupee.
6. On the next Rs. 15,000 of total income ..	Six and a half annas in the rupee.	Eight annas in the rupee.
7. On the next Rs. 50,000 of total income ..	Seven annas in the rupee.	Nine annas in the rupee.
8. On the next Rs. 1,00,000 of total income ..	Nine and a half annas in the rupee.	Nine and a half annas in the Rupee.
9. On the next Rs. 1,00,000 of total income ..	Ten annas in the rupee.	Ten annas in the rupee.
10. On the balance of total income	Ten and a half annas in the rupee.	Ten and a half annas in the rupee.

B. In the case of every local authority—

—	Rate.
On the whole of total income	Two annas in the rupee.

C. In the case of an association of persons; being a co-operative society, other than the Sanikatta Saltowners' Society in the Bombay Presidency, for the time being registered under the Co-operative Societies Act, 1912 (II of 1912), or under an Act of a Provincial Legislature governing the registration of co-operative societies—

—	Rate.
(1) On the first Rs. 25,000 of total income	*Nil.*
(2) On the balance of total income	Two annas in the rupee.

D. In the case of every company—

—	Rate.
On the whole of total income	Three annas in the rupee.

Provided that a rebate at the rate of one anna per rupee of the total income shall be allowed in the case of any company which, in respect of its profits liable to tax under the Indian Income-tax Act, 1922, for the year ending on the 31st day of March, 1949, has made the prescribed arrangements—

(*a*) for the declaration and payment in the Provinces of India of the dividend payable out of such profits, and

(*b*) for the deduction of super-tax from dividends in accordance with the provisions of sub-section (3D) or (3E) of section 18 of the said Act.

INDIAN BUDGET FOR 1948-49

The main features of the budget of the Indian Dominion presented by the Hon. Mr. Shanmukham Chetty to the Indian Parliament on February 28, 1948 were :—

(Rs. in crores)

	15-8-47 to 31-3-48 Budget	Revised	1948-49 Budget
Revenue ..	172.80	178.77	230.52
Expenditure ..	197.39	185.29	257.37
Defence ..	92.74	86.63	121.08
Civil ..	104.65	98.66	136.29
Revenue Deficit ..	24.59	6.52	26.85

Relief.—The following measures of relief in the present taxation were announced by the Finance Minister in his budget speech: (1) Reduction in business profits tax from 16¼ per cent. to 10 per cent. and the increase in the abatement from Rs. 1 lakh or six per cent. on the capital employed to Rs. 2 lakhs or six per cent. whichever is larger. (2) Increase in the limit for the application of the maximum rate of super-tax from Rs. 1¼ lakhs for earned and Rs. 1.2 lakhs for unearned income to Rs. 3¼ lakhs for both earned and unearned income, together with a rearrangement of the slab. (3) Abolition of the penal super-tax on companies distributing dividends above certain percentages and a regate of one anna in income-tax on undistributed profits, *i.e.*, as. 5 on distributed profits and as. 4 on undistributed profits of companies. (4) Reduction of income-tax on companies with an income of Rs. 25,000 and below to half the usual rates. (5) Exemption of donations to approved institutions and charities from taxation subject to a maximum of five per cent. of the companies' taxable income and 10 per cent. in the case of individuals, with an overall ceiling of Rs. 2½ lakhs. (6) Deduction of municipal taxes on property from the assessable income. (7) Conversion of the export duty of as. 4 per sq. yard on cotton cloth into 25 per cent. *ad valorem* and exemption of the handloom cloth from export duty as well as withdrawal of the export duty on cotton yarn. (8) the withdrawal of the excise duty on betelnuts. The net effect of the changes will be a drop of Rs. 6.46 crores in the revenue.

New Taxes—The new taxation proposals were :—

(1) Levy of an export duty of Rs. 80 per ton on oilseeds, Rs. 200 per ton on vegetable oils and of Rs. 20 per ton on manganese. (2) Increase in import duty on motor cars from 45 per cent. to 50 per cent. with preference of 7½ per cent. for the United Kingdom. (3) Excise duty of 25 per cent. on the ex-factory prices of cigarettes and the increase in the excise duty on certain categories of unmanufactured tobacco from as. 9 to as. 12 per lb. in some case and from as. 3 to as. 4 per lb. in others. (4) Increase in excise duty on tea from as. 2 to as. 4 per lb., on coffee to as. 4 per lb., on vegetable products by 50 per cent. to Rs. 7-8 per cwt., on tyres by 50 per cent., and on matches by Rs. 2-8 per gross on all boxes containing upto 50 matches. (5) Increase in postal registration fee from as. 3 to as. 4 and increase in surcharges on trunk calls from 40 per cent. to 60 per cent. and their amalgamation with the basic rate. (6) Increase in the corporation tax from as. 2 to as. 3 with a rebate of one anna to companies declaring and distributing dividends in India. In the aggregate, these proposals are designed to yield Rs. 17.72 crores.

The Finance Minister indicated that the readjustment of taxes will add Rs. 11.26 crores and proposed to transfer Rs. 10 crores to revenue by crediting advance payments against taxes instead of treating them as deposits. This would leave a deficit of Rs. 5.59 crores; but since the railways were expected to contribute Rs. 4½ crores to the general revenue, the net uncovered deficit was expected to be Rs. 1.09 crores.

SOME PARTICULARS

Here are more points from the Budget: For refugees' relief and rehabilitation, there is a provision of Rs. 100.4 million., Besides the Government will advance Rs. 100 million for the setting up of the Rehabilitation Finance Administration. Expenditure on relief and rehabilitation in the current financial year will amount to Rs. 148.9 million against Rs. 220 million included in the interim budget.

Expenditure on food subsidies in 1948-49 is estimated at Rs. 199.1 million. Food imports in the first half of 1948 are expected to amount to about Rs. 610 million.

Provision in the Capital Budget for normal requirements and for the financing of the Central and Provincial schemes will be of the order of Rs. 1,655 millions in the coming financial year.

Borrowings from the market are expected to amount to Rs. 1,500 million. This will be stepped up if circumstances are propitious.

Balance of Payments.—India's adverse balance in recent years is ascribed to two causes. "Firstly it is the inevitable result of the absence of imports during the many years of war that the long pent up demand should seek to satisfy itself as soon as the goods become available. The second and by far the most important reason for this deficit is, as is well known, our imports of foodgrains."

Another feature of India's External Financial position is that since 1946-47 she has been running a deficit in her balance of payments with the U.S.A., "both because goods have become much more freely available in that co untry and because we have to purchase there a substantial portion of our food requirements." The position was no better in regard to other hard currency areas.

Sterling Balances Agreement.—The Government of India and the United Kingdom have agreed by an exchange of letters that the interim Agreement of August 1947, which expired on December 31, 1947, should be extended up to June 30, 1948 with some modifications. Whereas the first agreement was concluded on behalf of both India and Pakistan, the present extension was on behalf of the Indian Dominion alone.

The object which has been kept in view is to make available to India sufficient foreign exchange resources to meet the estimated overall deficit of Rs. 520 million or £39 million, in the balance of payments during the first half of 1948. It has been agreed that the United Kingdom Government would transfer to India's No. 1 account a further £18 million. This fresh release, together with the balance at India's disposal under various accounts and some borrowing from the International Monetary Fund, should enable India to meet the anticipated deficit.

Settlement with Pakistan.—On a rough estimate the outstanding debt of the undivided Central Government on August 14, 1947 is likely to be of the order of Rs. 33,000 million. Total assets on that date are estimated at Rs. 28,000 million leaving a net excess of liabilities over assets of about Rs. 5,000 million. The arrangement with Pakistan lays down that for all assets located in her territory she would take a debt equal to their book value. An exception is made in the case of strategic railways, the book value of which for the purposes of settlement is written down from a little over Rs. 320 million to Rs. 145 million. In addition, it is agreed that Pakistan will take over a debt equal to the amount of the cash balance of Rs. 750 million allocated to her out of the cash balance of the undivided Government and 17½ per cent. of the net excess of the Central Government's liabilities over its assets, already stated as Rs. 5,000 million. Pakistan's debt will, however, be reduced by the liability she takes over in regard to Postal Savings Bank, Postal Cash and National Savings Certificates outstanding in her area, pensions of the undivided Government paid in Pakistan and the liability for pensions earned by officers who have opted for service in that Dominion. Pakistan's share will take the form of an inter-state debt to India, and on a very rough estimate this debt is likely to be of the order of Rs. 3,000 million and the rate of interest about 3 per cent. Pakistan's total debt will be repaid in Indian rupees in 50 annual equated instalments for principal and interest, the repayment commencing in 1952. A satisfactory solution has also been reached in regard to the allocation of the sterling reserves of the Reserve Bank, which has ceased to be the currency authority and banker to the Pakistan Government since July 1st, 1948.

New Financial year.—At the existing level of taxation the total Revenue for the year would be Rs. 2,305.2 million and the expenditure charged to revenue Rs. 2,573.7 million leaving a deficit of Rs. 268.6 million.

The main heads of Revenue are as follows: Customs, Rs. 817.5 million; Central Excise Rs. 340 million; Receipts from Income-tax (including Rs. 120 million on account of Excess Profits Tax and Rs. 170 million on account of Business Profits Tax), Rs. 1,300 million; estimated divisible pool of Income-tax, Rs. 802.4 million, the Centre retaining Rs. 423.7 million leaving Rs. 378.7 million as the provincial share; revenue from Posts and Telegraphs, Rs. 262 million; and working expenses and interest, Rs. 258.2 million leaving a surplus of 3.8 million.

Post-War Planning.—Regarding Post-War Planning and Development, there will be no reduction in the extent of the assistance promised by the Centre to the provinces when the provinces were asked to draw up their plans for development. After allowing for the expenditure incurred up to partition and for the areas now in Pakistan, the outstanding balance of assistance to the provinces at the end of the current year is estimated at Rs. 1,700 to Rs. 1,800 million.

For Central schemes of development, including resettlement, a provision of Rs. 107.7 million has been made in the revenue budget and Rs. 255 million in the capital budget.

In addition Rs. 265 million has been provided this year and Rs. 760 million next year for ordinary capital expenditure. The total provision in the capital budget for normal requirements and for financing the development schemes, both for the Centre and the Provinces, comes to the impressive figure of Rs. 700 million this year and Rs. 1,655 million next year.

Future Prospects.—As regards the prospects for 1949-50, the Finance Minister points out that if the large receipts of E.P.T. and B.P.T. in next year's revenue are allowed for the revenue in 1949-50 may be Rs. 200 million less than in the previous year. It is not unreasonable to expect a reduction of expenditure on refugees, subsidising of foodgrains and defence. Neither is it unreasonable to hope for a balanced budget in the future but he feels that in the transitional time it is "the path of prudence to strengthen our revenue position and keep down our expenditure as much as possible." The small uncovered deficit is an index of the efforts that Government are making to close the era of war-time deficits and bridge the gap between revenue and expenditure.

Debt Position—The total interest bearing obligations at the end of the budget year are estimated at Rs. 22,310 million against which the interests yielding assets are expected to amount to Rs. 12.370 million and cash and other investments to Rs. 1,300 million leaving a final uncovered debt of Rs. 8,640 million. These figures are to some extent approximate as the final figures of Pakistan's debt to India still remained to be worked out but they gave a broad indication of the position. The proportion of the country's debt to its national income also compares favourably with more advanced countries like the U.S.A. and the U.K. This country's debt is only half its probable national income while in the U.S.A. it is more than 1½ times and in the U.K. nearly 3 times the national income. The net burden of interest on the deadweight debt in this country amounts to only 10½ per cent. of the revenue next year.

The Currency System

THE history of Indian currency is fully summarised in the Reports of the Herschell, Fowler and Babington-Smith Committees, and the Chamberlain and Hilton Young Commissions. This historical retrospect is confined to a brief review of the facts and events of the past which chiefly influence the present and serve as a guide to the future.

Prior to 1818 India was suffering from political as well as currency chaos with a variety of coins of both silver and gold of different denominations in circulation. By the Act of 1818 the East India Company made the silver rupee of 180 grains 11/12ths fine unlimited legal tender for South India. In 1835 the Gold and Silver Coinage Act was enacted so as to make the rupee unlimited legal tender and deprive the gold coins of their legal tender character throughout British India. But in order to avoid the embarrassing fluctuations in the rate of exchange with gold standard countries consequent on the severe slump in the silver market from 1872 onwards, it was decided in 1893, in accordance with the recommendations of the Herschell Committee, to close the mints to the free coinage of silver. The stoppage of silver coinage was followed by an appreciation of the rupee, and by 1898 it had reached the level of 1*s.* 4*d.* The rupee remained unlimited legal tender, and was the standard of value for all internal transactions.

Sterling Exchange Standard.—The policy adopted in 1893, by the closing of the mints to the free coinage of silver, had for its declared object the establishment of a gold standard for India, and the Fowler Committee was invited in 1898 to consider how this object could best be secured. This Committee favoured the making of the British sovereign a legal tender and a current coin in India and recommended, at the same time, that "the Indian mints should be thrown open to the unrestricted coinage of gold on terms and conditions such as govern the three Australian branches of the Royal Mint. The result would be that, under identical conditions, the sovereigns would be coined and would circulate both at home and in India."

This recommendation was accepted by the Secretary of State for India and the Government of India and the effective establishment of a gold standard based on a gold currency thus became the recognised object of Government and their advisers. But Government's first attempt to introduce gold into circulation was not a success, and the Indian currency system developed in the years that followed along lines different from those foreseen in 1898. Gold never became a substantial part of the circulation. Apart from small change, the internal currency consisted almost entirely of tokens, one printed on silver, the rupee, and the other on paper, the currency note. Their value was maintained at 1*s.* 4*d.* gold (there was during this period no difference between gold and sterling) by the offer of the Secretary of State to sell bills on India without limit of amount at 1*s.* 4⅛*d.* and by the sale of drafts on the Secretary of State on occasions when, owing to temporary variations in the currents of trade, exchange tended to fall below the 1*s.* 4*d.* level. The latter process was not, however, the subject of a statutory obligation, nor was it in practice carried out as a matter of course. For instance the Secretary of State had to be consulted before offers of reverse remittances were announced, and the Government of India never went so far as to undertake to offer sterling drafts in all circumstances. The standard thus evolved was commonly known as a gold exchange standard, although in truth in so far as it amounted to a definite standard at all, it was a standard of sterling exchange.

The Chamberlain Commission was appointed in 1913 to inquire, among other things, whether the then existing practice in currency matters was conducive to the interests of India. It reported: "The people of India neither desire nor need any considerable amount of gold for circulation as currency, and the currency most generally suitable for the internal needs of India consists of rupees and notes. A mint for the coinage of gold is not needed for purposes of currency or exchange, but if Indian sentiment genuinely demands it, and the Government of India are prepared to incur the expense, there is no objection in principle to its establishment either from the Indian or from the Imperial standpoint; provided that the coin minted is the sovereign or the half sovereign; and it is pre-eminently a question in which Indian sentiment should prevail. If a mint for the coinage of gold is not established, refined gold should be received at the Bombay Mint in exchange of currency. The Government of India should continue to aim at giving the people the form of currency which they demand, whether rupees, notes or gold, but the use of notes should be encouraged. The essential point is that this internal currency should be supported for exchange purposes by a thoroughly adequate reserve of gold and sterling."

Thus, in effect, the Chamberlain Commission abandoned the ideal of a gold standard based on a gold currency and accepted in its place an exchange standard with an excrescent currency of sovereigns not essential to the working of the system. Owing to the outbreak of the First World War no action was taken on these recommendations.

Fluctuations.—The war of 1914-18 put the currency system of India, in common with those of other countries, to a severe test. The price of silver rose to unprecedented heights, and the material of the silver token became worth more than its face value. The Government found it difficult to continue their unlimited offer of rupees at the long-established rate. There was a keen demand for Indian exports, and there were exceptional disbursements to be made on behalf of the British Government. Internal currency had to be in some way provided, and it could no longer be provided on the old terms. Simultaneously there was a reduction in the output of the world's silver mines coinciding with an increased demand for the metal. The price of silver in 1915 was 27¼*d.* per ounce; by May 1919 it was 58*d.*; and on December 17 of that year it reached 7[illegible]

Confronted with these difficulties, the authorities allowed the rupee, so long anchored at 1*s.* 4*d.*, to break loose from its moorings and follow the course of silver prices. The rate of exchange accordingly rose rapidly until it reached 2*s.* 4*d.* sterling in December 1919. The effect of these measures was to jettison the currency policy pursued from 1893 to 1915, the main object of which was to stabilise the rupee at 1*s.* 4*d.*

The 2*s.* Ratio.—The Babington-Smith Committee was appointed in May 1919 when the rate was 1*s.* 8*d.* "to examine the effect of the War on the Indian Exchange and Currency system and practice, to make recommendations as to the policy that should be pursued with a view to meeting the requirements of trade, to maintaining a satisfactory monetary circulation, and to ensuring a stable gold standard."

These terms of reference precluded the Committee from considering alternative standards of currency and the Committee recommended the stabilisation of exchange at 2*s.* gold after taking into account the high range of silver prices and the importance of safeguarding the token character of the rupee. It also recommended that during periods of exchange weakness, the Government of India should be authorised to announce, without previous reference to the Secretary of State, their readiness to sell weekly a stated amount of reverse councils. Furthermore, it advocated the movement of gold to and from India free from Government control, fixation of the statutory minimum for the metallic portion of the Paper Currency Reserve at 40 per cent. of the gross circulation and the revaluation of the sterling investments and gold in the Paper Currency Reserve at 2*s.* to the rupee.

An important member of the Committee, Mr. Dadiba Dalal of Bombay, appended a minority report in which he urged (1) the standard of the sovereign and gold mohur with rupees related at the ratio of 15 to 1, (2) the continuence of the then existing silver rupees of 165 grains of fine silver as full legal tender, (3) the stoppage of silver rupees of 165 grains being minted as long as New York quoted silver over 92 cents and the minting of 2 rupee silver coins of reduced fineness, and (4) the sale of reverse drafts on London only at 1*s.* 4-3/32*d.* per rupee.

In making its recommendations, the majority was largely influenced by (1) the rise in the gold value of silver and (2) the decline in the gold value of sterling which was then about 30 per cent. below par. Actually the subsequent fall in the price of silver from 89½*d.* per ounce in February 1920 to 44*d.* in June 1920 outstripped the preceding rise. Moreover while this report was being written, the British Government was accepting the Cunliffe Committee's Report prescribing a deflationary policy for Britain.

