



(From the Public (Planning & Development) Department
No.4579/58-9 dated 16-5-58.)

.....

The case deals with the formulation of the tent proposals for the Third Five Year Plan in respect of the Agriculture Sector comprising of the following Groups of Subjects:-

(I) Agricultural Research, Education and Training.

(II) Minor Irrigation.

(III) Fertilizers and Manurial Resources.

(IV) Improved Seeds.

(V) Plant Protection and other Improved Agricultural Practices.

(VI) Demand.

(VII) Agricultural Commodities.

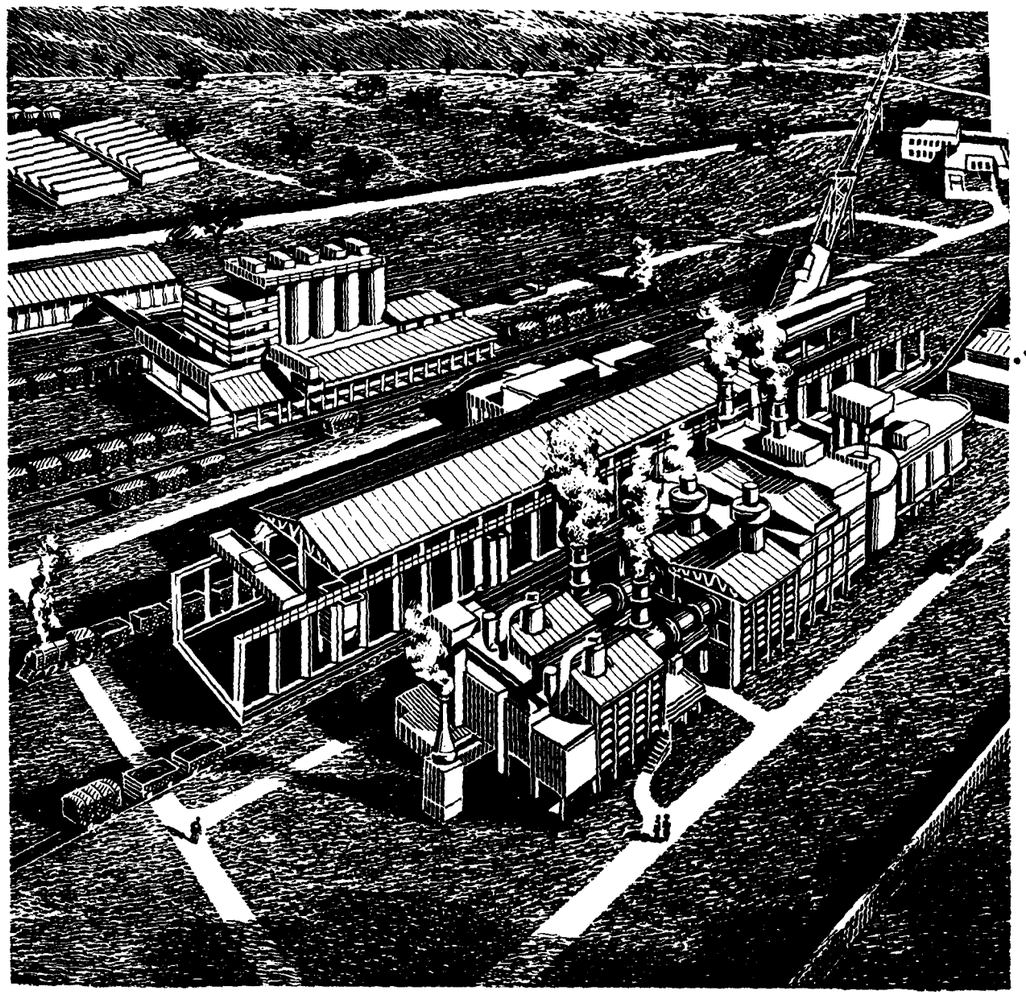
(VIII) Plantation Crops.

(IX) Land Use.

(X) Land Reclamation, Development and Settlement.

(XI) Animal Husbandry Research, Development and Training.

(XII) Dairy Develop ent.



ACC's new cement plant
at Mancherial (Andhra Pradesh)

now under construction to help India's economic growth under the Second Five-Year Plan

The ACC is going ahead with the construction of its new cement factory at Mancherial in Andhra Pradesh. When the first unit of this factory is completed in the third quarter of 1958, 1.65 lakh tons of cement will be added to the ACC's production—bringing its total capacity to 35.02 lakh tons. By the end of 1961, the ACC hopes to expand its total capacity to the huge total of 51.33 lakh tons.

Much of the cement-making machinery that will go into the erection of the Mancherial factory is being fabricated in the ACC's own workshops.

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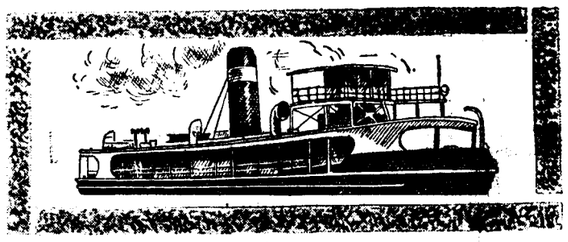
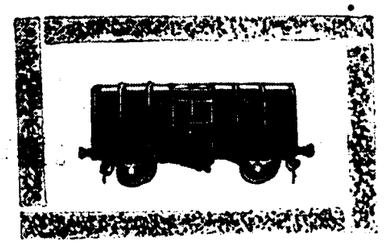
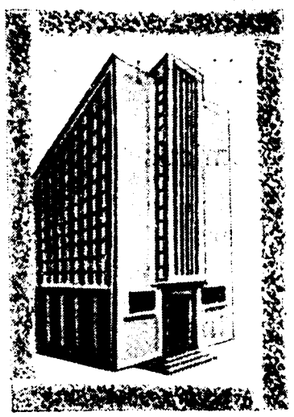
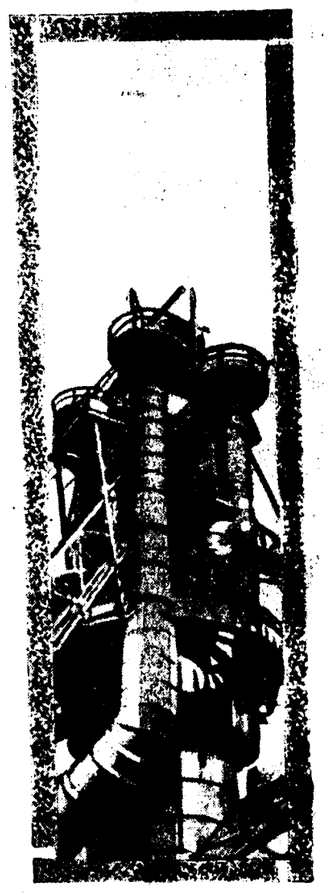
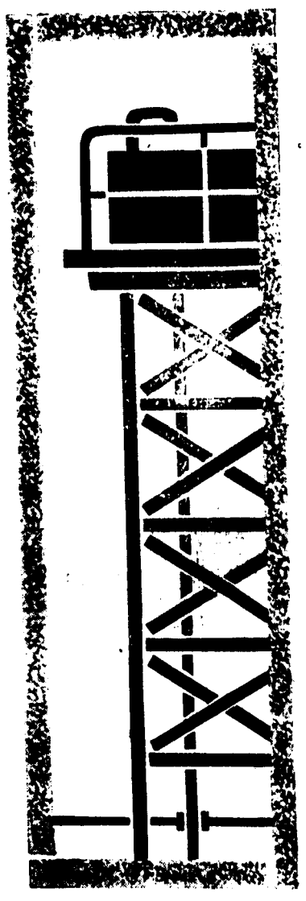
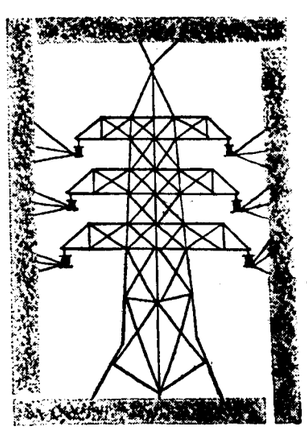
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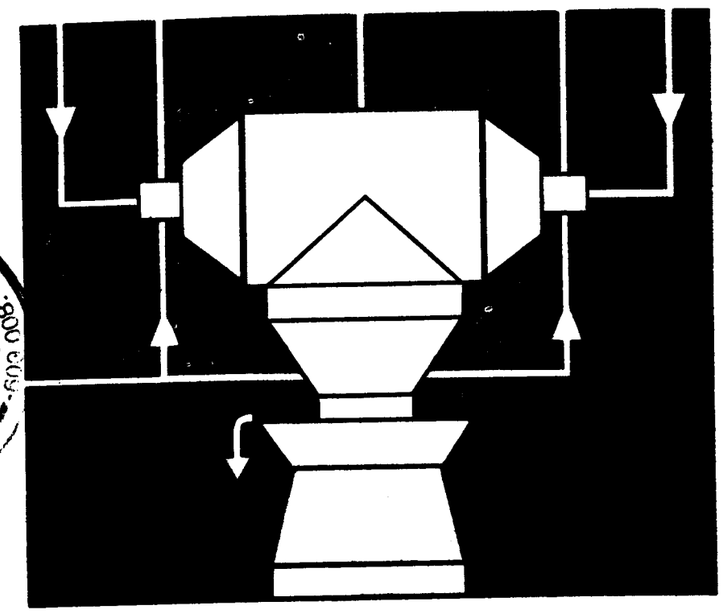







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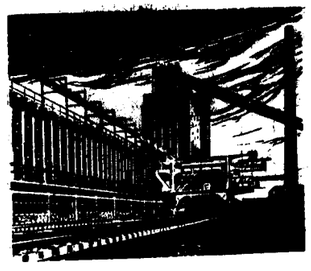
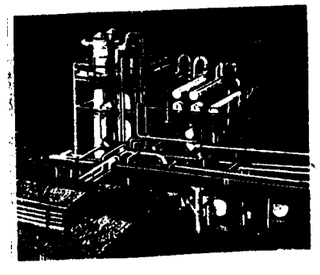
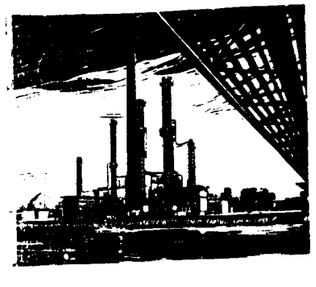
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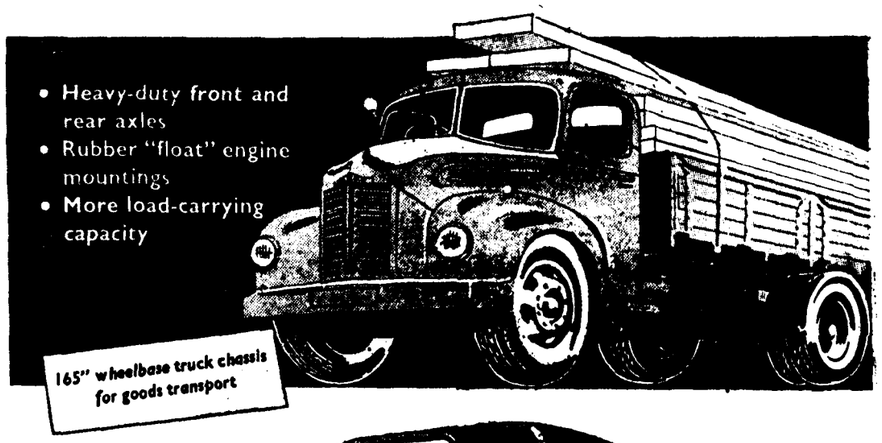
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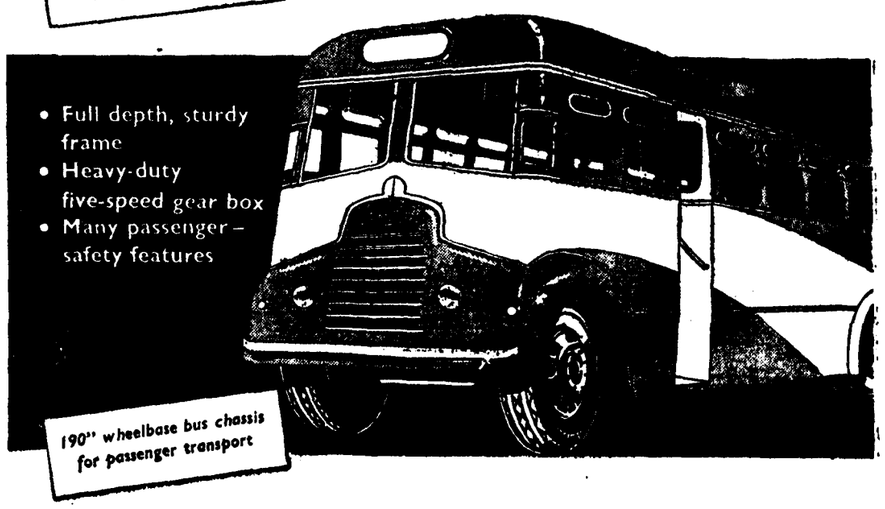
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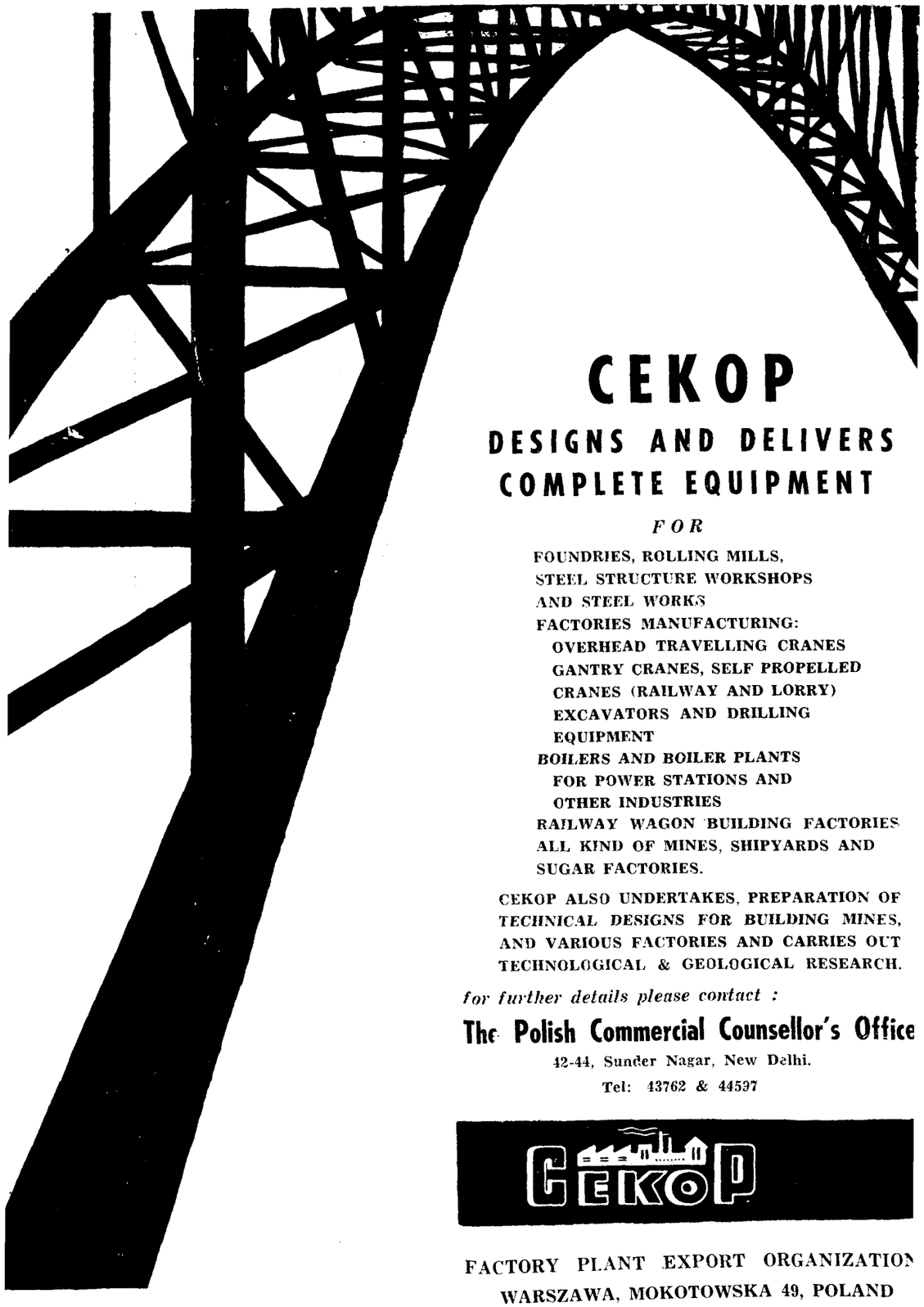


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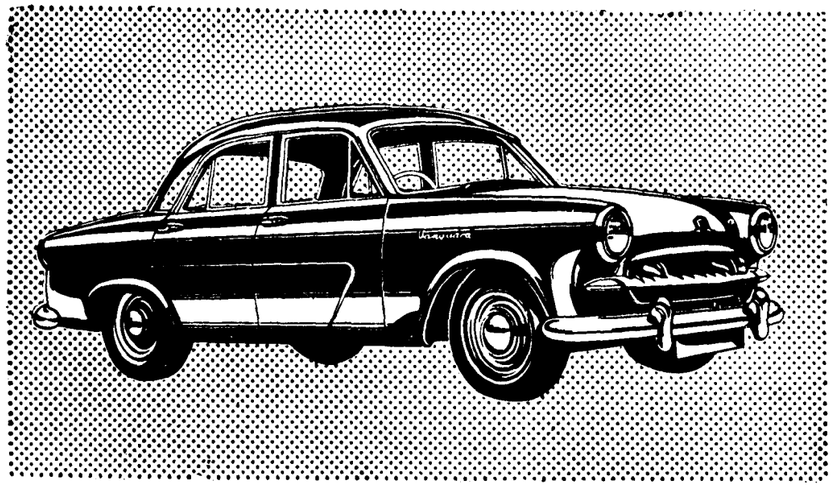
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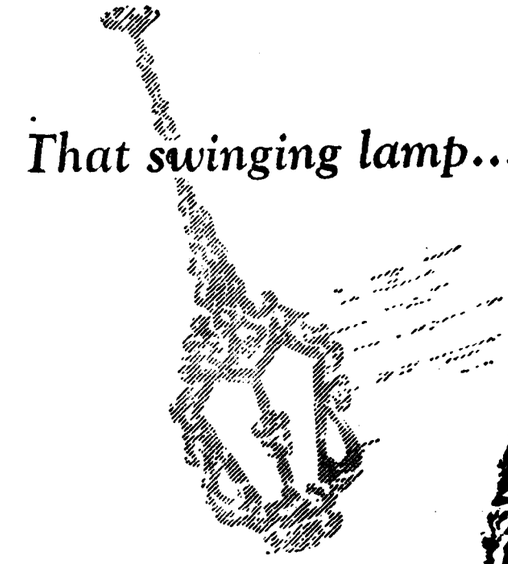
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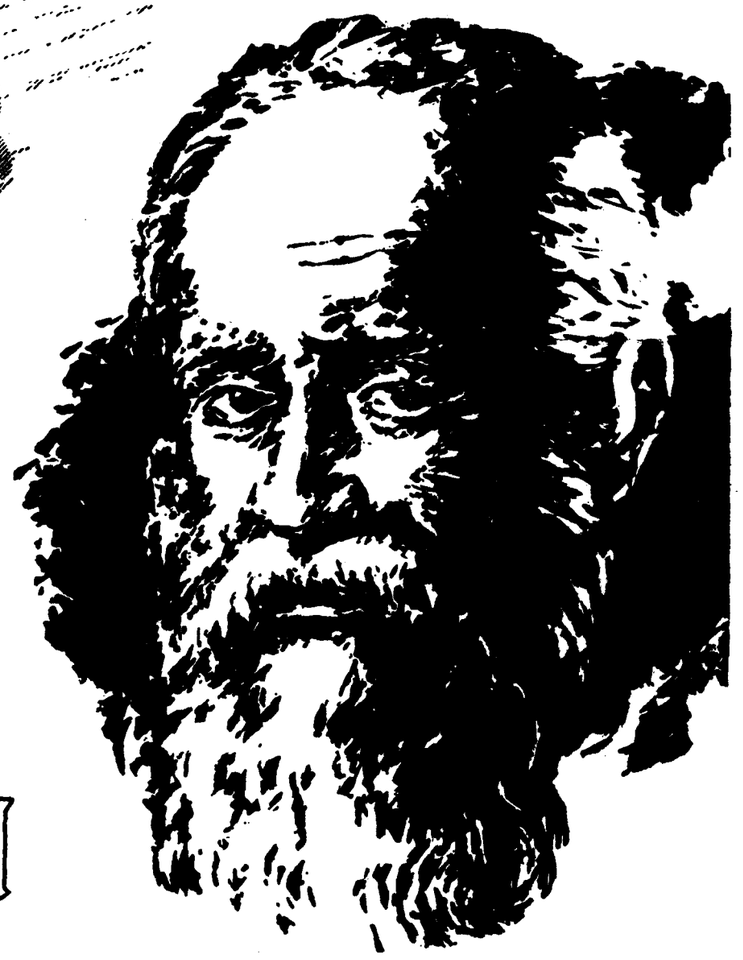
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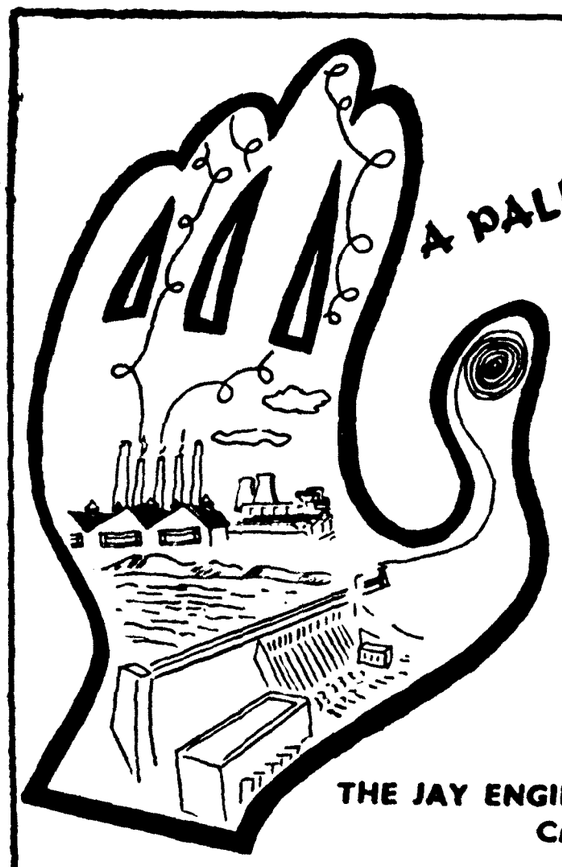
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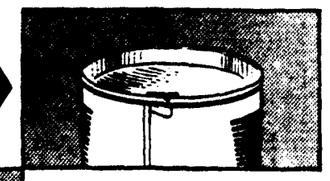
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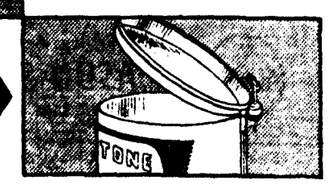
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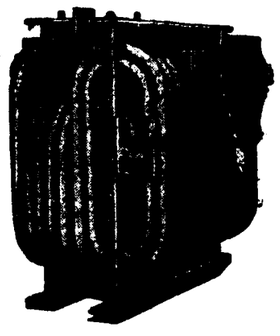
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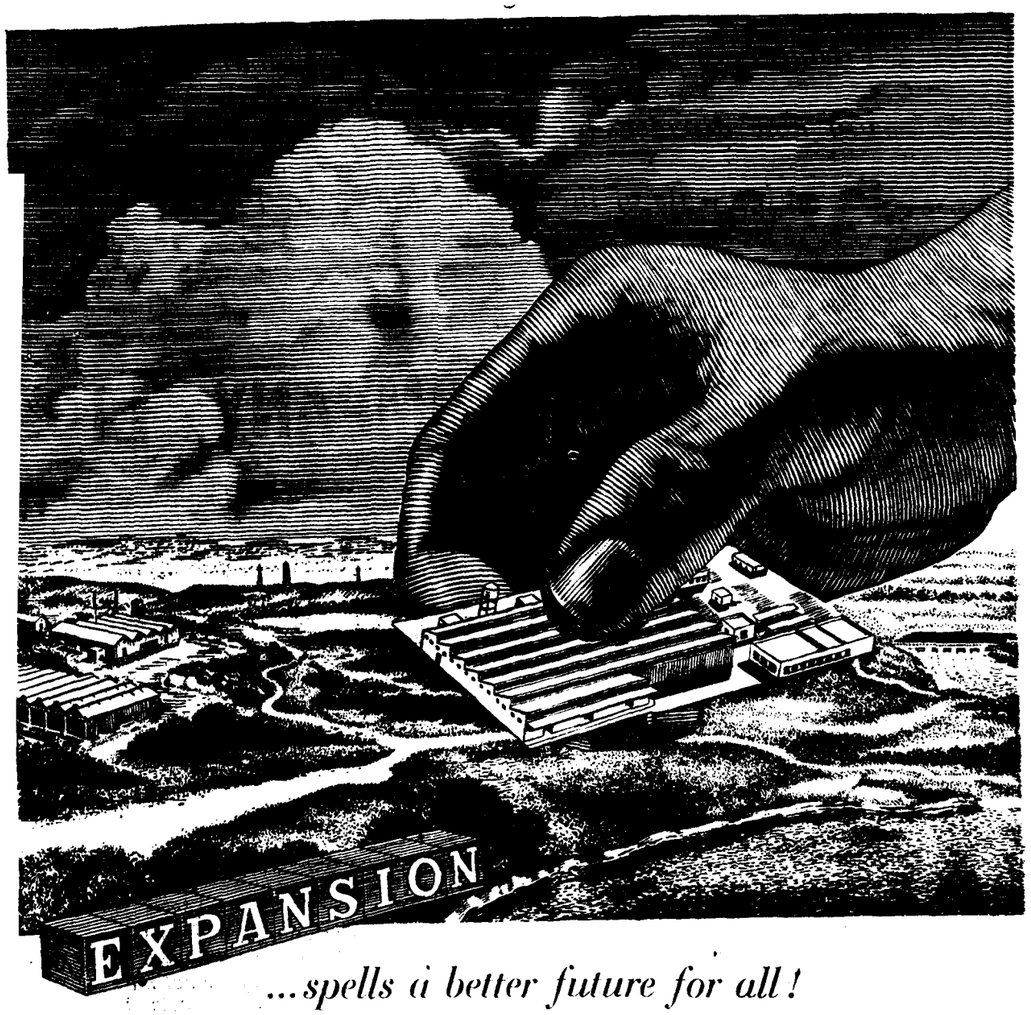
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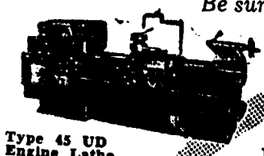
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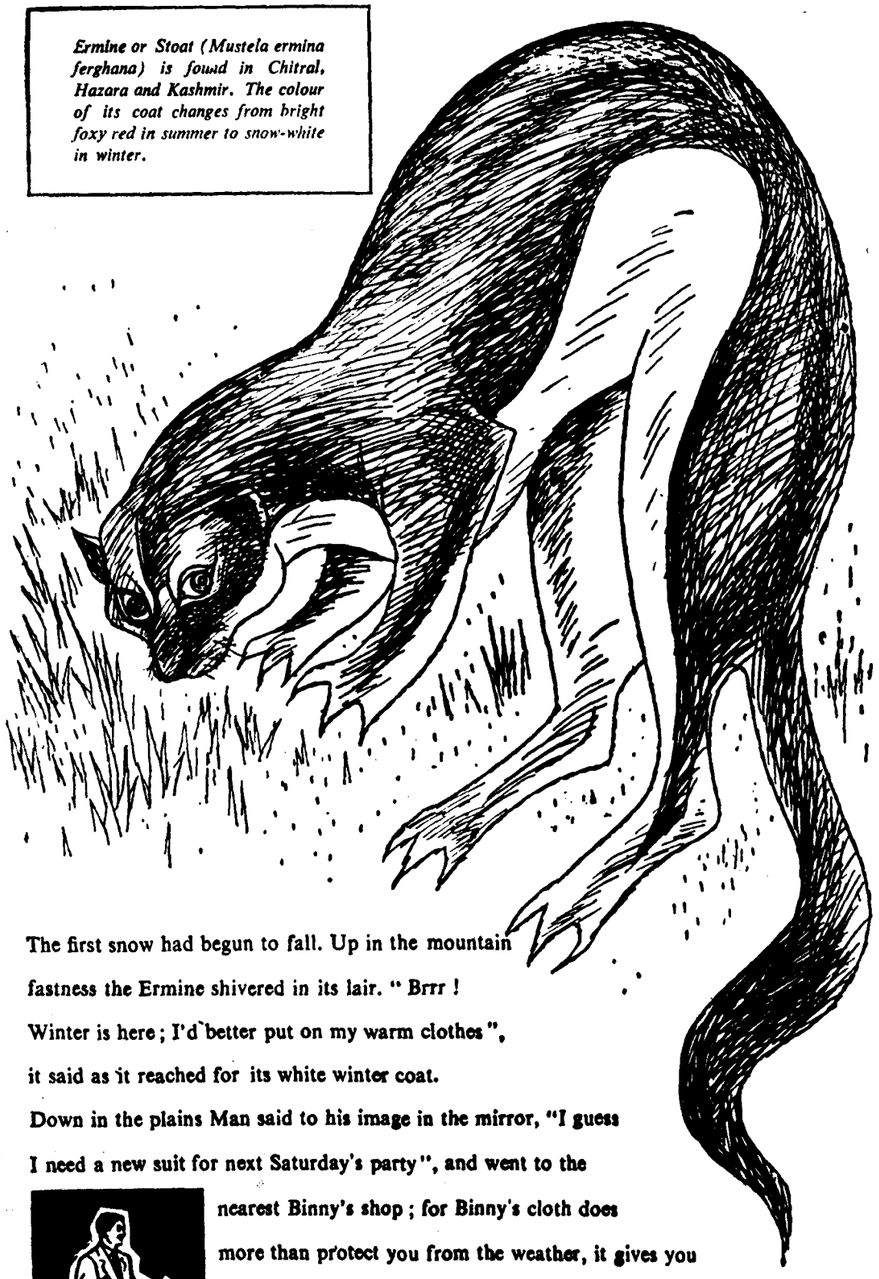
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With A Supplement on

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THE EASTERN ECONOMIST ANNUAL NUMBER

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INDIA AND CHINA 1947-57

"Real Swaraj will come not by the acquisition of authority by a few but by the acquisition of the capacity by all to resist authority when it is abused. In other words, Swaraj is to be obtained by educating the masses to a sense of their capacity to regulate and control authority."

—MAHATMA GANDHI
Young India,
January 29, 1925.

"The means by which Providence raises a nation to greatness are the virtues infused into great men."

—EDMUND BURKE'S inscription on CHATHAM'S Monument in the City of London.

For it so falls out
That what we have we prize not to the worth
Whiles we enjoy it, but being lack'd and lost,
Why, then we rack the value, then we find
The virtue that possession would not show us
Whiles it was ours.

—WILLIAM SHAKESPEARE
Much Ado About Nothing

Farthest from him is best
Whom reason hath equalled, force hath made supreme
Above his equals. Farewell happy fields
Where joy for ever dwells: Hail horrors, hail
Infernal world, and thou profoundest Hell
Receive thy new possessor: one who brings
A mind not to be changed by place or time.
The mind is its own place, and in it self
Can make a Heav'n of Hell, a Hell of Heav'n.

—JOHN MILTON
Paradise Lost

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Preface

THE theme in 'The Eastern Economist's' Annual Number 1957 is "India and China" — a theme so full of historical romance in its individual stories, and so full of topical interest in its present comparative context, that it makes demands upon knowledge and organisation which 'The Eastern Economist' must admit, frankly, it does not possess. There is even more journalistic daring in this Annual Number than there was last year when an attempt was made to describe India in 1975. But there is at least one present advantage. The future has no signposts; the past has them in abundance. A great, even if not always glorious, range of facts can be drawn from the deep wells of historical literature which have, both in the East and the West, illuminated the dynamic record of both countries. The word 'dynamic', applied to countries which have had stagnating economies for long periods, is used advisedly. Both countries are essentially dynamic, at least in the sense in which dynamism should be most highly prized. Both India and China have given profound original life to philosophical and artistic systems. In the valley of the Yellow River in China, and in the Gangetic Plain and elsewhere in India, there have grown up separately great intellectual societies which — again separately — have stumbled on some of the greatest truths of human life and its living. Much of that brilliant and ancient story may not seem to be relevant in the context of the current Indian and Chinese revolutions which are concerned, perhaps, with dynamism of a somewhat different kind. But the essence of this narrative is the link between the dynamism of today and the dynamism of the centuries that have gone. The present is truly a child of the past, even though, in the fervour of this revolutionary age, the future might appear to depart rapidly from the present, and we may look as though we were being born anew and different.

THE THEME

The central theme of both the political and cultural essays in this Annual Number is the same. It is that the force of tradition in India, and the force of a different tradition in China, are far more important elements in the total explanation of things as they are than anything that has actually happened in the age of the revolutions through which most of us have lived. Because the Indian and the Chinese traditions have been made to look alike — largely because of the absence of armed conflict across the mighty mountain barrier which separates our countries — superficial observers have too often assumed that the pattern of thought and action in the two countries was similar and, in a sense, even the same. This is the opposite of the truth. As the great currents of history have unfolded themselves, the central elements in India and China have grouped themselves round two or three central ideas which are basically opposed. There have, it is true, been, betwixt and between, many elements in which the opposing currents have seemed to mix, with each country borrowing a little from the other. But even the deepest impress of all — Indian Buddhism, our greatest gift to the Chinese people — has not entered deep into the historical pattern of Chinese living. It is in this contrast between the central prime movers in the great dynamic periods of their respective countries that this story finds its best expression.

THE PATTERN

Broadly, the currents of difference are threefold. The Indian people from the earliest times and, perhaps even before the Great Buddha and Ashoka, were essentially a tolerant, liberty-loving and non-violent people. There has, it is true, been brutality on a significant scale which has marred the grand stamp of pacifism, borne down the years on the face of the Indian subcontinent. But the picture of tolerance rises far above its denial. With tolerance, there has necessarily been a broad decentralisation of authority, which is the second great mark of the Indian heritage. By contrast, China has been militant from almost the earliest times. Perhaps, because of a border consciousness, which has always bred insecurity, she has worn a military and militant mood, and pursued a pattern of centralisation which has no Indian counterpart. Not unlike the great Roman Empire, China has had many Caesars. Indeed, one might say Caesarism as a creed is more marked in China from Shih Huang-ti in the third century B.C. to Mao Tse-tung in our time than it was in the Roman Empire. Not, indeed, again that China like Rome did not have her Marcus Aurelius in the form of the Han Emperor Hsiao-wen-ti. But her Marcus Aurelius was removed from the Chinese tradition almost as much as the Moghul and British rulers in India were apart from our own. The persistent culture of India is a Hindu, tolerant and religious culture; the culture of China is set in a seemingly ethical, but non-religious mould in which Caeserism and fierce regimentation have found congenial soil in which to throw their dangerous roots.

In the economic section, which it is hoped is as objective as it can be made, it will be seen that there are many aspects of economic life in which contemporary China has passed Indian performance. It cannot be denied that discipline has existed in much greater degree there, even when it is implemented with force. This is no more than to say that Caeserism and centralisation are in the short period more powerful engines of economic power than decentralisation and democracy. In the longer period the fact that democracy has done so well in other countries of the world should give us courage to persevere in a course which is as true to our traditions as it has been successful in some areas of our national life.

This story is an objective review in the sense that it assesses without bias the vast, and even oppressive, historical material, which passes under review. But its conclusions are moral as well as balanced. It is argued not only that we have been true to our traditions in choosing our own forms of political and social thought, but that we would have injured ourselves morally had we chosen the Chinese way.

DEDICATION

As usual, this Annual Number is dedicated to the Indian people. In the last analysis it is they who have to choose between the systems of thought presented by our Constitution and that of the People's Republic of China. No one is India — not even the Communist Party of India—can doubt that a choice in favour of the Chinese form will be a denial of our past. There must, however, be many in a "have-not" society who will not regret a choice on that account. But "The Eastern Economist" believes, with a passion derived in part, one hopes, from a reading of our heritage that the great majority of citizens in India do not wish to make the change. Even if they did, this would not alter the validity of the moral challenges in the observations here made. With that we can rest well content. **Satyameva Jayate!**

PART A

A POLITICAL PROLOGUE

The Indian Tradition: From Ashoka to Gandhi

FROM ASHOKA TO GANDHI

BETWEEN Ashoka, rightly called "The Great", and Mohandas Karamchand Gandhi, rightly called "The Mahatma", there stand about two thousand and three hundred years. One might have thought that in a spell of time so vast and so vital in world history — for what has been accomplished outside this period can only be a negligible fraction of the raw material of history — there would have been a dramatic difference in outlook in the dominant personalities at the terminals of the period. What is remarkable is the manner in which India's dominant leader in the twentieth century has assumed in thought and, in a sense, even in speech, the character of the great Mauryan Emperor. It cannot be that this bridge across two thousand three hundred years is unrelated to environment in the two cases. Both were speaking to the Indian people; it is the continuity provided by the Indian people that justifies the belief that Indian tradition in the twentieth century echoes its pre-Christian counterpart. There is no other country in the world which has anything like the same traditional alliance between a leader of the twentieth century and what might be called his prototype well over two thousand years ago. This is one way of saying that tradition has deeper, and more lasting, roots in India than in any country of the world.

It is not in accidents of birth or in religion that there is to be found the key of this intense similarity. Ashoka was born a prince and became a Buddhist. Mohandas Karamchand Gandhi was born a commoner and became — as the years went on — even more a man of the people. He, unlike Ashoka, was a devout Hindu, though, like Ashoka, he had a reverence for every faith. Different in faith, they both spoke the language of religious righteousness, recalling their generations, in the manner of the great Messiahs, back to right living and their duties to their fellowmen. More important, perhaps, that their common objectives were the common means they employed. The word "ahimsa" current in our own day may have been in use in Ashoka's time; it was no accident that it found new currency in the hands of Mohandas Karamchand Gandhi. By the same token, the vehicle of Ashoka and Gandhi was democratic persuasion in both cases. The Great Emperor erected his edicts and sent his messengers to all portions of India and even abroad on a mission of mercy, conceived non-violently, with no thought of using force to implement a programme which could well have been, as other religions have been, preached from behind the sword. In much the same way, Mahatma in our own time chose satyagraha and democratic discussion even when it was clear he enjoyed so large a degree of popular support that on many matters a flat of his could have obliterated discussion. Finally, the forms in which both Ashoka and Mahatmaji worked called for decentralisation — that is, for the placing of responsibility on men far removed from their own personal circles, and with a wide degree of local — if not personal — authority.

THE GANDHIAN AGE

Thus the Gandhian Age, because of its association across the years with the great Buddhist period in Indian history, is appropriately reckoned as a fulfilment of an ancient Indian tradition. In its essence, this tradition was God-fearing, tolerant, non-violent; in political terms, decentralised; in individual terms, democratic. There are marks of this Indian tradition even if one works through periods which are far from favourable to other aspects to our national pride. And in our own time where there have been substantial elements in conflict with both Ashokan and Gandhian teaching, one might still dare to say that we live in the glare of the Gandhian message, in this at least, that the touchstones of our policies are still believed to rest on a fundamental moral base.

THE PRESENT AND THE PAST

Consider some compulsions imposed on Indian both foreign and domestic policies as the result of these moral imperatives. In the case of Goa, for example, India has chosen, although military force can place the area now covered by Goa within the Indian Union's hands, to refrain scrupulously from the use of her armed forces. Consider, again, a major decision on the domestic front. The Constitution of India allows the President of India to declare in an emergency 'President's Rule' in any State of the Indian Union. In the marginal situation which obtains in the State of Kerala some excuse might have been found for displacing a Communist Government, whose outlook and objectives are ultimately contrary to the broad principles of democracy in this country. The fact that the President of the Indian Union has not employed any of his emergency powers shows that the respect for decentralised authority, even under conditions potentially provocative, will be honoured in the spirit of the Constitution. There are many who may believe that this is weakness. But it is an expression of the Gandhian spirit and a reflection of the force of traditional tolerance as well as an indication of a moral outlook. We are entitled to draw from the illustrations of Goa and Kerala proof that, in respect for non-violence and decentralised authority, we are following the traditional way.

The record elsewhere, it is true, is not equally happy. The growth in our defence expenditure is a true denial of the Gandhian philosophy, on which we certainly cannot claim any moral ascendency. Whatever the changes involved, it would appear that, again, in many issues of general administration there are tendencies to produce a monolithic outlook by the use of the excessive armoury of the State. There is no doubt that the power of preventive detention has been overdone. It cannot be doubted, too, that political parties other than the Congress do not enjoy in the process of the formation of public policy an adequate sense of participation. These, however, must be reckoned as details against the broad current of tolerance and freedom of expression which is general and growing.

THE SECULAR AND PLANNING STATE

There are also a few outlines of our policy which may be confused with, but are not essentially part of, the Indian tradition. One of these is the Secular State which might look like the age-old expression of Indian tolerance. It is, however, of a different breed; tolerance, without any base in religion. It is still acceptable but agnostic tolerance or toleration is a modern Western byproduct, not part of the Indian original tree. There have been deeper departures still from the parent element of decentralisation. Here, under planning, sometimes necessarily, sometimes purely for ideology, a departure has been made which needs careful scrutiny. More is said about this in the article on 'The Indian Revolution' which follows on page 24.

Chinese Tradition: From Shih Huang-ti to Mao

THE Chinese Empire — the largest assembly of peoples under *one flag* — was brought into being by the genius of Shih Huang-ti who can lay claim to a work of magnificent endurance. Under various dynasties his framework endured in essentials for a period of nearly two thousand one hundred and fifty years — from about 246 B.C. when as King Cheng, a boy of thirteen, he ascended the throne of Ch'in to the abdication of the last of the Manchus in A.D. 1912. This spacious achievement *contains*, both before and after, the essence of the perpetual Chinese political tradition. Just as we in the twentieth century have found our moorings in the Age of Ashoka, so China, under the leadership of *Mao Tse-tung*, speaks a voice and acts a part drawn from the earliest days of the Chinese Empire.

BLOOD AND IRON

Immediately before Shih Huang-ti China was deluged in blood. The eminent French scholar, Rene Grousset, has put in words in "The Rise and Splendour of the Chinese Empire" the terrible price that was paid. "Only the annals of the kings of Assyria, the Sennacheribs and the Assurbanipals", he says, "can display such a wealth of atrocities. In 331 Ch'in captured the army of Wei and decapitated 80,000 men; in 318 they broke up the coalition of Wei, Han, and Chao, which had aided the Huns and cut off 82,000 heads; in 312 they beat Ch'u and 80,000 heads fell. In 307 they contented themselves with the score of 60,000 heads, but with the accession of King Chao Hsiang (he reigned over Ch'in from 306 to 251 B.C.) the scale of the massacres increased. In 293 he defeated Han and Wei and won himself, for a start, a trophy of 240,000 heads. In the campaign of 275 against Wei only 40,000 heads fell, but in a new expedition against the same adversary, a further 150,000. In 260, in a major success against Chao, although he had promised to spare the lives of the conquered, more than 400,000 were decapitated. The other kingdoms of China were filled with a growing terror. Scarcely a decade passed in which Ch'in, 'the wild beast of Ch'in', failed to devour one of them."

Human life in the East has been notoriously cheap for hundreds of years and today, because of ill health and malnutrition, populations are still dragged away by death before they have lived half the Western expectation of life. But for organised brutality, "decapitation" and "liquidation" the Chinese record from the earliest times until our present day when about two million people have been liquidated as "bandits" and subverters of the State is without parallel in the annals of history. Against the petty wars which preceded the Mauryan Empire in India and then the envelope of peaceful traditions which surrounded Indian political thinking, China has excelled in the arts of mass extermination at almost every critical period in her troubled history.

THE PASSION FOR CENTRALISATION

Following swiftly on the success of his arms, Shih-Huang-ti with the aid of his brilliant Chancellor, Li-Ssu, proceeded headlong on a campaign for centralisation, which henceforth was to be an *outstanding* mark of the Chinese Empire. The Government ordered that the language of the country should be unified and a single style of writing adopted. This was done by lists sent out from the Centre and no major departure was permitted. Thus in one fell swoop the regional languages in the Great Empire with all the possibilities of great regional literature were, for all practical purposes, obliterated. Secondly, largely as a means of creating a good system of interchangeable transport, all road axles for carts were decreed to be of the same size, so that grain could be drawn from the farthest areas of the Empire into central granaries, wherever they were without the inconvenience of transhipment from one cart to another. Finally, whole populations were taken away from portions of the country and planted in others, uprooting them from local loyalties which stood in the way of a central scheme of intense bureaucracy. Alongside this threefold campaign of intense centralisation, there went obliteration of some of the best that existed in the old Chinese codes of conduct. In 213 B.C. there took place an act of vandalism with few parallels in great countries of learning, as China undoubtedly was. There was a great burning of books in libraries all over the country, and all the Confucian writings were ordered to be destroyed with the exception of a copy for each of the State Libraries. Scientific books were not affected, and thus the broad humanism, which had run in Confucian and Taoist thought, gave way in that age, as in ours, to a pattern of growing materialism, because some of the best human literature of the Chinese peoples was obliterated and its influence ruthlessly subdued. Thus China became more and more regimented with a monolithic society, denying equal discussion of all philosophies which countered those of the State.

One has only to go over the elements described in the last two paragraphs to see how closely the Communist revolution in China has run true to tradition. Today, as before, the ancient Chinese philosophical works associated with Confucius, Mencius and Mo Tzu have been eclipsed in the presence of the ruling Marxist doctrine. The regimentation of thought in China proceeds on the same monolithic pattern which prevailed well over two thousand years ago. At the same time, the centralisation of which Shih Huang-ti was a major exponent, has now been improved upon by the efficiency, and almost incorruptible administration of Chinese Commissars. Again, the manner of centralisation has not permitted, on any major issue, a departure of standards, so that all over the country there is growing up a dread uniformity in economic affairs with no departure in principle from the standard axles of the distant past.

CAESARISM: PAST AND PRESENT

Finally, today China is expressing herself in a militant mood which presided at the birth of the first Chinese Empire and has, from time to time, stamped its cast upon the Chinese scene. She has had a standing army at one time of 10 million men and, even after the Great Civil War after 1949 eclipsed potential enemies on Chinese soil, her army has run into many millions; her air force has been greatly extended. The tremendous efficacy of this military machine was shown in the Korean War in which China rode to Great Powerdom by a single display of an act of war which showed that, in defence, she was equipped in battle to defeat one of the best equipped American armies. There is here all the national pride, as well as all the ruthless capacity of a central Caesarised State. Shih Huang-ti has been described appropriately as the first Chinese Caesar. Will Chairman Mao Tse-tung be her last? In view of the persistence of the Chinese tradition, a historian would hesitate to pronounce this verdict. Meanwhile the tide of Caesarism flows full and strong.

The Indian Revolution: 1947 to ?

OUT OF TRADITION?

IT is time to consider in what respect the Indian Revolution, ushered in by Independence on August 15, 1947, fulfils the basic elements in Indian tradition to which reference has been made. It will be remembered that these basic elements were conceived to be three. Firstly, an outlook of non-violence with its roots in Hindu tolerance; secondly, in practical implementation, a decentralised outlook with an emphasis on regional, and even personal, authority. Finally, since care for the individual obviously involves some meeting of his material needs, an approach to economic affairs conceived humanely and democratically. To what extent then has the Indian Revolution made for more democracy, larger decentralisation and an effective improvement in the base of opportunity and welfare for all classes in the country?

In its barest terms, the Indian Revolution consisted of a transfer of authority from what might be called comprehensively the managerial class, particularly in the top ranks of the Civil Service, and the business classes to political representatives of the people. After the Indian Constitution was introduced in January 1950, there can be no doubt that the basis of sovereignty was widened as far as it could possibly be by the grant of adult suffrage. In that sense of influence, though not of power, decentralisation in the Indian Revolution is almost complete. On the other hand, and partly because we live in the Gandhian Age and in the time of some heroes of the Indian Revolution, there has been an emotional and, in some sense even factual, withdrawal of power from the people to a few central figures in the Executive Government. This is not a legal consequence of the Constitution, but it remains, nevertheless, a solid fact to the extent that those who now exercise power particularly in New Delhi are far fewer than they were in 1947. One might thus argue that what has been gained by adult suffrage has been greatly limited by the tremendous concentration of power in the Indian Central Executive. On the whole, one might be tempted to say that this is a transitory thing, but, in the meanwhile, it has one interesting consequence.

To the extent that centralisation now exists in the political apparatus of the Congress party, and to the extent that the Prime Minister commands the overwhelming emotional loyalty of the Indian people, there is at work in the Age of Revolution a force which is clearly contrary to Indian tradition, conceived in a decentralising and delegating role. In this respect, India may not at this time be running true to tradition. Indeed, it is very likely that in the age of every revolution there is a departure from "normal" tradition. The example of the United States in the time of George Washington is one which is full of interest. For about 15 years after 1789 the American State in the hands particularly of Alexander Hamilton (who operated with the support of George Washington until his death in 1799) had a degree of centralisation contrary to its own genius and, indeed, directly opposed to the philosophy which for 150 years thereafter has proved effectively its own. In much the same sense, India in the age of her revolution has evolved a pattern of political and economic thinking which, while incorporating much that is traditional, has the stamp of the mind of the leading hero of the Revolution perhaps more than the long tradition that preceded it.

THE SOCIALISTIC PATTERN OF SOCIETY

It has been said that this over-centralisation is best seen in the operation of the Socialistic Pattern of Society introduced, at least verbally, by the Avadi Resolution of the Congress in December 1954. This is not, however, wholly true; for as an objective the raising of the low-income brackets and the extension of the range of opportunities in the Socialistic Pattern of Society is a decentralising, and not a centralising, operation. It is only when it comes to the implementation of the socialistic pattern by a deliberate expansion of the public sector — and then only when the public sector is controlled by very few — that contradiction with our tradition ensues. There is, indeed, no reason why an expanding public sector should not be consistent with a widespread dispersal of authority, such, for example, as would arise if State Governments and 'local bodies' and municipal corporations were the instruments of operation. It is not unlikely, of course, that in time this will come about. The genius of the Indian people is likely to express itself, as the Age of the Revolution recedes, in a greater element of delegation than now seems probable.

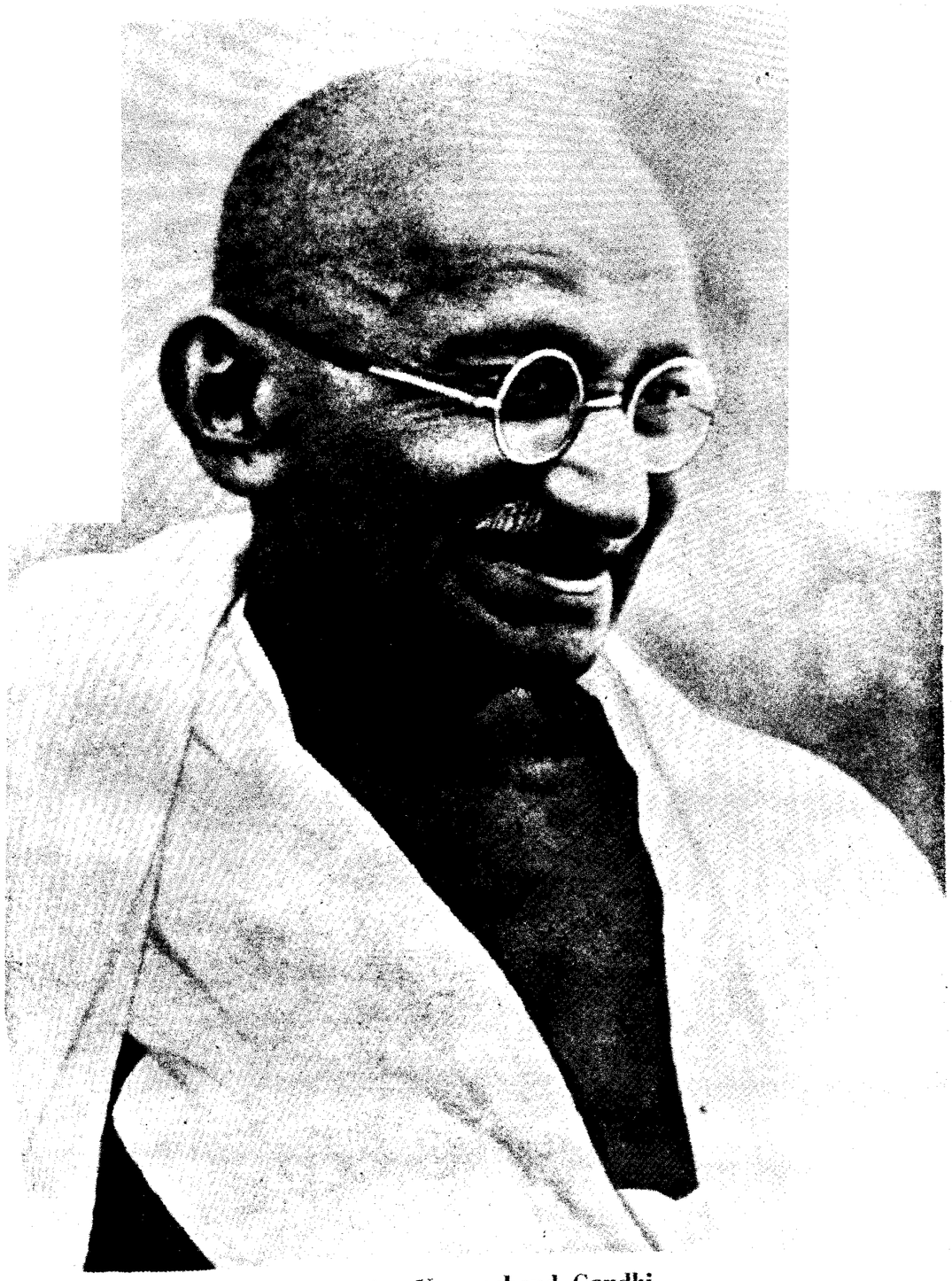
THE "WOBBLE" IN THE "LINE"

In the sense that the Age of the Revolution embodies a philosophy which is not entirely akin to that of the great Indian tradition of decentralisation, one might say that there is a "wobble" in the movement of our political progress. If one uses a phrase of an applied mathematician, one might say that our path at present is the resultant of two components, one of which is the long Indian tradition of decentralisation and the other, the mind of the leading hero of the Indian Revolution. This has caused, in a metaphor rather more dynamic, the Indian top to keep spinning away a little from its axis with a movement sometimes closer, sometimes further; but still with an axis of tradition, which keeps it from falling too far out of its historical moorings.

This "wobble" in democratic systems is not merely to be accepted. It is itself a measure of the volume of democracy in a society. Every democracy in a sense implies a permanent revolution, since there are no fixed principles, as the sovereign people may at any time choose alternative parties or alternative principles in the operation of policy. In that sense, the Indian Revolution — irrespective of its achievements of the present times which are discussed more fully in Part 'B' in which economic performance in the last decade is described — will not run entirely true to tradition or entirely true to the ruling spirit of the time. This contrast with Communist countries is central, because sovereignty there resides with an unchanging party or, if one chooses to oversimplify, with a revealed book. Our Revolution is permanent and unending; the Chinese Revolution which began in 1949 is already closed.

The Chinese Revolution: 1949-1956

IT has already been indicated that the Indian Revolution which came relatively peacefully, notwithstanding the bloodiness of Partition, was a process by which influence, though not power, was transferred to the Indian people. The Chinese Revolution, which came after a ruinous Civil War, culminated in a dictatorship. The Communist Party, which was the instrument truly of liberation from Civil War came to power in a form which had the consent of the Chinese people at that time, but it cannot be said that it was a process by which sovereign decisions vested in the people. More and more as the Revolution has proceeded, one



Mohandas Karamchand Gandhi
(October 2, 1869 — January 30, 1948)



Mao Tse-tung

(1893 ——)

recognises that the people in China have had to sign on the Party dotted line. True to Marxist prescription, what the Chinese people have got is at best a dictatorship of the proletariat.

This is, however, no substantial departure from the great Chinese tradition to which reference has already been made. In that sense, the Chinese revolution was in the strict line of the Chinese tradition, which, as has been indicated previously, has been in outlook totalitarian and centralised. The interesting fact about the Chinese revolution is not that it has run so true to its own tradition, but that it has managed to do so while basing its entire philosophy of both political and economic affairs on a purely Western apparatus of thought.

THE MARXIST GOSPEL

It is one of the supreme *accidents of* world history that Chinese tradition and the gospel of Karl Marx plus Stalinism plus Leninism should be so closely allied in detail; in other words that Karl Marx should be so completely in tune with the Chinese tradition down the centuries. In it, incidentally, one of the tremendous errors of Karl Marx stands exposed. Marx himself believed that his classless society, conceived by a truly socialist revolutionary party, would come first in a highly industrialised country. He was wrong to some extent in the USSR. He was totally wrong in China. The framework of totalitarianism was more easily grafted on to the totalitarian Chinese mind than even on to the German people, amongst whom Karl Marx had prophesied Communism would first appear.

NO "WOBBLE"

Because the Marxist gospel and Chinese tradition are so closely linked with one another, there is no "wobble" in the *Chinese revolution*, similar to that we have noted in our own. This is because the two components of the revolution — past tradition and current thinking in the Age of the Revolution — have run so close that there is really no departure in the forms of government or in the comprehensive elimination of decentralisation; *there is no* "resultant" different from the traditional line as there is in the Indian case. For the same reason, there is no permanent revolution in the People's Republic of China. The mind of the Revolution has been made the mind of the nation by the systematic elimination of opponents so that today both the political and economic appartus are so firmly grounded in every State of the country that a major adjustment of policy through the expression of the will of the people is no longer possible. The "blooming of a hundred flowers" is reserved for those within the circle of the converted. In his classic speech of February 27, 1957, Mao Tse-tung said this with brutal frankness:

"Ours is a people's democratic dictatorship, led by the working class and based on the worker-peasant alliance. What is this dictatorship for? Its first function is to suppress the reactionary classes and elements and those exploiters in the country who range themselves against the socialist revolution, to suppress all those who try to wreck our socialist construction; that is to say, to solve the contradictions between ourselves and the enemy within the country — for instance, to arrest, try and sentence certain counter-revolutionaries, and for a specified period of time deprive landlords and bureaucrat-capitalists of their right to vote and freedom of speech — all this comes within the scope of our dictatorship. To maintain law and order and safeguard the interests of the people, it is likewise necessary to exercise dictatorship over robbers, swindlers, murderers, arsonists, hooligans and other scoundrels who seriously disrupt social order...." In that sense the Chinese revolution has been closed; perhaps, 1956, when centralisation was extended greatly over economic affairs, particularly by the expansion of collectives in agriculture, and when the elimination of most of the private sector in industry became a decree of the land, should be set out as the last year of experimentation.

There may be some who will see in this a clear picture of a ruthlessly logical system, with a tyrannical consistency in thought and action, a high degree of revolutionary perfection such as India can never dream to achieve and such, indeed, as India's Constitution is designed to prevent from achieving. Before passing a judgment on the choice, which Indian citizens should make, one needs to dwell on the external perspectives which have followed in the wake of both the revolutions.

India and the West

IN the articles which have preceded, it has been argued that an element of democratic thinking with emphasis on the worth of the individual and a deep tolerance has run through Indian tradition, even though at times there were large areas of the country where there has been authoritarian government. It has been argued that it is largely as a result of this tradition that India was "prepared" for democracy, and it was natural that the Indian Revolution should contain democratic elements of the Indian tradition as one of its most powerful components. It is natural in the same sense that India should find her major partners in those nations which share a like faith; these are, broadly, the democratic nations of the West. One would expect that our foreign policy would have tended to recognise the force of this alliance in everything except the use of military methods which are inconsistent with the Gandhian tradition.

HOW CLOSE, HOW FAR?

The question then arises as to how close or how far is the outlook of our policies to those of the leading Western democracies, particularly the United States and the United Kingdom. In theory our policies should be close; but in practice some of our major differences in the last ten years have been with these two countries. There is no doubt that some of these differences have sprung from two issues on which national consciousness in India is deeply alive. The first of these is Kashmir, the second is Goa. On Kashmir, there is an element which comes from Partition which, in a sense, derives from the fact that the Free World can take an "outside" view; whereas this appears to us a "heart and soul" affair. Goa incorporates differences which are substantially historical and spring from a much larger field. Across the seeming unity of philosophy enshrined in the Indian tradition and in the democratic experiments in the great nations are two major obstacles which derive from the last two centuries. They may be separated as Colour and Colonialism, but are essentially the same expression of the anger of the coloured subject peoples with the Western nations who, in the 19th century, rode roughshod over the people of this area; and by colonialism deprived them of a sense of national pride in the building of their countries. The carryover from Colonialism and Colour is so deep in the short period that, over many countries in Asia and Africa, it has over-powered the natural affinity which should lie between peace-loving and democratic peoples in the East and the great Western democracies.

THE BANDUNG IDEA:

For this reason, there is nothing improper in the departure from alliances with the Western nations on

issues connected with the raising of prestige and dignity of Eastern peoples. The Bandung idea which incorporates this as a central philosophy is a continuing and permanent attack on Western perspective, which, for the last two hundred years, has deemed that all important events were taking place in the great capitals of Western Europe and the United States. The Bandung idea is, in part, a literature of revolt, but it is a wholesome attempt to correct the distortion of history which has arisen because of the subjection of Eastern nations throughout the 19th century. It is wholly right and proper that India should appear closely involved in the Afro-Asian group, and use the Bandung idea as a corrective for the mistakes which Western nations have made in their reading of the world as essentially an ordering of affairs by the minds of Western statesmen or, failing a just ordering by their minds, the use of force in a manner which was once called Gunboat diplomacy. But though the Bandung idea is right even when it runs across the main line between the democracies and Communism (and this includes elevating China to an important place) it is an idea which needs to be watched, lest it should outrun the balanced interest of these countries. In its criticism of the West the Bandung idea has one limitation that it tends to set itself against the Western democracies, and to import more than a good reading of history justifies, a neutral and non-critical role of the Union of Soviet Socialist Republics, and particularly the doctrine of Satellitism as operated from the Kremlin. Sometimes Satellitism has had the effect of injuring many minor States, notably, Hungary and Poland, in their efforts at national self expression. Many Asian countries, including India, failed at the time of the Hungarian uprising to recognise that the criticism of the Soviet Union in an aggressive role should be great as that of Western democracies when they err.

Outside the Bandung idea, we have differences with some Western countries which we do not have with others. For example, we differ substantially from the United States on the placing of China in the United Nations. Here we are operating on a basis of broad principle not against the Western world, but against the decision of a single power, the United States, which opposes its entry. We enjoy, in this respect, the support of the United Kingdom and Canada although we do not enjoy the support of other nations in the Commonwealth. Again, in the nations grouped in the Commonwealth, we have a broad pattern of affinity, political and economic, and partnership which is assisted by day-to-day consultations which we do not enjoy with the USSR or the United States. In a sense, therefore, there are issues of policy which cut across both our affinities and our differences with the Western world.

To sum up, one might say that India's foreign policy, in its purely political context, has two elements which reflect the great historical tradition of the country. India is peace-loving and is set against military methods. She tends to use her good offices peacefully to provide agreement amongst nations. On the other hand, she has substantial differences with Western democracies, who should be her natural partners in outlook. This arises largely from the biased view of Eastern peoples which has grown up in the West; the corrective is enshrined in the Bandung idea. All this involves no conflict with our traditional position. What seems to involve a fall from our Gandhian ideals is the relatively light manner in which we have treated Communism as it is expressed aggressively from the Kremlin, particularly in respect of Hungary, where a major moral battle has been lost. But, all in all, one can look upon India's relations with the West in the last ten years as being based substantially on our best traditions, except where we have sought uncritical friendships with the Communist world.

China and the East

JUST as tradition and the basic philosophy of the Indian Constitution would suggest a partnership between India and the great democracies of the West, so China's tradition and her constitution, based upon Marxian faith, should imply a deep alliance with the Union of Soviet Socialist Republics. Are there any qualifications, such as in the Indian case, to prevent this alliance from being the dominant element in Chinese foreign policy? It is argued, for a variety of reasons, that there are no such qualifications, and the Sino-Russian axis remains, and is likely to remain, the dominant element in China's foreign policy for a very long time to come.

THE FORCE OF A GOSPEL

In the first place there is the force of the Marxian gospel. Unlike the democratic faith which assumes and, indeed, requires, differences in order that there should be democratic persuasion between members of the democratic community, the Marxian line has no such measure of dispersion. Even after the "cult of personality" was destroyed, and a liberalising process looked as though it were under way, it was shown in Poland and Hungary how limited was the operation of liberty in the Communist World. The fact that China is too large and powerful for pressure of the "satellite" kind to be exerted on Peking by Moscow does not alter the point that the fanatical acceptance of the Marxian gospel has prevented the Chinese leaders from even wishing to break away in any material respect from the interpretation of Marxist-Leninist philosophy which, from time to time, emerges from the citadels of the Kremlin. In other words, the democratic dispersion of ideas cannot operate to dislodge China from the Soviet Union.

THE INERTNESS OF RUSSIAN COLONIALISM

More remarkable in a sense is the inertness of the Chinese people on historical colonialism of the Soviet Union in Outer Mongolia, Manchuria and on the Manchurian railway. It is being quickly forgotten that Harbin was a completely Russian city. The far-sighted treaty between the Soviet Union and China by which the Manchurian railway was returned and Port Arthur placed under the Chinese flag obliterated from the Chinese mind the memory of Soviet colonialism while it became all the more aware of American imperialism symbolised in the Korean War. Thus the colonial impact tends to attach China to the Soviet Union by the curious process of repulsion from the United States.

THE PROBLEM OF SECURITY

The need for security, conceived largely as a psychological fear of American support for Chiang Kai-shek on Formosa, has also been a major factor in a military treaty with the Soviet Union which implies that in the event of an attack on either country each will go to the other's help. The People's Republic of China is now almost completely dependent on the Soviet Union for all major imported armaments; Russian military missions have been training over the last five years Chinese soldiers in their use. At the same time all technical knowledge in the air and training of pilots, using some of the fastest aircraft in the world, has been undertaken by the Soviet Union. A feeling of intense collaboration in military measures with no major issues of difference has, therefore, linked the two great partners in the Communist World and military strategy has been unified so that defence policies are jointly conceived.

EXTERNAL ASSISTANCE

No less important is the economic component. The Sino-Soviet treaty of friendship, alliance, and mutual assistance of February 14, 1950 which transferred the Chinese Eastern Railway and the naval base at Port Arthur to China also granted to China credits of $300 million. This amount was increased by the Economic Aid agreement of September 1953 which provided financial and technical assistance for 141 enterprises. On October 12, 1954 an increase of $100 million in the original loan was announced and further long-term credits amounting to $130 million were provided for 15 additional industrial projects. It is estimated today that the Soviet Union has sent 15,000 technicians and military, economic and administrative advisers to China. The depth of the economic penetration of the Soviet Union in Chinese rule is as great as the penetration of Russian thought in the highest counsels of the Communist Party.

THE ECONOMIC IMPERATIVE

It is obvious, in economic and military terms alone, that the People's Republic of China, set now on a campaign of heavy industry, cannot waver in its alliance towards the Soviet Union. Nor can it be said that any action taken by the Free World—least of all the action described as military containment—is designed to remove any attachment which China has to the Soviet Union. Both military and economic imperatives decree a growth in friendship, an association between the two countries. Neither Colonialism nor the Bandung idea stands across this enduring bond.

MAO AND MOSCOW

For all these reasons, there is nothing surprising in the subsidiary role which Mao Tse-tung has taken in recent statements in regard to Chinese relations with the Soviet Union. Those superficial observers, who argued that Mao Tse-tung was necessarily the senior High Priest of the Marxian gospel, had not estimated the extent to which emotionally, militarily and economically the People's Republic of China is now integrated with the Soviet Union. On Hungary, when the test of loyalty was called, it was soon seen how abjectly China accepted the Moscow line. If it has been an aim of Indian policy to detach China from too close an association with a great European power—via Bandung and Indo-Chinese friendship association and the like—that policy is singularly naive. There can be no doubt at the present time that China's bonds with the U.S.S.R., unlike India's with the West, are made of hoops of steel which cannot now be broken. This does not imply that India should be anything but friendly and helpful to the People's Republic. That should be our traditional outlook towards all countries. It does imply, however, that we do not need to lean over backwards to please.

This Picture and That: Which Choice?

UP to this point, few moral judgments have been made. The citizen of India has not been asked to make his choice between a policy which fits into a peace-loving and non-aggressive tradition, such as our own, or a militant and aggressive faith, such as is implied in the People's Republic of China. This choice has also been separated from its economic component which is discussed in detail in Part 'B'. Here the choice is between the exercise of peaceful and benevolent explanation of one's ideas and an enforcement by rigid regimentation and by the liquidation of opposition.

There are some poor readers of the canvas of Indian history who would see the reverse in the years over which this description has lightly passed, namely, the years of India's most vigorous expansions overseas. It is appropriate that there should be recorded at once the assessment of a leading historian, Prof. G. B. Sansom, who sums up the Indian story in this respect in a judgment which is fiercely objective and should be final in dispelling disbelief. "There are good reasons", says Prof. Sansom, "to justify the expansion of Indian empires in the past, particularly where it resulted in conferring the benefits of Indian culture upon backward countries. Its method was not always in keeping with the principle of ahimsa or non-violence, which is sometimes said to have been a controlling factor in Indian history. Apart from a long record of internal wars fought for the expansion of individual states within the Indian sub-continent, the colonizing activities of Indian peoples, which from the beginning of our era extended to Burma, Indo-China, Malaya and Indonesia, were sometimes assisted by the force of arms. It must, however, be admitted that in general the expansion of India was peaceful and gradual. It was fostered less by the ambition of princes than by the slow permeation of Indian ideas and customs through the influence of Indian traders and the effort of Indian missionaries, neither of whom had any persistent military or even political support from India."

By the same token, the same historian gives a verdict on China which should be read alongside. "As for China, the overseas expeditions of the king emperors did not manifest a determined spirit of imperialism such as was displayed under previous dynasties. They were, however, by no means free from an aggressive character. Soldiers were landed in distant parts of Asia where a good deal of fighting and destruction took place. They ranged as far as the Persian Gulf and the Somali coast, exacting submission and tribute from rulers great and small. They even carried off to China in 1410 a king of Ceylon who had offended them. Perhaps in the light of subsequent history the most interesting episode is the attack delivered upon the port of Calicut in Southern India."

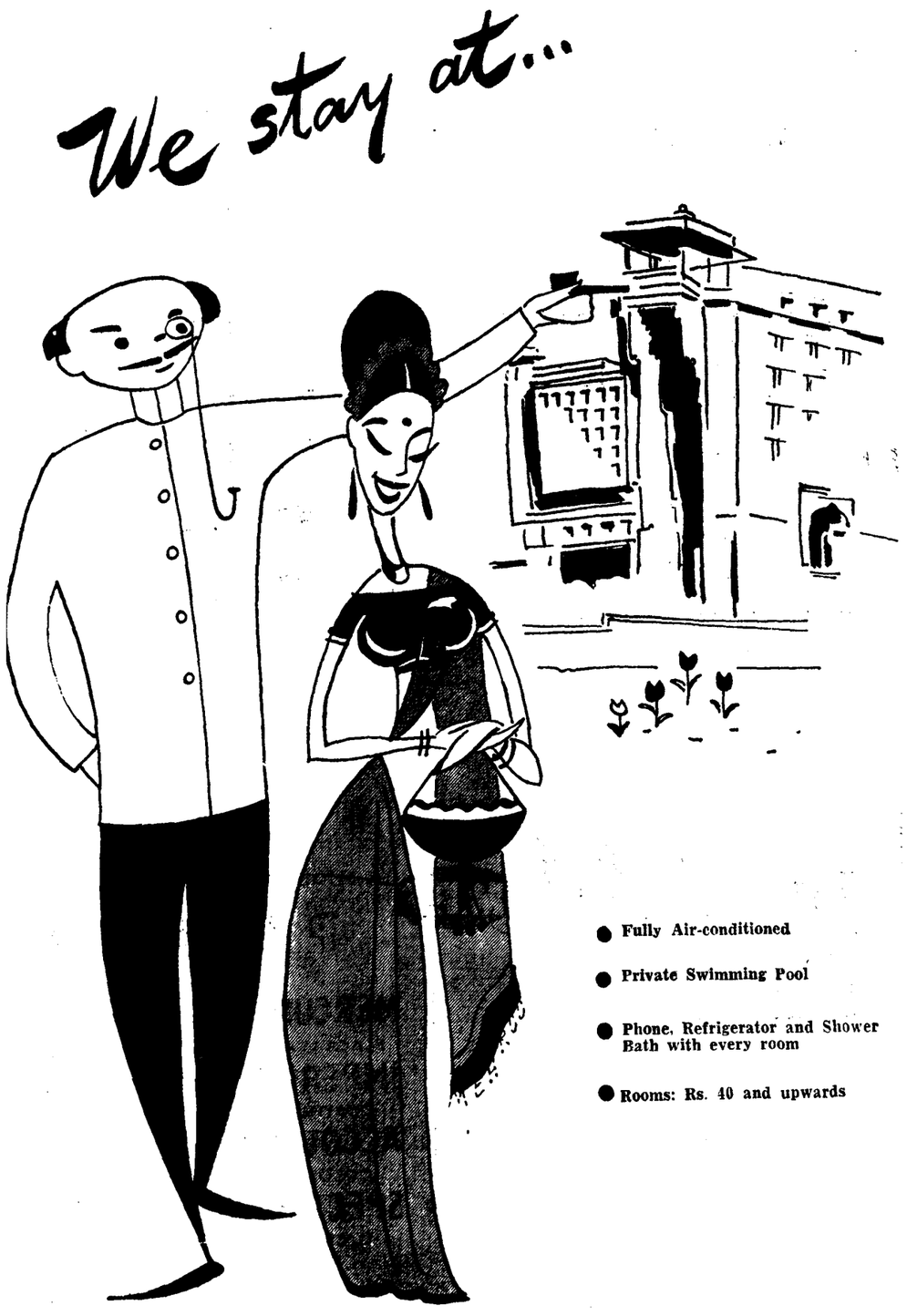
PEACE HATH ITS VICTORIES

'The Eastern Economist' believes that these judgments present in a compressed form the broad truths

in regard to the peaceful character of Indian expansion, and the aggressive character of its Chinese counterpart. Not, indeed, that India always yielded to China although her methods were almost always peaceful. Everywhere except in Indo-China, the Indian spirit has left the marks of democratic victory in language as well as in beautiful stone.

In a sense the choice as to whether we should, at this moment, choose the democratic and peaceful Indian tradition or one aggressive and militant is an issue of national pride. It would be difficult to find a citizen of India who knows his own past who can make the choice to depart from the principles of the Indian Constitution. In that sense, the judgment is not entirely a moral one; the dice are loaded in India's favour.

Nevertheless it is right that the moral issue should be posed. Do we desire a system of intense centralisation, such as China has at present instituted? Do we desire the elimination of the private sector in the belief that it subverts the philosophy of the Welfare State? Do we desire free international relationships or a closing of our bonds with most countries of the world in order to obtain a rigid and, in the last analysis subordinate role in the Communist comity of nations? Whatever one's choice, there can be no question that such a choice would injure the great moral prestige in the world which India as the inheritor of the great messages of Ashoka and Mahatma Gandhi has obtained. To the extent that those messages are based upon a moral law, which is universally recognised, a departure from them will be a departure from moral law. 'The Eastern Economist' does not believe that, outside the Communist Party of India, there is any Indian worth his salt who will make an adverse choice. And for those who make such a decision with conviction, one might say that in them India's salt has lost its savour.



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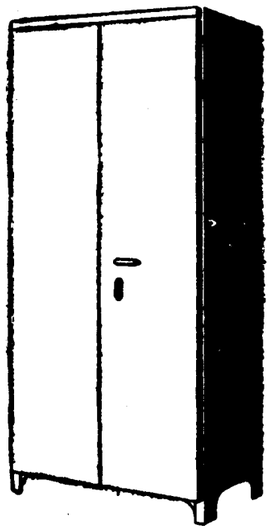
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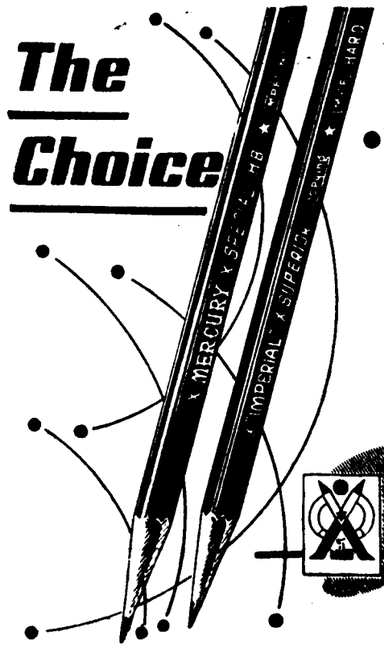
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PART B

AN ECONOMIC REVIEW

India and China: An Economic Assessment

Introduction

IN this economic review an attempt has been made looking both before and after, to place the Indian and Chinese economies on a basis of comparison. It is a very imperfect attempt as, indeed, it must be, even if statistics in every case were available in absolute terms. For one thing, the resources of the countries are very different, although quite frequently they are assumed to be similar. An important element in this report deals with differences in particular elements of resources. In potential resources the picture might, conceivably, be better but here, again, almost nobody knows in detail what the great expanses of the Indian Union and People's Republic of China contain. They may, or they may not, be very rich economies. On the other hand, they are both oppressed by population problems which look similar, but, in fact, are not. China has much the more difficult population problem, not only because its base at 600 million people is larger than India's by nearly 50 per cent, but also because her rate of population growth at perhaps near 2 per cent is 50 per cent more than India's. Fifty years from now — and we are looking at the end of the century — Chinese population will have risen far more steeply than our own; conceivably China will have double India's population.

RATES OF PER CAPITA PROGRESS

This population comparison gives perspective to rates of economic progress. It is not enough that China should in total production terms do as well as India, or even 50 per cent better. Unless her per capita income continues to rise as steeply as India's, she will not be able to maintain equal progress. Put otherwise, because of her population, total real national income in China should rise at the rate of nearly 50 per cent more than in India if the two countries are to keep level. In other words, the bare production figures are very misleading, because total production has to serve a purpose, namely, that of raising the standard of living. Unless China can do substantially better than the Indian Union — may be by 50 per cent in total production — it is doubtful if in per capita terms she can ever win the economic race. The dice are loaded against her; not against us.

PRICE OF CHINESE PERFORMANCE

There is no doubt that, in the vigour of her investment programmes — more than double, it would appear, of the Indian Union's investment — the rulers of China are making a determined and, in a sense, a passionate attack upon the overwhelming problems with which they are faced. Those of us who know the difficulties against which they are working, partly because we have them in similar measure ourselves, cannot withhold admiration for the tremendous imagination and superb organisation which has been thrown into the battle. Some of the results, as the figures in production and improvement in transport indicate, are impressive, well beyond our own. On the other hand, these are still not in total terms adequate to bridge the gap between the Chinese and Indian people, and the price that is being paid in taxation by withdrawing income in all of something near 30 per cent from some of the lowest income groups under one head or another is a cruel burden on the Chinese people in this generation, which the Indian people are not called upon to shoulder. It is not enough to give admiration for China's tremendous achievement; one needs to ask whether the output is worthy of the price. Almost certainly an Indian audience, reviewing the figures which have been set out in this review will decide that the present price has been too great.

THE PROBLEM OF SYSTEMS

As the story is told, there is seen more and more the impersonal elements, namely, the old and tiresome economic co-ordinates which decree the rate of economic development — the level of capital formation, the level of net investment, the rate of productivity on the land and in factories, and finally, the method of financial investment including deficit financing with possible inflation. All in all, one can stand back and look on both stories and see that the impersonal elements have been differently conceived, but have yet worked in similar grooves. There is no miracle about China's progress. It is doubtful if the Indian people would even have accepted the Chinese way in its spectacular regimentation or its cruel taxation. It is equally doubtful if the Chinese people could ever, in view of their past history, have dreamt of a level of agricultural taxation such as that which in the liberal atmosphere in India is deemed appropriate. On the whole, the impersonal elements are different as they are explained by the differences in behaviour in the economies.

Practically the most important judgment that can be made is that neither economic system can change its course substantially, and adopt the economic norms of capital formation or investment which belong to the other country. There is, therefore, little point in a detailed comparison in absolute terms and what these countries have done in terms of investment and output. There is, perhaps, only one comparison in which one can look beyond these figures and to the future of these great countries which between them by the end of the century will probably contain half the population of the world. This is in respect of productivity, not total production, both in agriculture and industry. A major portion of this economic report deals with the problem of Chinese agriculture in terms of productivity per acre. Here it is shown that the spectacular results which Chinese production claims are almost of no account in changing the terrible tiredness of Chinese soil. We too, are afflicted with this disease. But in the last seven years Indian productivity has risen significantly changing the age-old disease into what looks like a great element invested with the hope of future progress.

Thus it comes about that while looking at these two economies — pitiful in their poverty and wonderful in the passion with which poverty is proposed to be erased — one can draw few comparative conclusions, though the records of the facts have, for convenience, been set alongside one another. These systems are doomed

to work their way apart and perhaps twenty-five years from now we may have a record on what, in fact, they have meant in the conditions which have obtained in this critical period in Asian history. For the present all that we can say is that we see as through a glass darkly and the best thing, perhaps, is that both systems should be allowed to run their course. There should be no attempt now or in the immediate future to turn one system into the other because, in fact, these great turnings are not now possible. The Chinese people will never accept the Indian method of wide decentralisation and local initiative. Thus the minds of the nations are set apart, and their economies must move in settled grooves. Nevertheless, there is room here and there for experience to be shared and there should be as there has been down the years, a free communion of the ideas, across the mighty mountains which still separate our economic systems, as they provide our political and social worlds.