Fall In Value.—The majority's recommendations were, however, accepted by the Secretary of State. The publication of the Report in February 1920, however, coincided with a keen demand for remittances to London, and steps were at once taken to maintain the new exchange rate of 2*s.* gold recommended by the Committee by the offer of reverse councils at a rate founded on that ratio, allowance being made for the depreciation of sterling in terms of gold, as shown by the dollar-sterling exchange. The rates for reverse councils offered by the Government thus varied from 2*s.* 3-29/32*d.* sterling to 2*s.* 10-27/32*d.* sterling. By the Indian Coinage Amendment Act of 1920, the sovereign was made legal tender at Rs. 10. The attempt to hold the rate of 2*s.* gold was not successful; and the Government of India thereupon tried, with effect from the weekly sale on June 24, 1920, to maintain it at 2*s.* sterling. This attempt also failed and was abandoned on September 28. The Government of India at this period were unable to contract currency in India at the pace at which world prices were falling. All they could do was to avoid further inflation and to effect some measure of contraction. This was insufficient to arrest the falling tide of exchange, which early in 1921 fell below the low level of 1*s.* 3*d.* sterling and 1*s.* gold. The 2*s.* ratio, passed in 1920, remained on the statute book and was ineffective for purposes of tender of gold to the currency office.

During this period the export trade was arrested and the import trade mounted when the precise converse was demanded and Government's action created an artificial movement of the transfer of capital from India to England; large war profits accumulated in India since 1914 were hurriedly liquidated and transferred to England. Then the difference between the reverse council rate and the market rate, which on some occasion was several pence, induced gigantic speculations. The Exchange Banks set aside all their available resources for bidding for Bills and at once sold their allotments at substantial profits.

Recovery.—In this way the weekly biddings for the million of reverse councils varied from 120 millions to 130 millions and the money market was completely disorganised. In turn, business was severely affected and immense losses were incurred by all importers. Government sold £55 millions of reverse councils before abandoning their effort to stabilise exchange at the new ratio, the loss on this account being Rs. 35 crores. According to an official statement, currency was contracted to the tune of Rs. 31¼ crores in 1920-21 and the process was continued in the following two years by the transfer of sterling securities held in London to the Secretary of State's cash balance and by the discharge of the Indian Treasury Bills held in the reserve. The tide consequently definitely turned by January 1923; and Government exchange recovered to 1*s.* 4*d.* sterling, and showed a general tendency to move upward. It reached the level of 1*s.* 6*d.* sterling in October 1924 at which time it was equivalent to about 1*s.* 4*d.* gold. From that time till March 1926, the upward tendency of exchange continued, but it was prevented from rising above 1*s.* 6*d.* by free purchases of sterling on the part of Government. Meanwhile sterling was restored to parity with gold about the middle of 1925 and the rupee was in the neighbourhood of 1*s.* 6*d.* gold when the Hilton Young Commission was appointed in 1926.

HILTON YOUNG COMMISSION

The system existing in 1926 was summed up by the Hilton Young Commission in the following words: "At the present time Indian currency consists of two kinds of token, paper notes and silver rupees, which are mutually convertible. The paper notes is in form a promise by the Government of India to pay the bearer on demand a specified number of rupees. The rupee is a silver coin 180 grains in weight and 11/12ths fine.

"The value of both forms of token currency in relation to sterling is at present being maintained between the gold points corresponding to a gold parity of 1*s.* 6*d.* No obligation has been assumed, but Government as currency authority have freely purchased sterling when the rate has stood at 1*s.* 6-3/16*d.*, and in April 1926, authorised the Imperial Bank, to make an offer on their behalf to sell sterling at 1*s.* 5$\frac{31}{32}$*d.* The stability of the gold value of the rupee is thus based upon nothing more substantial than a policy of the Government, and at present that policy can be found defined in no notification or undertaking by the Government.

"For the purpose of maintaining the value of the token currency, the Government of India hold two reserves, the Paper Currency Reserve and the Gold Standard Reserve. The former is composed of the proceeds of the note issue and is held as a backing against the notes in circulation; the latter has been accumulated from the profits of the coinage of silver rupees and is designed primarily to maintain the external value of these coins. The permanent constitution of the Paper Currency Reserve provides for a holding of gold and silver metallic reserves of not less than 50 per cent. of the total note circulation, and for the balance to be held in rupee and sterling securities. These permanent provisions have not yet become operative and in the meanwhile the Reserve is governed by transitory provisions under which the fiduciary portion is limited to a maximum of Rs. 100 crores and the balance of the reserve is held in gold and silver coin and bullion. The Gold Standard Reserve at present amounts to £40 million. It is invested in British Treasury Bills and other sterling securities."

The Commission's views on this system were: (1) The system is far from simple, and the basis of the stability of the rupee is not readily intelligible to the uninstructed public. The currency consists of two tokens in circulation, with the unnecessary excrescence of a third full-value coin which does not circulate at all. One form of token currency is highly expensive and is liable to vanish if the price of silver rises above a certain level. (2) There is a cumbrous duplication of reserves, with an antiquated and dangerous division of responsibility for the control of credit and currency policy (the former being with the Imperial Bank). (3) The system does not secure the automatic expansion and contraction of currency. Such movements are too wholly dependent on the will of the currency authority. (4) The system is inelastic. The utility of the provision for elasticity made on the recommendation of the Babinton-Smith Committee is affected by the methods of financing Indian trade.

GOLD BULLION STANDARD

The Commission held the view that "the currency of the country must be linked with gold in a manner that is real and conspicuously visible." It, therefore, recommended a gold bullion standard whereby an obligation should be imposed by statute on the currency authority to buy and sell gold without limits at rates determined with reference to a fixed gold parity of the rupee but in quantities of not less than 400 fine ounces, no limitation being imposed as to the purpose for which the gold is required. It would establish the principle that gold is the standard of Indian currency at a fixed ratio. Simultaneously it recommended that the legal tender quality of the sovereign and the half-sovereign should be removed.

Other main recommendations of the Commission were:—

(*i*) The necessity of a unity of policy in the control of currency and credit for the achievement of monetary stability involves the establishment of a central banking system. Detailed recommendations are made about the constitution, functions and capacities of the Bank which should be a new organisation, referred to as the Reserve Bank of India.

(*ii*) An obligation should be imposed by statute on the Bank to buy and sell gold without limit at rates determined with reference to a fixed gold parity of the rupee but in quantities of not less than 400 fine ounces, no limitation being imposed as to the purpose for which the gold is required.

(*iii*) The conditions which are to govern the sale of gold by the Bank should be so framed as to free it in normal circumstances from the task of supplying gold for non-monetary purposes. The method by which this may be secured is suggested.

(*iv*) Government should offer "on tap" savings certificates redeemable in 3 or 5 years in legal tender money or gold at the option of the holder.

(*v*) The paper currency should cease to be convertible by law into silver coin. It should, however, be the duty of the Bank to maintain the free interchangeability of the different forms of legal tender currency, and of the Government to supply coin to the Bank on demand.

(*vi*) One-rupee notes should be re-introduced and should be full legal tender.

(*vii*) Notes other than the one-rupee note should be legally convertible into legal tender money, *i.e.*, into notes of smaller denomination or silver rupees at the option of the currency authority.

(*viii*) No change should be made in the legal tender character of the silver rupee.

(*ix*) The Paper Currency and Gold Standard Reserves should be amalgamated, and the proportions and composition of the combined Reserve should be fixed by statute.

(*x*) The proportional reserve system should be adopted. Gold and gold securities should form not less than 40 per cent. of the Reserve, subject to a possible temporary reduction, with the consent of Government, on payment of a tax. The currency authority should strive to work to a reserve ratio of 50 to 60 per cent. The gold holding should be raised to 20 per cent. of the Reserve as soon as possible and to 25 per cent. within ten years. During this period no favourable opportunity of fortifying the gold holding in the Reserve should be allowed to escape. Of the gold holding at least one-half should be held in India.

(*xi*) The silver holding on the Reserve should be very substantially reduced during a transitional period of ten years.

(*xii*) The balance of the Reserve should be held in self-liquidating trade bills and Government of India securities. The "created" securities should be replaced by marketable securities within ten years.

(*xiii*) A figure of Rs. 50 crores has been fixed as the liability in respect of the contractibility in the rupee circulation. Recommendations are made to secure that an amount equal to one-fifth of the face value of any increase or decrease in the number of silver rupees in issue shall be added to or subtracted from this liability, and the balance of profit or loss shall accrue to or be borne by the Government revenues.

(*xiv*) The Reserve Bank should be entrusted with all the remittance operations of the Government. The Secretary of State should furnish in advance periodical information as to his requirements. The Bank should be left free, at its discretion, to employ such method or methods of remittance as it may find conducive to smooth working.

(*xv*) During the transition period the Government should publish a weekly return of remittances made. A trial should be made of the system of purchase by public tender in India.

(*xvi*) The cash balances of the Government (including any balances of the Government of India and of the Secretary of State outside India), as well as the banking reserves in India of all banks operating in India, should be centralised in the hands of the Reserve Bank. Section 23 of the Government of India Act should be amended accordingly.

(*xvii*) The transfer of Reserve assets should take place not later than 1st January 1929, and the Bank's obligation to buy and sell gold should come into operation not later than 1st January 1931.

(*xviii*) During the transition period the currency authority (*i.e.*, the Government until the transfer of Reserve assets and the Bank thereafter) should be under an obligation to buy gold and to sell gold or gold exchange at its option at the gold points of the exchange. This obligation should be embodied in statutory form, of which the outline is suggested.

(*xix*) Stabilisation of the rupee should be effected forthwith at a rate corresponding to an exchange rate of 1*s.* 6*d.*

(*xx*) The stamp duty on bills of exchange and cheques should be abolished. Bill forms, in the English language and the vernacular in parallel, should be on sale at post offices.

(*xxi*) Measures should be taken to promote the development of banking in India.

(*xxii*) Every effort should be made to remedy the deficiencies in the existing body of statistical data.

Minute of Dissent.—In a minute of dissent to the report, Sir Purshotamdas Thakurdas said: "The position, as I view it, is that the Government and people of India stand committed to the principle recommended by the Fowler Committee and adopted by the Secretary of State and the Government of India. The Fowler Committee recommended and the Government adopted gold standard based on gold reserves and a gold currency as the currency system of India. I do not think that it is possible to improve upon the ideal of a gold standard based on gold reserves. India has today sterling and rupee securities equal to about four and a half times the value of her gold coin and bullion in reserve. It is neither feasible nor desirable that the sterling securities should be realised and converted into gold forthwith or in any manner other than the safest and most gradual to the markets of the world. The proportion of gold to securities in the currency reserves demonstrates the necessity of the free inflow of gold into India being permitted in the normal course."

On the question of the central banking institution, he held the view that the ends in view would be better served by developing the Imperial Bank of India into a full-fledged Central Bank.

As regards the exchange ratio, he said: "I look upon the question of the ratio in this Report as being no less important than the question of the standard to be adopted for the Indian currency system. I have very great apprehensions that if the recommendations of my colleagues to stabilise the rupee at 1*s.* 6*d.* is accepted, India will be faced during the next few years with a disturbance in her economic organisation. Why, therefore, gamble on uncertain factors if India's natural ratio of 1*s.* 4*d.*, that stood for 20 years unshaken by the crisis of 1907-08 and shaken only after 1917 by a world convulsion and then too mainly because of the embargo on the import of gold, is still within India's reach? The facts and figures that I have stated, and the records from which I have quoted, conclusively show that the Executive had made up their minds to work up to a 1*s.* 6*d.* ratio long before this Commission was appointed to examine the question—indeed they have presented to us the issue in this regard as a *fait accompli* achieved by them, not having hesitated by manipulation to keep up the rate even while we were in session. I cannot conceive of any parallel to such a procedure in any country."

Act of 1927.—The Currency Bill of 1927 embodying the recommendations of the majority report was passed into an Act with an amendment that the obligation placed on Government was in regard to the purchase of gold and sale of gold or sterling and not gold exchange as originally proposed. The Act came into force on April 1, 1927. Its main features were :—

(1) The silver rupee, the silver half-rupee and the currency notes were all legal tender without limit, but open to issue at the will of Government. The parity of exchange was 8.47512 grains troy of fine gold per rupee.

(2) Gold coins were no longer legal tender, but could be received at any Government currency office and at any Government Treasury other than a Sub-Treasury as bullion at the rate of 8.47512 grains fine gold per rupee.

(3) Gold in the form of bars containing no less than 40 tolas (15 ounces) fine could be offered for sale in unlimited quantities to Government at the Bombay Mint, and Government was under a statutory obligation to buy gold at the rate of Rs. 21-3-10 per tola fine.

(4) Holders of legal tender currency were given the right of obtaining gold at the Bombay Mint or, at the option of Government, sterling for immediate delivery in London, provided they paid for an amount of gold or sterling of not less value than 1,065 tolas (400 ounces) of fine gold. As for sterling Rs. 21-3-10 was to buy as much sterling as was required "to purchase one tola of fine gold in London at the rate at which the Bank of England" was bound by law to give sterling in exchange for gold, after deducting therefrom an amount being the normal cost per tola of transferring gold bullion in bulk from Bombay to London, including interest on its value during transit. As the latter rate would vary, the Governor-General-in-Council had to notify from time to time the rate determined for this purpose.

Thus strictly speaking, the monetary standard created by the Act of 1927 was a sterling exchange standard with the proviso that it was like the gold exchange standard so long as sterling did not go off the gold parity. Moreover, it would have been a gold standard if Government had exercised the option of offering gold in exchange for rupees. While it retained most of the old features condemned by the Commission namely the conversion of silver rupee into paper currency, the duplication of reserves and the separation of currency from credit control, it represented an improvement over the pre-1916 standard by ensuring a statutory gold parity for the rupee and a statutory obligation on Government with regard to the purchase of gold and sale of gold or sterling.

Ratio Controversy.—The main controversy in the following years centred on the exchange ratio. From the beginning, however, Government were finding it necessary to take special measures to maintain the ratio of 1*s.* 6*d.* owing to its weakness. On February 10, 1927 when the Imperial Bank desired to borrow Rs. 2 crores from Government, it was charged seven per cent. as against the bank rate of six per cent. This created the impression that Government had changed their regulations under the Indian Paper Currency Amendment Act of 1923 without making a public announcement and that this had been done as a part of the measures to sustain the rupee exchange at 1*s.* 6*d.* Government had to remit about £7 millions between February 15 and March 31 1930 during which sterling bills were difficult to obtain from the market and Government decided to raise the price of money in India by raising the interest on the emergency currency to be given to the Imperial Bank from 7 to 8 per cent. on February 14, 1930. The position deteriorated further by November 1930 owing to rumours about the change in the ratio, and sterling to the tune of £5,650,000 was sold between November 1930 and March 1931 on speculative account.

The weakness of the exchange was followed by contraction of currency during the same period. The net contraction of note currency during the five years ending 1931 was Rs. 102¼ crores. The Secretary of State for India made the following statement in the House of Commons on February 11, 1931 :—

"The Government regard the rupee question as having been settled in 1927, when the Indian Legislature passed the Currency Act by which the rupee was rated at 1*s.* 6*d.* gold. The Government will use all the means in their power to maintain this rate in accordance with their statutory obligations."

THE CRISIS OF 1931

By 1931 the situation had become critical owing to the economic depression resulting in the precipitate fall of agricultural prices, slump in trade and a serious deterioration in the budgetary position of the Government of India. The ways and means position was attempted to be buttressed by short term loans in the form of treasury bills which mounted upto Rs. 83.4 crores by August 1931 and thereafter by taxation and retrenchment. The flight of capital from India could not be checked and Government had to sell £11 millions sterling to maintain the ratio at the lower exchange point between August and September 19, 1931.

On September 21, 1931, the pound sterling was divorced from gold ; India had a Currency Ordinance ; and the Secretary of State announced Government's currency policy in terms which were not in conformity with the Currency Ordinance. The confusion thus created necessitated the declaration of moratorium for three days in respect of banks and this unprecedented event was followed by the issue on September 24 of the Gold and Sterling Regulation Ordinance of 1931. The first Ordinance sought to suspend the operation of Section 5 of the Currency Act of 1927 relating to Government's obligation to sell gold or sterling at rates fixed therein in view of the emergency, while the Secretary of State made it clear before the Federal Structure Sub-Committee in London that "it has been decided to maintain the present currency standard on a sterling basis."

The Indian Gold and Sterling Sales Regulation Ordinance of 1931 had the object of maintaining the sterling paper standard by strict regulation of dealings in foreign exchange and the prevention thereby of the export of capital by nationals. The Imperial Bank of India was authorised to allocate exchange for certain definite purposes such as normal trade needs, excluding the import of silver and gold, contracts done before September 21 and reasonable personal and domestic purposes. The linking of the rupee with sterling involving the loss of its freedom was strongly opposed by the public. Happily, however, the apprehensions did not materialise ; but the change ensured the flow of trade between India and the British Empire while placing India at a disadvantage in respect of her trade with countries having a gold standard. An outstanding feature of our trade thereafter was the unusual exports of gold.

SECOND WORLD WAR

The table given below gives figures of money supply in India which is defined as the total of currency in circulation plus the demand deposits of banks, including the Reserve Bank, minus cash reserves of banks including their deposits with the Reserve Bank. This covers all forms of liquid assets in the country and includes not only cash balances with the public but also Government deposits with the Reserve Bank constituting the cash balances of Government. In the absence of accurate estimates of the amount of small coin in circulation, the figures for total money supply exclude small coin. The figures for the cash balances with the public are derived by deducting from total money supply the deposits of Government with the Reserve Bank of India :—

During the war period the total money supply increased from Rs. 317 crores to Rs. 2,313 crores owing to the spectacular rise in the net accrual of sterling from the supplies balance of payments on private as well as on Government account, *i.e.*, including the payments on account of the supply of goods and services to His Majesty's and Allied Governments in India against recoverable war expenditure. Though the war ended, the upward trend continued until the total money supply reached Rs. 2,643 crores at the end of 1945-46. From this peak it declined to Rs. 2,569 crores in the following year owing mainly to the sharp decline in Government deposits with the Reserve Bank of India which fell by Rs. 94 crores to Rs. 462 crores at the end of March 1947. There was a net increase of Rs. 26 crores in the cash balances with the public as compared with an increase of Rs. 251 crores in 1945-46 and of Rs. 470 crores in 1942-43. The increase in 1946-47 is small as compared with the increases in preceding years, reflecting a further acceleration in the rise of monetary expansion noticed since the wartime peak of 1942-43. The fall in the rate of expansion is mainly due to the curtailment of the defence expenditure of the Government of India and that on behalf of the Allied Governments to a negative balance of payment during the year.