This economic report will have been well worthwhile if it shows in an appropriate perspective how in separate terms the two economic systems at present stand; how they stood ten years ago; how they are likely to look five years from now. If they can also give the Indian people some assurance that the way they have chosen is, in the light of the facts presented, one on which there need be no regrets, the writing of this economic report will have been its own reward.

National Income Figures

AN exact comparison of the level of living in India and China is made extremely difficult by the wide gap in statistical information in regard to China. Precise estimates of India's national income are available for the period 1948-49 to 1955-56, and certain reliable unofficial estimates are available for earlier years. No official estimate of China's national income can be had for any period. The comparison has perforce to be based on non-official estimates only.

Income estimates for the last two decades indicate that per capita income in India has always been higher than that in China. Between 1936 and 1946, China's national income registered a decline of 9.2 per cent; between 1931 and 1942, India's national income in real terms rose by 7 per cent. Even though these non-official estimates relate to different periods in time, they do help to indicate the manner in which the two economies have grown in the war and post-war days.

An illustration of China's pitifully low standard of living as compared with India is available from the estimates prepared by the Statistics Division of the United Nations for the years 1946 and 1949. It has been estimated by the U.N. experts that, in 1946, per capita income in China at U.S. $23.13 (about Rs. 110) was nearly half of the per capita income in India at U.S. $42.61 (about Rs. 202). Three years later in 1949, the comparable figures were U.S.$27 for China and U.S.$57 for India. The rates of growth indicated by these figures during the period 1946-49 show that the level of living in India improved at almost double the rate in China. These estimates also highlight the fact that the standard of living in China on the eve of the establishment of the Chinese People's Republic was less than half of that in India.

Colin Clark's estimates of per capita income in terms of Oriental Units also endorse the above thesis. Defining the Oriental Unit as "the quantity of goods or services exchangable directly or indirectly for one rupee in India in 1948-49", Colin Clark has placed India in the real income group of 150-200 oriental units per head. Iran, Pakistan and Thailand also lie in the same group but they rank lower than India. China is placed in the group of countries which claim real income per head of less than 100 O.U. Chine stands above Indochina and Yemen but below Afghanistan. These estimates refer to the year 1950.

Even though no official estimates of national income to China are available, some indications in regard to agricultural and industrial output since 1949 are available from Chinese publications. Table I below taken from "Report on Fulfilment of the National Economic Plan of the People's Republic of China in 1955" shows the manner in which the major sectors of the economy have moved since the Communists took over. The figures show the gross output of industry, handicrafts, agriculture and rural subsidiary occupations in terms of 1952 prices. The gross value of industrial output is valued at 44.7 billion yuan in 1955 as against 10.7 billion yuan in 1949. Similarly, the gross value of the agricultural sector is valued at 55.5 billion yuan in 1955 as against 32.6 billion yuan in 1949. If true, these figures show a splendid record of achievement.

Tentative estimates of Communist China's national income, investment and consumption have been made by Yuan-Li Wu, associates professor of Economics, Marquette University. These estimates are set out in Table II. Based on Po I-po's reports to the eighth Congress of the Chinese Communist Party in September

TABLE I
TOTAL OUTPUT VALUE OF INDUSTRY IN CHINA ACCORDING TO ECONOMIC SECTORS
(Calculated in terms of constant prices of 1952)

	Absolute Figures (in million yuan)					Percentages				
	1949	1952	1953	1954	1955	1949	1952	1953	1954	1955
Total ..	**14,018**	**34,326**	**44,696**	**51,975**	**54,871**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
State Enterprises ..	3,683	14,258	19,239	24,488	28,142	26.3	41.5	43.1	47.1	51.3
Co-operatives ..	65	1,109	1,702	2,454	3,453	0.4	3.2	3.8	4.7	6.3
Joint State-Private Enterprises ..	220	1,367	2,013	5,086	7,188	1.6	4.0	4.5	9.8	13.1
Private Enterprises ..	6,828	10,526	13,109	10,341	7,266	48.7	30.7	29.3	19.9	13.2
Individual Handicrafts ..	3,222	7,066	8,633	9,606	8,822	23.0	20.6	19.3	18.5	16.1

Notes: 1. The output value of co-operatives includes that of the processing factories of supply and marketing co-operatives and consumers' co-operatives, and of handicraft producers' co-operatives.
2. The output value of individual handicrafts includes that of handicraftsmen's supply and marketing co-operatives and handicraftsmen's supply and marketing teams.

Source: "Report on Fulfilment of the National Economic Plan of the People's Republic of China in 1955."



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TABLE II

TENTATIVE ESTIMATES OF COMMUNIST CHINA'S NATIONAL INCOME INVESTMENT AND CONSUMPTION

(In billion yuan)

	1952	1953	1954	1955	1956 (Plan)
National Income1	59.13	73.25	76.02	92.01	97.58
Investment1	9.28	13.40	16.42	18.86	22.25
Investment in Fixed Assets under the first Five-Year Plan2	3.71	6.51	7.50	8.63	14.00
Other3	5.57	6.89	8.92	10.23	8.25
Consumption3	49.85	59.85	59.60	73.15	75.33

1 Estimates based on Po I-p's's report to the C.C.P. 8th Congress, September 18. 1956, in which the percentage figures referred to in the text were given.
2 National Bureau of Statistics, Bulletin on Summary of National Economic, Cultural and Educational Statistics for 1949-54; and Communique, June 14, 1956.
3 Residuals.

1956, they reflect the optimism displayed by the Chinese statistics. The figures are of a preliminary character and shall have to be revised if and when more statistical data are made known.

It is clear from these figures that national income in China took a great stride forward in 1955 when it rose to 92.01 billion yuan from 76.02 billion yuan in 1954. That shows a rise of nearly 21 per cent in one single year. On converting these figures into Indian Rupees by considering a yuan equivalent to two rupees, we find that per capita income in 1955 was Rs. 256; in 1956, it rose to Rs. 304. In 1955, therefore, China overtook the Indian Union in terms of per capita income. This apparent gain needs to be qualified by the fact that the official index of general wholesale prices which is employed to deflate the money incomes does not reflect the true course of prices. Based on "controlled prices", it takes a uniformly stable trend. The table below brings out this fact very clearly:

TABLE III

CHINA: PRICE AND COST OF LIVING INDICES (1953-56)
(1952 = 100)

	1953	1954	1955	1956
National wholesale price index	98.7	99.1	99.7	99.2
Retail price index in eight major cities	103.7	104.1	105.5	105.8
Cost of living for workers and employees in twelve major cities	105.6	106.9	107.3	107.1

'The Eastern Economist' believes that Prof. Yuan-Li Wu's estimates err grievously on the liberal side. As a matter of fact, they do not correspond exactly to the figures given by Po-I-Po, Chairman of the National Economic Commission, in a speech at the 8th National Congress of the Communist Party of China. Here is what Po-I-Po said about the increase in China's national income in the four years from 1953 to 1956: "Thanks to the development of industrial and agricultural production and the rise in the labour productivity, our national income (net value of production) increased by 43.8 per cent averaging 9.5 per cent every year". Prof. Yuan-Li Wu's estimates on the other hand show a rise of 65 per cent in national income in 1956 with 1952 as base. This indeed is a serious error.

Assuming Prof. Yuan-Li Wu's estimates for 1952 as correct, national income figures for 1953 to 1956 have been re-computed in the light of the above quotation from Po-I-Po's speech. These computations are set out in Table IV below.

TABLE IV.

'THE E.E.' ESTIMATES OF COMMUNIST CHINA'S NATIONAL INCOME, INVESTMENT AND CONSUMPTION
(In billion yuan)

Year	National Income	Investment	Consumption
1952 ..	59.13	9.04	50.09
1953 ..	67.95	12.43	55.52
1954 ..	69.91	15.10	54.81
1955 ..	81.07	16.62	64.45
1956 ..	85.03	19.39	65.64

The national income of China for 1956 in this way works out to 85.03 billion yuan and not 97.58 billion yuan as Prof. Yuan-Li Wu's estimates show.

Figures of gross capital formation given by Po-I-Po and set out in Table V below show a steady rise from 15.7 per cent in 1952 to 22.8 per cent in 1956. These figures are without doubt extremely high, but for comparison with Indian figures, they need to be converted into "net" figures.

TABLE V.

THE PROPORTION OF ACCUMULATION IN NATIONAL INCOME IN CHINA

	Per Cent
1952	15.7
1953	18.3
1954	21.6
1955	20.5
1956	22.8

In Table VI figures of total investment in terms of rupees as well as in terms of percentage of national income in the base period are set out. It is clear that the rate of capital formation in China has been nearly 50 per cent higher in the first Plan and will be about 40 per cent higher in the second Five-Year Plan. On per capita basis, investment in China in the first Plan was Rs. 122 as against Rs. 99 in India and the proposed investment in China's second Five-Year Plan works out to Rs. 184 as compared to Rs. 149 in India.

The impact of this high rate of capital formation is to reduce consumption levels in Communist China significantly. If in 1956, per capita income was estimated at Rs. 275, consumption was reduced to Rs. 212 only. On this basis, even though China seemed to have caught up with India in per capita income terms, the consumption level still lagged significantly behind.

THE INTERNATIONAL SCALE

The Statistics Division of the United Nations has estimated national income on per capita basis for nearly 55 countries for the years 1952 to 1954. These results are set out on p. 41. In that table Prof. Yuan-Li Wu's liberal estimates for 1952 to 1954 have been utilised.

According to these estimates, China still remains one of the most backward nations of the world. The gap between China and other advanced industrialised nations of the world looks extremely wide. Against per capita income of $1870 in the United States and $1310 in Canada, the figure of China at $50 looks extremely low. These figures reveal the huge effort that is required to bridge the gap between the standard of living in the advanced countries and the backward ones.

TABLE VI.

TOTAL AND PER CAPITA INVESTMENT AND RATE OF CAPITAL FORMATION IN INDIA AND CHINA

	India's-FFYP (1951-56) realized net investment	(1956-1961) India's SFYP proposed net investment	China (1952-57) estimated net investment	China (1958-62) estimated net investment
1. Total investment	Rs. 35,000 m.	Rs. 61,000 m.	Rs. 70,714 m.	Rs. 114,905 m.
(a) Public	17,500 m.(50%)	38,000 m.(62%)		
(b) Private	17,500 m.(50%)	23,000 m.(38%)	N.A.	N.A.
2. Per Capita investment during the Plan period	Rs. 99	Rs. 149	Rs. 122	Rs. 184
3. Capital formation as percentage of national income in the base period	7.7%	10.4%	10.5%	14.4%

Growth in Population

BOTH India and China are giants in so far as population is concerned. India's population was estimated at 357 millions in the 1951 census. China also had a census in 1953, according to which, total population excluding Taiwan and the overseas Chinese, was estimated at 583 millions. These vast numbers pose grave problems for both India and China.

In the case of the Indian Union, decade by decade figures of population are available because censuses have been taken at intervals of 10 years. An estimate by the National Planning Association in a recent publication on "Regional Economic Development and Nuclear Power in India" shows that during the last decade the growth in India's population was around 1.25 per cent per year. If births and deaths were both reduced to 50 per cent of the current level, the Indian population might rise to 562 millions in 1981. If, on the other hand, both these rates were to remain unchanged the calculations indicate a population of about 682 millions by 1981. These estimates are illustrated on page 151.

It is very difficult to determine the rate of growth in China's annual population. As a matter of fact, the population total revealed by the 1953 census came as a big surprise. Sometime in the middle of June 1950, Chou En-lai, while speaking to the People's Political Consultative Conference, had stated that "according to the most trustworthy investigations the population of liberated China totals 488 millions." How could Chinese population then rise by 100 millions in 3 years? That is a question which has remained unanswered till today. Certain observers have even gone to the extent of saying that these grandiose figures do not represent China's true population. They have been put up with political motives in order to hide the frightful massacre of many "enemies of the people". These figures are also intended to conceal the huge sacrifices in Korea and the vast numbers of victims of floods and droughts in various parts of the country between 1949 and 1953.

The attitude of the Chinese People's Republic to the problem of population was initially one of non-restriction by family planning and birth control campaigns. The Chinese Government were of the opinion that this problem would be settled by scientists by increasing the output of food. But recently under Premir Chou En-lai, China is emerging as a strong advocate of birth control. In a speech at the China National Peoples Congress, Shao-Litze declared, "it is a good thing to have a large population but in an environment beset with difficulties, it appears that a limit should be set". Various estimates of China's future growth in population have alarmed the Chinese Communist leaders. This has been made clear by a recent statement of China's Minister of Health who said "we have known for a long time that a soaring population would prevent a substantial rise in living standards and we have decided this year (1956) to start family planning in earnest.... Our teams have reported a definite demand, on the part of village women, for fewer children. We have done a lot to teach them about such matters (on birth control) alongwith reading and writing. Now, peasants are quite willing to go to the hospitals and have operations. They aren't frightened any more."

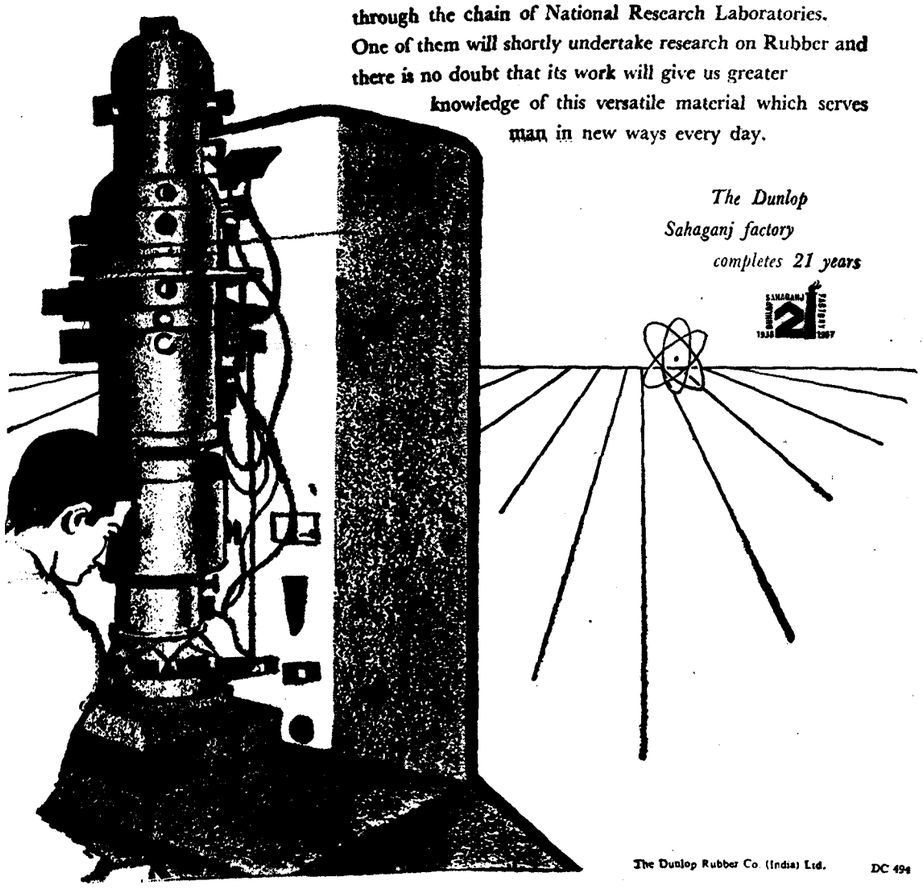
The pressure of population in China is much greater than in India. Not only because the rate of increase at 2 per cent per annum is significantly higher than India's 1.25 per cent, but also because the cultivatable land on per capita basis in China is much smaller than in India. The average density of population of China gives a misguided picture of the two countries. Against 280 persons per square mile in India, China has to support only 125 persons per square mile but for every square mile of cultivated land the pressure in China is three times that in India. If one square mile of cultivated land in India is required to support nearly 500 persons, the corresponding figure in China exceeds 1,500. This vast difference in per capita cultivated land makes the situation extremely difficult for the Chinese People's Republic. Moreover, recent calculations made by Chinese statisticians estimate that China's population might double during the next 30 years unless proper checks are provided. That is the basic cause of the recent shift in policy in regard to population. Slowly the Marxian doctrine of population is being discarded and steps are being taken to encourage birth control and family planning.

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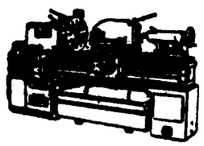
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ESTIMATES OF POPULATION, NET NATIONAL PRODUCT, AND PER CAPITA PRODUCT OF 56 COUNTRIES EXPRESSED IN US DOLLARS

	Population* Mid-year 1953 (thousands)	Net National product at factor cost (million US dollars)	Per capita product (US dollars)
		Average 1952-54†	
AFRICA			
Belgian Congo	12,154	850	70
Egypt	22,062	2,650	120
Kenya	5,851	330	60
Rhodesia and Nyasaland	6,708	670	100
Uganda	5,343	270	50
Union of South Africa	13,153	3,950	300
AMERICA			
Argentina	18,393	8,460	460
Brazil	55,772	12,830	230
Canada	14,781	19,360	1,310
Chile	6,437	2,320	360
China, mainland	**582,603**	**29,150**	**50**
Colombia	12,111	3,030	250
Cuba	5,807	1,800	310
Dominican Republic	2,291	360	160
Ecuador	3,464	520	150
Guatemala	3,049	490	160
Honduras	1,564	230	150
Jamaica	1,457‡	260‡	180‡
Mexico	28,056	6,170	220
Panama	863	220	250
Paraguay	1,496	210	140
Peru	9,035	1,080	120
Puerto Rico	2,213	950	430
United States	159,643	298,530	1,870
Venezuela	5,440	2,940§	540§
ASIA			
Burma	19,045	950	50
Ceylon	8,155	890	110
India	**372,000**	**22,320**	**60**
Israel	1,650	770	470
Japan	86,700	16,470	190
Korea (South)	21,376	1,500	70
Lebanon	1,353	350	260
Malaya	5,706	1,770§	310§
Pakistan	79,330	5,550	70
Philippines	21,039	3,150	150
Thailand	19,556	1,560§	80§
Turkey	22,461	4,720	210
EUROPE			
Austria	6,954	2,570	370
Belgium	8,778	7,020	800
Denmark	4,369	3,280	750
Finland	4,141	2,770	670
France	42,860	31,720	740
Germany (Western)	48,994	24,990	510
Greece	7,824	1,720	220
Iceland	151	120	780
Ireland	2,945	1,210	410
Italy	47,551	14,740	310
Luxembourg	304	270	890
Netherlands	10,493	5,250	500
Norway	3,359	2,490	740
Portugal	7,990	1,600	200
Sweden	7,171	6,810	950
Switzerland	4,877	4,930	1,010
United Kingdom	50,611	39,480	780
OCEANIA			
Australia	8,815	8,400	950
New Zealand	2,047	2,050	1,000
Total of 56 Countries	**1,908,287**	**619,270**	**325**

* Estimates obtained from the July 1956 issue of 'Monthly Bulletin of Statistics', Statistical office of the United Nations, New York. † Simple arithmetic mean of annual aggregate and per capita product estimates. ‡1952. §1952 and 1953.

CHINA: POPULATION

TOTAL: 601,938,000.

(Time of census: June 30. 1953)

(In thousands)

Provinces and Municipalities	Population	Provinces and Municipalities	Population
Peking	2,768	Anhwei Province	30,344
Tientsin	2,694	Chekiang Province	22,866
Shanghai	6,204	Fukien Province	13,143
Hopei Province	35,985	Honan Province	44,125
Shansi Province	14,314	Hupeh Province	27,790
Inner Mongolian Autonomous Region	6,100	Hunan Province	33,227
Liaoning Province	18,545	Kiangsi Province	16,773
Kirin Province	11,290	Kwangtung Province	34,770
Heilungkiang Province	11,897	Kwangsi Province	19,561
Jehol Province	5,161	Szechuan Province	62,304
Shensi Province	15,881	Kweichow Province	15,037
Kansu Province	12,928	Yunnan Province	17,473
Chinghai Province	1,677	Sikang Province[1]	3,381*
Sinkiang Province[1]	4,874	Taiwan Province[2]	7,591
Shantung Province	48,876	Tibet Region and Chambdo Area	1,274
Kiangsu Province	41,252	Other places[3]	11,743

[1]Jehol Province has been abolished and incorporated intoHopei and Liaoning Provinces and the Inner Mongolian Autonomous Region. Sinkiang Province has beenabolished and the Sinkiang Uighur Autonomous Region set up in its place. Sikang Province has been abolished and incorporated into Szechuan Province.
[2]According to statistics reprinted in the Chinese-languageweekly, 'Hongkong Chou Mo Pao,' for April 10, 1951.
[3]Including the overseas Chinese and Chinese studentsabroad.

INDIA: AREA & POPULATION OF REORGANISED STATES

1951 (Census) States	Area ('000) (sq. miles)	Population ('000)	1951 (Census States	Area ('000) (sq. miles)	Population ('000)
Andhra Pradesh	106	31,260	Orissa	60	14,646
Assam	85	9,044	Punjab	47	16,135
Bihar	66	38,926	Rajasthan	132	15,971
Bombay	191	48,265	Uttar Pradesh	113	63,216
Kerala	15	13,549	West Bengal	35	26,160
Madhya Pradesh	171	26,072	Centrally administered area	28	4,122
Madras	50	29,975	TOTAL*	1,174	356,742
Mysore	74	19,401			

* Excluding Sikkim in which Census operations were simultaneously conducted and which has been in

INDIA: POPULATION BY AGE GROUPS

(In thousands)

(1951 Census)

Age-group	Males	Females	Total	%
Below 1 year	5,846	5,691	11,537	3.2
1— 4	18,153	18,107	36,260	10.2
5—14	45,707	42,920	88,627	24.9
15—24	31,463	30,774	62,237	17.4
25—34	28,531	27,173	55,704	15.6
35—44	22,494	19,908	42,402	11.9
45—54	16,048	14,171	30,219	8.5
55 & over	14,902	14,643	29,545	8.3
TOTAL	183,144	173,387	356,531	100.0

INDIA: POPULATION BY LIVELIHOOD CATEGORIES

(In thousands)

1951 Census	Self-supporting	Earning dependents	Non-earning	Total	%
Agricultural	71,049	31,069	146,957	249,075	69.8
Cultivators of own land	45,762	21,448	100,117	167,327	46.9
Other cultivators	8,765	3,957	18,896	31,618	8.8
Cultivating labourers	14,881	5,201	24,637	44,809	12.6
Non-cultivators	1,641	373	3,307	5,321	1.5
Non-Agricultural	33,350	6,868	67,335	107,553	30.2
Production	12,136	3,134	22,402	37,672	10.6
Commerce	5,903	933	14,476	21,312	6.0
Transport	1,734	237	3,650	5,621	1.6
Others	13.577	2,565	26,807	42,949	12.0
Total (classified)	104.400	37,937	214,291	356,628	100.0



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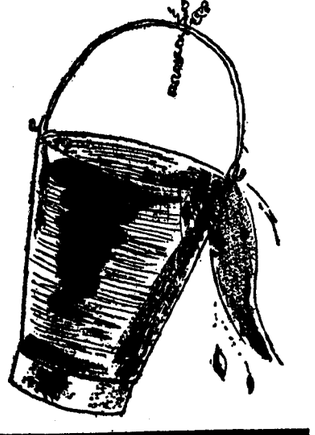
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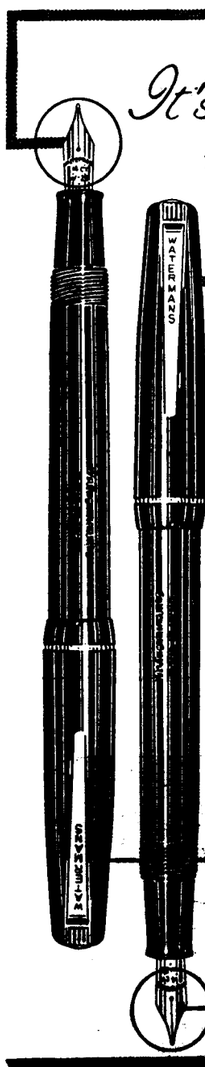
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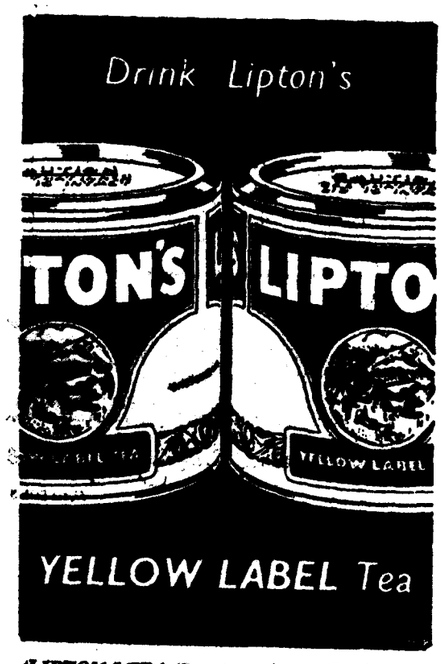
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Agriculture

The Inherited Contrasts

NEITHER Democratic India nor Communist China did start on a clean slate eight or nine years ago; nor were they on a par with each other in the crucial and vital sector of land and agriculture. History and tradition handed down to the Chinese Communists a system of agriculture which had more than one distinct advantage over its counterpart inherited by Independent India. The distinctive characteristics developed by Chinese agriculture over the long centuries were to be seen in its structure of land utilisation, in its system of irrigation, in its practice of double-cropping, in its method of wet paddy cultivation and in its quality of soil management. In contrast, the picture of Indian agriculture in these five respects revealed characteristics which placed this country in a position of initial disadvantage. That the Communist Government in China had a better developed agricultural base on which to build further than what the Democratic Government in India had, is the theme of this introductory background to a decade study of agriculture in the two countries.

LAND UTILISATION

India, as the following figures would show, had brought under cultivation nearly 147 million hectares of land representing roughly 52 per cent of her geographical area:

1. Land Utilisation in India

(In million hectares)

	1950-51	1955-56
Geographical area (a)	284.3	291.2
Forests	40.8 (14.3)	50.8 (17.4)
Permanent meadows and pastures	6.7 (2.4)	11.5 (4.0)
Cultivated land (including fallows) (b)	146.8 (51.7)	153.5 (52.7)
Built-on-area, culturable and unculturable wastes and other	90.0 (31.6)	75.4 (25.9)
Cultivated area as a per cent of topographically usable area	72	75

N.B.: Figures within brackets are percentages of geographical area. 1 hectare=2.471 acres.

Footnote: (a) Geographical area here is reporting area according to village papers; the non-reporting geographical area consisting predominantly of mountainous and jungle tracts in Assam, Manipur, Andamans, Himachal Pradesh, Jammu and Kashmir, etc., was nearly 44 million hectares in 1950-51 and 37 million hectares in 1955-56.

(b) Fallows accounted for about 28 million hectares in 1950-51 and 24 million hectares in 1955-56. This high proportion of fallows was the inevitable result of the fact that cultivation had been extended to sub-marginal lands of very low fertility.

Together with the area under permanent meadows and pastures, an average Indian thus had 0.425 hectare (1.05 acres) of agricultural land in effective use for himself and his livestock. With such a high, and rather uneconomic, level of land utilisation, it was probable that the larger part of the agricultural area — especially in tracts farther from the fertile river valleys — should have consisted of poor and thin soils.

The picture of land utilisation in China, on the other hand, was totally different as the following figures would show:

2. Land Utilisation in China

(In million hectares)

	1949-50	1955-56
Geographical area	963.6	963.6
Forests	73.5 (7.6)	76.0 (7.9)
Permanent Meadows and Pastures	170.0 (17.6)	170.0 (17.6)
Cultivated land (including fallows) (b)	97.9 (10.2)	110.2 (11.4)
Built-on area, culturable and unculturable wastes and other	622 2 (64.6)	607.4 (b) (63.1)
Cultivated area as a per cent of topographically usable area	20	23

N.B.: Figures within brackets are percentages of geographical area.

Foo..ote: (a) According to one estimate, nearly 100 million hectares of culturable wastes in this group can be reclaimed.

(b) Fallows in China are comparatively little because cultivation had not extended to submarginal lands on any substantial scale, and thus there was practically no need to retire some lands from cropping for a year or two.

The Chinese, it may be seen, had brought under cultivation nearly 98 million hectares of land representing just 10 per cent of her geographical area. Together with the area under permanent meadows and pastures, an average Chinese thus had nearly 0.475 hectare (1.17 acres) of agricultural land in effective use for himself and his livestock. Although the 'per capita' agricultural area which was in effective use in China was not much more than in India, the far lower level of land utilisation in that country suggested that the larger part of the cultivated area — more especially in the river

valleys — should have consisted of rich and fertile soils. The Chinese peasant, unlike his counterpart in India, did not have to bring under the plough vast extents of marginal, and even sub-marginal, land. In not making inroads upon the country's permanent pastures the Chinese peasant, besides ensuring adequate green fodder for his livestock, had simultaneously ensured for his cropland ampler and richer organic manure.

IRRIGATION

The contrast between India and China was no less striking in the field of irrigation which, however, was as ancient as the ages in both the countries. The comparative picture in this regard is brought out in the two tables immediately below:

3. Irrigated Area in India

(In million hectares)

Year	Net cultivated area including fallows	Net area irrigated	(2) as a per cent of (1)
	1	2	3
1949-50	138.4	20.2	14.6
1950-51	146.8	20.8	14.2
1951-52	148.3	21.0	14.2
1952-53	150.0	21.2	14.1
1953-54	151.5	21.7	14.3
1954-55	152.7	22.0	14.4
1955-56	153.6	22.8	14.8

4. Irrigated Area in China

(In million hectares)

Year	Net cultivated area including fallows	Net area irrigated	(2) as a per cent of (1)
	1	2	3
1949-50	97.9	20.3	20.7
1950-51	100.3	20.8	20.7
1951-52	103.6	21.8	21.0
1952-53	107.9	23.4	21.6
1953-54	108.5	24.0	22.2
1954-55	109.3	24.8	22.7
1955-56	110.1	26.1	23.7

Although the above figures show that the net irrigated area in India in 1949 (when the greatest era of construction activity in the field of irrigation had just begun) was about the same as in China in the same year (when the Communists had just brought the entire country under their control), it was, at the same time, significant that this net irrigated area was only about a seventh of the net cultivated area in this country whereas it was a fifth in the other. An average acre in China was thus more advantageously placed than an average acre in India in the matter of irrigtion.

DOUBLE CROPPING

If Independent India started with an initial relative handicap in the field of irrigation, she had an even greater disadvantage in the matter of double or multiple cropping which had been developed over the previous decades. The following two tables bring out the comparative picture in India and in China in this regard:

5. Double-Cropped Area in India

(In million hectares)

Year	Area sown more than once	(1) as a per cent of net cultivated area in Col. 1 of Table 3	More-than-once sown area which is irrigated	(3) as a per cent of (1)
	1	2	3	4
1949-50	15.4	11.1	1.6	10.2
1950-51	13.2	9.0	1.6	13.2
1951-52	13.8	9.3	2.1	15.5
1952-53	14.2	9.5	2.1	15.1
1953-54	15.6	10.3	2.5	15.8
1954-55	16.2	10.6	2.8	17.5
1955-56	17.6	11.5	3.1	17.5

6. Double-Cropped Area in China

(In million hectares)

Year	Area sown more than once	(1) as a per cent of net cultivated area in Col. 1 of Table 4	More-than-once sown area which is irrigated	(3) as a per cent of (1)
	1	2	3	4
1949-50	34.7	35.4	5.8	16.7
1950-51	—	—	—	—
1951-52	—	—	—	—
1952-53	33.3	30.9	7.4	22.2
1953-54	35.5	32.7	6.9	19.5
1954-55	38.6	35.3	6.8	17.6
1955-56	40.9	37.1	6.0	14.5

It may be seen that only about a tenth of the cultivated area in India was cropped more than once as against a third in China. Multiple cropping of dry lands was always possible to a greater extent in China than in India, thanks to more reliable and steady rainfall in that country. Again, in China, a larger proportion of the double or multiple-cropped area received the benefits of artificial irrigation than in India.

WET PADDY CULTIVATION

It was, however, in the field of wet rice (paddy) cultivation that the contrast between India and China was most striking. As irrigated paddy gives double or treble the yield of unirrigated paddy, a comparative picture of the extent to which this crop was irrigated in India and in China should be of the greatest relevance in comparing productivity trends in the two countries. This picture may be obtained from the two tables immediately below:

7. Irrigated Paddy Area in India

(In million hectares)

Year	Gross area under paddy	Gross paddy area which is irrigated	(2) as a per cent of (1)
	1	2	3
1949-50	30.5	9.9	32.4
1950-51	30.8	9.8	31.9
1951-52	29.8	9.6	32.3
1952-53	30.0	9.6	32.1
1953-54	31.3	10.4	33.1
1954-55	30.7	10.4	34.0
1955-56	30.9	—	—

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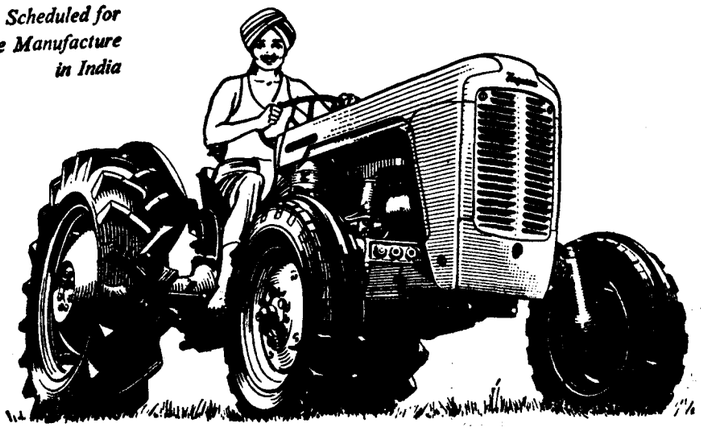
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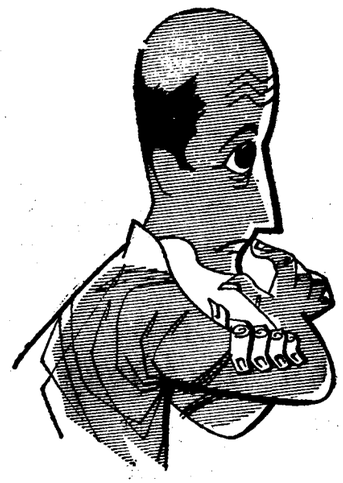
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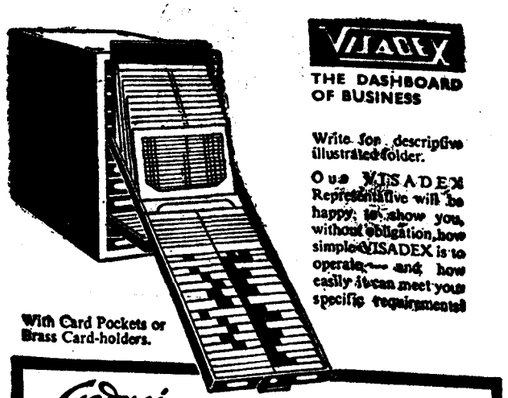


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8. Irrigated Paddy Area in China

(In million hectares)

Year	Gross area under paddy	Gross paddy area which is irrigated	(2) as a per cent of (1)
	1	2	3
1949-50	25.7	22.0	85.7
1950-51	26.1	—	—
1951-52	26.9	—	—
1952-53	28.4	25.0	88.2
1953-54	28.4	25.1	88.6
1954-55	28.7	25.5	88.7
1955-56	29.2	25.8	88.5

That nearly nine-tenths of the gross paddy area in China was irrigated (as against a third in India) would have meant — as in fact it did — a far higher average yield per acre than in India from the gross cropped area covering both irrigated and unirrigated lands. As the vigorous response of paddy crop, under irrigated conditions, to intensive application of organic manures (which in China could always be had in greater abundance than in India) and to judicious use of chemical fertilizers was also there, the Chinese method of wet rice cultivation was 'generally' superior to India's although it was not 'particularly' superior to the traditional paddy-crop practices in the high-yielding canal-irrigated tracts of South India.

SOIL MANAGEMENT

As intensive cropping (very much like gardening) was, by and large, always in vogue in China, soil management in the sense of giving back to land what was taken out of it and of conserving its natural fertility was more diligently practised in China than in India. Here, of course, the Chinese farmer had two distinct advantages over his Indian counterpart — one in the higher natural fertility of his soil and the other in the fuller use of animal and human excreta on cultivation-land. In about a compact third (of China's territory) containing as much as 94 per cent of her cultivated area, Nature had provided three broad types of soil — all of them rich in nitrogen and humus (organic matter) and containing iron, aluminium or calcium. Nature, on the other hand, had provided in India three broad types of soil — all of them deficient in nitrogen and humus but containing potassium and/or calcium. The rather thin organic composition of soil cover in India had always stood in the way of more intensive cultivation unless, of course, it was replenished by organic manures wherever possible. But it was never generally possible in India to put on land most of the animal excreta on account of the widespread need to burn cattle dung as fuel. This was an unfortunate drawback of Indian agriculture although the livestock population in this country was nearly two-thirds more than that in China. The only characteristic common to both countries was that they were never in a position to use inorganic fertilisers on any substantial scale as in Japan. In the circumstances it was really remarkable that the Indian peasant with his commonsense and practical experience had managed, through the ages, to conserve the rather thin soil fertility by adopting suitable crop practices which, on balance, did not deplete it unduly.

Levels of Productivity

IT would thus appear, in the light of the advantageous factors always in operation in China, that the usual sweeping comparison of average acre-yields of different crops in that country with those in India was unrealistic and unfair—'unrealistic' because the basic factors (both natural and artificial) making for productivity were not comparable in the two countries and 'unfair' to the Indian peasant because it often led to the wrong conclusion that he was less industrious and hard-working than his Chinese counterpart. If anything, there was always some good reason to believe that in the conditions of individual peasant farming, which, if experience all the world over was any guide, should have provided the greatest incentives to personal effort and enterprise, the Indian peasant was doing his very best like his counterpart in China. If, therefore, the average acre-yield of an irrigated or of an unirrigated crop in India had been compared with that of an identical irrigated or of an unirrigated crop in China and if, at the same time, due consideration had been given to the comparative levels of natural fertility and of manuring in the two countries, it would have been more realistic and fair. In the absence of comparable data germane to this question of production and productivity separately for irrigated and unirrigated lands, a rough-and-ready comparison of yields per hectare in the two countries is attempted here in the case of paddy for which comparable irrigated area statistics are more readily available. The relevant comparative estimates of irrigated and unirrigated paddy yields in India and in China are presented in the following two tables:

9. PADDY YIELDS IN INDIA

Year & Period	Average yield from gross paddy area covering both irrigated and unirrigated lands		Average yield from gross irrigated paddy area		Average yield from gross unirrigated paddy area	
	In kilograms per cropped hectare	In lbs. per cropped acre	In kilograms per cropped hectare	In lbs. per cropped acre	In kilograms per cropped hectare	In lbs. per cropped acre
Standard yield	1,516	1,353	2,280	2,034	1,140	1,017
1936-39	1,334	1,190	2,004	1,788	1,002	894
1949-50	1,157	1,032	1,740	1,552	870	776
1950-56	1,174	1,047	1,764	1,574	882	787
1955-56	1,258	1,122	1,890	1,686	945	843

10. PADDY YIELD S IN CHINA

Year & Period	Average yield from gross paddy area covering both irrigated and unirrigated lands		Average yield from gross irrigated paddy area		Average yield from gross unirrigated paddy area	
	In kilograms per cropped hectare	In lbs. per cropped acre	In kilograms per cropped hectare	In lbs. per cropped acre	In kilograms per cropped hectare	In lbs. per cropped acre
1929-33	3,330	2,971	3,594	3,206	1,797	1,603
1931-37	2,532	2,260	2,736	2,440	1,368	1,220
1949-50	1,893	1,689	2,058	1,836	1,029	918
1950-56	2,405	2,146	2,598	2,318	1,299	1,159
1955-56	2,675	2,387	2,892	2,580	1,446	1,290

As the agricultural economies of India and China were largely rice economies from time immemorial, the yield of paddy was at once an index of general agricultural productivity in the two countries. It might appear from the figures of average hectare-yields (obtained from dividing the respective total paddy outputs by the respective gross cropped areas under that crop in the two countries) that the average level of agricultural productivity in China was nearly twice as high as in India. Again, if a comparison had been instituted between the average hectare-yields obtained from dividing the respective total paddy outputs by the respective net areas sown to that crop in the two countries, it would have appeared still more unfavourable to India; but that would have ignored the fact that a far larger proportion, than in India, of the paddy area in China was fertile enough or watered well enough to be double or treble-cropped as in the Yairgtze Plain which was always feeding half of China's population.

Neither of these comparisons, however, would have been a true measure of the comparative levels of agricultural productivity in the two countries. It would, on the other hand, appear from the figures of average hectare-yields of paddy, under comparable conditions of irrigation or non-irrigation, that the Chinese level of productivity was only about 50 per cent higher than the Indian level. Even this difference should have been due, almost entirely, to the higher average levels of soil fertility and of manuring in China. There is every reason to believe that this picture of comparative paddy productivity was repeated in the case of most other crops in the two countries. Although crop-wise irrigated area statistics are not available for crops other than paddy in China, a rough idea of general productivity could still be obtained from the two tables on page 56 giving average yields of the principal crops in the respective countries. It may be broadly inferred from the figures of acre-yields, in India, of wheat, cotton and sugarcane under irrigated and unirrigated conditions that the conclusion reached in respect of comparative paddy productivity might well apply to the general levels of agricultural productivity in India and China.

Comparative Development

BEFORE a comparative picture of agricultural production actuals and trends in the two countries can be drawn and explained, it is necessary to have a second look at the series of tables in the foregoing sections describing the basic agrarian contrasts and productivity trends in the period under study.

To take up land utilisation first. It may be found from Tables 1 and 2, that the net cultivated area in India had increased by 6.7 million hectares, or 4.6 per cent, in the period 1950-56 whereas in about the same period in China it had increased by 12.3 million hectares or 12.6 per cent. Of course, neither in India nor in China did this increase in net cultivated area represent so much additional land newly reclaimed for it is known that only about a million hectares of cultivable wastes were reclaimed in India as against China's 2.5 million hectares in the comparable period. In this respect India was bound to lag behind China for the simple reason that she had far less of cultivable wastes which could be economically reclaimed than the latter country had.

Secondly, in the matter or irrigation, Tables 3 and 4 would show that the net irrigated area in India (20.2 million hectares) was about the same as in China (20.3 million hectares) in 1949-50 and had increased by only 2.6 million hectares or 12.9 per cent, in the period 1949-56, as against China's 5.8 million hectares or 28.6 per cent. Here again, it would appear that India's performance did not match China's. But a little consideration of the irrigation potential created in the comparable period in India would show that this country's performance in terms of construction activity was even more spectacular than China's. It may be recalled here that by 1955-56 the potential was created, under India's major and medium irrigation projects and under minor works, to irrigate additional areas of about 3.5 million hectares and 3.9 million hectares respectively. But unfortunately the actual utilisation, by 1955-56, of the additional irrigation potential covered just 2 million hectares and this deplorable state of affairs was almost entirely due to the fact that only 1.6 million hectares of land utilised new irrigation under major and medium projects and 3.5 million hectares under older minor



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BOARD OF DIRECTORS:

1. *SRI KALIDAS ROY*
2. *SRI CHANDRA KUMAR MAZUMDER*
3. *SRI KALIPADA GHOSH*
4. *SRI SUNDAR LALL DUTT*

General Manager: R. N. KOLAY

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COLLEGE STREET, CALCUTTA (Phone: 34-3941) AND BANKURA

works did not appear to have benefited by irrigation with the construction of newer ones. If this had not been the case, India would have surpassed China by 1956 in the matter of net irrigated area. But that was not to be, and the peasant was largely responsible for this failure to utilise irrigation facilities fully. This failure, in its turn, was almost entirely due to the time-lag in the matter of adapting dry lands, at considerable expense, to wet cultivation — a time-lag which was perhaps inevitable 'at the time' on account of the rapid pace at which new irrigation potential was being created.

In regard to double or multiple-cropping, on the other hand, the comparative position revealed by Tables 5 and 6 was not wholly unfavourable to India. It may be seen that in spite of the additions, in the period 1949-56, to the areas sown more than once in the two countries, the multiple-cropped areas, expressed as percentages of the respective net cultivated areas, were about the same by 1956. In at least one respect, namely, the increase in multiple-cropped area which is irrigated, the position was static in China whereas in India such area had doubled in the period. This welcome trend would have been more significant in India if there had not been a regrettable under-utilisation of available irrigation water.

As regards wet paddy cultivation, Tables 7 and 8 would show that the gross area under the crop in China had nearly reached the level attained in India by 1956 and the irrigated paddy area in that country had also increased much more significantly. But irrigated paddy area, expressed as a percentage of gross paddy area, had not increased appreciably in either country since 1949. The initial gap in this regard thus continued to remain throughout the period.

In the matter of soil management, the progress registered in the two countries, in comparble physical terms, by way of use of chemical fertilisers, oilcakes, compost manures, etc., could not be measured in a more or less precise manner. But, in the light of the fact that the quantity of fertilisers and oilcakes distributed by co-operative societies to cultivators in China had increased from 100,000 tons in 1950-51 to 4.5 million tons in 1955-56 it may be inferred that manuring should have been maintained at a fair level from year to year. This should have been so on the assumption that in the earlier period, 1950-52, such fertilisers were mostly made available through private distribution channels. By and large in India, too, manuring during the period should have kept pace with the annual progress in this respect in China, judging by the identical pace of recovery of pre-war unit area yields in the two countries. It might, however, be noted that in neither country soil management through manuring had returned to the respective pre-war levels. This, again, would mean that the scale of effort, in physical and financial terms, required to recover lost ground in the matter of productivity and to surpass it in the respective countries was not commensurate with their respective overall needs. It would thus appear that China's effort in this regard was no more spectacular in relation to her pre-war level of productivity than India's was in relation to hers.

The picture of comparative agricultural development, as highlighted in this study in five specific respects (land utilisation, irrigation, double cropping, wet paddy culture and soil management) would now have to be rounded off with an appraisal of such development in terms of per-acre productivity. As unit area yields of different crops are based on their respective gross cropped areas, they are a more-or-less reliable and decisive test of efficiency in husbandry provided, of course, the irrigation factor is isolated. This has been done for different periods in the two countries in Tables 9 and 10 in respect of paddy. From these tables it would appear that neither in India nor in China were the standard or normal yields of irrigated and unirrigated paddy were recovered in the period 1950-56 and that in neither country were even the respective pre-war yields reattained. In India the 1950-56 average yields of irrigated and unirrigated paddy were 77 per cent of the respective standard yields and 88 per cent of the respective pre-war (1936-39) yields; in China, the 1950-56 average yields of irrigated and unirrigated paddy were 72 per cent of the respective normal yields of 1929-33 and 95 per cent of the respective pre-war (1931-37) yields. The only redeeming trend was that in 1955-56 India had nearly re-attained the pre-war (1936-39) yields while China had just crossed her pre-war (1931-37) level of yields.

As in the case of paddy, so in the case of most other principal crops. Here, of course, a comparison could not be made between the two countries separately for irrigated and unirrigated crops. However, a comparison would still be possible on the basis of average crop yields from irrigated and unirrigated lands together. It would appear from Table 'C' elsewhere in this section that the pre-war (1936-39) average yields of wheat, cotton, jute and sugarcane (gur) in India were either exceeded or nearly recovered in the period 1950-56. On the other hand, it would appear in Table 'D' elsewhere in this section that the pre-war (1931-37) average yields of most crops in China were not even nearly reached in the period 1950-56. As a matter of fact, the 1950-56 average yields of paddy, wheat, potato, soyabeans, cotton, tobacco, peanut and rapeseed in that country were only 95 per cent, 70 per cent, 29 per cent, 67 per cent, 94 per cent, 95 per cent, 71 per cent and 79 per cent, respectively, of her pre-war (1931-37) yields. Although the process of recovery of pre-war paddy yields in China was satisfactory and a shade better than in India, she was trailing behind this country insofar as the process of re-attaining the pre-war yield levels in respect of most other crops was concerned. The most significant conclusion that could be reached on these facts is that the magnitude of effort, in physical and financial terms, by way of distribution of fertilisers, improved seeds, improved implements, insecticides and pesticides etc., in China should not only not have been comparatively more than in India in the comparable period but should have been somewhat less. If irrigation water had been utilised more fully in India in the same period, the performance of her agriculture could well have been significantly better than China's in terms of agricultural productivity and efficiency. In that case the process of recovery of pre-war yields might well have been completed by the end of India's first Plan. As for per-man productivity, the position in the two countries was not known. In any case, this would not have been a reliable index of agricultural efficiency in densely-populated agrarian economies which had necessarily to keep varying numbers of more men on land than were strictly required for farm work.

Growth of Production

IT should by now be obvious that the process of largely-accomplished recovery of pre-war yields (which were higher than in India by about 50 per cent in the case of paddy and from 33-1/3 per cent to 50 per cent in the case of other crops) would have meant, as in fact it did, a correspondingly larger volume of production in China than in India on the assumption that the net cultivated and gross cropped areas alike remained

at the same respective levels in the 1950-56 period as in the pre-war period in the respective countries. But the area factor was not constant in either country, and so 'in relation to the pre-war period' the higher levels of output in the 1950-56 period in the respective countries should have been due entirely to the respective increases in gross cropped areas. And thus it could be roughly figured out that in China, in the case of all food grain crops including potato, a 24 per cent increase in the annual average of gross cropped area (112.2 million hectares) covering those crops in the 1950-56 period over the 1931-37 annual average of gross cropped area (90.6 million hectares) under such crops was responsible for a 22 per cent increase in their 1950-56 annual average output (160.3 million metric tons) over their 1931-37 annual average output (131.3 million metric tons). As the output increase percentage did not exactly correspond to the area increase percentage, it could be confirmed in this manner also that the recovery of pre-war unit area yields was not wholly completed in the 1950-56 period in China.

This was broadly true of India, too, where in the case of all food grain crops including potato, a 16.6 per cent increase in the annual average of gross cropped area (125 million hectares) covering those crops in the 1950-56 period over the 1936-39 annual average of gross cropped area (107.2 million hectares) under such crops was responsible for a 14 per cent increase in their 1950-56 annual average output (74.5 million metric tons) over their 1936-39 annual average output (65.4 million metric tons). As the output increase percentage did not exactly correspond to the area increase percentage it could be confirmed in this manner also that the recovery of pre-war unit area yields was not wholly completed in the 1950-56 period in India too.

The comparative production performance of the two countries would thus indicate that if a 24 per cent increase in gross cropped area had come about in India in the 1950-56 period, there would have been an output increase of about 22 per cent as in China. But that could not have possibly taken place for the simple reason that the scope for reclaiming culturable waste lands in this country was severely limited. It was thus inevitable that the growth of production in India should have been considerably less than in China in the comparable period. In a way this position is broadly, though not without some qualifications as to the base year 1949-50, reflected in the annual rate of growth of 9.3 per cent for food grains (as graphically presented in the chart elsewhere in this section) in China and in the annual growth rate of 4.1 per cent for food grains (as graphically presented in the chart elsewhere in this section) in India. If the comparative magnitude of effort in the two countries in the matter of reclamation of new lands, irrigation, etc., continues in the period 1956-61 to be the same as in the 1950-56 period, the respective growth rates could not possibly be less in the near future. But the actual chances are that while the area increase in China will continue to be considerably more than in India, the unit area yield increase might be arrested or slowed down with the institution of collectivised agriculture since 1957. On the other hand, the unit area yield increase in India will continue to be maintained or quickened under conditions of peasant proprietorship and of probable greater irrigation of double or multiple-cropped lands. It is not improbable, therefore, that the relative gap in the growth rates of production in the two countries might well begin to close in the period 1956-61 and close almost completely in the period 1961-66 when the possibilities of reclaiming vast extents of culturable wastes in China will have been nearly exhausted. The actuals running too closely parallel to the trends in China is too good to be maintained in the next decade.

It now remains to round off this picture of comparative production performance in the two countries by a reference to per capita production. For a population of 549 million in 1949-50 China's food grains production in that year was 111.4 million long tons; this represented a per capita production of 455 lbs. In 1955-56, China's food grains production was 131 million long tons for a population of 618 million; this represented a per capita production of 656 lbs. It may be seen that the availability, for an average Chinese, of domestic food grains, was 19.9 oz. per day in 1949-50 and 28.5 oz. per day in 1955-56. On the other hand, for a population of 352 million in 1949-50, India's food grains production in that year was 67.2 million long tons; this represented a per capita production of 428 lbs. In 1955-56, India's food grains production was 77.9 million long tons for a population of 381 million; this represented a per capita prduction of 458 lbs. It may be seen that the availability, for an average Indian, of domestic food grains was 18.8 oz. per day in 1949-50 and 20.1 oz. per day in 1955-56. The comparisons are made here in terms of food grains in husk; this means, for example, it is paddy, not cleaned rice.

An absolute gap of 8.4 oz. per capita per day in the availabilities of domestic food grains production in China and India may look somewhat depressing. This gap, however, may well disappear in the most likely conditions, in the coming decade, of a reduced rate of growth in China and of an increased rate of growth in India. In which case, per capita production in both the countries may well provide an average Chinese or an average Indian with about 84 oz. of food grains per day by the end of the next decade on the assumption that the annual rates of increase of population in the two countries will continue to be the same as in the decade under study. This country may thus take another decade to overcome the initial disadvantages of her inherited agricultural economy and break even with China in the matter of per capita production. This, again, is on the two-fold basic assumption that collectivised agriculture in China would not increase unit area yields and that peasant farming which is being strengthened in India would increase per-acre productivity. Here this study could be appropriately concluded with the same words as in the concluding paragraph of the projection-study of Indian agriculture; 1950-75, published in last year's Annual Number:

"That collective farming, or co-operative collective farming as it is sometimes called, might only destroy individual incentive and thus would not contribute to any striking increase in per-acre productivity, may be inferred from an unnoticed fact about Russian agriculture. The fact is that 3 per cent of Russia's arable land, while belonging to the State, remains divided into tiny plots available as private backyards for the collective-farm families and that this 3 per cent produces about 10 per cent of the U.S.S.R.'s agricultural output. Which means that the Russian farmer works three times harder on his vestige of personal property than on socialised land. There is no reason to believe that socialised land in China will surpass or at least maintain in the long run the high pre-acre yields reached long before collectivisation. All this should be as much a hope as it is a warning — hope that the farming organisation in India might continue over the next two decades to be basically what it is today, but vastly improved in its details and smoothly lubricated in its parts."

TABLE A.

SOWN AREA & PRODUCTION OF PRINCIPAL CROPS IN INDIA

Area in '000 acres. Production in '000 long tons

	1949-50		1950-51		1951-52		1952-53		1953-54		1954-55		1955-56	
	Area	Prodn.	Area	Prodn.	Area	Prodn.	Area	Prodn.	Area	Prodn.	Area	Prodn.	Area	Prodn.
Rice (Paddy)	75,414	34,755	76,135	30,377	73,713	31,446	74,036	33,806	77,318	41,654	75,949	36,797	76,253	38,211
Wheat	24,114	6,290	24,082	6,360	23,404	6,085	24,286	7,382	26,394	7,890	27,517	8,778	29,225	8,348
Potato	577	1,519	592	1,634	617	1,685	629	1,961	635	1,925	665	1,762	658	1,643
Misc. Food Crops	95,969	16,558	93,097	15,133	96,088	15,839	104,888	19,303	112,102	22,609	108,559	22,425	105,522	19,527
Gram & Pulses	49,833	8,030	47,175	8,278	46,394	8,287	49,039	9,044	53,695	10,450	55,300	10,870	55,100	10,187
Cotton	12,173	460	14,536	509	16,201	548	15,713	559	17,265	690	18,684	740	20,230	700
Jute	1,161	552	1,411	586	1,951	835	1,813	820	1,228	552	1,243	523	1,581	739
Tobacco	860	264	883	257	713	206	896	241	912	268	860	248	893	249
Sugarcane*	3,624	4,938	4,217	5,615	4,792	6,066	4,272	5,019	3,485	4,423	3,994	5,760	4,446	5,859
Groundnut	9,832	3,379	11,106	3,426	12,151	3,142	11,848	2,883	10,945	3,391	13,548	4,128	12,692	3,862
Rape & Mustard	4,781	793	5,118	750	5,934	925	5,201	844	5,345	858	6,025	1,019	6,262	832
Tea	..	261	..	271	..	286	..	301	..	263	..	289	..	..
Other Crops	..	9,772	..	9,835	..	9,834	..	9,659	..	10,982	..	11,832	..	..

* In terms of raw sugar (gur).

TABLE B.

SOWN AREA & PRODUCTION OF PRINCIPAL CROPS IN CHINA

Area in '000 Acres. Production in '000 long tons

	1949-50		1950-51		1951-52		1952-53		1953-54		1954-55		1955-56	
	Area	Prodn.	Area	Prodn.	Area	Prodn.	Area	Prodn.	Area	Prodn.	Area	Prodn.	Area	Prodn.
Rice (Paddy)	63,513	47,876	64,602	54,229	66,539	59,598	70,118	67,344	69,967	70,144	70,957	69,731	72,073	76,792
Wheat	55,154	13,592	56,327	14,266	56,957	16,958	61,219	17,839	63,334	17,991	66,623	22,966	66,059	22,602
Potato	17,320	9,685	19,013	12,194	20,470	13,779	21,463	16,067	22,274	16,392	24,164	16,712	24,838	18,597
Miscellaneous Food Crops	117,114	35,234	118,975	42,030	120,299	42,586	24,636	50,706	126,741	49,894	125,677	48,492	129,531	54,057
Soya Beans	20,552	5,005	23,722	7,318	26,683	8,494	28,854	9,370	30,540	9,773	31,261	8,937	28,267	8,976
Cotton	6,843	457	9,353	682	13,550	1,014	13,774	1,283	12,797	1,156	13,494	1,048	14,262	1,494
Jute & ambary hemp	21	36	120	78	439	246	391	301	196	136	178	135	287	253
Cured Tobacco	150	42	151	56	589	238	460	218	472	209	538	228	623	293
Sugarcane	267	2,600	278	3,084	350	4,556	451	7,003	475	7,095	540	8,457	505	7,982
Sugarbeet	39	188	52	241	58	354	87	471	120	497	180	973	284	1,571
Peanuts	3,099	1,248	3,320	1,712	4,117	2,063	4,457	2,279	4,386	2,094	5,180	2,723	5,604	2,880
Rapeseed	3,743	72	3,516	672	3,871	766	4,603	917	4,119	865	4,216	864	5,776	954
Other Crops	..	..	..	..	..	..	11,816	..	14,181	..	16,079	..	17,927	..
Tea	..	40	..	64	..	78	..	81	..	83	..	91	..	106

Source: Report of the Indian Delegation to China on Agricultural Planning & Techniques.

TABLE C.

CROP-YIELDS IN INDIA

(In lbs. per acre)

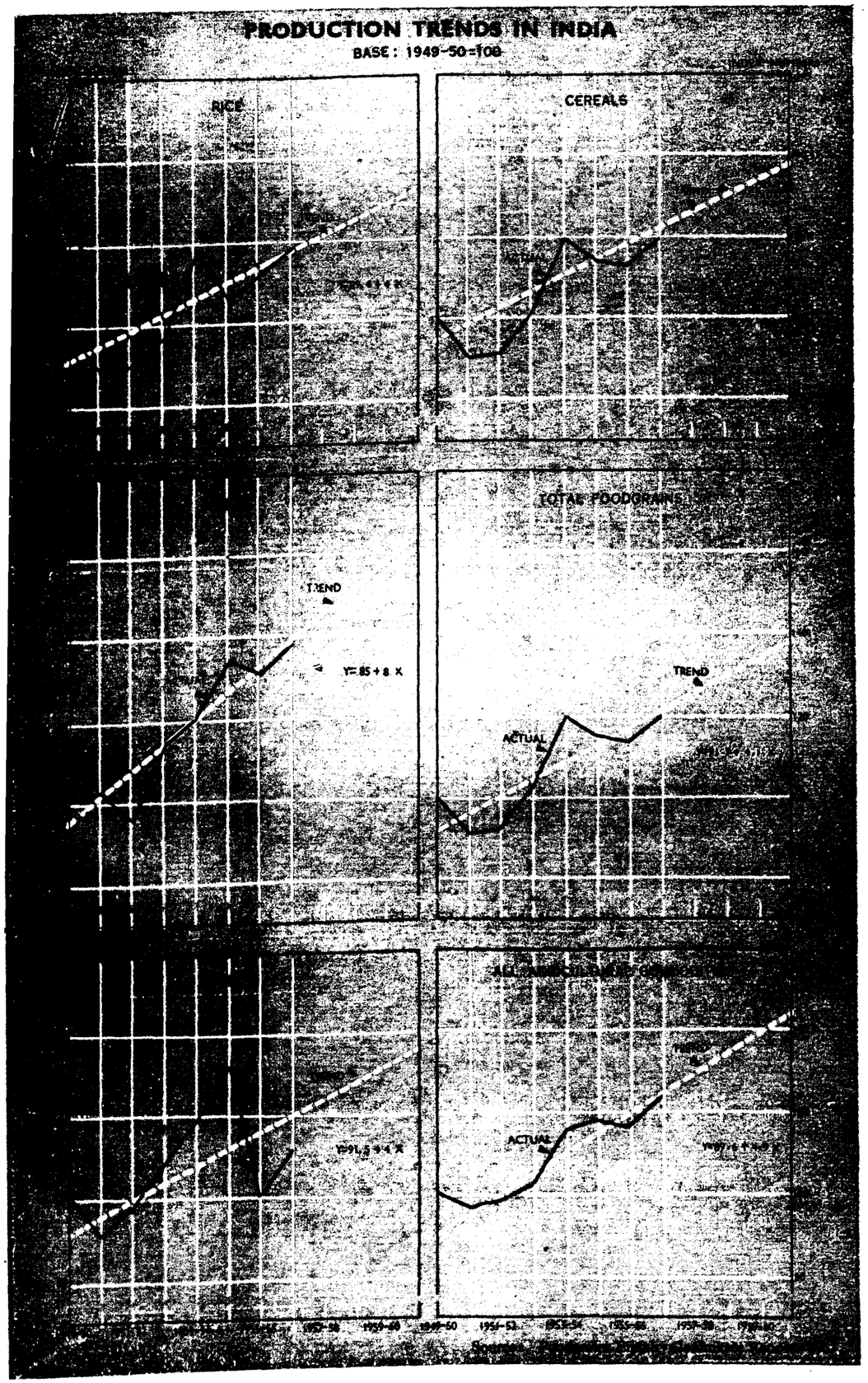
Crop	Standard Yield	1936-39 Average	1950-56 1949-50	1950-56 Average	1950-56 1955-56	1954-55 Irrigated	1954-55 Unirrigated
Rice (Paddy)	1,353	1,190	1,157	1,174	1,258	1,612	806
Wheat	828	618	584	647	640	1,052	526
Potato	—	—	5,897	6,252	5,593	—	—
Other cereals	—	—	386	413	415	—	—
All Cereals and Potato	—	—	675	693	717	—	—
Gram and Pulses	—	—	361	416	414	—	—
Cotton (lint)	111	78	85	82	77	268	134
Jute	1,296	884	1,062	983	1,047	—	—
Tobacco	977	839	688	637	629	—	—
Sugarcane (gur)	3,516	3,046	3,052	2,907	2,950	3,800	1,900
Groundnut	—	878	691	652	677	—	—
Rapeseed	502	385	372	344	294	—	—

TABLE D.

CROP - YIELDS IN CHINA

(In lbs. per acre)

Crop	1929-33 Average	1931-37 Average	1950-56 1949-50	1950-56 Average	1955-56	1954-55
Rice (Paddy)	2,971	2,260	1,689	2,146	2,387	2,201
Wheat	1,022	962	573	674	766	772
Potato	5,211	5,534	1,253	1,583	1,677	1,549
Other Cereals	—	—	674	863	935	864
All Cereals and Potato	—	—	949	1,198	1,318	1,231
Soya Beans	848	1,039	546	700	711	641
Cotton (lint)	—	205	145	192	234	174
Jute and Hemp	—	—	1,159	1,608	1,972	1,695
Tobacco	—	1,017	628	965	1,055	950
Sugarcane (cane)	—	—	21,788	32,136	35,438	35,053
Peanut	—	1,606	902	1,137	1,151	1,178
Rapeseed	—	553	433	436	370	459



Land Reform in India

THE organic connection between land tenure and productivity was always well recognised in India and hence the goal of post-Independence land reform in this country has been to expand and strengthen peasant proprietorship as a system of land holding best suited from the point of view of incentives to effort and enterprise in cultivation and of high unit area yields. Although the pace of land tenure and farm tenancy reform, with this goal in view, has not been as fast as some impatient agrarian reformers would have liked it to be, it has certainly been steady, measured and substantial and avoided the kind of large-scale human suffering which accompanied the all-too-sudden process of land redistribution and expansion of peasant proprietorship in the early years of Communist rule in China. The course of India's land reform thus provides an illuminating contrast to China's, and a review of its progress is called for if only to highlight its 'generally' humane character.

In the Indian Constitution agricultural lands are in the States' list, and the various State Governments have put through, in terms of a general land reform policy recommended by the Planning Commission, legislation for the abolition of intermediaries like Zamindars, Jagirdars and other similar tenure-holders between the State and the actual occupants of land. Although Zamindari abolition is only the logical culmination of a large body of pre-Independence tenancy legislation defining and even enlarging the rights of occupancy and quasi-occupancy holders of land under the intermediaries, it is now mostly completed in a manner that has brought a triple credit to the Congress-run State Governments—credit for giving or guaranteeing fair compensation to the displaced intermediaries most of whom were ardent supporters of British rule; credit for satisfying the aspirations of occupancy and quasi-occupancy ryots at little or no cost; and credit for largely doing away with the multiplicity of tenures and converting some of the old tenures into and approximating others to the ryotwari tenure. The ryotwari tenure, incidentally, has all along prevailed in respect of a little more than half of all cultivated lands in the country. Under this tenure, the ryot has always paid land revenue directly to the state and enjoyed absolute rights of ownership in his landholding.

It may be recalled that the Zamindari tenure was originally fashioned by the British rulers as a revenue settlement which farmed out to tax collectors (Zamindars) the right of collecting land revenue from the actual occupants of land. The earlier settlements were permanent settlements (as in Bengal and parts of Madras) under which the amount payable by each Zamindar to the State was fixed in cash in perpetuity; the later Zamindari settlements were temporary settlements (as in the United Provinces) under which the amount payable by each Zamindar to the state could be revised every thirty or forty years. Under both settlements which covered varying extents of land in the various British Indian Provinces, the occupants of land did not pay land revenue direct to the State, but paid it as rent through the Zamindar who retained a portion of it as collection charges; under both systems a chain of intermediaries, each claiming a share in the rent, grew up between the Zamindar proper and the occupants and thus the quantum of rent paid by the latter increased in due course. These occupants with hereditary and customary rights in their holdings were in due course statutorily protected by tenancy legislation which regulated their conditions of tenure including the rents payable and the conditions under which such rents could be raised. The occupancy tenants under Jagirdars (who were chiefly found in the Princely States) had also relatively secure permanent rights in their holdings. Broadly speaking, the occupancy holders had heritable and alienable rights and most of them were thus the 'virtual', though not full, owners of land. But the rent paid by them did not go in its entirety to the state, for a considerable portion of it was appropriated by Zamindars and other intermediaries, if any, under them.

The removal of these intermediaries has meant in all cases some fair compensation for that rental portion that is to be permanently denied to them. At the same time this abolition programme has meant that some sections of occupancy holders could now give the state rents which are lower than what they were formerly paying to the intermediaries but which are higher than the land revenue the Zamindars were formerly paying to the state on their behalf; and that some other sections of occupancy holders could continue to give the state rents which are about the same as they were formerly paying to the intermediaries but which are, again, higher than the land revenue the Zamindars were formerly paying to the State on their behalf. In either case the State would be getting, as in fact it has been in the last few years, an addition to its land revenue—an addition which, over a period of time, say, twenty to forty years, could cover the compensation (about Rs. 5,000 million) payable to the erstwhile intermediaries. In those cases where no additional land revenue would accrue to the state, the occupancy holder has himself to pay the compensation in one lump or in several instalments.

The state of Uttar Pradesh, for example, may give an idea of the sweep and magnitude, as well as the human and beneficent character, of the Zamindari abolition programme. In that State alone the programme has covered about 41 million acres of land, involving a total compensation of Rs. 1,600 million to about 2 million intermediaries. Of this amount, graded rehabilitation grants to smaller intermediaries who had been paying Rs. 5,000 and less as land revenue absorb Rs. 800 million. Two distinct types of tenure holders have emerged from the former medley of various classes of tenants—namely, the 'bhumidars' who formerly had absolute rights of occupancy and who now have unrestricted rights of ownership in their holdings and 'sirdars', who formerly had limited occupancy rights and who now have permanent and heritable but not transferable rights in their holdings which, however, cannot be used for any purpose other than agriculture, horitculture and animal husbandry. Former Zamindars are now 'bhumidars' in respect of their private lands and groves. Limited occupancy holders, if any, of Zamindars' private lands are now 'sirdars'. All the 4.4 million 'adhivasis' (a backward class of agriculturists) have also become 'sirdars' without paying any compensation. Sub-tenants under disabled 'bhumidars' and 'sirdars' and of groves, and tenants on lands of shifting and unstable cultivation have only protected cultivation rights. All 'sirdars' could have their rents reduced by half and become 'bhumidars' on payment of ten times their rent. About 25 per cent of such 'sirdars' have, by now, paid about Rs. 400 million and become 'bhumidars'. This amount which has gone into the U.P. Zamindari Abolition Fund, and the additional

'annual' land revenue of about Rs. 70 million would cover compensation payments to the former intermediaries over a period of time.

The case of Uttar Pradesh is described here only by way of illustration of the implications and consequences of a major land tenure reform which has expanded peasant proprietorship with a minimum of weeping and gnashing of teeth. The Zamindari abolition programmes in the other States have, of course, their own distinctive features according to their respective local conditions. While space forbids any elaboration of the other States' programmes, it would be relevant to note that this abolition reform has been a comparatively easy affair for some historical reasons like the reasonable success of pre-Independence tenancy legislation, the odium attached to Zamindars as "the feudal lackeys of British Imperialism" and the mass support of occupancy tenants to the Congress Party in its struggle for the country's freedom. But post-Independence tenancy reform ostensibly intended to protect tenants-at-will (who had never enjoyed secure rights of cultivation) under the former occupancy tenants and under such of those ryotwari landowners as were leasing out their lands, and on the personal lands of Zamindars and other intermediaries, has not only not been an easy affair but has actually turned out to be something of a fiasco (a blessing in diguise?) on account, again, of some historical reasons like the support given by occupancy tenants and ryotwari landowners to the Congress Party in the days of the freedom struggle and the support given by unprotected tenants and share-croppers (who were only glorified labourers) and by considerable sections of landless wage-labourers to Socialists, Communists and other left-wing groups. The rather unfortunate story of this post-Independence tenancy legislation is the theme of the following paragraphs.

The customary tenant-farming sector, which is to be clearly distinguished from the former occupancy tenant sector under Zamindari tenure, is now 'virtually' on its last legs. The customary tenant sector (in the ryotwari and former Zamindari areas) now covers just a tenth of all cultivated lands in the country whereas it covered prior to 1949 (when the fateful Congress Agrarian Reforms Committee under the chairmanship of Dr. J. C. Kumarappa reported) anything from a fourth to a third of all cultivated lands. Since 1949, a large body of legislation seeking to protect tenants-at-will and fix fair rents in some States and the threat of similar legislation in others have introduced many elements of friction and discord into what was a reasonably stable system. The Planners' proclaimed anxiety "to provide the tenant-tiller with fuller incentives for increasing agricultural production" inspired them to propose a drastic reduction in customary rents or owner-shares. (Incidentally, the experience of China was that on tenant-cultivated holdings some of the highest unit area yields were registered in spite of the fact that in that country land rents were generally not higher than in India). But the verdict of tenancy legislation up till now in most States has underlined the crucial importance of rent in the regulation and determination of landlord-tenant relations. It is notorious that the fixing of rents at an unrealistically low level (without any organic correlation to the surrounding level of agricultural wages) or even the mere threat of introduction of such rents has been the biggest single factor in provoking non-cultivating landowners throughout the country to resume lands on a large scale for personal cultivation, that is, cultivation with or without the help of cheap casual labour. Although the Planning Commission's view that a "fair wage" for the tenant could be had only from a 75 per cent or 80 per cent share of gross produce for him has not found uniform favour with all the State Governments, the reduction of rents in most States has still been pretty drastic, ignoring the consideration that the landowner could not possibly have at the same time either a reasonable share of the crop for his own livelihood or even a fair return on his investment in land.

The unfortunate and unintended effects of protective tenancy legislation based on a low level of rents in a number of States are already public knowledge. In Hyderabad, nearly 121,000 'protected' tenants out of a total of 21,000 were dispossessed between 1951-52 and 1954-55 and the area under 'protected' tenancy had come down from about 2.7 million acres to 1.1 million acres. Nearly 75 per cent of dispossessions were due to 'voluntary' surrenders which, in turn, were largely due to ignorance of protected tenants regarding their rights and to lack of resources for cultivation or for litigation; and nearly 15 per cent of dispossessions were due to evictions of which, in turn, about 80 per cent were illegal, brought about by undue influence. Of the landowners who had thus resumed lands, 57 per cent kept them under their personal cultivation while 34 per cent leased them out to others (probably for rents higher than the low statutory rents). The second Plan document has also spoken of large-scale ejectment of tenants in some States and of 'voluntary surrender' of tenancies which are not 'bona fide' transactions. In many villages of Punjab and Pepsu dispossessions have occurred in spite of the law staying ejectment of tenants. Many crop-sharers have been evicted in Bihar and West Bengal. In Bombay, between 1948 and 1951, the number of protected tenants declined by 20 per cent and the area under protected tenancy also by 20 per cent. And so Prof. M. L. Dantwala, one of the foremost liberal agrarian reformers in the country, has commented on the situation: "The surveys conducted by the Research Programme Committee have clearly revealed that both in regard to security of tenure and reasonable rents the provisions of legislation are almost a dead letter. It is estimated that there have been more evictions in the last ten years than in the previous hundred years. The Planning Commission, however, has chosen to avoid highlighting these facts, obviously for political reasons."

Prof. Dantwala's view, like that of Mr. Wolf Ladejinsky, is that if security of tenure is statutorily accorded statutory 'fair' rents would automatically come to prevail. The landlord-tenant system in India has, however, given the lesson that if 'fair' rents are unrealistically low, even statutory security of tenure would only be honoured more in the breach than in the observance. It is estimated in this connection that the present truncated tenant sector will be reduced in the coming four or five years to about 5 per cent of all cultivated lands in the country with the institution of certain provisions in legislation for resumption of tenant-occupied lands for personal cultivation by owners.

The elimination of large numbers of tenants as a class would have been an eminently desirable operation if it had been possible to enable them to rise to the proud status of owners under a country-wide tenant-purchase programme. But that was not to be except, to a very limited extent, in some States. And thus it came about that the downgrading of a considerable section of tenants as landless labourers was the only unfortunate feature of an otherwise even process of land reform in India. Although this regrettable development could well have been avoided by a little forethought in the matter of rent fixation, the fact nevertheless remains that it has had the twin effect of consolidating the landowning agriculturists (represent-

TABLE E.

PRODUCTION TRENDS IN INDIA

(Index Numbers with 1949-50 as Base)

Year	Rice	Wheat	Jowar	Total Cereals	Total Food Grains	All Agricultural Commodities
1949-50 ..	100 0	100.0	100.0	100.0	100.0	100.0
1950-51 ..	87.9	101.0	89.8	90.3	90.5	95.6
1951-52 ..	90.1	93.9	96.4	91.2	91.1	97.5
1952-53 ..	96.8	112.7	106.6	101.4	101.1	102.0
1953-54 ..	116.6	120.0	117.0	120.1	119.1	114.3
1954-55 ..	105.5	133.7	133.4	114.0	114.4	116.4
1955-56 ..	112.7	130.5	98.5	113.7	113.5	115.9
1956-57 ..	118.1	138.1	110.6	119.4	119.6	123.0

Source: Directorate of Economics and Statistics, Ministry of Food and Agriculture. 1956-57 indices are based on Final Estimates and are subject to revision.

N.B.: The data have ben utilised in Chart VII of the Report of the Food Grains Enquiry Committee; this chart is reproduced in the Agriculture section of the Annual Number.

TABLE F.

PRODUCTION TRENDS IN CHINA

(Index Numbers with 1949-50 as Base)

Year	Rice (Paddy)	Wheat	Total Food Grains
1949-50 ..	100	100	100
1950-51 ..	113	105	116
1951-52 ..	124	125	126
1952-53 ..	141	131	143
1953-54 ..	147	132	145
1954-55 ..	146	169	148
1955-56 ..	160	166	159

N.B.: The Statistics Department of 'The Eastern Economist' have used these data in its chart elsewhere in this Section of the Annual Number.

TABLE G.

AGRO-TECHNICAL DEVELOPMENT IN MAINLAND CHINA, 1950-1956

(In 1,000 acres, if not otherwise indicated)

	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56
1. Acreage newly reclaimed		1949-1952:	280	1,525	2,061	2,165
2. Acreage newly afforested	290	1,040	2,000	2,780	2,900	4,260
3. Acreage newly irrigated	1,113	2,000	4,250	1,630	1,950	3,170
4. Area sown with improved seeds Cotton	19%	28.8%	51%	n.a.	n.a.	70%
Wheat and Rice			10%	n.a.	n.a.	n.a.
5. New farm tools distributed (1,000 pieces) ..		12	30	570	400	530
6. Chemical fertilizer distributed (1,000 tons) (including soyabean cakes)	100	200	350	3,600	4,000	4,500
7. Power pumps distributed (1,000 h.p.)					137	700
8. Insecticides distributed (1,000 tons)						90
9. Total cultivated acreage (1,000 acres)			269797	271,322	273,383	275,390
10. Total crop acreage (1,000 acres)	n.a.	n.a.	353,140	360,090	369,813	377,705

Source: Data compiled from N.C.N.A. releases, J.M.J.P., and various other sources.

TABLE H.

FISCAL AND FINANCIAL PROGRAMMES IN AGRICULTURE IN MAINLAND CHINA

	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56
	(In million metric tons, if not otherwise indicated)						
1. Total grain production, unprocessed grain. Percentage increase over previous year . .	113.18	131.4 (16.1%)	143.4 (9.1%)	163.915 (14.3%)	166.83 (1.8%)	169.515 (1.6%)	184 (8.5%)
2. Amount of public grain collected as tax (in terms of "fine grain" which contain some dehusked grain)	20.30	17.67	21.87	19.4	17.55	19	19
3. Tax grain in terms of unprocessed grain as in 1. (The average depreciation rate from 1 to 2 is about 10.3%) . . .	22.636	19.71	24.378	21.637	19.574	21.2	21.2
4. Percentage of 3 to 1 . . .	20%	15%	17%	13.2%	11.73%	12.51%	11.54%
5. Grain purchased by State (Unprocessed)		7.241	11.482	25.511	30.73	30.72	26.97
6. Total of 3 and 5		26.95	38.86	47.15	50.30	51.92	48.17
7. Value of Agricultural tax (in billion yuan. One yuan equals U.S. $0.4246)		1.890	2.168	2.601	2.905	2.377	3.05
8. Percentage of Agricultural tax in national budget receipts .		29.63%	18.17%	17.08%	13.48%	12.4%	11.22%
9. Grain exported (processed; about half were soybeans) .			(1950-1952: 4.5 million tons)		1.6	1.75	n.a.
10. Grain imported			none	none	none (rice)	0.40	n.a.
11. Rural credit extended to peasants (million U.S.$) . .				310	660	860	510
12. State investment in agriculture, conservation, irrigation, forestry, and meteorology services (million U.S.$) . .					499.7	583.8	628

TABLE I.

THE DEVELOPMENT OF ORGANISED FARMING IN MAINLAND CHINA

	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956	1957 (original goal)
1. No. of mutual aid teams (in 1,000)	300	456	8,300	10,000	n.a.	n.a.	n.a	
2. No. of households to the mutual-aid terms (1,000)	11,313	n.a.	45,364	45,637	68,478	60,389	n.a.	
3. No. of Agriculture producers coops (1,000)	0.018	0.3	3.63	15	114.16	633.2	700.9 (May)	
4. No. of households in the APC (1,000)	0.18	n.a.	57	273	2,285	16,881	35,414 (May)	
5. No. of higher APC (collective farms)	1	n.a.	10	15	201	529	302,756 (May)	
6. No. of households in the higher APC (1,000)	0.032	n.a.	1.8	2.1	12	40	74.72 (May)	
7. Membership in the supply and marketing coops (In million) ..	25	46	138	150	163	n.a.	n.a.	
8. No. of credit coops (1000)				6.9	n.a.	155	220	
9. No. of state farms (mechanised ones in brackets)	1,215 (36)	n.a.	2,336 (50)	2,376 (59)	2,415 (97)	2,242 (106)	(152)	(141)
10. No. of tractor stations					89	138	275	194
11. Total no. of peasant households (In million)	105,536	n.a.	113,683	116,325	117,331	119,201	n.a.	

N.B. Data compiled from N.C.N.A. releases, J.M.J.P. and various other sources. Peking's statistics, while not comprehensive in certain areas, are extensive enough now to permit some cross-checking.

Nature's Weavers . . . I

The Yellow Warbler builds in tiers

It appears strange that a bird should build a nest upon its own nest. But the bright little yellow Warbler does exactly so!

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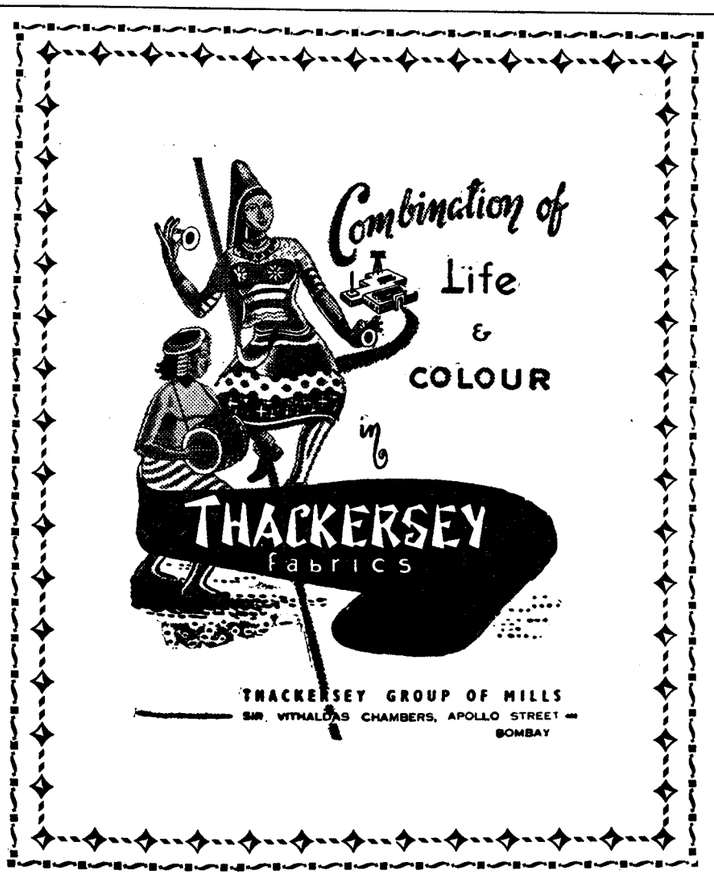
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ying nearly 33 million predominantly smallholder-families as against 19 million landless agriculturist families in the country as a whole) and of strengthening peasant proprietorship. Increased production aids to this numerous class of peasant proprietors and attempts to consolidate their fragmented holdings, though still not commensurate with the over-all requirements, have nevertheless been strengthening peasant proprietorship in their own small way with a view to rendering it more prosperous and stable. This is the supreme objective of India's Community Project and N.E.S. areas wherein increasing emphasis on service co-operatives may be expected to ensure better returns for the peasant farmer by way of economic marketing and cheaper credit and supply of agricultural requisites.

Land Reform in China

IF the Indian National Congress promised 'land to the tiller' — the word 'tiller' being originally identified with the occupancy and quasi-occupancy tenants of zamindari areas and later expanded to cover tenants-at-will in ryotwari and sub-tenants in zamindari areas, but not the landless labourers — and largely fulfilled that promise in a peaceful manner calculated to strengthen peasant proprietorship, the Chinese Communists promised 'land to the landless' — the word 'landless' being mostly identified with the numerous class of rural proletarians — and fulfilled that promise with a vengeance and in a manner calculated to destroy the inherited structure of peasant proprietorship which had been responsible for some very high unit-area yields in the world. The potential destruction of peasant proprietorship was implicit in the ridiculously exaggerated egalitarianism which marked the process of distribution, to the resourceless landless labourers, of about 120 million acres of confiscated land in parcels too tiny for economic cultivation. A numerous class of rural proletarians who benefited by the land redistribution reform was thus pitted against the older class of peasant proprietors and cultivating tenants and methodically used to destroy, by rapid stages, the entire structure of peasant proprietorship. And thus what seemed to expand with the institution of radical land reform in 1949-50 ended up, by stages, in collectivisation by 1957. It was all too ultra-democratic to be lasting. Peasant proprietorship is thus no more than a memory now in China — a bitter and painful memory to millions and millions of peasant farmers whose independence was destroyed in one fell swoop for which there was no parallel except in the Soviet Union.

All this was part of the history of the decade under study — a sordid history meriting narration both as a contrast to India's agrarian history in the same period and as a frightful warning to this country's peasantry. It all began this way. Long before they came to power, the Communists recognised in the inequalities of land ownership what Mr. Wolf Ladejinsky has called "the most dramatic and politically exploitable issue." And they adroitly exploited, in the course of the long civil war, the land-hunger of tenant-farmers who did not own the land they had been cultivating, of poor and small owners who had necessarily to rent some additional land to make their cultivated holdings reasonably economic and of landless labourers who were as numerous and resourceless in China as in India, and turned it against the big owners, representing 10 per cent of 110 million peasant-families and owning 50 per cent of all cultivated lands, and the medium owners who were typical peasant-proprietors, largely cultivating their holdings with family helpers and owning 18 per cent of all cultivated lands. Immediately after they came to power the Communists promulgated the Agrarian Reform Law of 1950 under which about 120 million acres representing 43 per cent of all cultivated lands were expropriated, without compensation, from the big owners and distributed to small owners, tenants and labourers. At the same time, tens of thousands of houses belonging to big owners, about 30 million draft animals, 40 million agricultural implements and 5 million tons of foodstuffs were confiscated, again without compensation, and redistributed under the law. What was still worse, tens of thousands of big owners were physically annihilated; the number of such victims was anything between 800,000 and 2,000,000. Subsequently, in the next two or three years, lands amounting to 10 per cent of the entire cultivated acreage were similarly confiscated from medium owners and redistributed. The final result of this violent and utterly unjust 'reform' — unjust in the sense that expropriation did not have even the saving merit of being fairly or reasonably compensated — was that big owners were left with just 3 per cent and medium owners with only 8 per cent of all cultivated lands while small owners — both old and new — came to have 63 per cent of all such lands.

Even this phase of small-scale ownership and peasant farming did not last long, and soon 'commandism' came into play through Government cadres in all the villages handing down to the peasants orders from above in the matter of even normal cultivation operations like ploughing, planting, sowing, weeding, harvesting and so on. It was 'discovered' at this stage that improved techniques could not be adopted on the millions of one-or two-acre owner-operated farms, and thus a plausible economic argument was invented to organise the peasants in producers' co-operatives. There was really no discovery here for the Communists knew what they were doing when they increased the number of uneconomic and sub-marginal peasant farms to ridiculous lengths so as to discredit peasant proprietorship and ultimately destroy it. If they had, at any time, really intended to make it prosperous and stable, they would have done something about the twin evils of subdivision and fragmentation and tried to create more of economic and compact peasant farms. As this was never the intention of Communists, it was always clear to liberal agrarian reformers where they (the Chinese Communists) were heading. And so it was not much of a surprise when in 1955 producers' co-operatives began to be energetically organised — the kind of joint farms which retained individual property rights and allowed a portion of the produce as rent for the pooled lands. What was really surprising was that the Communists did not deem it necessary to keep up for long the pretence that they, too, could safeguard private property rights, for very soon, in the next year itself, they were to turn the large masses of new small farmers (who were formerly landless labourers and who were now tightly controlled by Communist cadres) against the medium owners in the co-operatives, to do away with 'land divi' (rent) and to convert the joint farms into collective farms which socialised land and reduced all peasant-members to the position of labourers. By mid-1957, agricultural collectivisation, begun in late-1956, was nearly completed.

That the Communists in China were able to redistribute lands on the largest possible scale in the first phase and to socialise them in the final phase—all within barely six years—was something spectacular as a root-and-branch revolution, however unjust the whole process might have appeared to a devout Hindu

who saw in it a double dose of 'adharma'. For 'adharma' it was where it involved expropriation, without compensation and without any regard for human welfare, of movable and immovable proptrty on a la:ge scale in its first phase; drastic reduction of income attributable to ownership and equally drastic abridgement of private property rights in land, again without compensation, in the middle phase of co-operativisation; and total abolition, without compensation, of all lingering private property rights in the final phase of socialisation of land and collectivisation of agriculture. A worse and more galling piece of 'adharma', in the eyes of a dharmik Hindu, was the taking back of what was gifted way to millions and millions of poor peasants and labourers at an average of one-third acre of land per capita or of an acre and a half per household. To the 110 million peasant families, it must have been a blow too hard to bear, although every former owner had now the privilege (called 'right' in Communist parlance) to work on land and earn his livelihood if, without brooding over the loss of his property, he could somehow reconcile himself to the new scheme of things.

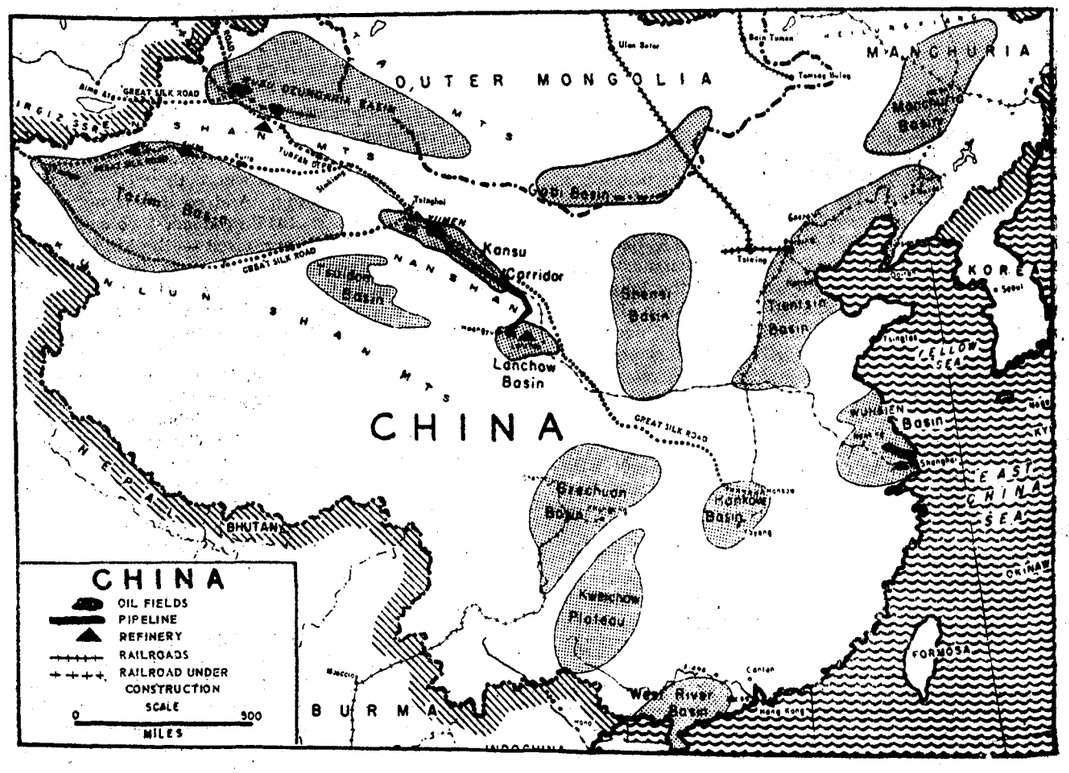
From the Communists' point of view, however, this agrarian and human tragedy was justified on the score of a practical reason, a compelling political reason and an equally compelling economic reason. The practical reason was that it would be administratively far easier to collect the agricultural tax in grain (amounting to anything up to 20 per cent of gross produce as against 3 per cent or so by way of land revenue in India) and to procure surplus grains for urban areas, from a few lakhs of collectives than from many millions of smallholders. The political reason was that an independent peasantry might constitute a potential danger to the centralised Communist power. And the compelling economic reason was that the dynamics of rapid industrialisation required a larger and more dependable flow of investible surplus from agriculture into industry. (Incidentaliy, to the extent this flow was unduly large, to that extent it would mean some very low re-investment in agriculture and, as a consequence, static or even lower per-acre productivity in the long run.) All these reasons, however powerful and understandable they were, could not have possibly assuaged the woes of that class of relatively guileless and unsophisticated human beings—the peasantry.

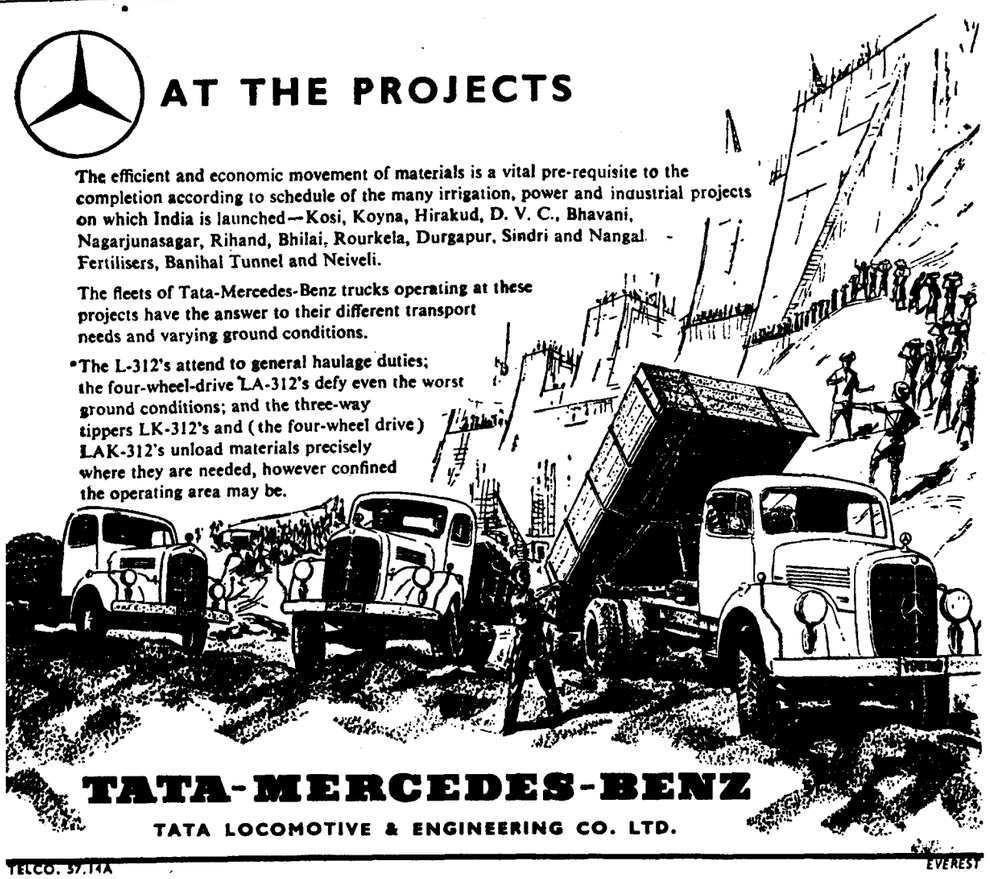
Thus ended a process of land reform which first deprived the big owners of their lands and then the medium and small owners and the beneficiaries of land gifts of theirs too. The insidious technique of 'class-differentiation' by which the highest class at any particular stage was isolated and the other classes lower down were ranged and directed against it, did the trick. At every stage in this technique of isolating one class after another, jealousy of the more well-to-do was employed as a pitiless weapon. At every stage the Chinese process of land reform and ultimate socialisation was marked by a degree of hypocrisy, violence, coercion, and injustice without parallel in world's agrarian history. All this was tragically true. But the mildest description of the entire thing would be, in the words of Mr. Wolf Ladejinsky, that "within a period of eight years the Communists both accumulated and dissipated most, if not all, of their political capital in the countryside" and are now "harvesting a crop of discontented peasants with interests and objectives quite at variance with those of the State." The Poet's poignant lines, written in the seventies of the eighteenth century, have an ironic relevance in the context of collectivised agriculture in China:

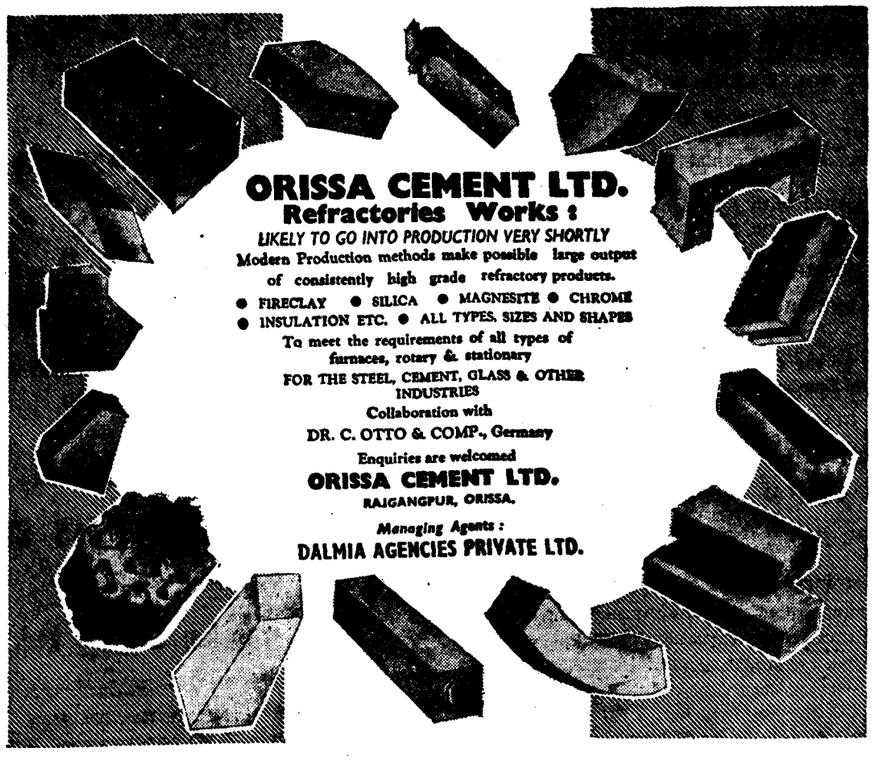
Princes and lords may flourish, or may fade;
A breath can make them, as a breath has made;
But a bold peasantry, their country's pride,
When once destroy'd, can never be supplied.

A CORRECTION

In Table I on Page 62, in the last item giving the total number of households the words "In million" may be read as 'In thousands".







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AREA, POPULATION AND FOOD AVAILABILITY IN TWENTY COUNTRIES

	Country	Area (Sq. Miles)	Population Year	Population Million	Density of Population	Cultivated land per head of population	Average daily calorie supply per head
1.	Barbados	166	1953	.22	1,331	0.30 acre	2,410 (1944)
2.	Puerto Rico	3,419	1953	2.23	655	0.42 „	N.A.
3.	Mauritius	720	1953	.53	729	0.38 „	2,240 (1948)
4.	Egypt•	14,600	1953	21.9	1,500	0.23 „	2,340 (1952)
5.	Java*	50,700	1953	51.2	1,009	0.43 „	1,880 (1949)
6.	**India**	**1,270,000**	**1953**	**372.0**	**293**	**0.83 „**	**1,640 (1952)**
7.	**China****	**3,760,000**	**1953**	**583.0**	**156**	**0.58 „**	**2,030 (1949)**
8.	Brazil	3,300,000	1954	57.1	17	0.81 „	2,350 (1952)
9.	Gold Coast†	91,800	1953	4.5	49	2.93 acres	N.A.
10.	Burma	262,000	1953	19.0	73	1.11 „	1,990 (1947)
11.	Japan	142,000	1953	86.7	609	0.15 acre	2,150 (1952)
12.	Italy	116,000	1953	47.0	405	0.81 „	2,580 (1952)
13.	Switzerland	15,900	1953	4.9	307	0.22 „	3,110 (1952)
14.	U.S.A.	3,000,000	1954	162.4	53	2.94 acres	3,120 (1952)
15.	Canada	3,800,000	1953	14.8	4	6.54 „	3,130 (1952)
16.	U.S.S.R.	8,600,000	1954	216.0	25	2.73 (1947)	3,020 (1949)
17.	Republic of Ireland††	26,600	1953	2.94	111	1.05 „	3,500 (1952)
18.	France	212,736	1953	42.9	201	1.22 „	2,850 (1952)
19.	Sweden	170,000	1953	7.2	42	1.31 „	N.A.
20.	U.K.	94,209	1953	50.29	539‡	0.38 acre	3,060 (1952)

	Country	Births (per thousand)	Deaths (per thousand)	Natural increase (per thousand)	Annual increase in Population
1.	Barbados	32.8	14.1	18.7	4,000
2.	Puerto Rico	34.8	8.1	26.7	2,000
3.	Mauritius	46.5	14.9	31.6	20,000
4.	Egypt	43.0	20.0	23.0	510,000
5.	Java*	Over 40.0	Over 20.0	At least 15.0	800,000 (Approx.)
6.	**India**	**40.0**	**27.0**	**13.0**	**4,800,000**
7.	**China****	**37.0**	**17.0**	**20.0**	**11,600,000**
8.	Brazil	42-44(1953)	18-20(1953)	22-26(1953)	1,280,000
9.	Gold Coast†	N.A.	N.A.	15.0 (Approx.)	68,000
10.	Burma	47.5	35.7	11.8	186,000
11.	Japan	21.5	8.9	12.6	1,200,000(1952-53)
12.	Italy	17.2	9.8	7.4	342,000
13.	Switzerland	17.0	10.6	6.4	69,000
14.	U.S.A.	(24.7)-1953; 25.2(1954)	9.6(1953) 9.2(1954)	15.1(1953) 16.0(1954)	2,800,000 (1953-54)
15.	Canada	27.9	8.6	19.3	382,000
16.	U.S.S.R.	24-26(1953)	9.0(1953)	15-17(1953)	3,000,000 (approx)
17.	Republic of Ireland††	21.4	11.8	9.6	9,000 (decrease)
18.	France	18.7	12.9	5.8	321,000 (1952-53)
19.	Sweden	15.4	9.7	5.7	57,000 (1952-53)
20.	U.K.	15.9	11.4	4.5	163,000 (1952-53)

* Java here means the Island of Java and the small satellite Island of Madura.

** Excluding Formosa.

† Including British Togoland.

†† Excluding Northern Ireland.

‡ 754 for England and Wales only.

Source: World population and resources by Pep.

INDIA'S NATIONAL INCOME, 1948-49—1955-56

Net National Output at Current Prices

In Rs. abja*

	1955-56**	1954-55	1953-54	1952-53	1951-52	1950-51	1949-50	1948-49
1. Agriculture, animal husbandry and ancillary activities (a)	42.2	43.5	53.1	48.1	50.2	48.9	44.9	42.5
2. Mining, manufacturing and small enterprises	18.7	18.1	17.7	17.0	16.8	15.3	15.0	14.8
3. Commerce, Transport and Communications	18.5	18.1	18.0	17.8	17.9	16.9	16.6	16.0
4. Other services (b)	17.1	16.5	16.0	15.4	15.0	14.4	13.8	13.4
5. Net domestic product at factor cost	96.5	96.2	104.8	98.3	99.9	95.5	90.3	86.7
6. Net earned income from abroad	0.0	0.0	0.0	—0.1	—0.2	—0.2	—0.2	—0.2
7. Net national output at factor cost= national income	96.5	96.2	104.8	98.2	99.7	95.3	90.1	86.5

Net National Output at Current and Constant Prices

	1955-56**	1954-55	1953-54	1952-53	1951-52	1950-51	1949-50	1948-49
Net output in Rs. abja*								
1. At current prices	96.5	96.2	104.8	98.2	99.7	95.3	90.1	86.5
2. At 1948-49 prices	104.2	102.8	100.3	94.6	91.0	88.5	88.2	86.5
Per Capita net output in Rupees								
3. At current prices	252.0	254.4	280.7	266.4	274.0	265.2	253.9	246.9
4. At 1948-49 prices	272.1	271.9	268.7	256.6	250.1	246.3	248.6	246.9
Index number of net output with 1948-49 as base								
5. At current prices	111.6	111.2	121.2	113.5	115.3	110.2	104.2	100.0
6. At 1948-49 prices	120.5	118.8	116.0	109.4	105.2	102.3	102.0	100.0
Index number of per capita net output with 1948-49 as base								
7. At current prices	102.1	103.0	113.7	107.9	111.0	107.4	102.8	100.0
8. At 1948-49 prices	110.2	110.1	108.8	103.9	101.3	99.8	100.7	100.0

* abja=100 crores.

** Preliminary.

Net National Output at 1948-49 Prices

	1955-56**	1954-55	1953-54	1952-53	1951-52	1950-51	1949-50	1948-49
								In Rs. abja*
1. Agriculture, animal husbandry and ancillary activities (a)	49.8	50.3	49.8	46.0	44.4	43.4	43.6	42.5
2. Mining, manufacturing and small enterprises	17.5	17.0	16.5	15.8	15.2	14.8	14.6	14.8
3. Commerce, Transport and Communications	19.7	19.1	18.3	17.9	17.3	16.6	16.4	16.0
4. Other services (b)	17.2	16.4	15.7	15.0	14.3	13.9	13.8	13.4
5. Net domestic product at factor cost	104.2	102.8	100.3	94.7	91.2	88.7	88.4	86.7
6. Net earned income from abroad	0.0	0.0	0.0	—0.1	—0.2	—0.2	—0.2	—0.2
7. Net national output at factor cost= national income	104.2	102.8	100.3	94.6	91.0	88.5	88.2	86.5

* abja=100 crores.
** Preliminary.

(a) Including forestry and fishery.
(b) Comprising professions and liberal arts, government services (administration), domestic service and house property.

Source: Estimates of National Income by the Central Statistical Organisation.

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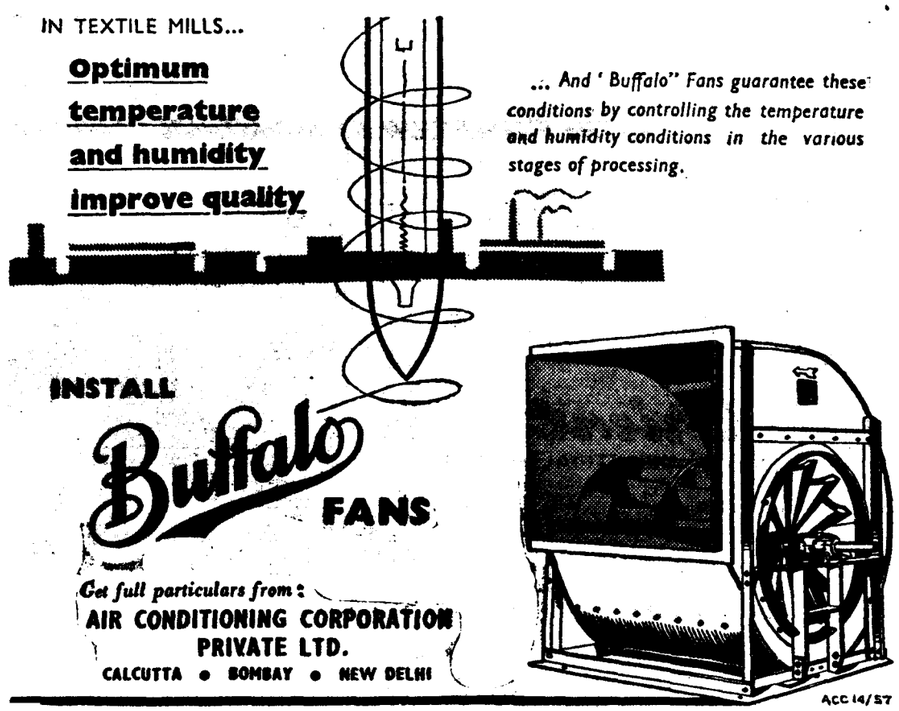
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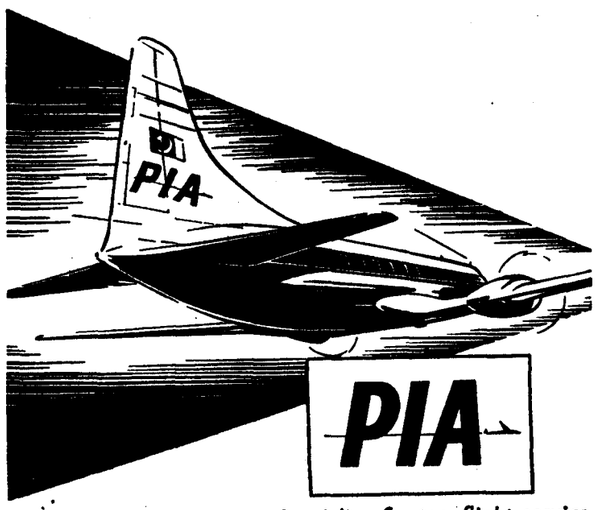
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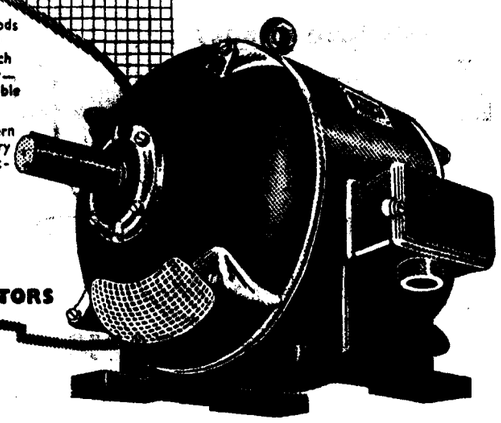
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Industrial Growth in India and China: Targets and Performance

WESTERN type factories in numbers were set up in India and China only at the close of the nineteenth century. These factories tended to remain near the coasts being largely connected with the export trade or because of facilities offered by concentration. The result was that the economies of the interior areas remained relatively unexplored and unexploited. In China, industrial development in 1949 was at the same level as that of post-war India. W. W. Rostow has estimated that China's industrial development in 1949 and India's industrial status in post-war days was the same as that of Japan in 1920-25, Russia in 1913 and the United States in 1870.

The peak production in modern factory enterprises in China before 1949, it has been estimated, did not employ more than 3 million workers. Total output of these factories accounted for hardly 10 per cent of the national income. Similarly in the case of India, the share of industrial output in the pre-independence year, was a little less than 10 per cent of the total national income.

Great stress, however, is laid on the industrial development plans which China and India have chalked out for the economic betterment of the countries. India has already completed its first Five-Year Plan and is at the moment completing the 2nd year of the second Plan. It has made remarkable progress in the first Plan. Similar claims are made by the Chinese also in regard to the over-fulfilment of certain targets in the first Five-Year Plan of China.

It is very difficult to compare the rates of advancement in industry in both the countries. Whereas, in the Indian Union we have a scientifically computed index of industrial production, we have no such index in the case of China. Moreover, the details which have been made available by the official sources in regard to the production targets attained relate only to a small number of industries. The technique of evaluating industrial advancement in China is shown in Table I set out on page 74. The practice is to evaluate the output in each industry in terms of prices for a certain year. It is not clear how the introduction of new industries is taken care of in this computation. For example, if, as in the table on page 74, the total value of industries is calculated on the basis of 1952 prices, how is account taken of those new industries which were started after 1952?

TARGETS OF PRODUCTION

The Chinese had set a target of "90.3 per cent rise" in industrial output including handicraft production. It is claimed that this target was attained in 1956, a year ahead of schedule. This claim has not been substantiated in detail, and unless more statistical data is made available it will not be possible to have an appropriate comparison. In the case of India's first Five-Year Plan, the Review of the first Five-Year Plan shows that the index of industrial production registered an overall increase of about 38 per cent. The production of consumer goods in India in the first Plan period rose by 48.73 per cent. Similarly, intermediate goods rose by 48.81 per cent. Since the first Plan laid very little stress on the production of capital goods, the total rise in their goods was 7.46 per cent only.

CONSUMER GOODS

The fact that China has been starving its population of the necessary consumer goods is apparent from a table in this Section showing per capita production of the chief industries in India and China. It shows that India ranks substantially higher than China in respect of cotton textiles, sugar and cement. China on the other hand is, on per capita basis, having more coal, steel and pig iron.

PRODUCER GOODS

India also has laid greater stress on capital goods in the second Five-Year Plan. Since the core of the second Plan which is not being pruned under any circumstances, includes steel, coal and transport, it is clear, by 1960-61, India's production of producer goods will not be less than that of China on per head basis.

It is an interesting illustration of the way the Chinese industrial development programmes are being implemented by trying to shut off the demands of the population. For consumer goods, it is made clear by the fact that in China, cloth is extremely in short supply and on per capita basis even in 1956 it amounted to not more than 10 yards. This estimate is a liberal one and includes the handloom production of cloth. In India the comparable figure would be 18 yards.

The figures of production in a limited number of items are given in Table II. We do not know the number of diesel engines, automobiles, chemicals, except amonium sulphate and soda, aluminium, cycles, vanaspati and soap which are being produced in China. That makes an exact comparison between the two countries very difficult; but the chances are that here they are much behind India.

The Chinese reports continue to stress the liquidation of the private sector. All production now is either on the basis of state-owned industries or industries run on a co-operative basis. 13.1 per cent of the industrial production in China in 1955 was the result of joint collaboration between the private and the public sectors. Whether the elimination of private incentive is accompanied by a rise or fall in production is anybody's guess. In India much the greatest portion of production is in the private sector.

PER CAPITA PRODUCTION OF SELECTED INDUSTRIAL PRODUCTS IN INDIA AND CHINA DURING THE YEARS 1949-56

	1949		1951		1952		1953		1954		1955		1956	
Products	**India**	**China**	**India**	**China**	**India**	**China**	**India**	**China**	**India**	**China**	**India**	**China**	**India**	**China**
1. Electricity generated (KWH) . .	14.1	8.0	16.4	10.3	17.1	12.7	18.2	15.8	20.2	18.2	22.4	20.8	25.1	24.7
2. Crude Steel (kg)	3.9	0.29	4.4	1.6	4.4	2.4	4.3	3.0	4.6	3.8	4.4	4.7	4.7	7.0
3. Coal (kg.) .	91.4	57.6	99.4	90.7	101.4	111.1	100.3	119.0	102.1	134.5	102.4	154.0	105.5	169.8
4. Pig Iron (kg.)	4.7	0.46	5.2	2.5	5.2	3.3	4.9	3.8	5.4	4.9	4.9	6.4	5.2	7.5
5. Cloth (yds.) .	11.2	2.2	11.4	5.1	12.7	6.3	13.3	7.4	13.5	8.2	13.6	6.8	13.9	8.1
6. Cement (kg.)	6.3	1.2	9.2	4.4	10.1	5.0	10.7	6.7	12.2	7.7	13.4	7.4	13.3	10.4
7. Ammonium Sulphate (kg.)	—	—	0.15	0.23	0.62	0.32	0.89	0.39	0.93	0.50	1.1	0.53	1.0	0.7

TABLE I

TOTAL OUTPUT VALUE OF INDUSTRY AND AGRICULTURE IN CHINA

(Calculated in terms of constant prices of 1952)

	Absolute Figures (In million yuan)					Percentages				
	1949	1952	1953	1954	1955	1949	1952	1953	1954	1955
Total	**46,613**	**82,718**	**94,611**	**103,541**	**110,415**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Industry	10,781	27,014	35,577	41,513	44,748	23.2	32.7	37.6	40.1	40.5
Modern Industry	7,913	22,049	28,809	33,986	37,082	17.0	26.7	30.4	32.8	33.6
Handicrafts Workshops	2,868	4,965	6,768	7,527	7,666	6.2	6.0	7.2	7.3	6.9
Individual Handicrafts 1	3,237	7,312	9,119	10.462	10,123	6.9	8.8	9.6	10.1	9.2
Agriculture and Rural Subsidiary Occupations	32,595	48,392	49,915	51,566	55,544	69.9	58.5	52.8	49.8	50.3

	Percentages of 1952 over 1949	Fixed Index (1952=100)			Chain Index (previous year=100)	
		1953	1954	1955	1954	1955
Total	**177.5**	**114.4**	**125.2**	**133.2**	**109.4**	**106.6**
Industry	250.6	131.7	153.7	165.6	116.7	107.8
Modern Industry	278.6	130.7	154.1	168.2	118.0	109.1
Handicraft Workshops	173.1	136.3	151.6	154.4	111.2	101.9
Individual Handicrafts 1	225.9	124.7	143.1	138.4	114.7	96.8
Agriculture and Rural Subsidiary Occupations	148.5	103.1	106.6	114.8	103.3	107.7

1 Figures under this heading include the output value of handicrafts organized on a co-operative basis and of individual handicraftsmen.

TABLE II

CHINA: TARGETS IN THE INDUSTRIAL SECTOR FOR THE SECOND FIVE-YEAR PLAN

Product	Unit	Target for 1962	Target for 1957	Actual output 1952	Peak annual output before liberation	
					Year	Output
Electricity	100,000,000 KWH.	400-430	159.0	72.6	1941	59.6
Coal	10,000,000	19,000-21,000	11,298.5	6,352.8	1942	6,187.5
Crude Oil	10,000 tons	500-600	201.2	43.6	1943	32.0
Steel	10,000 tons	1,050-1,200	412.0	135.0	1943	92.3
Aluminium ingots	10,000 tons	10-12	2.0	..	..	..
Chemical Fertilizers	10,000 tons	300-320	57.8	19.4	1941	22.7
Metallurgical equipment	10,000 tons	3-4	0.8	..	..	..
Power generating equipment	10,000 kw.	140-150	16.4	0.67	..	..
Metal-cutting machine tools	10,000 units	6-6.5	1.3	1.4	1941	0.5
Timber	10,000 cubic metres	3,100-3,400	2,000.0	1,002.0	..	..
Cement	10,000 tons	1,250-1,450	6,000.0	286.0	1942	229.3
Cotton Yarn	10,000 bales	800-900	500.0	361.8	1933	344.7
Cotton Piecegoods	10,000 bolts	23,500-26,000	16,372.1	11,163.4	..	..
Salt	10,000 tons	1,000-1,100	755.4	494.5	1943	391.8
Edible vegetable oils	10,000 tons	310-320	179.4	98.3	..	..
Sugar (including hand-made sugar)	10,000 tons	240-250	110.0	45.1	1936	41.4
Machine-made paper	10,000 tons	150-160	65.5	37.2	1943	16.5

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Mineral Resources

BOTH India and China possess sufficient mineral resources to feed their industries. The estimates of India's coal reserves have varied between 43 billion to 60 billion tons. The reserves of coal in China have been estimated at 250 to 275 billion metric tons. That shows that China's reserves are almost 5 to 6 times India's reserves of coal. China, however, is deficient in coking coal.

In regard to iron ore, China has a significantly lower level of reserves than India. Current estimates show that whereas iron ore reserves in India are around 10 billion metric tons, the corresponding figure in China varies from 2.5 to 4 billion metric tons. China also does not possess high grade iron ore in sufficient quantity.

India has both these basic minerals very near each other. Her resources of coal and iron are scattered in very close areas in Bihar, Orissa and Madhya Pradesh. In the case of China both these basic minerals are found at great distances from each other. Hence they entail a great burden on the country's means of transportation. The largest coal deposits in China are to be found in the Shansi and Shensi provinces but production in these provinces has always been low because of large distances from the coastal industrial centres.

India possesses reserves of copper, bauxite, lime, mica and manganese. Petroleum resources, however, are very meagre in India. In China, manganese, nickle, tungsten and cobalt are found in sufficient quantity. China, however, is very much deficient in copper. Supplies of petroleum are also limited but it seems that the exact extent of the resources has never been estimated.

Amongst the minerals, coal occupies a place of pride. In India coal accounts for nearly 80 per cent of the total commercial energy consumption in India. This is brought out very clearly in Table III below.

Out of a total energy consumption of 857 thousand billion B.T.U. coal alone accounted for 666 thousand billion B.T.U., nearly 77.8 per cent of the total. The ratio of coal has tended to decline because the consumption of oil and hydro-electric power has steadily increased between 1948 to 1954.

In China, also, coal occupies the top position in regard to the consumption of commercial energy, but official estimates of coal production have varied from year to year. They make them extremely unreliable

TABLE IV.

COAL PRODUCTION IN CHINA

(*In million metric tons*)

1949	31.8
1950	40.9
1951	50.8
1952	63.5
1953	66.6
1954	79.9
1955	93.6
1956	106.0

TABLE III.

COMMERCIAL ENERGY CONSUMPTION IN INDIA

1948 — 1954

	1948	1949	1950	1951	1952	1953	1954
Coal Consumption*							
Million tons	24.1	26.5	27.1	27.0	29.5	30.0	30.3
Thousand billion BTU†	530.2	583.0	596.2	594.0	649.0	660.0	666.6
Per cent of Total	84.1	82.4	81.4	78.5	80.2	79.8	77.8
Oil Consumption							
Thousand tons	1,954	2,459	2,687	3,237	3,174	3,312	3,800
Thousand billion BTU‡	92.1	116.2	127.0	152.9	150.0	156.5	179.5
Per cent of Total	1.3	1.2	17.3	20.2	18.5	18.9	20.9
Hydro-Electric Production							
Million KWH	2,373	2,490	2,520	2,860	3,096	2,914	3,236
Thousand billion BTU§	8.1	8.6	8.6	9.7	10.6	10.3	11.0
Per cent of Total	1.3	1.2	1.2	1.2	1.3	1.2	1.3
Total Energy Consumption							
Thousand billion BTU	630.4	707.7	731.8	756.6	809.6	826.8	857.1
Per cent increase over Preceding Years	—	12.8	3.6	4.0	7.0	2.0	4.0

* Not including bunkers and exports. These figures are based on reported railroad despatches, may underestimate consumption slightly by omission of truck and boat movement, and local utilization.

† One metric ton = 22 million BTU. This allowance is somewhat arbitrary; both higher and lower figures being used by competent Indian authorities. It is quite likely that the average calorific value of Indian coal used will decline in the future.

‡ One long ton of oil equals 47.25 million BTU.

§ One KWH equals 3,413 BTU.

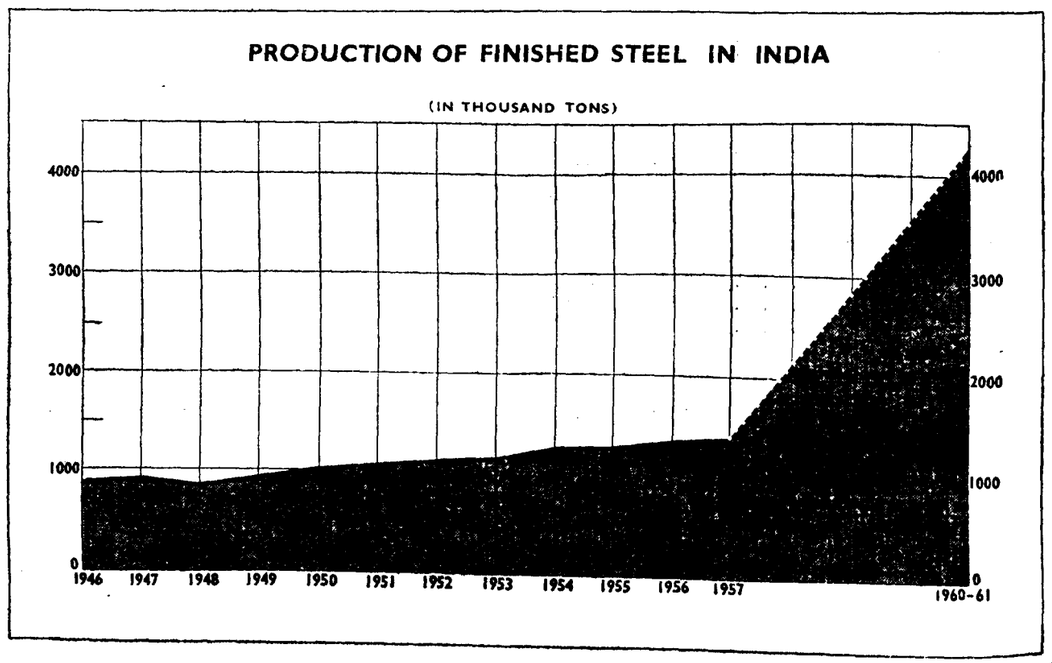
because systems of computation are very frequently changed with the result that it is very difficult to find out the correct production figures. In Table IV on the previous page coal production in China, is set out for the period 1949 to 1956. It will be seen that from the low level of 23 million metric tons in 1949 the overall production has increased to 106 million metric tons in 1956. It is, however, not known what is the quality of coal which is being produced because it is feared that nearly 15 to 20 per cent of coal mined in the major mines is dirt or rock and should be excluded. Even after making this adjustment, China's total production of coal exceeds 80 million metric tons — nearly double the absolute production of coal in the Indian Union. On per capita basis also, the production of coal in China is higher than in India.

The Steel Industry

THE low base from which both Communist China and India are trying to build the heavy sector of their industries can be measured from the steel output at the end of the last war. As they set on the road to planned development of their economies, one basic policy decision which they made was to develop domestic production capacity of steel. Before dilating upon the developments in the steel industry separately in each country, a comparative picture of the progress they recorded during the last six years would be necessary.

In respect of pig iron, India had a certain advantage in domestic output. In 1951 her production of pig iron was 1.71 million metric tons as against China's 1.41 million metric tons. In the first Plan India was preoccupied primarily with making good the deficiencies in her agricultural production. Heavy industry had a low priority. This scheme explains why the output of pig iron was raised in India from 1.71 million metric tons in 1951 to 1.84 million tons in 1956. On the other hand, the rapid progress in China's iron and steel industry typifies the central emphasis which Communist planning unmistakably places on production of steel. In fact, it is the relentless goal of China's Plan that whatever the cost heavy industries just be developed strictly according to targets since they constitute the hard core of the plan, for the purpose of creating a sound base for future expansion and for defence. China's production of pig iron rose at a fast rate from 1.41 million metric tons in 1951 to 4.63 million metric tons in 1956. A similar divergence in the trends of output of crude steel is to be seen. India's output rose steadily from 1.59 million metric tons to 1.71 million metric tons in 1954, whereas China pushed expansion of her crude steel production from 0.90 million metric tons to 2.22 million metric tons. In the rolled steel section, India's production rose by 0.24 million metric tons to 1.34 million metric tons between 1951 and 1956. In China there was the same tempo of a forced rate of increase, in the case of rolled steel as in pig iron nd crude steel. During her first Plan her output of rolled steel went up from 1.48 million metric tons in 1953 to 3.61 million metric tons in 1956.

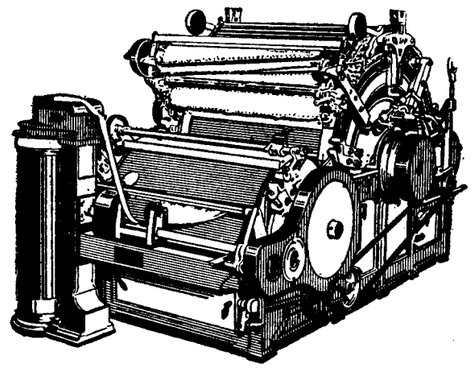
With the introduction of the second Five-Year Plan India has found it possible to place a positive accent on the development of some of the basic industries among which iron and steel ranks as the foremost. In accordance with the changed industrial policy, the public sector is emerging as the major partner in this industry. Three new steel plants are being set up in the public sector with a capacity of one million tons of ingots each. Provision has been made in the original Plans of the three plants to raise their output capacity by another one million tons of ingots each. The first in order is the Rourkela plant whose special features are the adoption of the L.D. process and production of 720,000 tons of flat products of steel, hot and cold rolled. The second plant located at Bhilai in Madhya Pradesh provides for 770,000 tons of saleable steel, heavy and medium products, including 140,000 tons of billets for the rerolling industries. The third plant

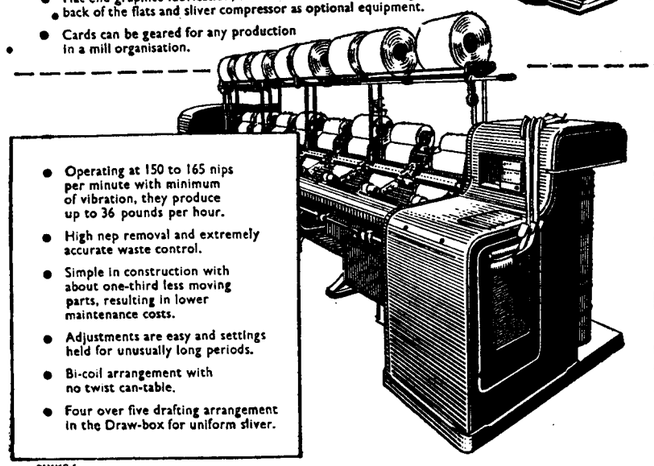


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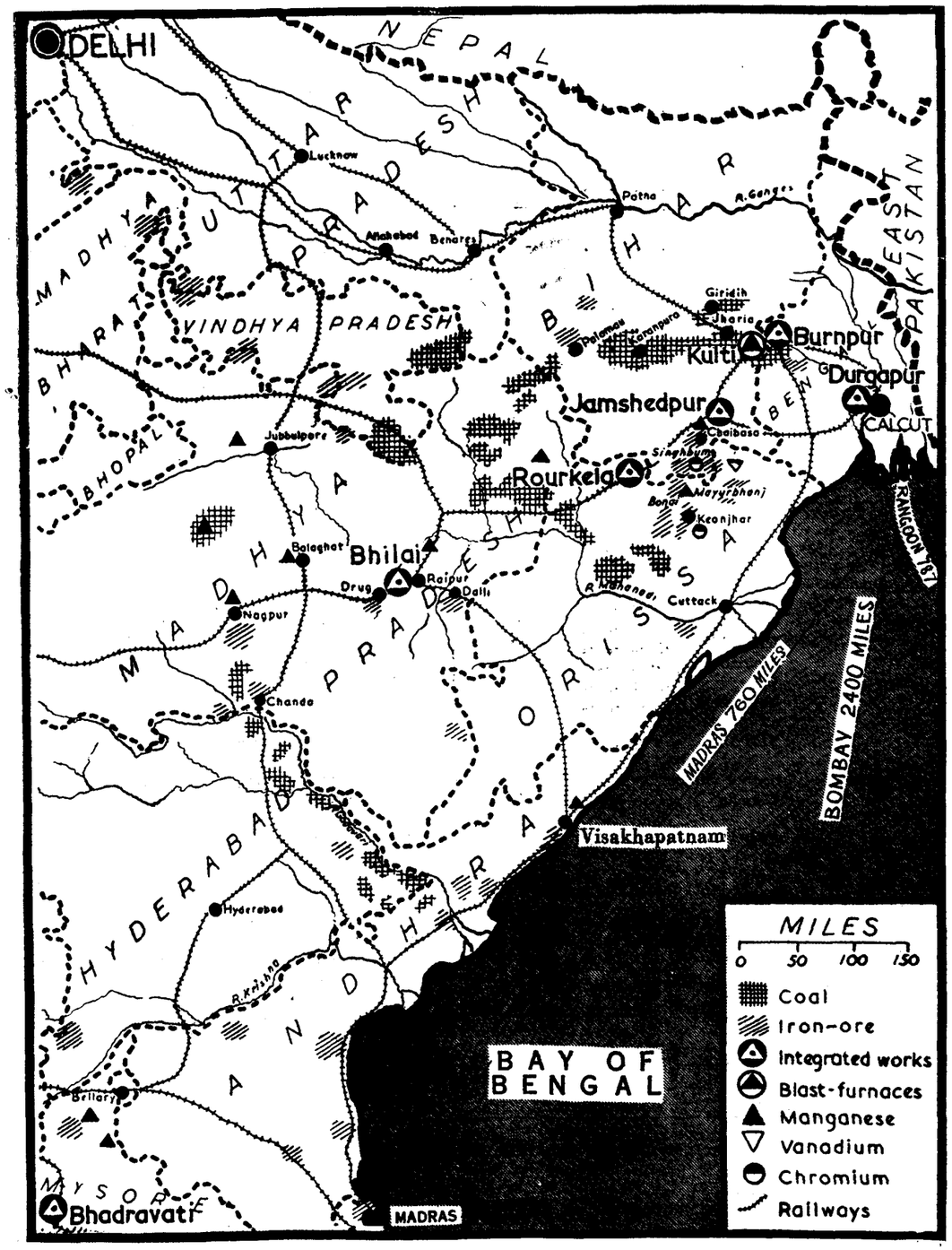
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THE LOCATION OF THE NEW STEEL PLANTS

(at Bhilai, Rourkela and Durgapur)



WORLD CRUDE-STEEL PRODUCTION IN 1939 TO 1955, AND ESTIMATED CAPACITY FOR 1956 AND 1960

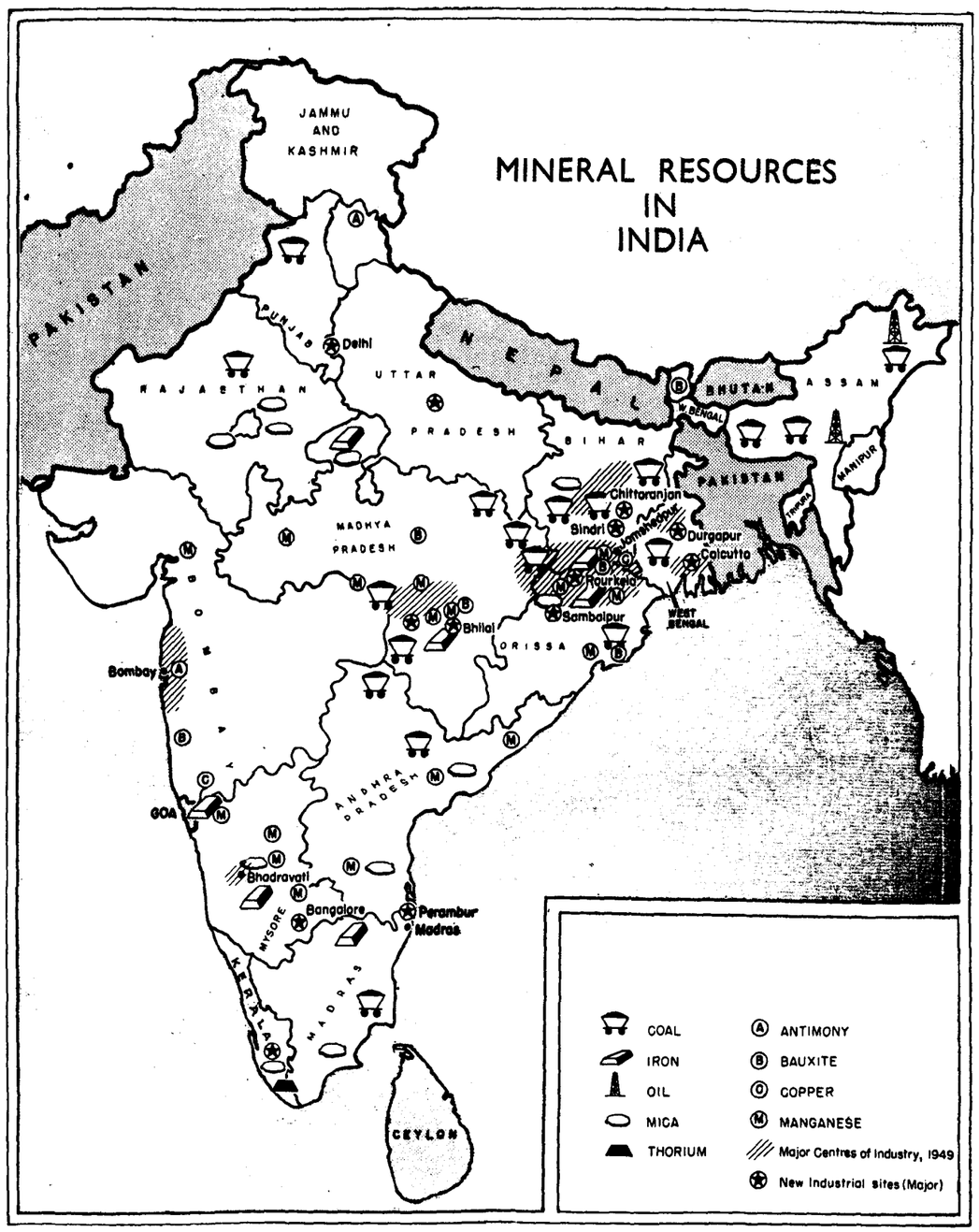
(In thousands of tons)

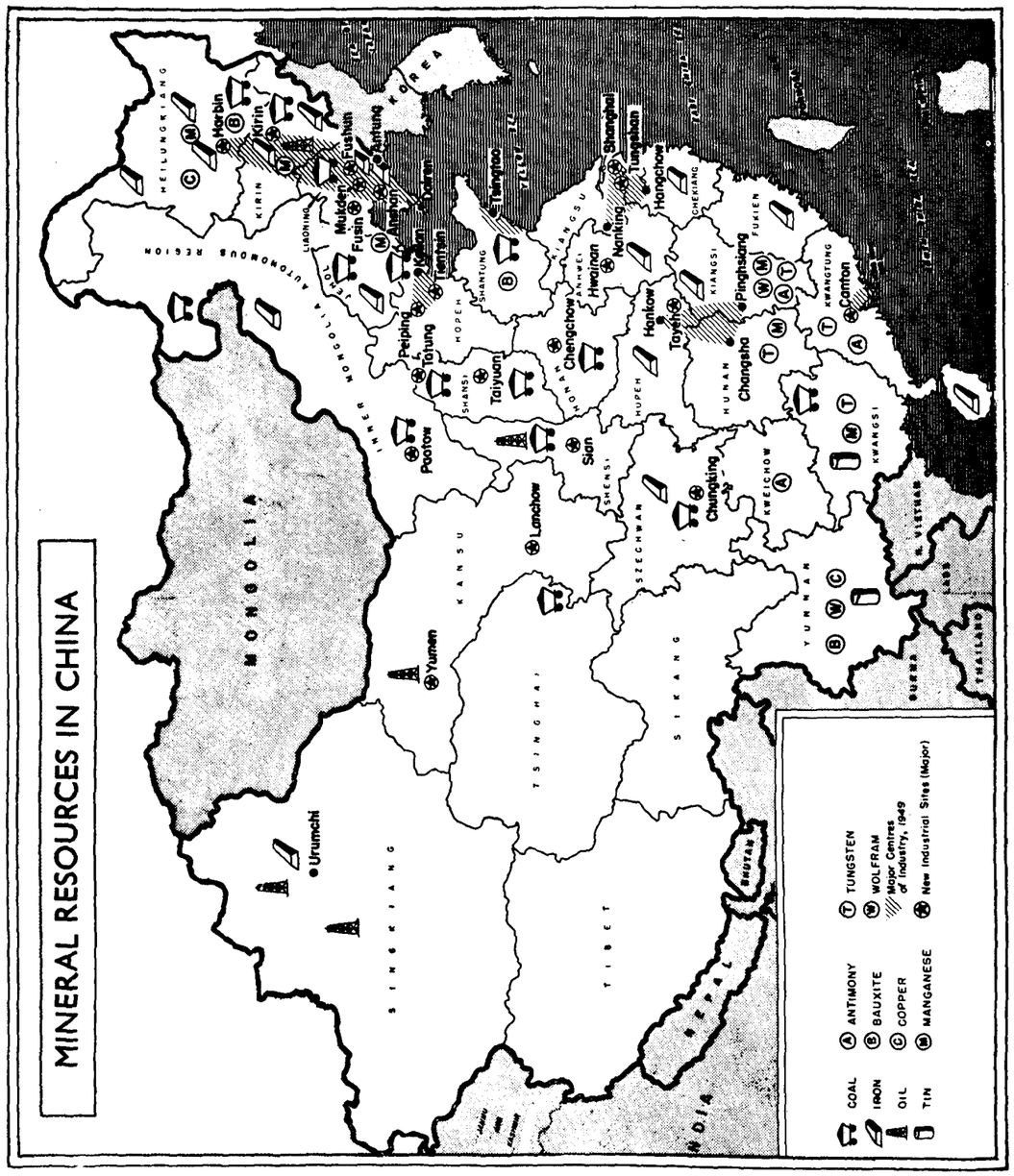
	Country	1939	1953	1954	1955	Estimated capacities 1956	1960
Africa:	Algeria	..	12*	12*	12*	12	15
	S. Rhodesia	5*	25	33	40*	65	75
	S. Africa	390*	1,298	1,431	1,581	1,700	2,000
	TOTAL	395*	1,335	1,476*	1,633*	1,777	2,090
Middle East:	Egypt	—	10*	10*	10*	10	250
	Israel	—	—	5*	40*	40	60
	TOTAL	—	10	15*	50*	50	310
Far East:	China:						
	Mainland (a)	545	1,767	2,225	2,850	3,400	7,000
	Taiwan (b)	—	28	47	55*	80	70
	India	1,067	1,531	1,712	1,731	1,800	6,000
	Japan	6,696	7,662	7,750	9,408	10,500	12,000
	Pakistan	—	11	10	11	15	350
	Philippines	—	—	10*	20*	40	140
	Others	101(c)	—	—	—	20d	150e
	TOTAL	8,409	10,999	11,754*	14,075*	15,835	25,710
Oceania:	Australia	1,191	2,082	2,257	2,232	2,300	2,600
	TOTAL	1,191	2,082	2,257	2,232	2,300	2,600
Latin America:	Argentina	20	100*	100*	100*	150	500
	Brazil	114	1,002	1,157	1,168	1,300	2,500
	Chile	—*	313	321	310	350	400
	Colombia	—*	—	20*	76	162	250
	Mexico	77	430*	535*	575*	1,000	1,250
	Peru	—*	—	—	—	—	60
	Venezuela	—*	15*	15*	15*	20	500
	TOTAL	211*	1,860	2,148	2,242*	2,982	5,460
North America:	United States	47,898	101,251	80,115	106,173	116,450f	134,500
	Canada	1,407	3,734	2,898	4,109	4,300g	4,600
	TOTAL	49,305	104,985	83,013	110,282	120,750	139,100
U.S.S.R.:		17,600	38,000	41,300	45,200	49,500	68,300
Europe: Western:	ECSC countries	36,054*	39,633	43,838	52,578	57,440	71,000
	United Kingdom	13,433	17,891	18,817	20,108	21,600	26,000
	Others	2,943	5,285	6,091	6,976	7,475	10,720
Eastern:		6,522*	12,466	12,742	13,882	15,673	21,390
	TOTAL	58,952	75,275	81,488	93,544	102,188	129,110
WORLD TOTAL (h)		136,063	234,546	223,451	269,258	295,382	372,680

Source: The European Steel Market in 1955, ECE, Geneva.

(a) Including Manchuria.
(b) Economic Survey of Asia and the Far East, ECAFE, Bangkok, 1955, page 214.
(c) Korea.
(e) Burma, Hong Kong, Indonesia, South Korea and Thailand.
(f) As at January 1, 1956.
(g) As at January 1, 1954.
(h) Excluding North Korea in post-war years and Bulgaria which began production on a small scale in 195

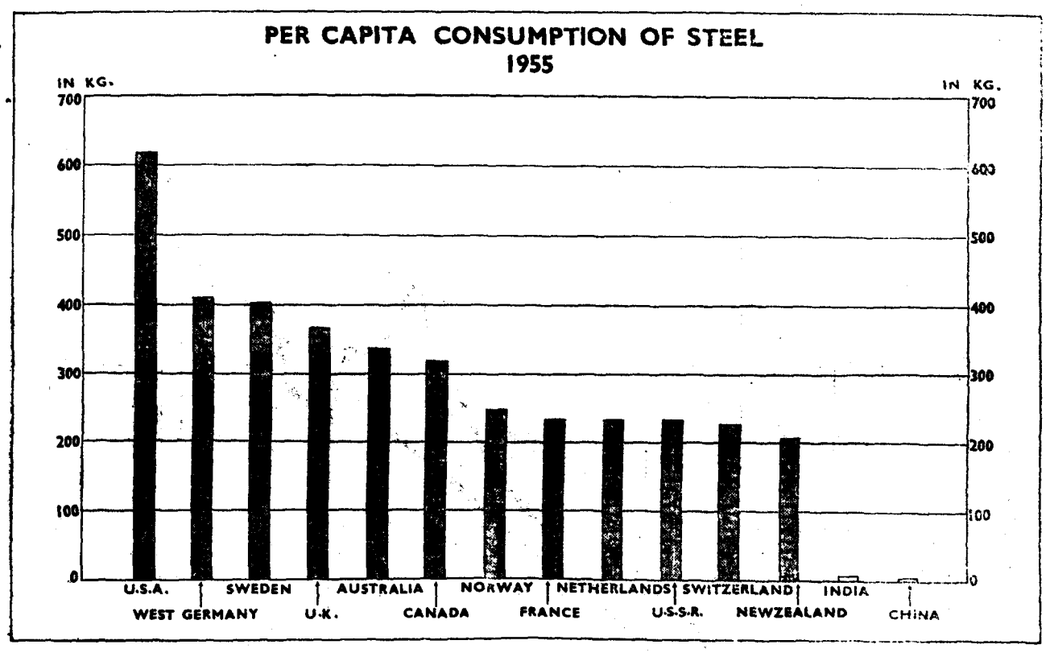
* Estimated.





which is to be set up at Durgapur in West Bengal will be equipped to produce 790,000 tons of light and medium section of steel and billets. Apart from this impressive programme of expansion in the public sector, the existing public sector plant at Bhadravati will have its capacity of steel production raised to 100,000 tons by the end of the second Plan period. In the private sector the Tata Iron and Steel Company and the Indian Iron and Steel Company are scheduled to increese their combined capacities to over double the level at the beginning of the second Five-Year Plan. The Indian Iron and Steel Company has made considrable progress in acquiring the financial outlay required while the Tata Iron and Steel Company has proceeded with full vigour in its expansion programme. With the loan recently obtained from the World Bank and credits from private banks in the United States, its requirements of outlay are now fully provided for India's target of output of steel ingots at the end of the second Plan is fixed at 6 million tons.

China's iron and steel industry was heavily concentrated in Manchuria, where, according to broad estimates, over 80 per cent of the capacity and output were located. The preponderance which Manchuria enjoys may be altered but in the general context it will stay even in the future. Since 1937 until the end of the last war, the steel works in Manchuria were under the total control of the Japanese. Their exit did not improve the situation but worsened it. The Paley Report on Japanese assets in China presented to the President of the United States makes the startling disclosure that all the steel plants in Manchuria were dismantled and removed by the Russian occupation troops under the plea of war booty. Excluding Manchuria, it is estimated that about 70 per cent of the capacity of the steel plants in China was badly damaged by war operations. However, the task of rehabilitation was started with vigour because Communist China was determined to revive and expand her steel industry as a matter of urgency. By 1953 the work of rehabilitation was complete. At the present time, the major centres of iron and steel production in China are situated at An-Shan, Pen-chi, and Fu-shun in Manchuria and Chungking, Tai-yuan and Ta-yeh in the rest of the China. Apart from these centres, the Shih-ching-shan pig iron plant and Tientsin and Tang-shan steel plants constitute the structure of China's steel industry. The target of production of ingots in China's steel industry in her second Plan is proposed to be fixed at 10.5 million tons.



The Cement Industry

As a basic building material the cement industry takes a strategic position in developmental programmes. This industry is relatively simple for technical operation, but its growth is conditioned by the availability of transport facilities for supply of raw materials and transmission of the finished product to the consuming centres. India and China have both made rapid strides in the output of cement in recent years. The production in India increased, as the following table will show, from 2.68 million metric tons in 1950 to 5 million metric tons in 1956. In China, during the same period, the increase has been of the order of 1.41 million metric tons to 6.40 million metric tons.

In per capita terms production in China is lower than India's production. Furthermore, if the much-publicised programmes of industrialisation are considered, the supply of cement in China is obviously inadequate.

The progress of the cement industry has been almost according to schedule in India's first Five-Year Plan. This Plan provided for expansion of selected existing units and establishment of half as many new units in order to increase installed capacity from 3.28 million tons in 1950-51 to 5.31 million tons in 1955-56. Actual production was to be raised to 4.8 million tons by 1955-56. At the end of the first Plan installed capacity was raised to 4.93 million tons and actual output was raised to 4.6 million tons. In the second Plan the capacity of the industry is to be raised to 16 million tons and the target of production is to be raised to 13

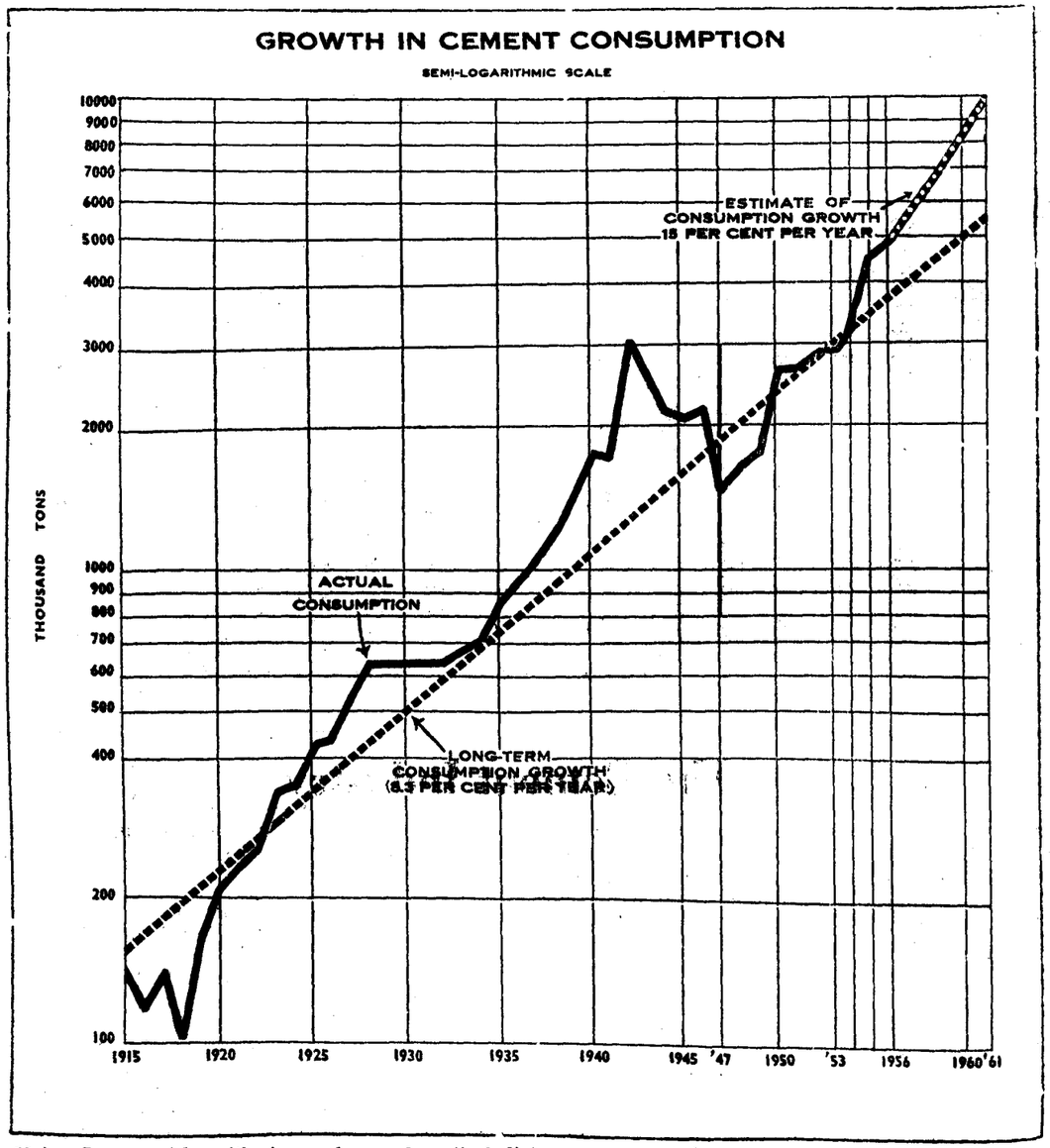
million tons. Already there is shortage of domestic supply of cement in India. It is, therefore, essential to achieve the target of 13 million tons in the second Plan. The major obstacle to the fulfilment of this target comes from transport. With the allocations made to them, railways find themselves confronted with a herculean task to provide transport facilities for more than 9 million tons.

In China many of the cement plants located in the major producing region of Manchuria was either damaged during the war operations or dismantled and removed subsequently by Russia. In other parts of China the damage to the installed capacity of cement factories has been estimated to be of the order of 70 per cent. Rehabilitation took nearly three years under the new regime. Since then under the first Five-Year Plan capacity is being raised at a fast rate. But the location of some major cement plants, influenced by the availability of raw materials happens to be at long distances from the centres of new industries which are large consumers of cement. This fact primarily explains why the quality of construction for factories has been poor and more than usual expenditure has to be incurred on maintenance and repairs. The target proposed for China's second Five-Year Plan for cement output is placed between 12.5 million tons and 14 million tons. Like India's China too has to face the problem of transport for cement to the consuming centres.

OUTPUT OF CEMENT IN INDIA AND CHINA

(In million metric tons)

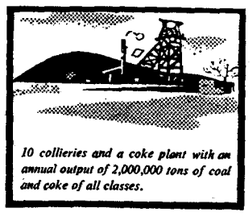
	China	India
1950	1.41	2.68
1951	2.48	3.29
1952	2.86	3.54
1953	3.87	3.90
1954	4.60	4.51
1955	4.50	4.51
1956	6.40	5.20

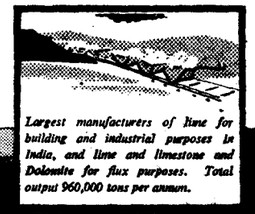


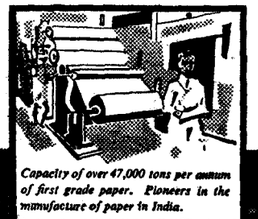
Note: In a semi-logarithmic graph, equal vertical distances represent the same ratio in whatever part of the scale they are taken.

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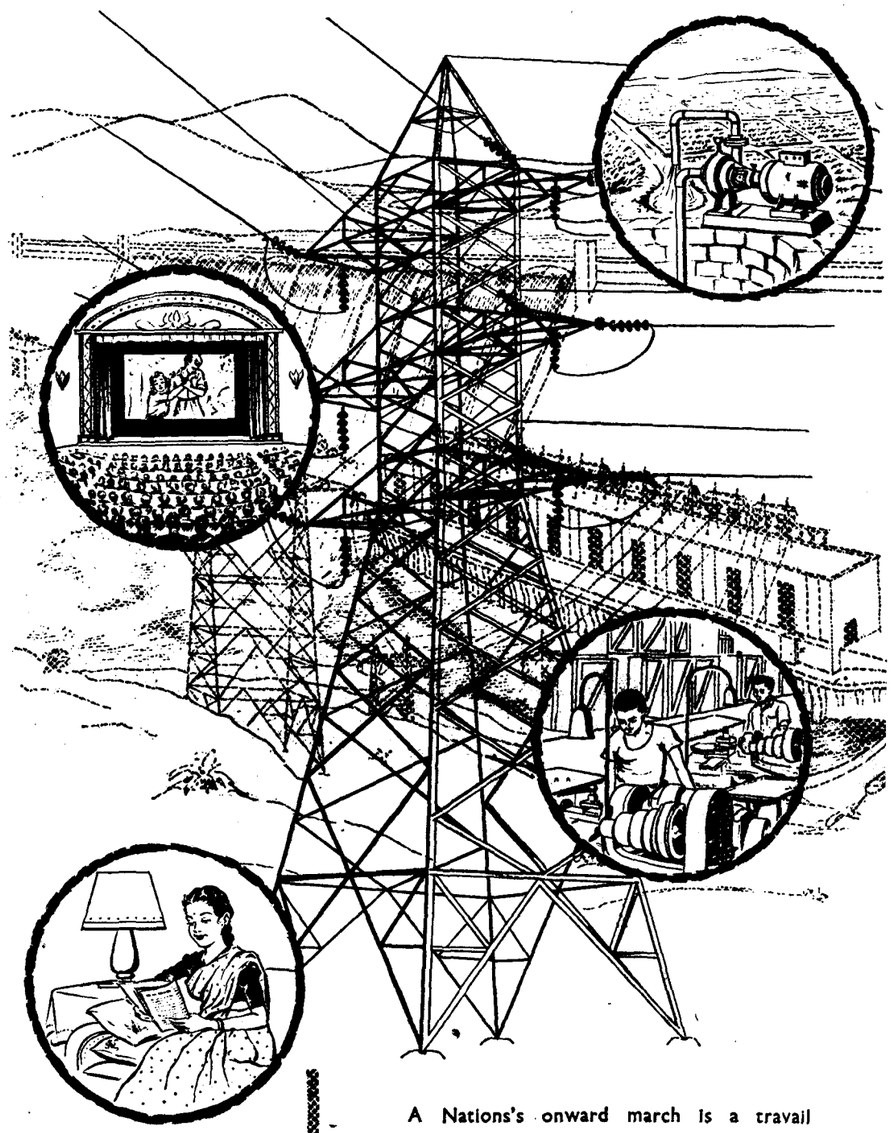

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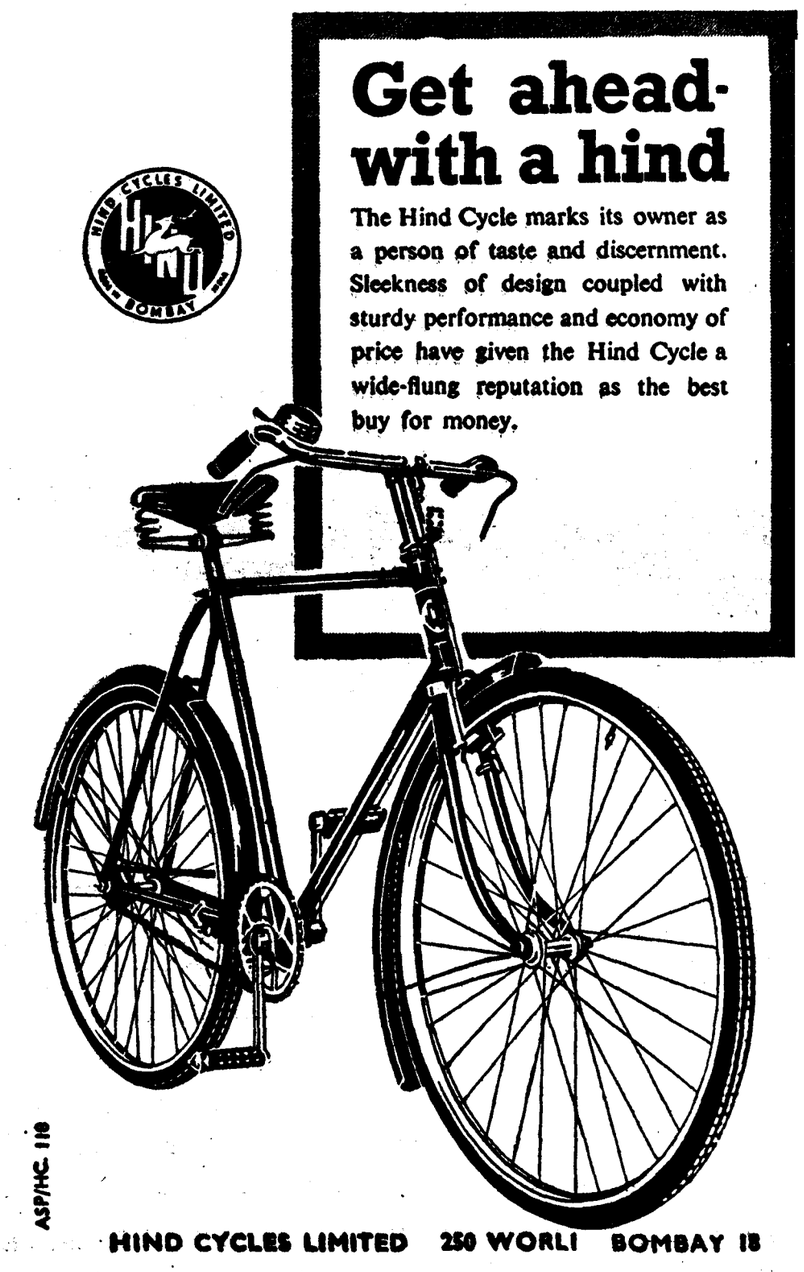
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Electricity Generated

(In million KWH)

	China	India
1949	4,320	4,908
1950	4,580	5,112
1951	5,790	5,856
1952	7,261	6,192
1953	9,195	6,708
1954	11,001	7,500
1955	12,278	8,496
1956	16,590	9,636

In the first Five-Year Plan India had set a target of 1.3 million kW of capacity to be installed additionally. This was divided into 1.1 million kW for the public sector and 200,000 kW for the private sector. The private sector has fulfiled its target, while the public sector has achieved 800,000 kW showing a shortfall of 500,000 kW. In addition, industrial establishments, for whom no target was fixed for obvious reasons for increased capacity during the first Plan, raised their capacity by 100,000 kW. Planning for electricity must be envisaged on a long-term basis, since this industry by the very nature of its complex preliminaries does not land itself to short periods like those of 5 years. When the first Plan was drawn up a target of 7 million kW was tentatively fixed for the 15-year period. In retrospect this has proved to be very conservative and the revised target, also tentative, has raised installed capacity by 1965 to 15 million kW. For the period of the second Plan additional capacity of the order of 3.5 million kW has been prescribed, of which 2.9 kW is to be provided by the public sector and 300,000 kW is to be provided by the private sector and the balance of 300,000 kW is to come from the lignite project at Neivelli and the generating plans of industrial establishments. A total outlay of Rs. 427 crores has been fixed for the second Plan which is to be allocated in the shares of Rs. 2.35 crores for generation, Rs. 92 crores for transmission, Rs. 25 crores for urban distribution and the balance of Rs. 75 crores for electrification in small towns and the rural areas.

A striking fact revealed by the foregoing table about the production of electricity in China is the steep increase suddenly recorded in the years 1953 and 1954 together with a higher tempo of production in the remaining three years. This spectacular increase is due to the deliberate policy of high investment in electricity projects undertaken from the year 1953 onwards. It will also be noted that the participation of Russia in electricity undertakings jointly with China as part of the programme of economic collaboration was also responsible for this remarkable progress. Out of 160 electricity generation and distribution works which figured among the programme for electricity in China's first Five-Year Plan, eight major projects were undertaken with Russia's assistance. In 1953 the chief projects of thermal electric power which were under construction were those at Hsi-an in Shensi, Ti-hua in Sinkiang, Chen-chou in Honan, Tai-yuan in Shansi, Chungking, Fouhsin, and so forth. In addition to these, the programme under way in 1953 included a generating plant at Cheng-tu and medium sized hydro plants in Szechwan. This tempo of the rapid expansion of electricity installations is not only to be sustained but raised further in the Second Plan. The traget of electricity output proposed for China's second Plan is about 400 million KWH to 430 million KWH.

Chemical Fertilizers

PRODUCTION of chemical fertilisers in India as well as in China was at a very low level in 1951. Ammonium sulphate production in India was around 54,000 metric tons in 1951 as against 129,000 metric tons in China. During the last five years, production has risen at a very steep rate in India as well as in China. Current production of ammonium sulphate in India exceeds 400,000 tons. Similarly, in China also, production exceeds 400,000 metric tons.

In per capita terms, the level of production in China is significantly lower than in India. The rate of advance shall have to be higher in China in the second Plan to catch up with the level of output in India.

The first Five-Year Plan in China had set the target of 578,000 metric tons of chemical fertilisers which included both ammonium sulphate and ammonium nitrate. This target will not be achieved in 1957 in China. The target for the second Five-Year Plan in China has been put between 3 to 3.2 million tons. The corresponding target for India is 566,000 tons for 1960-61.