	(Rupees in crores)			
	August 1939	August 1945	March 1946	March 1947
Notes in circulation	169	1,139	1,219	1,242
Demand deposits of Banks	141	671	728	714
Deposits with Reserve Bank	41	500	643	562
Deposits of banks with Reserve Bank	27	105	77	74
Cash held by banks	7	41	42	43
Total cash reserves of banks	34	146	119	117
Money supply excluding rupee coin and small coin.	317	2,164	2,471	2,403
Circulation of rupee coin	..	149	166	168
Total money supply excluding small coin	..	2,313	2,637	2,569

Sources of Supply.—As regards the sources of additions to money supply during wartime, the total net accrual of sterling from the balance of payments on private as well as Government's account was the largest part of what might be termed as the inflationary potential. The budget deficit on revenue account and the defence expenditure on capital account were other constituents of this inflationary potential. The addition to the internal debt of the country acts largely as a deflationary influence but has been reflected partly in the high and rising level of Government balances recently and the expansion of the public's cash balances given by

the addition to the aggregate amount of note circulation, rupee coin and small coin and of deposits of banks, scheduled and non-scheduled, measures the extent of monetary inflation. The progressive series of each of these factors since 1939-40, are given below :—

	(Rupees in crores)		
	1939-40	1944-45	1945-46
Total net accrual of sterling to end of period since the beginning of the war	100	1,680	2,026
Budget deficit including Defence Capital Expenditure, progressive	....	635	795
Total of Both ..	100	2,315	2,821
Increase in note circulation, rupee coin and small coin circulation, and in total deposits of scheduled banks.	82	1,706	2,048
Increase in deposits with the Reserve Bank, progressive	9	346	596
Total of Both ..	91	2,052	2,644
Increase in the Rupee debt of the Central Government since March 31, 1939, progressive	18	860	1,200

Absorption of Currency.—The wartime absorption of legal tender currency amounted to Rs. 1,198,64 crores of which notes accounted for Rs. 988,89 crores or 8·5 per cent., rupee coin for Rs. 142,16 crores or 11.9 per cent. and small coin for Rs. 67.59 crores or 5.6 per cent. The decline in the relative as well as the absolute expansion of note circulation which began in 1943-44 was further accelerated in 1946-47. Notes in circulation registered an increase of Rs. 23.26 crores to Rs. 1,242.03 crores at the end of 1946-47 as against Rs. 133.89 crores in 1945-46, Rs. 202.39 crores in 1944-45 and Rs. 238.91 crores in 1943-44. The annual rate of expansion declined to 2 per cent. in 1946-47, from 12 per cent. in 1945-46, 23 per cent. in 1944-45 and 37 per cent. in 1943-44.

With the cessation of the legal tender character of the standard rupee coin with effect from November 1, 1943, the quarternary rupees and Government of India one rupee notes constitute as from that date the total amount of rupee coin in circulation. The aggregate amount in circulation of the Government of India one rupee notes and quarternary rupees stood at Rs. 123.81 crores at the end of October 1943. The circulation of rupee coin rose to Rs. 137.38 crores at the end of 1943-44, to Rs. 147.28 crores at the end of 1944-45, to Rs. 165.73 crores at the end of 1945-46 and to Rs. 167.67 crores at the end of 1946-47. The demand for rupee coin showed a steep fall during 1946-47 the absorption amounting to Rs. 1.94 crores as compared with Rs. 18.35 crores in 1945-46 and Rs. 10.05 crores in 1944-45. During the year the Bank received from the Government of India one rupee notes and coin.

The absorption of small coin was at its height during the war period and amounted to Rs. 67.59 crores between September 1939 and August 1945. While the year 1945-46 witnessed a steep fall in the demand for small coin, it was not as steep as in the case of rupee coin and notes in the following year. The absorption in 1946-47 was smaller at Rs. 5.91 crores compared with Rs. 9.98 crores in 1945-46 and the record figure of Rs. 19.20 crores in 1944-45.

Seasonal Movements.—A study of the absorption and return of currency since 1920-21 indicates a fairly regular seasonality. The "busy" season when currency is absorbed begins usually in August, September or October and ends with December, January or February. The "slack" season of return of currency usually begins in January, February or March and extends upto July, August or September. In the pre-war years, there was a fair amount of regularity in the periodicity of the busy and the slack seasons. The war time monetary expansion distorted this even movement. The period of absorption that began in September, 1939 did not stop, as usual in the first quarter of 1940, but continued until the end of June, 1940, there being a return of currency from July to September. Again the next period of absorption beginning in October, 1940 extended over June, 1941 followed by a return of currency only during July, 1941. There was continued absorption during the entire period from August, 1941 to June, 1944, a period during which wartime monetary expansion reached its peak. Again there was a return of currency only during July, 1944. The period of absorption once more extended from August, 1944 to June, 1945 a return of currency taking place again in July, 1945. The next period of absorption which began in August, 1945 ended after December, 1945, there being a return of currency during January, 1946. There was an absorption of currency during February to June 1946, a period which is otherwise covered by the slack season. The return of currency began once again in July, 1946 and ended after September, 1946, there being an absorption of currency from October, 1946 to March, 1947. Thus, the tide of currency expansion during the war, resulting from steadily growing Governmental outlays, submerged the seasonal ebb and flow of currency. However, the month of July appears to mark the bottom of the slack season, and despite the rising wartime trend in currency circulation, the seasonal fall in the demand for currency, reaching its maximum in July asserted itself in 1941, 1944 and 1945 when returns of currency were noticed in that month. With the end of the war, although the tempo of currency expansion slackened appreciably, seasonality did not immediately reappear, and currency absorption was noticed in the slack months of February to June, 1946. The return of currency from July to September, 1946, would, however, appear to indicate the beginning of a process of return to normal conditions and the reappearance of currency trends in conformity with the normal seasonal pattern.

Before the wartime expansion of currency and credit got under way, opposite trends were witnessed in the movements of the volume of currency circulation and of demand deposits in the busy and the slack seasons. Note circulation tended to rise and demand deposits to contract in the busy season and *vice versa* in the slack season. During the war both deposits and currency circulation continued to expand, the incidence of the seasons being reflected in their varying rates of expansion. There was a greater percentage increase in demand deposits than in note circulation during the first half of the year corresponding generally to the slack season, while a comparatively larger expansion in note circulation than in deposits occurred in the second half of the year, which corresponds to the busy season.

During the year 1946-47, the pre-war tendency for notes in circulation and demand deposits to move in opposite direction during the different seasons reappeared. In the first half of the year notes in circulation declined by 3 per cent. as against an increase of 7 per cent. in demand deposits while in the second half notes in circulation showed a rise of 5 per cent. against a fall of 9 per cent. in demand deposits. This emergence of the normal seasonal movements in currency and bank deposits followed the slowing down in the rate of a monetary expansion witnessed during the war years.

NOTE CIRCULATION

The denominational pattern of note circulation underwent a considerable change as a result of the promulgation of the High Denomination Bank Notes (Demonetisation) Ordinance, 1946, issued in January, 1946, under which notes of the denomination of Rs. 500 and above ceased to be legal tender. These notes were exchanged during the year for notes of lower denominations. The amounts of notes of these denominations outstanding on 31st December, 1946 were Rs. 3 lakhs in the case of Rs. 500 denomination, Rs. 131, lakhs of Rs. 1,000 denomination and Rs. 23 lakhs of Rs. 10,000 denomination, as against Rs. 26 lakhs, Rs. 113,37 lakhs and Rs. 18,46 lakhs respectively on 31st December, 1945. The circulation of Rs. 100 denomination fell from Rs. 495,84 lakhs at the end of 1945 to Rs. 488,71 lakhs at the end of 1946. Its proportionate share in the total circulation also fell from 41.2 per cent of the gross circulation of all notes except Rs. 10,000 at the end of 1945 to 38.8 per cent at the end of 1946. Against this there was a greater proportionate increase in the circulation of Rs. 10 and Rs. 5 denominations, whose share of the gross circulation, excluding Rs. 10,000 notes, rose from 35.3 per cent and 12.8 per cent respectively at the end of 1945 to 43.3 per cent and 15.7 per cent at the end of 1946. This was in reversal of the trend noticed since 1939 for the proportion of Rs. 10 and Rs. 5 denomination to decline as against the tendency of the proportion of notes of Rs. 100 denomination and above to rise. Rs. 2 denomination also maintained its tendency to rise, the circulation at the end of 1946 being Rs. 25,42 lakhs against Rs. 14,45 lakhs at the end of 1945, the proportionate share rising from 1.2 per cent to 2 per cent. The steep fall in the absorption of all denominations of small coin excepting pice pieces noticed last year continued during the year under review and extended to pice pieces also.

On the eve of separation of Burma from India, an Agreement, embodied in the India and Burma (Burma Monetary Arrangements) Order, 1937, was arrived at between the two countries, with the object of causing the least possible disturbance in the currency systems of India and Burma during the initial stages of separation. Under this Order, the currencies of both countries were to continue to be closely linked and managed by the Reserve Bank of India. Under the stress of the Japanese war, the Government of Burma and the office of the Reserve Bank of India in Rangoon temporarily moved to India. In June, 1942, the responsibility for Burma notes was transferred from the Reserve Bank of the Government of India along with the assets held by the Bank as cover against these notes, the intention being to hand over the liability along with the assets to the Government of Burma as soon as they re-established themselves in Burma. The outstanding liability for the pre-war issues of Burma notes, which had been transferred from the Reserve Bank of India to the Government of India in June, 1942 was transferred together with the assets held against them, to the Government of Burma in June, 1946.

In June, 1946, the Government of Burma decided to sever the currency link with India and to establish an independent currency to be managed by a Currency Board in London with effect from 1st April, 1947. Authority was taken by an Order-in-Council in August, 1946 to amend the India and Burma (Burma Monetary Arrangements) Order, 1937 with a view to terminating the joint monetary arrangements with India by six months' notice. The notice, which was served on the Governor-General with effect from 1st October, 1946, expired on 31st March, 1947 and with it the currency system of Burma was delinked from that of India. In order to enable the Reserve Bank of India to

wind up its affairs in Burma, the Reserve Bank of India Act, 1934 was amended in March, 1947 to provide for the deletion of all references to Burma appearing in the Act. The Reserve Bank's office in Rangoon formally ceased to function in that country on 1st April, 1947.

In view of the ample time given to all bonafide holders of high denomination notes, which had been demonetised on January 12, 1946, to exchange their holdings, the Government of India announced on February 28, 1947 that no further claim for their exchange would be received after that date. The total notes exchanged upto March 31, 1947 amounted to Rs. 134,72,97,000 consisting of Rs. 21,70,000 worth of Rs. 5,000 denomination, Rs. 112,44,87,000 of Rs. 1,000 denomination and Rs. 22,06,40,000 of Rs. 10,000.

EXCHANGE CONTROL

The exigencies of the war necessitated the institution of strict exchange control which was exercised by the Exchange Control Department of the Reserve Bank of India. Payments and remittances were allowed freely to countries within the sterling area but the same system of control through the medium of banks authorised to deal in foreign exchange was maintained for transactions with countries outside the sterling area. Sales of the currencies of countries outside the sterling area continued to be restricted, while exports to these countries were only permitted provided the foreign currency proceeds were sold to the authorised dealers in foreign exchange thus ensuring the full conservation and mobilisation of the country's foreign exchange resources. Despite the end of the war and the resumption of financial and commercial relations with many countries previously under enemy occupation, the Exchange Control policy remained unaffected.

On March 25, 1947, Foreign Exchange Regulation Act was enacted to retain the powers granted under the Financial Provisions of the Defence of India Rules with certain modifications. It closely followed the Exchange Control Bill in the United Kingdom. The effect of the new measure is to continue the existing system of exchange control. It is an enabling measure giving wide powers to the Central Government and the Reserve Bank to control transactions in foreign exchange and securities and the import and export of bullion and currency notes. The Finance Member in his speech at the second reading of the Bill said that it was the intention of Government to allow payments for current transactions freely but to restrict transfers of capital unless directly connected with the furtherance of trade, and to aim at making the rupee multilaterally convertible as soon as practicable. In the meantime, in order to maintain Irdia's balance of payments in equilibrium, it was necessary to continue import control and also to take advantage of the transitional period allowed by the Fund rules, under which India could continue exchange control for a period of three years.

Rupee Unlinked.—In terms of the Anglo-American Loan Agreement signed in July, 1946, the United Kingdom undertook to negotiate with the holders of the sterling balances for the settlement of these balances and to make currently-earned sterling multilaterally convertible for current transactions, within one year of the signature of the Agreement. Consequent on this obligation to negotiate settlement of the sterling balances, a delegation from the United Kingdom visited India in February for a preliminary discussion.

Another factor conditioning the background to foreign exchange relationships is the establishment of the International Monetary Fund and the International Bank for Reconstruction and Development. Consequent on India's membership of the Fund and the fixing of par values in accordance with the Articles of the Fund Agreement, sterling has ceased to be the sole determinant of the external value of the rupee. The convertibility of the rupee into other currencies was therefore provided, for by the enactment of the Reserve Bank of India (Second Amendment) Act, 1947, which was passed by the Central Legislature in April, 1947. The amendment repealed Sections 40 and 41 of the Reserve Bank of India Act which had obliged the Bank to buy and sell foreign exchange at such rates and on such terms and conditions as the Central Government may determine from time to time in conformity with their obligations as a member of the Fund.

BRETTON WOODS ORGANISATIONS

The year 1945-46 witnessed the establishment of the International Monetary Fund and the International Bank for Reconstruction and Development, as in terms of the Final Act, countries representing more than 65 per cent. of the total of the quotas had signed the Bretton Woods Agreement before December 31, 1945. In order to secure for India the advantages of original membership of the Fund and of the Bank, the Government of India promulgated an Ordinance on December 24, 1945, providing themselves with the necessary powers for signing the Agreement. This was done on December 27. The inaugural meeting of the Boards of Governors of the Fund and of the Bank was held at Savannah (Georgia) in March 1946. It dealt with the procedural steps necessary before these institutions could begin operations, and the year under review witnessed the process of the setting up of these two organisations. India, by virtue of being one of the five largest quota holders appointed one Executive Director on the Fund and one on the Bank. In September the thirty-nine members of the Fund were notified to communicate to the Fund, within thirty days, the par value of their currencies, expressed in gold or U.S. dollars, and based on the rates of exchange that prevailed sixty days before the Fund Agreement came into effect. According to the Articles of Agreement, the Fund could notify a member, or a member could notifty the Fund that the par value communicated by it was unsatisfactory and could not be maintained without excessive dependence on the Fund. In such cases agreement on a suitable par value was to be reached between the Fund and the member within a reasonable period determined by the Fund. Before making a final decision as to the most satisfactory rate for the rupee, the Government of India invited proposals and comments from interested bodies and persons. After a thorough examination of the various

proposals had been made, the Government decided that the existing par value should be maintained, which, based on the rupee-sterling rate of 1*s.* 6*d.* and the London/New York parity of 4.03 dollars per pound, works out to Rs. 330 : 852 per $100, or, with the U.S. Treasury's buying rate for gold of $35 per fine ounce, the gold content of the rupee equals 0.268601 grammes. This par value was accepted by the Fund. On 18th December, 1946, the schedule of par values of the currencies of member countries was announced by the Fund.

India's Contribution.—India was called upon to pay to the Fund its subscription of $400 million by 1st March, 1947. This had to be paid partly in the form of gold and partly in the form of rupees. Under the rules of the Fund, the gold subscription had either to be 25 per cent of a country's quota or 10 per cent of its net official holdings of gold and U.S. dollars whichever was less. As 10 per cent of India's gold and dollar holdings was the lower figure, gold of this value was transferred to the Fund. Of the rupee subscriptions, a certain amount was credited to the Fund's account in the books of the Reserve Bank and the balance was paid in the form of non-negotiable non-interest-bearing promissory notes convertible on demand into rupees by crediting the par value to the account of the Fund. After the receipt of the subscriptions, the Fund announced that it was in a position to commence operations and sell the currencies of members in accordance with its rules and regulations from 1st March, 1947.

In October, 1946, the Central Legislature, while approving the payment of India's subscription to the Bank, also approved the continued membership of the Fund and the Bank. The balance due on account of 2 per cent of India's subscription amounting to $8,000,000 of which $40,000, was paid on 27th December, 1945, was paid in U.S. dollars on 12th August, 1946. In payment of the 2 per cent of its capital subscriptions, the Bank received until the time of the first annual report $143,786,883.70 in gold and U.S. dollars out of a total of $153,400,000. Another call was made for the payment of 5 per cent of the subscriptions payable in the local currencies of the members by 25th February, 1947. India paid $20,000,000 (Rs. 6,61,70,400) on account of this, partly in cash and partly in non-negotiable non-interest-bearing securities. Thus during the year under review, India paid $60,000,000 to the Bank (15 per cent of its capital subscription), of which $52,000,000 were paid in Indian currency.

Limited Help.—The present position is that certain countries of key importance in the world economy are rapidly running out of exchange resources, while the magnitude of the reconstruction task with which they are faced is far greater than was foreseen in 1945 and 1946. While the task is largely one of self-help, a continuance of the flow of imports is necessary to enable the countries engaged in reconstruction to utilize fully their own productive resources. The Fund and the Bank can give only limited financial help. If the reconstruction is not completed, the constructive efforts already made for international co-operation to attain greater production and higher living standard will be jeopardized. The world is approaching a turning point at which the alternatives are clear. Either we seek through a concerted effort, the goals of expanded production and higher standards of living or we resign ourselves to economic conflict and impoverishment.

In the year ended June 30, 1947, five additional members were admitted to membership in the Fund, making a total of 44 members and two further applications were received. In accordance with the Fund agreement, the Fund has also taken action in prescribing a margin for gold transactions by members. This margin has been fixed at ¼ of one per cent above and below par, exclusive of certain specified charges. These margins are directed at stabilizing the price of monetary gold for all members and preventing any significant divergencies from part of the external value of member currencies through transactions in gold. In June 1947, with a view to preventing the extension of external gold transactions at premium prices, which generally involve a loss of gold from monetary reserves and which might contribute to the undermining of exchange stability, the Fund requested all its members to co-operate in the elemination of such transactions.

A Catalyst: It must be stated that the International Bank cannot, and was never intended to provide the external financing required for all the projects of reconstruction and development of the post-war years. Its function is to provide a catalyst by which production may be generally stimulated and private investment encouraged. The Bank has upto now placed particular emphasis on the problems of European recovery. To date the loan requests from European countries have been primarily for reconstruction programmes and much progress has already been made towards the reconstruction of the nations of Europe, though it has not been uniform.

The capital funds of the Bank required to be paid in by member governments amount to only 20 per cent of the Bank's total subscribed capital; of the $1,599,985.000 paid in capital only $727,075000 is represented by U.S. dollars, the remainder being in local currencies of the various members other than the U.S. At present, the demand is primarily for U.S. dollars and the availability of the Bank's capital funds for lending is practically limited to approximately 725 million dollars. For loanable resources in excess of this amount, the Bank must look to the sale of its securities in the private investment market, for the time being predominantly the U.S. market. However, it will not be possible for the Bank to sell its securities in the market unless investors have confidence that their funds will be used only for economically sound and productive purposes. On July 15, 1947, the Bank made the first public offering of its bounds consisting of $100 million ten-year 2¾ per cent and $150 million 25 year 3 per cent at par. They were substantially oversubscribed. At present, however, the U.S. is the only market available in which the Bank's securities can be sold in large amounts. It may, however, be reasonably anticipated that in the future, as conditions improve, non-American capital may be tapped by the Bank's borrowing operations.

Coinage

THE act of 1818 marked the beginning of the Indian Coinage System when the silver rupee of 180 grains troy 11/12ths fine was made unlimited legal tender by the East India Company for South India where gold coins had been in circulation. Seventeen years later, the Gold and Silver Coinage Act was enacted to extend the unlimited legal tender character of the rupee to the whole of India (which then included Pakistan) by substituting monometallism for bimetallism.

Silver.—Mintage of silver rupees was undertaken in this country in 1835. It continued till June 26, 1893 when the Indian Coinage Act of 1870 was amended with a view to closing the mints for the unrestricted coinage of silver for the public. For four years, no Government rupees were coined with the object of attaching higher value to it as coin than bullion; but recoinage was again undertaken in 1897 and 1898 following the conclusion of arrangements with Bhopal and Kashmir for replacing the State currency by Government rupees. In 1899 there was again no coinage of rupees; but the need for it in the following year resulted in resuming its mintage which continued almost uninterruptedly till 1922 when it was suspended. The Currency Act of 1927 made the silver rupee and the silver half-rupee legal tender without limit, but open to issue at the will of Government.

In 1940 the then Government of India decided, as a measure of conserving silver resources as far as possible in view of the rapid absorption of silver price, to adopt the fineness of one-half silver and one-half alloy for all three coins. Incorporated in the new rupee was a new security edge device consisting of the insertion of a shallow re-entrant in the centre of the milled edge which was considered to be a virtually absolute safeguard against counterfeiting.

All Victoria and King Edward VII rupee and half rupee coins of the old fineness were withdrawn with effect from April 1, 1941 and May 31, 1942, respectively and King George V and King George VI standard silver rupees were called back with effect from May 1, 1943. These announcements marked the end of the policy which originated over 50 years ago of converting the rupee which had previously been a full value silver coin into a token. The return of coin was, however, meagre as, since the end of March 1943, the average price of silver was higher than the melting point of the standard silver rupee.

As standard silver coins have been demonetised, it is no longer illegal to hoard or melt them or to purchase or sell them at a value other than their face value; consequently, large quantities of coin have been hoarded or melted and sold for their bullion content. Under the Indian Coinage Amendment Act 1918, silver two anna pieces are no longer coined and issued, but coins previously issued continue to be legal tender.

New one-rupee notes were issued through the Reserve Bank of India in July 1941; the issue of these notes does not affect the earlier issue, the Government of India one-rupee notes of the 1935 King George V pattern which continue to be legal tender.

Between 1835 and 1946, the whole rupees coined and issued from the Indian mints totalled 755,29,90,130 comprising 16,30,78,572 of William IV, 352,13,80,138 of Victoria, 98,28,53,552 of Edward VII, 180,74,83,517 of George V, 98,02,178 of George VI standard and 106,74,92,173 of George VI quarternary standard.

The issue of quarternary rupee coin was discontinued from June 1946 when the reform for the introduction of the nickel rupee was launched.

Coins of smaller denominations, *viz.*, the half-rupee, quarter-rupee and one-eighth of a rupee used to be of the same metal as the standard coin and they contained exactly one-half, one-fourth and one-eighth of the weight of pure silver in a rupee when they were first issued.

On March 11, 1940, Section 5 of the India Coinage Act of 1906 was modified by an Amending Act. The amendment reduced the silver content of the four-anna coin from 11/12 or 41-¼ grains of fine silver to 50 per cent or 22-½ grains. This brought the silver four anna coin into line with the British subsidiary coinage. With a view to preventing counterfeiting, the Government of India directed on July 15, 1943, that the quarter-rupee coin minted during and after August 1943 should have the same security edge as quarternary rupees and half rupees.

In 1941-42, the design of the half-rupee coin of 1941 and after was altered so as to make it conform to that of the quarternary rupee coin. The minting of the quarternary half and quarter rupee silver coins was, however, suspended by a notification in May 1946 in order to enable the Government to discharge the obligation to return in kind, within five years of the end of the war, the 226 million ounces of silver borrowed from the U. S. Government between 1943 and 1945.

Nickel.—By a notification issued on May 23, 1946 the Central Government directed that the half and quarter rupee coins of the same size and weight as the quarternary coins shall be printed in pure nickel.

The Act of 1906 also provided for the coinage of a nickel coin. It was directed that the nickel one-anna piece should thenceforth be coined at the Mint and issued. The notification also prescribed the design of the coin, which has a waved edge with twelve scollops, the greatest diameter of the coin being 21 millimetres and its least diameter 19.8 millimetres. The advisability of issuing a half-anna nickel coin was considered by the Government of India in 1909 but after consultation with Local Governments it was decided not to take action in this direction until the people had become thoroughly familiar with the present one-anna coin. The two-anna nickel coin was introduced in 1917-18; and the four-anna and eight-anna nickel coins in 1919. The eight-anna nickel was withdrawn from circulation in 1924 but is still being received at issue offices only.

On account of war activities, the demand for small coin greatly increased and in January 1942 the Government of India issued a new half-anna coin which economises metal and is convenient to the public. Further with a view to economising the use of nickel, it was decided to mint new half-anna pieces and the one anna coin and the later two anna coin in a nickel-brass alloy instead of the cupro-nickel alloy. The notification of January 24, 1942, provided for the mintage of the new half-anna coin of a square shape and equal to three-fourths the weight of one anna piece. According to this notification, the half-anna and one anna pieces were minted in nickel-brass composed of 79 per cent. copper, 20 per cent. zinc and 1 per cent. nickel. A similar change in the metallic contents of two anna piece was announced on March 21, 1942.

Towards the end of November 1945, the Government of India decided that further requirements of two anna and one anna pieces should be minted in the cupro-nickel alloy instead of nickel-brass alloy which had been adopted as a wartime expedient and later found unsatisfactory.

In May 1946 the Central Government authorised the minting and issue of half and quarter rupee coins in pure nickel owing to "inadequate supplies of silver in the open market and the prevailing high prices in India." These new coins were exactly the same size and weight as the early silver coins with designs usually adopted for decimal coins of 50 cents and 25 cents respectively. The new coins have no security edge and have been designed with the margine lettering and head of the King on one side and the name of the country, the denomination in three languages, English, Devanagari and Urdu, with the figure of an Indian tiger on the reverse.

The efforts started in 1906 to avoid the wasteful use of a metal of high value like silver for coinage achieved their objective in 1947 when the Indian Coinage Act was amended further with a view to authorising the Government to issue all coins including the rupee in any metal. In the case of the half-rupee coin, the existing position was that the silver half-rupee was legal tender for any amount but the nickel half-rupee only for a sum not exceeding one rupee, under the same Act and, all half-rupee coins are legal tender for a sum not exceeding ten rupees, while coins of smaller denominations would continue to be legal tender for one rupee as before.

Eight anna cupro-nickel coins were withdrawn with effect from October 1, 1924 and are now received at the Issue Offices only.

Copper and Bronze.—Copper coinage was introduced into the Bengal Presidency (now East and West Bengal) by Act XVII of 1835 and into the Madras and Bombay Presidencies by Act XXII of 1844. The weight of the copper coins struck under Act XXIII of 1870 remained the same as it was in 1835. It was as follows:—

	Grains troy.
Double pice or half-anna	200
Pice or quarter-anna	100
Half-pice or one-eighth of an anna ..	50
Pie being one-third of a pice or one-twelfth of an anna	33⅓

The weight and dimensions of bronze coins were as follows:—

	Standard weight in grains troy.	Diameter in millimetres.
Pice	75	25·4
Half-pice	37½	21·15
Pie	25	17·45

Since 1924 double pice coin has been and is being withdrawn from circulation but it is still received at Treasuries and Issue Offices.

With a view to protecting further issues of pice against hoarding resulting from the black market value of the metallic contents rising above the face value, the Government of India issued in February 1943 a new design of pice, which economises the metal and is expected to be convenient to the public. The Finance Department notification dated February 23, 1943, provided for the mintage of the new pice with a smaller diameter and a circular hole in the centre, reduced in weight from 75 grains to 35 grains and with a metallic composition of 97 per cent. copper, 2½ per cent. zinc and one-half per cent. tin instead of the former fineness of 95½ per cent. copper, 3 per cent. tin, and 1½ per cent. zinc. The notification also provided for the discontinuance of the coinage of half-pice and pie pieces. The new pice was issued from the Bombay office of the Reserve Bank on February 1, 1943.

Gold.—Since 1870 there has been no coinage of double mohurs in India and the last coinage of single mohurs suspended as from 1891-92 was undertaken for a short period in 1918 only. The Currency Act of 1927 provided that "gold coins whether coined at His Majesty's Royal Mint or at any Mint established in pursuance of a proclamation of His Majesty's Royal Mint, shall not be legal tender in British India but such coins shall be received at any Government Currency Office.....at the rate of 8,47,512 grains troy of fine gold per rupee."

Decimalisation of the Coinage.—With a view to simplifying accounting and facilitating calculations the Government of India have under consideration the introduction of a decimal system of coinage in India. The present occasion, calling for a huge recoinage programme necessitated by the unpopularity of the nickel brass coin introduced in 1942 as a wartime measure, is considered to be most opportune for the proposed reform. The proposals under this system are that the rupee would remain unaltered and the half-rupee and the quarter-rupee, while retaining their present shape, size and weight, would be issued as 50 cents and 25 cents coins. The existing lower denominations of small coin would, however, be discarded and, instead, cupro-nickel coins of 10 cents, 5 cents and 2 cents and bronze coins of 1 cent and, if necessary, ½ cent will be issued. A bill incorporating the above changes was introduced in the Central Legislative Assembly on the 18th February, 1946 and has been circularised to elicit public opinion.

Banking

MODERN banking in India owes its origin to the British agency houses operating in Bombay and Calcutta in the eighteenth century. The banks in those days were connected with the introduction of their notes. The crisis that overtook the agency houses in the first half of nineteenth century had an adverse effect on this type of banking. Broadly, the history of Indian banking may be divided into three sections, one connected with the influence of the Presidency Banks, second following the establishment of the Imperial Bank of India in 1921, and third under the guidance of the Reserve Bank of India.

PRESIDENCY BANKS

The history of the Presidency Banks again falls into three well-defined stages. The Bank of Bengal was started in 1806, and it took 34 years more before the Bank of Bombay came into existence. The Bank of Madras however came only three years later in 1843. Prior to 1862, these Banks had the right of note issue and their main activity was to facilitate the borrowing operations of the East India Company and the financing of the trade of British merchants. Naturally, they were subject to Government control and their business was restricted by the terms of their charter.

In 1862, these banks were deprived of the right of note issue and were authorised to transact paper currency business as agents of Government. As compensation for the loss of their right of issue, they were given the use of the Government balances and the management of the treasury work in the cities and towns where they had their branches. Four years later, however, they were deprived of the paper currency business and by the Act of 1876 severe restrictions were imposed on their business. This system continued till 1920 when the Presidency Banks were merged into the Imperial Bank of India.

IMPERIAL BANK

Under the Imperial Bank of India Act of 1920, as amended by the Amendment Act of 1934, the control of the Bank is entrusted to a Central Board of Directors with Local Boards at Calcutta, Bombay and Madras and such other places as the Central Board may determine. A more detailed reference to the salient provisions in the Act will be found in the earlier editions of the Year Book; but it may be mentioned here that under the agreement with the Reserve Bank of India, the Imperial Bank continues to be the sole agent of the Reserve Bank at all places in the Indian Dominion where there was a branch of the Imperial Bank and no branch of the Banking Department of the Reserve Bank of India before 1934.

The Imperial Bank has at present 185 branches and over 200 sub-offices. Mr. A. R. Chisholm is the Managing Director, and Mr. N. G. Irvine is the Deputy Managing Director. The progress of the Bank is summed up below :—

(Rs. in lakhs)

	Capital	Reserve	Govt. Deposits	Other Deposits	Cash	Invest-ments	Dividend for year
30th June							
1921 ..	547	371	2,220	7,016	3,433	1,652	16 per cent.
1922 ..	562	411	1,672	6,336	3,395	900	16 " "
1923 ..	562	435	1,256	7,047	2,913	925	16 " "
1924 ..	562	457	2,208	7,662	2,195	1,175	16 " "
1925 ..	562	477	2,252	7,588	3,582	1,413	16 " "
1926 ..	562	492	3,254	7,530	4,503	2,188	16 " "
1927 ..	562	507	1,004	7,317	2,283	2,050	16 " "
1928 ..	562	517	796	7,331	1,377	2,535	16 " "
1929 ..	562	527	2,074	7,233	3,041	2,409	16 " "
1930 ..	562	537	1,391	7,003	1,696	2,969	16 " "
1931 ..	562	542	1,596	6,615	1,717	3,077	14 " "
1932 ..	562	515	1,908	6,149	2,201	2,979	12 " "
1933 ..	562	520	582	7,423	2,308	3,973	12 " "
1934 ..	562	527	791	7,483	2,165	3,932	12 " "
1935 ..	562	542	..	7,243	1,676	3,783	12 " "
1936 ..	562	550	..	7,894	1,976	4,254	12 " "
1937 ..	562	550	..	8,314	2,168	4,065	12 " "
1938 ..	562	552	..	8,118	1,628	3,975	12 " "
1939 ..	562	557	..	8,392	1,459	4,280	12 " "
1940 ..	562	562	..	9,603	2,482	4,857	12 " "
1941 ..	562	562	..	10,891	1,526	6,439	12 " "
1942 ..	562	575	..	16,346	2,352	11,587	12 " "
1943 ..	562	585	..	21,452	5,376	12,979	12 " "
1944 ..	562	600	..	23,778	2,831	14,863	12 " "
1945 ..	562	607	..	25,937	4,159	15,417	14 " "
1946 ..	562	612	..	26,677	6,040	15,864	14 " "
1947 ..	562	623	..	27,705	5,601	15,304	14 " "

Balance Sheet of the Imperial Bank of India as at 31st December 1946.

LIABILITIES.	Rs. a. p.	Rs. a. p.	ASSETS.	Rs. a. p.	Rs. a. p.
Capital:—			Investments (of which securities are valued in accordance with bye-law 29 of the Bye-Laws of the Bank):—		
Authorised—2,25,000 shares of Rs. 500 each ..	11,25,00,000 0 0		Government Securities ..	1,44,02,96,257 1 11	
Issued and Subscribed—2,25,000 shares of Rs. 500 each	11,25,00,000 0 0		Other Trustee Securities ..	2,03,06,221 3 7	
Called up—75,000 shares of Rs. 500 each, fully paid	3,75,00,000 0 0		Other Authorised Securities	8,47,05,902 4 10	
1,50,000 shares of Rs. 500 each, Rs. 125 paid	1,87,50,000 0 0	5,62,50,000 0 0	Immovable Properties at or below cost	.....	1,54,53,08,380 10 4
Reserve Liability of Shareholders—Rs. 375 per share on 1,50,000 shares	5,62,50,000 0 0		Advances:— Loans .. .. .. Cash Credits and Overdrafts .. .. .. Bills Discounted and Purchased ..	38,67,85,640 11 5 44,57,94,206 3 4 11,01,59,402 6 7	94,27,39,249 5 4
Reserve Fund		6,17,50,000 0 0	Dead Stock	.....	1,57,30,000 8 4
Fixed Deposit, Savings Bank, Current and other Accounts		2,71,67,36,006 4 10	Sundries	.....	34,56,926 5 11
Loans against Securities per contra		10,00,00,000 0 0	Adjustment Account ..	.....	1,21,27,807 8 11
Acceptances for Constituents		.....	Bullion	.....	.....
Dividends:— For the half-year ended 31st December 1946 ..	39,37,500 0 0		Cash:— In hand and with Reserve Bank	40,38,89,669 15 8	
Unclaimed	10,27,589 7 2	49,65,089 7 2	Balance with other banks ..	2,06,30,312 2 0	42,45,19,982 1 8
Profit & Loss Account ..		41,81,250 11 8			
	Rupees ..	2,94,38,82,346 7 8		Rupees ..	2,9 .. 8,82,346 7 8

Reserve Bank of India

The idea of a central banking institution for the Indian sub-continent was mooted as early as in 1836 and was the subject of a minute by Mr. James Wilson, the then Finance Member, in 1859. Eight years later, Mr. Dickson, the then Secretary of the Bank of Bengal, submitted detailed proposals for the amalgamation of the three Presidency Banks. The question was again revived in 1913 by the Chamberlain Commission which went into the Indian currency and finance and was later thrashed out by the Hilton Young Commission. The latter came to the conclusion that central banking functions should not be combined with commercial banking and since it did not wish to rob the Imperial Bank of its Commercial functions on the ground that such a step would arrest the progress of the country in one important sphere in which progress was most urgent and vital, it recommended a special central bank.

But the question remained undecided for nearly seven years owing to differences on its constitution. The matter was dropped after the introduction of two bills in the central Legislature and was reopened again in 1931 following the strong emphasis laid by the Central Banking Inquiry Committee in that year on the establishment of a Central Bank. The White Paper on Indian reforms carried the matter a step further when it laid it down as a condition that before responsibility in respect of finance was introduced at the centre a Reserve Bank free from political influence should be set up.

The Reserve Bank of India Act was passed by the Legislative Assembly and received the assent of the Governor-General on 6th March 1934 and the Bank began to function on 1st April 1935. From this date, the Reserve Bank took over the management of the Currency Department of the Government of India by the creation of a special department known as the Issue Department. The assets of the Gold Standard Reserve were transferred to the Bank and were combined with the assets of the Currency Department. On July 1st the Banking Department was opened and the scheduled banks deposited the required percentage of their demand and time liabilities. The Clearing House was transferred from the Imperial Bank to the Reserve Bank as from this date.

The share capital of the Reserve Bank is 5 crores of Rupees in shares of Rs. 100 each, fully paid up. The Reserve Fund of Rupees five crores is provided by Government to the Bank in the form of Government Rupee Securities.

The Bank maintains share registers at its offices at Bombay, Calcutta, Delhi and Madras.

Management.—The general superintendence and direction of the affairs and business of the Bank is entrusted to a Central Board of Directors which exercises all powers and does all acts and things which may be exercised and done by the Bank. The Board is composed of:—

(*a*) A Governor and two Deputy Governors appointed by the Central Government after consideration of the recommendations made by the Board.

(*b*) Four Directors nominated by the Central Government.

(*c*) Eight Directors elected on behalf of the shareholders on the various registers.

(*d*) One Government official nominated by the Central Government.

The Governor and Deputy Governors are the executive heads, and hold office for such term not exceeding five years as the Central Government may fix when appointing them, and are eligible for re-appointment. A Local Board is constituted for each of the five areas.