China's first Five-Year Plan had called for the construction of fertiliser plants with a capacity exceeding 910,000 tons a year. To attain this goal, five nitrate fertiliser plants were to be constructed. Two of these are designed by the Soviet technologists; these, in all probability, will be completed by 1960 only.

The table below compares the production of ammonium sulphate in India and China during the years 1951 to 1956. The performance of India's first Plan in regard to ammonium sulphate was spectacular; whereas capacity increased by 443 per cent in 5 years,

AMMONIUM SULPHATE

(In thousand metric tons)

Year	China	India
1951	129	53.7
1952	181	224.3
1953	226	324.3
1954	298	346.3
1955	324	396.1
1956	444	395.0

production increased by 756.5 per cent. This was made possible by the utilisation of idle capacity which increased by 50 per cent. Whereas in the beginning of the first Plan utilised capacity in India was as high as 41.8 per cent, it was reduced to 8.2 per cent only in 1955-56.

There is no mention of phosphatic fertilisers in China's Five-Year Plans. In the case of India, on the other hand, actual output of phosphatic fertilisers exceeded 20,000 tons. It is obvious, therefore, that the output of fertilisers (both phosphatic and nitrogenous) in India is at a significantly higher level than in China.

The Cotton Textile Industry

CHINA'S first Five-Year Plan laid great stress on the producer industries. The factories of steel and cement enjoyed top priority and were given preference over factories for consumer industries such as cotton textiles and sugar. Cotton cloth has been distributed only on the basis of strict rationing ever since the People's Republic was founded. Ration tickets continue to be distributed till today because the population in China is being starved of the dire necessities of life like cloth. The table below sets out very clearly the current position. In regard to the production of both cotton yarn and cotton cloth, it is obvious that production has increased steadily between 1949 to 1957 and is currently being estimated at double the level of the pre-1949 peak. In 1956 the availability or consumption of cloth per head did not exceed 10 yards. This estimate is a liberal one and takes into account the production of the handloom sector also.

The situation in India is very much better. There is no doubt that immediately after independence there was great scarcity for all consumer goods including cloth but even in the worst years per capita availability was higher than the peak availability in China. Current estimates show that per capita availability of cloth exceeds 18 yards. In fact, the Indian textile industry is, at the moment, passing through a crisis of production, which is higher than the capacity of the people to consume. Even though purchasing power has been created by the development expenditure under the two Plans, still it is not sufficient to match the total cloth which is being made available to the Indian people. That puts India in a very happy position. It also shows that economic development in India is not lop-sided as in China. The producer Industries in India are progressing along with consumer industries.

In regard to spindles and looms, some figures are available for China. They show that the Chinese Republic has 7.2 million spindles and 115,000 looms. These figures stand at a considerably lower level than that of India. In 1956, India had 465 mills with 12.4 million spindles and 2,07,000 looms. That indicates that India enjoys superiority in spindles to the extent of 60 per cent and in rgeard to looms to the extent of nearly 90 per cent.

COTTON CLOTH PRODUCTION AND CONSUMPTION IN CHINA

A: Cotton Yarn produced (million bales)
B: Cotton cloth produced (million bolts).
C: Cotton cloth consumption (million bolts).
D: Private consumption (million bolts).
E: Public (State) consumption (million bolts).
F: Consumption per head per year (Chinese feet).

	A	B	C	D	E	F
Pre-1949 Max.	2.41 (1939)	81.253 (1936)	68.87 (1936)	65.59 (1936)		12.20
1949	1.81	55.073	42.87	40.88	1.99	7.61
1950	..	73.54	56.96	52.68	4.28	9.72
1951	..	89.21	77.05	71.23	5.82	12.23
1952	3.61	117.53	93.97	86.99	6.98	15.13
1953	4.41	147.32	130.34	119.37	10.97	22.14

	A	B	C	D	E	F
Pre-1949 Max.	2.41 (1933)	81.253 (1936)	68.87 (1936)	65.59 (1936)		12.20
1954	4.61	156.62	128.7	117.24	11.46	21.81
1955	3.971	132.9	128.85	117.83	11.02	21.9
1956	5.22	174.89	173.65	156.17	17.48	29.07*
1957	(4.6)2	(149.91)	(151.05)	(133.58)	(17.47)	(24.86)

1 Appendix Tables to the Statistical Office Report for 1955.
2 Ministry for Commerce Report to the Cabinet; People's Daily, April 20, 1957.
3 People's Daily, April 20, 1957, Editorial Columns B, C, and D: PD, April 20, 1957, chart; Column E: the difference of C & D. Column F: Column D amounts divided by the 580 million population.
* PD, April 14, P. 3: 22.13.

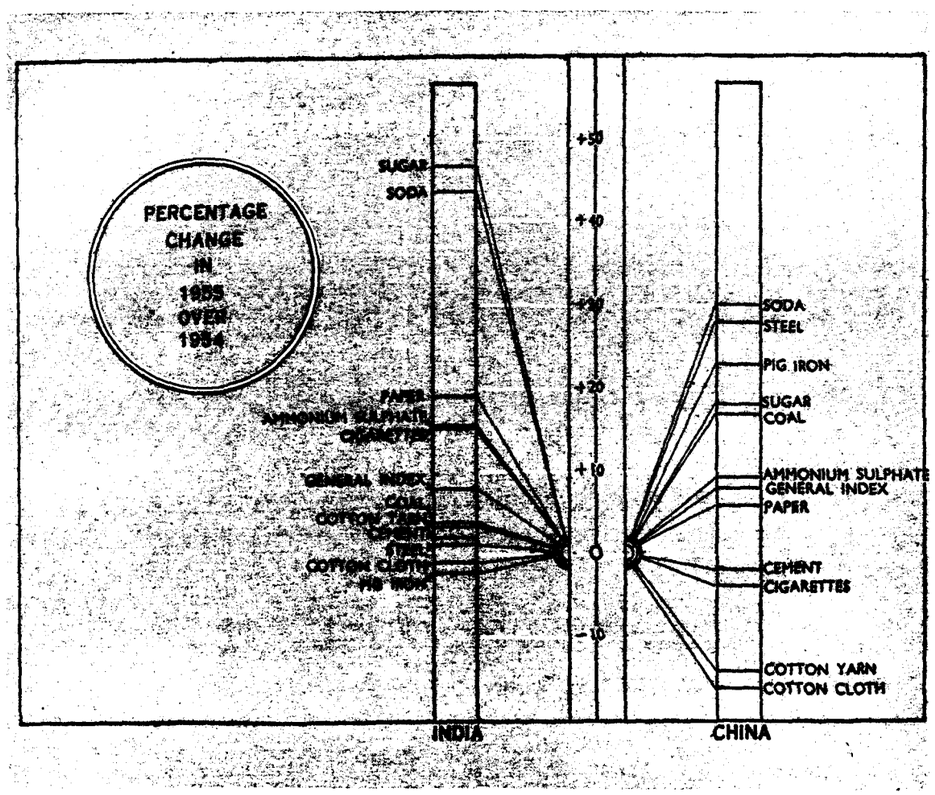
Paper and Paper Board

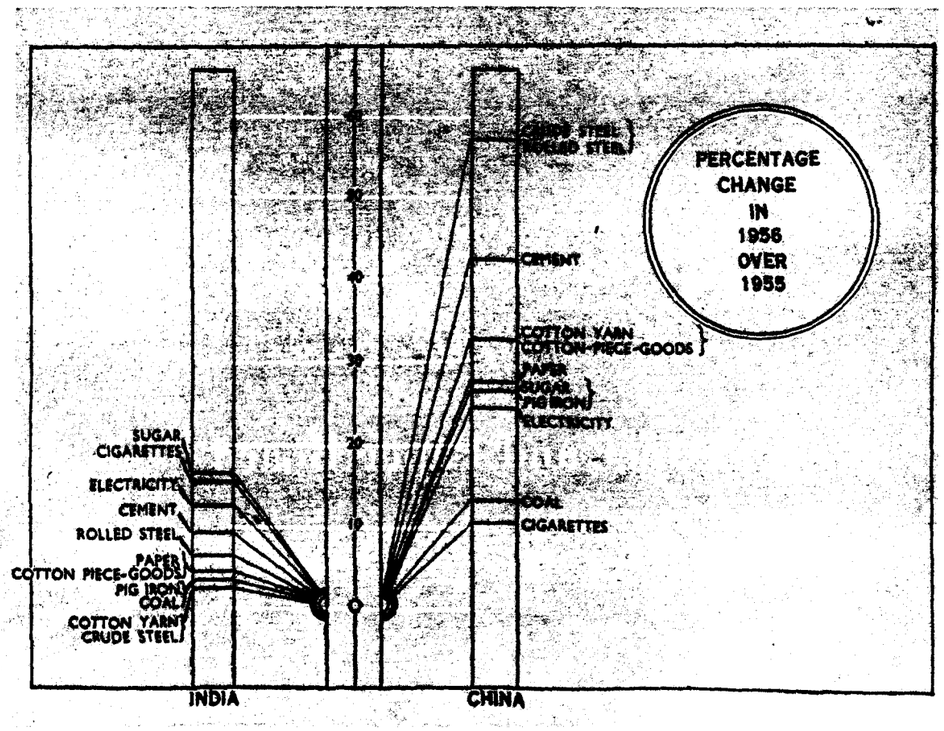
BOTH in India and China stress on cultural and educational work has been growing steadily because both the countries are trying to transform their people into educated and industrial societies.

A table on p. 95 gives the comparative rate of rise in factory made paper in both the countries. It shows that China produces more than three times the total output of paper in India. Even though China started in 1949 from a very low level, it has slowly made its production rise to a level which is almost seven times the level prevalent in 1949. In the case of India, production has reached only three times the level in 1949. The target which has been set in China for the first Plan was attained in 1956. The target for 1957 was only 655,000 metric tons but actual production in 1956 was 746,000 metric tons. In 1956, production rose by 27 per cent over 1955.

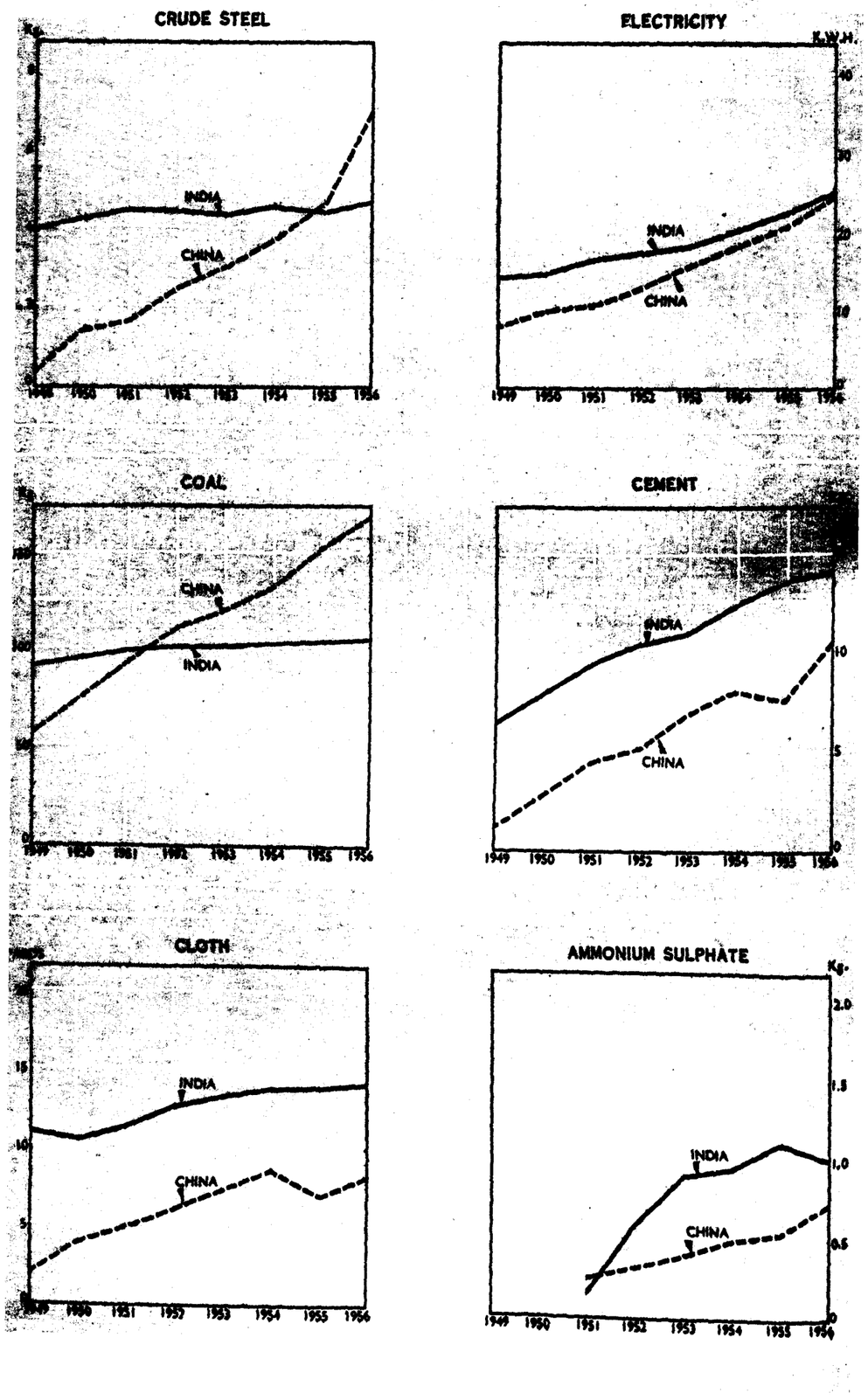
In India, it was estimated that the demand for paper and paper board would reach 200,000 tons by the end of the first Plan. Actual production therefore was around 200,000 tons. The schemes completed in the first Five-Year Plan are given in the table on p. 95. With the completion of these schemes, the total capacity in April 1956 was 210,000 tons.

THE SPECTRUM OF
INDUSTRIAL PRODUCTION : INDIA AND CHINA





PER CAPITA PRODUCTION OF SELECTED INDUSTRIES IN INDIA AND CHINA



It is estimated that if all the projects included in India's second Five-Year Plan for the setting up of paper plants go through, total production in 1960-61 will reach 350,000 tons — almost half the total current production in China. Annual rated capacity in India, on the other hand, will reach the level of 450,000 tons in 1960-61.

Production of newsprint in India will also grow speedily in the second Five-Year Plan. From the current production of a little above 4,000 tons in 1955-56, it will rise to 60,000 tons in 1960-61. The targets for paper and paper board, newsprint, straw board and other boards for the second Plan are set out in the table below:

PAPER
(other than newsprint)

(In thousand metric tons)

Year	China Paper‡	India Paper only**	India Paper and Paper Boards**
1949	108	71	104.9
1950	140	76	111.0
1951	241	111	134.1
1952	372	118	140.2
1953	428	122	141.4
1954	556	132	157.3
1955	589	187.8*	187.8
1956	710	196.3*	196.3
1957	655	206.9*	206.9 (Estimate)

‡ Including newsprint.
* Including paper boards.
** Excluding newsprint.

	1955-56 Annual rated capacity (Thousand tons)	1955-56 Production (Thousand tons) (Estimated)	1960-61 Annual rated capacity (Thousand tons)	1960-61 Production (Thousand Tons)
Paper and paper-board	210.0	200.0	450.0	350.0
Newsprint	30.0	4.20	60.0	60.0
Strawboard and other boards (excluding fibre-board)	59.3	32.0	59.3	35.0 to 40.0

SCHEMES COMPLETED IN 1951-56

Name of the units	Nature of scheme	Annual capacity (1950-51) (Tons)	Present annual capacity (Tons)	Date of commencement production or completion of expansion
Cauvery Valley Paper Mills, Mysore	New Unit	..	3,000	1952
Ballarpur Paper Mills, Madhya Pradesh	„	..	8,000	1952
Paper Pulp Conversion, Poona	„	..	4,600	1954-55
Bengal Paper Mills, Calcutta	Modernisation	11,000	14,000	1952
Punalur Paper Mills, Travancore-Cochin	Expansion	4,000	6,000	1953
Sirpur Paper Mills, Kaghaznagar	Expansion and new unit	5,000	15,000	1954-55
Rohtas Industries, Dalmianagar	Expansion	11,000	29,000	1955-56
Shree Gopal Paper Mills, Jagadhari	„	8,500	15,000	1954-55
Mysore Paper Mills, Bhadravati	„	4,000	8,000	1954
Star Paper Mills, Saharanpur	„	4,500	6,500	1954
Titaghur Paper Mills, Calcutta	Modernisation	38,000	42,000	1955-56
Orient Paper Mills, Sambalpur, Orissa	„	31,500	36,000	1955-56
India Paper Pulp Co., Calcutta	„	6,000	6,600	1055-56
Upper India Couper Paper Mills, U.P.	„	1,900	3,000	1955-56
Gujarat Paper Mills, Ahmedabad	„	1,500	2,500	1955-56
Deccan Paper Mills, Poona	„	2,500	3,600	1955-56
Pudumjee Paper Mills, Bombay	„	1,100	1,200	1955-56

Sugar

LIKE cloth, China is deficient in sugar also. During the first Five-Year Plan, production has no doubt more than doubled but it has not as yet reached a level where it could satisfy the internal demand.

At the beginning of the first Plan, sugar was in short supply in the Indian Union also but the progress made in the last six years has been so encouraging that the Government of India has been emboldened to allow exports of sugar in quantities which are equal to the total current production in Communist China.

In the table alongside are set out the figures of output of sugar in India and China from 1952 to 1956. India's production in 1956 at about two million tons is nearly four times the output in China. The second Five-Year Plan in China has set the target of 2.4 — 2.5 million tons in 1962 as against the target of 1.1 million tons in 1956-57, which will remain unattained. Sugar production in 1956 in China at 518,000 tons registered a rise of 26 per cent in one year but the target for 1957 is almost double the production in 1956; that is why the target will not be attained.

In India, sugar production in 1956 was almost 50 per cent more than the output in 1952. The second Five-Year Plan has set the target for sugar production at 2.25 million tons. Capacity is estimated to be around 2.50 million tons.

If production of sugar in China is one-fourth the level of production in India on per capita basis the availability is almost one-sixth of the Indian level. Unless there is a shift in emphasis in China from producer goods to consumer goods, the target for the sugar industry will remain unattained in the same way as the target for the first Plan remained unfulfilled.

SUGAR

(Thousand metric tons)

Year	China	India
1952	249	1,441.2
1953	298	1,318.0
1954	347	1,103.4
1955	410	1,641.1
1956	518	1,981.3

CHINA: WHERE DOES THE MONEY COME FROM?

The following two tables show the sources of revenue and their changes during the five-year period, 1953-57.

Sources of Revenue (1953-57)

	Amount (in million yuan)	Percentage of Total
TAXES	66,690	50.0
Revenue from State enterprises .	55,920	41.9
Receipts from loans and credits	5,980	4.5
Other sources	4,750	3.6

Revenues Year by Year (1953-57)

(In million yuan)

	1953	1954	1955	1956	1957
TAXES . . .	11,970	13,220	12,740	14,090	14,670
of which, tax on industry and commerce . .	8,250	8,970	8,730	10,100	10,650
Agricultural tax .	2,710	3,280	3,050	2,970	2,940
Revenue from State enterprises . .	7,670	9,960	11,190	13,430	13,670
Receipts from loans and credits . .	490	1,790	2,360	720	620
Other revenues	1,630	1,270	910	510	430
TOTAL . .	21,760	26,240	27,200	28,750	29,390

CHINA: WHERE DOES THE MONEY GO?

Financial outlay by the state for the five years amounted to 132,210 million yuan (equivalent to more than 1,300 million tolas of gold, not including transfers to the banks for credit and loan funds and to the local governments for revolving funds).

BREAKDOWN OF EXPENDITURES (1953-57)

	Amount in million yuan	Percentage
Economic construction ..	64,400	48.7
Education, culture and social services	19,440	14.7
National defence and administration	41,170	31.1
Repayment of loans, etc. ..	7,200	5.5
TOTAL	132,210	100.0

The figures for 1953-56 are actual expenditures; those for 1957 are those budgeted.

In almost every department, the expenditures have exceeded the original planned estimates. Below are given the year by year figures.

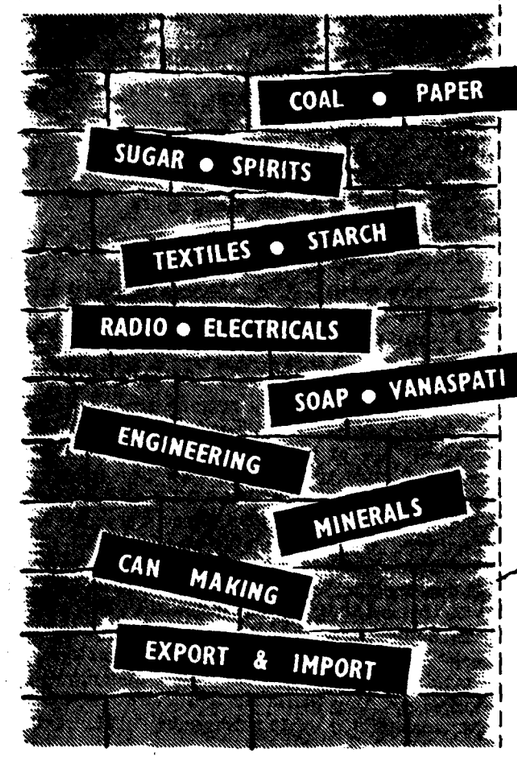
EXPENDITURES (953-57)

(In million yuan)

	1953	1954	1955	1956	1957
Total ..	21,490	24,630	26,730	30,570	28,790
Economic construction	8,650	12,360	13,760	15,910	13,720
Education, culture & social services ..	3,360	3,460	3,190	4,590	4,840
National defence & administration ..	7,800	7,970	8,660	8,780	7,960
Repayment of loans etc. ..	1,680	840	1,120	1,290	1,810
Reserve					660

Source: China Today.

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Designed to carry the country towards the goal of a socialist pattern of society, the Second Five Year Plan is the embodiment of the hopes and aspirations of the nation. It stands for rapid development of basic and heavy industries, a great advance in food and agricultural production, a further increase in national income, expansion of employment opportunities and a more even distribution of economic power and the rewards of labour and enterprise. The problems that it poses are only the pangs of progress. It is a challenge that the nation can and must meet by rallying to the cause of the Plan and striving for its fulfilment in a spirit of dedication, service and sacrifice.

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FOR PROGRESS

FOR PROSPERITY



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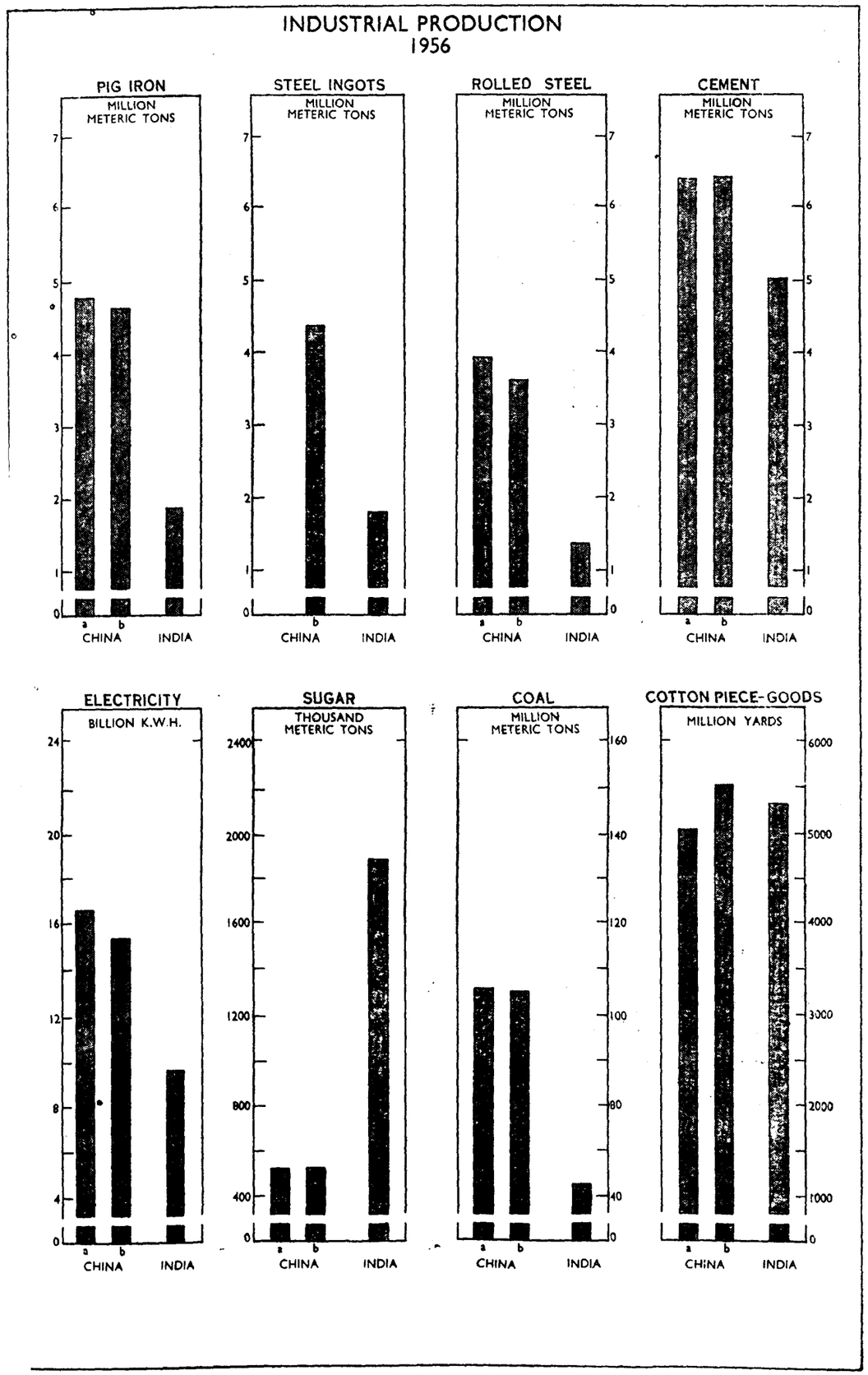
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a: "China Today", September 1956.

b: Economic Survey of Asia and the Far East, 1956.

COMPARISON OF PRODUCTION AND TARGETS FOR SELECTED PRODUCTS, INDIA AND CHINA

Item	India 1950-51	India 1953-54	India target 1955-56	China 1952	China 1954	China target 1957	Footnote India	Footnote China
Pig Iron (million tons)	1.57	1.65	2.83	1.90	3.03	4.67	5	1, 4
Steel (million tons)	.976	1.08	1.65	1.35	2.17	4.12	5, 6	1, 4, 2
Electric Power (million kwh.)	5,688	—	—	7,260	10,800	15,900	—	1, 4
Electric Power (million kw.)	—	—	[12]3.38	—	—	—	11, 12	—
Coal (million tons)	34.43	—	—	63.52	81.99	112.98	10	1, 2, 4
Metal Working Machines (units)	1,100	—	4,600	—	13,513	—	11	1
Cement (million tons)	2.69	4.02	4.80	2.86	4.73	6.00	5	1, 4
Paper (thousand tons)	114	137	200	372	480	655	5	1, 4
Petroleum (million tons)	--	—	—	.436	—	2.01	—	4
Petroleum (million gallons)	—	—	403	—	—	—	5	—
Coke (thousand tons)	—	—	—	2,860	—	6,685	—	4
Caustic Soda (thousand tons)	11	25	33	79	—	154	5	4
Sulphate of Ammonium (thousand tons)	46	307	450	181	—	504	5	4
Locomotives (units)	—	86	438	20	—	200	5, 8	4
Passenger cars (rail) (units)	479	786	4,380	6	—	300	5	4
Freight cars (rail) (units)	1,095	6,892	30,000	5,792	—	8,500	5, 8	4
Automobiles and Trucks (units)	16,519	12,629	30,000	—	—	4,000	5, 7	4, 2
Glass Plate (Thousand Square metres)	—	—	—	21,320	—	40,000	—	4
Glass Plate (tons)	5,850	11,250	26,000	—	—	—	5	—
Cotton yarn (million bales)	—	—	—	3.61	4.6	5.0	—	4, 1
Cotton yarn (million pounds)	1,179	1,520	1,640	—	—	—	5	—
Cotton cloth (thousand bolts)	—	—	—	111,634	—	163,721	—	4, 3
Cotton cloth (million yards)	3,718	4,906	4,700	—	—	—	5, 9	—
Sugar (thousand tons)	1,120	1,001	1,500	249	—	686	5	4
Food grains (million tons)	54.0	60.1	58.1	—	—	—	10	—
Food grains (billion catties)	—	—	—	327.93	—	385.62	—	1, 4
Cotton (10,000 bales)	29.7	—	33.4	—	—	—	10	—
Cotton (billion catties)	—	—	—	2.61	—	3.27	—	1, 4

SOURCES

1. Chou En-lai, Report on Government Work to the National Peoples Congress, September 23, 1954. Reported in Hsinhua News Agency, Daily News Release, September 24, 1954.
2. Li Fu-chun, Report on the first Five-Year Plan for Development of the National Economy. Supplement to Peoples China, August 16, 1955.
3. 1952 and 1957 production excludes native cotton cloth produced from native cotton yarn.
4. The first Five-Year Plan of the People's Republic of China for the Development of the National Economy Peking, August 1955. (Summary U.S. Consulate, General, Hong Kong, Despatch 378 1955.)
5. Government of India, Planning Commission Five-Year Plan. Progress Report for April-September, 1954. New Delhi, 1955.
6. Steel production figure for 1950-51 excludes secondary producers.
7. Automobiles manufactured excluding those assembled in India. The Planning Commission Progress Report for 1953-54 states that production in 1951-52 was 23,576 automobiles; in 1953-54, 12,629 automobiles.
8. During 9-month period, April-December 1954, 103 locomotives and 8,455 freight cars were built.
9. Mill-made cloth only. Handloom cloth target for 1957 is 1,700 million yards.
10. Government of India, Planning Commission, Five-Year Plan, Progress Report for 1953-54. New Delhi, 1954.
11. Planning Commission, the first Five-Year Plan, a summary, New Delhi, 1952.
12. Production target for electric power is not given. Capacity would increase from 2.3 million kilowatts in 1950 to 3.38 million kilowatts in 1956.



The Power to do work

BURMAH-SHELL . . . IN INDIA'S LIFE AND PART OF IT

Energy means the power to do work, and India needs all the energy she can get if the targets of the Second Five Year Plan are to be fulfilled. The proportion of *commercial* energy—that is to say, coal, electricity and oil—to the whole energy system is still extremely low in India. Nevertheless, it is beginning to have its impact on traditional methods and ways of life, even in remote rural areas.

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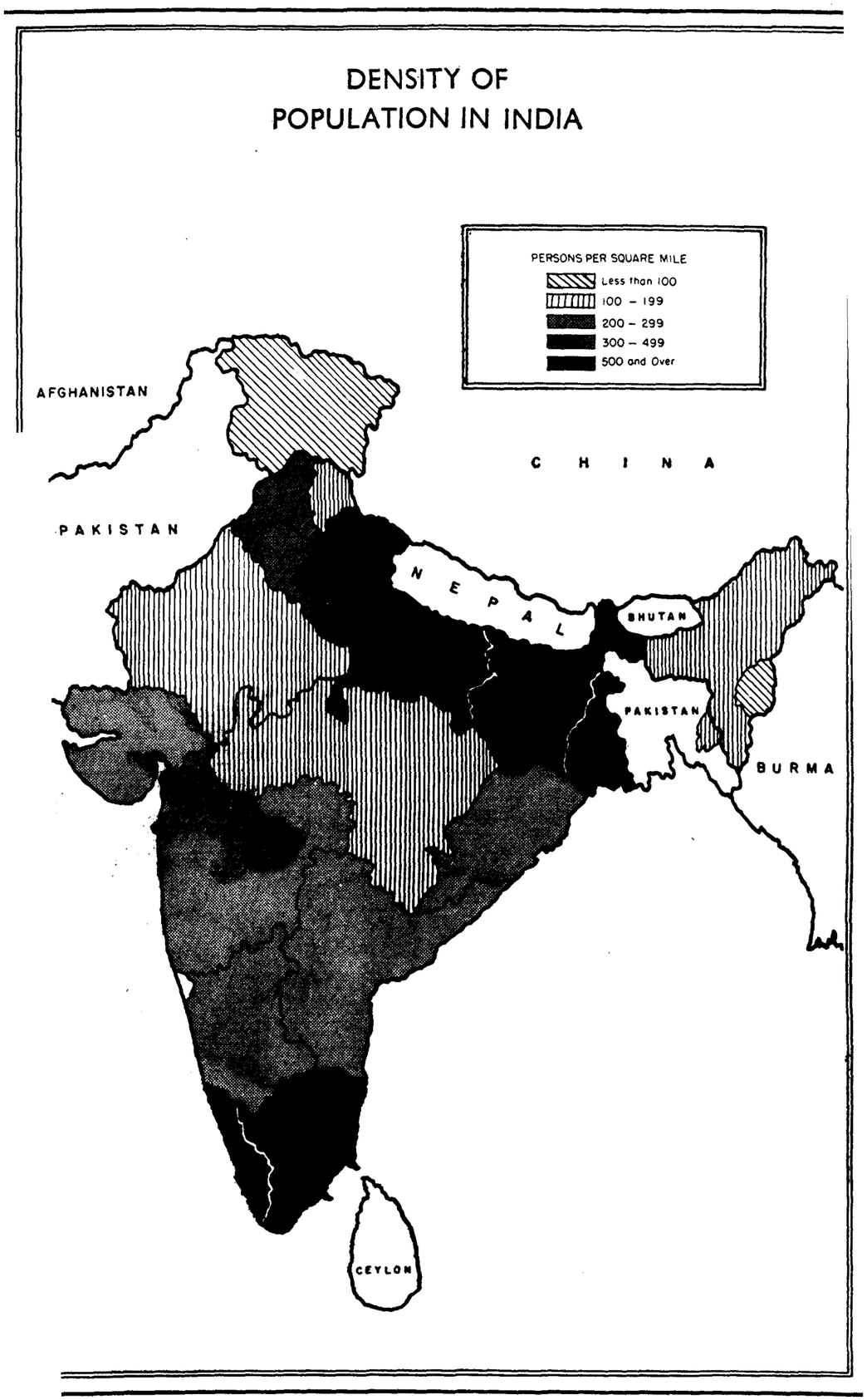
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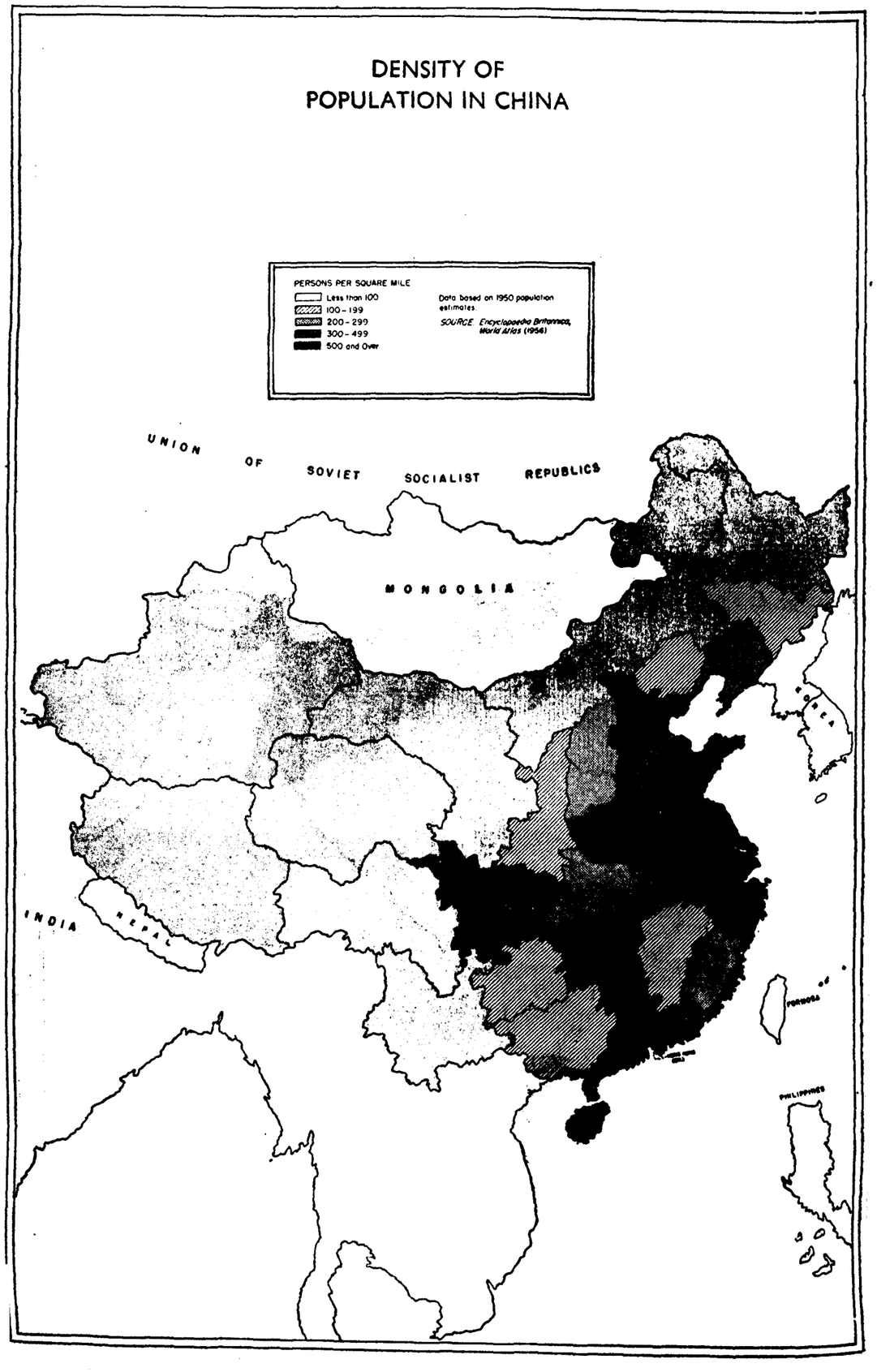
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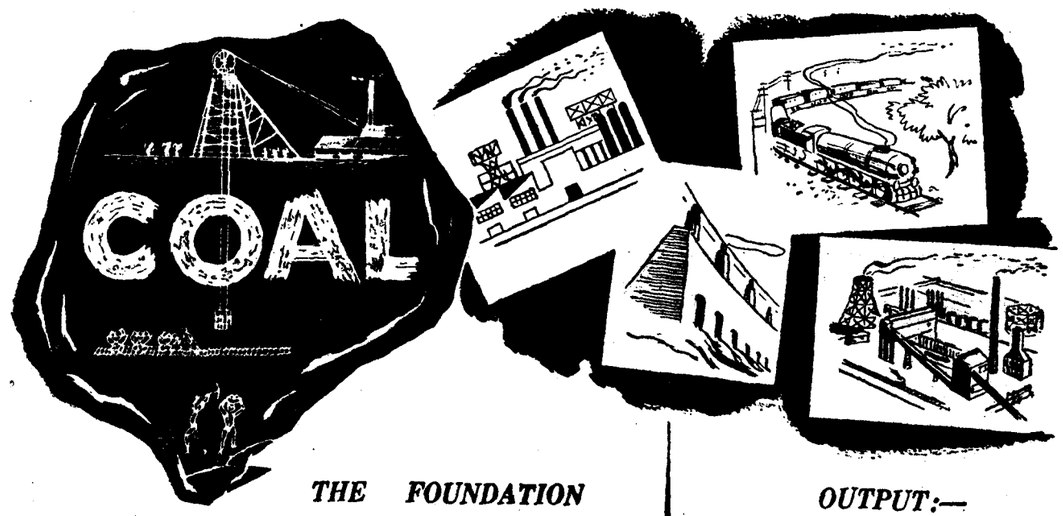
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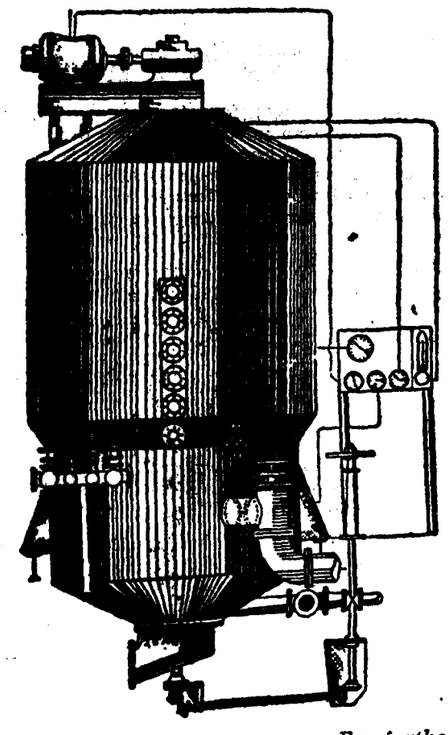
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Foreign Trade

China

THERE is apparent resemblance between the developments in recent years in the foreign trade of China and India. In both the countries foreign trade is undergoing considerable structural changes since they embarked upon planned development of their economies. The impact of development programmes is distinctly noticeable in the structure of imports. Machinery and capital equipment as well as semi-manufactures and industrial raw materials are absorbing a bulk of the share of imports, reducing the traditional proportion of consumer goods. This pattern of change is not novel to countries which are in the process of industrialising their economies. But the emphasis which China and India are placing, in varying degrees, on a rapid rate of industrialisation, as also on the heavy sector of industry, has made the changes in the structure of their imports quite pronounced with a drastic reduction of the consumer goods component. In India this process started virtually with her second Five-Year Plan, whereas in China the pattern was set from the very beginning of her first Five-Year Plan. The transition which involves great strains will be extended over some years, at any rate, in India, until the balance between agriculture and industry is brought into reasonable alignment. How far China will be able to pursue the course relentlessly like Russia is a matter for speculation. At this point the similarity in the nature of changes in their foreign trade ceases.

THE BASIC DIFFERENCE

The fundamental difference in the pattern of foreign trade in China and India is to be seen in its organisation and control. In quick stages, within a short span of two years, China, true to her Communist cult, brought the entire foreign trade within the grip and ownership of the Government functioning through the agency of the Foreign Trade Control Office, a strategic wing of that Ministry. Domestic trade, too, has been transformed under either socialisation or co-operativisation. In India, State participation in trade has been marginal with a modest extension in the wake of the responsibilities which the public sector is assuming in economic development. The State Trading Corporation of India, which has undoubtedly come to stay as an integral part of the country's organisational pattern of trade, is by no means an octopus bent on ramifying its activities into all spheres of trade until it occupies each one of them. Its purpose is to strengthen the weaker links in the chain of trading organizations which is obvious from its technique of operation in collaboration with the existing private trade agencies. China has managed to go headlong with a heavy programme of imports of capital goods and industrial raw materials to be paid for by exports which consist of as high a proportion as 75 per cent of agricultural products and a large part of the residue of mineral ores. Supplementary relief which is available in the form of credits is marginal, at any rate its magnitude is not revealed as it would have been if it was large. Nothing short of total control and direction of export resources can conceivably achieve a task of such increasing dimensions.

REORIENTATION FOR REGIMENTATION

In the initial stage, ever since its installation in power on an all-China basis in October 1949, the major pre-occupation of the Government of Communist China in directing its external trade policy was to wipe out the persistent deficit. Trade was geared to the stabilisation of the economy by various modes of regulation. The judicious control of foreign exchange which was clamped by the new regime was not altogether unfamiliar to most countries since the war. But by the adoption of a realistic exchange rate, tax concessions, subsidies, preferential freight rates, and so forth, exports were diligently fostered so that in the very next year—1950—not only was the trade deficit wiped out but a surplus was achieved. Although this surplus was by no means on a scale unparallelled in the history of the country's trade, as claimed officially, it gives a measure of the austerity practised in respect of imports. This recovery, however, was shortlived for in the middle of 1950 the Korean war changed the outlook for China's foreign trade.

China's involvement in the war in November 1950 made the change decisive for her. A radical reorientation of trade policy became a matter of paramount necessity for her. Faced with a stringent naval blockade, it was only to be expected that China would adopt a policy of stockiling of imports. The result was disclosed in the conversion of the modest trade surplus of 1950 into a sizeable deficit in 1951. The United Nations embargo on trade with China, formally declared in May 1951, aggravated the situation for her. The embargo, like all economic sanctions implying injury to both the parties in the long run, was hardly expected to be fully effective. Nevertheless, in the immediate context, it pushed China's trade straight in the direction of the Communist Bloc. The free world's share in exports to China dropped by 50 per cent in the second half of 1951 below the level in the first half. More significant is the rapid decline in the free world's share of China's total external trade, which is estimated to have dropped from 79 per cent in 1950 to 39 per cent in 1951, 28 per cent in 1952 until it reached the low ratio of 20 per cent towards the close of 1954.

Although in its immediate impact the effect of the embargo on the direction of China's trade was significant, its real and long-run magnitude need not be exaggerated. It is an error to assume that in the absence of the embargo the traditional direction of China's foreign trade would have been preserved by her new rulers. China's foreign economic policy was bound to be directly influenced in a profound degree by her political ideology. A major and rapid shift in the direction of trade from the free world to the Communist Bloc was a matter of priority for her. The embargo merely hastened the process. The inauguration of her first Five-Year Plan in 1953, necessitating continuous and heavy imports of strategic capital goods and other industrial materials, must be considered to be the major factor in the reorientation of her trade policy both as regards the composition and direction of trade. Foreign trade was regimented in the direction of the Communist Bloc as a matter of deliberate and progressive economic integration. China had to contribute her share in the consolidation and expansion of the "socialist international market". Thus the reorientation of her external trade policy provides but an instance of the application of the basic creed of international Communism. In absolute terms Communist China's imports and exports have kept on increasing in volume as well as value like the foreign trade of all other countries. But the real extent of the increasing integration of her trade with the rest of the Communist Bloc can be measured in percentage terms. The share

of the Communist Bloc has risen steeply from 21 per cent in 1950 to 61 per cent in 1951, 75 per cent in 1953, while the figure in 1955 is reckoned at anything between 80 per cent and 85 per cent.

THE COMPOSITION OF IMPORTS

An analysis of China's import trade, which has been transformed beyond recognition consequent on the re-orientation of external trade policy after 1951, has been seriously handicapped by the discontinuance of the official statistics from that year. Data for trade with the non-Communist countries are available from the U.N. sources as well as official sources of the participating countries. But the handicap operates in respect of over four-fifths of the trade carried on with the Communist Bloc. Tables A to D in this Section give a commodity-wise break-up of the broad categories of the import-export trade for the pre-war period and the period immediately preceding the introduction of the present trade policy. In their limited context they are useful to the extent they bring out the contrast with the position obtaining after the regimentation of trade for integration wih the Communist Bloc. The pre-war annual average of imports (Table B) discloses the share of machinery, equipment and metals (including construction materials like cement and timber) to be of the order of 30.2 per cent, plus 27.3 per cent for petroleum, chemicals, and other industrial materials making a total of 57.5 per cent. Machinery and metals in 1950 accounted for 26.1 per cent in 1950 (Table A). Combined with raw materials, chemicals and mineral oils they add up to an aggregate of 74.3 per cent. Apart from the fact that the classification in the two periods is not similar, 1950 was a year of austerity in imports. This stands in sharp contrast with the recent share of capital goods, equipment, industrial materials which is placed as high as over 85 per cent in total imports. Foodstuffs and consumer goods which absorbed 42.5 per cent of total imports before the war and 25.7 per cent in the reduced imports of 1950 have been further cut down to 15 per cent after 1951. This percentage composition in the period especially following the inauguration of the Five-Year Plan should give a broad idea of the magnitude of the trade measured in value which must be high indeed.

THE PATTERN OF EXPORTS

The pattern of exports exhibits relative inflexibility in the short and medium periods, in any event, in free economies. Nevertheless, the trends in Communist China's exports demonstrate that under a regime of regimentation this inflexibility can be broken in a certain measure. Sheer necessity to cover the bulk of payments for the high cost of imports, with a large component of capital goods and other industrial requirements, by current earnings of exports has dictated the urgency of pushing up the volume of traditional staple exports. Table D is instructive in this sense. But trends in 1951 shown there must be read subject to the observation that the growth in the volume of staple exports was raised further in the first Plan period. Except for salt which registered a steep decline to one-tenth of the pre-war volume and raw silk whose volume is static, each single staple export — antimony, coal, soya beans, tung oil, and so forth — discloses a marked increase in 1951. The pre-war average share (Table C) of agricultural products and allied articles was of the order of 64 per cent. In 1950 (Table A) it jumped to 71 per cent. This was under the deliberate stimulus given to exports in that year in the new regime's determined bid to eliminate the chronic trade deficit. It comes much nearer to the present share of agricultural exports of about 75 per cent. An interesting feature of the export trade of China is its content of re-exports which has become imperative on account of the large-scale resort to bilateral trade agreements. Russia's intake of rubber via re-exports from Great Britain declined steeply from 88,000 tons in 1952 to 27,000 tons in 1953 and to merely 4,000 tons in 1954. The decline is attributed to re-exports of this strategic material from China since there were no direct exports to Russia in the three years from Malaya, Ceylon or Indo-China.

TRADE WITH THE "REST OF THE WORLD"

Communist China's trade with the non-Communist world, described as the "rest of the world" in U.N. publications and "capitalistic countries" in Chinese official parlance, is carried on the basis of bilateral agreements. In the case of five Asian countries the agreements are concluded with the governments of those countries, while in the case of Japan and five West European countries they are entered into with non-official representative organisations. The composition of China's imports from these countries discloses the necessity of closer ties, integration with the Communist Bloc notwithstanding. Machinery, metals and metal products, electric equipment, transport and communications equipment and chemicals are the major items in the case of the U.K. In addition to these products from France, Belgium, Holland and Italy, chemical fertilizers from a vital import from the last two countries. The two agreements in the case of Japan for June-December 1952 and October-December 1954 provide for trade each valued at $84 million each way. Textile machinery, railway equipment, ships, steel manufactures, non-ferrous ingots and agricultural machinery constitute the vital imports from Japan. Soyabeans, tea, vegetable oils, oilseeds, silk raw and manufactured, coal, iron, ore, manganese ore, antimony and a wide range of agricultural products compose China's exports to these countries. Table E provides data about China's foreign trade with 10 principal non-Communist countries whose percentage shares in the export and import trade with this region were almost identical in 1950 and 1954. They show a substantial decline in China's trade with them of the order of 25 per cent in exports to them and 35 per cent in imports from them between these two years.

Out of India's four short-term agreements concluded with China in 1951 and 1952, three agreements — those of January 1951, April 1951 and December 1952 — stipulated for imports from China of 50,000 tons of rice in each case. The agreement of May 1951 is vital for the reason that it explains the timely assistance which India received in her critical food situation — 400,000 tons of rice. India exported in return in terms of these agreements mainly burlap bags fixed at a quantity of 16,500 bales. As Table E reveals, India's trade with China was at the maximum level during the relevant period in 1951 and 1952 which is to be related to these agreements. The high exports from China—$29 million in 1951 and $32 million in 1952 — are largely attributable to the shipments of rice. The agreement of October 1954 between the two countries provided for exchange of various manufactures, light equipment, construction materials and agricultural products both ways, depending on the conclusion of specific individual contracts.

Among the other countries of South and South-East Asia — Ceylon, Indonesia, Pakistan and Burma — which, too, have made bilateral agreements of trade with China, four agreements with Ceylon are typical for the basic rice-rubber deals. The quantity of rice to be exported from China was fixed at 80,000 tons in the first part of October 1952, whereas each of the remaining three deals between 1952 and 1954 provided for 270,000 tons. Ceylon undertook to export 50,000 tons of rubber per each agreement. Burma's two agreements of 1954 contain terms about export of rice to China, the second

TABLE A.
CHINA: MAIN COMMODITY EXPORTS AND IMPORTS 1950

(By percentages of total exports and imports)

EXPORTS:				IMPORTS:			
A. By commodities		A. By commodities		B. By categories		B. By categories	
Soya beans	14.4	Cotton	18.0	Food	16.3	Food	3.0
Tung oil	7.0	Rubber	11.5	Raw materials	42.4	Raw Materials	29.5
Bristles	6.7	Iron & Steel	11.3	Oil & Fats	12.4	Minerals oils	8.4
Fats & Oils	5.4	Machinery	8.3	Others	28.9	Chemicals	10.3
Peanuts, Shelled	4.7	Petroleum	6.2			Machinery & metals	26.1
Eggs & Products	4.7	Pharmaceuticals	4.0			Other manufactures	5.5
Wool	4.1	Vehicles	3.2			Others	17.2
Tea	3.3	Gunny bags	3.0				
TOTAL	50.3	TOTAL	65.5	TOTAL	100.0	TOTAL	100.0

Source: U.N., Economic Bulletin for Asia and the Far East (November 1953), p. 27.

TABLE B.
COMPOSITION OF CHINA'S IMPORTS, ANNUAL AVERAGE 1935-1937a

Commodities	Average Value (U.S.$ million)		Per cent of Total	
(1) Machinery and tools, iron and steel, non-ferrous metals, transportation equipment, timber and cement, total		90.5		30.2
Machinery and Tools	30.0		10.0	
Iron and Steel	28.8		9.6	
Automobiles and bicycles, ships and planes	8.8		2.9	
Non-ferrous metals	6.8		2.3	
Railway equipment	5.5		1.8	
Timber and Cement	10.7		3.6	
(2) Petroleum products, fuel, dyes, chemicals, cotton, wool and rubber total		81.6		27.3
Petroleum products	30.8		10.3	
Dyes	12.3		4.1	
Chemicals and Pharmaceuticals	16.0		5.3	
Cotton	10.2		3.4	
Wool	4.4		1.5	
Fuel and Wood	4.8		1.6	
Rubber	3.2		1.1	
(3) Foodstuffs and tobacco, total		54.2		18.1
Rice, Wheat and Flour	27.8		9.3	
Sugar	7.6		2.5	
Tobacco	5.2		1.7	
Other foodstuffs	13.6		4.5	
(4) Other consumer goods, total		73.0		24.4
Cotton, woollen and rayon yarn and manufactures	15.0		5.0	
Flax, linen, jute and manufactures	5.4		1.8	
Sundries	34.1		11.4	
TOTAL		299.3		100.0

a Excluding the North-East; figures are rounded to the nearest first decimal place and therefore not always additive.

Source: Chih Tsang, China's Post-War Markets (New York, 1945), pp. 114-115.

TABLE C.
COMPOSITION OF CHINA'S EXPORTS; ANNUAL AVERAGE 1935-1937a

Commodities	Average Value (U.S.$ million)		Per cent of Total	
Food and tobacco, total		56.1		25.2
Eggs, Dried, Frozen and Fresh	9.6		4.3	
Peanuts, Nuts and Fruit	7.7		3.2	
Vegetables and Beans	7.2		3.2	
Sausages casings, Pigs and Meat	6.3		2.8	
Millet, Oilcake and Bran	4.8		2.1	
Tobacco Leaf	2.6		1.2	
Other	4.7		2.1	
Agricultural Raw Materials, Total		86.4		38.9
Tung Oil	21.1		9.5	
Other Oils, Seeds and Fats	14.1		6.1	
Raw Silk and Pongee	14.1		6.3	
Raw Cotton	8.4		3.8	
Bristles	7.2		3.2	
Sheep Wool and Camel's Hair	5.8		2.6	
Goat and Lamb Skins	4.8		2.2	
Hides, Skins and Leather	7.2		3.2	
Other	3.7		1.7	
Minerals, total		22.2		10.0
Tin	9.0		4.1	
Tungsten	5.8		2.6	
Antimony	3.1		1.4	
Iron Ore	1.2		0.5	
Coal	3.1		1.4	
Manufactures, total		33.1		14.9
Cotton Yarn and Piece Goods	6.1		2.8	
Cotton and Silk Waste	3.9		1.7	
Lace, Thread and embroideries	4.6		2.1	
Linen embroideries	4.9		2.2	
Rugs and Mats	5.1		2.3	
Other Textiles	2.9		2.3	
Other	5.5		2.5	
Miscellaneous		24.3		11.0
TOTAL		222.1		100.0

a Excluding the North-East; figures are rounded to the nearest first decimal place and therefore not always additive.

Source: Chih Tsang, China's Post-war Markets (New York, 1945), pp. 129-130.

TABLE D.

SELECTED EXPORTS FROM CHINA 1936 AND 1951

(Thousand metric tons)

	1936	1951
Antimony a	7	20
Coal	4,862	7,430
Egg Products	63	70
Peanuts	172	250
Salt	997	100
Silk, Raw	10	10
Soya beans	1,909	2,480
Tea	34	100
Tung Oil	87	100

a 1938.

Source: U.N., World Economic Report 1951-1952, p. 129, Table 80. The 1951 figure for tea exports is reconcilable with the figures for tea production in State Council, the first Five-Year Plan (Peking, Chinese language, 1955), p. 81, since the latter are for unfired green tea, while exports consist chiefly of brick and black tea.

TABLE F.

HONG KONG'S TRADE WITH CHINA AS PERCENTAGE OF TOTAL TRADE 1938-1954

(Balance of Trade)

Year	Percentage of Total Imports	Percentage of Total Exports	with China (£ million)
1938	37.7	45.0	— 0.2
1948	20.7	17.7	— 9.3
1949	21.5	25.6	0.4
1950	22.6	39.2	37.5
1951	17.7	36.1	45.7
1952	22.0	17.9	—19.4
1953	22.1	19.8	—19.8
1954	20.8	16.2	—18.9
1955	24.1	7.1	—44.8

Source: Hong Kong, Department of Commerce and Industry, Trade Statistics, 1954-55, and Colonial Office, Colonial Reports, Annual Report on Hong Kong, 1948-1952.

TABLE E.

CHINA'S TRADE WITH THE REST OF THE WORLD 1950-1954

(U.S. $ million)

	1950		1951 (May)		1952		1953		1954	
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports
Hong Kong (a)	152	257	162	305	145	91	150	95	121	68
United States	150	46	51	—	28	—	9	—	—	—
Ceylon	1	—	1	8	7	26	44	51	33	47
Pakistan	19	8	17	45	2	84	3	7	2	26
Japan	38	20	22	6	16	1	30	5	41	19
United Kingdom	29	10	22	8	8	13	29	18	25	19
Switzerland	13	18	13	26	10	18	16	26	11	23
West Germany (b)	—	—	—	—	18	3	33	25	36	22
Malaya (b)	—	—	—	—	39	—	34	2	29	6
India	**2**	**5**	**29**	**13**	**32**	**7**	**2**	**3**	**2**	**4**
Total for 10 countries	404	364	317	411	305	243	350	232	300	234
Per cent of Trade with Rest of the World	85	39	65	93	90	97	79	80	85	87

a 1950 includes trade with Taiwan.

b 1950 and 1951 figures not included for West Germany and Malaya. Trade with Malaya may be estimated to be U.S.$40 million each way in both these years.

Source: U.N., Economic Survey of Asia and the Far East 1951, p. 163, and Economic Bulletin for Asia and the Far East (November 1953), p. 26; U.N., Direction of International Trade, Annual Issue 1953 and Monthly Issues 1954-1955.

TABLE G.

BRITISH TRADE WITH CHINA IN SELECTED YEARS

(£ million)

Year	Exports	Imports	Year	Exports	Imports
			1951	2.7	7.7
1929	14.1	12.2	1952	4.6	3.0
1937	5.9	8.2	1953	6.3	10.2
1949	2.4	3.6	1954	6.9	9.0
1950	3.6	10.3	1955	7.9	12.4

Source: Board of Trade, Annual Statement of the Trade of the United Kingdom, 1929, 1937 and 1949-1952, and Trade and Navigation and Accounts (December 1953. 1954, 1955); the first column in the table shows exports, including re-exports, to China, the second is imports from China.

agreement of November 1954 stipulating for a quantity of 150,000 tons. Agricultural and light machinery, machine tools, textile machinery, figure as items of exports from China to Burma and Indonesia. Furthermore, recently China has supplied to Burma ful equipment for two textile mills. These exports of industrial equipment are undoubtedly inspired by their propaganda potential.

The following table summarises the break-up of China's trade wih the "rest of the world" by principal categories of goods for the three latest years:

CHINA'S TRADE WITH THE "REST OF THE WORLD"

(In million dollars)

	Foodstuffs		Raw Materials		Machinery & Transport Eqp.		Other Manufactured Goods		Total		Trade Balance
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	
1954	30.7	—	46.4	11.7	—	4.8	11.7	32 5	38.3	49.0	+39.8
1955	35.4	0.4	58.7	11.5	0.3	7.2	20.2	49.7	114.6	72.8	+41.8
1956	40.3	3.8	76.6	18.8	0.4	9 4	27.9	76.9	145.2	108.9	+36.3

Source: U.N. World Economic Survey, 1956.

INTRA-COMMUNIST BLOC TRADE

In this most strategic sector of China's external trade, which accounts for not less than four-fifths of the total, although estimates in terms of volume or value are not available, the composition of China's imports demonstrates its importance for her development projects. Russia supplies principally industrial equipment, motor vehicles, railway rolling stock, electric power equipment, mining machinery, agricultural machinery, rolled steel, petroleum products, chemicals, and so forth. Heavy industrial machinery and heavy trucks are the most crucial imports from Czechoslovakia. Machine tools, rails and other steel products as well as complete sets of factory equipment have figured as the major imports from Poland. Electrical generators, motors, chemicals and dyestuffs are among East Germany's supplies. Hungary and Bulgaria export light equipment. Rumania's important contribution consists of supplies of petroleum. These imports are paid for by exports of agricultural products and minerals.

TERMS OF TRADE: HARD BARGAINING

How are China's terms of trade with the Communist countries and particularly with her major trading partner — Russia? Here one has to look for straws in the wind. The governing feature of intra-Communist Bloc trade is its barter basis, which, apart from a maximum effort at balancing, involves price-fixing in terms of roubles. Russia in her trade agreements with China has proved to be a hard bargainer. This is typically shown by the experience of the high-powered delegation led by Premier Chou En-lai in the second half of 1952. Negotiations were protracted well over six months until the announcement about the agreement came on March 24, 1953, shortly after Stalin's death. Post-Stalin agreements have been less exacting in negotiations. The Communist claim to the effect that rouble prices fixed in the agreements are on parity with prevailing international prices is hard to accept. Burma's experience may be taken as representative in this respect. The disparity between rouble prices and world market prices is some times as wide as $70 per ton paid for soyabeans imported by Russia from Manchuria and $120 per ton outside the Communist orbit. Hog bristles, tung oil and oilseeds imported from China have been re-exported by Russia to West European markets at prices ruling at higher levels. Trucks exported to China via Russia have been priced three times as much as the cost of comparable vehicles supplied from Europe to Hong Kong. In this context it is essential to recall that imports from Communist countries are so classified on the basis of country of shipments and include an element of re-exports of West European origin. Their cost at destination cannot but be high.

THE BALANCE OF PAYMENTS: AN INTRIGUING PROBLEM

How does Communist China meet her problem of the balance of external payments? This is an intriguing question if considered in its overall context. But this is the context which must determine her ability in the long run to sustain the present structure of imports without which her successive Five-Year Plans cannot be implemented on an ever-progressive scale. China's balance of payments ought to be considered in two region-wise divisions—in respect of the "rest of the world" (or non-Communist countries) and in respect of the Communist Bloc.

The table given above which sets out the value of China's trade with the "rest of the world" shows that she had a trade surplus with this region as a whole of $39.8 million in 1954, $41.8 million in 1955 and $36.3 million in 1956. If this table is interpreted in conjunction with Table F in this Section, setting out the official figures for the balance of trade of Hong Kong with China, an almost complete clue is offered to the secret of China's total trade surplus with the "rest of the world". Table F highlights the vital significance of Hong Kong for the payments purpose of China. As that table reveals, it was only in 1950 and 1951 that Hong Kong had a trade surplus with China of the order of $105 million and $128 million respectively—due largely to the anti-blockade tempo of stockpiling of imports. Hong Kong's nominal trade surplus in 1949 may be disregarded.

The most vital fact established by this table is that in each year from 1952 onwards Hong Kong had a trade deficit with China, or to put it conversely for convenience, China had a trade surplus with Hong Kong. This surplus was of the order of $52.9 million in 1954 and $125.4 million in 1955. Comparing the size of this surplus with the total trade surplus in these years with the whole of the "rest of the world", the most important fact which emerges is that it is the Hong Kong trade that really creates either the entire surplus or bulk of it. Invisible items of current account between China, on the one hand, and the "rest of the world", on the other, may be treated as of no great consequence. In any event, it would be safe to assume that, with the Hong Kong trade surplus, China is able to balance

her payments with the non-Communist countries. Capital inflow from this region into China does not exist. There are two aspects of trade with Hong Kong which must not be missed. In the first place, Hong Kong is very badly dependent on China for the supply of essential consumer goods, including notably, foodstuffs. There is no normal alternative channel to replace this source. A stable trade surplus is thus assured to China. In the next place, the existence of a free foreign exchange market in Hong Kong should suffice to solve China's problem of making payments in particular non-Communist currencies as occasion would demand.

But in the overall payments picture, it is China's account with the Communist Bloc that essentially matters because the share of this bloc in China's external trade is as high as at least 80 per cent. Statistical particulars of this trade in value would throw light on the balance of payments with this crucial region. In their absence, however, it is possible to draw broad inferences. The composition of China's imports and exports which has been analysed in the foregoing part of this Section should at once suggest the indisputable fact that, despite the general barter basis character of this trade, China is running into a trade deficit with this region from year to year. One vital but erroneous impression about the genuine nature of the bilateral trade agreements of China with the Communist Bloc countries needs to be corrected. These agreements are admittedly not on a pure and self-balancing barter basis. A scrutiny would show that the purely barter agreements concluded were mainly as follows: (A) Russia: the agreements of 1951 and 1952. But it should be underlined that they were followed in the same years by protocols under the long-term credit agreements of 1950 which, in effect, helped to provide accommodation for China's import surplus from Russia. (B) Bulgaria: the barter agreement of July 1952 described as a short-term agreement, but followed by a barter plus payment agreement concluded at the end of that year. (C) Rumania: Barter agreements of 1952 second half and 1953. (D) Albania: Barter agreement of 1954 followed by barter and payment agreement in December the same year. (E) North Korea: Barter agreement of 1954. In parenthesis it may be mentioned that China has rendered economic aid including trade to North Korea as a matter of political expediency. (F) Viet-Minh: Barter agreement of 1954. The overwhelming majority of China's bilateral agreements—those entered into with Russia, Czechoslovakia, Poland, East Germany, Hungary, Bulgaria, Rumania, Albania, and even Outer Mongolia—are on a barter plus payment basis.

The main threads of China's external payments with the Communist Bloc may be gathered by inference. One item of invisible imports from Russia into China is the inflow of capital for the China-Russia joint enterprises for the development of petroleum, non-ferrous metals and rare metals in Sinkiang as well as the flotation of the air transport company. Possibly, this import is included in the visible trade account. The position about the other joint enterprises is obscure. However, since 1955 a trend has been set in motion whereby the ownership of whatever joint enterprises have been floated is being transferred exclusively to China. If so, it creates the logical liability of payment to Russia. The number of Russian technicians and "advisers" in China was variously estimated above 15,000 in the recent past. The mode of payment for their services is not clear. There are other items like interest on the Russian loan or outstanding payments to other Communist countries which do not appear to be substantial. Expenditure on Chinese diplomatic establishments abroad is probably cancelled out by counter in-payments. Remittances from Chinese abroad was traditionally a fruitful source of invisible receipts, which, however, is dwindling as avenues of investment in China for unearned income are fast fading out.

The most significant element in the payments problem is the long-term credit granted by Russia. The Russian loan of 1950 worth $300 million was initially agreed to be paid in five equal annual instalments. The bilateral trade agreements of China with Russia make mention of protocols under this credit which suggests payments in the shape of capital goods. To what extent disbursements from this loan have been made is a matter of conjecture. According to one report, however, another loan agreement for an amount of $1 billion was concluded between Russia and China. The previous loan of 1950 is said to have been merged with it.

The upshot of this inferential discussion of China's payments problem with the Communist Bloc is that China is incurring a continuous net deficit and she has no choice but to lean heavily on Russian aid for goods, technical services and credits, if she is to be enabled to adhere to her ideal of ambitious industrialisation. Its political moral should be obvious.

India

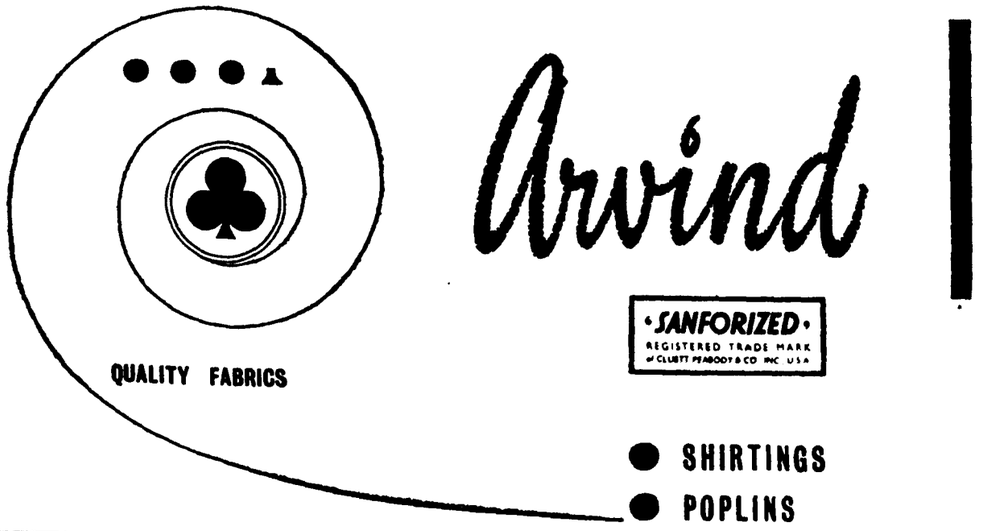
THE foreign trade of India, like the foreign trade of Communist China, was subjected to sudden dislocation, but for a different reason and with a different effect. The partition of the Indian sub-continent had the direct consequence of converting India into a net importer of certain strategic materials ilke fibres in which she was self-sufficient and a substantial import of food with the least turn in the monsoons or natural calamities like floods which are frequent. Sharp divergence between India and Pakistan over at least two outstanding issues — Kashmir and canal waters — has prevented smooth neighbourly relations which would have made the economic consequences of partition much less painful than they have actually been. But the magnitude of these consequences must not be magnified. The injury inflicted by partition is being healed partly by greater domestic production and partly by other sources of supplies. In the total context of India's external trade, the share of Pakistan in modest and in the light of her development requirements its size is unlikely to be enlarged. Communist China's rupture with the free world, her involvement in the Korean hostilities, bringing in its wake the United Nations embargo on her trade, and the ideological imperatives disrupted the pattern of her foreign trade and gave it a twist. Unlike China, India is not forced to bring about a radical change in the traditional direction of trade, whose virtue of mutual benefit to the participants has been tested over decades. Such adjustments as India has to make in the pattern of the direction as well as composition of her trade are necessitated by the requirements of her programmes of economic development.

THE NEW LOOK OF THE STRUCTURE OF IMPORTS

The structure of India's import trade is being transformed in the last seven years and this process is expected to continue by reason of the obligation, implicit in the Five-Year Plans, to incur a sizable import surplus with emphasis on capital goods and industrial materials, raw as well as semi-manufactured. There is,

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3. Government Ceramic Factory, Kundara, Producers of India's Superfine China Clay, Fire Clay and Fire Cement. Specialists in high class crockery and electrical, chemical and refractory porcelain.
4. Kerala Government Ceramics, Kundara, New concern started for production of high-class crockery and insulators.
5. Government Oil Factory, Kozhikode, Manufacturers of Ademin (concentrate) and Shark Liver Oil — Vitamin supplements for children, mothers and convalescents. SEA GOLD-BLENDED SHARK LIVER OIL — The Full complement of Vitamins A and D is ensured in this preparation at a low cost.
6. Kerala Soap Institute, Kozhikode, Makers of high-class toilet, washing, medicated, shaving and other kinds of soaps.
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(Inserted by the Department of Public Relations, KERALA)

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TABLE I.

PRINCIPAL IMPORTS INTO INDIA

(By Sea, Air and Land)

(Value in lakhs of Rupees)

Item	1951-52	1952-53	1953-54	1954-55	1955-56	1956 (April-Dec.)
Consumers, Goods :						
1. Grain, Pulse & flour*	22,812	22,812	7,248	6,837	1,768	135
2. Fruits and Vegetables (excluding cashewnuts)	1,062	908	956	1,000	984	696
3. Spices	966	425	568	429	634	654
4. Textile manufactures (excluding yarn)	848	564	479	437	684	426
5. Drug & Medicines	1,561	1,147	1,247	1,328	1,501	1,207
Producers Goods :						
(i) **Raw materials—**						
1. Hides & Skins raw and tanned**	123	80	112	129	198	110
2. Oils (excluding Kerosene)	6,028	6,006	6,488	6,142	4,369	4,578
3. Raw cotton	18,718	7,667	5,275	5,845	5,733	3,526
4. Raw Jute	6,708	1,648	1,432	1,300	1,933	737
5. Raw wool	259	71	178	100	142	81
6. Art Silk yarn	1,729	785	1,204	1,269	1,544	1,374
7. Chemicals (including chemical preparations	1,900	1,274	1,272	1,793	2,126	1,874
8. Dyes	1,607	851	1,663	1,737	1,497	1,224
(ii) **Capital Goods :**						
1. Machinery (excluding consumption items)	10,516	8,530	8,351	8,282	11,451	11,350
2. Electrical goods	1,019	1,485	1,310	1,118	1,502	1,542
3. Metals—iron and steel	2,079	2,056	2,267	2,861	5,414	9,845
4. Other metals	2,276	2,271	1,614	2,844	3,829	2,880
TOTAL (including others)	94,313	66,988	57,193	65,626	67,883	61,187†

* Excludes value of certain consignments of food grains awaiting adjustments. ** Incomplete.
† Figures are provisional. **Source:** D.G.C.I. & S.

TABLE II.

PRINCIPAL EXPORTS FROM INDIA

(By Sea, Air and Land)

(Value in lakhs of Rupees)

Item	1951-52	1952-53	1953-54	1954-55	1955-56	1956 (April-Dec.)
A. **Consumers' goods :**						
1. Cashew kernels	905	1,298	1,099	1,070	1,292	1,187
2. Black pepper	2,322	1,606	1,287	699	471	196
3. Tea	9,398	8,088	10,219	14,774	10,914	10,844
4. Cotton piece goods*	5,215	6,207	6,365	6,331	5,663	4,271
5. Woollen carpets & rugs	588	280	369	337	397	306
B. **Producers' Goods :**						
1. Coal	955	983	684	572	425	401
2. Mica	1,321	901	806	672	837	657
3. Manganese Ore	1,569	2,178	2,423	1,292	1,072	847
4. Gums, Resins & Lac	1,627	811	743	1,151	1,299	867
5. Hides & Skins, raw & tanned	3,354	2,580	3,106	2,777	2,911	1,984
6. Vegetable oils	2,361	2,655	489	2,002	3,433	1,244
7. Raw cotton	1,368	1,933	940	1,019	2,969	762
8. Raw wool	490	841	587	861	973	727
9. Gunny bags	13,529	6,139	4,024	5,686	5,419	3,987
10. Gunny cloth	12,458	6,307	6,943	6,254	5,908	4,474
TOTAL EXPORTS (including others)	72,907	57,234	52,581	58,847	59,085	43,467

NOTE: (1) Exports are on f.o.b. basis from 1951-52. (2) Exports are of Indian merchandise only.
(3) Figures for 1956-57 are provisional. * Handloom and Mill-made.

TABLE III.

INDIA'S BALANCE OF TRADE IN MERCHANDISE†

(Sea, Air and Land)

(PRIVATE AND GOVERNMENT)

(Lakhs of Rupees)

Year	Imports**	Exports*	Balance of Trade
1951-52	943,13	732,99	—210,14
1952-53	669,88	577,37	—92,51
1953-54	571,93	530,62	—41,31
1954-55	656,26	593,54	—62,72
1955-56	704,81	609,41	—95,40
1956-57	840,11	600,37	—239,74

† Provisional. * Figures are inclusive of re-exports and are on f.o.b. basis. ** Exclude the value of certain special imports of foodgrains and stores for which full particulars are not available.

Source: Reserve Bank of India Report on Currency and Finance (1956-57).

TABLE VI.

INDIA: INDEX NUMBERS OF IMPORTS AND EXPORTS

Base: 1952-53 = 100

Year	Volume Index Imports/Exports		Price Index Imports/Exports		Net Terms of Trade
1948-49	135	106	78	86	110
1949-50	127	112	77	91	118
1950-51	112	117	83	111	134
1951-52	146	95	115	153	133
1952-53	100	100	100	100	100
1953-54	95	99	93	94	101
1954-55	105	102	91	100	110
1955-56	114	115	94	93	99

Source: Reserve Bank of India.

TABLE V.

DIRECTION OF TRADE

Exports from India (by Sea, Air and Land)

(Value in lakhs of Rupees)

Country	1951-52	1952-53	1953-54	1954-55	1955-56	1956 (April-Dec.)
U.K.	18,786	12,244	14,871	18,808	16,438	13,559
U.S.A.	13,013	11,189	8,969	8,803	8,526	6,436
Canada	1,624	1,282	1,307	1,743	1,401	1,166
Japan	1,427	3,118	2,316	1,610	3,015	2,009
South East Asia						
Philippines	181	176	111	98	184	77
Australia	4,663	1,696	1,752	2,453	2,481	1,674
New Zealand	791	286	298	454	458	368
Indonesia	450	530	661	544	1,160	570
Viet Nam & Laos	68	27	67	128	43	22
Cambodia	—	—	—	—	65	1
Malaya	373	316	631	384	437	31
Ceylon	1,650	1,982	1,789	1,856	2,027	286
Burma	1,960	2,219	2,086	1,666	1,239	1,340
Pakistan	4,525	3,111	801	975	830	712
Thailand	872	427	360	220	317	639
Singapore	1,194	1,546	778	704	791	132
China	677	41	80	296	654	508
West Asia						272
Iran	414	206	153	609	516	334
Iraq	313	208	244	276	213	147
Afghanistan	398	472	389	288	214	131
Saudi Arabia	185	297	348	305	603	357
Jordan	15	23	19	32	30	19
Lebanon	23	29	18	52	26	22
Syria	68	75	99	213	108	59
Egypt	635	568	347	809	946	849
Sudan	772	614	511	703	562	680
Tunis	35	35	28	30	14	9
O.E.E.C. Countries						
Austria	100	42	57	33	40	19
Belgium	770	663	438	640	881	498
Denmark	123	101	110	130	204	143
France	1,045	563	528	529	703	468

however, a major imponderable factor in the composition of her imports, namely, food. Its unpredictable nature is bound to persist until irrigation projects rectify the excessive dependence of agriculture on the monsoons. But excluding this uncertain factor, the changing pattern of imports can be analysed against the background of the Five-Year Plans. It must be remembered at the outset that the pre-occupation of India in the period of her first Five-Year Plan with post-war and post-partition reconstruction of the economy postponed to major accent on industrial development until late in the fourth year of the plan. The impact of industrialisation is to be seen on imports from the final year of the first Plan onwards.

India incurred throughout this period a trade deficit whose size rose steeply from Rs. 109.5 crores in 1955-56 of Rs. 430.5 crores in 1956-57 as the table on the Balance of Payments on page 118 discloses. During the three preceding years the deficit was small, nonetheless it kept on rising steadily as the tempo of outlay on development increased. The abnormal deficit of Rs. 232.8 crores in the first year of the first Plan has no relevance to this outlay since bulk of it is to be traced to the heavy bill for food imports. If the first year 1951-52 is excluded from consideration on this count, imports rose progressively from Rs. 633 crores in 1952-53 to an abnormal high of Rs. 1,076.5 crores in 1956-57. It is necessarily to trace the trends in the expenditure on imports. They are set out in Table I in this Section by three principal categories namely, consumers' goods, raw materials (producers' goods) and capital goods. The outstanding feature of imports in this period is the marked reduction in imports of consumer goods from Rs. 192 crores in 1952-53 to an annual rate of Rs. 42 crores in the first three quarters of 1956-57. This reduction was effected while the total outlay on imports was rising at a fast rate as mentioned above. The proportion of import expenditure on raw materials remained more or less steady around Rs. 180 crores. Outlay in this class of goods was as high as Rs. 320 crores due to raw cotton imports of the extraordinary amount of Rs. 137 crores. But by far the most significant trend highlighted by this Table is the switch-over in outlay on capital good in the last two years — Rs. 222 crores in 1955-56 and an annual rate of Rs. 340 crores in the first nine months of 1956-57. The distribution of this outlay on individual items in this class is a matter of relative weight, but here again machinery, iron and steel as also other metals have absorbed substantial allocations.

THE PROBLEM OF EXPORTS

India has managed to introduce a wider diversity in the range of her exports than most of her neighbours in South and South-East Asia with the notable exception of Japan. Light mechanical as well as electrical engineering goods provide a case in point. In recent months an accent is being placed on stepping up exports of ores. In addition, manufactured articles are figuring as items in the steady schedules of exports. The sum total of this drive for the diversification of exports makes a modest contribution to the current earnings of foreign exchange. The Export Promoton Committee in its report released recently has expressed the optimism that it should be possible to push up exports in the near future by anything between Rs. 100 crores and Rs. 150 crores, raising total exports to Rs. 750 crores. This optimism is clearly pitched rather high and it is significant that the Committee has not prescribed any specific programme to achieve the higher target it has suggested.

The course of exports over the last six years gives further corroboration to the relative lack of flexibility in the pattern of exports over short and medium periods. Table II in this Section demonstrates the slow expansion in the earnings of exports. The classification of exports made there into consumers' goods and producers' goods is only one way of grouping them. It does not rest on the criterion of the potential to earn foreign exchange. The staple exports are the traditional ones which belong to both these categories. Tea and jute products run a close race for the first rank. Tea exports reached the level slightly above Rs. 145 crores in 1954-55 and 1956-57 and in other years around Rs. 105 crores. Jute products (cloth and gunny) reached the mark of Rs. 120 crores in 1952-53 and 1954-55, if the boom year of 1951-52 is left out of account. It serves to underline the importance of the price factor. In the rest of the period they have stayed near Rs. 113 crores. Cotton piece-goods, hides and skins, vegetable oils mineral ores rank as next in the order of contribution to foreign exchange earnings. Since export promotion is conditioned by the dynamism of domestic production plus the response of the overseas markets which are not susceptible to rapid changes, the drive for intensification of exports ought not to underrate the urgency of concentrating effort on the established staple exports. Higher levels of exports, in the last analysis, are intended to mitigate the gravity of the foreign exchange gap.

THE TRADING PARTNERS

Like the composition of India's foreign trade in the import sector, the direction is also disclosing a changing pattern, of course, with the vital difference, that the pace of that change is moderate and while trade with new or erstwhile negligible suppliers is expanding, its volume with established sources of imports, too, is growing. Table IV on page 121 gives a comprehensive picture of the direction of India's import trade. The United Kingdom is easily the greatest source for imports. Her ties of commerce with India have been strengthened after independence because of the deep economic interest which India has in th sterling area's trade. Imports from the United Kingdom have risen above an annual rate of Rs. 200 crores in the first three quarters of 1956-57 on account of their increasing component of capital goods. The United States is the next important trading partner. Even if the large size of trade in 1951-52 or 1952-53 is omitted on the score that it represents an abnormal element of food grains, imports from this country have now reached an annual rate above Rs. 90 crores. West Germany is rapidly emerging as a vital supplier of developmental imports, particularly plant and machinery. Between 1951-52 and 1956-57, India's imports from her have trebled in value. Japan, another important source of supply of machinery and equipment, has raised her share in India's imports by nearly 100 per cent. Italy, Belgium and France have assumed increasing importance in this sector as a result of India's increasing volume of imports.

A brief reference is necessary to India's trade relations with the Communist Bloc for a broad comparison with the magnitude of trade with the free world. It is also necessary for another reason inasmuch as the conclusion of bilateral trade agreements between India and most of the Communist countries is apt to create inflated notions about the volume of trade. The course of trade between India and China has been mentioned in the foregoing part of this Section. Imports from China are steadily increasing and have reached the level of Rs. 6 crores per year. Russia and Czechoslovakia are the two sources in the Communist Bloc with whom India's trade has increased most in this region. As the rate of outlay on imports of capital goods was raised by India in the first year of the second Plan, the shares of Russia and Czechoslovakia were also stepped up to approximately Rs. 15 crores and Rs. 7 crores. It is needless to

compare these peaks with imports, for instance, from Belgium, France or Italy.

THE FLOW OF EXPORTS

The chronic trade deficit in which India is running since the start of her first Five-Year Plan (Table on Balance of Payments, page 118) gives a clue to the flow of her exports country-wise. Table V in this Section shows the direction of India's trade. Less than a dozen countries are responsible for a fair or sizeable intake of her exports. But in so far as the total value of the outward trade is concerned, the diffusion of her exports over a large number of countries is also a matter of great value. The size of trade with these latter countries is mostly determined by the traditional pattern of their trade as well as by their level of economic development. The premier trading partner, the United Kingdom, has raised its intake of Indian exports since 1954-55 and it now ranges around Rs. 180 crores. But in spite of higher exports to this country, India has a trade deficit with it in the last two years. With the solitary exception of 1954-55, India is incurring continuous trade deficit with the United States. The declining trend in India's exports to her since 1953-54 has not been reversed which is due largely to the fact that prices of commodities like, pepper, mica and manganese can hardly recover previous levels unless unusual development in the world markets intervene. Exports to Japan, although below the level of imports from her, have remained stable in the last two years near Rs. 30 crores. India's exports to West Germany have shown a slight decline after the peak was reached in 1954-55 at Rs. 15 crores. Among the rest of the countries, which do not belong to the category of major suppliers of developmental goods to India, Australia, Ceylon, Burma, Pakistan, Egypt and Russia, have provided modest outlets for India's exports.

THE BALANCE OF PAYMENTS

The current critical situation of foreign exchange which has made it obligatory on India to slow down the pace of her development projects for over a year now will be conspicuous from the state of her balance of payments set out in the table given below.

The deficit of Rs. 162.6 crores in India's total balance of payments on current account for all the currency areas was due to the heavy food import bill. For two years immediately following, India had a net surplus for a fair order, but the surplus in 1954-55 and 1955-56 was nothing more than marginal. It would be legitimate to infer, therefore, that the strain of the Plan outlay in the import sector had already begun to manifest itself. The emergence of a net deficit of the high order of Rs. 292.5 crores in 1956-57 (preliminary estimate) provides a reflection of the high tempo of imports unprovided by resources outside current foreign exchange earnings. The payments deficit has come to stay in view of the Plan programmes and it was anticipated in the original scheme. The outcome of the present search for external aid in the form of loans, deferred payments and in other channels will determine in what manner the problem of external payments is to be tackled by regulation of outlay on the Plan. The area-wise break-up of last year's payments is significant as revealing the central fact that it is the balance with the OEEC countries which is overwhelmingly responsible for the large deficit. In fact, a net deficit with the OEEC area is chronic for India and it is almost co-extensive with the trade deficit. The prospect of reducing it by exports is small which indicates the remedy of external resources. Each developing country has to face the issue of payments deficit. While foreign credits are indispensable, an important aspect to which careful attention will have to be given is purposeful accent on export industries in the development programmes for proper servicing of the credits. It is, of course, recognised that the entire problem is amenable to solution over a period of years.

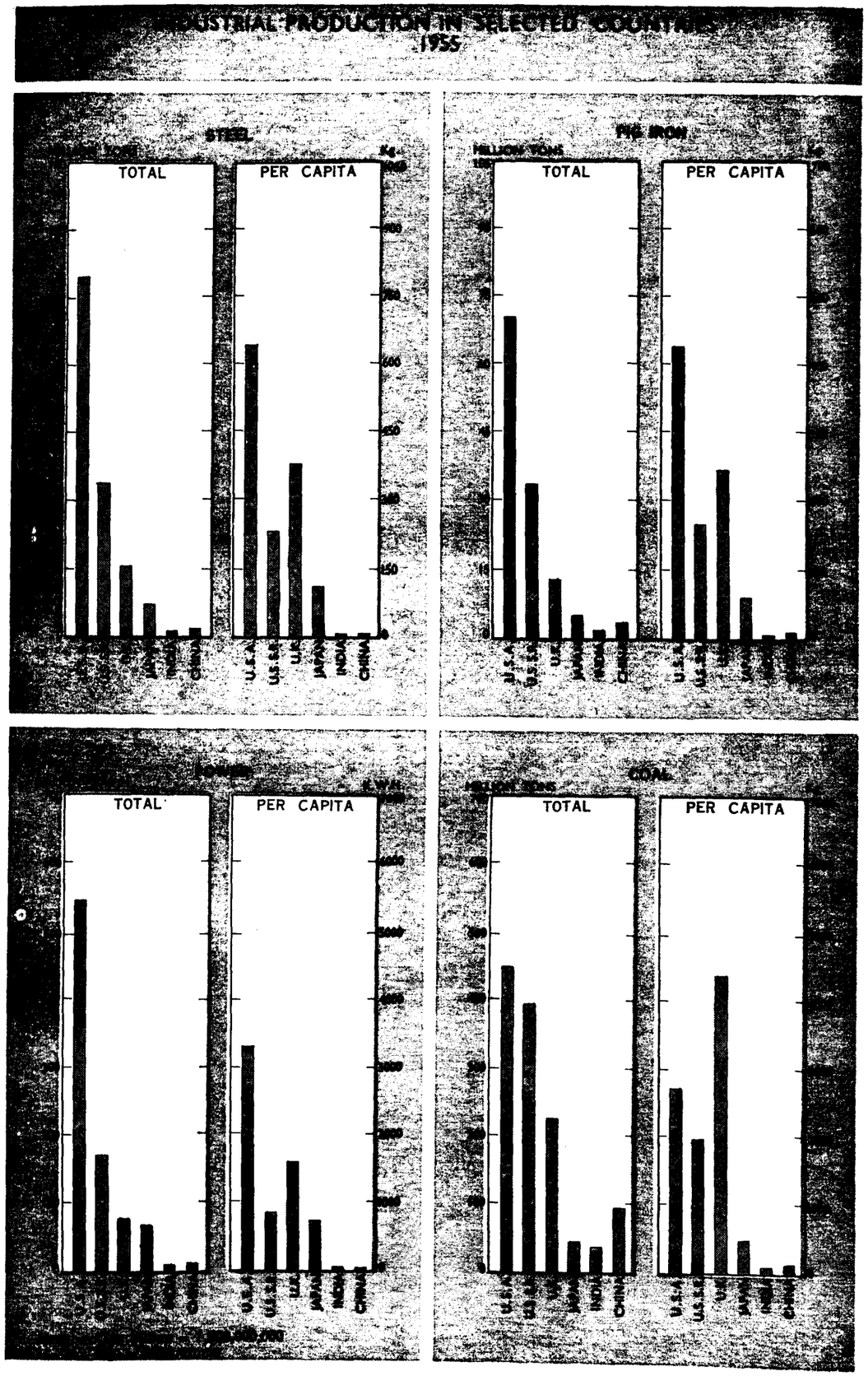
INDIA'S BALANCE OF PAYMENTS

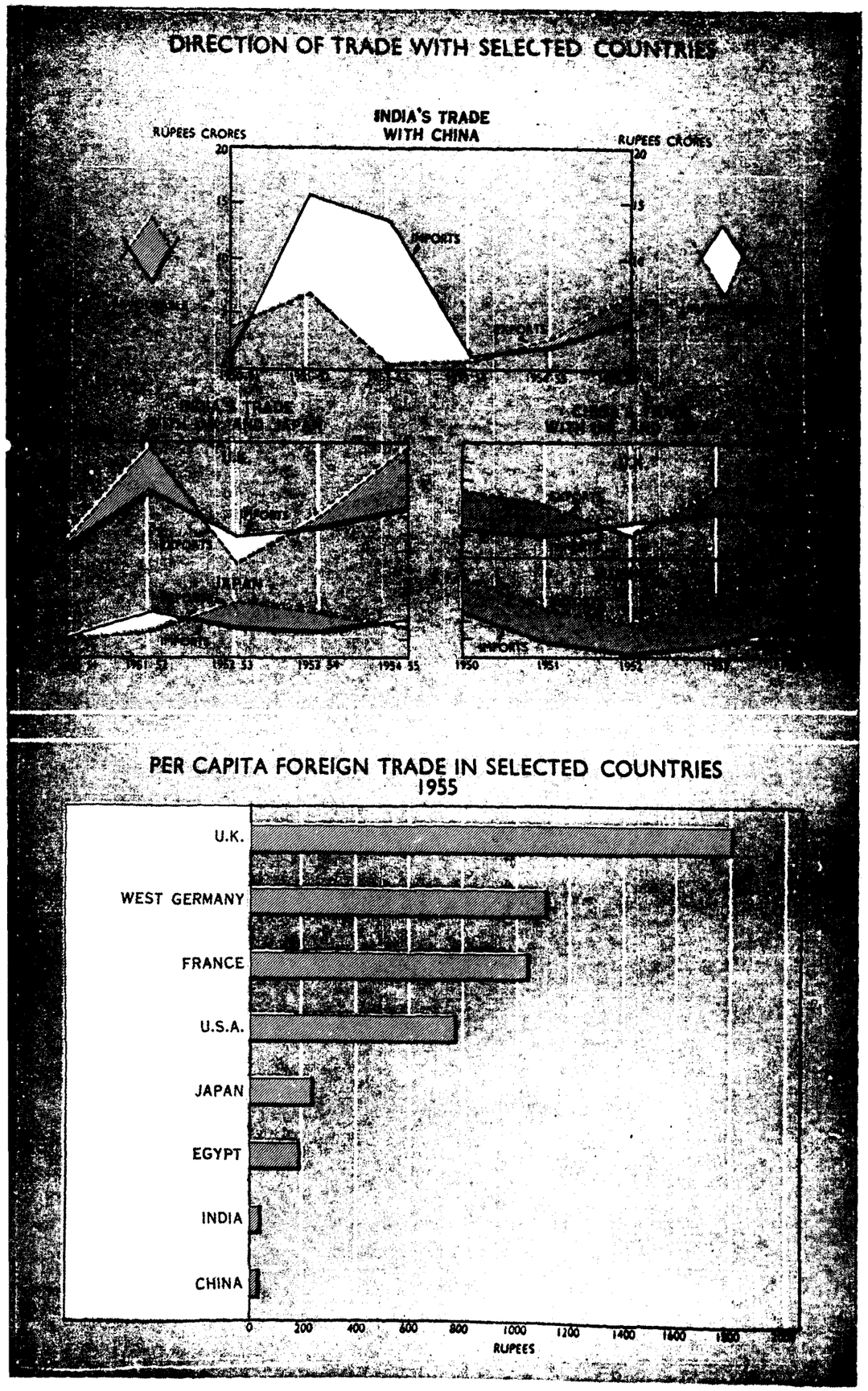
Current Account: Currency-Area-wise

(In crores of rupees)

	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57 (Preliminary)
1. Sterling Area	+ 98.9 (+ 20.8)	+98.9 (+24.4)	+64.2 (—11.1)	+52.9 (—17.7)	+ 44.6 (— 26.0)	— 35.2 (—125.3)
2. Dollar Area	—151.0 (—156.)	—26.9 (—41.8)	+27.2 (+ 7.2)	+14 9 (— 3.5)	+ 43.6 (— 4.7)	— 31.4 (— 77.0)
3. OEEC Countries	— 34.8 (— 32.3)	—20.3 (—19.1)	—57.5 (—56.2)	—75.7 (—74.4)	— 84.2 (— 81.1)	—201.9 (—200.6)
4. Rest of Non-Sterling Area	— 75.7 (— 65.2)	+ 8.5 (+ 3.1)	+13.5 (+ 8.0)	+13.9 (+ 8.4)	+ 12.9 (+ 2.3)	— 24.0 (— 36.6)
TOTAL: All Areas	—162.6 (—232.8)	+60.2 (—31.1)	+47.4 (—52.1)	+ 6.0 (—87.2)	+ 16.9 (—109.5)	—292.5 (—439.5)

Notes: 1. Figures without brackets show net balance on current account.
2. Figures within brackets show the trade balance.





DIRECTION OF TRADE (Contd.)
Exports from India (by Sea, Air and Land)

(Value in lakhs of Rupees)

Country	1951-52	1952-53	1953-54	1954-55	1955-56	1956 (April-Dec.)
West Germany	866	1,238	1,146	1,511	1,476	1,056
Greece	60	44	26	28	30	24
Iceland	4	1	..	1	..	3
Ireland	638	250	526	767	582	311
Italy	693	1,049	506	652	954	474
Netherlands	773	1,025	653	1,377	1,517	795
Norway	160	88	41	60	112	33
Portugal	56	50	49	37	20	17
Sweden	241	181	148	160	154	116
Switzerland	205	59	75	93	90	63
Turkey	352	495	258	149	245	184
East and West Africa:						
Nigeria	709	643	848	840	818	568
Kenya	883	654	600	678	693	462
Uganda	35	71	81	83	106	44
Tanganyika	262	367	337	446	368	252
Nyasaland	38	99	127	71	79	48
Rhodesia—						
Northern	45	49	97	62	62	33
Southern	278	140	196	216	161	109
Mozambique	91	93	70	74	75	55
Ethiopia	109	32	225	329	376	247
East European Countries:						
U.S.S.R.	667	85	115	212	326	1,094
Poland	11	4	15	46	33	87
East Germany	2	2	1	4	2	26
Hungary	..	4	2	2	8	10
Czechoslovakia	119	107	267	158	133	209
Yugoslavia	26	11	1	2	24	16
Bulgaria	..	..	..	1	2	5
Rumania	..	3	..	4	1	8

Source: Accounts relating to the Foreign (Sea, Air and Land) Trade and Navigation of India.

TABLE IV.
DIRECTION OF TRADE

Imports into India (by Sea, Air and Land)

(Value in lakhs of Rupees)

Country	1951-52	1952-53	1953-54	1954-55	1955-56	1956 (April-Dec.)
U.K.	16,228	13,884	14,271	15,336	17,269	15,500
U.S.A.	29,377	18,141	7,925	8,222	8,930	7,058
Canada	1,934	2,931	1,410	1,016	684	559
Japan	2,542	1,582	1,306	2,057	3,337	3,421
South East Asia:						
Philippines	73	36	25	17	22	19
Australia	1,762	1,273	2,599	1,976	1,347	900
New Zealand	214	106	133	189	248	164
Indonesia	321	101	150	81	146	188
Viet-Nam)	..	..	..	..	5	..
Laos)	..	..	..	..	..	..
Cambodia)	..	..	..	..	2	..
Malaya	423	225	419	583	448	680
Ceylon	560	429	508	751	942	659
Burma	2,334	2,647	1,755	5,736	958	388
Pakistan	8,750	2,188	1,930	1,938	2,711	1,239
Thailand	1,164	772	45	75	43	35
Singapore	1,787	1,257	1,626	1,556	1,384	1,167
China	1,589	1,302	99	203	438	595

DIRECTION OF TRADE (Contd.)

(Imports into India (by Sea Air and Land)

(Value in lakhs of Rupees)

Country	1951-52	1952-53	1953-54	1954-55	1955-56	1956 (April-Dec.)
West Asia :						
Iran	2,894	250	204	420	1,443	2,450
Iraq	361	205	256	184	227	151
Afghanistan	453	466	445	542	438	289
Saudi-Arabia	1,004	1,477	1,482	1,681	1,516	1,270
Jordan	..	..	..	6	9	23
Lebanon	15	2	7	13	24	24
Egypt	4,053	1,512	2,766	1,969	2,310	492
Sudan	1,430	399	748	305	1,268	843
Syria	5	..	..	4	12	1
Tunis	..	..	..	4	10	..
O.E.E.C. Countries :						
Austria	247	189	251	213	2	371
Belgium	1,028	660	797	1,064	2,208	1,895
Denmark	222	151	163	211	418	313
France	1,089	1,355	993	1,635	1,554	1,509
West Germany	2,856	2,255	3,105	4,068	6,028	6,462
Greece	7	4	8	10	11	6
Iceland	..	..	..	..	..	..
Ireland	3	2	4	1	..	..
Italy	1,798	1,201	2,307	2,052	1,650	2,133
Netherlands	1,098	1,080	1,130	1,364	1,413	1,079
Norway	358	279	292	267	311	234
Portugal	30	21	30	36	43	27
Sweden	749	566	618	606	786	875
Switzerland	999	695	912	1,017	1,207	1,258
Turkey	13	1	..	1	..	8
East & West Africa :						
Nigeria	..	..	37	108	48	..
Kenya	1,360	2,057	1,532	1,839	2,185	1,574
Uganda	18	122	158	7	28	47
Tanganyika	217	198	115	246	227	265
Rhodesia						
Northern	22	82	19	50	5	213
Southern	33	39	32	58	50	75
Mozambique	342	595	448	444	450	221
Ethiopia	3	2	35	1	4	3
East European Countries :						
U.S.S.R.	133	24	60	181	621	1,080
Poland	34	26	16	424	43	211
East Germany	7	10	8	23	37	20
Hungary	32	16	10	10	41	58
Czechoslovakia	281	135	114	125	289	517
Yugoslavia	14	9	7	16	29	173
Bulgaria	..	..	..	1	3	2
Rumania	..	..	..	28	32	1

Source: Accounts relating to the Foreign (Sea, Air and Land) Trade and Navigation of I

Transport

THE development of transport in Communist China and India since they launched their first Five-Year Plans has tended to concentrate the available resources on the strengthening and some expansion of the railway systems. Under normal conditions one major difference between the transport systems of the two countries ought to be reckoned in terms of the significance of inland waterways in China. But the Planning Bureau of the Economic and Financial Commission of China took a basic policy decision two years before the first Plan was launched to give virtual preference in allocation of resources to the regeneration and expansion of rail transport capacity and to relegate highways and waterways to a low priority. The chief reason behind this decision was that Communist China had under her command utterly inadequate fleets of vehicles and vessels. In case outlay was diverted to the recovery of highways and waterways, the returns in terms of transport capacity would have been too poor, considering the strain of civilian and particularly military traffic during the earlier period of the Communist regime.

In India railways have occupied a strategic position in surface transport. Now that shortages of railway transport have become a chronic problem in this country and the high component of foreign exchange outlay on railway development has threatened to prohibit their expansion except on a modest scale highways in particular are beginning to receive the careful attention they merit. Nevertheless, the issue to what extent relative importance and roles should be assigned to these two major modes of surface transport in the long-term planning is in the stage of discussion. The principle has been recognized that for purposes of inland transport highways must be released from regulatory restrictions inasmuch as the central problem of transport in India in the coming years will no longer be competition and consequent necessity of co-ordination through restrictive regulation as hitherto but deliberate expansion of roads also to meet the mounting requirements of traffic. But in the context of the near future preponderance will continue to be given to railways in the expansion of transport.

CHINESE RAILWAYS: DISRUPTION AND RECONSTRUCTION

A prolonged period of active warfare on the Chinese soil was bound to bring disruption of the railway system. Much of this damage was inflicted by the Communists themselves as part of their guerilla tactics to undermine the potential resources of the Nationalist Government. It was not to be expected then that the long-term consequences of this action would be weighed with caution. But when the Korean hostilities of 1950 suddenly accentuated the pressure of rail traffic and the tight blockade of Shanghai effectively cut off supplies from overseas, the Communist Government had perforce to pay extra attention to the rehabilitation of the transport system. The precise position of the railway system in operation when the Communists took the reins of Government was somewhat obscure by reason of the fact that destruction was caused over long sections of railways in such varying degrees that a large part of the railway lines or rolling stock was in a full or semi-dilapidated condition and "active operation" conveyed different notions of capacity. This factor needs to be borne in mind when estimating the growth of the rail system in mileage terms.

Two major aspects of the expansion of Chinese railways deserve to be noted. The increase in mileage after 1949 does not necessarily imply additions on account of new construction. The work of rehabilitation proceeded well up to the end of 1952 and not all the dismantled or seriously damaged lines were revived. In view of the compulsion of progressive integration of China with Russia and East European countries, the emphasis in development was placed on the Western region, including north-western and south-western parts. In the next place, practically all the lines constructed in the first period of the developmental programme were included in the plan prepared by the previous regime. Variations in this plan were small and furthermore the new rulers of China had the advantage of engineering surveys and even the initial physical work in some cases having been already completed.

INTENSIVE USE UNDER COMMUNIST REGIME

The principal data about the mileage and operating performance in the freight sector of China's railway transport contained in the relevant table in this Section brings out the major conclusion that the rail system has been put to intensive use there. Considering the vast expanse of the country and the magnitude of the traffic offering in view of the fact that highways and inland waterways which provide cheap and convenient communications for short hauls were postponed in the schedule of development, the actual traffic carried answered only a part of the prevailing demand. Acute shortages have reared their head throughout. But this has been the case on a lower scale in India too. The absolute as well as percentage figures of the volume of freight traffic in terms of originating tons and also ton-kilometres constitute an impressive performance for the available stock and equipment. Freight traffic in originating tons increased between 1952 and 1955 by 46.4 per cent while measured in ton-kilometres, which give a clearer idea of use of capacity, the increase was still higher at 63.1 per cent. This table shows that the length of the rail net-work increased during this period by 2,700 kilometres to 26,931 kilometres. This mileage bears a poor comparison with India's total of 34,705 miles (equivalent to 55,875 kilometres) in 1956, while railway mileage related to China's area and population offers a more adverse picture. It ought to be stressed that the increase of 2,700 kilometres in railway lines in China does not represent a net increase for many of the damaged or dismantled lines have been abandoned.

AT WHAT COST?

At what price is Communist China stepping up the utilisation of her railway system and particularly the rolling stock and how long can this tempo be sustained? This is an important factor which needs to be taken into account. It would appear that the peak in over-utilisation of the rolling stock has already been passed as the low rate of growth in freight carried after 1954 indicates. As against 98 billion ton-kilometres carried in 1955, the target fixed in China's first Plan for 1957 is 121 billion kilometres. No explanation is available why the rate of increase in freight carried dropped at once to 5 billion kilometres in 1955. Achievement of additional 23 billion kilometres in two years by 1957 seems difficult.

The position in respect of investment in railways is not clear. In like manner, the position about the state of the rolling stock cannot be gathered from

INDIA: OUTLAY IN THE FIRST PLAN ON RAILWAY TRANSPORT

(Rs. in crores)

Head	1951-52	1952-53	1953-54	1954-55	1955-56	Total 1951-56	Allocation envisaged in the first Plan
Rolling stock, plant and machinery	34.36	33.23	40.37	58.69	85.79	253.44	207.96
Track and bridges	10.72	13.96	10.93	13.93	14.87	64.41	70.47
Other structural engineering works including Integral Coach Factory, Chittaranjan Locomotive Works, Ganga Bridge, Collieries, Ports and Staff quarters etc.	10.58	10.48	12.29	15.32	21.81	70.48	69.99
New lines, restoration of dismantled lines and electrification	7.26	3.71	4.01	7.49	10.73	33.20	34.18
Passenger amenities	2.45	2.34	2.47	3.03	3.00	13.29	15.00
Miscellaneous items	5.52	—3.43*	—5.80*	—2.22*	3.18	—2.75*	2.40
TOTAL	70.89	60.29	64.27	96.24	140.38	423.07	400.00

* The reduction is on account of decrease in stores balances and credit taken for released materials and other recoveries.

TRANSPORT—ALL INDIAN RAILWAYS

	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56
Route Mileage (Miles)	34079	34119	34275	34406	34705	34736
Goods Originating (Million tons)	92	98	98	99	107	115
Net ton Miles (Millions)	27007	29018	28961	29568	32126	30468
Passengers Originating (Million Nos.)	1308	1232	1212	1220	1261	1297
Passenger Miles (Millions)	41672	39551	37396	37549	38649	39084
Gross earnings (Million Rs.)	2646	2941	2723	2728	2886	3175
Passenger Earnings (Million Rs.)	992	1114	1018	1014	1037	1088
Goods Earnings (Million Rs.)	1398	1539	1438	1454	1564	1770
Working Express (Million Rs.)	2144	2276	2200	2320	2360	2602
Net Earnings (Million Rs.)	502	666	523	408	526	573

INDIA: ROADS, SHIPPING AND CIVIL AVIATION

	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57
Roads:							
National Highways ('00 miles)	123	124	125	126	128	129	
Surfaced Roads ('00 miles)	..	..	..	..	..	1,070	
Earth Road ('00 miles)	1,470	..	..	..	..	1,570	
Shipping:							
Tonnage (Overseas & Coastal) ('00 GRT)	390	436	452	460	480	600	..
Civil Aviation:							
Aerodromes (No.)	75	..	77	78	..	81	82
Miles Flown (Lakhs)	189	195	195	192	198	208	234
Passenger Carried ('000 Nos.)	453	449	434	404	432	452	538
Freight Carried (Lakh lbs.)	800	877	860	848	864	922	976



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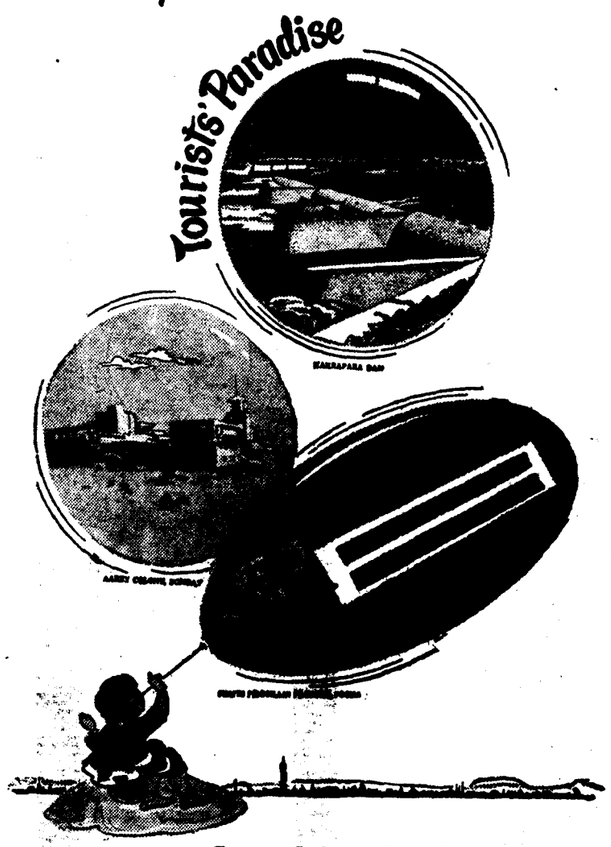
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available data. It is an undisputed fact that a good part of the locomotives and freight cars are overaged and excessive use is causing rapid depreciation. Repair workshops which were usually ill-equipped have not been adequately revitalised. Domestic capacity for manufacture of freight cars is inadequate in relation to requirements and China made her debut in locomotive manufacture only in 1952. Imports of rolling stock have of necessity to be strictly rationed. The new lines which are being constructed in the western region in widely dispersed areas will put further strain on the stock capacity. The overall prospect appears to be critical.

THE MAGNITUDE OF RAILWAY REHABILITATION IN INDIA

To describe the railway component of India's first Five-Year Plan as the Railway Development Plan is clearly a misnomer. Ever since the close of World War II, Indian Railways have been faced with an obstinate problem of rehabilitation. The pace of rehabilitation had per force to be moderate and in the meanwhile the dislocation caused by partition of the Indian sub-continent aggravated the difficulties of rehabilitation especially in the North and East through lack of workshop facilities in the former and loss of skilled technical personnel by migration to Pakistan from the latter. During the war and particularly after the operations in the Eastern theatre, track and rolling stock was used recklessly with scant attention paid to maintainance and repair. After the war the pressure of freight as well as passenger traffic kept on mounting with the result that the rate of increase in overaged and worn-out stock could not be overtaken by the rate of replacements. At the start of the first Five-Year Plan, Indian railways carried a legacy of abnormal backlog of replacements and renewals. The first Plan was essentially a Rehabilitation Plan for India's railways. At the end of the first Plan the position of rolling stock showed the strength of locomotives to be 9,262, freight wagons in terms of 4-wheelers 266,049 and passenger coaches 23,779. Out of these, 2,813 locomotives, 49,568 freight wagons and 6,305 passenger coaches were due for replacement but had to be continued in service on grounds of sheer necessity. This state of affairs persisted in spite of the fact that the domestic capacity for the manufacture of locomotives and freight wagons was raised far ahead of the targeted programme and indigenous production of passenger coaches was raised above its low base by 50 per cent. Track renewal and improvement of line capacity as a whole could not keep to the targets fixed in the first Plan.

The table given on page 124 on India's outlay on railway transport in the first Five-Year Plan highlights the significant fact that expenditure on railway rehabilitation and some expansion was raised by 8 per cent above the original allocation to Rs. 432 crores. There was sizeable shortfall in the targeted expenditure on track and bridges and slight shortfalls in the case of new construction and restoration of dismantled lines, passenger amenities and minor projects. The unspent resources together with the enhanced allocation of funds was devoted to further replenishment of the rolling stock.

The higher levels which Indian railways achieved in their operating performance were due in the first place to the concentrated attention devoted to the replacement of the rolling stock. But there were other reasons which were responsible for it. Workshop equipment and personnel were strengthened not only in size but quality. Their contribution was evident in the ability of the railways to retain stock much beyond the serviceable age limit and the reduction in the rate of immobilization away from the track. But apart from the availability of larger and improved resources, the overall standards of efficiency on the railways reached distinctly higher levels. This is demonstrated in the comparative figures of the major indices of efficiency with reference to the broad gauge lines which constitute 80 per cent of the total. Wagon miles per wagon day rose from 40.9 in 1951-52 to 46.3 in 1955-56. During the same period covering the first Plan, engine miles per engine day in use increased from 109 to 111 and net ton miles per wagon day staged a spectacular rise from 463 to 541.

PROGRESS ON THE INDIAN RAILWAYS

The severe strain of traffic load which India's railways had to bear in the period of the first Plan is reflected in the progress in financial as well as physical operations which is tabulated elsewhere in this Section. Freight traffic as measured by originating tons increased between 1950-51 and 1955-56 by 25 per cent to 115 million tons, while in terms of the vital index of net ton-miles it rose still higher by 35 per cent to 36,458 million. The financial improvement is reflected in the increase of 14 per cent, or Rs. 71 crores to Rs. 573 crores, in net earnings in the fifth year of the Plan above 1950-51. The net addition of 617 miles to the total railway mileage in the period of the Plan is explained by the fact that a Rehabilitation Plan could spare allocations only for urgent restoration of dismantled lines and new construction.

ROADS: THE LEEWAY CHINA HAS TO MAKE UP

LOW development of highways in China has been a striking characteristic of her transport system. There are vast areas in the country where the railway network has not penetrated and which are not served by inland waterways. Even assuming that railways are opened in these regions (which will be a tardy process for reasons of outlays required) road transport has a great significance from the view-point of potential growth. When the Communist regime will be able to attack this problem on an organised basis cannot be forecast. It is clear that a combination of circumstances has conspired to stay its hands in this matter. Twice in 1949 and 1951 at the official conferences on highways and waterways, a firm decision was taken to the effect that new roads should be built essentially for military movements and that priority in repairs should be given to national highways and selected provincial roads of economic importance, while the rest of the roads should be allocated funds for ordinary maintenance. This policy has been modified since then, but new construction could not be accelerated. There are two major handicaps which retard the growth of road transport—poor condition of road surface, due to shortage of building material and low maintenance and high cost of fuel.

Statistics of highways in China and India contained in the tables in this Section clearly demonstrate that China has a great leeway to make up before she reaches the present mileage of highways in India. This is so far as absolute figures are concerned. Road ratios to area and population place China in a far worse position relative to India. Statistics of highways in China contain a considerable element of confusion. The conference on highway and waterway transportation held in 1949 put the length of highways at the fastastic figure of 372,094 kilometres. The table here gives the figure of highways open to traffic as 129,614 kilometres in 1952. It is not clear which roads are included in the Chinese official statistics in this table. Highways are classified in China into three categories, national, provincial and country. In 1955 China had 162,462 kilometres of highways open to traffic. Assuming for the sake of a liberal comparison that this figure includes only national and provincial categories, the corresponding figure for India in 1955-56 (excluding earth roads which are analogous to China's country roads) was 119,900 miles. This is equivalent to 193,039 kilometres

which discloses the sharp contrast in the road lengths of the two countries.

INDIA'S ROAD PROBLEMS

India's relative advance in developing her road system is to be understood only in the limited context of a broad comparison between India and China. It does not by any means suggest that India has at the present time a highway system which is commensurate with the requirements which the railways are unable to satisfy or which traffic in short hauls actually demands. Far from it. Limitations of investment resources have slowed down the growth of India's road system with the result that the Master Plan, popularly known as the Nagpur Plan, has been drastically reduced. During India's first Five-Year Plan, a total outlay of Rs. 135 crores was incurred on roads, including new construction, repairs and rehabilitation.

The second Five-Year Plan has made an allocation of Rs. 246 crores for road development plus Rs. 25 crores which will be provided by the Central Road Fund. The targets set in the Nagpur Plan may at long last be reached at the end of the second Plan. But optimism in this respect must be restrained if past performance is a practical indicator. India's road problems are two—extension of the road mileage to tap the economic resources in the countryside and to exploit the potential of the road transport system, or of motor transport to be precise. The first is a long-term problem. But currently the second problem is very pressing. During the first Five-Year Plan, outlay in the public sector on motor transport services was Rs. 12 crores. This overall investment in nationalised road services has secured an addition of only 3,000 vehicles in the fleets owned by the government transport corporations in the States. This is virtually in the passenger sector. By far the greater brunt of motor passenger services is borne by private operators. The taxation of vehicles and petroleum in India has had a regressive effect on the growth of motor transport. India's real current headache in regard to transport is in the freight sector. Happily for her, motor freight services are not nationalised and the Planning Commission has cautioned the States to postpone freight services nationalisation until the end of the second Plan. This is by no means an adequate period of time to induce private investors to undertake large schemes of expansion of freight services. A recent all-representative conference has stressed the need of providing adequate incentives and removing the existing barriers to facilitate the development of road services. The policy of licensing vehicles and regulation of their operating routes, which was conceived at a time when cut-throat competition of motor services was causing serious injury to the railway system, has become outmoded. It is being modified and motor services are looking forward to a fair deal.

SLOW MOVE ON SHIPPING

COMPARED to their extensive sea-boards, both Communist China and India have poorly developed shipping systems. Both the countries had before the last war no national distant and ocean going services of their own. While their volume of seaborne traffic, excluding the coast-wise traffic could have offered a stable base for developing such services, they have all along incurred heavy liability on account of shipping freight in foreign currencies. India's first attempts, launched after independence, in making a headway in ocean-going services has demonstrated tough opposition from the vested shipping interests of Western countries. It is clear that it would be unrealistic and foolish to reply upon standards of fair deals in the sphere of overseas shipping and governments of backward countries will have to adopt appropriate measures to counter unfair practices of established ocean-going organizations. India's private shipping services are making a strenuous effort in maintaining distant continental services on a marginal scale, while the two government-participated shipping corporations have confined their services to the adjacent waters.

Such progress as the two countries have made in coastal shipping and inland waterways is slow. China had her hands tied with other communications projects. But between 1952 and 1955 the volume of freight carried in inland shipping increased by 179.8 per cent. Freight mileage of ships and larges increased in this period by 186.5 per cent. These percentage data are misleading. The reality of the situation is that China's fleets, including all categories of vessels, are in a dilapidated condition. Shipping has been relegated to a back place in the development of transport. Nor is India's progress in shipping better by any standards. She has reached the target of shipping of the order of 600,000 g.r.t. which is expected to be raised in the second Plan by 50 per cent. Coastal shipping which has been reserved for Indian operators is inadequate for the cargo traffic and foreign shisps have to be chartered for coastal operations. The allocation of Rs. 35 crores from the Government provided in the second Plan has been very nearly exhausted in the first eighteen months. Further outlay will be conditioned by external assistance in regard to which the picture is brightening up. How much, time will reveal.

DISPARITY IN CIVIL AVIATION

DATA on civil aviation in China and India contained in the two relevant tables in this Section are not comparable except in respect of the volume of freight carried. There is a small element of difference in this indicator as the volume of mail carried is included in the Chinese figure but excluded in the figure for India. This indicator shows that India has gone far ahead in the race. As against China's volume of freight of 2,047 tons in 1952, Indian airlines carried 35,700 tons, while the corresponding figures for 1955 for China and 1955-56 for India were 4,711 tons and 41,100 tons respectively. But civil aviation in both the countries is in its first stage of growth. Their wide expanse is conducive to unhindered air flights but India has the added advantage of good weather conditions. The rate of growth in civil aviation has to reckon with the effect of per capita income in both the countries. Even so, the outlook for civil aviation is stimulating for them for, in the last analysis, civil aviation as the second line of defence is a "must" for a modern State.

TRANSPORT: SECTORWISE OUTLAY IN THE FIRST PLAN

(Rs. in crores)

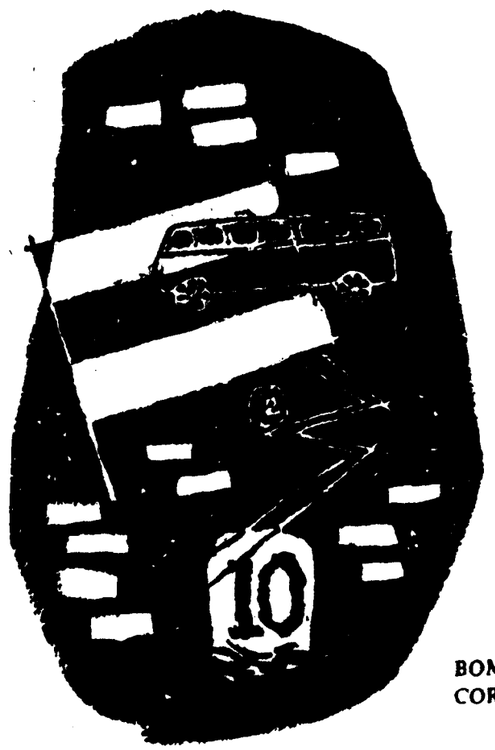
	Plan Provision		Estimated Expenditure
	Original	As revised after adjustments	
Railways	250.00 (150.00)	267.07 (165.00)	267.07 (165.00)
Roads	110.23	135.15	134.47
Road transport ..	8.97	11.66	12.35
Shipping	18.06	26.30	18.71
Port & harbours ..	33.08	36.91	27.57
Civil air transport ..	22.87	29.39	23.19
Other transport ..	0.10	3.52	1.30
Communication & Broadcasting ..	55.14	60.05	46.20
TOTAL	498.45	570.05	531.46

Note: Figures in brackets represent contributions from the Railway Depreciation Reserve Fund which are in addition to the provision for railways in the Plan.

TRAVEL MANNERS

* CLEANLINESS is next to Godliness. Cultivate the habit of cleanliness. Avoid throwing scraps of food, skins and peel of fruit and water on platforms or in compartments. Use the dustbins provided at stations or in passenger compartments.
* SPITTING indiscriminately on platforms is unhygienic. It is also bad manners. Please use spittons.
* Cooled and filtered water at Railway stations is for drinking. Do not use it for other purposes.
* You will annoy others by sitting in compartments with your feet on the seats. Please sit properly in trains.
* Book your heavy luggage in the brake-van and give yourself and your fellow passengers more room in the compartments.
* It is an offence to smoke in railway trains when requested by a fellow passenger not to smoke. Please avoid smoking when requested by a fellow-passenger, when the compartment is crowded or when doors and windows of the compartment are shut.

WESTERN & CENTRAL RAILWAYS



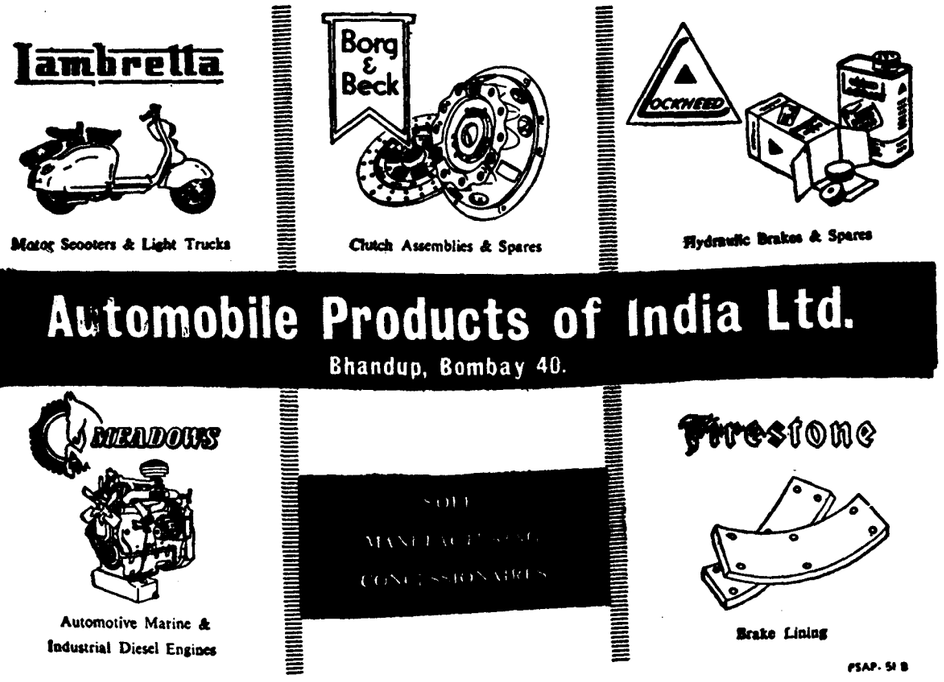
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the wheels of progress

...in constant motion. In nine year's time the Bombay State Transport has not only become the largest road transport undertaking in the country, but it has also established a tradition of service in a state-wide system of road transport.

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(Commenced 1915)

The Surat Electricity Co., Ltd.
(Commenced 1922)

Bombay Suburban Electric Supply Ltd.
(Commenced 1928)

Total Installed Capacity 1957	174,000 kWs.
Total Number of Consumers served	138,000.
High Tension Industrial Consumers	145.
Other Industrial Consumers	8,400.
Annual Output in kWhrs. exceeds	740 millions.

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General Manag

CHINA TRANSPORT: SHIPPING, ROADS AND CIVIL AVIATION

	Absolute Figures					Fixed Index (1952= 100)		
	1952							
	Actual Total	Planned Total	1953	1954	1955	1953	1954	1955
Railways:								
Length of Main Lines (at the end of the year) (kilometres)	23,232	—	24,690	25,447	26,931	101.9	105.0	111.1
Freight Volume (1,000 tons) .	132,064	132,064	160,437	192,603	193,396	121.5	145.8	146.4
Freight Mileage (1,000,000 tons kilometres)	60,153	60,153	78,057	93,223	98,127	129.8	155.0	163.1
Coastwise Shipping:								
Freight Volume (Ship and barge) (1,000 tons) . . .	5,765	3,884	5,925	9,907	10,450	102.8	171.8	181.3
Freight Mileage (ship and barge) (1,000,000 ton nautical miles)	2,700	1,980	2,513	4,341	4,527	93.1	160.8	167.7
Inland Shipping:								
Freight Volume (ship and barge) (1,000 tons) . . .	9,407	9,341	15,338	20,476	26,322	163.1	217.7	279.8
Freight Mileage (ship and barge) (1,000,000 ton kilometres	3,628	3,628	5,631	7,891	10,425	154.8	216.9	286.5
Highways:								
Opened to Traffic (kilometres)	129,614	—	138,586	142,449	162,462	106.9	109.9	125.3
Freight Volume (motor) (1,000 tons)	20,718	20,718	30,393	43,538	50,068	146.7	210.1	241.7
Freight Milage (motor) (1,000,000 ton kilometres) .	678	678	1,182	1,867	2,517	174.2	275.3	371.1
Civil Aviation:								
Freight Volume (including mail) (tons)	2,047	2,047	3,607	4,734	4,711	176.2	231.3	230.1
Freight Mileage (including mail) (1,000 ton kilometres) .	2,430	2,430	4,466	5,602	5,143	183.8	230.5	211.7

Note: Figures for private shipping in the Sungari River are not included in the 1952, figures for inland shipping as mentioned in the Five-Year Plan; figures for short-distance coastwise shipping under local jurisdiction are not included in the coastwise shipping.

ELECTRIFIED RAILWAYS THE WORLD OVER

The following table gives comparative figures of total railway route mileage, total electrified route mileage and the electrified track mileage in 1955 in 35 different countries of the world:

Country	Total Route Mileage in 1955	Electrified Route Mileage in 1955	Electrified Track in 1955
Algeria	2,828	193	242
Argentina	27,273	88	209
Australia	26,562	398	977
Austria	3,757	922	1,969
Belgian Congo	3,250	130	1,665
Belgium	3,063	312	859
Bolivia	1,734	6	9
Brazil	23,100	1,433	N.A.
Canada	43,132	31	87
Chile	5,104	279	456
China	**16,708**	—	—
Costa Rica	411	84	100
Cuba	2,840	144	260
Czechoslovakia	8,304	275	544
Denmark	2,239	37	81
France	25,223	3,090	5,881
Germany (West)	22,878	1,326	3,501
Great Britain	19,470	1,172	3,158
Holland (Netherlands)	1,975	828	1,989
Hungary	5,029	231	659
India	**34,705**	**240**	**579**
Indonesia	3,727	55	77
Italy	11,210	4,297	7,923
Japan	14,113	6,618	9,137
Mexico	14,498	79	100
Morocco	1,090	474	561
New Zealand	3,489	71	167
Norway	2,768	790	1,044
Poland	15,800 (estimated)	65	158
South Africa	13,585	861	1,749
Spain	8,170 (B.G. only)	1,201	N.A.
Sweden	10,063	4,331	6,749
Switzerland	3,082	2,953	4,371
Turkey	4,849	17	35
U.S.S.R.	74,753	3,430	N.A.
U.S.A. (including Alaska)	221,666	2,044	5,368

(Figures compiled from the Directory of Railway Officials and *Year Book*, 1956-57)

THE FIRST ELECTRIC TRAIN

The year 1890 saw the beginning of railway electrification in the world, on the British Railways. This was 69 years after the world's first steam-operated train ran in Great Britain in 1825.

The table below shows, in chronological order, the year in which railway electrification started in various countries. Indicated in brackets after the name of each country is the year in which the first steam-operated train started in that country:

Electrification started in	Country and when railway was first founded
1890	Great Britain (1825)
1894	Sweden (1856)
1895	Germany (West) (1835)
1899	Switzerland (1844)
1900	France (1832)
1901	Italy (1839)
1903	Czechoslovakia (1839)
1905	Bolivia (1889)
1905	U.S.A. (including Alaska) (1830)
1906	Japan (1872)
1907	Cuba (1837)
1908	Canada (1836)
1908	Holland (Netherlands) (1839)
1909	Argentina (1857)
1910	Brazil (1854)
1911	Austria (1838)
1911	Hungary (1846)
1911	Norway (1854)
1911	Spain (1848)
1916	Chile (1851)
1919	Australia (1855)
1923	New Zealand (1863)
1924	Mexico (1850)
1925	**India (1853)**
1925	Indonesia (1867)
1926	South Africa (1860)
1926	U.S.S.R. (1837)
1927	Morocco
1929	Costa Rica (1890)
1931	Belgium (1835)
1932	Algeria (1862)
1934	Denmark (1847)
1936	Poland (1845)
1952	Belgian Congo (1898)
1955	Turkey (1856)

(Figures compiled from the Directory of Railway Officials and Year Book, 1956-57)

EVOLUTION OF THE LENGTH OF RAILWAY LINES IN AFRICA, LATIN AMERICA, ASIA AND OCEANIA

(In kilometers)

Country	Length of lines 1860	1900	1930	1940	1950	1955	Length of tracks 1955
Africa							
Algeria	—	4,251a	4,806	4,443	4,380	4,367	4,940
Sudan	—	—	3,211	3,206	3,248	3,442	3,968
Angola	—	—	2,308	2,342	2,428	2,667	2,816
Belgian Congo	—	—	3,951	—	—	5,230	—
British East Africa b	—	—	4,814	4,830	4,947	5,337	6,146
Egypt	443	3,358	4,730	—	6,238	6,302	—
Eritrea	—	—	312	312	306	306	355
Ethiopia	—	—	693	—	—	784	834
French Cameroons	—	—	504	504	504	504	—
French Equatorial Africa	—	—	401	515	515	515	—
French Somaliland	—	—	106	106	106	106	—
French Togoland	—	—	330	441	607	607	—
French West Africa	—	—	3,325	3,783	3,763	4,091	4,690
Gold Coast	—	—	805	805	861	993	1205
Libya	—	—	269	399	352	352	—
Madagascar	—	—	696	858	866	866	936
Mauritius	—	—	232	—	—	146	219
Morocco	—	—	1,711	1,711	1,787	1,787	2,329
Mozambique	—	—	1,387	1,010	2,197	2,612	2,629
Nigeria	—	—	2,979	3,032	3,062	3,062	3,570
Nyasaland	—	—	206	465	505	505	546
Reunion	—	—	126	—	—	50	—
Rhodesias	—	—	2,948	3,845	3,845	4,361	—
Sierra Leone	—	—	501	500	500	500	542
Tunisia	—	—c	2,025	2,089	2,173	2,100	—
Union of South Africa	12	8,807	21,300*	21,529	21,480	21,529	27,536
TOTAL AFRICA	455	16,416	64,676	68,600d	70,650d	73,150d	86,200d
Latin America							
Argentina	39	16,369	38,364	—	42,984	44,039	—
Bolivia	—	1,000	2,235	2,588	—	3,279	—
Brazil	129	14,798	32,478	34,251	36,679	37,175	—
British Guiana	—	188	135	127	126	125	—
Chile	195	4,586	8,937	9,208	9,081	8,812	—
Colombia	77	644	2,950	—	—	3,161	—
Costa Rica	e	e	890	890	824	898	—
Cuba	604	1,825	31,000*	—	—	14,000*	14,507
Dominican Republic	—	—	240	240*	240*	238	—
Ecuador	—	300	1,131	1,106	1,106	995	—
El Salvador	e	e	604	623	623	621	704
Gautemala	e	e	830	867	867	867f	1,003
Haiti	—	—	217	266	301	301	—
Honduras	76g	1,139g	—	744	879	945	1,290
Jamaica	—	—	424	424	434	421	—

EVOLUTION OF THE LENGTH AF RAILWAY LINES IN AFRICA, LATIN AMERICA, ASIA AND OCEANIA

(Contd.)

(In kilometres)

Country	Length of lines						Length of tracks
	1860	1900	1930	1940	1950	1955	1955
Mexico	32	14,573	20,500	20,300*	20,645	20,645	25,076
Nicaragua	e	e	267	—	—	378	—
Panama	e	e	439	—	—	792	—
Paraguay	—	253	468	497	497	522h	532h
Peru	89	1,667	3,649	—	—	3,578	—
Puerto Rica	—	—	546	—	—	354	—
Surinam	—	—	173	172	172	172	—
Trinidad and Tobago	—	—	198	—	—	175	251
Uruguay	—	1,841	2,763	2,908	2,956	2,010	3,025
Venzuela	—	1,020	1,070	966	1,020	760	—
TOTAL LATIN AMERICA	1,241	60,203	133,200d	138,400d	144,800d	146,272d	168,000d
Asia							
Burma	—	—	3,293	3,314	2,860	2,888	3,586
Cambodia	—	—	i	340	386	390	—
Ceylon	—	478	1,324	1,234	1,146	1,149.	1,442
Hong Kong	—	—	47	—	—	35	56
India	**1,350**	**38,235**	**68,044**	**66,232**	**54,752**	**55,885**	**78,965**
Indonesia	—	2,094	6,654	6,709	5,811	6,664	6,818
Iran	—	54	370	1,907	2,559	2,567	—
Iraq	—	—	1,212	1,527	1,659	1,693	—
Israel	—	—	j	—	—	425	621
Japan	—	5,892k	21,798	25,202	22,442	22,783	39,097
Jordan	—	—	1,056m	—	—	366	—
Korea	—	n	3,865	4,318	2,800o	3,116o	4,265o
Lebanon	—	—	219	219	409	417	—
Malaya	—	—	1,723	1,719	1,439	1,654	2,092
Nepal	—	—	48	108	108	122	133
North Borneo	—	—	230	—	—	187	200
Pakistan	N.A.	N.A.	N.A.	N.A.	11,183	11,335	—
Philippines	—	—	1,293	1,352	1,057	1,167	1,512
Saudi Arabia	—	—	—	—	137	566	585
Syria	—	—	777	859	851	867.	—
Taiwan	—	—	—	—	—	950	1,713
Thailand	—	227	2.923	3,120	3,291	3,354	3,686
Viet-Nam	—	—	1,913p	2,583	953	1,196	—
TOTAL ASIA (Excluding China Mainland)	1,350	47,080	117,600d	122,650d	115,750d	119,752d	167,600d
China mainland	—	**646**	**13,441**	—	**25,700**	**26,931**	—
Oceania							
Australia	367	20,202	44,220	44,500*	44,100*	43,574	54,000
New Zealand	—	3,670	5,346	5,456	5,681	5,728	5,955
TOTAL OCEANIA	367	23,872	49,566	49,956	49,781	49,302	59,955

Note: Owing to the scope of the data, both in time and space, and the variety of the sources used, the data are not always fully comparable.

a. Including Tunisia. b. Kenya, Tanganyika and Uganda. c. Included with Algeria. d. Including estimates for missing or incomplete data. e. Included under Honduras. f. Excluding 293 km. of lines of industrial railways. g. Including Costa Rica, El Salvador, Guatemala, Nicaragua and Panama. h Excluding 561 km. of industrial railway lines. i. Included under Viet Nam. j. See Korea only. k. Including Korea. m. Palestine and Transjordan. n. Included with Japan. o. South Korea only. p. Including Cambodia.

Company Meeting

THE DELHI CLOTH & GENERAL MILLS CO., LTD., Delhi

SPEECH OF THE CHAIRMAN, SIR SHRI RAM

Speaking to the shareholders of the Delhi Cloth and General Mills Co., Ltd. at the 69th Annual General Meeting held on 20-12-1957, Sir Shri Ram, Chairman of the Company, stated that profits from the Textile Mills in India were lower in the year under review than they were in the year preceding it. The Mill in Lyallpur, in common with the rest of the Cotton Industry in Pakistan, had also made lower profits.

For the Chemical Section of the Company, he said, this had been a year of growth and of better working. During the year under review, a new Sulphuric Acid Contact Plant designed by the Company's engineers and fabricated in the Company's Workshops went into operation. This plant is the biggest of its kind to be manufactured inside the country, and it has been put up at a cost comparatively lower than comparable imported plants. In order to meet the country's requirements for Active Earth, the Company was planning to reach a daily production capacity of 5 tons from the present level of 3 tons a day. The Sugar Mills in Daurala and Mawana and the Confectionery Factory and the Distillery have all worked well.

Continuing, Sir Shri Ram said:

"The overall results have been affected by the various taxation policies of the Government, such as the additional excise duties on textiles, the higher taxation on companies and the new wealth tax.

In a sense, our difficulties are a part of the economic problems facing the country at large.

The problem of food supplies remains with us, and its presence is casting a long and dark shadow across our economic horizons. The foreign exchange situation is still critical, and adequate solutions for it will probably need years of effort by all, and the exercise of discriminating skills in the future designing of our economic programmes, so that their import-content is within our exchange resources and their scale within the bounds of our internal resources.

At the moment there is a lull on the price-front, but it is a quietude at a level that is high, and being myself a firm believer in a low-price economy I feel somewhat uneasy.

In this context, I might refer to an aspect of our internal resource situation bearing on the working of private enterprise. Paradoxical as it might seem, the position is that while the Money Market is easier this year than what it was last year, the credit-worthy borrower is still unable to secure finance except at an exhorbitant price, irrespective of the fact whether the money is required for industry or for operational finance. This has been very forcefully mentioned by the Industrial Delegation which went recently to the United States and Europe. The Small Savings Scheme of the Government itself is not giving satisfactory results either. The Government alone can remove this self-defeating situation.

Nearer home the textile industry is in crisis. In May 1956, the stocks of unsold cloth were 168 million yards; while at the end of October 1957 the unsold stocks have piled to a level never before touched—587 million yards. As a direct consequence, realisations have been lowered and the liquid solvency of the cotton textile industry is in a state of impairment.

I can do no better than present the data on Bank Advances to the Cotton Mill Industry which have reached a very high level:

	1955	1956	1957
Scheduled Banks' Advances to the Cotton Industry at the end of June in Each Year ..	69	73	107 cr. Rs.

This burden of stocks carried unwillingly has been telling on all connected with the industry, and it is tragic that a few mills have closed down and some others have cut their shifts, and I am afraid that the steady growth of production, year after year, in the last few years is not likely to be maintained.

I welcome the relief in excise duty on Medium Cloth announced by the Finance Minister a week ago, although burden of excise duties on Fine and Superfine Cloth still continues to be very heavy. At the same time I realise that since the Government are committed to raising the maximum of internal resources for the National Plan, they may not be in a position to view the situation merely from the angle of the textile producer. The remedy, therefore, has to be found elsewhere. A fair part of the crisis, in my humble opinion, can be resolved by taking steps to export 300 to 400 million yards of cloth in the near future, even at sacrifice prices. The burden of the sacrifice should be shared equitably by the industry as a whole, since the resultant benefits of a market not oppressed by huge and rising stocks which are declining in value will be 'generally' shared. I make this plea to fellow-industrialists once again, and in all humility. Its advantages do not stop at lowering stocks within the country but in creating an appropriate psychology in the markets which have been fighting shy of their normal function of stock-holding since the successive unsettlements of the sharp rise in excise duties last year, of the Flu epidemic, and of the confusion consequent upon the introduction, earlier in this year, of the Inter-State Sales Tax. This will not only help the industry itself but also earn a fair amount of much-needed foreign exchange for the country. In a sense, the textile crisis is a dealer crisis, and the dealer will not be in a position to get free of the feeling of crisis so long as the once-accumulated stocks oppress the market by the sheer fact of their presence.

In this context, as well as in the wider context of the nation's need for an expanded export-effort, I will commend the suggestions made by the Export Promotion Committee. They have pointed to the stagnant condition of India's exports in a period of a significant rate of growth in world trade as a whole. Rightly, the Committee have stressed the role of the manufacturer, the exporter and of their organisations in developing larger exports, and the equally significant role of appropriate Government policy, measures and

export-oriented organisations and media of publicity and information.

Gentlemen, there has been considerable talk in the course of this year about worker participation in Management. As early as 1938, we in this company decided to have an elected representative of the workers on the Board of Directors as also an elected representative of other employees. We have not had cause to regret our decision, but its value as an educative step for our workforce in general has been extremely limited. Even Works Committees and Production Committees, all over the industry, have yet not been a success in the sense of providing a real feeling of belonging, of participation to all the constituents of the working family. So often these Committees have become only "Demand" Committees or mere platforms for the ventilation of all sorts of grievances—real, unreal and imaginary.

Want of mutual confidence very unfortdnately exists, and because it exists, it warps our understanding of the point of view of each other. And furthermore, it inhibits our willingness to talk, and to converse. And so disabled, we can hardly have the feeling of belonging, of being participants in a common cause. In my opinion, worker participation in Management should be built up not from the top but from the work-floor upwards. Towards this end every effort must be made, both by the employer and by the employees, to render the Works Committees & Production Committees a living success, the educative effects of which are reflected over the larger mass of workers.

I might even raise this to the larger national plane where we have to rely on our capacity to help ourselves. And the latter we cannot do if labour and capital, the two inevitable partners, do not pull together in the common national interest instead of following small-minded controversies and self-centred parochial interests, whether political or economic. In fact, it was good to hear Labour Leaders, even Communists, and others rising to defend the second Five-Year Plan and the democratic urges for progress which it embodies. Translated in the language of the work-aday world it means more production. And more production, in turn, implies a new, rich and rewarding co-operation between labour and capital—co-operation that is oriented to consumer interest in the broadest sense, and inclusive of the imperatively needed export-orientation. And let us not forget that each one of us is a consumer as much as he is a worker.

There are exceptions—and I am happy that the exceptions are not very few in number—but there is an air of complacency whether inside our factories or inside other offices. Our notions of adequate personal performances are so puny, a mere fraction of our potential for performance. The urge to work hard is something which, we as a nation, have yet to acquire, although our traditions have always been informed by a sense of duty. The Unions have to respond to the country's need for harder and harder work, because on them rests the responsibility of leading our workers not merely to a fair day's wage but also to a fair day's work.

There are more holidays—other than the weekly rest day—in our country than in any other country in a similar stage of its development. I calculate that we can get up to 7 per cent more industrial production from the same set of basic equipment by judiciously pruning the excess of holidays from which we suffer.

Some of these might appear drastic suggestions. Perhaps they are. But to me, who is advocating them only in the larger interest, it seems that chronic diseases call for drastic remedies.

Before I conclude, let me convey my thanks to all my colleagues, including the members of the staff and the workers.

With these words, ladies and gentlemen, I move that the Directors' Report and Accounts be adopted.

NOTE: This does not purport to be a record of the proceedings of the Annual General Meeting.

Company Meeting

SILK & ART SILK MILLS' ASSOCIATION, LTD.

Presidential Address by Shri D. N. Shroff

At the 18th Annual General Meeting held on Monday, December 23, 1957.

Gentlemen,

I have great pleasure in extending to you a cordial welcome this afternoon to the 18th Annual General Meeting of our Association. The Annual Report of the Directors and the Audited Balance Sheet and the Income and Expenditure Account for the year ending 31st March, 1957, have already been circulated. Before you proceed to adopt them, I would like to make a few observations on the events of the past year.

We are meeting at a time when India is facing increasing difficulties of foreign exchange required to meet the targets laid down under the second Five-year Plan. The stress and strain that has resulted owing to India trying to go ahead fast with the development of the country, has manifested itself in several facets of community life and has affected the industry and trade, for the past year witnessed far reaching events in the direction of state ownership and a socialistic pattern of society.

The second Five-Year Plan is primarily intended to gear our economy to this goal and the resources of the entire country will have to be mobilised in order to achieve the development envisaged in the second Plan. The private sector has to take stock of the greatly changed conditions and circumstances. It will have to play a role in line with the new economic thinking and I am confident that the private sector

will rise to the occasion and make its proper contribution to the common goal laid before the nation. We of the Rayon Weaving Industry shall have to concentrate our energies in effecting a radical change in the techniques of production and bringing down the costs, thereby playing our role in the task of nation building.

Turning to the problems facing the rayon weaving industry, I would like to state that the shortage of raw material, namely the rayon yarn, has been the foremost problem for this industry since its inception. As a result, the productive capacity of the industry has never been fully utilised. As there was no production of rayon yarn until the middle of 1950, the industry was solely dependent on the imports of rayon yarn. During the growth and development of the rayon weaving industry, the supplies of rayon yarn have been inadequate, at times creating an acute shortage. Even, today, the position regarding the supply of rayon yarn is far from being comfortable. The indigenous production of rayon yarn is so inadequate compared to the total requirements of the industry, that the bulk of the yarn is imported and even then the needs of the industry are not fully met with. Inadequate supplies of rayon yarns and their high prices have been the problems that our industry has faced since its inception.

During the Second World War, the shortage of the supplies of rayon yarn led to the virtual stoppage of the working of the industry. Even thereafter, the supplies of rayon yarn have been limited owing to the import control regulations. Except for a short period in 1949, and in 1951, when the imports of rayon yarn were put under O.G.L., this essential raw material has been subjected to considerable restrictions. The production of indigenous rayon yarn, which started in 1950, amounted to 20 million lbs. during the year 1956-57. The imports of rayon yarn during 1956-57 was of the order of 60 million lbs. Thus the total availability of rayon yarn, that is imported plus indigenous production, during the year 1956-57 amounted to only 80 million lbs. thereby leaving a wide gap between the total availability and the actual requirements of the country, which have been estimated at 100 million lbs. per annum. As for the gap between the indigenous production and the requirements of the country, it can only be said that if the industry were dependent only upon the indigenous production, there would have to be immediate closures for the indigenous production is a mere one-fifth of the requirements.

Despite this fact, the import quota per loom per shift has been reduced by the Government from time to time thereby tightening the import control restrictions on this essential raw material required by the rayon weaving industry. Whereas in July-December 1955, the quota of Rs. 8.50 per loom per shift was allotted to the industry, during the subsequent licencing period of January-June 1956 the quota came down to Rs. 6.70 per loom per shift. This was further reduced during the July-December 1956 period when the quota of Rs. 6 per loom per shift was fixed; during January-June 1957 period this was again brought down to Rs. 4 per loom per shift and during July-September 1957 period the quota per loom per shift was calculated at Rs. 3. This gradual reduction in quota did not stop even at this stage and during the current licencing period, quota of Rs. 2 per loom per shift has been granted to the industry. The present quota of rayon yarn is not at all adequate to keep the industry running. This has caused grave concern to the producers of rayon fabrics and has placed the industry under the threat of grave dislocation.

On one hand there is a growing shortage of rayon yarn and on the other the productive capacity of the rayon weaving industry has considerably increased in the recent years. The report of the office of the Textile Commissioner shows that at present there are 47000 looms registered with them as against 38000 in 1954. This means that the rayon weaving industry's productive capacity is much more than 600 million yards which is the usual estimate, and this productive capacity cannot be fully utilised due to the shortage of yarn, thus limiting the actual production of Rayon Fabrics to about 400 million yards during the past year.

Whilst the industry is suffering from such perennial shortage of raw material required by the industry, recently a systematic and inspired press campaign is being waged against this industry. In this campaign, problems of growing accumulation of rayon fabrics have been attributed to the "liberal" rayon yarn import policy of the Government of India, and therefore total ban on the imports of rayon yarn has been advocated. From what I have stated above, it is clear such advocacy is without any foundation and is rather motivated by self-interest and is based on half truths and twisted facts.

As a matter of fact, I forsee a great shortage of rayon yarn in near future, especially in view of the fact that the indigenous production of rayon yarn is limited to coarse deniers and the demand of the industry regarding the different types of rayon yarn cannot be met with by the indigenous producers. It will rather take a decade before the requirements of the industry are met with from indigenous sources. Even under the second Five-Year Plan, the Planning Commission does not envisage that the total requirements of the industry will be met with from indigenous sources. The rayon weaving industry will therefore be dependent for a number of years on the foreign sources for supply of raw material.

During the coming years, more plants for the manufacture of rayon yarn are to be set up in India and it is indeed a happy augury to develop our own resources for the manufacture of this essential raw material and thereby achieve self-sufficiency. However, it will have to be seen that the rayon weaving industry gets its essential raw material at a reasonable price. The indigenous rayon yarn industry owes its inception, existence and continuance to the rayon weaving industry. I would like to remind it that owing to the great interdependence, the rayon weaving industry and the rayon yarn manufacturing industry will have to exist in an atmosphere of peaceful co-existence.

I would now like to refer to the increasing burden of taxation on this nascent industry. From time to time, the Government has imposed unbearable burdens on the rayon weaving industry and our industry, being small scale as it is, has been able to survive during all these years owing to the active co-operation and united efforts of all the members, and it is only with these qualities that we can face the various ordeals confronting the industry. Unfortunately, the industry has been treated on par with the cotton textile industry as regards taxation, when there is an urgent necessity that this industry should be treated as a light consumer goods industry.

The import duty on rayon yarn is now levied denierwise at a specific rate per lb. This was a welcome change inasmuch as the Government has accepted the principle that the industry had been advocating regarding the change in the basis of levy of import duty which was until then based on the market prices of rayon yarn, which were fluctuating. The effective rates of duty fixed by the Government are too high and the incidence of duty on the various types of yarn varies from 35 per cent to 65 per cent. This advantage given by way of specific duty levied on the import of

yarn has been offset owing to the higher rates of effective duty fixed on the imports of rayon yarn. The excise duty was also levied for the first time in the past year on the indigenous rayon yarn and the result of which is that the rayon fabric manufacturers have to bear the burden of this levy on the purchase of the indigenous rayon yarn.

The Government's proposal to increase the employers' contribution towards Provident Fund from the present level of 6¼ per cent to 8-2/3 per cent and the employers' contribution under the Employees State Insurance Scheme from the present level of 1¾ per cent to 3½ per cent will impose an additional burden on the industry.

The latest burden in the shape of additional Central Excise Duty which has come as a replacement of Sales Tax on rayon fabrics though welcomed in principle by the Association and the Industry, has been too high, for if the original rate of Central Excise Duty was 9 pies per square yard, i.e. 5 nP., and it was compounded at the rate of Rs. 27, Rs. 18 and Rs. 10 per loom per month for the first, second and third shifts respectively, the additional excise duty of 3 nP. per square yard should be compounded at the proportionate rates which would work out to Rs. 16.20, Rs. 10.08 and Rs. 6.00 per loom per month for the first, second and third shifts respectively. Moreover, as the industry will lose the benefit of making purchases against L and M forms under the Bombay Sales Tax Act, 1953 and obtaining the set-offs on purchases of raw materials, lubricants chemicals, stores, etc. to be used in the manufacture of art silk fabrics, the financial burden on the industry will considerably increase.

Nor will the increase in the financial burden relieve the procedural complications for about a year, since the sales and purchases of 'non-dutiable" stocks will have to be made according to Sales Tax Laws prevalent in Bombay State before the announcement was made on 13-12-57. In fact there has arisen an impasse in the trade as the local and up-country dealers do not desire to follow the complicated procedure, especially in view of the fact that several other States have so legislated that the "non-dutiable" stock of rayon fabrics entering those states after 13-12-57 will further be subject to the Sales Tax laws prevalent within the areas of those states. Bombay State being the main manufacturing centre of rayon fabrics, the position of the industry has become precarious and we trust that the Central Government will step in and insist upon uniform legislation in all states, and, more important, will exempt "non-dutiable" stocks from all Sales Tax Laws.

The burden of taxation as described above, is not yet complete and I would like to make a reference to the new tax structure that has come into existence this year in the shape of the Deposit Scheme, the Wealth and Expenditure Taxes in the wake of Estate Duty and the Tax on Capital Gains. With a Gift Tax looming on the horizon, these measures are discouraging to the development of free enterprise. The acute shortage of raw material, diminishing quota of art silk yarn owing to the changing import policy and the increasing incidence of taxation on rayon industry from time to time, have placed this industry in a paradoxical position.

I would now like to emphasise to the silk and rayon industry the foremost need of keeping the consumer in mind while designing and manufacturing its products. It is imperative that we should produce quality fabrics according to the standards desired by the consumer both in the internal and export markets. In this age of increasing competition, fabrics should be made available at competitive prices and the technological genius of the industry should devote particular attention to the creation of new fabrics. The industry will have to effect these improvements in processes and introduce varieties of fabrics with a wide range of useful properties. The need for technically qualified personnel by the industry is rather great and it is a matter of pleasure to learn that the Research Association has approached the Government of India for starting a fullfledged technical college for giving training in the technology of silk and man-made textiles. The matter is receiving the active consideration of the Bombay State Government and the Government of India.

At this stage I am happy to inform you that the manufacturers are taking keen interest in the export promotion of silk and rayon fabrics. The various facilities granted by the Government to assist the producers will enable the industry to build up sizeable exports. Schemes have been initiated by the Government of granting import licences against the exports of fabrics and of granting prospective licences to the manufacturers for the exports of fabrics. As a matter of fact, there has been gradual rise in the export of silk and rayon fabrics and I am glad to inform you that the targets of our exports promised by the industry to the Government will be almost achieved.

I would like to appeal to all members to develop export consciousness and make determined efforts to participate in the export promotion drive. I, therefore, desire that every member should enrol as an exporter thereby contributing even to a small extent to the export drive so as to earn the valuable foreign exchange. The export promotion scheme is open to both big and small units and the same concessions are granted to all alike. Our Association has taken lead in establishing Export Promotion Council and I hope all members will endeavour to export the silk and rayon fabrics of our country.

The Export Promotion Council had adopted the slogan 'Export and Exist' because export is a recourse upon which we have to increasingly rely to obtain our raw material despite the handicaps suffered in exporting our goods, owing to the international competition from well established foreign countries. At the time of inauguration of the Textile Industries Fair, where our Association has a stall displaying the most beautiful and quality fabrics manufactured by our industry, Hon'ble Shri Morarji R. Desai, Minister for Commerce and Industry who visited our stall said that he did not like the slogan 'Export and Exist', but would like to suggest to the Industry the slogan "Export and Thrive". I consider it an expression of the keen desire of the Hon'ble Minister to assist our industry in boosting up its exports, enabling it thereby to thrive and prosper and not only exist. I thank him on your behalf for giving us such an encouraging slogan and bestowing his blessing upon this industry.

I would like to refer now to the problems pertaining to labour. During the year in question there were four major disputes that were concerning the Association and those were (1) the demand by the Union for Gratuity for employees in the Silk Textile Industry, (2) the demand for change in the service conditions of clerical, technical and supervisory staff, (3) the demand for increase in Dearness Allowance and (4) the Standardisation of wages. During the year in question the Association has so far successfully dealt with all these Labour disputes through the co-operation of you all, members, and I take this opportunity of expressing my gratitude for all the help that was extended to the Association for fighting these disputes.

It cannot be disputed that the employee and the employer are the two wheels of the industrial chariot and unless they move in unison it will not be possible to do anything for the maintenance of peace, discipline and order in the Industry; but, I am constrained to say that there is a sad deterioration of law and order at present in many parts of the country and also sometimes in the case of our industry, and law and order are essential to proper labour-management relations.

The industry today is passing through a great crisis, and unless all the members unite it will be very difficult to pass through these difficult times. I would, therefore, take this opportunity to request the members that, whenever they find any difficulty in solving the disputes or in meeting the grievances of the labour, they should approach the Association.

Before I conclude, I would like to express my sincere thanks for the active co-operation and guidance that I have received from my colleagues on the Board of Directors and on the various Committees. I would also like to express my appreciation of the conscientious and loyal manner in which the staff of the Association have performed their duties during the year.

It remains for me to present to you the Directors' Report and the Audited Balance Sheet and Profit and Loss Account for the year ended 31st March, 1957, and I now move the following resolution:

"RESOLVED that the Directors' Report and the Audited Balance Sheet and Profit and Loss Account for the year ended 31st March, 1957, together with the Report of the Auditors thereon, be and are hereby adopted."

RESULTS OF VOTING

Ballot papers issued: 201.
Ballot papers found invalid: 1.
No. of invalid votes: 7.
No. of valid votes: 1197.

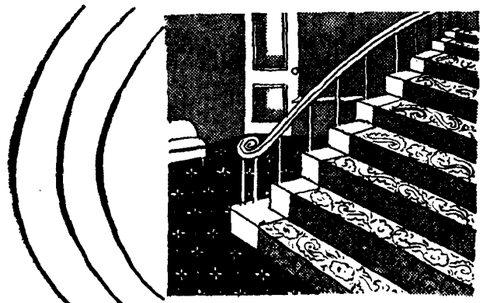
Names of Candidates in order of the number of votes secured:

	Names.	Votes secured.
1.	Shri D. N. Shroff	162
2.	Shri S. M. Mehta	144
3.	Shri P. K. Badiani	137
4.	Shri J. G Vakharia	127
5.	Shri M. B. Mehta	117
6.	Shri R. C. Khanna	109
7.	Shri Udayaram Ambaram	107
8.	Shri M. H. Doshi	77
9.	Shri H. J. Vaidya	63
10.	Shri S. M. Gandhi	61
11.	Shri R. M. Khatau	49
12.	Shri R. H. Mehra	44

The first seven are declared elected as Directors.

23RD DECEMBER, 1957.

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Protection for Industrial Workers

THE industrial working class in China is protected by a large number of welfare measures and a wide network of labour insurance. The most significant feature of this labour insurance is that the premium of the insurance is charged against the management in marked contrast with India where according to its Employees' State Insurance Act, the employers and the employees both have to contribute. The labour insurance regulations in China clearly stipulate that "the cost of the various labour insurance benefits must be borne in full by the management or the owners of enterprises which take part in labour insurance". It can be compared with the labour insurance system of the Soviet Union from where China has drawn most of its ideological principles.

INSURANCE SCHEME

The labour insurance scheme in China is classed in two categories. The first includes the benefits paid directly to workers by the State factory management or owners of private enterprises, such as wages paid during maternity leaves and medical expenses for sick and injured workers; whereas the other takes the form of labour insurance fund which is paid monthly to the trade union organisations by the State factory management or owners of private enterprises. According to Article 9 of the regulations, "seventy per cent of this fund is to be deposited with the account of the respective primary trade union committees of the enterprises concerned as the labour insurance fund to be used as pension, allowance and relief benefits to workers and staff members. Thirty per cent of the monthly sum due to the labour insurance is to be deposited with the account of the All-China Federation of Labour (A-CFL) as the general labour insurance fund."

In a nutshell the insurance scheme in China provides benefits in case of sickness, maternity, professional accidents and old age; while in India the Employees' State Insurance Scheme covers sickness, maternity, disablement, medical and dependent benefits. With the exception of old age pension, the other features of the labour insurance scheme in China resemble to a certain extent with India's employees State Insurance. The Indian scheme like the Chinese scheme provides for free consultation, medicines, dressings and treatment by specialists. Medical assistance is available in the hospitals as well as in the homes. The sickness benefit amounting to approximately 7/12th of a person's average wage is payable for a maximum period of 56 days in a year. The difference in sickness benefits in India and China is that while pension is provided in China to persons suffering from sickness lasting beyond three months till the period of recovery, such is not the case in India. The Employee's State Insurance Scheme in India extends to most of the industrial areas and would be covering the whole of the country by the end of the second Five-Year Plan. The workers families would also be covered under the scheme so far as the medical benefits are concerned. At present it covers only 11 lakh workers. The other social security measures in force in India are the provident fund schemes, lay-off and retrenchment benefits, workmen's compensation and maternity benefits for women workers. The provident fund scheme is in operation in six industries namely, cement, cigarettes, electrical machinery or general engineering products, iron and steel, paper and textiles employing 50 or more persons. The contributions are provided by both employers and employees at 6¼ per cent of wages and dearness allowance. It is likely to be extended to all industries with a employment strength of 10,000 workers. Later it is intended to cover non-factory industries such as commercial establishments, other mining industries and plantations.

OLD AGE PENSIONS

In China where the pension scheme is in operation, retirement pensions of between 35 to 60 per cent of regular wages are paid from the labour insurance fund to male workers over the age of 60 and women workers over the age of 50. To qualify for a retirement pension the condition is that the male worker must have worked for 25 years and the woman worker must have worked for a period of 20 years. A ten year regular record in the enterprise or factory from where the person retires is also essential. Paid maternity leave is given under the labour insurance regulation in China for 56 days to women workers. Wives of workers or employees who are not members of the trade unions receive half of the maternity allowance. In cases of professional accidents workers are provided with all necessary medical expenses, hospital fees, and the costs of food during hospitalization entirely by the State factory or owners of private enterprises. During the period of convalescence they are provided with full pay. Workers disabled on account of accidents get pension which varies according to the degree of disability. Usually the amount of pension ranges from 60 to 70 per cent of their regular wages. In case of sickness or non-occupational injury, however, only part of the necessary medical expenses are paid by the State or the private owners, but so far as wage payments are concerned the workers get full payment during convalescence. Workers suffering from sickness lasting beyond three months and disabled as a result of it get disability pensions from labour insurance funds ranging from 20 to 30 per cent of their regular wages and continue for the rest of the worker's, life or till recovery. The following table indicates the number of workers enjoying labour insurance benefits and free medical treatment in China.

In thousands of persons

	Absolute Figures				Fixed Index (1952=100)		
	1952	1953	1954	1955	1953	1954	1955
Numbers of workers enjoying labour insurance benefits	3,300	4,830	5,380	5,719	146.4	163.0	173.0
Numbers receiving free medical treatment	4,000	5,496	5,666	5,937	137.4	141.7	148.4

Although there is every year an increase in number of workers enjoying labour benefits, it constitutes only a small percentage of the total labour force. When it is found to be rather cumbersome and in actual practice it is hard to get the claims settled. The worst sufferers are the non-trade union members who receive only half of the amount provided. The discrimination against the non-trade union members is enforced to draw the workers into the trade unions which form a powerful appendage of the People's Government This clearly specifies that the social organisations in China have been drawn and are being drawn into the arena of political struggle.