FUNCTIONS

The Bank is authorised to carry on and transact the following commercial business, *viz*:—The accepting of money on deposit without interest; the purchase, sale and rediscount of bills of exchange and promissory notes with certain restrictions; the making of loans and advances, repayable on demand but not exceeding 90 days, against the security of stocks, funds and securities (other than immovable property) against gold coin or bullion or documents of title to the same and such bills of exchange and promissory notes as are eligible for purchase or rediscount by the Bank; the purchase from and sale to scheduled Banks of sterling in amounts of not less than the equivalent of Rs. 1 lac; the making of advances to the Central Government and to Provincial Governments repayable in each case not later than three months from the date of making the advance; the purchase and sale of Government securities of the United Kingdom maturing within ten years from the date of purchase; the purchase and sale of securities of the Government of India or of a Provincial Government of any maturity or of a local authority in India and Pakistan or of certain States in the sub-continent which may be specified.

The Bank is authorised to act as Agent for the Secretary of State in Council, the Central Government or any Provincial Government or State in India for the purchase and sale of gold and silver; for the purchase, sale, transfer and custody of bills of exchange, securities or shares; for the collection of the proceeds, whether principal, interest or dividends, of any securities or shares; for the remittance of such proceeds by bill of exchange payable either in India or elsewhere, and for the management of public debt.

Bank Notes.—The sole right to issue bank notes in British India is vested in the Reserve Bank and at commencement the Bank shall issue currency notes of the Government of India supplied to it by the Central Government and on and from the date of such transfer the Central Government shall not issue any currency notes. The issue of bank notes shall be conducted by the Bank in an Issue Department which shall be separated and kept wholly distinct from the Banking Department.

The Bank shall sell to or buy from any person who makes a demand in that behalf at its office in Bombay, Calcutta, Delhi, Madras or Rangoon, sterling for immediate delivery in London at a rate not lower than 1*sh*. 5 49/64*d*. and not higher than 1*sh*. 6 3/16*d*. respectively; provided that no person shall be entitled to demand to buy or sell an amount of sterling less than ten thousand pounds. In April 1947 The Reserve Bank Act was amended consequent on India's membership of the International Monetary Fund and the fixing of the par value of the rupee. The amended Sections 40 and 41 of the Act now require the Reserve Bank to buy and sell foreign exchange at such rates and on such terms as the Central Government may determine from time to time.

The Bank shall make public from time to time the standard rate at which it is prepared to buy or re-discount bills of exchange or other commercial paper eligible for purchase under the Act.

The Bank will publish the accounts of both the Issue and Banking Departments weekly in the *Gazette of India*.

Every bank included in the Second Schedule shall maintain with the Bank a balance the amount of which shall not at the close of business on any day be less than five per cent. of the demand liabilities and two per cent. of the time liabilities of such bank in India and Burma as shown in the return referred to in sub-section (2).

Allocation of Surplus.—After making provision for bad and doubtful debts, depreciation in assets, contributions to staff and superannuation funds, and such other contingencies as are usually provided for by bankers, and after payment out of the net annual profits of a cumulative dividend at such rate not exceeding five per cent. per annum on the share capital as the Central Government may fix at the time of the issue of shares, a portion of the surplus shall be allocated to the payment of an additional dividend to the shareholders calculated on the scale set forth in the Fourth Schedule and the balance of the surplus shall be paid to the Central Government:

Provided that if at any time the Reserve Fund is less than the share capital, not less than fifty lakhs of rupees of the surplus, or the whole of the surplus if less than that amount shall be allocated to the Reserve Fund.

(A) If the maximum rate of dividend fixed under section 47 is five per centum and so long as the share capital of the Bank is five crores of rupees—

(1) if the surplus does not exceed four crores of rupees—Nil

(2) if the surplus exceeds four crores of rupees—

(*a*) out of such excess upto the first one and a half crores of rupees a fraction equalto one-sixtieth;

(*b*) out of each successive additional excess up to one and half crores of rupees—one-half of the fraction payable out of the next previous one and a half crores of excess.

Provided that the additional dividend shall be a multiple of one-eighth of one per cent. on the share capital, the amount of the surplus allocated thereto being rounded up or down to the nearest one-eighth of one per cent. on the share capital.

(B) If the maximum rate of dividend fixed under section 47 is below five per centum, the said fraction of one-sixtieth shall be increased in the ratio of the difference between six and the fixed rate to unity.

(C) When the original share capital of the Bank has been increased or reduced the said fraction of one-sixtieth shall be increased or diminished in proportion to the increase or reduction of the share capital.

Notwithstanding the provisions of section 47 of the Reserve Bank of India Act, 1934 (II of 1934) and of the Fourth Schedule to that Act (given above), the aggregate of the rate at which payment of the cumulative dividend and the additional payable to shareholders of the Bank under the said provisions is made shall not, so long as this Ordinance (the Reserve Bank of India limitation of Dividend Ordinance of 1943) remains in force, exceed four per cent. per annum on the share capital of the Bank; and the balance of the surplus of the net annual profits of the Bank shall be paid to the Central Government.

Agricultural Credit Department.—The Bank shall create a special Agricultural Credit Department the functions of which shall be—

(*a*) to maintain an expert staff to study all questions of agricultural credit and be available for consultation by the Central Government [Provincial Governments,] provincial co-operative banks, and other banking organisations.

(*b*) to co-ordinate the operations of the Bank in connection with agricultural credit and its relations with provincial co-operative banks, and any other banks or organisations engaged in the business of agricultural credit.

(1) the Bank shall, at the earliest practicable date and in any case within three years from the date on which this Chapter comes into force, make to the Central Government a report, with proposals, if it thinks fit, for legislation, on the following matters, namely:—

(*a*) the extension of the provisions of this Act relating to scheduled banks to persons and firms, not being scheduled banks, engaged in British India in the business of banking and

(*b*) the improvement of the machinery for dealing with agricultural finance and methods for effecting a closer connection between agricultural enterprise and the operations of the Bank.

(2) When the Bank is of opinion that the international monetary position has become sufficiently clear and stable to make it possible to determine what will be suitable as a permanent basis for the Indian monetary system and to frame permanent measures for a monetary standard it shall report its veiws to the Central Government.

The full text of the Act will be found in the earlier editions of the Year Book.

Nationalisation.—A proposal for the nationalisation of the Reserve Bank came up for consideration before the Central Assembly through a resolution on February 18, 1947. It may be recalled that the question as to whether the Reserve Bank of India should be a State or a shareholders' Bank aroused some controversy

at the time when the first Reserve Bank Bill for constituting a shareholders' Bank on the lines recommended by the Hilton-Young Commission was proposed by Government in January 1927. At that time, the majority of the members opposed the Bill on the ground that a State Bank alone would inspire confidence among the people and that a shareholders' Bank would make domination by private financial interests possible. An influential minority, however, argued that a shareholders' institution alone would ensure freedom from interference in its working by political parties. The Government was prepared to accept the majority proposal but as no agreement was possible on the composition of the Directorate, the Bill was not proceeded with.

After the war, with the nationalisation of the Bank of England but more particularly with the formation of the Interim Government at the Centre, the demand for the nationalisation of the Reserve Bank of India was revived in certain sections of the press and the non-official resolution mentioned above was the logical sequel. It was, however, withdrawn on the assurance of the Finance Member that Government would consider the proposition most carefully and sympathetically and if they were convinced that nationalisation of the Bank would be in the country's interests, they would not hesitate to take steps in that direction. This assurance was followed by an announcement by the Finance Member in the course of the budget speech on February 28, 1947 that Government had taken a decision to nationalise the Reserve Bank of India. He observed: "I have since given further thought to the matter and am convinced that the advantages of nationalisation outweigh any possible disadvantages. I have, therefore, come to the conclusion that the Reserve Bank of India should be nationalised, the time and manner of effecting the change being a matter of separate consideration in due course."

CENTRAL BOARD OF DIRECTORS

Governor.—Sir Chintaman D. Deshmukh.

Deputy Governors.—C. R. Trevor, M. G. Mehkri.

Directors Nominated under Section 8 (1) (*b*).—Sir Homi Mehta, Bombay; Khan Bahadur Adam Hajee Mohamed Sait, Madras; Sir Syed Maratib Ali, Lahore.

Directors elected under Section 8 (1) (*c*).—

Bombay Register.—Sir Purshotamdas Thakurdas, Kashirbhai Lalbhai.

Calcutta Register.—B. M. Birla, K. P. Goenka.

Delhi Register.—Sir Shri Ram, Satya Paul Virmani.

Madras Register.—C. R. Srinivasan.

Director Nominated under Section 8 (1) (*f*).—V. Narahari Rao, Secretary, Finance Department, Government of India.

REPORT FOR YEAR

The report of the Central Board of Directors of the Reserve Bank of India for the year ended June 30, 1947 states that after payment of expenses and provision for sundry liabilities the net profit amounts to Rs. 8,02,27,309-15-11 as compared with Rs. 13,63,43,150-13-2 in the preceding year. Of this amount Rs. 20 lakhs will be utilised for paying a dividend of four per cent. and the balance will be paid to the Central Government.

The year under review showed a further decline in the total number of shareholders from 45,692 on June 30, 1946 to 45,031 on June 30, 1947. The tendency noticed since 1944 for the number of shares on the registers of the Bombay and Calcutta areas to expand at the expense of the remaining areas continued; the Calcutta area recorded a large rise of 1689 as against a comparatively smaller increase of 308 in the Bombay area. The number of shares on the Madras and Delhi registers showed a decline of 1382 shares and 265 shares respectively.

Notes and Coins.—During the accounting year, no alterations were made in respect of paper, size, etc., of notes issued by the Bank. In the last year's report, mention was made of the introduction by the Government of India of half and quarter-rupee coins minted in pure nickel and also of the discontinuance of the issue from June 1946 of the quarternary-rupee coin with a view to introducing the nickel rupee. Under the authority given by the Amended Government issued on May 24, 1947 two Indian Coinage Act notifications authorising the minting of rupee coins, in pure nickel. These rupees were first issued on June 2, 1947. They are similar in design to the pure nickel half and quarter-rupees and are of the same weight as the quarternary rupee coins, though slightly smaller in diameter.

Applications for the exchange of high denomination notes demonetised under the High Denomination Bank Notes Ordinance of January 12, 1946 continued to be received. In view of the ample time already given to all *bona fide* holders of these notes, the Government of India announced on February 28, 1947 that no further claim would be received after that date. Out of a total of Rs. 143.97 crores of high denomination notes in circulation on January 11, 1946, notes of the value of Rs. 134.90 crores were exchanged upto the end of June 1947.

Early in 1945 currency affairs in Burma were placed in charge of the British Military Administration in Burma. Following the termination of the military regime on January 31, 1946, the Government of Burma took over responsibility for the note issue in Burma, the Reserve Bank continuing to act as banker to Government. In June 1946, the Government of Burma decided to sever this currency link and on March 31, 1947, the currency system of Burma was delinked from that of India.

Exchange.—There were no changes during the year in the principles on which Exchange control was operated. The main changes in the United Kingdom regulations affecting Indian trade were the provision of facilities for the finance of business in sterling with merchants resident in a country other than that for which goods were intended or from which they originated and for the finance of trade between two non-sterling area countries through sterling area intermediaries. The Bank of England also established a system of "transferable account" for Belgium, Holland, Portugal and Brazil under which the monetary authorities in these countries undertook that all transactions

passing through these accounts would be limited to current payments. A step towards making sterling multilaterally convertible was taken on July 15 when the Bank of England agreed to allow transfers to take place between the "transferable" accounts of Argentina, Canada, the U. S. A. sterling accounts and those of Belgium, Holland, Portugal and Brazil.

The Foreign Exchange Regulation Act, which came into force on March 25, 1947, conferred wide powers on the Central Government and the Reserve Bank in respect of transactions in foreign exchange and securities, import and export of bullion and currency notes.

Consequent on India's membership of the Fund and the fixing of the par value of the rupee, sterling has ceased to be the sole determinant of the external value of the rupee. The Reserve Bank of India (Second Amendment) Act, 1947, passed in April repealed section 40 and 41 of the Act which obliged the Bank to buy and sell sterling without limit at specified rates and replaced them by a section which requires the Bank to buy and sell foreign exchange at such rates and on such terms as the Central Government may determine from time to time.

Security Market.—Except for a comparatively short period of boom in the early part of the year, the gilt-edged market ruled easy during the greater part of the year, steady conditions, however, emerging again towards the close. The Economic Adviser's index number of Government securities with 1927-28 as base rose from 120.7 in June 1946 to 122.8 in August but thereafter almost continuously declined to a low of 117.4 in February, 1947 after which there was a slight rise, the index standing at 117.9 in May. The trend of the industrial share market corresponded generally with that of the gilt-edged, though the extent of fluctuations in the former has been larger. The Economic Adviser's general index number of prices of variable yield securities, with 1927-28 as base, for the 10 months ended May 1947 averaged higher at 261.2 as compared with 233.4 for 11 months of the corresponding period of the previous year. But the index for May 1947 was 215.2 as compared with 280.9 for June 1946. The range of decline in the case of individual groups varied from 3.9 per cent. in the case of tea shares to 34.3 per cent. in the case of iron and steel shares.

Conditions prevailing in the money market in India during the year under report reflect a return to the pre-war pattern of alternating slack and busy seasons, which was submerged during the war under the flood tide of money supply.

Issue Department.—The continuance and marked increase in the total of the balance sheet of the issue department, witnessed since the outbreak of the war, was replaced during the year by a moderate rise, the balance sheet total having increased only by Rs. 11.23 crores to Rs. 1,265.31 crores at the end of the year under review or by 0.9 per cent. compared with 22 per cent. and 8.9 per cent. in 1944-45 and 1945-46 respectively. On the liabilities side, notes in circulation stood at Rs. 1,223.55 crores showing a decrease of Rs. 13.32 crores in contrast with an increase of Rs. 99.40 crores in the previous accounting year. The figure reached the bottom at Rs. 1,187.85 crores on September 27, 1946 owing mainly to the advent of the slack season and thereafter remained more or less steady round about Rs. 1,200 crores till the end of November. As the busy season started, the notes in circulation rose again in December reaching Rs. 1,244.68 crores on March 14, 1947 but declined subsequently. On the assets side, contrary to the trend noticed since the beginning of the war, the sterling securities remained steady at Rs. 1,135.33 crores throughout the year under review. Rupee coin which includes Government of India one rupee notes increased from Rs. 16.50 crores on June 30, 1946 to Rs. 27.73 crores at the end of June 30, 1947.

Banking Department.—The total of the balance sheet of the banking department fell from Rs. 617.94 crores as at June 30, 1946 to Rs. 548.41 crores on June 30, 1947 or by 11.25 per cent. as against an increase of 45.09 per cent. during the previous accounting year. This is mainly due to a decrease in "Central Government deposits" on the liabilities side and in "Balances held abroad" on the assets side. The deposits of the Central Government fell by Rs. 66.73 crores to Rs. 390.70 crores. The deposits of banks fluctuated widely between Rs. 111.96 crores for the week ended July 5, 1946 and Rs. 68.01 crores for the week ended February 7, 1947 and stood at Rs. 88.91 crores at the end of the accounting year. Apart from the seasonal factor, unsettled political and economic conditions in the sub-continent seem to account for the fluctuations in the deposits. The improvement noticed latterly, however, has partly arisen from the refund of the E. P. T. deposits and partly from the support extended to the market by the Reserve Bank. On the assets side, "Balances held abroad" fell by Rs. 128.25 crores to Rs. 430.82 crores partly in response to the demand for funds for financing imports. Investments, however, rose by Rs. 36.15 crores to Rs. 66.94 crores.

Agricultural Credit Department.—The Department continued to study the problems connected with the co-operative movement, land mortgage banks, debt legislation, etc. The rebate in the rate of interest was increased from one per cent. to 1¼ per cent. in the case of accommodation against bills or promissory notes drawn by co-operative banks for financing seasonal agricultural operations or marketing of crops with a view to encouraging co-operative banks to make greater use of the Bank's facilities for re-discounts for and advances to provincial co-operative banks.

During the year, 19 banks were inspected under the Banking Companies (Inspection) Ordinance, 1946, and four under section 42 (6) of the Reserve Bank of India Act. Action against two banks was taken; one was prohibited from accepting fresh deposits from January 13, 1947 and the other was refused admission to the second schedule.

Sterling Assets.—The sterling assets of the Bank registered a decline by Rs. 128.25 crores during the year under report as against a net increase of Rs. 271.93 crores in the previous 12 months. This reversal of the rising trend which was in evidence for some years was partly

brought about by the disappearance of factors such as Government's war expenditure and purchases of stores on account of Allied Governments, and partly by larger imports particularly of food grains and fertilisers, stores and equipment on Government account. This also reflects presumably some repatriation of British capital from India. The total holdings in the issue and banking departments as on June 30, 1947 amounted to £1174.61 million or Rs. 1566.15 crores, which are maintained in the form of cash and investments in short-term British Government securities renewed from time to time. The sterling balances constitute about the entire foreign exchange reserve of this country accumulated at the cost of great hardship and sacrifice borne by the sub-continent.

Since the beginning of the war upto March 31, 1946, India earned dollars aggregating Rs. 405 crores and spent Rs. 240 crores, leaving a net surplus of Rs. 114 crores, after taking into account Rs. 51 crores representing the excess of total expenditure over earnings in other hard currency countries. Taking into account the unfavourable balance with hard currency countries to the extent of Rs. 22 crores during 1946-47, India's net earnings of the currencies of these countries during the period September 1939 to March 1947 amounted to Rs. 92 crores.

Bretton Woods Organisations.—The period under review witnessed the commencement of operations of the International Monetary Fund and the International Bank. During the year, 20 per cent. of India's subscription to the Bank amounting to $80 million was paid, the first two per cent. being in U. S. dollars and the rest in rupees. As regards the par value, the Government of India decided that the existing par value which works out to Rs. 330.852 per $100 or 4.145142857 grains of fine gold per rupee should be maintained. On September 18, 1946, the schedule of par values was announced and India was called upon to pay its subscription of $400 million by March 1. Under the rules of the Fund, the "gold" subscription had either to be 25 per cent. of a country's quota or 10 per cent. of its non-official holdings of gold and U. S. dollars, whichever was less. As the latter was the lower figure in India's case, gold to this value was transferred to the Fund.

Below is given the table relating to the affairs of the Reserve Bank of India since its inception.