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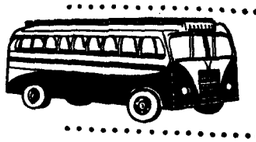
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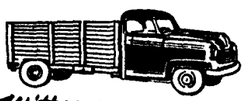
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Health

PUBLIC health services have of late been receiving growing attention both in India and China. Strict comparisons between the two are, of course, hard to draw since the allocation of expenditure for medical and health services has been lumped together in China's first Five-Year Plan with expenditure on education and culture without a breakdown into the three subjects. But when the criterion of inhabitants per physician and the number of inhabitants per hospital is applied to assess the progress attained by each country, it is visualized that India stands far ahead of China in the matter of providing health services to its population. In so far as the popular definition of health as a condition of physical fitness and immunity from disease is concerned, the record of progress in India is considered to be fairly modest.

MASS DISEASES

The factors which have been responsible for retarding the standards of health have been ignorance and poverty in both the countries. However, it is creditable to find that in India the mass diseases, malaria and tuberculosis, that used to take a heavy toll of life are now under some control. Small-pox and plague have been brought under complete control. The significant result of a well conceived and integrated public health planning in India has been that the general death rate per 1,000 of population has diminished from 19.7 in 1947 to 12.9 in 1954 and the infant mortality rate from 146 to 113. The incidence of deaths per 1,000 of population on account of diseases has also shown a decline from 10.8 to 6.1 in case of fevers, 0.3 to 0.0 in case of plague, 0.4 to 0.04 in respect of cholera, 0.8 to 0.7 in case of dysentry and diarrhoea and 1.5 to 1.3 in regard to respiratory diseases. In China, too considerable advance has been made in eliminating serious epidemic diseases. It is claimed that during the past eight years not one case of cholera has occurred in China. With the exception of sporadic cases occurring in isolated small frontier areas, small pox is almost non-existent. Human bubonic plague is practically eliminated. The mortality rates for measles and scarlet fever have also been lowered. The mortality rates of measles in 1950 and 1956 in China were 8.6 per cent and 1.6 per cent respectively and for scarlet fever 17.8 per cent and 1.75 per cent. Active work in prevention and treatment of malaria resulted in a lowered incidence in many areas. The morbidity rate in 1956 lowered by 57 per cent as compared to 1949. The spread of Kalazar has declined. The official Chinese figures depict the infant mortality rate to be 74.3 per thousand as compared to 200 per thousand in the past.

The anti-malaria measures undertaken in India cost Rs. 15 crores during the first Plan and will involve an outlay of Rs. 28 crore under the second. Up to the end of March 1956, 10.7 crore people were given protection and about 23 lakh malaria cases were treated in the dispensaries in areas covered by the programme. At the end of June 1956., 142 units were in operation in various States. Measures to combat it have been further strengthened. A total provision of about Rs. 14 crores has been made for measures for the control of T.B. during the second Plan. Under the B.C.G. vaccinations programme which was started in April 1952, 8,01,87,653 people were tested by September, 1956 and 2,78,14,065 of them vaccinated. Although there has been a considerable increase in the number of T.B. hospitals, sanatoria and clinics, still much leeway remains to be made. It is considered, the number of tuberculosis beds will have to be raised 100 times if the menace of tuberculosis is to be effectively tackled.

In the countryside the spread of health services in India has been limited, while in China it has been almost negligible. Flies, mosquitoes and insanitary conditions are still the characteristics of the rural areas in China. Up till 1956 the number of group practice clinics and sub-district health clinics over the countryside in China was nearly 50,000. The number of health stations established by agricultural producers co-operatives had exceeded 10,000. This, however, is far below the requirements of the rural areas in China still embody many irrational features or practices which inconvenience the people. Lack of unity among medical and sanitary workers hinders further its rapid growth. In India where there is also a shortage of doctors, the difficulty is due less to lack of trained personnel than to the present unsatisfactory position in respect of housing conditions, and facilities for the education of children.

INDIGENOUS SYSTEM

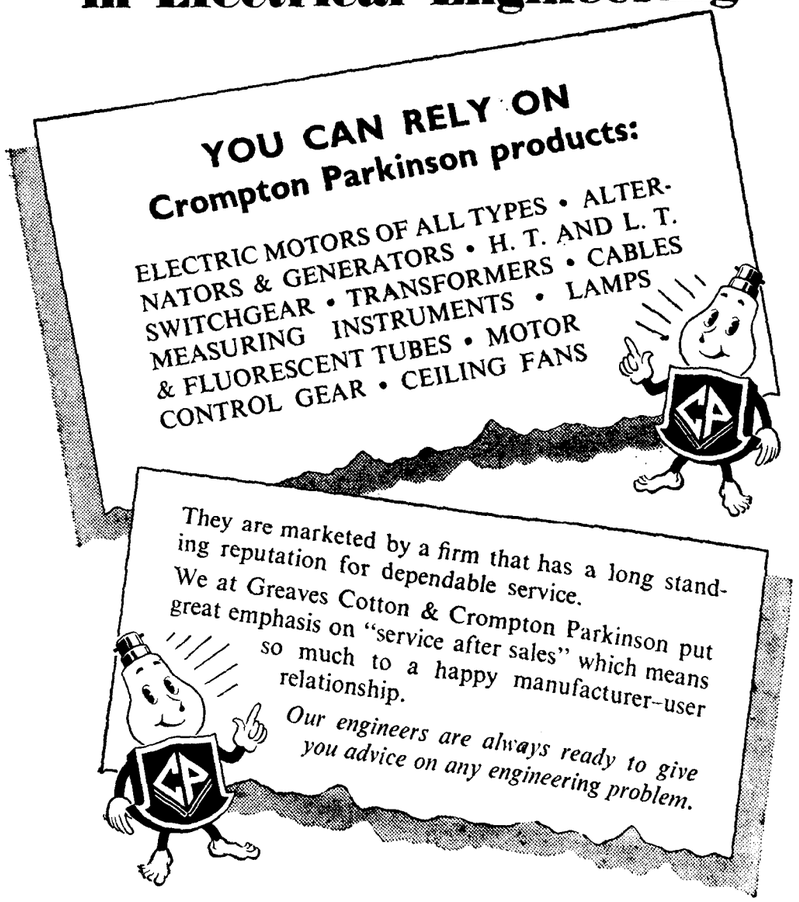
To redress this imbalance stress has been placed in both the countries on the indigenous system of medicine. As against a provision of Rs. 37.5 lakhs made by the Government of India in the first Plan, Rs. 1 crore at the Centre and Rs. 5.5 crores in the States have been provided in the second Plan for developing the indigenous system of medicine. In China doctors of traditional Chinese medicine have been harnessed into service. It is estimated over 20,000 traditional doctors have joined the Government health service. An institute for traditional medicine has been established. All colleges of medicine and pharmacy have been instructed to pay particular attention to research in traditional Chinese medicine. In India, the Central Institute of Research at Jamnagar has been conducting research in indigenous system of medicine. To promote the further development of indigenous system studies in indigenous systems with allopathy have been prescribed in various Indian universities.

Whether the medical facilities are adequate or not is usually judged by the ratio of personnel of various categories in health services to the total population as well as the provision of hospital beds in cases of advanced illness. This being the general criterion, the following table would indicate the progress recorded by both India and China.

	India	China
Doctors	70,000 (1955-56)	70,000 (1955)
Nurses	22,000 (1955-56)	52,000 (1954)
Midwives	26,000 (1955-56)	18,000 (1954)
Hospital beds	1,25,000 (1955-56)	2,61,930 (1956)
Medical Colleges	42 (1956)	38 (1956)

The figures themselves are suggestive of the large gaps in the standard medical requirements. If the ratio of one physician to 2,000 inhabitants and one bed for 1,000 population and one midwife for 5,000 population is to be considered the tolerable minimum, India and China will have to make tremendous strides in the field of health services.

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C.P.17

PHYSICIANS BY COUNTRY[a]

Country	Date	Inhabitants per physician
Africa South of the Sahara:		
Angola	1950	29,000
	1954	27,000
Basutoland	1948	27,000
	1954	21,000
Belgian Congo	1950	24,000
	1954	20,000
Cameroons (French Trust Territ.)	1950	25,000
	1954	20,000
French Equat. Africa	1950	30,000[b]
	1954	23,000[b]
French West Africa	1950	40,000
	1954	28,000
Gold Coast[c]	1948	31,000
	1954	18,000
Kenya	1948	19,000
	1954	9,700
Liberia	1950	90,000
	1952	30,000
Madagascar[d]	1949	7,600
	1954	8,700
Mauritius	1949	5,400
	1954	5,900
Mozambique	1950	37,000
	1954	36,000
Nigeria	1948	80,000
	1954	57,000
Nyasaland	1948	24,000
	1954	32,000
Rhodesia (Northern)	1948	15,000
	1954	11,000
Rhodesia (Southern)	1948	5,200
	1954	4,100
Reunion	1948	20,000
	1953	5,300
Ruanda-Urundi	1950	72,000
	1954	67,000
Sierra-Leone	1948	38,000
	1953	33,000
Tanganyika	1950	26,000
	1954	20,000
Togo (French Trust Territ.)	1950	36,000
	1954	28,000
Uganda	1948	23,500
	1954	21,000
Union of South Africa	1950	2,200
	1954	2,000
Zanzibar	1948	4,600
	1953	6,200
Asia & the Far East:		
Afghanistan	1954	90,000[e]
	1955	70,000[e]
Burma	1952	8,400
Cambodia	1950	
	1953	90,000
Ceylon	1951	5,900
	1953	5,300
China[f]	**1953**	**22,000**
Hong Kong	1950	4,400
	1955	3,300
India	**1949**	**6,250**
	1952	**5,700**
Indonesia	1948	67,000
	1954	71,000
Japan	1950	1,200
	1954	1,000
Korea[g]	1952	5,900
	1953	5,700
Laos	1950	50,000
	1953	29,000
Macau	1949	16,500
	1952	2,800
Malaya (Federation of)	1948	7,300
	1954	8,000
Netherlands New Guinea	1952	21,000
	1954	14,000
North Borneo[h]	1948	20,000
	1955	16,700
Pakistan	1948	33,000
	1954	13,000
Philippines	1951	12,000
Singapore	1950	4,700
	1954	2,600
Thailand	1954	6,800
Viet-Nam	1950	60,000
	1952	61,000
Middle East & Northern Africa:		
Algeria	1950	5,200[b]
	1955	5,000[b]
Cyprus	1948	1,300
	1954	1,500
Egypt	1947	4,300
	1954	3,500
Ethiopia (Empire of)		
Eritrea	1954	18,000
Ethiopia	1953	210,000
Iran	1952	8,600
Iraq	1948	5,900
	1954	5,900
Israel	1950	410
	1954	400
Lebanon	1951	1,200
Morocco:		
Northern Zone	1950	6,000
Southern Zone	1955	8,900
Tangier	1952	2,500[e]
Somaliland (Italian Trust Ter.)	1951	27,000
	1953	19,000
Sudan	1955	81,000
Syria	1951	5,000
	1954	4,000
Tunisia	1950	6,600
	1955	6,600
Turkey	1951	3,300
	1955	3,400
Latin American and Caribbean Area:		
Argentina	1954	780
Bahamas	1948	3,450
	1954	3,200
Barbados	1948	4,190
	1954	4,000
Bermuda	1953	1,100
Bolivia	1948	4,700
	1954	3,980
Brazil	1950	3,300
British Guiana	1948	4,400
	1954	2,700
British Honduras	1948	4,200
	1954	4,300

PHYSICIANS BY COUNTRY a (Contd.)

Country	Date	Inhabitants per physician
Chile	1949	1,800
	1953	1,800
Colombia	1948	3,300
	1952	2,800
Costa Rica	1951	3,210
	1953	2,800
Cuba	1952	1,040
Dominican Republic	1954	5,000
Ecuador	1946	3,500
	1953	3,700
El Salvador	1951	5,100
	1952	6,000
Guadeloupe	1949	3,000
	1953	3,300
Guatemala	1952	5,800
Haiti	1951	10,800
Honduras	1952	6,500
Jamaica	1948	6,010
	1953	3,700
Martinique	1946	
	1953	3,460
Mexico	1953	2,400
Netherlands Antilles	1948	1,800
	1953	1,500
Nicaragua	1950	3,610
	1955	2,600
Panama	1947/48	3,100
	1950	3,300
Paraguay	1950	2,500
	1954	2,200
Peru	1945	5,700
	1952	4,500
Puerto Rico	1950	3,290
	1955	1,600
Surinam	1950	2,500
	1953	2,400
Trinidad	1948	4,195
	1954	2,800
Uruguay	1952	1,130
Venezuela	1950	2,300
	1953	1,900
Virgin Islands (U.S.)	1950	2,200
	1953	1,900
Europe:		
Austria	1950	650
	1954	630
Belgium	1950	1,055
	1954	950
Bulgaria	1951	4,000
Czechoslovakia	1954	740f
Denmark	1949	980
	1955	910
Finland	1950	2,040
	1954	1,800
France	1951	1,200
	1954	*1,100*
Germany (Federal Republic)	1951	800
	1954	740
Greece	1951	1,000
	1955	920
Hungary	1946	920
	1955	690
Iceland	1946	815
	1953	770
Ireland	1946	1,100
	1951	1,000
Italy	*1951*	*800*
Luxembourg	1951	1,200
	1954	1,080
Malta	1950	1,120
	1954	1,100
Netherlands	1949	1,200e
	1955	1,000
Norway	1949	1,000
	1952	920
Poland	1947	3,100
	1954	1,700
Portugal	1950	1,500
	1954	1,400
Spain	1951	990
	1953	980
Sweden	1950	1,455
	1954	1,300
Switzerland	1951	1,020
	1955	700
United Kingdom:		
England & Wales	1951	1,200 j
Scotland	1950	1,140k
	1954	950k
U.S.S.R.	1950	680l
	1955	600l
Yugoslavia	1950	3,200
	1953	2,600
Northern America & Oceania:		
Canada	1948	967
	1954	*950*
United States of America	*1950*	*754*
	1953	760
Australia	1952	1,040
New Zealand	1950	795
	1954	*720*
Papua	1948	60,000
	1955	17,000
W. Samoa	1949	2,780
	1955	2,300

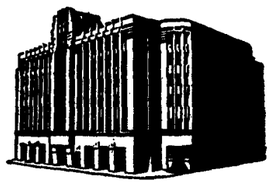
a Sources: World Health Organisation, Medical Statistics Series, and United Nations Statistical Yearbook 1956. Ratios between population and physician calculated by United Nations Secretariat.

b Including military physicians.
c Including Togo (United Kingdom Trust Territory).
d Including Comoro Islands.
e Estimate.
f Chinese People's Republic.
g Republic of Korea.
h Including Brunei and Sarawak.
i Including dentists with medical degress.
j Estimates based on census.
k National Health Service Physicians.
l Derived from Central Statistical Administration of the USSR, Narodnoe Khozyaistvo SSSR, P. 245.

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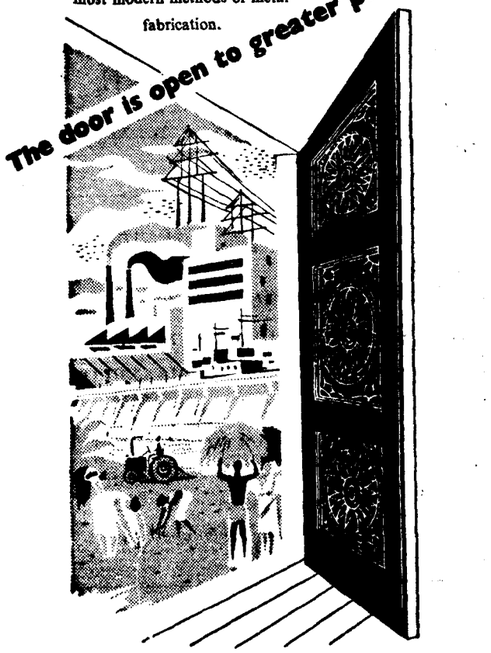
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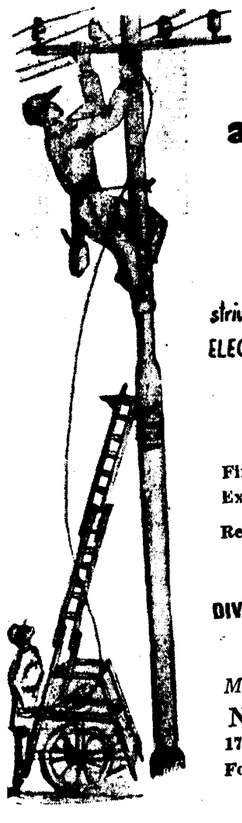
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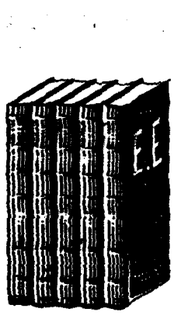
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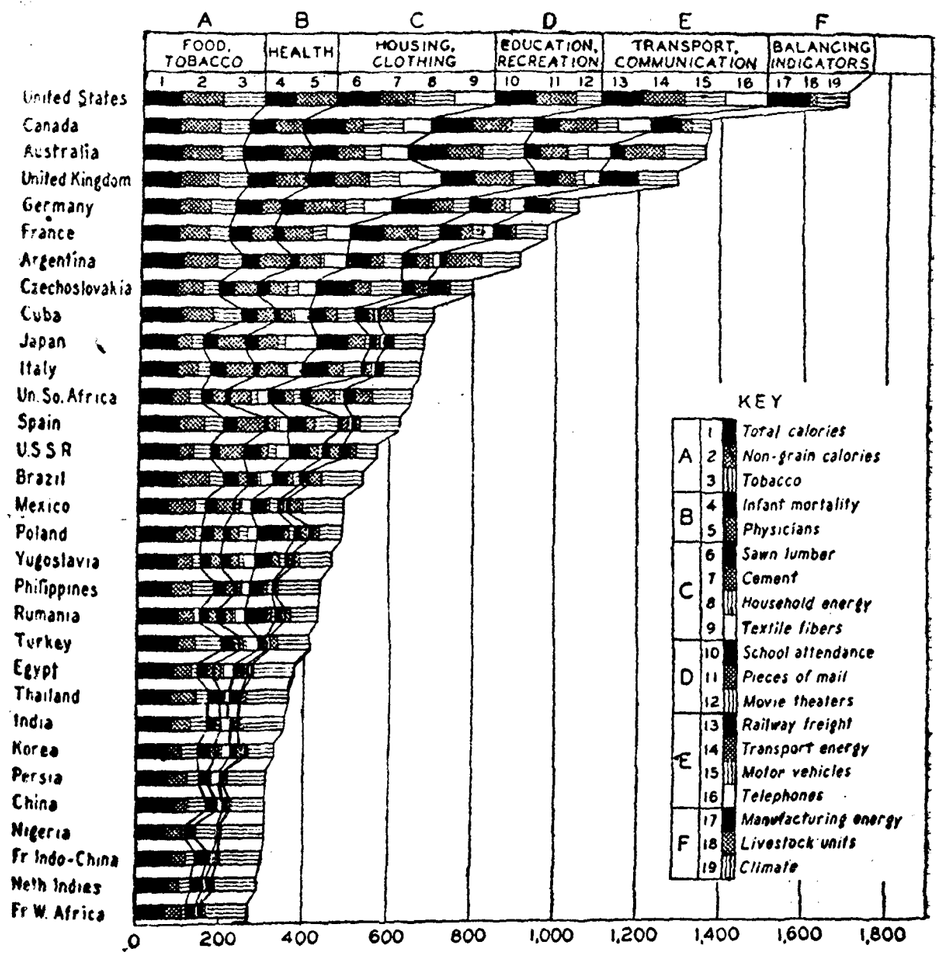
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ENROLMENT IN INSTITUTIONS OF HIGHER EDUCATION IN SELECTED COUNTRIES

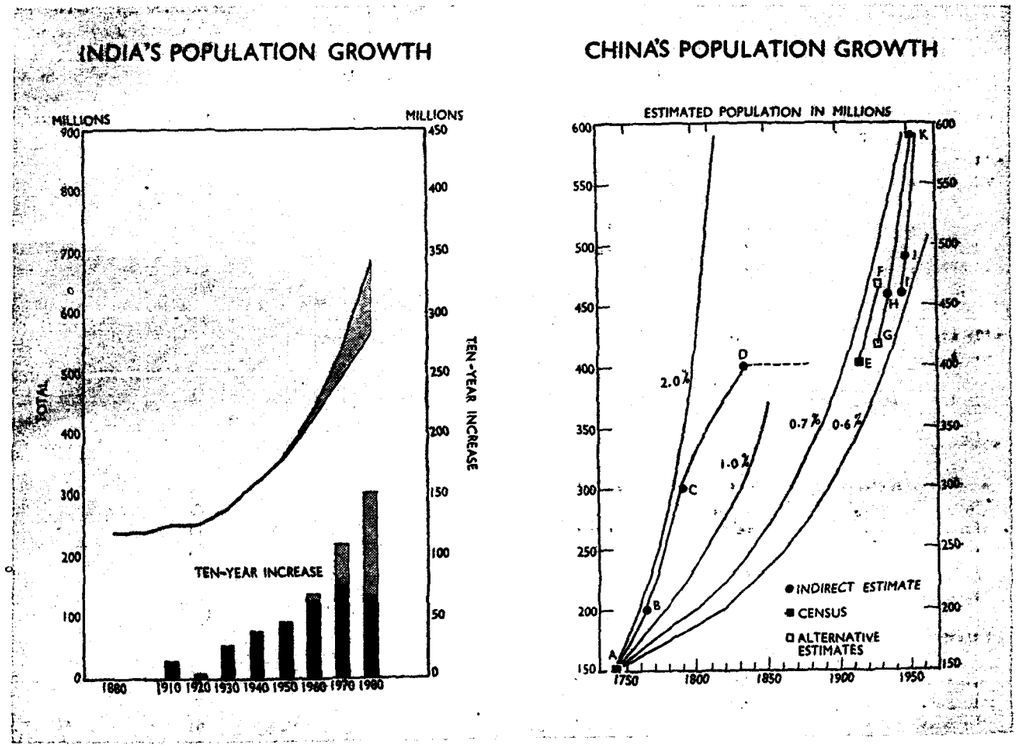
Country	Year	Number of students enrolled in institutions of higher education.	Percentage enrolled in		Enrolment of 100,000 of national population in	
			Law and Medical Sciences	Engineering & Agricultural Sciences	Law and Medical Sciences	Engineering & Agricultural Sciences
AMERICA, Middle and South:						
Agentina	1954	143,342	56	19	426	144
Brazil	1954	65,633	54	14	62	16
Colombia	1954	11,996	55	17	53	16
Peru	1954	20,351	25	12	54	26
AMERICA, Northern:						
United States	1954	2,301,884	6	10	84	135
ASIA:						
China: Mainland	**1954**	**253,000**	**15**	**44**	**7**	**19**
China: Taiwan	1954	13,162	13	44	20	66
India	**1953**	**594,061**	**7**	**4**	**11**	**6**
Iran	1955	9,981	59	10	28	5
Japan	1954	475,132	18	16	95	86
Syria	1954	5,023	56	—	71	—
EUROPE:						
Austria	1954	17,949	31	25	79	64
Bulgaria	1955	31,067	19	43	78	177
Finland	1954	14,668	17	17	61	61
France	1954	179,726	43	6	179	26
Germany (Fed. Rep.)	1954	116,081	41	21	97	50
Greece	1954	17,975	34	11	78	25
Ireland	1954	7,284	27	18	66	44
Italy	1953	137,789	42	12	123	35
Netherlands	1953	27,987	35	22	93	58
Norway	1954	5,607	27	23	45	38
Poland	1954	143,305	21	49	113	262
Portugal	1953	14,563	35	14	59	24
Spain	1953	61,671	57	11	124	23
Switzerland	1954	15,684	34	15	109	46
Yugoslavia	1953	53,186	28	27	88	83
U.S.S.R.:						
U.S.S.R.	1955	1,867,000 1,227,900	14	40	133	373

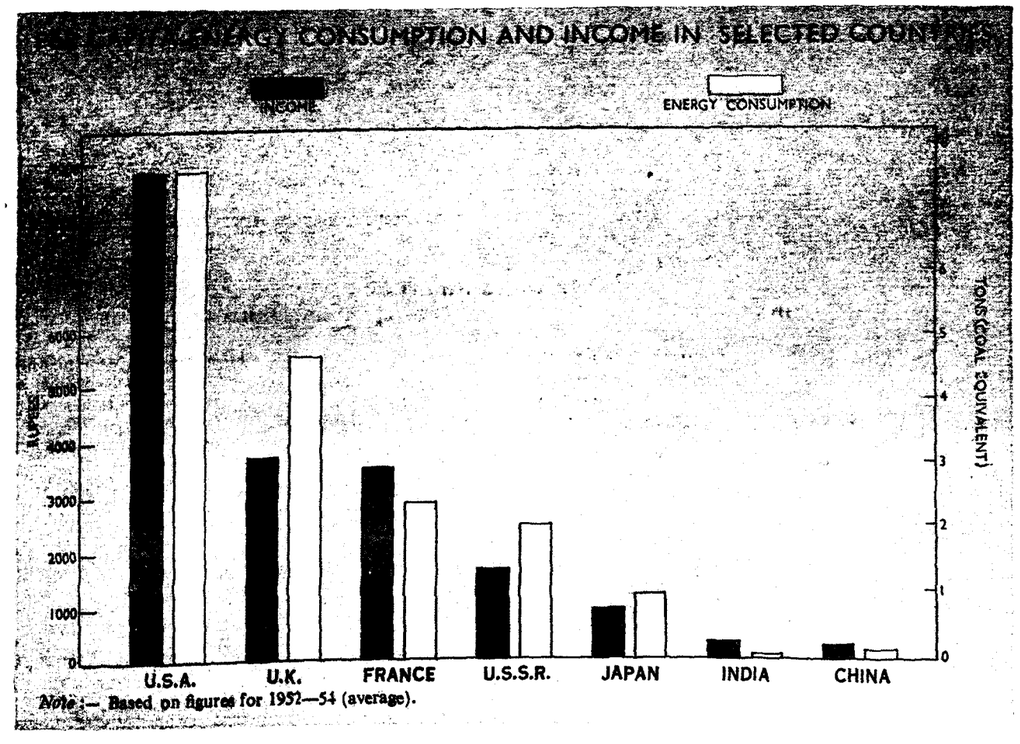
Source: Report on the World Social Situation.

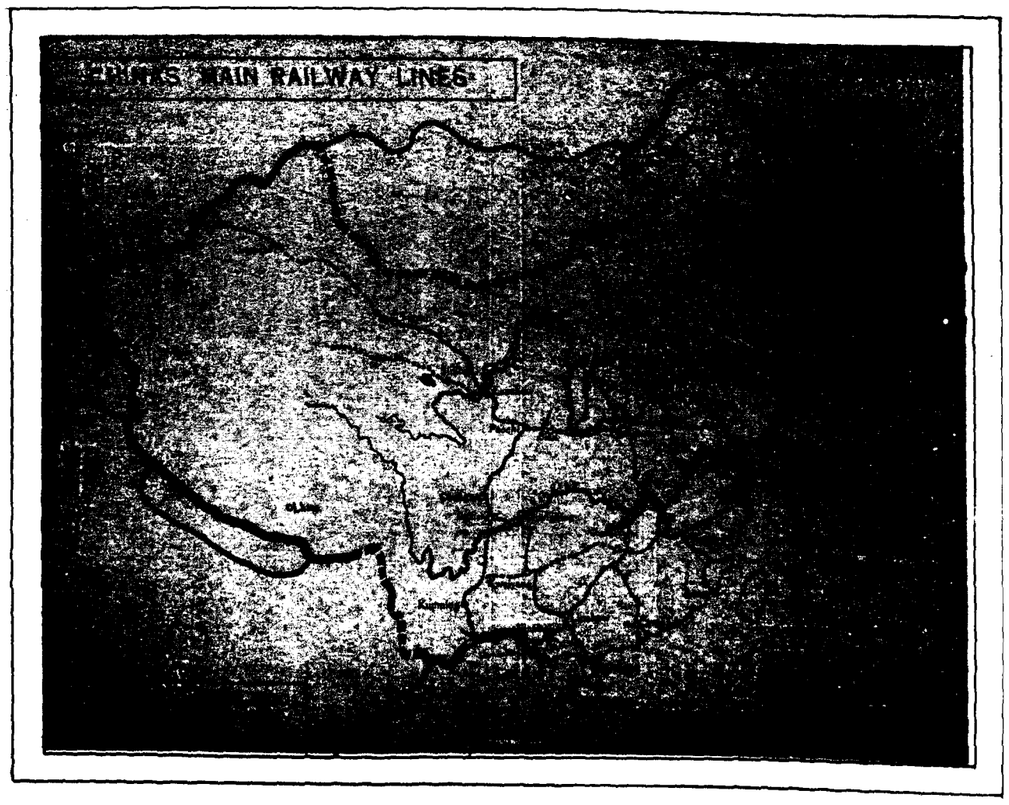
COLLEGE GRADUATES

CHINA (a)			INDIA		
Year	Number	Students of technological subjects as percentage of the total number of graduates (e)	Year	Number	Students of technological subjects as percentage of the total number of graduates (e)
1949	21,460	22.15	1949	..	..
1952	32,629	31.42	1952	58,886(b)	16.3
1953	49,268	29.89	1953	74,121(c)	17.8
1956	65,563	34.82	1956	100,020(d)	18.2

(a) Preliminary figures including the post graduate students who finished their course.
(b) for 1950-51.
(c) for 1952-53.
(d) for 1955-56.
(e) The definition of "technological subjects" not available for China; for India, technological subjects include Engineering, Forestry and Technology only.









Education

THAT elementary education should be free and compulsory has been accepted by almost every country and has been incorporated in their Constitutions. The pace and progress of it has, of course, varied depending on the social and economic development of each country. So as far as these basic tenets of providing free and compulsory education at the elementary stage are concerned, there is hardly any difference between the educational policies of India and China. However, a comparative study of the progress in the two countries reveals that the accepted philosophies of education in the two countries are poles apart. While the higher education is thoroughly controlled at all stages by the State in China, there is almost complete autonomy of the universities and higher institutions in India. Not only that but even the number of graduates to be turned out and admitted into various colleges has also varied in accordance with the direction of the State in China, which also fixes the curricula and the prescription of text books.

THE STUDENT CRISIS IN CHINA

Although state control of education has helped the requirements of planning in China to a certain extent, the imposing of involuntary choice is definitely against the development of the personality of the individual and has been resented accordingly. The result has been the uprisings of the student community a number of times as a protest against this control. The causes of the growing dissatisfaction among students have been the regime's failure to provide sufficient educational facilities and suitable employment for the country's youth, and its continued insistence on complete ideological conformity. With this as the background it can be safely said that the much publicized policy of "let the flowers of all season blossom and let the diverse schools of thought contend" has in fact only been in name so far as the Universities are concerned. After a slight approach towards liberty the end of 1957 has seen a fierce return to Marxist conformity.

INDIAN DISCONTENTS

An analysis of education in India at the same time reveals that there has been widespread dissatisfaction with the educational system, the radical overhaul of which has been long demanded. But these defects spring from freedom not totalitarianism. The basic defect has been that it has not been in tune with the requirements of the country, leaving aside the well known fact that it lacks in quality and offers limited facilities for the teacher as well as the taught. Science and technological fields received inadequate attention in the past; this is now changing with the growing industrialisation of the country. Although the system of education has taken a slight turn for the better, by the introduction of basic education and the reforms introduced in the secondary and higher education in the recent years, there is still a long road to traverse in giving education the real content, and to eliminate the gulf between the educated youth and his environment. Another weakness also springs from freedom — the animus against English. There seems to be a great hurry in completely switching over from English to Hindi despite the warnings from the statesmen and the educationists that the pace of it be slowed down.

BASIC AND TECHNICAL EDUCATION

Basic education being the accepted pattern of our educational system, the system of elementary education is gradually being brought in line with it. In the new organisational pattern of secondary education in a total school duration of 11 years following the four or five years period of primary or junior basic education there would be a senior or middle basis or junior secondary stage of three years and a higher secondary stage of three or four years. The first degree course would then be of three years duration.

In the sphere of technical education in India there are still maladjustments in the requirements of technical personnel although systematic attempts are being made to remove this lacunae. In the second Five-Year Plan Rs. 48 crores have been provided for technical and vocational education as compared to Rs. 23 crores in the first Plan. The annual intake in engineering institutions is now about 5,400 people for the degree course and 8,800 for the diploma courses compared to less than 4,000 and about 5,000 in 1951 and only about 2,500 and 3,000 respectively in 1947. This is deplorably low when the requirements of the country are kept in view. The Planning Commission has estimated that 18 new colleges and 62 polytechnics would be needed in India to cope with the demand for engineering personnel for projects under the second Plan. China on the other hand has made much headway in the field of technology. The table appended to this section suggests that the number of students of technological subjects as percentage of total number of graduates were 22.15 in 1949, and 34.82 in 1956 — a substantial achievement over seven years. The higher enrolment for engineering courses in China speaks for the inevitable trend towards industrialisation.

THE FRUIT OF THE PLAN

The programme in India for the conversion of the existing elementary schools into basic ones, the opening of new basic schools, the introduction of crafts in non-basic schools, the production of literature on basic education and training of basic school teachers is progressively being carried out. By 1955-56, in accordance with the report on progress of the first Five-Year Plan there were about 41,124 basic schools with 38 lakh students. The corresponding figures for 1950-51 were 33,730 and 29.2 lakhs. In ordinary education the chief emphasis under the Chinese first Five-Year Plan was on middle schools particularly senior middle schools (age 16-19) from which higher education must draw its students. Since 1949 together with the reorganisation of schools and departments, reforms in China were introduced in colleges and universities in their teaching methods. The target under the Chinese first Five-Year Plan was 724,000 senior middle school students. In primary and junior middle schools, the number was 64 million. In China, it is planned to extend compulsory education up to junior middle schools level (that is from 7 to 16 years to all children in the major cities and industrial centres within seven years.) In smaller cities and towns and in the more developed villages, compulsory primary school education from 8-14 years old will become general by the end of the same period. Regarding India, the progress of development in the primary and secondary education has also shown considerable improvement. The proportion of school going children in the age groups of 6 to 11 which stood at 40 per cent of the total in 1950-51, rose to 51 per cent in 1955-56 and is expected to rise to 62.9 per cent by the end of the second Plan period. Similarly, the percentage of children in school in the age group 11-14 rose from 13.9 in 1950-51 to 19.2 during 1956 and is expected to rise by 22.5 by the year 1960-61.

It is assessed that the number of students enrolled is much higher in most Chinese institutions as compared to India. While comparing figures, the population of the two countries which is 600 million in the case of China and 380 million in the case of India has got to be taken into consideration. The increased enrolment in China can very well be due to higher population. At the same time it is discovered that the number of institutions and teachers is small in China which except in the case of primary schools, speaks of a high disparity in the teacher-student ratio and hence the low quality of instruction imparted.

A CULTURAL COMPARISON

"It was India's way in the past to welcome and absorb other cultures. That is much more necessary today, for we march to the one world of tomorrow where national cultures will be intermingled with the international culture of the human race. We shall, therefore, seek wisdom, knowledge and friendship and comradeship wherever we can find them, and co-operate with others in common tasks...."

—JAWAHARLAL NEHRU
The Discovery of India.

"I do not want my house to be walled in on all sides and my windows to be stuffed. I want the culture of all lands to be blown about my house as freely as possible. But I refuse to be blown off my feet by any of them. Mine is not a religion of the prison house. It has room for the least among God's creations. But it is proof against insolent pride of race, religion or colour."

✚

"No school of thought can claim a monopoly of right judgment. We are all liable to err and are often obliged to revise our judgments. In a vast country like this, there must be room for all schools of honest thought."

✚

"I have always held that social justice, even to the least and the lowliest, is impossible of attainment by force."

✚

"They say 'means are after all means'. I would say 'means are after all everything'. As the means so the end. There is no wall of separation between means and end."

—MAHATMA GANDHI

PART C

A CULTURAL COMPARISON

Introduction

IN this part an attempt has been made to consider the consequences of some of the diverse cultural factors which have operated down the years in India and China. As has been indicated in the Political Prologue, the broad current in India has been one of tolerance and decentralisation; in China one of militancy and centralisation. This has been particularly true of the last ten years with which this study is primarily concerned.

In the articles which follow some illustrations are presented in the cultural field of the manner in which diversity has worked in the Indian scene. For example, it is pointed out that there are at least four, and possibly more, forms of Indian classical dancing with numerous neo-classical subsidiaries. Indian music is at least as wide. There are at least fifteen Indian languages with literary quality and many with embellishment in form even if not with distinguished literature. Or, take painting in which there are almost as many schools as there are States. Finally, take political parties themselves, and the scope for almost any one to stand for Parliament under the name of 'Independent' with almost any description of politics that he might desire. There is no country in the world where the Houses of Parliament contain so many Independents, that is, persons whose beliefs are not curtailed by party machines. There are few countries in the world where artistic and cultural freedom has been so complete.

THE ECONOMIC ELEMENT

All this is part of India's cultural tradition. It is, by no means, part of China's as one of the following articles will show. In its economic implications, this broad base of freedom allows individual genius to create new institutions and new enterprises. A kind of rugged entrepreneurship of the eighteenth century kind is not now possible, in view of the complexity of entrepreneur relations with the State which call for not merely knowledge of law, but also for not a little philosophy and good taste. In a sense, entrepreneurship in the old forms has had to change because entrepreneurship in that form was individual; today it is much more a group element. Indian entrepreneurship is not, however, a dying thing. The growth of entrepreneurship in the public sector has been consistent with the accelerated growth of independent business men in the Indian Union. Because these things do not exist in China, 'The Eastern Economist' believes the choice of the Chinese philosophy is not one which the Indian people will make. But if they should make it, it would be a double misfortune; amorally, it would be bad for Asia; morally bad for us. There are two quotations from Mahatma Gandhi which present the moral and the amoral elements in Indian culture. The first of these relates to the need for voluntariness to have morality at all. "No action", said the Mahatma, "which is not voluntary can be called moral. So long as we act like machines, there can be no question of morality. If we want to call an action moral, it should have been done consciously and as a matter of duty. Any action that is dictated by fear or by coercion of any kind ceases to be moral." The second quotation is one which embodies some national pride; it is an overstatement. Nevertheless, like so much that Mahatma Gandhi said, even when it was an overstatement, it had at its heart an element of the profoundest truth. "If India falls, Asia dies. It has been aptly called the nursery of many blended cultures and civilizations. Let India be and remain the hope of all the exploited races of the earth, whether in Asia, Africa, or any part of the world".

The Indian and Chinese Cultural Patterns

THE INDIAN HERITAGE: ABUNDANT DIVERSITY

THE Indian cultural heritage cannot, and should not, claim any superiority in technical perfection over Chinese performance. For, how, indeed, can cultures so basically different be compared with one another? It is difficult enough to compare indices of general production with many elements which are common. Happily no statistician has yet raised the complex issue of a general index of cultural performance, although, under high auspices, an index of Cultural Progress, with some economic components, is on a great University's blueprints.

Nevertheless one can see qualities in Indian culture which are not present in Chinese culture, and the other way about. References have already been made to the diversity which exists in Indian art. Thus there are four classical systems of dancing—Bharatnatyam and Kathakali in the South, Manipuri in the East and Kathak in the North, with many inter-woven patterns of dances in neo-classical styles. Similarly, there are two great classical strands of Indian music, though here there is less diversity, the Karnatak and Hindustani styles being predominant. To assess the record of architecture down the ages of Indian architecture from the earliest Buddhist ages, through the Gupta Renaissance and the magnificence of Moghul architecture under Shah Jehan is itself a stupendous undertaking. No national architecture has so many springs of diverse quality, particularly with the religious element so pulsating in its creative form. Then again diversity in regional languages and literature—whatever their political handicaps—provide abundant, and even luxurious, profusion in the language field.

THE NATURE OF INDIAN ABSORPTION

Largely because of the extraordinary freedom with which conflicting ideas drawn from different periods and even from outside India (as were the Moghul and British contributions) have mixed in the Indian scene, Indian culture has shown a capacity for absorption which has been one of the greatest sources of its strength. While the Indian mind is predominantly religious, and even Hindu, in the cultural field, it has shown a capacity for absorption of artistic techniques

quite unrelated to its basic philosophy. In other words, Indian cultural tolerance has been enriched by foreign influences particularly in the great Moghul period without losing its basic Hindu character. In our own time, Western architecture has transformed the traditional outlook and today we are in this field more Western than Eastern. This is no matter for regret.

TOLERANT NATIONALISM

One of the most interesting fields in which this tolerance has been exercised is in the character of Indian nationalism in our own days. Our current national life is based upon a vigorous nationalism, which years ago was entirely peaceful although it was broadly wedded to the Gandhian teaching. What is interesting, however, is the fact that, after differences so vital as those involved in the Indo-British political arena before Independence, no Indian has seriously hestitated about adopting English as the official language for the first fifteen years of the Constitution. Indeed, at the present time, there is a powerful move from the South to press for the continuance of English as the official language with, or it may be without, Hindi which is still regarded by many as no more than a regional language, even though it has the support of the great majority of the Hindus in the country. All this implies a tolerant perspective. The most burning of all topics is tolerantly handled, though this tolerance is not always exercised—witness the history of Bilingual Bombay. One might say that in India diversity is acceptable in itself irrespective of the subject discussed, and no rigid uniformity tends to be imposed.

With a foreign language as their main medium of speech and with foreign architecture and literature in their beings, not a few Indians have absorbed a Western outlook on life and some even dress in Western style. In the Age of the Revolution this has not been frowned upon, although there are many who have chosen to alter their dress and some their habits to conform to the new mould. By contrast the People's Republic of China has frowned heavily upon foreign influences except from the Soviet Union.

THE CHINESE HERITAGE: BRILLIANT CO-ORDINATION

If the supreme achievement of Indian culture is the extraordinary diversity which it contains, one might argue that the supreme achievement of the Chinese Empire was the superb manner in which centralisation has been imposed upon the language and the central philosophic ideas of this tremendous area. There are many times when certain portions of China particularly the Cantonese area in the South and Tibet in the South West have tended to break away from the strong pattern of regimentation. Tibet even to this day is predominently Buddhist and, in a sense, religious, while the rest of China is cast much more in a Confucian or ethical (or non-ethical?) mould. But today even Tibet has been forced to make its adjustments to central direction; and at this time the pattern of uniformity is greater than it has ever been.

Whether or not one desires diversity, one must agree that the process, by which in an area so vast and with population greater than anywhere in the world regimentation has been pursued, should fill observers with admiration. Consider, for example, the tremendous problem of creating a single language spoken in one form or another by nearly 600 million people. Consider again the distinctive classical forms of Chinese painting, of which the landscape in different hands is still the supreme single theme. There has occasionally been a touch of foreign influence in painting, but how much less significant has it not been than in the Indian case? China has indeed had her foreign influences and than in the Indian Union. Nevertheless, all foreign influences have been absorbed in the Chinese scene in a manner which makes those influences almost indistinguishable from the Chinese pattern. The Great Mongol, Kublai Khan himself became a civilized Chinese product and, as the head of the Yuan dynasty even received the Mandate of Heaven. The form of Chinese absorption has been spectacular in its sweeping away of foreign elements.

Much the most important element in the Chinese way of life is connected with the passion for language and Chinese culture which marks the Chinese wherever they live. Walter H. Mallory has this to say about this facet of the Chinese mind: "The amazing loyalty of the Chinese to their own culture century after century is due in the first place to their satisfaction with the customs, the langauge, the philosophy and the scheme of organisation of their society. They have, many times with good reasons, felt superior to the populations in whose midst they have lived. And they have consciously sought, therefore, to devise the means to preserve their inherited way of life. The family system and the worship of their ancestors, whose graves are the family shrines, have tied them firmly to the homeland. They have maintained Chinese newspapers. But the greatest force has been their schools. These they organised and supported, and their children, generation after generation, have learned the langauge, the history and the philosophy of their own race."

To sum up, here is a story of single-mindedness in language, in race, in poetry, in drama, in craftsmanship and in painting which is the greatest effort of co-ordination which the world has ever seen.

India and China: Political and Literary Philosophy

COMMUNISM is not primarily an economic or political system; it is an intellectual attitude, an invisible web of convictions and orientations and a method of State control. Thus, while it is important to study statistics for economic development and political organisations under Communism, it is much more important to gauge the fluctuations of the intellectual atmosphere. In this sphere too the difference between India and China is 'fundamental'; one is the anti-thesis of the other. While the word "Tolerance" epitomises the genius of India, "Regimentation" expresses the spirit of the Chinese civilization. This difference, though solidly embedded in their past histories and traditions, has become more eloquent in the last decade. It is easily noticeable in the State's attitude towards the Individual, the Artist and the Press.

INDIA

Consider India first. Though the ancient Hindu kings were absolute, their power was circumscribed and limited by the Shastras. Terror and liquidation were even then never justified as instruments of public policy. The present Constitution guarantees freedom to the Press and the Individual; restrictions are few and almost immaterial. The State cannot interfere with writing or other creative activity unless the writer or artist endangers security, is obscene, or libelous, or injures the religious susceptibility of any section of the people. Criticism, condemnation or caricaturing of the party in power, or its leaders, is not a crime; in fact, the introduction of the democratic system of government has made it 'functional' for the Indian citizenry. Hundreds of political parties exist in this country, ranging — to use outdated labels—from the revivalist Bharatiya Jan Sangh on the Extreme Right to the Communist Party on the Extreme Left. (The latter has, indeed, been allowed to form a government in one of the fourteen States — Kerala). Even when the Communists were following an insurrectionary policy between 1948 and 1950, the Government of India did not suppress their weekly organ — 'Crossroad'. The Supreme Court had set aside the executive order to that effect, holding that it violated the Fundamental Rights granted by the Constitution. Similarly, unlike as in China, Habeas Corpus petitions are allowed to be filed in India. This acts both as a deterrent and as a remedy against possible high-handedness on the part of the executive.

The Press enjoys even more freedom than the individual. There are no restrictions on their publication, except those which are necessary for routine check up or for national security. Even libelous stuff may be published if its publication is in the general interest. Books, too, can be published, distributed or sold, without fear of State intervention. An Indian writer or an artist is literally free as a bird. He is not obliged to follow a 'line' chalked out by the rulers. He may write or paint as he feels. Scientists are also not judged by their adherence to or knowledge of the ideology of the party in power. They are neither asked to fit facts into it nor to draw conclusions in accordance with it. They are not subservient to the Government and their researches are not guided by State officials. They are free to profess what they like; preach what they will; and experiment on what they think fit. It is notable that Dr. J. B. S. Haldane, known for his Communist inclinations, has chosen India as his home and not China.

DENIAL IN CHINA

On the other hand, China's Communist rulers think it fit to deny freedom of thought and action to the Individual and to the Press. The only compromises that they admit are compromises of expediency — that is, departures in timing and not of principle. If under Emperor Li every cart had to have a similar axle, under Chairman Mao Tse-tung every Chinese has to believe in the same way. He may feel, think and speak only what the ruling party allows or commands him. He is to be conditioned to respond suitably. This would be obvious from a study of the policy that the Chinese Communists have been following ever since their conquest of China. The entire State-appartus has been geared to achieve cultural and intellectual conformity, both by the absence of the Rule of Law and the denial of free assembly and discussion.

Since June 1955, there has been a continuous "discussion" in "Learning", a philosophical journal, on the "problem of combining the personal interests of the workers with the common good of society." The problem is doubtless important, reaching as it does to the foundations of social philosophy and individual freedom. But the ideologues of the ruling party, who are naturally the only contributors to the "discussion", do not seem to be troubled by any difficulty in ascertaining the just limits of interference by the State in the life of the individual. Indeed, Marxist doctrine knows and entertains no such limits. Most of China's Party theoriticians passionately advocate that an individual should be sacrificed for the happiness of the people; in Communist parlance, "people" means the Party. Not only must all individuals be ready to carry out the party will, they must also attain complete internal identification of their whole being with the current Party attitude and policy. Deviation is finished ruthlessly.

It is hardly necessary to state that where there is no individual freedom, the scientist, the artist and the writer — whom Stalin described as the "engineers of human soul" — cannot function as such. A Chinese scientist under Chairman Mao's rule 'must' understand the policy of the Party and 'must' be a "proud believer" in Marxism-Leninism. Naturally this inhibits correspondence with his colleagues abroad and even free discussion with other Chinese scientists. Traces of "idealism" may well be dicovered in his views.

THE PLACE OF THE ARTIST

The artist is a natural rebel. Defiance of the existing social evils comes easily to him, since he has not, as a rule, any vested interest in it. But the gesture of revolt that leads him to Communism is the last that he is likely to make, — unless the "revolt" is unsuccessful. He may no longer rebel or go his own way. Under Communism, he must be conventional, and the conventions are established by Authority. The bureaucratization of artistic life pervades all spheres of culture. Tragedy is forbidden because it is contrary to the 'official' optimism. Clowns must be humourous according to the directions of the Party. The provincial producers in China today limit themselves to plays which have already been staged in Peking; they are most likely to be safe.

This crisis of culture is best illustrated by the paradoxical state in the book market. There is both abundance and shortage of books. Abundance is lue to the frenzied rush of official publishing houses to advertise and support the government's political and economic campaigns, in countless pamphlets and brochures. The shortage is due to the natural tendency on the part of the reader to choose. The books he wants are not the kind that have been pouring out of the government press, and there are none of any other kind. The situation has been made worse by the censor's crusading zeal which is not limited to the new publications. They cut everything from even the classics which they think the Party will find objectionable. Thus they cut all references to the Buddhist theory of reward and punishment and, indeed, to any religious notion, and also to all passages in which a feudalistic way of life seems to them to be exalted. Moreover, translations of foreign classics is limited to the few authors approved by international Communist canon. The result is a tendency to immitate Russian writers. Stories centre round collectivization, class hatred, detection of counter-revolutionaries and the glories of the Communist Party.

This is just as it should be under a totalitarian regime. The idea of culture as we know it has no place in Communist thought. Entertainment and political propaganda are inseparable. It is an abberation to offer mere entertainment without a propose laid down by the Party. Cultural activity and entertainment are not designed to relax the mind; they are instruments for conditioning the people's minds to the Party's line.

THE PRESS

Like the intellectual and cultural activities in Communist China, the Press of the country is also controlled.

This is not done through a censoring authority; every newspaper and magazine is controlled directly by Party Committees. Newspapers are therefore repetitive, monotonous and platitudinous. Each shift or change in the Party policy is accompanied by a loud chorus of support from them. Nothing is published or can be published which does not have the Party's approval. The difference between the Indian and the Chinese Press — if there is need to seek it all! — may be seen from their contents. The trend in news presentation in India is more and more in the direction of "Human interest". This may not always be a healthy thing. "Human interest" can easily mean gossip or scandal! Yet it does tend to keep the individual to the fore in an age when he is very much in danger of being forgotten. In China, attention is deliberately focussed on the impersonal mass, the "People" rather than on men and women. Nor is there any of the spice of the multi-party politics to record. There are no sharply differing speeches by politicians of opposing camps to report; nor is the intellect stimulated by clash of conflicting ideas and political philosophies advanced by their protagonists in feature articles. All journals support the Government Party and uphold the leaders of that Party in all their actions.

"PARTIES" AND POLITICS

In the decades preceding the Communist occupation of China, politics was kaleidescope — with parties forming, merging and dissolving. But since then, all other parties except the Communist Party have been eclipsed. True, there are some so-called non-Communist parties that exist and "function" in China. But they are prohibited from enrolling new members and are expected to work conscientiously in the service of the Communist Party. They are thus now no more than adjuncts of the ruling Party. The people have the right to vote, but they are expected to choose only the official candidates. They cannot throw out the present rulers through the exercise of their ballot.

THE HUNDRED FLOWERS

The life of the ruling Communist Party has been insured afresh by the February, 1957 speech of Mr. Mao Tse-tung, better known as the Hundred Flowers speech. In that speech Mr. Mao listed six points to show what was right and wrong in present-day China. He said: "We believe that, broadly speaking, words and actions can be judged right if they. (1) help to unite the people of our various nationalities, and do not divide them; (2) are beneficial, net harmful, to socialist transformation and socialist construction; (3) help to consolidate, not undermine or weaken, the people's democratic dictatorship; (4) help to consolidate, not undermine or weaken, democratic centralism; (5) tend to strengthen, not to cast off or weaken, the leadership of the Communist Party; and (6) are beneficial, not harmful, to international socialist solidarity and the solidarity of the peace-loving peoples of the world. Of these six criteria, the most important are the social path and the leadership of the Party".

Conclusion

IT is now possible, very briefly to bring together the threads of the entire piece. In Part 'A', the Political Prologue, emphasis has been placed on the point that the Indian and Chinese revolutions have been born out of great political and cultural traditions, which have left their marks deep upon the thought and practice of both countries. It has been argued that the Indian tradition has been a loose and, on the whole, a changing and flexible element in the making of Indian thought. By the same token, Indian practice in the last decade had departed from tradition in more than one element. These departures in a democracy are not merely to be accepted. They are essential as the spirit of the time always needs to adjust itself to the claims of the moment. The Indian Revolution, it has been argued, has a strong component away from the axis of tradition, in that the heroes of the Indian Revolution have placed in it a powerful element of centralisation, which, in a comprehensive historical sense, does not "belong". By contrast, the deep centralisation in China and the regimentation which has taken place under the magnificent auspices of Mao Tse-tung is a true byproduct of Chinese tradition. It has been argued that, because Chinese tradition departed so little from the Marxian structure of thought, although it was imported from the West, Marxism has been grafted perfectly on to it, and is bringing forth, in the cultural field in particular, some bitter fruit.

In the economic section, which is the main factual portion of this report, it has been shown that there are some areas, notably agriculture, where the Chinese performance cannot be deemed superior to our own. But there is no doubt that in massive investment, severe taxation, and general single-mindedness of effort, the Chinese economic effort looks more impressive than our own. This, however, is to be read against the far more difficult population problem that China has, and against the relative impossibility of carrying out Chinese practice in Indian soil which has been differently prepared. All in all, the final judgment is that these two tremendous systems in the two most populous countries in the world have now to proceed on their own course, unafraid of the other's success.

In the cultural section, there are some observations strung loosely together on the character of cultural tradition and cultural freedoms in the two countries which are set in different patterns and, in a sense are separated by the poles of centralisation and large delegation and democracy.

The note which runs through the entire piece is one of assurance and no loss of confidence. It is believed that the Indian people can review the facts — even those which are markedly unfavourable — with no fear in their hearts; with, indeed, renewed assurance that the faith that history, in hundreds of generations in addition to our own, has marked out for us is one which is not basically in error. It has been full of creative impulses and has lent dignity to the Indian mind. There will be many to whom, one hopes, the story told in these pages will bring a new dedication in the facing of the critical challenge of the next few years.

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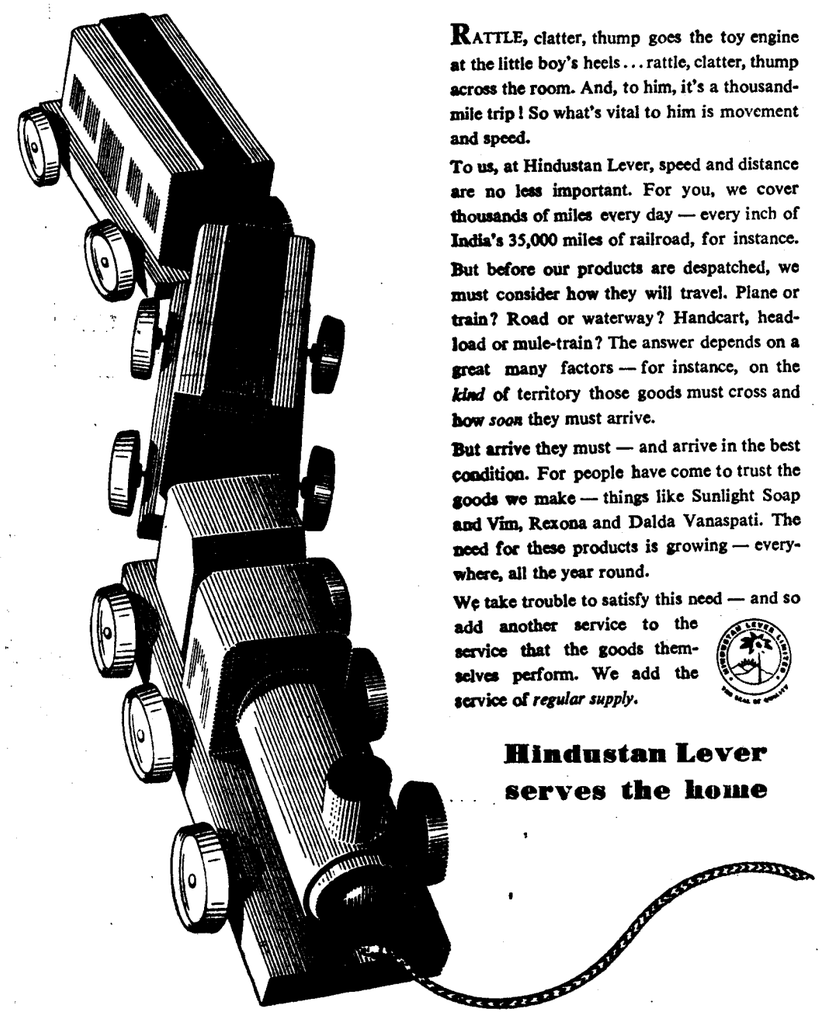
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It's 1,000 miles across the room...



RATTLE, clatter, thump goes the toy engine at the little boy's heels... rattle, clatter, thump across the room. And, to him, it's a thousand-mile trip! So what's vital to him is movement and speed.

To us, at Hindustan Lever, speed and distance are no less important. For you, we cover thousands of miles every day — every inch of India's 35,000 miles of railroad, for instance.

But before our products are despatched, we must consider how they will travel. Plane or train? Road or waterway? Handcart, head-load or mule-train? The answer depends on a great many factors — for instance, on the *kind* of territory those goods must cross and how *soon* they must arrive.

But arrive they must — and arrive in the best condition. For people have come to trust the goods we make — things like Sunlight Soap and Vim, Rexona and Dalda Vanaspati. The need for these products is growing — everywhere, all the year round.

We take trouble to satisfy this need — and so add another service to the service that the goods themselves perform. We add the service of *regular supply*.

Hindustan Lever serves the home

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Dalmia

PRODUCTS
for modern homes
and offices
QUALITY STONEWARE
AND PORCELAIN
PRODUCTS

① STONEWARE PIPES (for underground drainage) salt glazed, acid-resistant and tested to standard specifications.

② R.C.C. SPUN PIPES for irrigation, culverts, water supply and drainage, available in all classes and sizes.

③ DALMIA PORTLAND CEMENT for general construction

④ PORCELAIN SANITARY WARES Indian and European closets, wash-basins, urinals etc.

⑤ REFRACTORIES for all industrial purposes ; firebricks, mortars, insulating bricks in all heat ranges and shapes.

⑥ INSULATORS AND ACID-RESISTANT TILES etc.

DALMIA CEMENT (BHARAT) LTD.
DALMIAPURAM (TIRUCHIRAPALLI)

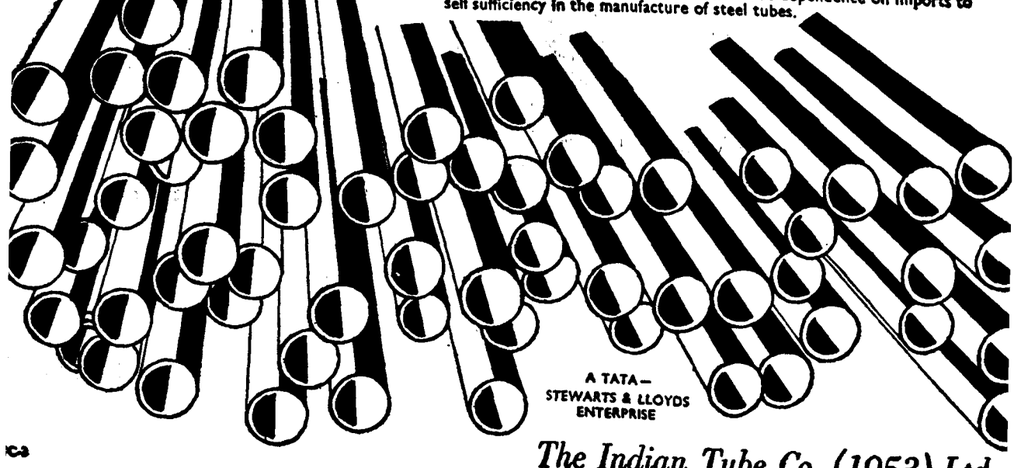
8,000 Miles of Tubes

In March 1956 the Jamshedpur Tubeworks of the Indian Tube Company (1953) Limited was formally opened. That date marks the establishment of a new industry which is already saving crores of rupees in foreign exchange each year, and which is expanding at a phenomenal rate.

The plant already in operation includes a Fretz-Moon Mill for the manufacture of black and galvanised Screwed and Socketed Tubes for gas, water and steam; an Electric Resistance Weld Tube Mill making land and loco boiler, cycle, transformer, conduit, and other industrial tubing; and a Strip Mill producing cold-rolled strip for the E R W Mill and for sale as strip.

A further mill is under construction, which will manufacture seamless tubes to meet the whole national demand within its size-range, and further expansion is contemplated.

The activities of The Indian Tube Company (1953) Limited have thus resulted, in a few years, in a transformation from entire dependence on imports to self sufficiency in the manufacture of steel tubes.

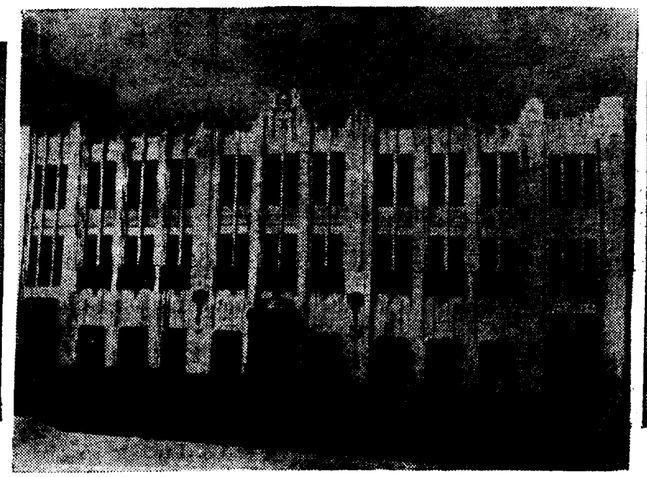


A TATA–STEWARTS & LLOYDS ENTERPRISE

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The Indian Tube Co. (1953) Ltd.

THE INDIAN BANK LTD



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(1907-1957)

In this year of Golden Jubilee, the Directors tender their grateful thanks to the shareholders and the constituents of the Bank for their unabated confidence and unfaltering support which have enabled the Bank to acquire a place in the front rank of the Banking institutions of the country.

The Bank has had an illustrious past and hopes, with the support of the public, to maintain its tradition of useful and efficient service in the years to come.

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THE INDIA CEMENTS LTD.

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Zinc Oxide 'Tractamount' Rollers

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Kamani Chambers, Nicol Road,
Ballard Estate,
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(Established 7th September, 1906)

Capital—Authorised, issued and Subscribed	**Rs. 5,50,00,000**
Capital Paid Up	**Rs. 3,00,00,000**
Reserve Fund	**Rs. 3,10,00,000**

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ADEN, DAR-ES-SALAAM, JINJA, KAMPALA, KARACHI, MOMBASA, NAIROBI, OSAKA, SINGAPORE, TOKYO.

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BOMBAY 1.

(Tel.: 255101/4)

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(Help us to help you)

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Extending your co-operation for keeping the surroundings clean and by availing of the services of Sanitary Staff provided at stations whenever required.

(Issued by Northern Railway on behalf of Indian Railways.)

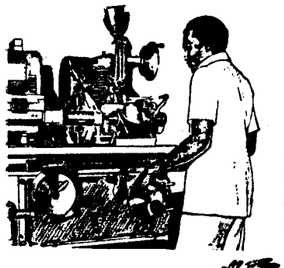
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Manufacturers of
High Quality Bonded &
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FLINT, (SAND), GARNET, EMERY, ALOXITE, SILICON CARBIDE, ROLLS, BELTS, DISCS, REAMSTOCK, IN PAPER, CLOTH, COMBINATION, ETC.



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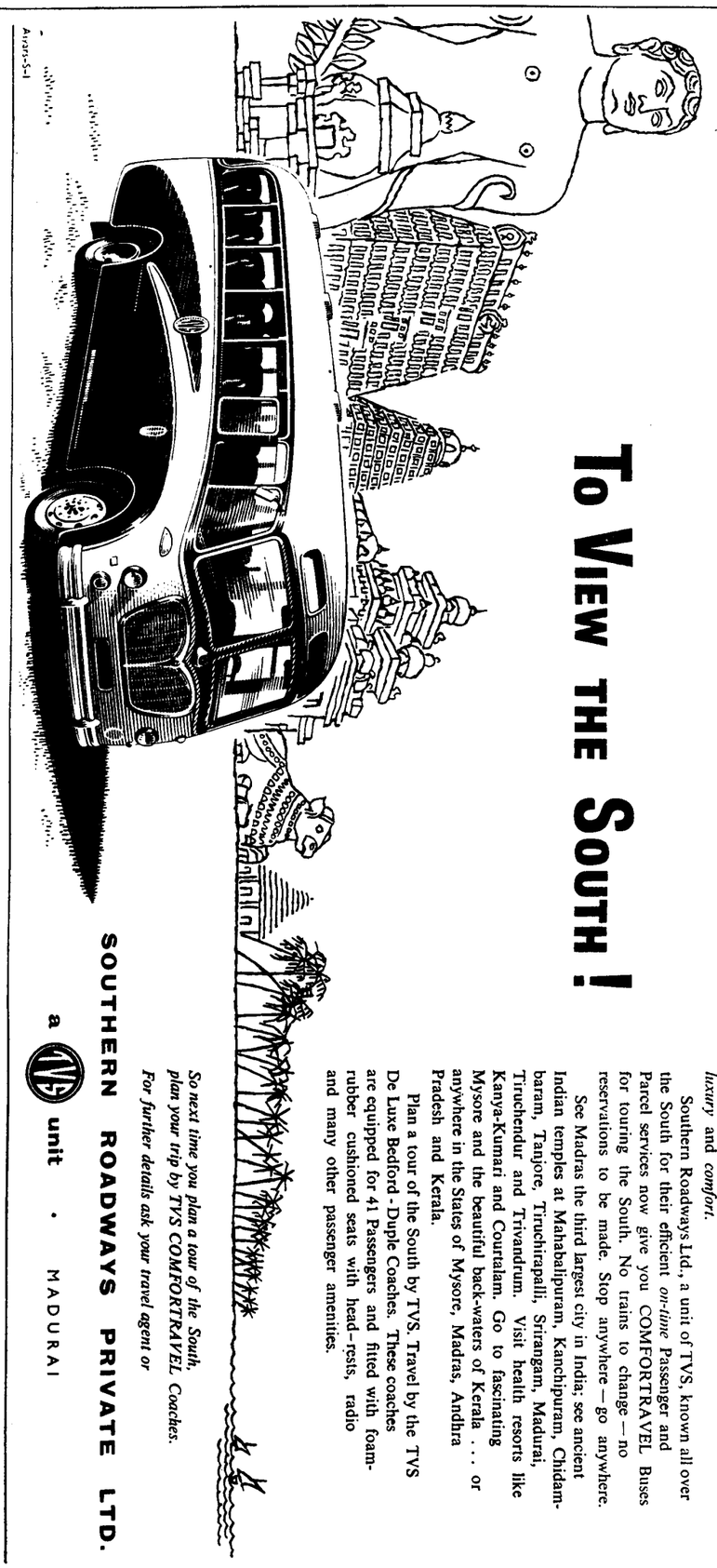
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For many areas the key to increased low cost electricity is the boundless energy potential of available natural water resources, in which India is in a fortunate position. Cromptons are proud of the part being played by them in the electrification of this country.

Established in 1918 in South India Cromptons are continuing to serve the people of India in carrying out installations ranging from domestic electrification to large hydro electric generating stations.

In India's ambitious Second Five-Year Plan, Cromptons are taking a vital part in making the Plan a success for the ever increasing prosperity of India.

The Crompton Engineering Co. (Madras) Private Ltd.,
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Branches: All Over South India.



To View the South !

See the wondrous beauty of Southern India in *luxury* and *comfort*.

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See Madras the third largest city in India; see ancient Indian temples at Mahabalipuram, Kanchipuram, Chidambaram, Tanjore, Tiruchirapalli, Srirangam, Madurai, Tiruchendur and Trivandrum. Visit health resorts like Kanya-Kumari and Courtalam. Go to fascinating Mysore and the beautiful back-waters of Kerala . . . or anywhere in the States of Mysore, Madras, Andhra Pradesh and Kerala.

Plan a tour of the South by TVS. Travel by the TVS De Luxe Bedford-Duple Coaches. These coaches are equipped for 41 Passengers and fitted with foam-rubber cushioned seats with head-rests, radio and many other passenger amenities.

So next time you plan a tour of the South, plan your trip by TVS COMFORTRAVEL Coaches.
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You get more than what you see in

THE NEW HINDUSTHAN

Ambassador

Air-flow contours on the bonnet reduce wind resistance and impart a dynamic appearance to the front.



Mono Construction Body

increased family safety...
and many new advanced features

Yes, here's truly amazing value for your money: Styling that's ultra modern yet dignified; performance that's vigorous, yet economical; an interior that's roomy, luxurious, tastefully decorated; and a large luggage boot

Many new features make the Ambassador a safer, finer car: deep-sunk-centre steering wheel; easy-to-reach, easy-to-read grouping of instruments; foam-rubber protection on facia rails; safety-lock doors; safety glass all round and a smoother, easier gear shift.

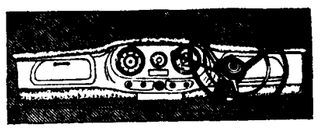
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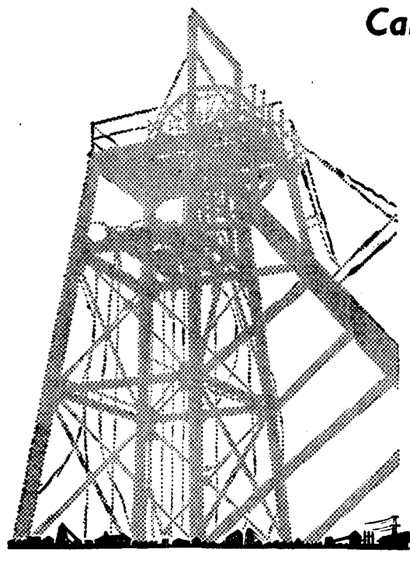
Prominent tail-fin fenders with twin stop and tail lights enhance over-all beauty without sacrificing luggage space.

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Nearly 80% of the annual production of coal comes from the Bengal-Bihar coal regions; 76% is carried by the Eastern Railway in 2,750 wagons a day. During the Second Plan, the production in the country will increase by 20 million tons.... out of which a substantial portion will be from the fields over the Eastern Railway.

Helping carry coal to every nook and corner ....to provide motive power for the wheels of industry ...to feed all the ovens, furnaces and boilers...is the day-and-night job for us.

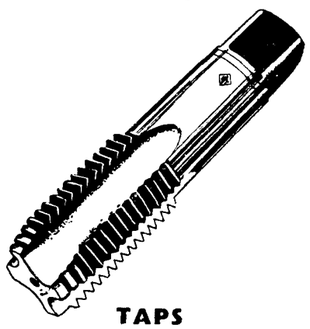
EASTERN RAILWAY DELIVERS THE NATION'S COAL

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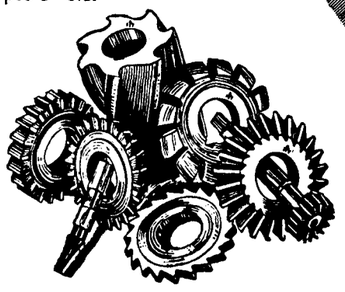


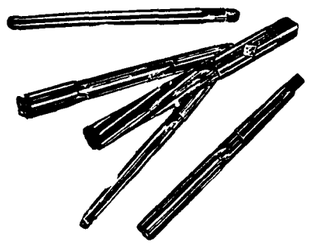
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Upto 5" dia.

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In any size from 1/8" to 3" dia.





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ASP/IT 9

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Rising standards of living open new markets for Indian goods

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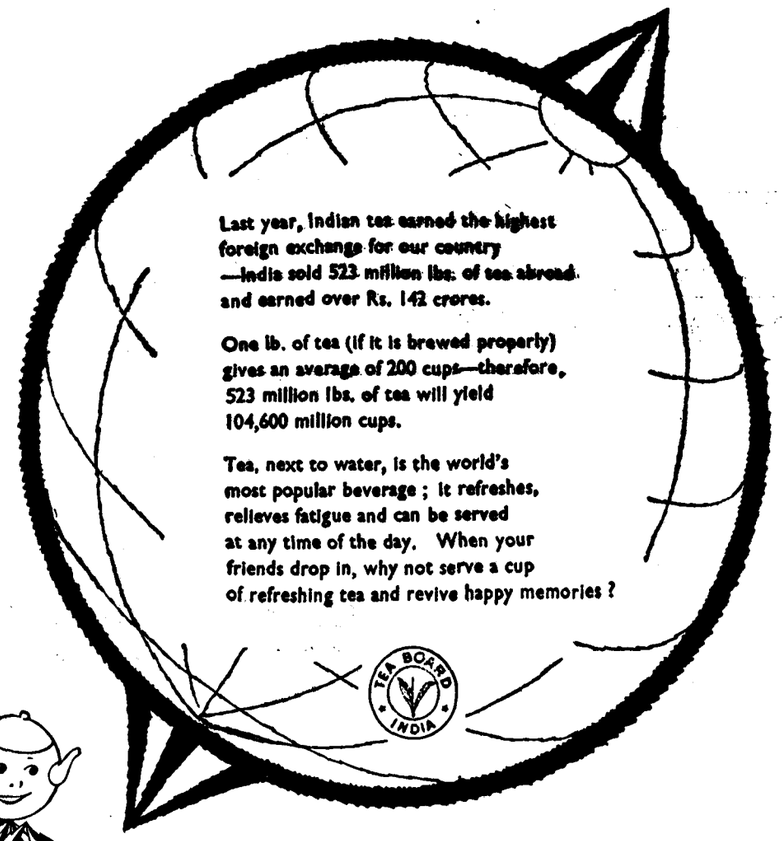
TO ENSURE REMUNERATIVE RETURNS TO PRODUCERS THROUGH IMPROVED MARKETING
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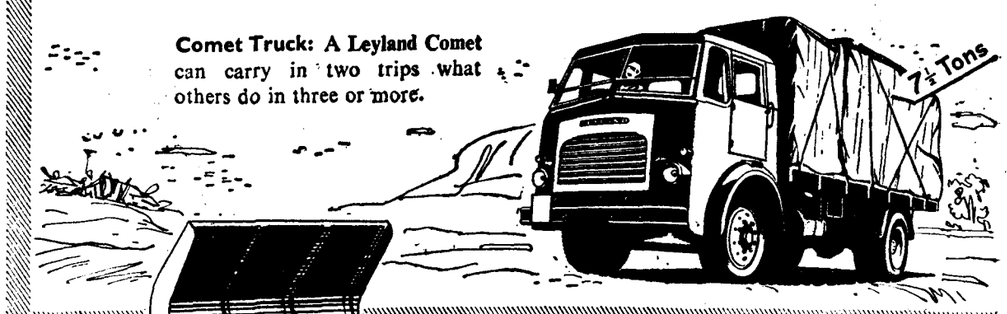
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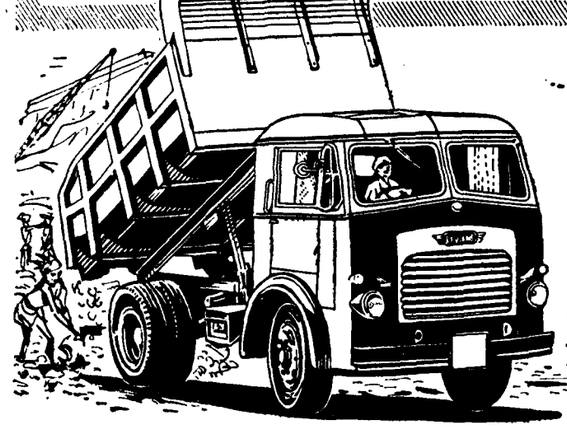
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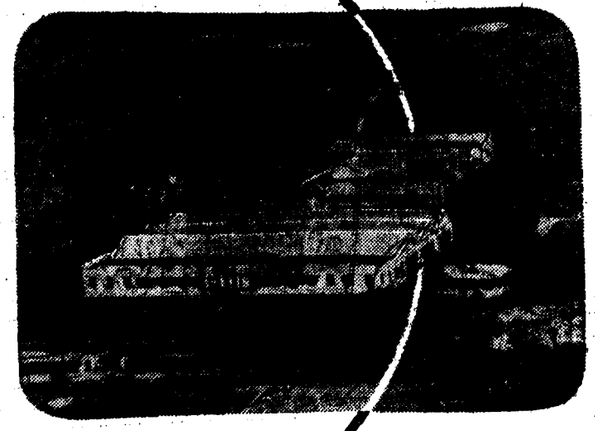
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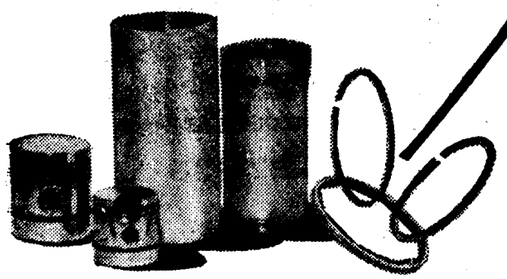
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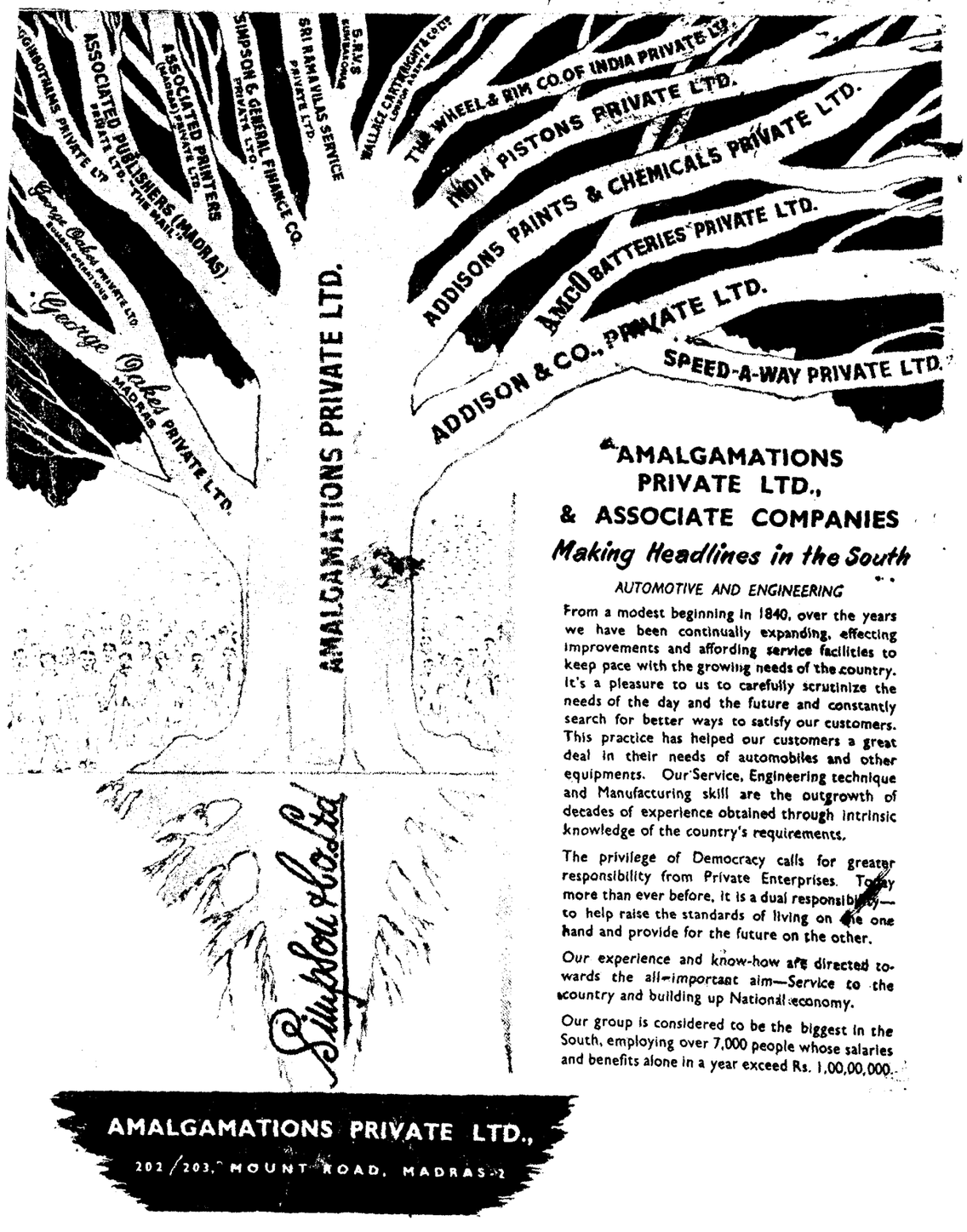
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The Indian Economy in 1957

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A Critical Year

THE year 1957 which has just closed has been, in many respects, a critical year. Not unnaturally, the spotlight rested on the Sterling Balances which have measured, as the months have gone by, the deepening foreign exchange component of the crisis. Quite often the mere magnitude of this foreign exchange crisis has distracted attention from real elements in the difficult internal economic situation with which the year has closed. It is clear—and even the Indian Industrial Delegation thought fit to stress this point—that, in some respects, the rupee capital situation is more difficult than the foreign exchange component. Wheather or not the Indian Industrial Delegation was right in assuming that foreign exchange assistance under certain circumstances, that can be obtained is substantial, it is almost certainly right on the rupee problem with one qualification.

During the year and, particularly in the last four months, there has been a miraculous rise in bank deposits without a corresponding rise in advances. The second element, namely, the restraint on advances, can be explained easily enough both by the fact that the Reserve Bank of India has brought suitable pressure to bear on the Scheduled Banks to exercise caution, and because the demand for money, where there was a foreign exchange component has, naturally, fallen when it was clear that the foreign exchange was not available. No easy explanation is, however, possible on the rise in deposits. It is true that the United States Commodity Credit Corporation loan has been translated into substantial deposits in the State Bank of India but only half—and it may be even less—of the spectacular rise in bank deposits can be explained in these terms. In any case, the fact is more important than the explanation. It might even appear that the rupee capital problem—which looms so large in terms of equity capital or even of Government loans—is now on the way to solution because of the disappearance of monetary stringency in the Indian banking system. It is, perhaps, the only silver lining in a difficult year.

Not indeed, that industrial production has not risen steeply but organised industrial production is still so relatively small a portion of the total picture of the Indian economy that one should not exaggerate this success. Other major indicators in the economy, particularly agricultural prices, and the inflationary elements associated with it reflected in consumers' costs of living, have shown an unhappy tendency.

If the high rate of investment, deficit-financed to some extent coupled with the feared deterioration in our food situation, impinged on the price structure, the heavy imports to meet the requirements of the second Plan were responsible for the steady decline in the country's foreign exchange resources, necessitating two amendments to the provision relating to the backing for our currency in the Reserve Bank of India Act in quick succession. However, there was one redeeming feature; it is that production by all the major industries, except a few, as, for example, the textile industry which reported lower production in the later months of the year, showed significant increases over the previous year. Though industrial production generally maintained its upward trend thus and agricultural production also went up as compared to the previous year, the combined effect of even both these developments fell far "short of the growth of demand initiated largely by the continued rise in the Government expenditure mainly on development". The Plan investment has been going up every year. While it was just Rs. 343 crores in 1953-54 and Rs. 476 crores in 1954-55, it was as high as Rs. 667 crores in 1955-56 and Rs. 761 crores in 1956-57. It is running currently at a higher (budgeted) rate still of nearly Rs. 900 crores! As a result, the money supply also has gone up from Rs. 1794.6 crores on March 31, 1954 to Rs. 2240.2 crores on August 31, 1957. Between them, the two factors have been responsible for generating considerable inflationary forces. Prices, particularly of food grains, rose continuously, bringing in the wake of this trend labour unrest and demand for higher wages. The situation on

the price front, however, became somewhat easy towards the end of the year, doubtless as a result of the series of anti-inflationary policies pursued both by the Government of India and the Reserve Bank of India.

At the same time the share markets have been visited by one of the steepest declines that has taken place in Indian history. There are some who recall the crash days of 1946 and 1947. 1957 has not, it is true, been so difficult. But almost certainly, there is worse to come in 1958.

Not all these difficulties are without their blessings. In one sense consolidation, when there has been an over-investment and over-extension of the economic system, is a necessary thing. It is not, however, clear with banking funds heavily employed in Indian industry how the process of consolidation is going to work out in the current year. 'The Eastern Economist' takes a bearish—though by no means an alarmist—view of this situation. It is essential both in the public and private sectors at this turning point that there should be prudence and caution, and no expression of bravado or excessive optimism.

Agricultural Production

NO programme or policy of the Government of India has been subjected to such continuous revision, assessment and criticism, during the year under review, as its food and agriculture policy, thanks to the sharp and abrupt rise in prices of food grains, especially in the first half of the year. Thus the general price index, which declined by 17.6 per cent between the middle of 1953 and mid 1955, rose by as much as 23.4 per cent by the middle of 1957.

This rise in prices and the sharp declines in the country's foreign exchange reserves served to add to the stresses and strains of the economy and to compel both the Union Government and the Central Banking authorities to take stronger and more varied measures to tackle the situation.

Although there was a decline in the overall agricultural production, during the agricultural year 1955-56, when compared to 1954-55 (which is attributed mainly to fall in food grains, particularly coarse grains, and in cotton and oilseeds) an assessment of the progress in the production of the important agricultural commodities during the agricultural year ended June 30, 1957 shows that the country is more or less well on the way to achieving the targets fixed in the second Five-Year Plan, given the continuance of the same degree of attention as is being evinced lately and the determined adoption of the measures adumbrated by the Government of India.

During the agricultural year 1956-57, which also coincided for the most part with the second year of the second Five-Year Plan, the overall index of agricultural production (with 1949-50 = 100) rose to 123 as compared to 115.9 in 1955-56, recording thereby an increase of 7.1 points, or 6.1 per cent. It may be mentioned here incidentally that the targets under the second Plan envisage an increase of about 27 per cent in five years or of 5.4 per cent per annum. It may also be recalled here that the original targets of 17 per cent increase in the agricultural production as a whole and of 15 per cent increase in food production were subsequently raised to 27.1 per cent and 23.8 per cent, respectively.

Except with regard to the 'rabi' pulses, for which only tentative estimates are available, final estimates are available for all the other food grains. According to these estimates, the production of food grains rose to 68.6 million tons, as against 64.9 million tons in 1955-56, which shows an increase of 3.7 million tons or about 5.6 per cent over the previous year. This means actually a higher rate of increase, albeit fractionally, over the 'pro rata' annual rate of rise of 4.8 per cent as envisaged under the second Plan. Among food grains, both rice and wheat showed record yields, exceeding even the previous peaks attained in 1953-54 in respect of rice and in 1954-55 in respect of wheat. Other cereals recorded an increase of about a million tons: 'ragi' and small millets also showed small increases. But there was a fall in the production of 'bajra'. Grams showed an impressive increase of about 11 per cent from 5.3 million tons in 1955-56 to 5.9 million tons in 1956-57.

The following table shows the production figures of principal food grains for 1955-56 and the final estimates for 1956-57:

	Unit	1955-56	1956-57	% increase
Food grains (in general)	Million tons	64.9	68.6	5.6
Rice	„	26.8	28.1	4.8
Wheat	„	8.6	9.1	5.8
Gram	„	5.3	5.9	11.0

In regard to commercial crops, the production of cotton went up from 40.0 lakh bales in 1955-56 to 47.2 lakh bales in 1956-57, showing an increase of about 18 per cent. It is noteworthy that, along with the total production, the proportion of long and medium staple cotton in the total cotton produced in the country also has gone up. The table below shows the proportion of long and medium staple cotton in the total cotton produced in India:

Staple length	1947-48	1950-51	1955-56	1956-57
Long	14.5	23.5	40.2	41.0
Medium	49.4	49.9	42.3	42.5
Short	36.1	26.6	17.5	16.5
All staples	100.0	100.0	100.0	100.0

A notable development of the cotton development schemes, apart from the continuance of the cotton extension work initiated during the first Five-Year Plan, was the introduction of Sea Island cotton, which is one of the best-known long-staple varieties. It is proposed to cover about three lakh acres with this variety during the next three-year period. The production of jute has been placed, according to the final estimates for the year, at 42.21 lakh bales, as against 41.97 lakh bales in 1955-56. Thus, the production of jute has registered only a small increase of about 24,000 bales. To achieve the Plan target of 55 lakh bales, therefore, more concentrated efforts to increase the production of jute are imperative. As a matter of fact, certain measures, such as the "campaign for top dressing of jute with ammonium sulphate", are already being taken, but this process needs to be further intensified.

As regards oilseeds, production has gone up by 5.7 per cent during the year, as compared to the previous, the relevant figures for the two years 1956-57 and 1955-56 being 60.3 lakh tons and 57.1 lakh tons, respectively. Similarly, the production of sugar cane went up to

AGRICULTURAL PRODUCTION

Estimated Area and Yield of Principal Crops

(Crop years ending June unless otherwise stated)

Crops	1951-52		1952-53		1953-54		1954-55		1955-56		1956-57	
	Area ('000 Acres)	Production ('000 Tons)	Area ('000 Acres)	Production ('000 Tons)	Area ('000 Acres)	Production ('000 Tons)	Area ('000 Acres)	Production ('000 Tons)	Area ('000 Acres)	Production ('000 Tons)	Area ('000 Acres)	Production ('000 Tons)
Rice (1)	73,713	20,964	74,056	22,537	77,318	27,769	75,949	24,531	76,864	26,864	78,174	28,142
Jowar	39,399	5,981	43,340	7,243	43,882	7,954	43,446	9,903	42,904	6,602	41,314	7,427
Bajra	23,522	2,309	26,613	3,142	30,145	4,475	27,983	3,421	28,024	3,379	27,542	2,926
Maize	8,179	2,043	8,908	2,825	9,561	2,991	9,311	2,939	9,116	2,554	9,244	3,020
Ragi	5,410	1,291	5,542	1,316	5,767	1,846	5,711	1,646	5,693	1,820	5,674	1,914
Small Millets	11,771	1,885	12,464	1,895	14,028	2,438	13,799	2,456	12,713	1,937	12,209	2,010
Wheat	23,404	6,085	24,286	7,382	26,394	7,890	27,517	8,778	30,386	8,569	32,891	9,068
Barley	7,807	2,330	8,021	2,882	8,719	2,905	8,309	2,870	8,382	2,794	8,594	2,744
Total Cereals	**193,205**	**42,888**	**203,230**	**49,222**	**215,814**	**58,268**	**212,025**	**55,734**	**214,082**	**54,456**	**215,642**	**57,251**
Gram	16,876	3,334	17,930	4,142	19,689	4,756	22,047	5,393	24,157	5,331	23,990	5,930
Tur	6,045	1,801	5,930	1,675	5,942	1,834	5,944	1,688	5,637	1,830	5,696	2,047
Other pulses	23,473	3,152	25,179	3,227	28,064	3,860	27,309	3,789	27,270	3,670	27,609	3,458
Total Food-grains	**239,599**	**51,175**	**252,269**	**58,266**	**269,509**	**68,718**	**267,325**	**66,604**	**271,146**	**65,287**	**272,937**	**68,686**
Potatoes	617	1,685	629	1,961	635	1,925	658	1,736	693	1,839	—	—
Sugarcane (2)	4,792	60,660	4,272	50,190	3,485	43,709	3,994	56,923	4,564	59,317	5,019	66,890
Black Pepper	202	23	205	22	208	24	208	26	233	32	234	32
Chillies (Dry)	1,385	342	1,235	283	1,336	303	1,523	363	1,490	355	1,450	354
Ginger (Dry)	46	15	46	14	45	14	35	14	40	15	40	15
Tobacco	713	206	896	241	912	268	846	244	1,013	295	1,022	306
Groundnut (3)	12,151	3,142	11,848	2,883	10,945	3,391	13,548	4,128	12,692	3,862	13,101	4,086
Castor seed	1,437	106	1,326	102	1,346	103	1,394	124	1,405	124	1,403	129
Sesamum	5,942	445	5,874	464	6,351	554	6,501	589	5,653	457	5,433	451
Rape & Mustard	5,934	928	5,021	844	5,545	858	6,025	1,019	6,317	848	6,211	1,017
Linseed	3,409	328	3,366	366	3,428	379	3,354	382	3,781	414	3,758	349
Cotton (4)	16,201	3,133	15,713	3,194	17,265	3,944	18,684	4,227	19,978	4,001	19,834	4,723
Jute (5)	1,951	4,678	1,813	4,592	1,228	3,091	1,243	2,928	1,739	4,197	1,883	4,221
Mesta (5)	—	—	484	682	463	650	528	1,018	572	1,159	738	1,474
Tea (6)	782	641	778	675	775	589	779	649	—	—	—	—
Coffee (6)	230	55	230	48	232	56	234	59	—	—	—	—
Rubber (6)	148	32	169	36	—	45	172	43	174	50	—	—
Coconut (7)	1,545	3,336	1,549	3,310	1,564	3,881	1,589	4,082	1,597	4,097	—	—

(1) Production of Rice is in terms of cleaned rice.

(2) Production of sugarcane is in terms of cane and not gur.

(3) Production of groundnut is in terms of nuts in shell.

(4) Production of cotton is in terms of lint cotton and in thousand bales of 392 lbs. each.

(5) Production of Jute and Mesta is in terms of dry fibre and in thousand bales of 400 lbs. each.

(6) Production of tea, coffee, and rubber is in million lbs; figures of tea and rubber relate to calendar year.

(7) Production of coconuts is in million nuts.

Source: Ministry of Food and Agriculture

about 67.5 lakh tons during 1956-57, as compared to 59.8 lakh tons (revised) during 1955-56, showing thereby an increase of about 12.8 per cent. The second Five-Year Plan envisages an increase of 34.5 per cent i.e. from 58 lakh tons in the year 1955-56 to 78 lakh tons (in terms of 'gur'). In the case of sugar cane also, an intensive manuring campaign was initiated during the year. Under this scheme, about 14 lakh acres were brought under the top-dressing of fertilisers scheme during the year 1956-57. The production of crystal sugar has also gone up substantially during the year to reach 20.21 lakh tons of crystal sugar; in 1955-56, the production was 18.62 lakh tons.

Thus, contrary to popular belief, both food crops and commercial crops have recorded a sizeable improvement during the agricultural year 1956-57, resulting in an increase of 6.1 per cent in the overall agricultural production of the country in 1956-57, as compared to the previous year.

Notwithstanding this increase in production and all the efforts made to improve our agriculture during the first and the second Plans, it still remains the cinderella of our economy. Agricultural crisis, as this Journal has so often indicated, is the most severe economic problem of India. It may not be as bleak as the one depicted by the Asoka Mehta Committee, but it is certainly bad enough to warrant no complacency. For our per-acre yield is still the lowest in the world. Unless agricultural production is increased 'pari passu' with the development in other sectors of the economy, there is bound to be imbalance in the demand for, and the supply of, agricultural products, notably in food grains, which, in turn, will lead to a sharp rise in food prices. And yet the holding of the price line at a reasonable level is the 'sine 'qua non' for the success of the Plan.

In order to step up food production, the Food Grains Enquiry Committee has made a number of notable suggestions. Among them, the most important are those that relate to examination of major and minor irrigation projects, as also tube well projects, and those bearing on fertilisers and seeds. The Committee's recommendation to adopt the principle of "net benefits" for the fixation of water rates and the supply of irrigation water at concession rates during the first few years are among others that deserve careful consideration. So also are the recommendations to give as high a priority for repairing existing minor irrigation works as for the construction of new ones, to increase the number of seed stores, and to import more fertilisers or set up more fertiliser factories if import is not possible due to foreign exchange difficulties. In this connection, it is perhaps necessary to add that, to not an inconsiderable extent, the ideological and sentimental bias in the matter of land reforms has come in the way of higher agricultural production. Be that as it may, if the Asoka Mehta Committee recommendations, coupled with a good system of agricultural credit, are implemented, the prospects of more production may not be very remote. However, agriculture is one of the most intricate problems which God invented with this wonderful world. It is, therefore, to be hoped, as 'The Eastern Economist' has said ere now, that, one day, in His compassion at our terrible affliction, He will throw down the key which will unlock these mysteries.

AGRICULTURAL PRODUCTION

Index Numbers

(Base: Crop year ending June 1950=100)

Items	Weights	1950-51	1951-52	1952 53	1953-54	1954-55 (a)	1955-56 (a)	1956-57 (a)
I Food Grains								
(a) **Cereals** (1)								
i. Rice	35.3	87.9	90.1	96.8	118.6	105.5	112.7	118.1
ii. Wheat	8.5	101.1	93 9	112.7	120.0	133.7	130.5	138.1
iii. Total Cereals	58.3	90.3	91.2	101.4	120.1	114.0	113.7	119.4
(b) **Pulses** (2)								
i. Gram	3.7	98.0	88.2	109.2	125.4	142.2	140.6	156.4
ii. Total Pulses	8.6	91.7	90.3	98.8	112.0	117.3	112 3	120.9
iii. Total Food Grains ..	66.9	90.5	91.1	101.1	119.1	114.4	113.5	119.6
II Other Crops								
(a) **Oilseeds** (3)								
i. Ground Nuts	5.7	101.4	93.0	85.3	100.3	122.1	114.2	120.5
ii. Total Oil Seeds ..	9.9	98.5	97.4	91.9	103.7	121.7	109.2	115.9
(b) **Fibres** (4)								
i. Cotton	2.8	110.7	119.2	121.0	151.8	163.1	151.6	179.3
ii. Jute	1.4	106.3	151.4	148.6	100.0	94.7	135.7	136 5
iii. Total Fibres	4.5	108.6	128.3	128.4	132.1	141.2	148.3	168.9
(c) **Plantation Crops**								
i. Tea	3.3	103.8	109.6	115.4	100.6	110.7	113.3	113.4
ii. Coffee	0.2	112.3	112.7	125.9	146.5	148.1	197.1	222.8
iii. Rubber	0.1	93.8	94 4	106.1	131.8	127.6	133.5	139.2
iv. Total Plantation Crops ..	3.6	104.0	109.4	115.7	104.0	113.2	118.5	120.2
(d) **Miscellaneous** (5)								
i. Sugarcane	8.7	113.7	122.8	101.6	89.5	116.7	121.2	136.7
ii. Tobacco	1.9	97.3	78.0	91.3	101.5	93.9	98.1	97.7
iii. Total Miscellaneous ..	15.1	110.3	114.0	101.5	97.4	115.0	120.6	129.5
(e) **Total Other Crops** ..	33.1	105.9	110.5	103.8	104.7	120.4	120.7	129.8
III General Index	100.0	95.6	97.5	102.0	114.3	116.4	115.9	123.0

Source: Ministry of Food and Agriculture.

(1) Includes Jowar, Bajra, Maize, Ragi, Small Millets and Barley, besides Rice and Wheat.
(2) Includes Gram, Tur and other Pulses.
(3) Includes Groundnut, Sesamum, Rape and Mustard, Linseed, and Castor seed. (4) Includes Mesta.
(5) Comprises Sugarcane, Tobacco, Potato, Pepper, Chillies and Ginger. (a) Provisional.

Industrial Production

A STEADY rise in the tempo of industrial production has been one of the most notable features of Indian economy ever since the commencement of the planning era. This trend gathered further momentum during the second Five-Year Plan period, as is only to be expected, what with the stress on industries in this Plan. According to the review of the first Five-Year Plan, prepared by the Planning Commission and released only early this year, industrial production increased steadily during that quinquennium, the increase having been as much as 40 per cent. While production in some industries reached the anticipated levels, in a few others, such as cotton textiles, for example, it exceeded the first Plan target by a big margin. Thus, production of mill-made cloth increased from 3,718 million yards in 1950-51 to 5,102 million yards in 1955-56, thereby exceeding the target by as much as 400 million yards. Similarly, cement production rose from 2.7 million tons in 1951-50 to 4.6 million tons in 1955-56. Apart from this, a number of new products came to be manufactured in this country for the first time. If only by way of illustration, mention may be made here of the more important ones, such as petroleum refining, ship-building, manufacture of aircrafts, railway wagons, penicillin, ammonium chloride and D.D.T.

In the public sector, while industrial units, such as the Sindri Fertilizer Factory, the Chittaranjan Locomotive Works, the Indian Telephone Industries and the Integral Coach Factory, recorded progress, the steel plants, the heavy electrical equipment plant (which could not even be commenced in the Plan period) and others, such as the Nepa Newsprint Factory and the Machine Tool Factory, were much behind schedule. The following table gives a synoptic view of the trends in certain major industries during the first Five-Year Plan period:

Industry	1950-51	1955-56	% Increase 1951-1956
Finished Steel (thousand tons)	976	1,274	30.5
Pig Iron (thousand tons)	1,572	1,787	13.7
Cement (thousand tons)	2,689	4,592	70.8
Locomotives (Numbers)	3	179	
Automobiles (Numbers)	16,519	25,272	53.0
Diesel Engines (Numbers)	5,536	10,369	87.3
Cotton Yarn (million lbs.)	1,179	1,633	39.0
Mill cloth (million yards)	3,718	5,102	37.2
Handloom cloth (million yards)	810	1,449	79.0
Sugar (thousand tons)	1,064	1,701	59.9
Jute manufactures (thousand tons)	824	1,054	28.0

Overall, however, the first Five-Year Plan may be said to have firmly laid the foundation for an even bolder Plan. This contributed in the main to the rise of national income of our country by about 17.5 per cent over the five years 1951-56.

Evidently encouraged by the success of the first Five-Year Plan and genuinely believing that the required background had been created for a bold and ambitious industrialisation programme, the Government of India launched its second Five-Year Plan, having a pronounced bias towards industrialisation, in the year 1955-56. Maybe as a result of this, India's industrial production reached an all-time high in 1956. The index for industrial production, with 1951 as the base year, improved steadily from 103.6 in 1956 to 105 6 in 1953 to 112.9 in 1954, to 122.1 in 1955 and to 133.0 in 1956. It is gratifying to note that the index of production during the first six-month period of 1957 was even higher than the average index for the whole of 1956. The average general index for the first half of 1957 works out to about 148.8.

With this background we may now proceed to study in detail the performance of some of the major industries of India in 1957. Both by virtue of the pride of place which the planners have accorded to it and by reason of the huge capital investment involved, steel occupies a unique position in the Government's programme of industrialisation. Naturally, the three steel plants, each with a million tons ingot capacity, coming up in the public sector, have saddled the Government with special responsibility, especially now that their costs are again expected to go up substantially. The most recent reports show that at least one of them — Rourkela — is in a rather poor shape. This is attributed to dearth of personnel — technical and otherwise — to man this first steel plant to be conceived in the public sector. Work at Bhilai, on the oher hand, is said to be progressing satisfactorily. But it is at Durgapur, we are told, that construction work has been going on remarkably well, so much so that it is the only one of the three steel units in the State sector that is expected to be ready exactly according to schedule, provided, however, that there is no labour unrest and there is maximum co-operation by the railways. In any case, in order to achieve the target of the second Five-Year Plan and raise the production of finished steel from the present level of 1.3 million tons to 4.3 million tons by 1960-61 as envisaged, the twin problems of technical personnel and efficient organisation need to be tackled squarely and urgently.

In the private sector, the Tata Iron and Steel Company — India's biggest private enterprise unit and the largest steel producer — has been contributing substantially to the country's wealth in the last half a century of its existence. Thus, since its inception 50 years ago, it has produced as much as 22 million tons of steel. It has now embarked on a vast expansion programme to reach its two million-ton target as early as possible. This two million-ton project includes, within its compass, every aspect of steel making — from the mining of the ore to the rolling of finished products. Further, the Tatas propose to have a blast furnace with a 28-foot hearth which will, incidentally, be the largest in Asia and have an additional capacity of 1,650 tons a day. Such a huge expansion programme needs large sums of money. Fortunately, the World Bank is showing the utmost interest in this expansion programme of the Company and has agreed to raise the amount of the present mortgage up to $110 million.

The two other steel units — the Indian Iron and Steel Company, in the private sector, and the Bhadravati Steel Plant (in the public sector)—the expansion of which is one of the major schemes of the State Government of Mysore — are also making remarkable progress. While the production of iron of the Indian Iron is in the neighbourhood of 695,156 tons, that of Bhadravati stood at 30,300 tons of finished steel and 52,400 tons of pig iron in 1955-56. The total production

of steel in India, according to the latest official figure, is 670,400 tons for the first half of 1957. The iron and steel industry has thus not only made notable progress in the past but its future also is quite promising which is as it should be as the appetite for steel has been growing.

Next only to steel in significance, cement occupies a very important place in the industrial set-up of any country. This dynamic industry of India, which is mostly in the private sector (out of 28 units, only 2 units belong to the public sector) has produced spectacular results. Cement production has gone up from 593,000 tons in 1932-33 to over six million tons in 1956-57 — an achievement of which Free Enterprise can well feel proud. The following table shows the pattern of growth of the industry in the first Plan period:

('000 tons)

Year	Installed capacity	Production	% capacity utilised
1950-51 . . .	3,280	2,689	82.0
1955-56 . . .	4,931	4,593	93.1

The first Five-Year Plan envisaged a rise in the rated capacity of the cement industry from 32.80 lakh tons available in 1950-51 to 53.06 lakh tons by 1955-56. The last year of the first Plan actually saw the achieving of the expected production level by the industry and now, that is in the first six-month period of 1957, —that is the first year of the second Plan—production has reached 26.76 lakh tons. The second Plan has, indeed, envisaged a very big programme, namely, to increase the capacity to 16 million tons or three times its capacity in but one five-year period, which involves an investment of Rs. 1,000 million. This would have been easily found by the industry itself, had there been no interference in the affairs of the industry. Unfortunately, the industry has been weighed down by the Old Man of the Sea in the form of the State Trading Corporation. The Corporation has become the sole trader and distributor of cement in the country. What effects the continuance of this none too satisfactory arrangement will have on the fortunes of the industry in future years remains to be seen.

The performance of the cotton textile industry — India's largest organised industry — especially in the first Plan period was, by all accounts, praiseworthy. The target of 4,700 million yards fixed by the Planning Commission was exceeded by a big margin; the actual production of the mill sector in the last year of the first Plan being 5,000 million yards. Under the second Five-Year Plan, the target for mill cloth was originally fixed at 5,000 to 5,500 million yards, with the export

THE REVISED INDEX OF INDUSTRIAL PRODUCTION

(1951=100)

Year and month	General Index	Coal	Cotton Textils			Jute	Chemicals	Cement	Iron and Steel	Gen.* Engineering	Paper	Sugar	Tea	Electricity
		2	Total 3	Yarn 4	Cloth 5	6	7	8	9	10	11	12	13	14
1952 ..	103.6	105.6	102.3	103.0	102.0	107.6	117.9	110.7	102.2	92.8	104.2	134.0	98.6	104.5
1953 ..	105.6	104.5	109.1	108.4	109.5	101.1	130.0	118.3	95.7	108.9	105.9	115.8	96.7	113.1
1954 ..	112.9	107.2	110.9	113.5	109.5	107.3	141.1	137.6	113.2	151.9	117.7	97.4	102.0	127.0
1955 ..	122.1	111.4	111.9	117.3	109.2	118.9	159.0	140.4	113.3	183.3	140.2	143.0	106.2	131.2
1956 ..	133.0	114.9	117.5	122.0	115.2	127.3	171.1	154.2	119.4	218.1	140.6	175.1	106.0	164.1
January 1956 ..	122.9	110.0	107.7	112.4	105.4	121.2	164.3	148.2	116.7	179.3	142.9	133.2	115.2	152.3
February ..	134.2	123.5	118.9	123.3	116.7	135.2	172.7	155.7	125.0	204.8	141.7	127.2	122.8	161.2
March ..	128.6	115.7	111.0	115.2	108.9	135.6	162.7	159.1	121.5	207.3	144.9	151.3	97.0	160.9
April ..	134.8	114.6	115.2	118.6	113.5	132.3	165.0	150.8	116.6	207.4	143.4	294.3	84.0	162.3
May ..	151.0	114.1	118.6	118.1	118.8	138.6	161.7	154.4	108.7	213.4	147.4	601.3	111.4	166.1
June ..	200.3	113.6	121.7	123.7	120.7	139.7	177.2	158.4	109.9	220.8	145.5	1,664.4	116.5	165.5
July ..	153.1	108.9	122.3	126.2	120.3	129.4	167.1	146.1	121.7	220.2	149.9	590.2	124.8	160.5
August ..	133.2	113.8	114.9	120.7	112.0	123.7	172.4	146.9	122.6	227.1	145.5	194.8	116.0	159.6
September ..	146.4	111.1	125.8	130.5	123.4	120.9	174.7	152.5	120.6	226.7	149.1	353.4	113.0	163.9
October ..	131·9	109.3	116.2	122.4	113.2	111.8	170.6	188.1	117.4	220.0	143.4	231.7	105 5	165.8
November ..	142.3	118.2	115.1	122.5	111.5	120.4	175.9	157.3	124.6	240.7	148.0	369.9	96.1	168.4
December ..	136.1	126.6	122.4	130.7	118.2	118.7	177.1	169.7	120.9	239.3	157.3	191.7	58.1	177.2
January 1957 ..	139.9	124.4	122.4	130.8	118.2	123.8	179.6	169.0	129.3	247.1	156.0	135.6	131.5	174.1
February ..	142.7	133.6	122.7	133.1	117.5	123.5	186.8	174.4	121.1	252.9	157.7	128.0	139.3	180.0
March ..	138.1	125.3	116.0	126.8	110.6	117.3	180.1	181.0	122.1	259.8	154.2	169.7	123.6	175.5
April ..	147.7	132.1	122.2	133.4	116.6	124.0	185.1	173.7	120.2	269.6	155.5	326.8	92.8	186.7
May ..	156.2	130.1	114.6	126.4	108.7	121.1	175.2	165.1	115.6	247.4	154.1	692.7	87.8	186.6
June ..	168.5	118.0	109.4	120.0	104.1	114.2	160.9	149.6	109.7	224.4	154.7	1,090.2	110.8	186.0
July ..	162.3	114.3	116.6	127.9	110.9	118.4	176.0	156 5	113.9	231. 8	156.2	800.8	125.4	186.0
August ..	140.1	115.8	108.6	121.9	101.9	112.7	172.9	165.6	116.7	212.9	160.7	423.8	106.5	185.0
September ..	..	129.3	118.3	132.0	111.4	121.6	..	168.3	..	..	..	..	113.0	..

* General Engineering including Electrical Engineering. Source: Directorate of Industrial Statistics, Calcutta.

goal being fixed at 1,000 million yards. In June, 1956, the Government of India announced its revised cloth policy, according to which the 1960-61 target was stepped up slightly, that is to 5,350 million yards for mill cloth, 2,200 million yards for handloom cloth produced from mill yarn and 300 million yards for handloom cloth produced from Ambar Charkha yarn, and 400 million yards for powerloom cloth production, while a quota of 150 million yards was held in reserve to be allocated later. Thus was visualised an overall total production of 8,400 million yards, out of which 1,000 million yards were earmarked for export. The performance, both in 1956, when the production stood at 5,306 million yards, and for the major part of this year, was good. Though the output was just 4,025 million yards up to the end of September, 1957 and this compares favourably with the previous year's production, textile circles genuinely feel that the whole year's production in 1957 may not exceed the 1956 mark, as the tempo of production has been adversely affected lately by the mounting cloth stocks, thanks to the onerous excise duty. A substantial and permanent cut in this duty seems to be the only remedy that can answer the daily worsening situation in this industry.

In a developing economy such as ours, the electricity supply industry naturally gets precedence over other industries. For it provides power, which is so vital to the running of the entire economic machine of the country. In view of the low 'per capita' power generation in India, which is just 25 kw. as compared with 6,500 kw. in Norway, 4,860 kw. in Canada, and 3,520 kw. in the U.S.A., this industry should not only be given top priority but also be assisted by suitable fiscal concessions. Apart from this, rural electrification in a country of continental dimensions such as ours demands more and more power generation. Our hydro-electric potential has been estimated at 35 million kilowatts, but, out of this, only 0.56 million kw. had been exploited up to the commencement of the first Plan; the first Plan has added just another 0.4 million kw. The second Five-Year Plan, however, envisages an increase of 2.1 million kw. by 1960-61, which would raise the total installed capacity of the hydro-power of the country to 3.06 million kw. Though, in all future development of power, the emphasis is likely to be on the expanding role of the State Sector, the private sector too has a vital role to play. In the case of such an important public utility like this, the Government should examine very carefully, and in a realistic way, the repurcussions of its policies, especially taxation policies.

Among the transport industries, spectacular progress has been recorded by the automobile industry. The present annual rate of production is about 33,000 vehicles, as compared to the production of 23,000 vehicles in 1955 and less than 15,000 in 1954. As against the output of 14,800 in the first half of 1956, as much as 16,600 automobiles of different types were produced in the first half of 1957. Similarly, the total number of bicycles manufactured during January-June 1957 was 381,500, which was nearly a lakh more, compared to the production in the corresponding period of 1956. The production of diesel engines also went up to 7,076 in the first half of 1957 from 5,656 in the corresponding period of last year.

In the sugar industry too, production has been steadily on the rise. The output rose from 14.86 lakh tons in the first half of 1956 to 15.62 lakh tons in the corresponding period of 1957. The target of sugar production was fixed at 5.0 million tons by 1955-56 and 6.5 million tons by 1960-61. On the recommendation of the Development Council for Sugar, the installed capacity of the industry was raised by 0.5 million tons for the second Plan period in order to bring it to 2.5 million tons of sugar. Accordingly, as many as 69 licences were granted to existing factories for effecting expansion, while 54 licences were granted for the establishment of new factories, many of which are in the co-operative sector.

Among others, the production of coal has increased by two million tons during the first half of the year, as compared to the first half of 1956. Perhaps this would have been higher still, had it not been for the inhibiting and restrictive policies of the Government, the worst of which was the fear of nationalisation. Old King Coal is no longer the merry old soul of old. The production of machine tools increased by 100 per cent during the first half of this year; the value of machine tools output was a little over Rs. 1 crore, as against Rs. 2.45 lakhs in the comparable period of last year! Similarly, the production of radio receivers and electric fans increased by 20,800 and 82,000 units, respectively, during January-June 1957, as compared to the first half of 1956. Likewise, while the production of electric transformers rose from 401,000 kva to 568,000 kva, that of electric motors increased from 160,800 H.P. to 212,200 H.P. between the first half of 1956 and 1957. The output of several other industries, including salt, razor blades, cigarettes, soaps, soda ash, tyres and tubes also recorded sizeable increases during the year.

It is only proper to conclude this brief review of industrial production in India in the year 1957 with a note on the prevailing economic climate in the country. For only a climate conducive to investment can ensure rapid development — both in the agricultural and in the industrial fields—of the magnitude envisaged in the second Five-Year Plan. Unfortunately, the year 1957 saw measure after measure, in quick succession, which had the cumulative effect of rudely shaking the confidence of the private sector. The ever-increasing scope of the State Trading Corporation — a constant source of apprehension to the private sector — the levy of new taxes, especially the application of wealth tax to joint-stock companies, the compulsory deposits scheme, and the growing labour unrest, to mention only a few, sufficed to chill the enthusiasm of the investor and the entrepreneur alike. No wonder then that there was an utter collapse of confidence, when the Union Finance Minister presented his momentous mid-May budget this year imposing a host of taxes — direct and indirect. Both in volume and incidence, these taxation proposals have earned the description of being unique and unprecedented. As if this were not enough, and notwithstanding the strong exceptions taken not only by leading captains of industries, who too are equally interested in the country's economic development, and men of eminence such as the World Bank Chief, the Government of India has been continuously encroaching on the spheres of Free Enterprise and has been appropriating to itself more and more fields of industrial and trading activity, regardless of whether it has the requisite personnel to man the new undertakings. Yet responsible spokesmen from the Prime Minister downwards go on reiterating that they recognise the part played by the private sector and also pompously add that it has an honourable place in the country's economic set-up. In short, the Government's efforts in the year 1957 to enthuse the business man have been more on the negative side than on the positive, so much so that the commercial community seems to have almost despaired of the Government changing its attitude towards Free Enterprise, 'pari passu' with its reassuring pronouncements. It is high time, therefore, that the Government restated clearly its economic policy in the light of its present difficulties and the experience gained by both the Indian Industrial Delegation and the Krishnamachari Mission abroad. In particular, as the resolution

on taxation adopted by the Associated Chambers of Commerce, a few days ago, says, "If foreign investment is to be attracted to Indian Industry, early action is essential with the object of reducing corporate taxation to levels more compatible with the requirements of a country engaged in promoting rapid industrialisation in competition with other countries for the limited capital resources of the world."

Investment Trends

WITH the end of 1957 also comes to a close probably one of the worst years for our Stock Exchanges in the living memory of many. There was not a single month, nay, not even a single week, when the investor could breathe freely and heave a sigh of relief from fresh shocks. The market was receiving successive doses from one quarter or the other—from labour this time and from the Government next—which effectively paved the way for what has appropriately been described as the "collapse of confidence". Of the many-sided economic crisis that the country is facing today, this one of investment confidence is perhaps the most significant, inasmuch as it leaves behind its effects both in the short run and in the long run.

Yet it is unfortunate that such a vital facet of our economic problems as this does not seem seriously to bother the powers-that-be. This crisis of confidence stood out vividly during 'Diwali'. The 'moorat' trading in 1957 was amongst the dullest that one has known for years. Again, the index number of (variable dividend) industrial securities, with 1949-50 as the base year, recorded a fall of more than 23 points over the last 12-month period—between December 1, 1956 and November 30, 1957—which indicates the enormous capital loss suffered by the investors, individual and institutional alike.

The following table gives a synoptic picture of the capital loss, under various heads during the year:

(1949-50 : 100)

	30-11-57	1-12-56	Increase (+) or Decrease (—)
Variable dividend—industrial securities	98.3	121.4	—23.1
a) Financial	93.3	94.3	— 1
b) Public utilities	104.0	110.8	— 6.8
c) Manufacturing industries	101.7	131.2	—29.5
d) Non-manufacturing industries	113.5	151.7	—38.2
e) Miscellaneous	72.6	99.3	— 6.7

That such should be the state of our capital market, even under the stimulus of a remarkably expanding economy is, indeed, paradoxical. But there is a convincing explanation, and the reasons for this steep decline in values in shares, during the year under review, are not far to seek. If, in the beginning of the year, the market was left guessing and preparing for the onslaught of the May budget, for the whole of the next two quarter it had to reckon with the severe jolt from that budget and from the disappointing report of the Select Committee on the Wealth and the Expenditure Tax that followed. In the second half of the year, especially towards the end, the crisis in the textile industry and the Lok Sabha discussions about the Life Insurance Corporation's investment policy were enough to chill the most robust among investors. As if these were not enough, there was also labour unrest throughout the country in general and in Kerala in particular. Labour unrest, stringency in the money market, dearth of savings, and the usual threat of nationalisation, with or without provocation by our politicians, lack of a clear economic policy vis-a-vis the private sector, and the serious disequilibrium in our economic system were among the other contributory causes that influenced the course of trading on the stock markets. But by far the most important single bearish factor that affected the market psychologically very adversely for the major part of the year was the mid-May budget. The initial reaction to this Herculean effort of Mr. T. T. Krishnamachari, the Union Finance Minister, to salvage the second Five-Year Plan and to tow the nation towards the Avadi ideal, was very sharp. Equity values slumped by as much as 10 per cent. On a paid-up capital of Rs. 67.81 crores belonging to about 22 important companies of Bombay, Madras and Calcutta, the investors suffered as much as Rs. 37 crores! The debacle that manifested itself after the announcement of the budget was verily unprecedented and reminded one of the reactions to the late Liaquat Ali Khan's Budget, presented in 1947.

The following table shows the effect of the Budget on some of the leading scrips traded in on the Bombay Stock Exchange:

Name of the Share	Pre-Budget Closing May 15, 1957 Rs. nP.	Lowest after Budget Rs. nP.	Closing in May 16, 1957 Rs. nP.
Tata Ordinary	165.75*	145.00	153.50
Indian Iron	19.50*	16.50	17.20*
Bombay Dyeing	531.00	491.00	509.00
Century	444.00	390.00	406.00
A.C.C.	158.75	142.00	146.00
Tata Loco	150.00	134.50	144.50
Tata Oil	44.00	41.00	42.50

* Ex-right.

The most regressive, iniquitous and objectionable of all the tax proposals were the two new taxes, namely the Wealth and the Expenditure Taxes and, more especially, the application of the former even to joint-stock companies. It is surprising that the Select Committee on Wealth Tax never cared to exempt all the companies from the obnoxius measure, despite the country-wide agitation, and all this at a time when capital formation is known to be the dire need of the hour.

Among the scrips that suffered very heavily, particular mention must be made of the landslide in plantation scrips in the beginning and in textile shares towards the end. Almost all the leading textile shares had more sellers than buyers. If the reason for the debacle in plantation shares was due to the Award of the Special Industrial Tribunal for Plantations' that raised the daily wages of Madras plantation labour from Rs. 1-7 to Rs. 2-4 with retrospective effect from March, 1952 (which, however, was later settled amicably, thanks to the mediation of the Madras Minister, Mr. Bhaktavastalam), continued labour unrest and the talk of nationalisation of plantations by the Kerala Government, the crisis in the textile industry was due mainly to the accumulation of stocks. Ever since the enhancement of the Excise Duty in September, 1956 with the objective of mopping up the excess profits and domestic consumption, the textile industry and the shareholders of cotton mills are having a very bad time, thanks to the abnormally low demand leading to accumulation of stocks. In sympathy with the textile shares, the market as a whole, particularly in Bombay, remained pronouncedly depressed. In Calcutta, the foreign exchange situation and the severe restrictions

on imports, coupled with the other reasons already noted, such as labour unrest and stringency in the money market, contributed to the unrelieved sluggishness. Thus, all the principal markets—Bombay, Calcutta, and Madras—ruled distinctly bearish, for the whole year, for one reason or another.

Two other developments in the capital market deserve mention even in this brief and cursory review of the trends in investment in India in 1957. The first one relates to the coming into force of the Securities Contracts (Regulation) Act, which is intended to control and regulate speculative activities. The second one—and perhaps a very, if not the more, important one—relates to the increasing dependence of the market on the operations of the Life Insurance Corporation these days. Admittedly, this is not a healthy trend at all. For it makes the market an appendage of the L.I.C. and not a barometer of the economic health of the nation, as it really ought to be.

In retrospect thus, it seems that, in the formulation of the various economic policies—monetary, fiscal, labour, import, and taxation—little thought is given to the plight of the investor. The result has been a lethal blow to the confidence of the investor. It is hardly necessary to stress here that the revival of 'entrepreneurial' and investment confidence and the creation of a conducive economic climate are all the more urgent and imperative today, as these are the necessary pre-requisites to the attracting of foreign capital, without which the success of the second Five-Year Plan can hardly be assured. Hence it is that the Indian Industrial Delegation, after its visit to the USA and other Western countries, has very rightly emphasised this point. Only a re-evaluation of the place of the Indian investor in this country's economic set-up and a clear and unequivocal economic policy, free from all impracticable ideologies and unrealistic sentiments, can extricate us from our present plight, and this brooks no delay whatsoever.

Money and Banking

THE most important problem that faced the monetary authorities during the year 1957 was that of restraining domestic inflationary pressures. Since taking stock of the position last year, the situation has greatly changed and changed for the worse. Even the authorities have not minced matters in referring to this deterioration. Addressing the joint informal discussion on "Current Problems of Credit and Fiscal Policy" in Washington, recently, in connection with the Twelfth Meeting of the I.M.F. and the World Bank, Mr. H. V. R. Iengar, Governor of the Reserve Bank of India, made it clear that the price situation in India had begun to cause concern and he listed the number of factors that brought about this state of affairs. First, unlike during the first Plan period, food production has not increased beyond the peak reached in 1953-54, with the result that food prices have risen due to inter-play of lower food output and increased population. Secondly, thanks to the rises in prices in the Western world, the Suez crisis and the rise in freights, India has had to run down her foreign balances by more than the targeted amount under the whole of the second Five-Year Plan in less than two years, and this notwithstanding the recourse to the I.M.F. for $200 million of foreign exchange. But all this has happened, as Mr. Iengar remarked, primarily because of the gathering momentum of development.

However, according to the authorities, the situation cannot still be called serious, in the sense in which it can be said in respect of, say, a developed economy in similar circumstances. Nevertheless, it must be admitted that the powers-that-be are fully siezed of the problem and there are no two opinions in the country that the fundamental aim of the monetary and fiscal policy should be not only vigorously to control the developing inflationary pressures but to avoid fresh inflationary pressures. And in this context, it has been noted, and rightly so, that, in controlling inflation in India, account must be taken of some of the peculiarities of this country's monetary and banking framework. In this respect, it may be noted, India differs not only from the industrially advanced countries of the West but from some of the neighbouring countries of Asia as well. The main difference is to be found in the degree of monetisation of the economy as reflected in the capital market, the banking system and bank credit. Hence the relatively greater importance of currency even in a relatively advanced Asian country like India than in Western countries. This is clearly reflected in in the ratio of currency to total money apply; this was 67 per cent when India's first Five-Year Plan was inaugurated, and, even today, it forms about the same percentage. Particular mention has to be made of this feature, if only to point out the limitations of the extent to which the monetary policy of the Reserve Bank of India can be expected to make itself felt. Notwithstanding this, it must be said to the credit of the Reserve Bank that it has been able to pursue an effective policy by employing all the traditional weapons open to it.

From what has been stated so far, it should be obvious as to why India has not exactly followed the countries of the West in tackling her inflationary situation, in particular, in the employment of the bank rate for the purpose. Concerned as we are with the developmental aspect, to quote the words of the Governor of the Reserve Bank, "we are anxious to maintain a structure of interest rates, which, while meeting the needs of the short-term equilibrium, will not, at the same time, be too burdensome in the long run". In other words, the peculiar position in India has necessitated the working of the monetary policy in not one, but in more than one, direction. To quote the same source, "the solution to such a situation is not a general tightening of credit or a general relaxation; it is selective control".

The history of banking in the year under review is thus a story, in the main, of the administration of selective credit control. Admittedly, this has not been an easy task, not only because the rise in prices has not been uniform in respect of all the articles—that is, food grains, raw materials, manufactures, etc.—but there are practical limitations to the ability of banks to exercise detailed control over a number of branches spread over a country of such vast dimensions as ours. Hence, along with selective credit control, which is applied mainly to primary commodities, a limit has also had to be set to the accommodation provided by the Reserve Bank to the banking institutions to ensure effective control over bank credit generally.

As in the previous year, the main features in the monetary field in 1957 were an expansion in money supply and bank credit, a fall in the foreign assets of the Reserve Bank of India and a rise in commodity prices. However, neither the increase in the money supply nor that in bank credit was as much as in the previous year, while the fall in the foreign assets of the Reserve Bank was much sharper than in the year 1956. Thus, money supply as on December 7, 1957 was Rs. 2,176 crores, which was more or less the same as on December 7, 1956, when it stood at Rs. 2,174 crores. The net increase over the whole year was only Rs. 110 crores, which is the lowest for the past

four years. Similarly, the increase in advances and bills discounted was of the order of only Rs. 74 crores as against Rs. 165 crores in 1956 and Rs. 87 crores in 1955. On the other hand, the fall in foreign assets was as much as Rs. 232 crores, compared to only Rs. 181 crores in the previous year. The rise in commodity prices was about 15 points, between October 1956 and October 1957 with 1939 as the base.

The more or less identical expansion in mone supply but a relatively lower rise in bank credit compared to that in the previous year must, however, be set against the sharp drawing down of our foreign assets, consequent on the very substantial increase in the development expenditure and due to heavy imports connected with the Plan. As measured by the changes in the holdings of the Rupee securities of the Reserve Bank and from the balances of the Central Government, the extent of deficit financing amounted to the exceptionally large figure of Rs. 416 crores, which is almost twice the previous year's deficit.

By reason of the special stress on selective credit control and, in particular, the insistence, in August last, of the Governor of the Reserve Bank of India on the total advances being brought down by the banks to a level around Rs. 800 crores by the middle of October, i.e. the end of the 1956-57 busy season, the increase in scheduled bank credit in 1957 amounted to only Rs. 74 crores (up to the end of November), as compared to Rs. 165 crores for the same period in the previous year. (The increase in scheduled bank credit even in 1955 was higher at around Rs. 90 crores). As against this, or perhaps because of this partly, and partly because of the crediting to the Government's account with the State Bank of the sale proceeds of P.L. 480 wheat, there was a sharp rise in the resources of scheduled banks as a whole. Thus, both demand and time liabilities registered impressively higher increases at Rs. 66 crores and Rs. 199 crores, or a total of Rs. 265 crores, as against increases of only Rs. 35 crores, Rs. 40 crores and Rs. 75 crores, respectively, over the corresponding period of 1956. Thanks to this comfortable position, not only were the cash and balances of these banks with the Reserve Bank at Rs. 57 crores, higher at the end of 1957 (despite subscriptions to Central Government loans twice over) than at the end of 1956—actually, at the end of 1956, there was a net decline of Rs. 12 crores, so that the position at the end of 1957 must be considered as an improvement to the tune of Rs. 69 crores—but the borrowings by the scheduled banks from the Reserve Bank also dropped from Rs. 58 crores at the end of 1956 to Rs. 16 crores at the end of November, 1957. The same reason may be attributed to the increase in the investment portfolio of these banks from Rs. 364 crores at the end of 1956 to as much as Rs. 409 crores at the end of November, 1957. This is, however, not brought out equally vividly by the variation in the percentage of investment to liabilities of these banks, because of the sharp rise in deposits referred to above. The following table indicates the distribution of assets of the scheduled banks at the end of November:

(Rs. in crores)

End of November	Deposits	Advances	Investments
1954 ..	Rs. 925	Rs. 519 (56)	Rs. 350 (38)
1955 ..	„ 1,021	„ 601 (58.9)	„ 394 (38.7)
1956 ..	„ 1,095	„ 766 (69.9)	„ 365 (33.3)
1957 ..	„ 1,312	„ 840 (61.7)	„ 409 (30.01)

Note: Figures in brackets indicate percentage to total liabilities.

From the disposition of assets as above, it is evident that the net profits of banks during the year 1957 would be generally lower than in 1956. Due to larger deposits, especially time deposits, recording an abnormally sharp increase, and also involving a higher rate of interest payment by the banks, and lower advances, thanks to import controls and the selective credit policy of the Reserve Bank, coupled with higher pay and D.A. to bank staff, the tempo of outgo was more

MONEY SUPPLY IN INDIA

(Lakhs of rupees.)

Last Friday	Money supply with the public	Total currency with the public	Deposit money with the public: Total	Demand liabilities of banks	Other deposits with Reserve Bank†	Total variations in money supply
(1)	(2)=(3)+(4)	(3)	(4)	(5)	(6)	(7)
1952–53 ..	1,764,71	1,199,25	565,46	548,95	16,51	—39,08
1954–55 ..	1,920,63	1,311,77	608,86	599,16	9,71	+126,65
1955–56 ..	2,184,32	1,505,09	679,23	667,22	12,01	+263,69
1956–57 ..	2,312,89	1,556,50	756,39	744,74	11,65	+128,57
September 1956 ..	2,109,41	1,435,95	673,46	662,92	10,54	—25,51
October „ ..	2,123,00	1,442,52	680,48	669,64	10,84	+13,59
November „ ..	2,151,46	1,462,01	689,45	677,99	11,46	+28,46
December „ ..	2,178,65	1,485,34	693,31	681,35	11,96	+27,19
January 1957 ..	2,220,47	1,509,90	711,57	724,46	10,77	+42,82
February „ ..	2,264,55	1,528,31	736,24	744,74	11,78	+43,08
March „ ..	2.312,89	1,556,50	756,39	763,43	11,65	+48,34
April „ ..	2,362,37	1,586,44	775,93	762,01	12,51	+49,48
May „ ..	2,381,99	1,596,43	785,55	672,79	23,55	+19,62
June „ ..	2.344,04	1,562,85	781,19	758,55	22,64	—37,95
July „ ..	2,310,72*	1,521,14*	789,58*	767,69*	21,89	+33,32*
August „ ..	2,242,38*	1,490,02*	752,35*	740,93*	11,42	—68,34*
September „ ..	2,248,42*	1,490,63*	757,79*	744,98*	12,81	+6,04*

* Provisional.

† Excluding balances held on I.M.F. Account No. 1.

Source: Monthly Bulletin of Reserve Bank.

than the pace of increase on the receipts side of the banks.

Seasonal variations in money supply during 1957 are of special significance, as the following table indicates:

Period	Increase (+) or Decrease (—)	Net variations for the whole year
Busy Season:		
29-10-55 to 11-5-56	+264	for the year 1956 : Rs. 149
27-10-56 to 10-5-57	+260	-do- 1957 : Rs. 110
27-10-56 to 30-11-56	+ 26	
28-9-57 to 29-11-57	+ 17	
Slack Season:		
12-5-56 to 26-10-56	—127	
11-5-57 to 27-9-57	—139	

Thus, the contraction in the latest slack season namely the one preceding the current busy season, has been as much as Rs. 96 crores, which is the largest for the past five years. Presumably this has been in response to the call of the Reserve Bank Governor to bring down the total advances referred to above.

The pattern of interest rates during the year was influenced by the credit policy of the government which, in turn, was determined by the requirements of the Plan. The problem before the monetary authorities was not one of merely raising or lowering the interest rates but of "opening an integrated structure which takes into account diversified needs of the economy". Accordingly, although the Bank Rate has been 4 per cent, the Reserve Bank has been giving accommodation to apex co-operative banks and to certain important small-scale industries, such as handloom weaving at 2 per cent below the bank rate. Hitherto, these concessions in interest rates have been available only for seasonal loans and loans of a short-turn nature, but it is now proposed to extend this facility even to medium-term credits. It is, for this purpose, in fact, that the Refinance Corporation has been set up.

Money rates during the period under review remained firm. An extra element of competition for deposits was introduced during the year, because of the increase in the U.K. Bank Rate which led to the exchange banks in India relying more on the Indian money market for their resources.

There was no spectacular increase in the number of banks for obvious reasons. The total number of scheduled banks rose to 91 with the inclusion of only 2 more banks in the schedule. A gratifying feature during the year under review was that there was no major bank failure although the strict inspection by the Reserve Bank resulted in 28 small banks being refused licences to carry on banking. However, there was an increase in the number of branches of scheduled banks by as many as 145. Although this represents a faster rate of increase in branch banking, it should be noted that the bulk of the increase was accounted for by the State Bank alone; the Big Five accounting for only 9 branches and all the remaining scheduled banks together making up only 68. The exchange banks did not at all figure in this process of expansion. Talking of expansion of banking, one cannot but draw pointed attention to the fact that as against the 400 branches which the State Bank of India is required to establish within 5 years since its inception, it has only been able to open 106 branches so far, which gives an average of less than 45 per year. There is no reason why the State Bank should not open branches at a faster pace than this, especially as the State Bank is insured against losses on unremunerative branches as a result of the creation of a special fund namely the Integration and Development Fund, a fund from which it can reimburse itself for losses on this account.

The Government of India entered the capital market in 1957 twice in the same year, once for Rs. 100 crores in August and a second time, early last month (December, 1957), for Rs. 30 crores. The total subscription to the first loan was Rs. 105.97 crores, including conversions to the tune of Rs. 44.99 crores. The second loan was floated a few weeks ago, taking advantage of the delay in the pressure of the seasonal demand

INDIA'S OVERALL BALANCE OF PAYMENTS

(Rupees in Crores)

	April–June 1956	July-Sept. 1956	Oct.–Dec. 1956	Jan.-March 1957	April-June 1957†
Imports c.i.f.					
(a) Private	196.1	195.5	209.6	194.7	201.0
(b) Government	34.1	51.1	84.4	110.0	122.1
Total	230.2	246.6	294.0	305.7	323.1
Exports f.o.b.	153.5	134.8	171.5	177.2	139.8
Trade Balance	—76.7	—111.8	—122.5	—128.5	—183.3
Invisibles (Net)	+22.6	+22.1	+30.1	+32.4	+28.6
Official Donations	+9.6	+8.3	+7.6	+14.3	+5.0
Current Account (Net)	—44.5	—81.4	—84.8	—81.8	—149.7
Errors and Omissions	—7.1	+17.7	+2.2	—17.4	—7.7
Official Loans	+4.6	+3.3	+10.9	+37.6	+9.7
Other Capital Transactions (Net) ..	—13.2	—8.9	—15.0	+59.4	+77.5
Movement in foreign exchange Reserves Increase (+) Decrease (—) ..	—60.2	—69.3	—87.3	—2.2	—70.2

† For convenience transactions relating to repatriation of Lend-Lease Silver of Rs. 64.8 crores have been excluded from these.

for funds and the fairly comfortable position in the money market. Besides the Union Government, two other State Governments — Mysore and Bombay — also entered the market to raise Rs. 9 crores. All the other States refrained from entering the market on the advice of the Finance Minister, being content to receive 66.2/3 per cent of the collection from small savings offered by him (Finance Minister). In the result, the total State borrowing at Rs. 9 crores in 1957 compared with Rs. 64 crores raised last year by as many as 15 States. In the light of the response to the small savings drive in spite of all attempts at making the scheme attractive, such as an increase in the rate of interest offered and the raising of the exemption limits for individual subscription, it is not improbable that the States which did not enter the capital market must now be having second thoughts on their decision not to enter the capital market. Be that as it may, this unsatisfactory response to the small savings movement is easily explained. In the first place, the rates offered by the banks are relatively more attractive than those offered by the small savings scheme. Then, there has been a sharp rise in the cost of living which has narrowed down the margin of savings. Also, though only of psychological impact yet, owing to the reducing of the minimum level of income at which income-tax is attracted, the middle class people who used to be the traditional supporters of the small savings scheme may be reluctant to extend their support to the expected extent. (The full effects of the latter will, however, be obvious only next year.)

Finally, for a few words about capital issues during the year. By and large, the capital issues market during the year under review was dull and featureless. It could not be otherwise, what with the penal taxation imposed in the last Central Budget and the lack of a clear and categorical policy enunciation about the role of the private sector by the Government of India. To some extent, the restriction on imports and the insistence on deferred payments in regard to imports of plant and machinery also came in the way of new flotations by industrialists and business men. In consequence, new floatations were of the aggregate value of hardly Rs. 20 crores as against nearly Rs. 45 crores in 1956. Needless to add, the big floatations were few and far between. The more notable among these were: Indian Iron and Steel Co., Indian Aluminium Co., Alkali and Chemical Corporation, Dunlop Rubber Co., Ashok Leyland, Gopal Papers, Phillips India, National Rubber Co., Great Eastern Shipping, Gokak Mills, Aluminium Industries, and Amar Dye Chemicals etc. Another feature of capital issues during 1957 was that most of these issues came from established concerns. To a preponderating extent the new issues consisted of equities, as in the previous year. The established concerns were, of course, able to issue their shares at a premium, subject, as before, to Government's prior approval.

Transport

IT seems somewhat surprising that, even after realising fully well that inadequacy of transport facilities would frustrate all other efforts at development, the Government has done little to formulate an integrated transport policy, that is a policy covering the entire gamut of the nation's transport needs — railways, road transport, shipping, inland waterways, and aviation. There is complete unanimity now, among officials and non-officials alike, that the country should do its utmost to "catch up with the arrears of development which have accumulated over decades" in this field. Judged by the relevant indices in this behalf, it is seen India's transport development stands woefully low, when compared to other countries. Barring the railways, it has been noted, India does not stand to gain by comparison regarding other means of transport, even with her neighbouring countries. All that the Government has done so far to co-ordinate the solution of problems is to put forward a proposal to set up a Road and Inland Water Transport Advisory Committee, besides renaming the present Transport Advisory Council as the "Transport Development Council." This is clearly not enough, considering the magnitude of the transport problems of this country and the prevailing bottlenecks, and to spotlight this is the purpose of the following brief study of the various means of transport in the country.

To take the railways, which is our largest public sector undertaking, first. The progress of Indian railways since its inception a hundred and odd years ago has been more or less satisfactory. Both the passenger traffic and the goods traffic have increased tremendously and this trend has been particularly noticeable since our independence. Thus, the daily average of the passenger coach-vehicle miles has increased from 33.6 lakhs in 1947-48 to 49.8 lakhs in 1956-57, showing a rise of 48 per cent over the 10 years — (figures relate to B.G. and M.G. only). Similarly, goods traffic too has grown enormously, the increases being especially marked during the last three or four years, which is undoubtedly an evidence of India's economic progress. The following table shows the details of goods traffic on Indian railways:

Year	Traffic Carried (million)	Index Increase Base : 1947-48 : 100
1947-48	69.8	100
1950-51 (Pre-Plan) .	91.4	131
1951-52 (First Plan) .	96.7	139
1952-53 („ „) .	97.1	139
1953-54 („ „) .	98.1	140
1954-55 („ „) .	105.8	152
1955-56 („ „) .	114.1	163
1956-57 (2nd Plan) .	126.9 (estimated)	181

Impressive though this performance is, absolutely, it is by no means so when viewed 'vis-a-vis' the rapidly rising needs of our expanding economy. It is, therefore, a great pity that even the modest plan prepared by the Railways of Rs. 1,425 crores at first has had to be scaled down to Rs. 1,125 crores. With this revised outlay, the railways will be able to carry just about 162 million tons at the end of the second Plan period, as against 180.8 million tons they were expected to carry under the original Plan. When it is feared that the transport requirements may exceed even the original estimate (of 180.8 million tons), the resultant transport shortages are bound to be extremely acute. Thus, according to one estimate, by 1960-61, our transport facilities would fall short of as much as 33 million tons per year in respect of freight and of 1.4 lakh per day in respect of passengers! The Railway Minister himself confessed, whilst replying to the debate on the Railways' estimate, that even as it was, there was overcrowding which, instead of lessening, would get worse; and so, to remedy this, he suggested reducing the number of dining cars and air-conditioned coaches. Thus, there exists a sort of a wide gap between the demand for, and the supply of, railway transport facilities, which has to be filled by alternative modes of transport, and that which lends itself best for the purpose is road transport admittedly.

Regarding road transport, it is expected that, by the end of the second Five-Year Plan, the mileage of metalled roads in the country would go up to 144,000. At the end of the first Plan, the total mileage was 1,22,000. The second Five-Year Plan envisaged an outlay of Rs. 82 crores on road development, or an average of Rs. 16.40 crores a year. But the budget estimates for 1957-58 provide only Rs. 13-14 crores, which is less than the Plan outlay. Clearly this is quite inadequate to meet even the revised Plan needs. Hence the allocation for road construction should be revised upwards. Again, the number of motor vehicles to be produced every year between now and 1960-61 has been fixed by the Planning Commission at 40,000 vehicles. This too is on the low side and needs an upward revision. Apart from the number of vehicles, the real problem of motor transport relates to the policy of the Government. For example, on the question of nationalisation of goods transport, which lags hopelessly behind the demand for it, the Government is not still prepared to give a firm assurance. Only a categorical anti-nationalisation assurance can stimulate fresh investment in this field without which our transport bottlenecks are destined to last indefinitely. It is necessary to add here that the present moratorium on nationalisation of goods transport lasts only up to the end of the Second Five-Year Plan. In other words, one does not know what will happen to goods transport after three or four years. Surely, with such uncertainty, no private operator can be expected to venture into this field on any big scale. Not until the Government is prepared to reorientate its nationalisation policy in regard to road transport and revise its licencing procedure and taxation policies suitably will the transport bottleneck in this country disappear.

To turn now from land to water transport, both overseas and inland. It is claimed that, for Indian shipping, the year 1957 has been a historic year, in that it opened up new vistas for shipping. In the pre-independence days, as everyone knows, Indian shipping and shipbuilding were deliberately neglected. It is mainly during the last decade that we have achieved some notable progress in this direction. Indian tonnage at the beginning of the first Plan period was about 390,000 g.r.t. That Plan fixed a target of 215,000 additional tonnage, after allowing for obsolescence to the extent of about 60,000 tons. The second Five-Year Plan has proposed the addition of another 300,000 tons to this, so that a target of a little over 900,000 tons may be reached by 1960-61. Even after the attainment of this target, Indian bottoms are expected to carry no more than 10 to 15 per cent of the country's overseas trade and only about 50 per cent of the trade with adjacent countries! At the moment, India's tonnage in the overseas sector and the coastal sector is estimated to be 331,000 g.r.t. and 240,000 g.r.t. respectively, as against the targets of 500,000 tons and 412,000 tons g.r.t. respectively. This position, especially in regard to coastal tonnage, is very disappointing in view of the vast coastline which nature has provided us. However, with the exemption of Wealth Tax and the series of concessions or reliefs, including the establishment of a non-lapsable Shipping Development Fund to provide rupee resource for financing further tonnage, the proposal to charge a uniform rate of 3 per cent, as interest to all fresh loans to shipping companies, etc., Indian shipping has reasons to expect a better and brighter future.

Inland water transport was, more or less, a neglected child during the regime of the British, but, since independence, more especially, with the commencement of the second Plan, it has begun to receive special attention, as witness the recent establishment of the Ganga-Brahmaputra Board and the proposal to persuade the Governments of Andhra Pradesh, Madras, and Kerala to set up separate boards in each one of these States and also to devise ways and means to co-ordinate their activities. Also of interest in this context is the reported decision of the Government of India of its intention to pursue the question of improving the navigability of the Buckingham Canal — one of the important waterways, 150 miles of which lies in the Andhra State and 60 miles in the State of Madras — and to suggest to these two Governments to conduct a joint traffic survey, as the first step. The efforts to be made during the second Plan period, modest though they are, considering the number of big rivers we have in India, may yet mark the beginnings of an ambitious scheme to make these waterways a major means of transport in the country, thereby effectively supplementing the others.

Today, when people have become more time-conscious than ever before, air transport — the fastest of all modes of transport — occupies a vital place. As in regard to other forms of transport, the development of air transport also has made remarkable progress, both in domestic and international services only since 1947. Our external services, which were confined only to Burma and Ceylon in 1949, have now become more or less global. The table below shows the progress of air transport between the years 1949 and 1955:

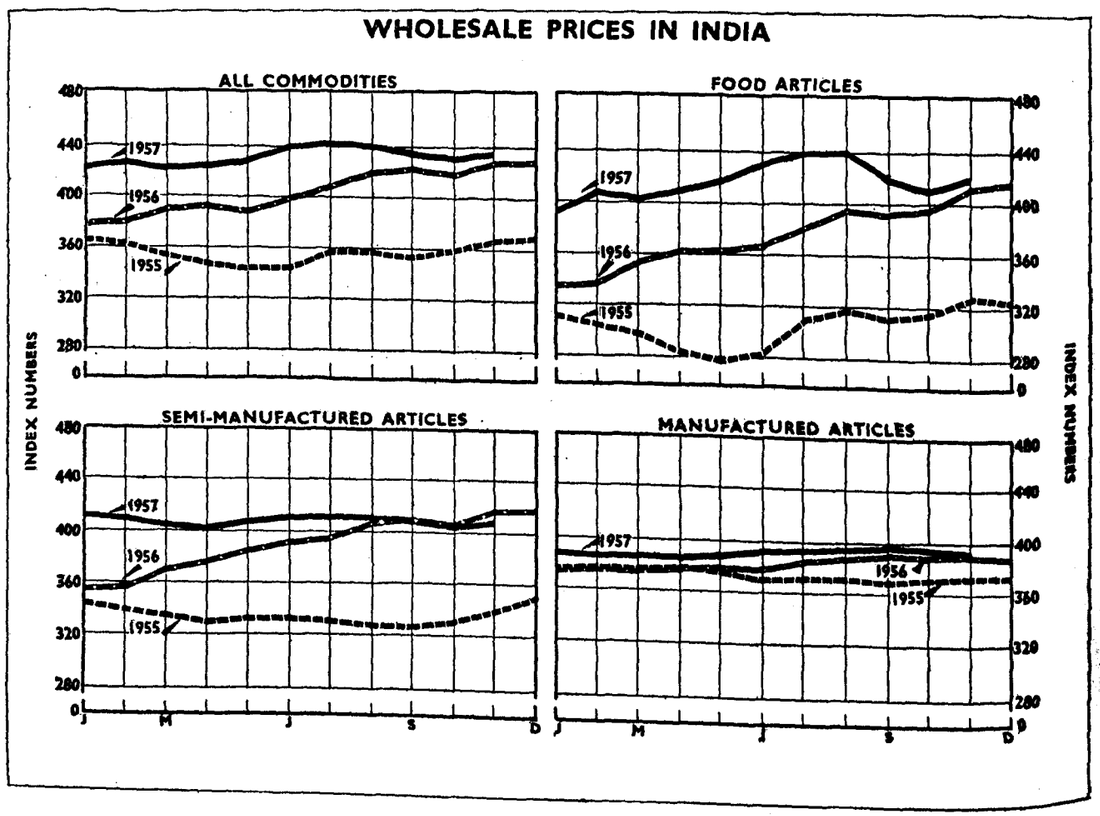
Year	Miles flown	Passenger Nos.	Freight lbs.	Mail lbs.
1949 .	9,361,673	254,960	5,647,562	1,405,073
1955 .	21,266,514	468,894	98,199,645	11,478,091

Thus, it will be seen that, since 1949, our passenger traffic has increased by about 84 per cent, cargo loads by 17 times, mail loads by more than 8 times, and miles flown by more than 127 per cent. Opening of more new routes, new areodromes, training of technical personnel and other allied problems have also been receiving increasing attention lately. This youngest entrant to the world of transport has already begun to play a notable role and the present pace of development ought to augur well for its future.

INDEX NUMBERS OF WHOLESALE PRICES AND SECURITY PRICES

	Wholesale Prices (General Purposes Index)† Year Ended August 1939=100						Security Prices †† (1949-50=100)			
	Food Articles	Indus. Raw Matrls.	Semi-manufactured Articles	Manufactured Articles	Miscellaneous	General Index	Govt. and Semi-Govt.	Debentures	Preference	V. D. I.
1947-48 ..	306.1	377.5	261.6	286.4	456.2	308.2	..	..	..	..
1948-49 ..	382.9	444.8	327.3	346.1	525.2	376.2	..	..	..	..
1949-50 ..	391.3	471.7	331.6	347.2	570.7	385.4	..	..	..	..
1950-51 ..	416.4	523.1	348.9	354.2	707.4	409.7	..	..	..	..
1951-52 ..	398·6	591.9	374.4	401.5	721.6	434.6	..	..	..	..
1952-53 ..	357.8	436.9	343.8	371.2	614.1	380.6	..	..	..	..
1953-54 ..	384.4	467.7	359.2	367.4	686.6	397.5	89.7	100.6	87.3	95.6
1954-55 ..	339.8	436.2	350.3	377.4	612.4	377.4	89.8	100.7	88.4	113.6
1955-56 ..	313.2	419.8	338.2	372.9	546.4	360.4	90.0	100.8	87.3	121.6
1956-57 ..	388.5	501.9	402.3	384.6	559.3	414.0	90.0	100.1	82.9	121.2
January 1957 ..	392.1	525.0	412.4	387.4	592.7	422.3	89.7	99.0	80.4	113.7
February „ e ..	406·0	520.5	410.6	385.5	585.2	425.0	89.8	99.0	79.8	113.6
March „ e ..	402·7	518·1	403.3	384.1	569.6	421.3	90 0	99.0	78.6	106.9
April „ e ..	408.3	514.7	400.0	384.3	567.1	422.1	89.9	99.0	78.6	106.9
May „ e ..	419.3*	536.3	406.5	387.7*	572.3	431.2	89.9	99.1	78.4	104.5
June „ e ..	433.2*	541.4*	413.0	392.4	578.0	439.2	89.5	99.0	77.6	102.6
July „ e ..	439 8	544.4	413.3	392.3	637.1	443.5	89.2	98.7	76.7	105.5
August „ e ..	440.9	530.6	411.2	392 7	643.3	441.8	89.0	98.8	75 6	103.1
September „ e ..	424.1	525.3	409.1	394.7	644.0	435.9	89.0	98.0	74.0	99.3
October „ e ..	412.1	534 3	406.1	394.5	645.9	432.8	89.0	97.7	73.6	97.4
26-10-1957 ..	411.1	536.7	407.1	392.7	655·2	432.7	89.0	97.7	73.7	97.4
2-11-1957 ..	412.4	535.9	405.8	392.2	654.8	432.6	..	..	..	..
9-11-1957 ..	421.7	545.6	406.3	391.4	654.8	436.8	..	..	..	..
16-11-1957 ..	424.5	549.2	407.4	390.8	659.4	438.4	..	..	..	..
23-11-1957 ..	420.6	523.4	407.5	390.5	669.5	433.4	..	..	..	..

†Economic Adviser's Series. * Average of weeks. ††Reserve Bank Series. Revised*

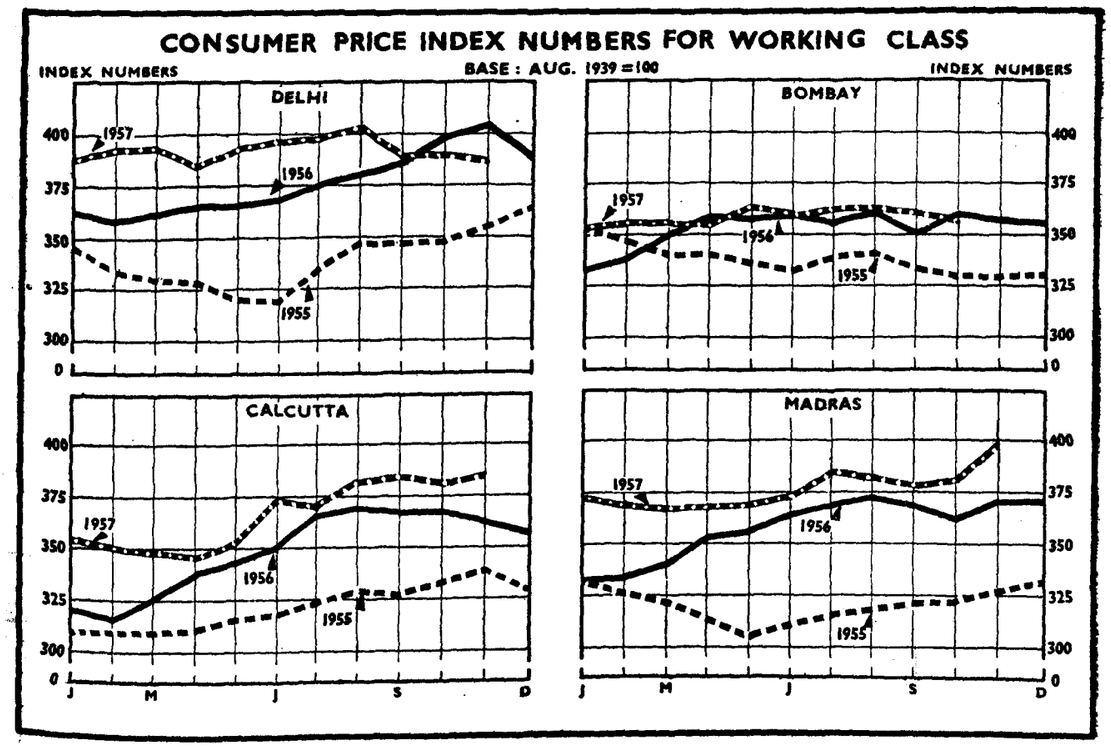


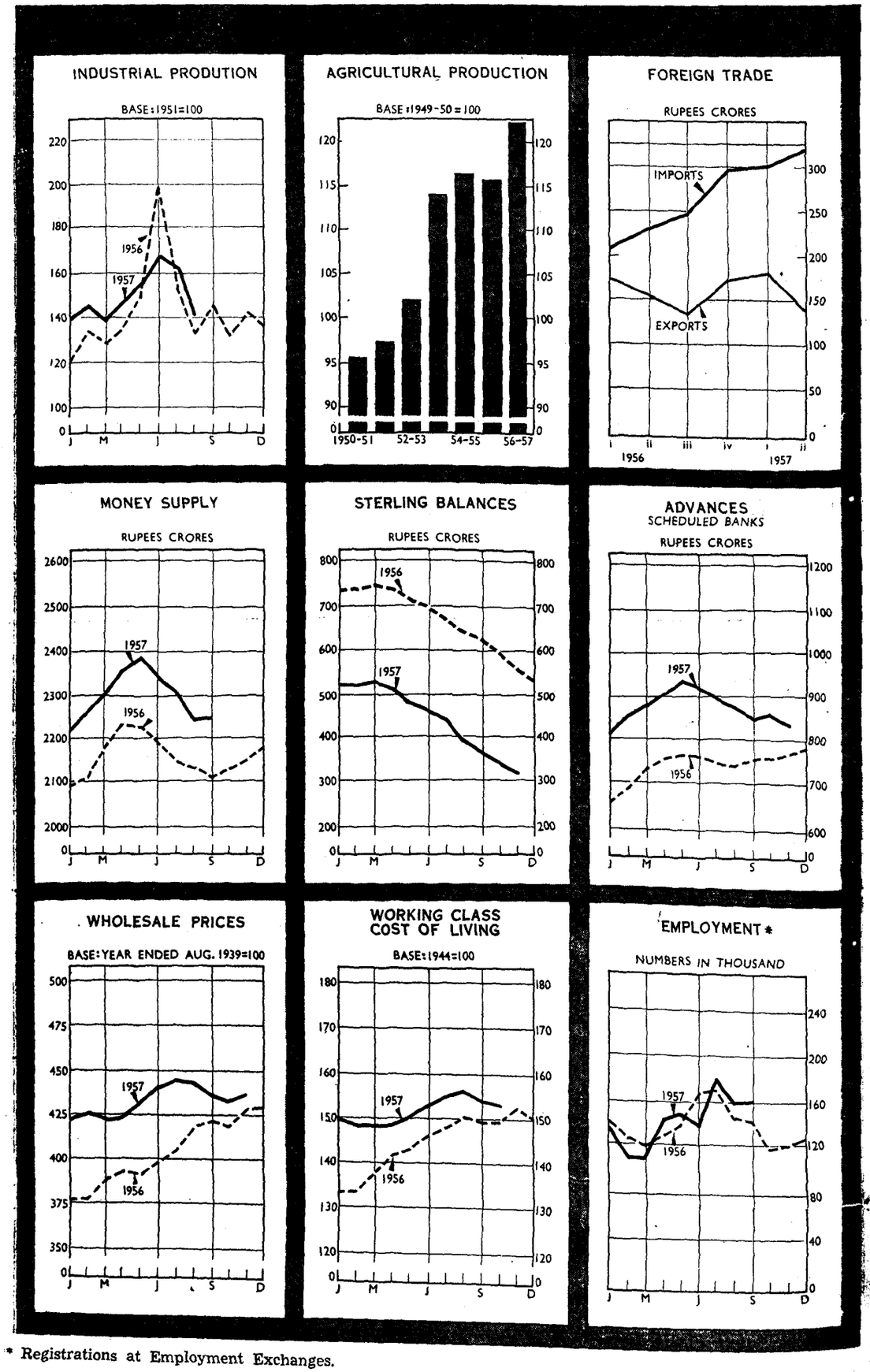
CONSUMER PRICE INDEX NUMBERS FOR WORKING CLASS

(August 1939=100)

Period	Bombay	Bombay June 1934 =100	Ahmedabad July 1927=100	Delhi	Bengal	U. P.	Central Provinces		Madras	E. P.	Bihar	All India†
	Bombay			Delhi†	Calcutta	Kanpur	Nagpur	Jubbulpur†	Madras June 1936=100	Ludhiana†	Jamshedpur†	
1939 (Aug.-Dec.)*	103	—	—	—	—	105	104	—	106	—	—	—
1943	283	303	243	132	339	471	372	146	309	168	136	134
1949	292	307	248	132	348	478	377	151	323	164	138	138
1950	298	313	257	132	349	434	372	153	325	165	145	138
1951	314	330	261	142	370	451	391	168	334	167	160	144
1952	321	337	250	143	351	441	380	150	330	151	154	141
1953	346	363	275	140	349	453	387	151	351	147	156	145
1954	342	359	244	138	327	408	373	139	341	148	140	138
1955	322	338	218	130	321	371	364	133	321	134	135	132
1956	336	352	244	142	347	424	397	151	356	152	146	145
1957 January	339	355	252	149	354	436	411	156	372	157	144	149
February	341	357	253	151	350	438	411	158	369	157	148	148
March	340	356	254	151	348	433	415	158	367	158	148	148
April	340	356	256	148	345	427	415	162	369	161	152	149
May	347	363	257	151	352	441	418	163	369	157	156	150
June	354	370	259	152	371	446	422	168	373	159	156	153
July	360	376	263	152	371	459	422	—	375	159	164	155
August	361	377	265	155	398	468	—	—	373	—	—	156
September	359	375	262	149	394	464	—	—	372	—	—	155
October	359	375	—	149	391	459	—	—	375	—	—	153

†Base 1944=100





* Registrations at Employment Exchanges.

Printed and Published by Devi Prasad Sharma at the Hindustan Times Press,
for "The Eastern Economist" Ltd., 52, Jan Path, New Delhi. Editor:—E. P. W da Costa, M. A. (Oxon.)



The dress of the people...

Costumes, whether they are for occasions or for daily wear, vary all over the world. Climatic conditions, natural materials available, religious demands and individual ingenuity are some of the factors that determine the dress of a people.

Many varied costumes are worn in India but different costumes need different qualities of cloth. The Mafatlal Group of Mills manufactures a wide range of cloth for everyday use in all parts of the country.



The fisherwoman of Bombay, a familiar figure in the market, wears a nine-yard saree. The style is indicative of the freedom and strength these women draw from the ocean.

SHORROCK, Ahmedabad. NEW SHORROCK, Nadiad. STANDARD, Bombay. NEW CHINA, Bombay. SASSOON, Bombay. NEW UNION, Bombay. SURAT COTTON, Surat and Dewas. MAFATLAL FINE, Navsari. GAGALBHAI JUTE, Calcutta.

MAFATLAL GROUP OF MILLS

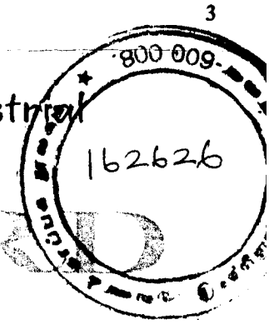


CLOTH FOR THE NATION

Mafatlal's other interests include Sugar and Dyestuffs

MAFATLAL HOUSE, BACKBAY RECLAMATION, BOMBAY 1.