STATEMENT OF THE AFFAIRS OF THE RESERVE BANK OF INDIA

ISSUE DEPARTMENT

(In lakhs of Rupees)

	Notes held in the Banking Department.	Notes in Circulation.		Total Notes Issued.	Gold Coin and Bullion.		Sterling Securities.	Total Gold coin and Bullion and Sterling Securities.	Rupee Coin.	Govt. of India Rupee Securities.	Internal Bills and other Commercial Paper.	Ratio of Gold Coin and Bullion and Sterling Securities to Total Liabilities.
		Legal Tender in India.	Legal Tender in Burma.		Held in India.	Held outside India.						
31st Dec. 1935 ..	21,49	171,78	..	193,27	41,55	2,87	66,19	110,61	57,12	25,54	*Nil*	57·231%
,, ,, 1936 ..	11,87	192,00	..	203,87	41,55	2,87	71,31	115,73	64,76	23,38	*Nil*	56·768%
,, ,, 1937 ..	29,33	180,60	4,77	214,70	41,55	2,87	80,30	124,72	62,57	27,41	*Nil*	58·092%
,, ,, 1938 ..	18,43	180,26	7,74	206,43	41,55	2,87	59,50	103,92	70,19	32,32	*Nil*	50·339%
,, ,, 1939 ..	17,87	225,20	11,43	254,30	41,55	2,87	107,50	151,92	64,04	38,34	*Nil*	59·739%
30th June 1940 ..	11,09	235,04	12,70	258,83	41,54	2,87	131,50	175,91	33,32	49,60	*Nil*	67·966%
,, ,, 1941 ..	13,07	260,01	18,26	291,34	44,41	*Nil*	118,80	163,21	36,81	91,32	*Nil*	56·022%
,, ,, 1942 ..	14,33	447,23	*Nil*	461,56	44,42	*Nil*	266,85	311,27	28,00	122,29	*Nil*	67·439%
,, ,, 1943 ..	13,68	732,48	*Nil*	746,16	44,41	*Nil*	567,79	612,20	15,55	118,41	*Nil*	82·047%
,, ,, 1944 ..	12,02	931,38	*Nil*	943,40	44,41	*Nil*	828,33	872,74	12,82	57,84	*Nil*	92·511%
,, ,, 1945 ..	14,31	1,137,48	*Nil*	1,151,79	44,42	*Nil*	1,034,33	1,078,75	15,20	57,84	*Nil*	93·658%
,, ,, 1946 ..	17,21	1,236,87	*Nil*	1,254,08	44,41	*Nil*	1,135,33	1,179,74	16,50	57,84	*Nil*	94·072%
,, ,, 1947 ..	41,76	1,223,55	*Nil*	1,265,31	44,41	*Nil*	1,135,33	1,179,74	27,73	57,84	*Nil*	93·287%

BANKING DEPARTMENT

(In lakhs of Rupees.)

Year.	Paid-up Capital and Reserves.	Deposits.					Bills payable.	Other Liabilities.	Total liabilities and Assets.	Cash.	Bills purchased & discounted.	Balances held abroad.	Loans and Advances.		Investments.	Other Assets.
		Central Government.	Government of Burma.	Other Government Accounts.	Banks.	Others.	Total.						To Governments.	To others.		
31st Dec. 1935 ..	10,00	6,05 (a)	..	..	28,34	26	34,65	11	71	45,47	21,57	*Nil*	17,39	100	*Nil*	5,29	22
1936 ..	10,00	7,14 (a)	..	..	15,87	27	23,28	9	70	34,07	11,97	*Nil*	14,86	*Nil*	*Nil*	6,18	1,08
1937 ..	10,00	9,76 (a)	..	..	20,16	1,27	31,19	12	56	41,87	29,41	*Nil*	3,64	2,00	2	6,24	56
1938 ..	10,00	4,87	1,95	4,36	12,18	84	24,20	9	87	35,16	18,54	8,26	1,14	1,06	11	5,26	79
1939 ..	10,00	6,73	1,54	4,58	18,87	1,16	32,88	9	54	43,51	17,74	10,11	6,98	1,20	*Nil*	6,42	1,06
30th June 1940 ..	10,00	6,20	1,45	4,42	20,98	1,46	34,51	9	49	45,09	11,21	4,09	20,20	10	15	7,70	1,64
1941 ..	10,00	15,03	3,26	4,17	30,02	2,37	54,85	39	2,07	67,31	13,19	*Nil*	47,33	15	*Nil*	5,27	1,37
1942 ..	10,00	14,11	34	7,56	64,63	2,01	88,65	3,33	2,38	104,36	14,44	6	80,39	*Nil*	*Nil*	8,24	1,23
1943 ..	10,00	8,42	63	9,98	58,24	3,05	80,32	1,60	7,19	99,11	13,84	51	75,88	*Nil*	22	7,39	1,23
1944 ..	10,00	65,25	79	16,79	94,35	3,45	180,63	2,97	8,09	201,69	12,31	2,59	173,74	72	10	11,11	1,12
1945 ..	10,00	277,97	71	22,96	80,19	17,93	399,76	3,78	12,35	425,80	14,49	*Nil*	388,13	70	*Nil*	21,44	1,13
1946 ..	10,00	457,43	87	18,56	109,47	6,47	592,80	2,88	12,26	617,94	17,49	*Nil*	559,06	*Nil*	6	30,79	10,54
1947 ..	10,00	390,70	..	18,00	88,91	30,96	528,57	1,92	7,92	548,41	41,86	*Nil*	430,82	511	3	66,94	1,21

The Exchange Banks

The banks carrying on exchange business in India are merely branch agencies of banks having their head offices in London, on the Continent, in the Far East or the U. S. A. Originally their business was confined almost exclusively to the financing of the external trade of India; but in recent years, most of them, while continuing to play their main role, have also taken an active part in the financing of internal trade. Before the Great War, these banks used to do their business in India with money borrowed elsewhere; but the development of the money market in this country in the past three decades have enabled them to depend on internal deposits. No information is available as to how far each bank has secured deposits in India but the following statement published by the Reserve Bank of India throws light on the trend of their aggregate deposits and cash balances in India and Burma:—

Deposits and cash balances of the exchange banks in India and Burma.

	Deposits Rs. in 000s.	Cash Balances Rs. in 000s.
Dec. 31, 1870 ..	52,31	61,13
„ „ 1880 ..	3,39,88	1,80,09
„ „ 1890 ..	7,53,60	3,50,43
„ „ 1900 ..	10,50,35	2,39,58
„ „ 1910 ..	24,79,17	4,38,51
„ „ 1920 ..	74,80,71	25,17,53
„ „ 1930 ..	68,11,44	7,70,89
„ „ 1940 ..	85,32,81	17,19,40
„ „ 1941 ..	106,73,07	13,39,75
„ „ 1942 ..	116,85,27	12,00,96
„ „ 1943 ..	140,21,13	17,24,47
„ „ 1944 ..	165,36,93	19,10,00
„ „ 1945 ..	179,00,39	18,32,33

INVESTMENTS

Discussing the question of investment in greater detail we find that so far as India is concerned they consist to a great extent of the purchase of bills drawn against imports and exports to and from India.

The financing of the import trade originated and is carried through however for the most part by branches outside India, the Indian branches' share in the business consisting principally in collecting the amount of the bills at maturity and in furnishing their other branches with information as to the means and standing of the drawees of the bills, and it is as regards the export business that the Indian branches are more immediately concerned. The Exchange Banks have practically a monopoly of the export finance in India and in view of the dimensions of the trade which has to be dealt with the Banks would under ordinary circumstances require to utilise a very large proportion of their resources in carrying through the business. They are able, however, by a system of rediscount in London to limit the employment of their own resources to a comparatively small figure in relation to the business they actually put through.

The bills against exports are largely drawn at three months' sight and may either be "clean" or be accompanied by the documents relating to the goods in respect of which they are drawn. Most of them are drawn on well-known firms at home or against credits opened by Banks or financial houses in England and bearing as they do an Exchange Bank endorsement they are readily taken up by the discount houses and Banks in London. Any bills purchased in India or Pakistan are sent home by the first possible Mail so that presuming they are rediscounted as soon as they reach London the Exchange Banks are able to secure the return of their money in about 16 or 17 days instead of having to wait for three months which would be the case if they were unable to rediscount. It must not be assumed however that all bills are rediscounted as soon as they reach London as at times it suits the Banks to hold up the bills in anticipation of a fall in the London discount rate while on occasions also the Banks prefer to hold the bills on their own account as an investment until maturity.

The Banks place themselves in funds in India and Pakistan for the purpose of purchasing export bills in a variety of ways of which the following are the principal:—

(1) Proceeds of import bills as they mature,
(2) Sale of drafts and telegraphic transfers payable in London and elsewhere out of India or Pakistan.
(3) Purchase of Council Bills and Telegraphic Transfers payable in India from the Secretary of State.
(4) Imports of bar gold and silver bullion.
(5) Imports of sovereigns from London, Egypt or Australia.

The remaining business transacted by the Banks in India and Pakistan is of the usual nature and need not be given in detail.

A Big Increase.—The number of scheduled banks on April 1,1935 stood at 50 as against 97 on June 30, 1947. There has also been a substantial increase in the number of non-scheduled banks and although complete statistics are not available, it is estimated that the number exceeds 700. The development of branch banking has been the main feature during the past 12 years, though the spade work in that connection was done by the Imperial Bank of India and the other four big banks as early as 1924 and the following years. As compared with 1,800 branch offices at the end of 1939, on June 30, 1947 there were 3,566.

The table below gives the position of scheduled banks as on June 28, 1946 and June 27, 1947 and compares it with the position on the eve of the Second World War :—

(Rs. in Crores)

	1-9-39	28-6-46	27-6-47
Demand Liabilities ..	135	709	667
Time Liabilities ..	102	311	346

Contrary to the trend noticed during the past few years, the total demand and time liabilities of the scheduled banks did not maintain their continuous upward trend throughout 1946-47. From Rs. 1,020 crores, they reached an all-time high of Rs. 1,097 crores on November 2, 1946 but receded thereafter. The proportion of demand to total liabilities increased from a little less than 57 per cent. on the eve of the War to 69.47 per cent. on June 28, 1946 and then slipped back to 65.82 per cent. in the following year. The increase in time liabilities in 1946-47 indicated a gradual progress towards pre-war pattern of bank deposits.

Though the deposits of banks increased since 1939, there was no corresponding rise in demand for bank finance in the war period and even though the subsequent increase was rather sharp, the banks were able to maintain high liquidity of their assets. This is illustrated by the following table :—

(Rs. in Crores)

	1-9-39	28-6-46	27-6-47
Advances	101	354	414
Bills Discounted ..	4	0·2	0·15
Cash and Balance with Reserve Bank ..	32	151	143

War time Anxiety.—It would be seen from the above table and the previous one that the percentage of advances to total deposits fell sharply, owing to wartime restrictions on trade and Government being the main financier of the country's economic activity, from 44.3 per cent. on September 1, 1939 to 34.7 on June 28, 1946 but increased in the following year to 40.6. Similarly, the proportion of cash to total deposits rose from 13.5 per cent. just before the outbreak of the War to 14.8 per cent. and then contracted to 14.1 per cent. in the following year. It might be noted that the proportion of cash to deposits reached the peak at 20.7 per cent. on December 27, 1940 as a result of the fall in economic activity following the collapse of France.

The total number of non-scheduled banking companies working in India and submitting returns under section 277L of the Indian Companies Act was 659 at the end of 1946 as compared with 631 at the end of 1945. Their total deposits increased from Rs. 67.31 crores to Rs. 78.44 crores, the ratio of cash to deposits declining from 12 per cent. to 8.4 per cent.

Surveying the developments in 1946-47, Sir Chintaman Deshmukh, Governor of the Reserve Bank of India, told the annual meeting of the Bank on August 4, 1947 that the swift expansion in advances was not due entirely to the normal demands of trade and industry but due to an unwholesome extent, to abnormal factors like bullish markets and speculative imports. Such business was evidence of immature or imprudent bank management. With a view to restoring a proper balance between their capital and deposits and also because of the provisions of the projected banking legislation, banks continued to make applications for raising their capital.

"Banking practices," observed the Governor of the Reserve Bank, "still leave much to be desired. There is yet, for instance, a propensity towards declaring dividends from profits arising out of security transactions. I have also noticed a pronounced tendency on the part of some banks to window-dress their balance sheets. Considerable anxiety was felt about the ability of Indian banks to tide over smoothly the period of transition from war to peace, particularly because of the scramble for establishment of new banks during the years following 1943. As the year 1946 advanced, the public felt reassured that the worst was over."

PRESENT POSITION

The following table shows the position of the better known existing banks as it appears in "Statistical Tables Relating to Banks in India and Burma for the years 1944 and 1945":—

(In Lakhs of Rupees)

	Capital.	Reserve.	Deposits.	Cash and Liquid Investments.	No. of Offices.
Allahabad Bank	46	97	28,75	15,75	75
Baroda Bank	100	102	29,68	20,07	33
Bank of India	149	189	59,02	41,30	30
Bharat Bank	201	18	26,91	18,04	214
Central Bank	251	274	105,23	80,51	308
Imperial Bank	563	603	259,37	195,78	433
Indian Bank	44	49	13,71	10,58	63
Punjab National Bank	80	81	51,52	39,32	197
Union Bank	40	16	5,05	4,44	4
United Commercial	200	8	23,89	17,61	10

The following figures appearing in the Statistical Tables Relating to Banks in India show the growth of the Capital, Reserve and Deposits of the Joint Stock Banks having a paid capital and reserves of Rs. 5 lakhs and over registered in India :—

In Lakhs of Rupees.

	Capital.	*Reserve.*	*Deposits.*
1922 ..	802	261	8103
1923 ..	889	284	4442
1924 ..	690	380	5250
1925 ..	673	386	5449
1926 ..	676	408	5988
1927 ..	688	419	6084
1928 ..	674	434	6285
1929 ..	786	366	6272
1930 ..	747	442	6325
1931 ..	780	428	6226
1932 ..	781	439	7254
1933 ..	778	455	7167
1934 ..	709	467	7677
1935 ..	817	502	8444
1936 ..	848	546	9814
1937 ..	725	553	10026
1938 ..	748	565	9808
1939 ..	825	530	10073
1940 ..	908	556	11398
1941 ..	1012	606	13764
1942 ..	1260	641	20274
1943 ..	1871	782	34384
1944 ..	2583	1109	47534
1945 ..	3182	1326	60117

LONDON OFFICES, AGENTS OR CORRESPONDENTS OF BANKS AND FIRMS (DOING BANKING BUSINESS) IN THE SUB-CONTINENT.

Name of Bank.	London Office—Agents or Correspondents.	Address.
Reserve Bank of India	London Office	31-33, Bishopsgate, E.C. 2.
Imperial Bank of India	Ditto	25, Old Broad Street, E. C. 2.
Other Banks & Kindred Firms.		
Allahabad Bank	Affiliated to Chartered Bank of India, Australia & China.	38, Bishopsgate, E. C.2.
Bank of Baroda	Eastern Bank	2 & 3, Crosby Sq., Bishopsgate, E. C. 3.
Bank of India	Westminster Bank	41, Lothbury, E. C 2.
Bank of Mysore	Eastern Bank	2 & 3, Crosby Sq., Bishopsgate, E. C. 3.
Bharat Bank	National City Bank of New York	117, Old Broad Street, E. C. 2.
Central Bank of India	Barclay's Bank and Midland Bank	168, Fenchurch Street, E. C. 3 and 122, Old Broad Street, E. C. 2.
Devkaran Nanjee Banking Co. ..	Barclay's Bank	168, Fenchurch Street, E. C. 3.
Exchange Bank of India & Africa.	Midland Bank (Overseas Branch).	122, Old Broad Street, E.C. 2.
Habib Bank	Ditto ..	Ditto.
Indian Bank	National City Bank of New York.	117, Old Broad Street, E. C. 2.
Punjab National Bank	Midland Bank	122, Old Broad Street, E. C. 2.
Union Bank of India	Westminster Bank	41, Lothbury, E. C. 2.
United Commercial Bank ..	National City Bank of New York.	117, Old Broad Street, E. C. 2.
Exchange Banks.		
American Express Co. (Inc.) ..	London Office	6, Haymarket, London (Temp.).
Banco Nacional Ultramarino ..	Anglo-Portuguese Colonial and Overseas Bank.	9, Bishopsgate, E. C. 2.
Bank of China	London Office	85, Gracechurch Street, E. C. 3.
Chartered Bank of India, Australia and China.	Ditto	38, Bishopsgate, E. C. 2.
Comptoir National d'Escompte de Paris.	Ditto	8-13, King William Street, E.C. 4.
Eastern Bank	Ditto	2-3, Crosby Sq., E. C. 3.
Grindlay & Co.	Ditto	54, Parliament Street, S. W. 1.
Hongkong & Shanghai Banking Corporation.	Ditto	9, Gracechurch St., E.C.3.
Lloyds Bank	Ditto	71, Lombard Street, E.C.3.
Mercantile Bank of India ..	Ditto	15, Gracechurch St., E.C.3.
National Bank of India	Ditto	26, Bishopsgate, E. C. 2.
National City Bank of New York.	Ditto	117, Old Broad Street, E. C. 2.

Banking Legislation

Ever since 1913 when the banking crisis in this country stressed the need for separate legislation to govern the working of banks, this problem has been confronting the authorities. The Indian Central Banking Inquiry Committee examined the question in greater detail and advocated legislation for a Special Bank Act covering the various aspects of banking. Owing to the outbreak of War and subsequent constitutional developments, this measure could not be passed through the legislature and the bill, after seven years of severe trial, has emerged only from the Select Committee of the Indian Legislature. However, some of its more urgent provisions have been brought into effect either by the amendment of the Company law or by the issue of Ordinances.

The original bill provided for (1) a clear but simple definition of banking, (2) for minimum capital so as to permit them of reasonable profits, (3) restrictions on the mode of investment and (4) for acceleration of the liquidation proceedings in order to minimise the inconvenience of depositors. In 1942, the Government of India got the approval of the legislature to amend the Indian Companies Act whereby Section 277F was added so as to define the word "bank", "banker" or "banking". In 1943 following the Bombay High Court's ruling that the exemption granted to banks by Government under a notification on January 16, 1937 from showing in their balance sheets the provision for bad and doubtful debts, the Indian Companies Act was amended by providing specifically the same exemption under Form F in the Third Schedule.

By amending Section 277 I and adding Section 277 H, Government prevented the banks from employing managing agents or any person either on commission basis or on a contract exceeding five years. It also laid down that no bank registered after January 15, 1937 shall carry banking business unless its subscribed capital is not less than half the authorised capital and its shares consist of ordinary shares only. While the already registered banks were allowed to have preference shares, they were compelled to extinguish the deferred shares. It further regulated the voting rights on the basis of the contribution to the share capital. The whole object was to prevent the issue of mushroom banks which had been so prominent a feature of the War years.

The Banking Bill moved in the Central Legislature in 1944 sought to tighten the control more rigidly than the original legislation proposed in 1939 and provided for (1) a definite ban on trading by banks and disposal of trading assets of the defaulting borrower within a specified period, (2) ban on the grant of unsecured loans to directors, their firms and companies, (3) the licensing of banks registered outside British India, (4) submission of monthly returns to the Reserve Bank in respect of assets and liabilities and half yearly returns regarding particulars of advances and investments, (5) return of unclaimed deposits to be filed with the Reserve Bank, (6) a special form of balance sheet, (7) authority by which the Central Government could direct the Reserve Bank to inspect the books of any bank, and (8) the Reserve Bank being the official liquidator of banks.

Select Committee Report.—The revised Bill was referred to a Select Committee whose report was presented to the Legislative Assembly on February 17, 1947. The consideration of the report has, however, been postponed to subsequent session. The main changes proposed by the Committee in the Bill are :—

(1) Limiting the Reserve Bank's emergency power to suspend the provisions of the Bill to 30 days. (2) Widening the definition of "banking" so as to include the acceptance of time deposits also. (3) Providing that no company other than a banking company shall accept deposits repayable on demand. (4) Making the existence of managerial contracts subject to confirmation by a general meeting of shareholders and making the Reserve Bank the arbiter in questions of disproportionate remuneration. (5) Introducing a somewhat elaborate but more workable basis for capital requirements replacing the original basis of population for capital requirements by one dependent on the territorial range of a company's activities. (6) Limiting the voting rights of any one shareholder to one-tenth of the total voting rights so as to prevent the control of the affairs of a banking company from passing into the hands of a small group. (7) Prohibiting a banking company from declaring dividends before it has written off all its capitalised expenses. (8) Debarring a banking company incorporated in India from taking on its board a person who is already a director of another banking company. (9) Placing on all banking companies incorporated in India an obligation to build up and maintain a reserve fund equal to the paid-up capital. (10) Making it necessary for all banks to obtain the permission of the Reserve Bank before forming a subsidiary company for purposes other than those expressly permitted under clause 19. (11) Requiring all banking companies to take out licences. (12) Prohibiting a banking company from holding shares in any company in the management of which any manager or managing director of the banking company is in any way concerned or interested. (13) Bringing down the minimum percentage of cash and approved securities to be held from 25 per cent. to 20 per cent. (14) Giving the Reserve Bank free discretion to inspect a banking company at any time so that the public may not draw any pessimistic inference from the fact that a bank has been inspected. (15) Adding further to the powers and functions of the Reserve Bank so as to bring it into closer contact with banking companies and providing for an annual report by the Reserve Bank on the trend and progress of banking in the country. (16) Removing, in case of private banking companies, some of the exceptions granted under the Indian Companies Act. (17) Amending the Reserve Bank of India Act so as to enable the Bank under certain circumstances to come to the aid of a banking company by means of a loan against such securities as it may consider sufficient.

Unhealthy Developments.—The Committee has also suggested that the constitutional difficulties standing in the way of extending the provisions of the Bill to partnerships and individuals carrying on banking business should be examined with a view to introducing legislation to bring them within the purview of the Bill.

Pending the enactment of the Banking Companies Bill, 1946, and with a view to controlling the unplanned expansion of branches and checking certain undesirable developments such as excessive expenditure on branches in relation to their resources, employment of untrained staff, etc., a Bill for the licensing of branches of banking companies was introduced in the Assembly on November 4, 1946. After being approved, it became effective from November 22.

Section 31 of the Reserve Bank of India Act was amended on November 16, 1946 putting on a permanent footing the ban on the issue of promissory notes payable to bearer. The ban had been imposed by the Government of India on May 18, 1946 by an Ordinance with a view to putting a stop to the unhealthy practice noticed in the case of certain banks of issuing bearer promissory notes with a stated period of maturity, which, in effect, constituted substitutes for currency notes.

INDIGENOUS BANKERS

Long before the establishment of joint-stock banking companies in India or Pakistan indigenous bankers or *shroffs* flourished. Even at present they form an important credit agency in the banking system and are the only source of credit in many parts of the sub-continent. The difference between *shroffs* and moneylenders is that while the latter work generally with their own capital, the former use borrowed capital also either in the form of deposits from the public or by drawing and rediscounting *hundies*. A certain number of indigenous *shroffs* work on modern lines and transact all kinds of business which the ordinary joint stock banks transact, including the issue of pass books and cheque books. They do not, however, publish balance sheets and their management is entirely in the hands of a single proprietor or a firm of proprietors.

No reliable estimates of the capital employed by indigenous bankers are available; but it is recognised that amongst the agencies financing agriculture, internal trade and small industries, they occupy a prominent position. Their operations are not attended with formalities and delay, and the majority of them combine banking with some form of trade and the capital employed in banking is not distinguished from that employed in trade.

In Bombay indigenous bankers on the approved lists of joint-stock banks get advances from these banks upto their respective limits. Banks also make advances against *shroffs' hundies*, the period for which is usually 60 days. In all Provinces, the indigenous bankers get remittance facilities from the Imperial Bank on the same terms as the general public do.

In pursuance of the recommendations of the Central Banking Inquiry Committee for linking indigenous bankers with the country's central banking institution, the Reserve Bank of India, on its formation, opened negotiations; but no agreement materialised since the indigenous bankers felt that the conditions laid down were rather irksome. The question was brought up for discussion again in 1946 when the Central Assembly considered the Banking Bill. The Select Committee has now suggested that indigenous bankers should be brought in line with joint-stock banks and the difficulties in the way of extending the legislation to them should be examined.

THE INTEREST STRUCTURE

Recent monetary theory looks on money rates as the basic influence at work in respect of a country's economy. Banks work within the conditions set by interest rates which, in turn, are regulated, under the modern monetary technique, by the central banking institution of a country. The yield on a non-terminable Government security is generally looked upon as a barometer of long-term interest rates, while the rate of the Imperial Bank on demand loans represents earnings on short term investments. The Imperial Bank's *hundi* rate is the rate at which the Bank discounts first class trade bills. The call money rate is the rate for surplus money seeking investment and repayable at the option of the borrower or the lender subject to a minimum period of 24 hours. Bazaar Bill rates are the highest rates in the Indian money market and they are the rates charged by *shroffs*.

In the monetary history of the sub-continent the normal relationship between the short term money rates and the long-term money rates is that the former stands higher than the latter. For three decades in the last century, the excess ranged between one and two per cent.; but since then, the difference has narrowed down and the latest tendency is that the short-term loan rates are actually lower than the long-term interest rates. This is mainly due to the exceptional demand of Government for loans.

Formerly each Presidency Bank fixed its own Bank rate which was not uniform. After the amalgamation of the Presidency Banks the Imperial Bank fixed the rate for the whole of the sub-continent until July 4, 1935 when the right to fix the official Bank rate was exercised by the Reserve Bank. The rate fixed represents the rate charged by the banks on demand loans against Government securities and is the standard rate at which the Reserve Bank is prepared to buy or rediscount bills of exchange or other commercial paper eligible for purchase under the Reserve Bank of India Act. This rate enables the Reserve Bank to have direct contact with short-term rates and the money market and to encourage or discourage scheduled banks to obtain more cash.

The Bank rat (of the Reserve Bank of India and the *hundi* rate of the Imperial Bank of India remained unchanged at three per cent. throughout 1946-47. Unlike the two previous years, money conditions were generally stringent during the greater part of 1946-47. However, the inter-bank call money rate quoted by the larger scheduled banks remained nominally

LIABILITIES AND ASSETS OF EXCHANGE BANKS AS PUBLISHED IN THEIR LAST BALANCE SHEETS

(In 000s)

Name of Bank.	Date of Balance Sheet.	Capital and Reserves.	Acceptances, Loans and Bills payable.	Miscellaneous Credit.	Deposits and Current Accounts.	Profit.	Total liabilities or Assets.	Cash in hand and at Bank and Bullion.	Investments in Govt. and other Securities.	Bills of Exchange and Bills receivable.	Bills discounted, Loans and advances.	Building and sundries including Loans for acceptances.	No. of offices in India and Burma.
		£	£	£	£	£	£	£	£	£	£	£	
Chartered Bank of India, Australia & China.	31st Dec. 1945	6,000	1,375	..	80,335	639	90,046	13,980	51,402	2,267	18,467	3,930	9
Eastern Bank ...	,,	1,800	717	251	21,526	100	24,394	4,804	15,236	608	3,012	734	4
Lloyds Bank	,,	26,810	38	30,610	867,844	1,030	926,340	166,768	580,626	9,272	117,130	52,544	18
Mercantile Bank of India	,,	2,125	620	..	33,532	196	36,702	6,297	18,758	1,518	8,923	1,206	8
National Bank of India	,,	4,200	979	..	61,804	574	67,557	16,563	31,658	11,501	7,167	668	11

GROWTH OF BANKING

The credit for giving an impetus to joint stock banking in India goes to a certain passage in the Indian Companies Act of 1860 which accepted the principle of limited liability, a factor indispensable to the raising of large amounts of capital. Till 1906 however, there were few banks in the country and their resources being meagre, the sphere of activity was also restricted. The *swadeshi* movement gave an impetus to indigenous banking activity in the country and between 1906 and 1913, the number of banks with capital and reserves in excess of Rs. 5 lakhs doubled and their deposits increased from Rs. 8 crores to Rs. 18 crores. The year 1913 however, gave, a rude shock when several banks led by the People's Bank of India and the Indian Specie Bank went into liquidation; and though the First World War did give a fresh impetus, and the share of Indian joint stock banks in the aggregate deposits of banks in the country increased from 21 per cent. in 1914 to as much as 32 per cent. in 1920, it is a fact that between 1913 and 1924 as many as 161 banks failed.

Between 1924 and 1931 the joint stock banks in the country were adversely hit by the world depression; but the economic recovery that followed resulted in increasing the share of deposits of these banks from 31.6 per cent. in 1930 to 40.2 per cent. of the total banking deposits in 1906. The increase was mainly achieved at the cost of the Imperial Bank of India and the Exchange Banks. Since then there was a steady development till the outbreak of the Second World War excepting for a minor set-back in 1938 as the result of the closing down of the Travancore National and Quilon Bank, Ltd.; and the pace of expansion accelerated during the war period as will be seen from the figures given below :—

SCHEDULED BANKS' CONSOLIDATED POSITION IN INDIA, PAKISTAN AND BURMA

(Rs. in lakhs)

Average of Friday Figures.	No. of schedule banks at the end of periods.	Demand liabilities.	% of Demand liabilities to Total Deposits.	Time Deposits.	Savings Deposits.	Total Demand and Time Deposits.	Cash.	Balances with Reserve Bank.	Excess of Balances over statutory minimum.	Total Cash and Balances with Reserve Bank.	% of this to Demand liabilities.	Advances.	Bills Discounted.	Total Advances and Bills Discounted.	% of Advances to Demand Deposits.
1940-41	63	163,90 (8,11)	61·0	104,94 (3·75)	37,58	268,84 (11,86)	8,37 (42)	36,42	26,13	44,79	16·66	122,13 (4,43)	3,84 (15)	125,97 (4,58)	46·86
1941-42	59	211,35 (11,22)	66·3	107,61 (4,24)	37,24	318,96 (15,46)	9,86 (70)	36,65	23,93	46,51	14·58	120,20 (4,88)	4,93 (9)	125,13 (4,97)	39·23
1942-43	61	306,28	74·6	104,21	48,30	410,49	12,97	55,73	38,33	68,70	16·73	95,68	2,18	97,86	23·83
1943-44	75	456,63	76·2	142,78	68,03	599,41	20,57	63,63	37,99	84,20	14·05	156,14	5,59	161,73	26·98
1944-45	84	584,80	75·1	194,12	90,58	778,92	27,31	89,25	56,90	116,56	14·96	224,22	11,16	235,38	30·22
1945-46	91	654,53	71·6	259,52	121,56	914,05	34,80	89,91	51,99	124,71	13·64	285,07	16,05	301,12	32·94
1946-47	96	725,54	69·2	323,11	133,04	1,048,65	41,11	81,25	38,51	122,36	11·67	406,39	21,32	427,71	40·79

around ¼ per cent. during the major part of the year. The 12 months rate which was quoted at 1½ to 1¾ per cent. at the end of last year was quoted at that level upto June 28 but thereafter recovered to 1½ to 1¾ per cent. continuing unaltered throughout the remaining period under review.

Money Rates.—The following is the trend of the short-term money rates in the country since 1935-36 :—

Year.	Bank Rate.	Imperial Bank *Hundi* Rate.		Call Money.		Bazar Bill.		Average Treasury Bill Rate.	Annual Deposits.	
		High.	Low.	Highest.	Lowest.	H.	L.		H.	L.
1935-36 ..	3	3½	3	3½	¼	6½	3	1·21	..	..
1936-37 ..	3	3	3	1½	¼	5½	3½	0·78	..	..
1937-38 ..	3	3	3	1½	¼	5½	5½	0·97	..	..
1938-39 ..	3	3	3	2½	¼	5½	3	1·63	2	1½
1939-40 ..	3	3½	3	2½	¼	6½	5½	1·86	2	1½
1940-41 ..	3	3½	3	1½	¼	6½	5½	0·89	2	1½
1941-42 ..	3	3	3	½	¼	6½	4½	0·82	2	1½
1942-43 ..	3	3	3	¼	¼	6½	5	0·87	2	1½
1943-44 ..	3	3	3	¼	¼	6	4½	0·90	1½	1
1944-45 ..	3	3	3	½	¼	5½	4½	0·49	1½	1
1945-46 ..	3	3	3	1	¼	5½	5½	0·38	1½	1½
1946-47 ..	3	3	3	¾	¼	7½	5½	0·43	1½	1½

Relative Rates.—The relationship between the long-term interest rates as represented by the yield on non-terminable Government loan and the short-term interest rates is established in the following table :—

Year.	Yield on 3½ p.c. Rupee Security.	Average Bank rate.	Excess or Deficit of 2 over 1.
1870 ..	4·3	5·16	+ 0·86
1880 ..	4·3	5·01	+ 0·71
1890 ..	4·0	5·92	+ 2·07
1900 ..	3·64	5·51	+ 1·87
1910 ..	3·72	5·47	+ 1·74
1920 ..	5·9	6·20	+ 0·07
1930 ..	5·1	5·88	+ 0·78
1931 ..	5·5	7·04	+ 1·54
1932 ..	5·7	5·02	— 0·70
1933 ..	4·3	3·56	— 0·74
1934 ..	3·9	3·50	— 0·40
1935 ..	..	3·46	..
1936 ..	3·52	3·0	— 0·52
1937 ..	3·63	3·0	— 0·63
1938 ..	3·55	3·0	— 0·55

* From this year, the yield is on 3 per cent. Rupee Paper.

Year.	Yield on 3½ p.c. Rupee Security.	Average Bank rate.	Excess or Deficit of 2 over 1.
1940-41* ..	3·79	3·0	— 0·79
1941-42 ..	3·69	3·0	— 0·69
1942-43 ..	3·77	3·0	— 0·77
1943-44 ..	3·57	3·0	— 0·57
1944-45 ..	3·33	3·0	— 0·33
1945-46 ..	3·14	3·0	— 0·14
1946-47 ..	2·90	3·0	+ 0·10

Clearing Houses.—The Principal Clearing Houses in India and Pakistan are those of Calcutta, Bombay, Madras and Karachi, and of these the first two are by far the most important. In 1946-47 Clearing Houses were opened at Alleppey, Rajkot and Gaya and are being managed by the Imperial Bank of India. This brings the total number of Clearing Houses under the management of the Imperial Bank to 19. In Bombay, a Metropolitan Clearing Association was formed and registered in October 1946 to arrange for clearing for non-scheduled banks as the Bombay Bankers' Clearing House decided to restrict its membership and sub-membership only to scheduled banks.

CLEARING HOUSE STATISTICS

(In lakhs of rupees)

Year.	Calcutta.	Bombay.	Madras.	Karachi.	Rangoon.	Cawnpore.	Lahore.	Delhi.	Total.	Other Centres.
1919-20 ..	10,55,76	8,83,02	33,95	23,13	94,74	..	..	..	20,90,60	..
1924-25 ..	9,54,11	6,21,66	55,96	46,13	1,17,21	5,72	5,57	..	18,06,36	..
1929-30 ..	9,60,97	7,93,66	82,19	26,49	1,20,70	7,56	8,17	..	19,99,74	..
1934-35 ..	8,75,69	6,89,17	56,22	28,96	61,08	11,51	10,43	..	17,33,01	..
1935-36 ..	9,18,66	7,16,74	69,23	30,12	72,00	11,69	11,16	13,73	18,43,35	..
1936-37 ..	9,23,68	7,62,38	91,39	31,94	88,75	11,51	11,40	15,61	19,31,66	..
1937-38 ..	9,66,93	8,15,56	1,09,64	35,53	82,07	11,91	11,21	18,27	20,51,12	..
1938-39 ..	9,34,65	7,86,22	98,91	32,66	81,40	11,76	10,36	18,58	19,74,54	28,31
1939-40 ..	11,54,03	8,83,97	99,94	37,53	97,55	14,22	11,14	20,35	23,18,73	31,73
1940-41 ..	10,08,53	8,02,32	1,08,65	46,76	1,18,64	19,20	16,33	23,53	21,48,96	42,28
1941-42 ..	12,33,61	10,48,60	1,36,41	58,80	1,09,15	29,59	28,71	41,35	26,84,22	91,27
1942-43 ..	10,74,66	13,45,23	1,31,40	77,51	..	56,21	48,76	81,94	28,15,71	1,63,38
1943-44 ..	17,18,61	19,66,69	1,96,80	1,01,36	..	1,01,06	77,80	1,19,16	42,81,48	2,97,74
1944-45 ..	23,51,59	22,36,97	2,27,37	1,24,54	..	1,12,95	95,94	1,29,94	52,79,30	3,37,87
1945-46 ..	23,26,21	24,87,60	2,96,23	1,45,49	..	1,13,47	1,03,39	1,46,02	61,20,41	4,22,21
1946-47 ..	28,42,25	28,59,08	3,78,00	2,01,82	..	1,42,66	1,36,92	1,56,87	67,17,10	4,51,32

Insurance

(Figures taken from the Government of India Insurance Year Book.)

	1944		1945		1946	
Total Number of Companies ..	323	Up to Sept. 30, 1944.	330	Up to 30th Sept. 1945.	340	Up to 30th Sept. 1946.
Total Number of Indian Companies (Mostly Life)	228		234		239	
Total Number of non-Indian Companies (Mostly non-Life)	95		96		101	
Average Value of new Life Policy Issued by Indian Companies during year	Rs. 2,206		Rs. 2,128			
Average Value of new Life Policy Issued by non-Indian Companies during year	Rs. 5,874		Rs. 5,727			

LIFE BUSINESS

	New Business.			Total Business in force.		
	1943	1944	1945	1943	1944	1945
Number of Policies Issued ..	296,000	451,000	599,000	1,821,000	2,127,000	2,592,000
Number of Policies with Indian Companies	283,000	432,000	577,000	1,628,000	1,940,000	2,376,000
Number of Policies with non-Indian Companies	13,000	19,000	22,000	193,000	187,000	216,000
	Rs. Crores	Rs. Crores	Rs. Crores	Rs. Crores	Rs. Crores	Rs. Crores
Sums Assured (including Reversionery Bonus additions) ..	72·12	106·2	135·38	368·78	448·13	551·28
Sums Assured with Indian Companies	62·94	95·2	122·78	294·08	366·15	459·43
Sums Assured with non-Indian Companies	9·18	11·0	12·60	74·65	76·98	91·85
Premium Income	3·97	5·74	7·47	19·07	22·43	28·04
Premium Income of Indian Companies	3·48	5·12	6·73	14·84	18·10	22·81
Premium Income of non-Indian Companies	·49	·62	·74	4·23	4·33	5·23

ANNUITY BUSINESS.

	1942 Rs. per annum	1943 Rs. per annum	1944 Rs. per annum	1945 Rs. per annum
Total Annuity Business in force at end of year ..	37,04,000	37,84,000	42,65,000	55,92,000
Amount Payable by Indian Companies ..	17,83,000	18,33,000	21,84,000	26,11,000
Amount Payable by non-Indian Companies ..	19,21,000	19,51,000	20,81,000	29,81,000
Total New Annuity Business in year	4,55,000	5,55,000	9,46,000	10,42,000
Share of Indian Companies	1,08,000	1,65,000	4,09,000	4,39,000
Share of non-Indian Companies	3,47,000	3,90,000	5,37,000	6,03,000

NON-LIFE BUSINESS

	1942	1943	1944	1945
	Rs.	Rs.	Rs.	Rs.
Total Net Premium Income	7·38 Crores	7·63 Crores	7·89 Crores	8·88 Crores
Total Net Premium Income of Indian Companies	2·06 ,,	2·89 ,,	3·22 ,,	4·94 ,,
Total Net Premium Income of non-Indian Companies	5·32 ,,	4·74 ,,	4·17 ,,	3·94 ,,
Total Fire Premium Income	2·47 ,,	3·46 ,,	3·45 ,,	4·69 ,,
Total Marine Income	3·87 ,,	2·80 ,,	2·47 ,,	2·13 ,,
Total Miscellaneous Premium Income ..	1·04 ,,	1·37 ,,	1·47 ,,	1·95 ,,

GENERAL BACKWARDNESS

Though during the period of last war, Life Insurance business in the sub-continent registered a great progress over the past, when we compare the present position of Life Insurance business in the sub-continent with that of the other more advanced countries of the World we realise that we have yet a long way to go. The figures published in the Insurance Year Book, show that at the end of the year 1935 the total Life Insurance business in force amounted to Rs. 235 crores distributed over 11 lakhs Policies, whereas the total Life Insurance business at the end of the year 1945 amounted to Rs. 551 Crores distributed over 26 Lakhs Policies. As the sub-continent holds within its borders 400 million people constituting one-fifth of the total population of the World, these figures appear insignificant altogether. On an average taking 4 members in a family there should be 100 million families in India, over which are distributed 26 lakhs policies of Life Insurance. Thus only 2·6 per cent. of families can claim protection of Life Insurance, while 97·4 per cent. of the families are without such protection. This backwardness in the progress of Life Insurance in this country can only be attributed to the lack of development in the Commercial, Industrial, Agricultural and other allied fields, the lack of education and literacy in the masses, and above all the poverty of the Indian Nation. With the formation of National Government at the centre and with the popular ministries in the Provinces and with the various schemes for Post-War agricultural, industrial and economic development of the country envisaged by these Governments, life insurance is bound to thrive in the country. There are in all about 200 indigenous Life Offices in India. All have not enough business, owing mostly to the backward economic condition of the country. Due to the requirements under Insurance Act, 1938, as well as owing to the strict supervision of the department of the Superintendent of Insurance, Indian Insurance Companies in general have been improving from day to day. The three main factors on which the life insurance business depends are (1) Mortality experience (2) Interest yield and (3) Expenses. Mortality experience of Indian Companies is very satisfactory on the whole. The same however could not be said of the other two factors. In the year 1938 the average yield realised on the funds of Life Insurance Companies was 5·15 per cent. while in 1945 it was reduced to 3·48 per cent. which is likely to show further reduction in 1946 owing to the repayment of the 3½ per cent. loan by the Government of India. The first consideration in regulating the investments of Funds of Life Offices should be to safeguard the Capital. Without jeopardising the safety of Capital, Insurance Companies can be enabled to earn better interest yield, if more investments are permitted by Law in Securities other than the Government Approved Securities under Section 27 of the Insurance Act, 1938.

INCOME-TAX

Linked with the question of yield on investments is the question of income-tax to be paid by Life Offices. Insurance Associations have already made representations that we should be assessed on the actual less expenditure basis as is done in the United Kingdom since the year 1923. The amounts paid to, reserved for or expended on behalf of the policyholders should be exempted from the income-tax. Pending consideration by the Government of the major question of the revision in the basis of the assessment of life offices, they have urged upon the Government of India to grant immediate relief to Life Offices by lowering the ceiling rate of tax from 60 to at least 45 pies in a Rupee. Insurance Companies claim that immediate relief in this respect is very necessary as the low interest yield now realised is being further reduced owing to its being subjected to a rate of tax as high as 5 annas in a Rupee. Further in the case of Life Offices which are being taxed on the surplus basis, it has been experienced that several such offices during recent years had not been able to disclose a substantial surplus owing mainly to the operation of the interest factor, in their business. However, tax is always deducted at the source at the highest rate prevailing under the provisions of the Income-Tax Act which remains to their credit with the Income-Tax Department and is refunded only subsequently if no surplus is disclosed at their following valuation. Owing to deductions of income-tax at source at the high rate of 60 pies in a Rupee a substantial amount of the revenue of interest on the investments remains locked up with the Income-tax Department which is refunded without interest after a considerable lapse of time. It is therefore essential in the interests of life policyholders that the Government of India should lower the ceiling rate of tax from the present high level to at least 45 pies in a Rupee. That, broadly speaking, is how the case is presented.

THE INSURANCE AMENDMENT BILL

The expenses of procuration of business as well as overhead expenses in this country are very high compared to other countries. The Insurance (Second) Amendment Bill contemplates the working of a Company through Chief Agents or Branches and licensed Agents. The present system of organisation adopted by a few big Companies who have large resources is having a Branch or Branches, under which are Inspectors paid on salary basis and licensed agents. Medium sized and small companies being not sure of the turnover of the business, have got in place of paid-inspectors, special agents, *i.e.* (Employer of Agents other than Chief Agents who are paid on the basis of commission). The provision in the Bill preventing the employment of intermediaries, either inspector or organiser or special agents, on terms other than salary basis, will hamper the working of companies by Chief Agencies and as a consequence the increase in costs will be inevitable. Such a provision will also place a handicap on companies at a time when companies will be required to make great efforts to reduce their costs to the limits in the Bill. It is suggested for the consideration of the legislature that Insurance Companies should be allowed the freedom to employ intermediaries like the Inspectors or Organisers or Special

remuneration or both. Such a provision would considerably assist Insurance Companies both in building up their business and in complying with the provision of the Bill as regards restriction of over-all costs.

DISTRIBUTION OF COMPANIES

The total number of insurers registered under the Insurance Act, 1938, up to 30th September, 1946 was 340 of which 239 Insurers were Indian insurers and 96 were non-Indian insurers.

Of the 239 Indian insurers 88 had their head offices in the Bombay Presidency, 59 in the Bengal Presidency, 34 in the Madras Presidency, 17 in the Punjab, 12 in Delhi Province, 10 in the United Provinces, 3 in the Central Provinces, 5 in Sind each in Bihar, Assam, Ajmer-Merwara, and 8 in Indian States.

Of the 101 non-Indian insurers 67 (including 4 insurers holding standing contracts with Lloyds) were constituted in the United Kingdom, 21 in the British Dominions and Colonies, 9 in the United States of America, 3 in Switzerland and 1 in Java.

Most of the Indian insurers carry on life insurance business only. They are 152 in number, and of the remaining 87 Indian insurers, 48 carry on life business along with other insurance business, and 39 carry on insurance business other than life only. Of the Indian insurers, 49 are either Mutual Insurance Companies or Co-operative Insurance Societies. Further there are a few pension funds, mostly connected with Government services, and the Postal Insurance Fund which are exempt from the operation of the Insurance Act.

As regards non-Indian insurers, most of them carry on insurance business other than life. Out of the total number of 101 non-Indian insurers, 86 carry on insurance business other than life, 3 carry on life business only, and 12 carry on life business along with other insurance business.

LIFE INSURANCE BUSINESS

The total net new life insurance business effected in India during the year 1945 amounted to 599,000 policies insuring a sum of Rs. 13,538 crores and having an annual renewal premium of Rs. 7·47 crores, of which the new business done by Indian insurers amounted to 5,77,000 policies assuring a sum of Rs. 122 crores and having a yearly renewal premium income of Rs. 6·73 crores. The new life business effected by non-Indian insurers amounted to 22,000 policies insuring a sum of Rs. 12.40 crores and having a yearly renewal premium income of 0·74 crores.

The average sum insured per policy under the new policies issued in India by Indian insurers was Rs. 2,128 and under those issued by non-Indian insurers Rs. 5,727.

The total net life insurance business effected in India and remaining in force at the end of 1945 amounted to 2,592,000 policies insuring a total sum of Rs. 551·28 crores including bonus additions and having an annual premium income of Rs. 28·04 crores. Of this the share of Indian insurers is represented by 2,376,000 policies insuring a sum of Rs. 459·43 crores and having an annual premium income of Rs. 22·81 crores. The share of non-Indian insurers is represented by 216,000 policies insuring a sum of Rs. 91·85 crores and having an annual premium income of Rs. 5·23 crores.

The following table shows the New Sums Insured by Indian Life Offices, the Average Sum Insured Per Policy and the Total Sums Insured in Force at the end of the year:—

Year	New Sums Insured.		Total Sums Insured in Force.
	Sum insured (in crores).	Average sum insured per policy.	Sum insured including bonus additions (in crores).
	Rs.	Rs.	Rs.
1932	19·66	1,697	105·02
1933	24·83	1,573	118·77
1934	28·92	1,547	136·65
1935	32·81	1,565	151·63
1936	37·80	1,532	174·67
1937	41·74	1,520	196·74
1938	46·68	1,498	218·86
1939	45·96	1,511	232·42
1940	35·23	1,685	243·91
1941	36·68	1,841	256·43
1942	37·89	2,193	266·60
1943	65·24	2,258	310·95
1944	95·20	2,206	366·15
1945	122·78	2,128	459·43

ANNUITY BUSINESS

The total new annuity business effected during the year 1945 was for the amount of Rs. 10,42,000 per annum, of which the share of Indian insurers was Rs. 4,30,000 per annum. The total annuity business remaining in force at the end of the year was the amount of Rs. 55,92,000 per annum, of which the amount payable by Indian insurers was Rs. 26,11,000 per annum, and by non-Indian insurers Rs. 29,81,000 per annum.

Some Indian Life Offices have been operating outside India also. The total new sums insured by these offices outside India in 1945 amounted to 12,700 policies insuring Rs. 4·22 crores having an annual renewal premium of Rs. 0·26 crore, and the total business remaining in force at the end of 1945 amounted to 77,000 policies insuring Rs. 21·79 crores and having an annual premium income of Rs. 0·95 crore.

The total income of Indian and non-Indian insurers during 1945, in respect of their life insurance business amounted to Rs. 35·96 crores, while the total outgo was Rs. 20·94 crores.

The total income of Indian and non-Indian insurers during the year 1945, in respect of their life insurance business was made up of:—

(In lakhs of rupees.)

Particulars of Income.	Indian Insurers.	Non-Indian Insurers.
	Rs.	Rs.
Premium	24,11	5,27
Interest, Dividend and Rents	3,45	1,18
Other Receipts	82	1,13
Total ..	28,38	7,58

The total outgo of these insurers during the year in respect of the life insurance business was made up of:—

(In lakhs of rupees.)

Particulars of Outgo.	Indian Insurers.	Non-Indian Insurers.
	Rs.	Rs.
Claims by death ..	3,04	1,01
Claims by Maturity ..	3,67	1,82
Annuities	8	11
Surrender value ..	49	50
Expenses of Management	7,77	1,02
Commission and Transfer to Investment Reserves, etc... ..	29	18
Miscellaneous	8	82
Transfer to Shareholders' Reserves and dividends	4	2
Total ..	15,46	5,48

INTEREST RATE & EXPENSE RATIO

The net rate of interest earned on the mean life insurance funds during the year 1945 by Indian Insurers was 3·48 per cent. The net rate of interest realized on mean life insurance funds by the Indian insurers in each of five years were as follows:—

Year.	1941	1942	1943	1944	1945
Rate of Interest per annum ..	4·17	3·94	3·88	3·64	3·48

The total expenses of management of Indian insurers in respect of life insurance business, expressed as a percentage of the Premium income during each of five years was as follows:—

Year.	1941	1942	1943	1944	1945
Expense Ratio ..	27·4	26·7	27·9	31·2	32·2

The figures of half a dozen Insurers having largest premium income are excluded, the expense ratio in the case of remaining Insurers would be as under:—

Year.	1941	1942	1943	1944	1945
Expense Ratio ..	34·3	31·3	31·4	36·1	37·6

The net rates of interest realised in India on mean life insurance funds by the Non-Indian Insurers in each of five years were as follows:—

Year.	1941	1942	1943	1944	1945
Rate of Interest per annum ..	3·63	3·50	2·79	3·35	3.22

The total expenses of management of Non-Indian Insurers in respect of Life Insurance business in India expressed as a percentage of the premium income during each of five years was as follows:—

Year.	1941	1942	1943	1944	1945
Expense Ratio ..	15·6	17·8	16·0	18·6	19·3

NON-LIFE BUSINESS

The net Indian premium income of all Insurers under insurance business other than life insurance during 1945 was Rs. 8,88 lakhs (Rs. 7·39 lakhs in 1944) of which the Indian Insurers' share was Rs. 4,93 lakhs and that of the non-Indian Insurers Rs. 3,94 lakhs. The total amount was composed of Rs. 4,69 lakhs from Fire, Rs. 2,13 lakhs from Marine, and Rs. 1,95 lakhs from Miscellaneous Insurance business.

The Indian Insurers received Rs. 3,03 lakhs from Fire, Rs. 1,02 lakhs from Marine, and Rs. 88 lakhs from Miscellaneous Insurance business.

The non-Indian Insurers received Rs. 1,66 lakhs from Fire, Rs. 1,11 lakhs from Marine, and Rs. 1,17 lakhs from Miscellaneous Insurance business.

Some Indian Insurers who transact fire, marine and miscellaneous insurance business also operate outside India. These insurers had a net premium income of Rs. 1,31 lakhs in 1945 from business outside India.

ASSETS OF INSURERS

The assets of all the Indian Insurers amounted to Rs. 13,783 lakhs on 31st December 1945, which were held invested in:—

(In lakhs of rupees.)

Particulars.	Amount.
	Rs.
Indian Government Securities ..	87,20
Securities of Indian States	95
British, Colonial and Foreign Government Securities	1,31
Municipal, Port Trust and Improvement Trust Securities	6,86
Mortgages on Property	1,36
Loans on Policies	6,72
Loans on Stocks and Shares	23
Other Loans	54
Shares in Indian Companies	18,04
Land and House Property	5,55
Agents' Balances, outstanding Premium and Interest, etc.	6,30
Deposit, Cash and Stamps	6,37
Miscellaneous	1,40

The following table shows the assets in India of non-Indian Insurers :—

(In lakhs of rupees.)

Insurers constituted in	Total Assets in India of	
	Life or composite companies	Non-life companies.
United Kingdom ..	15,81	2,44
Dominions and Colonies	18,69	1,44
U.S.A.	..	29
Switzerland	22	4
Java	..	4
Total ..	34,72	4,25

PROVIDENT INSURANCE SOCIETIES

Between 1st October 1945 and 30th September 1946, only t ree societies were newly registered under the Insurance Act and the registration of four were cancelled. On 30th September 1946 there were in existence 136 provident societies.

The total new business effected by the societies during the year 1945 amounted to 22,429 policies insuring a sum of Rs. 1,02,0 ,800 and annuities for Rs. 8,0 0 per annum. The premium income received during the year on these policies amounted to Rs. 4,3 ,500. The business in force at the end of the year amounted to 76,410 policies, insuring a total sum of Rs. 2,48,82,200 ncluding bonuses and annuities for Rs. 22,000.

The total life insurance fund of these societies at the end of 1945 amounted to Rs. 58,49,000 showing a net increase of Rs. 1,99,000 over 1944.

The net rate of interest realized on mean life funds of the societies in the year was 3 63 per cent., and the total expenses of management expressed as a percentage of the premium income was 46.8.

Out of 118 Societies, which have submitted their returns for the year ending 31st December, 1945, 11 had renewal expense ratios in excess of 100 per cent. when calcul ted in the prescribed way, and 22 between 50 per cent. and 100 per cent. Further 10 Societies have not yet built up any life fund. There has been a slight improvement in this respect as compared with the year 1944 but the position was still far from satisfactory.

INSURANCE AGENTS

Insurance agents constitute an important pillar of the insurance structure. The rapid increase in their number during the last few years, as indicated by the table below, naturally raises the question whether the growth has kept within healthy limits or whether the evil of overcrowding is present in this profession as well.

Year.	1943	1944	1945
Number of Agents ..	65,921	89,202	122,926

It will be seen that the increase in the total number during 1945 was 40 per cent. of the total number of the licences issued during 1944. It is also evident that as many as about one-third of the total number of licenced agents did not renew their licences for the next year, these apparently being "Casual" agents who did not care to continue in the line.

This gradual increase in the volume of new business for the past several years does not in itself indicate that the country has become more insurance-minded. It is more or less a result of the war-time prosperity of the class taking to insurance. In this connection it is important to stress once again the oft-repeated warning about the relative importance of quality and quantity in life insurance business. Quantity implying merely the size of the premium income should never be the objective. Where insurance is at its best, the underwriter is supreme, ignoring the demand for premium income at the cost of the quality of the business.

In the case of companies doing insurance business other than life, the premium incomes, in the majority of cases, show a shrinkage in the Marine branch. This is an inevitable result of the complete cessation of war risk premiums. The disturbed post-war conditions have also contributed to this decline in as much as normal trade facilities are still lacking and war-time controls have not yet completely disappeared. It will be some time yet before the normal flow of trade begins. The claims have increased.

The premium incomes of both the Fire and Miscellaneous branches of these companies have generally increased. The claims in the Fire business show a welcome drop; while in the Miscellaneous business the position remains where it was in 1944.

Insurance in modern times plays an important part in civilian life. The world is engaged in far-reaching schemes of reconstruction and India is particularly engaged in schemes of industrial expansion which will help in raising the standard of living of its teeming millions. When these schemes come to maturity insurance business of all classes is bound to increase.