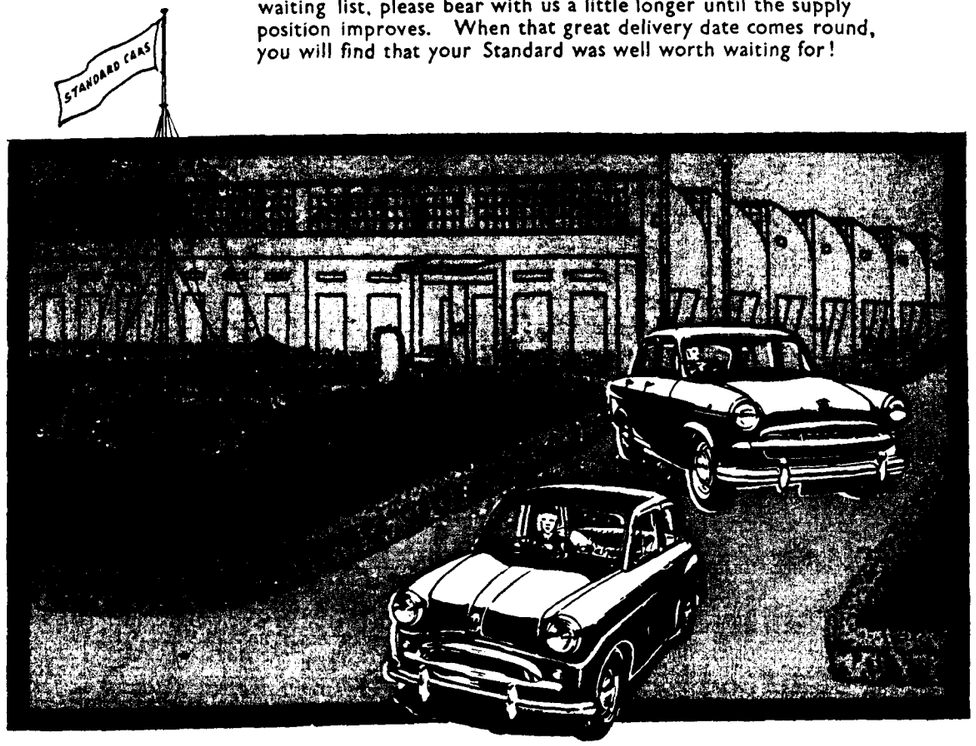
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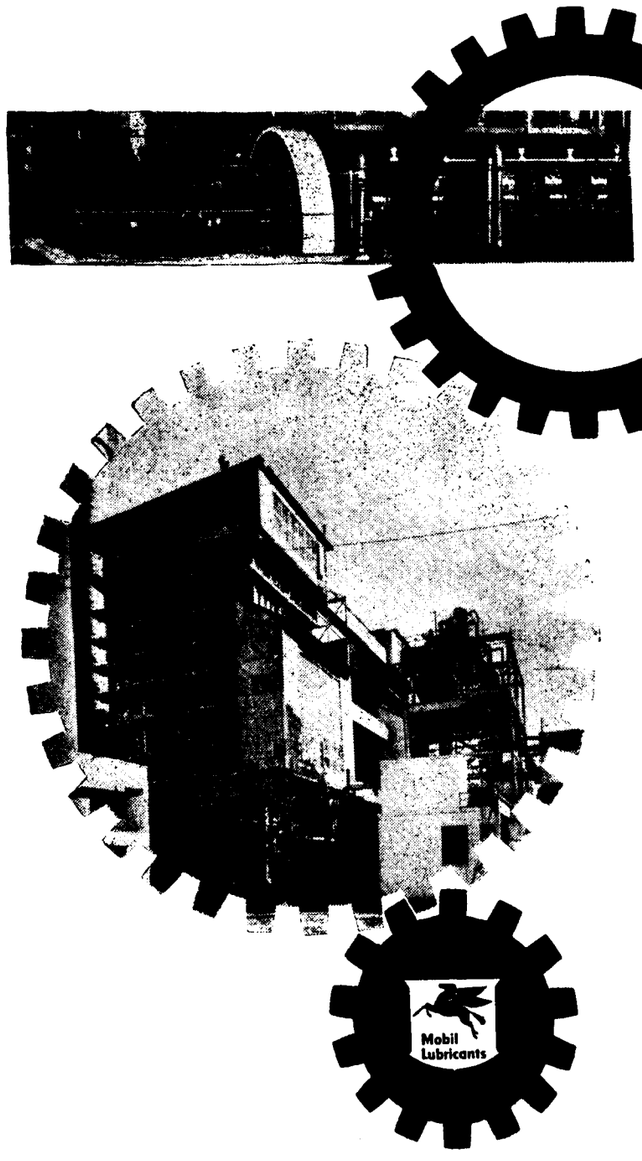
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Head Office :
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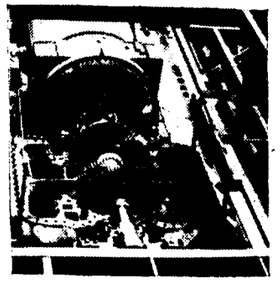


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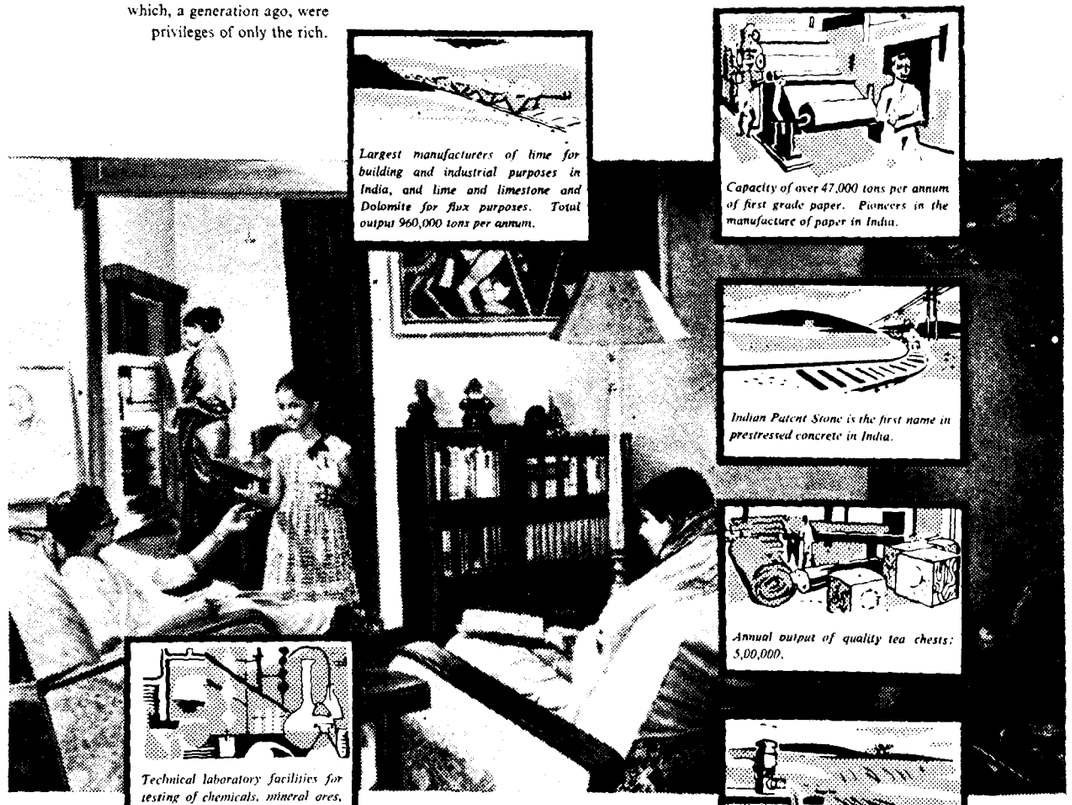
Twills & Longcloth

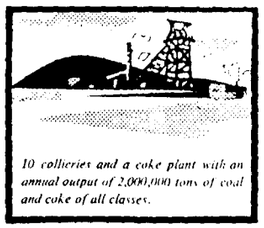
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AHMEDABAD

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This is not a wealthy family, yet it is happy and contented. Father has a good job, mother has time to relax and entertain friends, and the children are getting a good education. Their comfortable home has amenities which, a generation ago, were privileges of only the rich.





10 collieries and a coke plant with an annual output of 2,000,000 tons of coal and coke of all classes.

Largest manufacturers of lime for building and industrial purposes in India, and lime and limestone and Dolomite for flux purposes. Total output 960,000 tons per annum.

Capacity of over 47,000 tons per annum of first grade paper. Pioneers in the manufacture of paper in India.

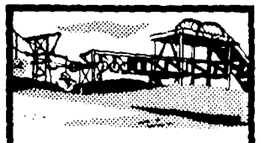
Indian Patent Stone is the first name in prestressed concrete in India.

Annual output of quality tea chests: 5,00,000.

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Manganese Ore, Manganese Dioxide, Iron Ore, Kyanite, Chrome Ore, Bauxite, Gypsum. Total output over 700,000 tons per annum.

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In this dynamic development, the House of *BIRD* and *HEILGERS* plays a significant part. Their collieries and mines provide power and raw materials for our industries. Their prestressed concrete and structurals, pumps and tubewells, tea chests, refractory bricks, etc. help to place the country on the road to self-sufficiency.

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Shah Jahan 1627-1658



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New Delhi's nine-storey ASHOKA HOTEL of nearly 350 rooms, with an imposing exterior and exquisite interior is the largest and the most fabulous hotel in the East. It has given the capital another lever to provide ultra modern accommodation, choicest foods and richest entertainment for travellers.

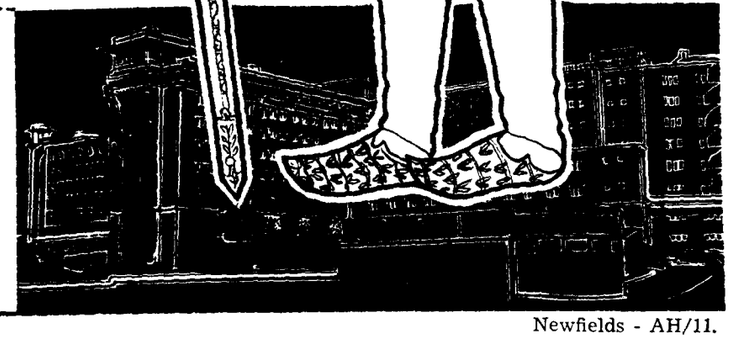
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ROOMS : Rs. 45 AND UPWARDS

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Newfields - AH/11.

lighting the fire

The stimulus from a pair of bellows sets a fire alight. A puff of well-directed wind makes all the difference between a smouldering failure and a blazing success. Much the same applies to a nation's progress. The right finance invested at the right place at the right time creates more incomes, more goods and more jobs for more people.

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The Life Insurance Corporation is thus contributing the vital spark to the glowing future we are trying to kindle.

Life Insurance Corporation of India



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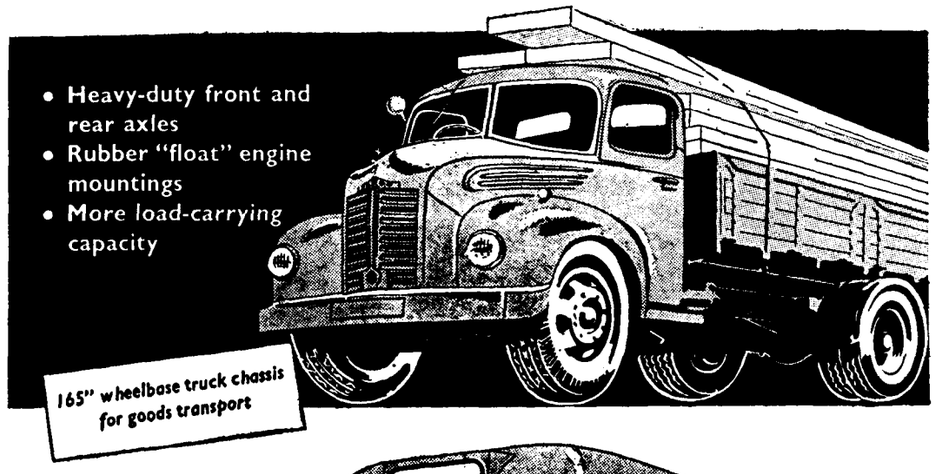
Manufacturers of:

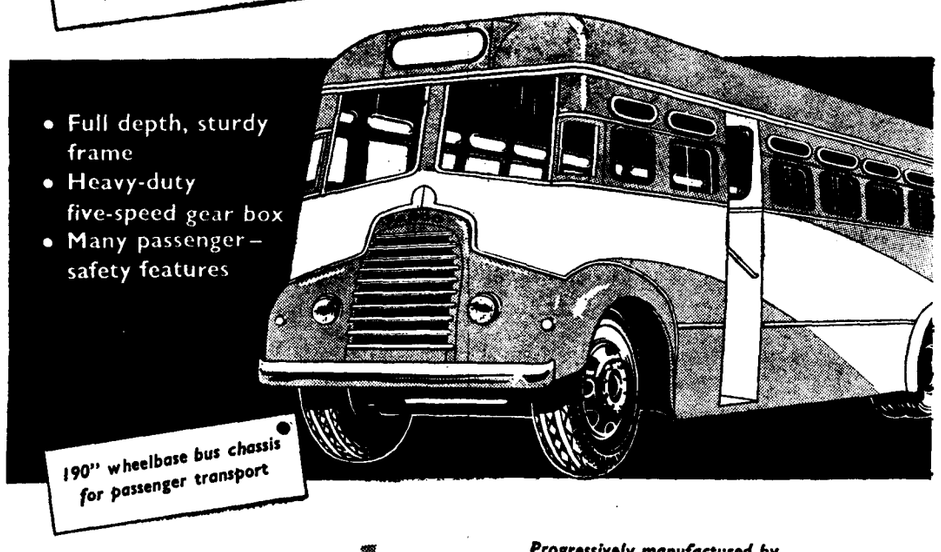
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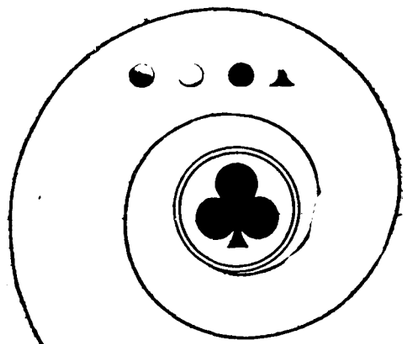


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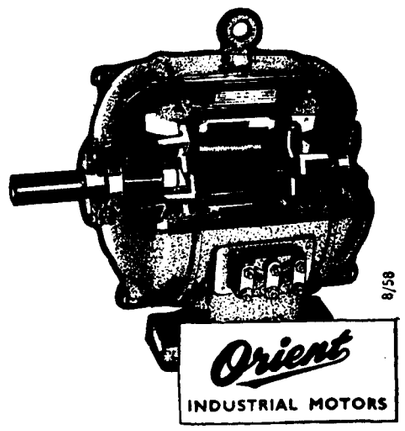
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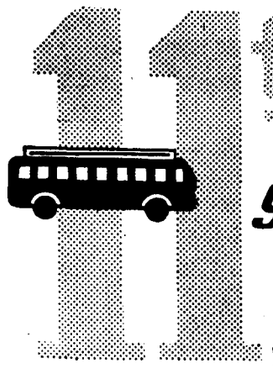
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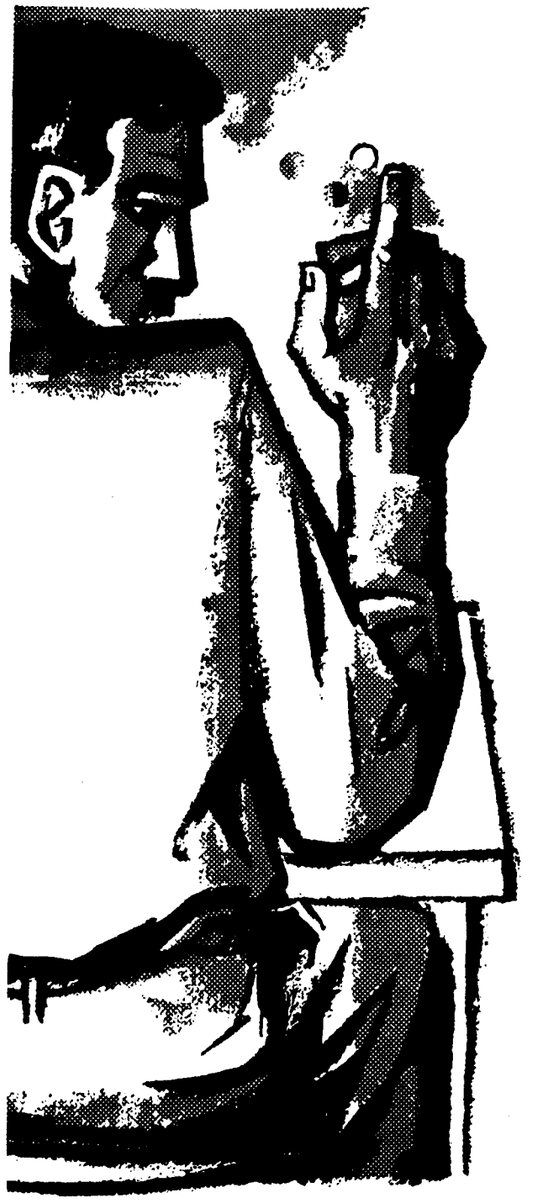
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Total Number of Consumers served	151,000
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Other Industrial Consumers	8,500
Annual Output in kWhrs. exceeds	900 millions.

Managing Agents:

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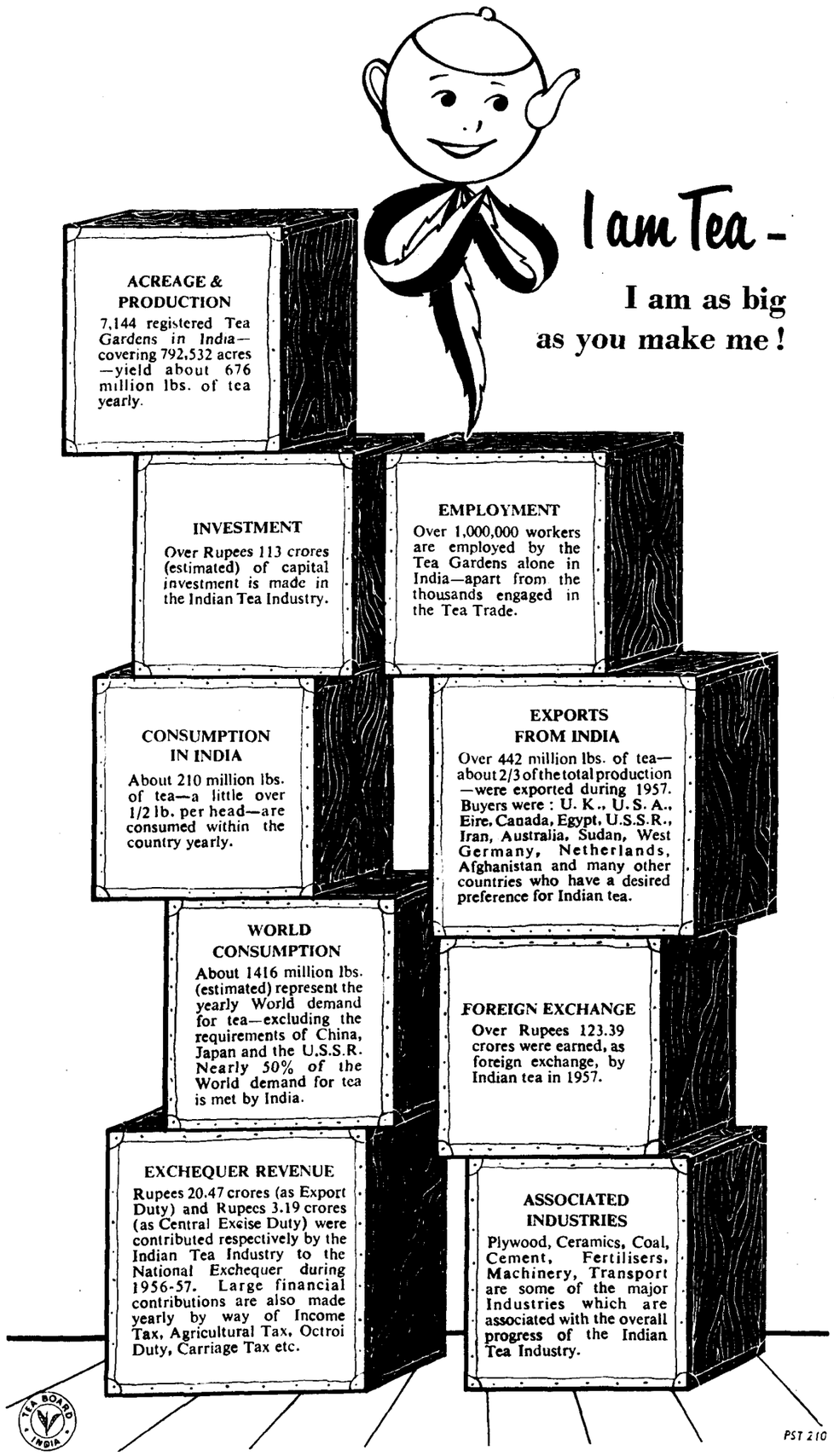
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AS citizens of India, you are called upon "to work wholeheartedly for the full and timely realisation of the tasks, targets and aims of the Second Five-Year Plan."

The Plan has been embarked upon. Its success depends upon your providing capital for its working. In this effort no amount is too small — the man who saves a rupee and the man who saves hundreds — both are rendering national service. Save as much as you can and entrust your savings to the nearest office of your Bank. In doing so you will help to build a new India and also create a valuable estate for yourself and your family.

THE STATE BANK OF INDIA

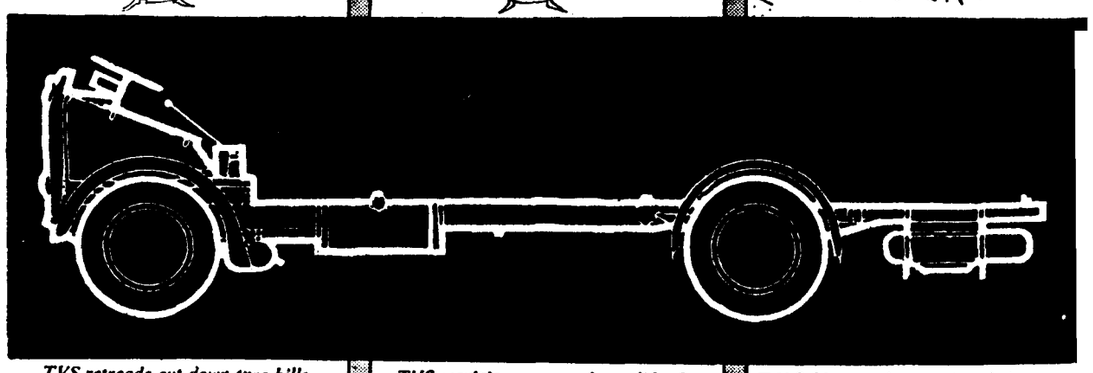
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TVS builds bodies both for buses and lorries

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I buy chassis from TVS because I get all I need under one roof

TODAY, the rising tempo of production demands speedy transport of men and materials. Road transport, therefore, offers excellent opportunities for expansion and progress.

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TVS 286 N

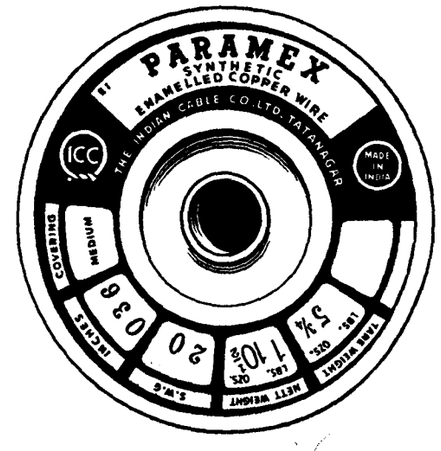
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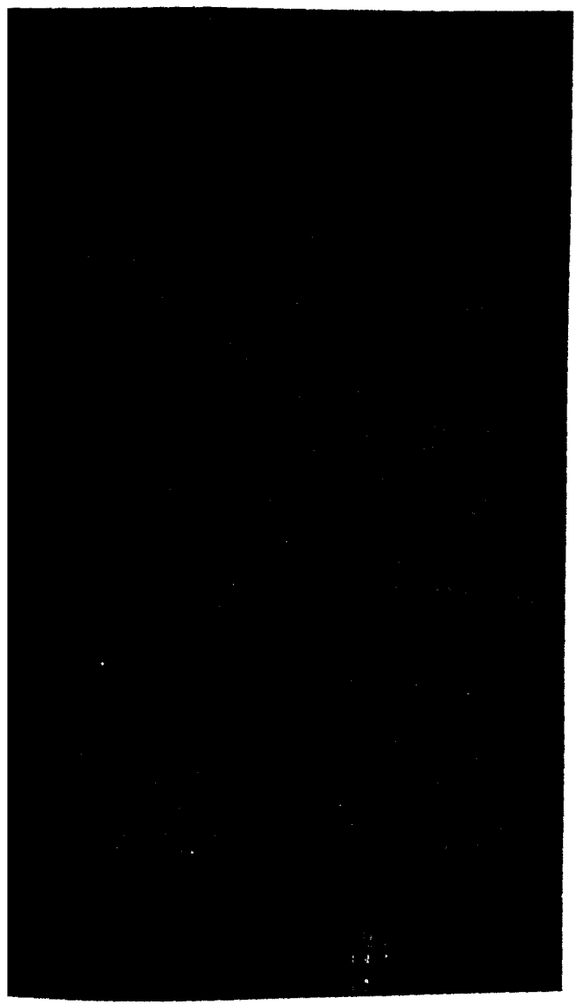
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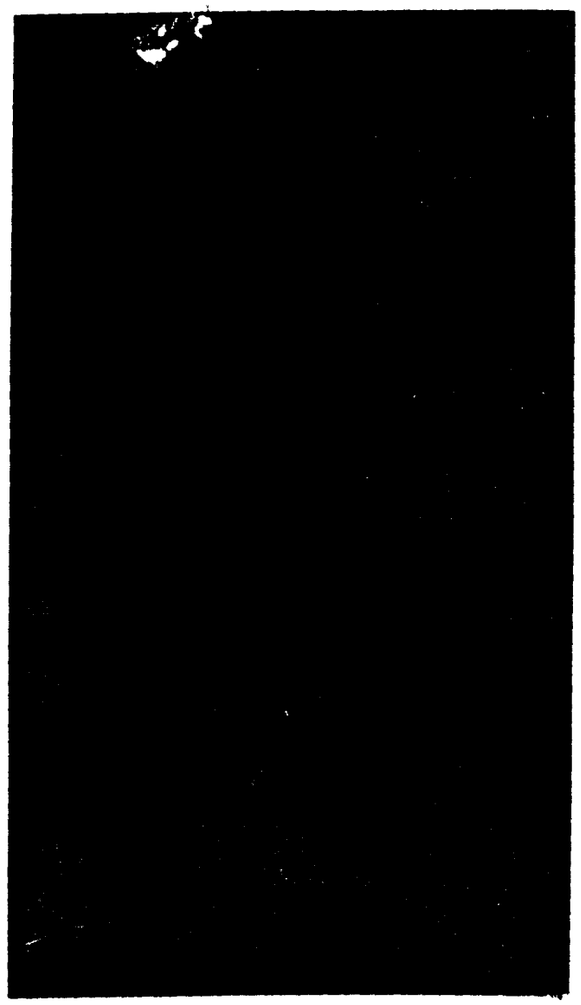
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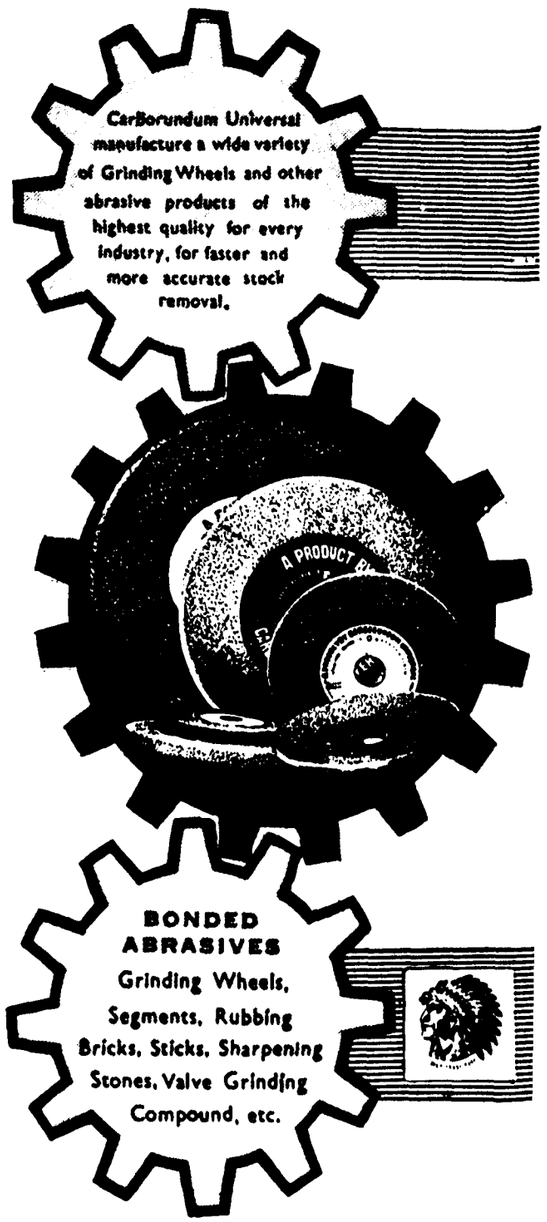
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INDIA AND THE MIDDLE EAST

O gentlemen! the time of life is short;
To spend that shortness basely were too long,
If life did ride upon a dial's point,
Still ending at the arrival of an hour.
An if we live, we live to tread on kings;
If die, brave death, when princes die with us!
Now, for our consciences, the arms are fair,
When the intent of bearing them is just.

—WILLIAM SHAKESPEARE
King Henry IV—Part I

The disruptive factors are according to you: religion, race and language. I do not see the importance of race. Race in India became intertwined with religion and partly took the shape of caste. Hindus and Moslems do not form different races; they are essentially the same amalgam of races. Thus though there are various races, they run into one another and on the whole form a definite unit, racially and culturally.

—JAWAHARLAL NEHRU TO LORD LOTHIAN
January 17, 1936. *A Bunch of Old Letters*

So long as all the increased wealth which modern progress brings goes but to build up great fortunes, to increase luxury and make sharper the contrast between the House of Have and the House of Want, progress is not real and cannot be permanent.

—HENRY GEORGE
Progress and Poverty "Introductory: The Problem."

To plan for the future we must plan with order, order being the disposition of equal and unequal things, attributing to each its place.

—ST. AUGUSTINE

India and the Middle East

Preface

THE central theme of the 'Eastern Economist's' Annual Number 1958 is 'India and the Middle East'. As at least on one previous occasion, it might be claimed that the subject has not so much been chosen as that it has chosen itself. History in a stately, if startling, manner, has directed its attention this year to the restless display of Arab nationalism and even in its explosive character in at least one great Middle Eastern State. Quite apart from the revolution in Iraq, American landings in Lebanon and the excursions and alarums in Egypt, Algeria, Tunis and Morocco have made the year 1958 the most historic of all recent years in the Middle East. At the same time, Africa, once called the Dark Continent, is stirring visibly in sympathy with Arab nationalism in the Middle East. The pattern of development cannot be fully described, for the waves of unrest have not yet found their level and are at present moving back and forth, searching and seeking for a haven and a refuge which is almost nowhere in sight. It is precisely because of this restlessness that Indian experience and example can be of assistance; for we have, to some extent, come through the same dark night; and, under somewhat different pressures, have found a twilight before a happier dawn.

TWO-WAY TRAFFIC IN IDEAS

India's interest in the Middle East goes, however, both before and beyond the current political uncertainty there. India has sponsored and, in a sense, still leads the movement against colonial interference or military pacts in the region by outside nations. In this respect, we stand against undue Western influence in the area but, almost by the same token, we have a profound example of moderation and co-operation with the West to present to the Arab peoples. We have shown that, once political liberation has been achieved, the opportunities for economic co-operation with the West can be made to grow, and that the maintenance of conflict, once the major objectives have been satisfied, is both a wasteful and, from the point of view of a nation needing economic progress, a foolish thing. To the extent we can communicate our own experience, we can impart to the Middle East some of the great wisdom of the Gandhian tradition, which we feel has permanent truths applicable to all nations at all times. The use of non-violent methods in settling disputes can be tried with advantage in the present turmoil which surrounds the Middle East, not least in that deep seated group of tensions which surround the name of Israel.

By the same token, we have not a little to learn from Middle East practice in terms of the exploitation of great natural resources with the co-operation of agencies other than the State. Millions of square miles in an area, perhaps ten times more than that of the Indian Union, now enjoy an average standard of living double our own in spite of the fact that it is hopelessly dominated by desert. The secret of this success, which the Middle East has obtained in co-operation with Western nations, has been in the unearthing of oil or black gold hidden in the bowels of the earth. We are at the moment showing every sign of fear in embarking on an equally imaginative programme of oil exploration which might, in a short period, uncover the black gold which certainly lies plentifully within the Indian Union. Perhaps a knowledge of what has been accomplished in the Middle East will help us to cast out fear which holds back the prosperity and advance of our people by restricted, instead of almost universal, exploration and discovery. There are thus lessons to be learnt on both sides and not a little of this Annual Number is concerned with the two-way traffic on ideas which must penetrate what might be called two great sectors of the partnership in Bandung philosophy.

The co-operation in the field of ideas will flow over in more practical terms to trade which is rising more rapidly with all countries in the Middle East and promises to rise even more spectacularly in the next two or three years. History which has chosen the Middle East for its own in 1958 is thus not expressing itself in one event, but in a continuing story. The purpose of this Annual Number is to tell this story in its simplest terms.

ABOVE INDIA IN ECONOMIC PROGRESS?

One of the surprising results of the studies made is to show that, even in terms of economic progress since 1950, a very large number of countries in the Middle East have greatly surpassed our performance. Quite apart from the fact that their national income is substantially higher than our own, most of the countries of the Middle East have a rate of economic progress of about 7 per cent per year over the last six years whereas our figure may not be as high as 3.5 per cent. Obviously we cannot, in the light of these results, argue that we are better prepared to advise on economic progress than they or that we have a superior system for economic development. Undoubtedly oil has played a major factor in this rate of economic progress; the more is the reason for us to modify our oil policies which are likely to be restrictive, in view of the fact that the public sector has not the foreign exchange resources for an all-out exploration campaign.

THE PATTERN

The pattern of the Annual Number of 1958 follows that which has been set down in a series of Annual Numbers now running to the tenth in the list. It starts with a political assessment, which attempts to set in perspective the political relations which subsist between India and countries in the Middle East. As is usual these political relations are placed against the vast historical canvas in which the richness of past living has been brought to mind. There follows an economic section, which is particularly relevant in view of the dominant place that oil exploration is due to hold in the Indian economy and the vast opportunities for mutual trade between India and the Middle East. Finally, there is a section on the mind and philosophy of India compared with the culture of the Middle East. Here there is enough to suggest that the great tragedy of Hindu-Muslim disunity which has broken the Indian sub-continent can be redressed over a wider field. The friendliness which subsists between India and the Middle East today is the mark of the abiding strength of secularism in race relationships. If the Prime Minister's faith in secularism has not yet been proved on the Indian sub-continent, it has been truly established abroad.

DEDICATION

This Annual Number, like those in the series that have gone before, is dedicated to the Indian people. It is hoped that some of the ideas here will serve to illuminate their collective consciousness and to throw some light on the lessons which they have to learn no less than to teach. The great revolutions in the Middle East, to which we in our generation have been witness, are forces now only once removed from ourselves. We should be grateful for the opportunity twice in a life time to experience the tremendous power of nationalism, based on a higher conception of the dignity of individual men and nations. We have surely a role to play because of our past experience, but the Indian people seem to be quite unaware of this role or their destiny. This Annual Number has sought to describe the gap it cannot fill. If, in the process, we are able to learn something of value for ourselves, this Annual Number, like those that have gone before, will have provided its own reward.

PART A

A POLITICAL PROLOGUE

India and the Middle East: Ancient Links

THE partnership between India and the Middle East, now in the process of being forged anew in the workshop of history, strikes a distant resonance of things that have passed away. We are dealing here with the beginning of civilization. The brilliant story of Egyptian and Sumerian splendour, which has been patiently put together in the last fifty years, shows these tremendous river valley civilizations as the first of the human race. It may be that the Indus Valley civilization, of which impressive remains have been discovered in Monenjodaro in Sind, Harappa in West Punjab, and more recently in Saurashtra and in the Ambala district of the Indian Punjab, is a parallel civilization, with a similar, though less consistent, record to establish its supreme achievements. If we treat the Indus Valley civilization as being coterminus with that of the glorious civilizations of the Nile and the Tigris and the Euphrates from about 3000 B.C., one might claim that India, Iraq and Egypt were, in somewhat different circumstances, in a tremendous cultural alliance all giving birth at about the same time to the first human civilizations, taking men away, at one great leap, from the deeply primitive into well-planned and ordered societies.

INDIA, EGYPT AND SUMER

Much of this romantic story has still to be proved in detail, but the labours of archaeologists have brought to light, particularly in the Valley of the Kings near Luxor and, in the tremendous discoveries of Upper Egypt, a degree of pomp and magnificence which shows that what we now call the Middle East was previous and equal to the grandeur that was Greece and the glory that was Rome. It is difficult for those who have not seen the tremendous treasures of the past in the great museum at Cairo, in the giant Pyramids which lie near about, particularly the Pyramid of Cheops and the tombs at Sikkara to appreciate the wealth and cultural attainments which that great succession of dynasties secured over a period extending over 2,500 years. That Indian merchants were in touch, during a significant portion of this period, with Sumerian and Egyptian merchants is highly probable. Professor Gordon Childe in 'What Happened in History' observes: "Manufactures from India's cities reached even the markets of Tigris and Euphrates. Conversely, a few Sumerian devices in art, Mesopotamian toilet seals, and a cylinder seal were copies on the Indus." Trade was not confined to raw materials and luxury articles; in return, fish, regularly imported from Arabian Sea coasts, augmented the food supplies of Mohenjo-daro. The use of cotton was common, and was extended to the Western world two to three thousand years later. Well-built baths, not known to any other antique civilization, are also found in abundance. Town planning and drainage system had reached a high stage of perfection in the Indus valley. It was not merely in magnificance of construction that these ancient civilizations led all the world. It is clear that the Egyptians knew much about astronomy, and it is now believed that at least elementary trignometry must have been known to Egyptian architects of the Pyramids. In India, from very early times, it would appear that the famous Arabic numerals including the concept of zero and, therefore, the concept of positive and negative quantities had been developed, making arithmetic and some portions of algebra a science in fairly wide circulation.

The structure of these societies was, as far as can be determined, rigidly monolithic. In Egypt, the Pharoahs exercised complete domination acting, as seems likely everywhere, as divine representatives of the supreme God whose name varied from time to time but was essentially a personal, and almost a household, deity. Indian theology at that time is uncertain, but there is no reason to believe that for the first thousand and odd years it was decisively Hindu in character. It may well have run on lines parallel to those in the Middle East. The decisive contrast in religious thought comes with the advent of Hinduism in the period which is commonly known as the Vedic Age; and then, in that tremendously vital century, which saw the enlightenment of Prince Siddnarina Gautama, afterwards the Buddha.

THE DIVERGENCE OF TRADITIONS

Indian and Middle East thinking take a decisive turning away from one another with the arrival of ahimsa or the doctrines of non-violence associated with Buddha and the Great Ashoka. From that century onwards, Indian tradition was largely peaceful and non-violent, although wars and battles continued, particularly in the Gupta period. The Middle East in the period in which Islam rose and rapidly spread itself reflected more the military and aggressive forces, which might be said to have grown out of tradition of the Pharoahs and the Kings of Assyria. Islam, through great Generals, notably Halaku Khan, carried its massage by the great caravan routes to the farthermost points of the Far East. The weaker Muslim settlements both in Turkestan and India fell before the fiery invaders. So did their cruder cultures. In the end they resulted in the Mongol dynasties of China and the Moghuls came through the Khyber into India, a powerful dynasty which produced the Great Akbar. In that sense China and India are both indebted to Muslim thought and culture, which spread in this mighty avalanche over the whole of Southern Asia.

THE FUSION OF CULTURES

In the conquest of large areas in India and China by Mongolian and Turkish Generals, Indian and Chinese cultures got inextricably mixed up with that of the Middle East. In both China and India, local influences prevailed. China made of its great Emperor Kublai Khan a profound Chinese scholar, and the imprint of Ashoka has been more dominant in the Indian Union than the forces of Islam which occupied and failed to conquer the Indian cultural heritage. There is here a story of persistence on both sides with a degree of coexistence which has its counterpart in the manner in which India is now co-operating fully with the Muslim countries in the Middle East. The ancient links spread over nearly four thousand years give us a romantic background against which to set out current collaboration. We are partners in the present. We can look back on a glorious past while we seek to build a glorious future. In the divergence of traditions and in the fusion of cultures, we have enriched our opportunities for the interchange of ideas and experience. Perhaps there will, one day, be a fusion of interests more important than the clashes of forces and cultures which have marked the historic past.

The Indian and Middle East Revolutions

IT is all too easy to believe that the content of all revolutions is the same, since they provide, at any rate to their supporters, a release from past tyranny. Thus it is too often believed in India that the Chinese and Indian revolutions have followed parallel courses; that the previous Chinese regime of Marshal Chiang Kai-Shek was a form of feudal imperialism not unlike the semi-feudal Colonialism which was imposed on us in the British regime. The student of history can, however, make no such mistake. In the Indian revolution, power was in fact transferred to the people; though, in the short period, the representatives of the people were dominated—as was natural and, indeed, is the case in all revolutions—by the living heroes of the Revolution. The fact must be recognised that the Indian Revolution comprised a true transfer of influence from the few to the many. Today, even while a single party exercises almost complete sway on the making of policy, it has constantly arrayed against it the forces of public opinion and, in the last analysis, is subject to a popular vote. This is not mere consent by the governed; it is, as nearly as may be, government by the people.

The position in China and the Middle-East has been substantially different. The revolutions in Egypt and Iraq were originally palace revolutions overthrowing discredited or inefficient monarchies by small military groups. While the removal of the monarchy in both cases would seem to have been a popular, and an even inevitable, movement for the expansion of the popular will, it would be foolish to describe either the Egyptian or the Iraqi system of government as democratic. In the case of Egypt and Syria, President Nasser now rules with a power totally different from that exercised by our Prime Minister. In Iraq Brigadier Kassem apparently has an overwhelming personal say in every issue. There is no opposition in either country in any significant sense of the term. Nor can it be said that the Press is operating under conditions in which a contrary view to those of the dictators can be adequately expressed. There is, it is true, this to be said of the Middle East revolutions; they have not yet had a reasonable time to establish 'normalcy.' This, however, is not the same thing as saying that the desire to establish democratic normalcy exists. As far as can be determined at the present time, the military dictatorships there are satisfied and, indeed, complacent with their present political performances. They have established stability of a kind previously unknown in the areas over which they operate, but not a little of this stability has been wrongly confused with an acceptance by the people of all the directives which issue in the name of the single-man State.

THE SIMILARITY IN OBJECTIVES

In terms of policy the revolutions may seem to have the same large purposes as our own. The first of these, undoubtedly, is the raising of the standard of living of the people committed to the cares of each government. The second, very probably, is the anxiety—more apparent in the last week than ever before in Egypt—to escape the pressure of Communism, always incidental to pressures in economically backward countries but particularly present in those which have no large popular base. At the same time, the historic role the West has played in the dominance in the Middle East prevents governments there from operating except on the ground of suspicion of the Western nations led in particular by Britain and France. In the case of Egypt there was good ground for this suspicion following the attack by Britain and France on Egypt after the nationalization of the Suez Canal two years ago. At the same time, the Balfour declaration created the kingdom of Israel which connotes to the Muslims of the Middle East a strategic nucleus designed to check the growing power of the Arab States. Whatever may be the purposes which have arrayed Middle East countries against Communism on the one hand and the Western nations on the other, it would seem that a politically neutral policy is thus decreed on these countries at least in terms of those great distracting elements of our time often described as the Cold War. Again, in material terms the need for substantial economic progress is imperative, and in the last analysis the governments of those countries, no less than our own, will stand or fall by their capacity to solve these economic problems.

THE PATTERN OF CO-OPERATION

The similarity in character of our current problems decrees the pattern of co-operation which should exist between India and the Middle East. Since economic progress is the purpose of much of joint endeavour, we will need to supply economic advice and information and, to the extent possible, technicians of the requisite calibre to replace those from the Power Blocs, as and when they are required. In terms of political policy, the form of co-operation is even more clear. India, like Egypt and Iraq, is fiercely anti-colonial; more positively, all these countries are committed to the general framework of the Bandung idea. Inside the United Nations, the Afro-Asian bloc has now become a significant neutralist group, co-operating closely in the day-to-day work of the United Nations. But even outside the United Nations, the activities of a neutral group—which may or may not be a Third Force in time—have come to pass and constitute a momentous new factor in the balance of World Power. Thus it has come about that, while our Revolutions were differently conceived and, indeed, were different in outcome, in that in the one case the people inherited power, and in other only their consent was transmitted to military dictatorships, the objectives of the Revolutions are the same. They call for a degree of political and economic co-operation which places supreme opportunities as well as obligations in the path of both partners. The Governments on both sides appear to be seeing these opportunities dimly; but, up to this point, they have failed to transmit anything of their vision to their peoples.

The Pattern of Political Partnership

WHAT is the coming pattern of political partnership between India and the Middle East? Certain elementary points can be made, but they provide only the framework and not the detailed and substance content of partnership. In the first place, India and the Middle East are both partners in the Bandung idea. Essentially the Bandung idea is the creation of a feeling of integration and partnership amongst the countries of Africa and Asia which have experienced the domination of the Western peoples in the recent past. Negatively, one of the first elements of the Bandung philosophy is the resistance of attempts to revive colonialism by Western nations over any portion of Asia or Africa, from which it has been withdrawn. More positively, it is to strive for the liberation of the peoples of these areas giving them dignity and honour as members of free communities choosing voluntarily to live their own lives free from external political pressures.

THE SOURCES OF PARTNERSHIP

The factors which have made so quickly for the arrival of the Bandung idea and its acceptance over virtually two continents must be sought in the past as well as in the present. So far as the past is concerned, Colonialism and discrimination on grounds of Colour have left an ugly legacy in the minds of almost all Asians and Africans. The insolence of Western Colonialism, particularly in the period of its reckless success, has created a smouldering anger which still has embers, which keep alive old and seemingly dead controversies. Discrimination based on colour, now rapidly departing, is still a matter which sensitive minds, both Asian and African, cannot easily forget. The new cohesion of the Bandung family is based not a little on this revulsion which colonialism and colour have aroused. It is right that the African and Asian nations should be banded together to prevent the growth of aggressive forces based upon the outworn ideas of colonialism and colour which, all too unhappily for the world's peace, have been imprinted on the minds of many millions in the two continents.

THE COLD WAR

The other major factor in the Bandung partnership arises from the Cold War. Here, largely because the members of the Bandung family have had more experience of Western Colonialism and Western arrogance under the guise of colour, there has been a less than fair or proper appreciation of the more cruel role that Communist imperialism plays in the modern world. There is thus less than adequate appreciation that the danger at the present time of a resurgence of Colonialism is far smaller than the danger of subversive elements taking power under a Communist regime and carrying out the orders of the Kremlin, under pressures which they are unable to resist. Neutralism in the Cold War is an appropriate and vital bond which should commend India to the Middle East; for India since 1947 has practised, with remarkable skill, a constructive neutralist role which, while it has erred here and there, has nevertheless kept us substantially out of the Cold War. Both the Middle East and South-East Asia need urgently a similar policy; we cannot make it for them, but they can learn much from our experience.

Whether the Middle East will in fact draw substantially from Indian practice in the matter is to be abundantly tested, and may be inadequately proved, over the next few years. At one terminal of the Bandung system there is President Nasser, whose attempt to overthrow Western influence and build an independent federal Arab State has hitherto had only limited success. While Syria has been absorbed and saved seemingly from the dangers of Communism in the immediate present, the present position in Iraq is markedly uncertain. It would appear anti-Nasserism and anti-Communism together will not suffice for Brigadier Kassem to maintain a degree of firm national independence, which alone will establish a truly neutral regime in the area; forces in Iraq are still swaying back and forth. In the Baghdad Pact Iran, Pakistan and Jordan are still heavily on one side of the Cold War. There is, by no means, a general acceptance of the doctrine that, in the Middle East as a whole as for India, a neutral and independent foreign policy is the best solvent of the current pressures of the Cold War. The methods of President Nasser and the methods of Mr. Nehru are by no means the same and, even where neutralism is accepted, there is the widest difference of degree.

ISRAEL

More particularly we in India have to note that Arab neutralism in the Cold War is by no means synonymous with non-aggressive intentions at all times and at all places. Thus all the Arab States with whom we are in close alliance have expressed unmistakenly their determination never to accept Israel and, if possible, to eliminate it as a separate State. India herself, contrary to her general policy of accepting 'de facto' a State constituted by law as such, has not had the courage to recognise Israel seeing the tremendous opposition which Israel creates in the Arab mind. This, in a sense, is an unworthy concession to the aggressive forces of the Middle East. While Israel is patently a source of tension in the Middle East, we in India should argue in favour of its constitutional right to exist and suggest the removal of these tensions by the forces of non-violence particularly where, as at present, war clearly provides no solution.

OUR FAILURE AND THEIRS

While we have shown over the last three or four years incapacity to provide a bridge between Israel and the Arab countries largely because we have lost our contact with Israel through non-recognition, there is a solid success recorded in another country by the use of Gandhian methods in a local situation. The publication of the Rev. Martin Luther King Jr.'s splendid book "Stride Towards Freedom" tells what is called the Montgomery story, which in the State of Alabama in the United States by a campaign of non-violence would do credit to the Mahatma himself. Perhaps Rev. King's projected visit to this country next month will rouse us to new efforts.

These are sobering thoughts. It may be that India's greatest contribution to the Middle East will not be the purely formal role of adviser to the Bandung group in the United Nations and outside, but in the creation of a new set of ideas in terms of a challenge for the removal of the tensions which exist in every State of the Middle East. Many of these tensions are internal and the position of President Nasser is by no means universally acceptable to some of the larger States of the Arab world, in particular Iraq and Saudi Arabia. A new and somewhat different pattern of integration has to be found, if India is to be equally acceptable in all areas of this vast and pulsating world.

Challenge and Response in Economic Progress

WANTED: MORE KNOWLEDGE

IF the political partnership is not by any means established and still has to be given new form and content, even greater performance is required in the economic field. Partly because most plans are conceived on a national scale, there has been no understanding of the performance of other governments in the public mind of various countries in the area. The pre-requisites for economic understanding, therefore, do not exist. Thus almost no one in India knows the story of the tremendous work of the Development Board in Iraq since 1950. Not the least of its achievements are the great and fruitful expenditure on irrigation works at costs relatively much lower than our own. The dams often referred to as "Nuri's Pyramids" highlight a many-sided achievement of which Indian engineers should be far more conscious than they are. Thus the Dokan Dam, being built on the Lesser Zab River will irrigate 617,500 acres and will cost only Rs 18 crores. It will also produce 200,000 kilowats of electricity and, as an overall multi-purpose project, seems far more fruitful than any of our own. The great Ramadi barrage on the Euphrates, 65 miles west of Baghdad, is a part of flood control and water storage project, which will also be more fruitful in terms of investment and output than our great Damodar project. These advantages may be the happy accidents of an under-developed area, but at least there is prima facie evidence that we do not possess either the most productive or the most efficiently run multi-purpose projects in the Bandung area. Our engineers should be studying much more of what is happening in the Middle East; they are far too concerned with Chinese experience only.

PLUS AND MINUS

Part of the economic problem in the Middle East is similar to our own, but this is merely the theoretical portion which can be easily stated. All economic progress requires capital and 'know-how' and the implementation of a plan requires skilled labour; how it is to be made available is largely a matter of creating the right incentives. That much must be true of all countries in the world. But almost at once the problems we face then diverge. The Middle East, so far as Iraq and, probably, so far as Saudi Arabia and Iran, are currently concerned, is adequately placed in regard to foreign exchange and is likely to be so for some years. In Egypt, particularly with the grand project of the Aswan Dam in view, foreign exchange will be as critical as for the Indian Union. By and large, however, one might say that the magnitude of our operations makes foreign assistance far more pressing in our case than in any other country of the Middle East except Egypt; and Egypt's Aswan Dam—for which the Russians have given a paltry initial credit of 400 million roubles—will probably be spread over so many years that her foreign exchange problem will not be nearly as pressing as our own.

In any case there must come a time when countries in the Middle East no less than Egypt and ourselves will need to think in terms of economic progress in partnership predominantly with the Western world. They will need to have climates attractive for the participation of foreign private enterprise and investment, since it is unlikely that Governments of friendly countries will provide all the foreign exchange they need. Nor can foreign governments alone or foreign exchange alone provide technical knowledge in the most convenient form. There is everything to be said, now that the political problem is nearly settled and that Western Imperialism cannot become a great tyrannising influence, for an open door policy inviting foreign capital and enterprise on terms of equity and justice based on an equal partnership. The Middle East has provided particularly in what are called the "fifty-fifty" agreements, to which reference is made in the succeeding article, a wonderful basis of economic partnership in which the technical know-how and capital of the West has raised the average standard of living far beyond anything which we have been able to achieve in this country.

THE POOLING OF EXPERIENCE

It is obvious that while conditions differ and our own experience is valuable for the pool, there is room for an economic conference on the Bandung model to serve as a great clearing house for economic information. The conference which was in session at Cairo from December 8 to 11 was in effect a non-official counterpart of Bandung. The National Chambers of Commerce are now approaching their Governments to have a regional office of economic co-operation for the Bandung area. Until there is an official commitment and the leaders of the area take seriously to the setting up of a regional economic organisation, the political advantages of the Bandung alliance will have little effect in the economic field. Yet it should be clear that the challenge to the whole area to arrange co-ordinated economic progress is not a matter of choice. It is a hard imperative for all Governments. Precisely because this challenge has hitherto been so inadequately accepted and so inadequately fulfilled, the need for a larger conception of partnership in economic affairs can be no longer ignored.

THE CHALLENGE TO INDIA

It would appear, therefore, that the problems of planning in the whole of the Bandung area should now be approached not so much from purely a national point of view as from the point of view of the area as a whole. This involves difficulties of no small degree, particularly as statistics in a great portion of the Middle East are very defective in the field of agriculture. The preparation of a plan for the Bandung area, even for the limited problem of inter-regional trade, is thus full of obstacles. Precisely because it is a problem which requires technical quality of a high order in economic research, this is appropriately a field in which Indian leadereship can express itself. The challenge, therefore, of giving co-ordination to economic activities of this area is primarily directed to us. We cannot fail to take up the challenge which the Cairo Conference has placed vividly before our eyes. And yet there are no signs that we are awake to our opportunities, which are as large as our needs.

Oil: Lessons for Indian Planners?

IN a separate article elsewhere in the issue the precise nature of agreement which the Middle East governments have entered into with International Oil Companies has been described. There have been some new patterns which are now competing with the apparently stable formula, often described as "fifty-fifty". The principle of "fifty-fifty" has meant that the government's income from royalties and taxes equals the Company's profits after such payments, and hence the Government benefits equally with the Oil Company from the production operating within that country.

The principle of "fifty-fifty" has been the main, if not the only, instrument of economic progress in the Middle East. Thus in the case of Iraq when the Development Board was set up in 1950 it was assigned 70 per cent of the royalties that Iraq receives from the Iraq Petroleum Company. Royalties now amount to about 200 million dollars a year, so that 70 per cent of this or about 140 million dollars is available for development. While some of this money has been diverted improperly to ill-considered schemes, much the greater fraction has gone into solid development work. Thousands of square miles of desert lands are being reclaimed and the Board claims that national income in Iraq had gone up from $84 to $140 per capita since 1950. While the principal beneficiaries of this increase have been civil servants, entrepreneurs and skilled workers who make up only a small part of Iraq's 6.5 million population, there is no doubt the impact of this development is now being felt widely in the countryside. Oil has thus been the predominant instrument of a widely distributed rise in national income which promises to solve Iraq's economic pressure in a reasonable time.

A LESSON FROM THE MIDDLE EAST

Now that there are prospects of India having oil in commercial quantities it is obviously reasonable that we should have an oil policy equally beneficial to the people of our country. This has been opposed generally by the Ministry of Fuel, which seeks to perform the task in the public sector only. But the Oil and Natural Gas Commission is doubly limited; firstly, it has a shortage of technical skill even with Russian and Rumanian assistance abundantly added. Secondly, it has a desperate shortage of foreign exchange, which for an oil exploration policy large

enough to distribute to attain adequate return must be measured in at least of the order of Rs. 1,000 crores in five years. If the Oil and Natural Gas Commission can find this money from the U.S.S.R. and other Communist countries it would be quite justified in excluding private enterprise now being offered by international oil companies. But it looks as though there is no prospect whatever of sums of even a fifth of this order forthcoming from the Soviet Union for oil alone. It is, therefore, inevitable over a period of time that the oil companies will be asked to co-operate in exploration and discovery in the Indian Union.

The only question then is in regard to terms. If the Oil and Natural Gas Commission considers that it can dictate its own terms to an international industry, which is operating round the world and has far wider opportunities than can possibly be attained by the Communist countries, operating over a rich but limited field, it is making an elementary mistake. There is an obvious advantage in attracting the Western oil companies to India on terms which are reasonable. The Middle East 'fifty-fifty' formula described above offers to India a happy compromise in that it is a proved prototype and which has worked well in the Middle East. It should attract the oil companies since in effect they have committed themselves on a large scale on agreements of just this kind. A deviation is always a matter of chance, and, while it is pointed out that some of the new deviations have been accepted by oil companies, the total volume of such agreements is small and it must be presumed that these new agreements are less acceptable to oil companies as a whole.

One of two courses is, therefore, posssible. Either we should immediately announce our willingness to operate on a 'fifty-fifty' basis or alternatively we should choose such areas as the Oil and Natural Gas Commission requires for its own exploration and discovery and throw the rest open on what are believed to be adequate terms for private tender. If tenders should arrive within a period of six months to a year, we would be justified in assuming that our terms were suitable. On the other hand, if they do not, it could be argued that the terms are unattractive for major participation and will need to be modified. "The Eastern Economist's" view is that, while this course might recommend itself to the Ministry of Fuel and Power in its present mood of distrust of the oil companies, it involves unnecessary delay. The 'fifty-fifty' agreement is both fair and compatible with the socialist pattern of society and should be adopted at once.

Looked at from the point of view of results — and, after all, nothing succeeds like success — the Middle East Governments, for all their weaknesses in imagination and all their extravagance, have performed over the last 25 years a substantial task in economic development. It is an irony of fate that in the last ten years, while India, struggling against momentous obstacles, has had a rate of economic progress of about only three per cent per year in per capita real income it would appear that Iraq has had a rate of development of nearly 7 per cent per year or more than double our own. Quite apart from providing the resources for development in terms of national currencies the oil industry in the Middle East has solved all the balance of payments problems of countries in which major success has been achieved. Some of the implications of this are dramatically brought out by the graph on page 102 of the trade of non-industrial countries divided between non-petroleum exporters and petroleum exporters. The petroleum exporters include Iran, Iraq, Saudi Arabia, Kuwait and South Persian Gulf States. All these States have now a comfortable balance of exports over imports and are, therefore, rid of the serious consequences of balance of payments difficulties, such as our own. We need oil as a solvent for balance of payments problem no less than as an instrument of internal economic progress. We deny this need to our peril. We need also to develop trade with these Middle East countries with a favourable foreign trade balance so that we might earn foreign exchange on other accounts. In both respects, there are reasons to study the Middle East economy. They give us a happy example in terms of the wise exploitation of oil resources and they should give us a market with which to attack our own deficits in foreign exchange.

Conclusion to Part A

IT is now possible to draw together the threads of the argument in this Political Prologue. It has been pointed out that there have been deep and fundamental differences between the Indian and Middle East Revolutions. They have, it is true, both been derived from nationalism thwarted; in the one case by Colonialism, in another by a feudal aristocracy, unimaginative and inflexible to the point of its own destruction. But the outcome and the inspiration in the two cases have been widely different. India rests substantially on a true democracy, in which the chosen representatives of the people maintain sovereign power over the army and, indeed, over all fields of national life. In the Middle East the pattern has been predominantly military and totalitarian, and, while the people have found fulfilment in release from past tyranny, they cannot be described as sovereign arbitrators of their own fortunes. The Revolutions in the Middle East, unlike our own, are, in this sense, incomplete popular revolutions. There have been transfers of power without a basic participation of the people; enthusiastic consent is not a substitute for power exercised by the people and the forces of public opinion.

The instrument of the Army, which stands over Egypt, Sudan and Iraq at least, cannot commend itself for all time to the people of these areas. This is no disparagement of the achievement of military dictatorships which now obtain. But it is a reflection of current opinion in the Indian Union that these dictatorships are insufficient and must lead to more and more participation of the people in the government of their own country. They are not even to be recommended when they are instruments of economic progress alone; for it is true now, as when it was first said, that men live not by bread alone but by every word of God.

While there is thus a major difference in approach —in India Gandhian and in the Middle East basically military—there is room for partnership in economic terms which is, as far as one can determine, without conflict, and, indeed, without obstacle. The current pattern of trade of most Middle East countries does not compete in any substantial respect with our own, and the capacity to supply technical assistance to these countries which may prefer us to Cold War participants for strategic reasons must be deemed to be an opportunity, of which we cannot fail to be aware. Both in trade, and in exchange of political and economic information the partnership between India and the Middle East is full of promise and mutual benefit.

The frame-work for partnership already exists in the powerful nucleus of the Bandung idea; the Bandung idea has now to be given the content and an imaginative direction. Egypt at one end and India at the other may provide for the Bandung region the terminals of a powerful grouping of minds in terms of neutralism in relation to the Cold War, and in terms of the expression of the rights of the under-developed countries, particularly areas once given to colonial or feudal activity. There is here an opportunity not merely of partnership but of creative thinking which might help all the world.

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PART B

AN ECONOMIC REVIEW

The National Income Scale

HOW does the Indian Union compare with the Middle East in terms of national income? This is indeed a very difficult question to answer despite the fact that estimates of national income are available in regard to India and nine Middle East countries, namely, Egypt, Iran, Iraq, Israel, Lebanon, Saudi Arabia, Syria, Turkey, and Yemen covering nearly 98 per cent of the total population in the area. The various estimates are not strictly comparable even after adjustments to conform to a universal definition because of the artificiality of the rates of exchange used for conversion. It has been the practice with the U.N. statisticians to convert the national income statistics of all countries into U.S. dollars whose official rates of exchange hardly reflect real purchasing power of the currencies of the different countries.

This may be illustrated with reference to a study made by Prof. Tsunehiko Watanabe and Prof. Ryutaro Komiya in a recent issue of a German journal, named, 'Weltwirtschaftliches Archiv'. This study sets out to establish the relationship between the Japanese Yen and the U.S. dollar in terms of their real purchasing power. It shows that the purchasing power of the Japanese Yen is almost double the exchange rate fixed for it in terms of U.S. dollars. Pakistan offers another striking illustration which highlights the element of error introduced by comparison through the U.S. dollar. For the year 1949, the U.N. statisticians placed India (57 U.S. dollars per capita) above Pakistan (51 U.S. dollars per capita) while for the period 1952-54 Pakistan at 70 U.S. dollars surpassed India at 60 U.S. dollars by 16 per cent. This error was introduced because the U.S. statisticians employed the official rates of exchange without any reference to the real purchasing power of the currencies in the two countries. The fact that Pakistan decided to devalue its rupee at a later date helped it to surpass India in per capita terms without in any way improving the level of living of the people of Pakistan as compared with the level of living in India. These illustrations bring home the fact that an international comparison of per capita income in terms of U.S. dollars is of a very rough and tentative nature and not much importance should be attached to differences of small order between different countries. With these reservations, we pass on to an analysis of the available data in regard to income levels in India and the Middle East.

THE RATES OF GROWTH: 1949-57

In 1950, the Statistics Department of the United Nations brought out a paper entitled 'National and per capita income of seventy countries'. The figures in regard to India and the Middle East, culled from this paper, are set out in Table I below. It will be seen that in 1949 Yemen with a population of 7 million and Saudi Arabia with a population of 6 million were the only two countries in the Middle East which were below India in terms of per capita income. Every other country surpassed the Indian Union by a wide margin. Israel enjoyed, in per capita terms, a level of living which was nearly seven times that of India. Similarly per capita incomes in Lebanon and Turkey were more than double that of India. This table also highlights the fact that no generalizations can be made in regard to the Middle East as a whole because of the huge differences in the standard of living of the countries constituting this area. Saudi Arabia and Yemen enjoyed a level of living in 1949 which was one-tenth of Israel, one-third of Lebanon and Turkey, less than one-half of Egypt and Syria and nearly one-half of Iran and Iraq.

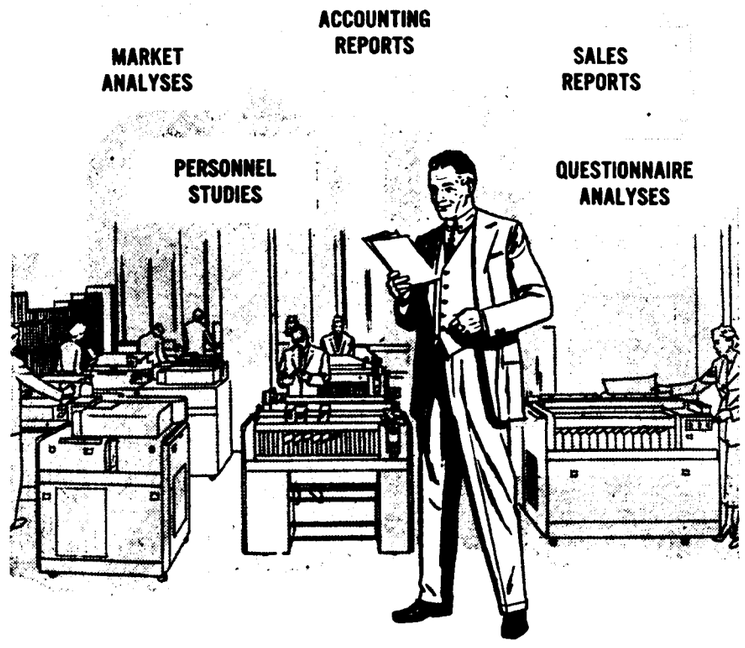
TABLE I

INDIA AND THE MIDDLE EAST:

NATIONAL AND PER CAPITA INCOME IN 1949

Country	National Income Unit	National Income Amount	1949 National income in million U.S. $	Population mid-year 1949 ('000)	1949 income per capita U.S. $
India	**Million rupees**	**93,200**	**92,572**	**346,000**	**57**
Egypt	Million £ (E)	650	1,989	20,045	100
Iran	Thousand million rials	42	1,450	17,073	85
Iraq	..	..	424	4,990	85
Israel	Million £ (I)	208	395	1,016	389
Lebanon	..	..	155	1,240	125
Saudi Arabia	..	..	240	6,000	40
Syria	..	..	340	3,407	100
Turkey	..	..	2,452	19,623	125
Yemen	..	..	280	7,000	40

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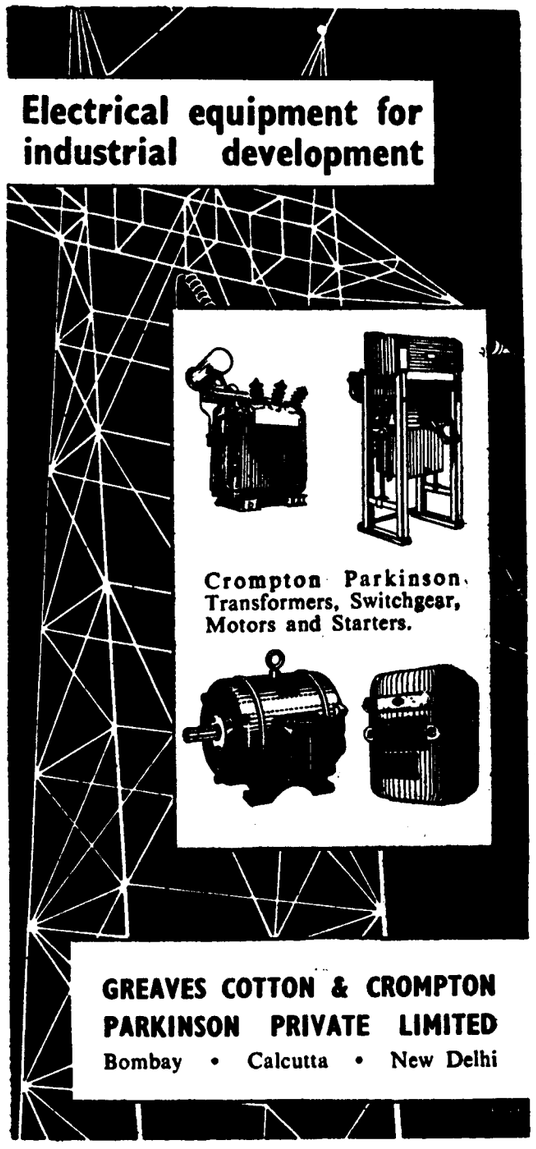
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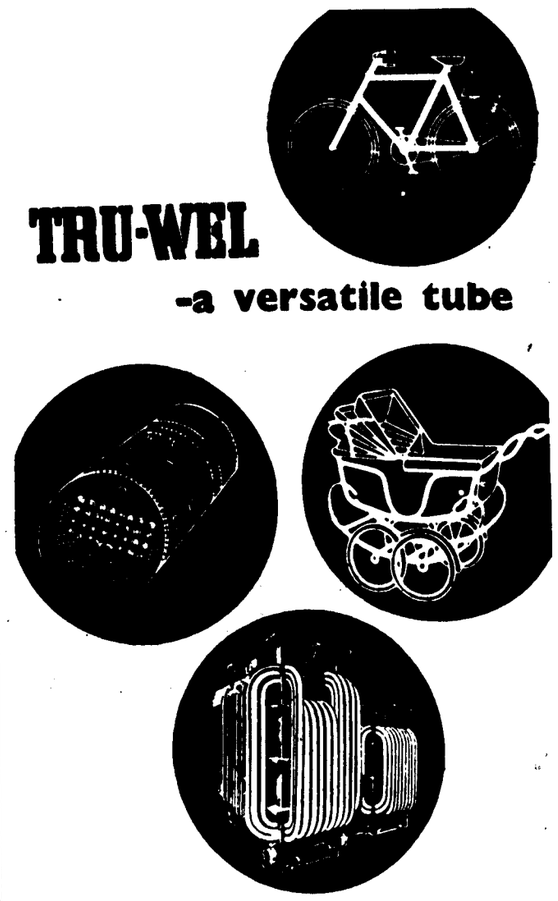
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In 1957, Statistical Office of the United Nations brought out another paper entitled "Per Capita National Product of Fifty-five countries: 1952-54". In this paper, per capita income figures appeared of only four Middle East countries, namely, Egypt, Israel, Lebanon and Turkey. In the same year, an International Industrial Development Conference was held at San Francisco. This conference was sponsored by Time-Life International and Stanford Research Institute. At this Conference was distributed a paper entitled "Facts and Figures" which was a handsome collection of the salient economic indicators, including national income statistics, of 76 countries. Latest per capita income figures obtained from this publication, and those obtained from the U.N. publications described above, are shown in the Table II below:

TABLE II.

Per Capita Income in U.S. Dollars: 1949-1956

Country	1949	1952-54	Latest
India	57	60	72
Iran	85	..	100
Iraq	85	—	195
Israel	389	470	540
Lebanon	125	260	269
Saudi Arabia ..	40	—	166
Syria	100	—	111
Turkey	125	—	276
Yemen	40	..	..

One fact which strikes the eye at once is the phenomenal rate of progress since 1949 in Lebanon, Turkey and Israel. Israel is no longer in the class of countries having a per capita income of less than 500 U.S. dollars. It is now vying with countries having per capita income between 500-749 U.S. dollar such as Germany and Netherlands. Similarly, Lebanon and Turkey have changed their class because they have more than doubled their per capita incomes in less than a decade and have moved into the class of countries having a per capita income ranging between 250 and 499 U.S. dollars. The gap between India and all the other Middle Eastern countries has widened because the rate of economic progress in all these countries has been much faster than in the Indian Union. Even Saudi Arabia has multiplied its per head income fourtimes since 1949. It may be remarked here that the new-found prosperity of the Middle East hinges on only one commodity, i.e., oil. In the oil States of Saudi Arabia, Iran, Iraq, Bahrein, and Kuwait, the revenues from the sale of oil have risen at such a fast rate that the Governments are hard put to discover local opportunities for productive investment.

In Table III below are set out figures of investment as a percentage of national income between 1950-57 for Egypt, Iran, Iraq, Israel, Lebanon, Syria and Turkey. It will be seen that Israel tops the list in investment. The rate of investment as a percentage of gross national product has risen from 24.7 per cent in 1953 to 31.1 per cent in 1956. Next comes Iraq for which

TABLE III.

INDIA AND THE MIDDLE EAST: RATE OF INVESTMENT, 1950-57

Country	1950	1951	1952	1953	1954	1955	1956	1957
LEBANON								
(Million of Lebanese Pounds)								
Net National Product	—	—	1090	1137	1167	1303	1465	—
Total Capital investment	—	—	150	155	165	206	225	—
Capital investment as a per cent of net national product	—	—	13.8	13.6	14.1	15.8	15.4	—
SYRIA								
Fixed Capital formation as a percentage of G.N.P. ..	13.3	15.6	11.2	15.4	17.0	21.0	16.5	—
Savings as a percentage of G.N.P.	13.3	9.2	7.9	13.8	12.3	15.0	16.8	—
TURKEY								
(Millions of Turkish liras)								
G. N. P.	—	—	—	16821	15468	17422	18785	—
Total investment	—	—	—	2098	2453	3062	3429	—
Total investment as a percentage of G.N.P.	—	—	—	12.5	15.9	17.6	18.3	—
EGYPT								
(Millions £ (E))								
National Income	818	968	873	878	969	1029	1065	—
Investment	115	143	116	116	135	122	110	—
Percentage of investment on national income	14.1	14.8	13.3	13.2	13.9	11.86	10.3	—
IRAN								
(Million of Dollars at 1955 prices)								
N. I.	—	—	—	—	—	2160	2290	2490
Investment	—	—	—	—	—	240	315	405
Investment as a percentage of national income	—	—	—	—	—	11.1	13.8	16.3
IRAQ								
(Millions of dinars)								
N. I.	—	—	—	—	—	292	—	—
Investment	—	—	—	—	—	80	—	—
Investment as a percentage of national income	—	—	—	—	—	27.4	—	—
ISRAEL								
(Millions of Israeli Pounds)								
G. N. P.	—	—	—	1349	1643	1784	1976	—
Gross investment	—	—	—	333	416	551	615	—
Ratio				24.7	25.3	30.9	31.1	—

estimates for the year 1955 only are available and whose investment as a percentage of national income is 27. In the case of Lebanon and Turkey also, the capital investment as a percentage of net income product has risen steadily. In Lebanon, it has risen from 13.8 per cent in 1952 to 15.4 per cent in 1956 and in Turkey from 12.5 per cent in 1953 to 18.3 per cent in 1956. This statement corroborates the thesis that the primary cause for the prosperity of the Middle East countries is the high rate of investment which has more than wiped out the pressure of population. How far the economies of these countries will be able to maintain this steady rise in rate of investment in the coming years is difficult to predict. The answer depends primarily on oil output. The picture is different in the case of India, where the economy is currently passing through a severe strain because the rate of investment was stepped up from 6 in 1955-56 to 9 per cent in 1958-59 of the national income.

RATES OF GROWTH IN NATIONAL AND PER CAPITA INCOME: 1950-56

The graph on page 40 traces the trends in national income and per capita income in India and five Middle East countries during the period 1950-56. With the exception of Lebanon and Egypt, national income as well as per capita income has risen by more than 7 per cent in all these countries. Egypt shows a rate growth in national income which is slightly higher than India's, but in per capita terms both India and Egypt show the same rate of growth at 2.4 per cent.

The rate of rise in per capita income is the highest in Israel. Next comes Turkey at 10.7 per cent per annum followed by Iraq at 7.1 per cent. The pressure of population has been the greatest in non-oil countries specially Egypt and Jordan where the changing climatic conditions play a dominant role in shaping the course of the economy which in both cases is highly dependent on agriculture.

PRESSURE OF POPULATION

On feature which is common to India and the Middle East is the "explosive" rate of rise in population. The increasing pressure of population tends to retard the rate of economic growth since with every rise in population the capital requirements for maintaining even the 'status quo' go on increasing. The rate of capital formation needs to be much higher than the rate of growth in population for raising the standard of living of the people.

The total population of the countries constituting the Middle East is around 105 million as against the present population of the Indian Union at 392 million. In other words, the total population of the Middle Eastern countries is slightly less than three times the total population of India. In area again, the Middle East covers more than three times the total area of the Indian Union. As against the total Indian area at 329 million hectares, the Middle East occupies about 1,000 million hectares. It needs to be remembered, however, that vast areas of land in the Middle East are sandy tracts. The Indian Union has its desert in Rajputana but the percentage of desert land to total cultivated land is much higher in the case of the Middle East than in the Indian Union.

As Table IV below shows, all the countries, with the exception of Aden Colony, Bahrein and Lebanon, are less densely populated than the Indian Union. These figures again highlight the presence of vast sandy lands in the Middle East and hardly focus attention on the ever-rising pressure of population in the Middle East which can be properly guaged from Table V below which compares the annual rate of rise in India and

TABLE IV

INDIA AND THE MIDDLE EAST:

DENSITY OF POPULATION

S. No.	Country	Area (In thousand hectares)	Population (In thousands)	Density of Population
1.	**India**	**328888**	**387000**	**1.18**
2.	Egypt	100000	23410	0.23
3.	Iran	163000	21977	0.13
4.	Iraq	44444	4842	0.11
5.	Israel	2070 (56)	1813	0.88
6.	Jordan	9661	1471	0.15
7.	Lebanon	1040	1450	1.39
8.	Saudi Arabia	160000	7000 (53)	0.04
9.	Sudan	250582	10226	0.04
10.	Syria	18448	3970	0.22
11.	Turkey	77698	24797	0.32
12.	Yemen	19500	4500 (49)	0.23
13.	Aden Colony	21	143	6.81
14.	Aden Protectorate	29008	600	0.02
15.	Bahrein	60	122	2.03
16.	Cyprus	925	526	0.57
17.	Kuwait	1554	206 (57)	0.13
18.	Muscat & Oman	21238	550	0.03
19.	Qatar	2201	40	0.02
20.	Trucial Coast	8360	80	0.01

the Middle East countries between 1937 and 1957. The fourth column in this table marked (A) gives the annual rate of rise, including the rise due to immigration. The fifth column marked (B) excludes the effects of immigration. It is obvious from this table that with the exception of Saudi Arabia, the annual rate of rise in every Middle East country is significantly higher than the Indian Union. India's rate of growth works out at 1.5 per cent as against 2.40 per cent in Israel, 2.0 per cent in Egypt, Jordan, Lebanon and Syria, and 3.0 per cent in Turkey. It may be assumed that the population in the whole of the Middle East is rising at nearly 2.25 per cent per annum. At this rate the population of the Middle East will double in 31 years and will be 1/12th of the present total population of the world.

TABLE V

INDIA AND THE MIDDLE EAST:

GROWTH IN POPULATION

Country	Population in Millions		Annual Rate of rise	
	1937	1957	(A)	(B)
India	**304**	**392**	**1.45**	**1.5**
Egypt	16.0	24.0	2.50	2.0
Iran	16.2	19.2	0.92	—
Iraq	3.7 (1941)	6.5	4.75	—
Israel	1.174	1.937	8.125	2.4
Jordan	—	1.527	--	2.0
Lebanon	0.925	1.525	3.25	2.0
Syria	2.4 (1948)	4.0	3.51	2.0
Turkey	16.7	25.5	2.14	3.0
Saudi Arabia	—	--	--	0.8

Table VI below shows the minimum capita requirements needed at various rates of growth of population and capital coefficients for maintaining the per capita income constant. It will be seen from this table that in the Middle East as much as 9 per cent of the national income needs to be saved every year in order to maintain the level of per capita income. This esti-

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ESTIMATES OF PER CAPITA NET NATIONAL PRODUCT OF 55 COUNTRIES EXPRESSED IN US DOLLARS: ANNUAL AVERAGE 1952-54

At Factor Cost

Range in US dollars.	AFRICA Country.	Per capita.	AMERICA Country.	Per capita.	ASIA Country.	Per capita.	EUROPE Country.	Per capita.	OCEANIA Country.	Per capita.
Over 1000			United States	1870			Switzerland	1010		
			Canada	1310						
750-1000							Sweden	950	New Zealand	1000
							Luxemburg	890	Australia	950
							Belgium	800		
							United Kingdom	780		
							Iceland	780		
							Denmark	750		
500-749			Venezuela (1)	540			France	740		
							Norway	740		
							Finland	670		
							Germany	510		
							Netherlands	500		
250-499	Union of South Africa	300	Argentina	460	**Israel**	**470**	Ireland	410		
			Puerto Rico	430	Malaya (1)	310	Austria	370		
			Chile	360	**Lebanon**	**260**	Italy	310		
			Cuba	310						
			Colombia	250						
			Panama	250						
Under 250	**Egypt**	**120**	Brazil	230	**Turkey**	**210**	Greece	220		
	Rhodesia & Nyasaland	100	Mexico	220	Japan	190	Portugal	200		
	Belgian Congo	70	Jamica (2)	180	Philippines	150				
	Kenya	60	Dominican Republic	160	Ceylon	110				
	Uganda	50	Guatemala	160	Thailand (1)	80				
			Ecuador	150	Korea	70				
			Honduras	150	Pakistan	70				
			Paraguay	140	**India**	**60**				
			Peru	120	Burma	50				

(1) 1952 and 1953
(2) 1952

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NET NATIONAL OUTPUT AT 1948-49 PRICES

(In Rs. abja*)

	1956-57†	1955-56	1954-55	1953-54	1952-53	1951-52	1950-51	1949-50	1948-49
1. Agriculture, animal husbandry and ancillary activities (a)	52.6	50.2	50.3	49.8	46.0	44.4	43.4	43.6	42.5
2. Mining, manufacturing and small enterprises	18.4	17.6	17.0	16.5	15.8	15.2	14.8	14.6	14.8
3. Commerce, Transport and Communications	20.8	19.7	19.1	18.3	17.9	17.3	16.6	16.4	16.0
4. Other Services (b)	18.2	17.3	16.4	15.7	15.0	14.3	13.9	13.8	13.4
5. Net domestic product at factory cost	110.0	104.8	104.8	100.3	94.7	91.2	88.7	88.4	86.7
6. Net earned income from abroad	0.1	0.0	0.0	0.0	—0.1	—0.2	—0.2	—0.2	—0.2
7. Net national output at factory cost= national income	110.1	104.8	102.8	100.3	94.6	91.0	88.5	88.2	86.5

(a) Including forestry and fishery.
(b) Comprising professions and liberal arts, Government services (administration) domestic service and house property.
* Abja=100 crores.
†Preliminary

NET NATIONAL OUTPUT AT CURRENT PRICES

(In Rs. abja*)

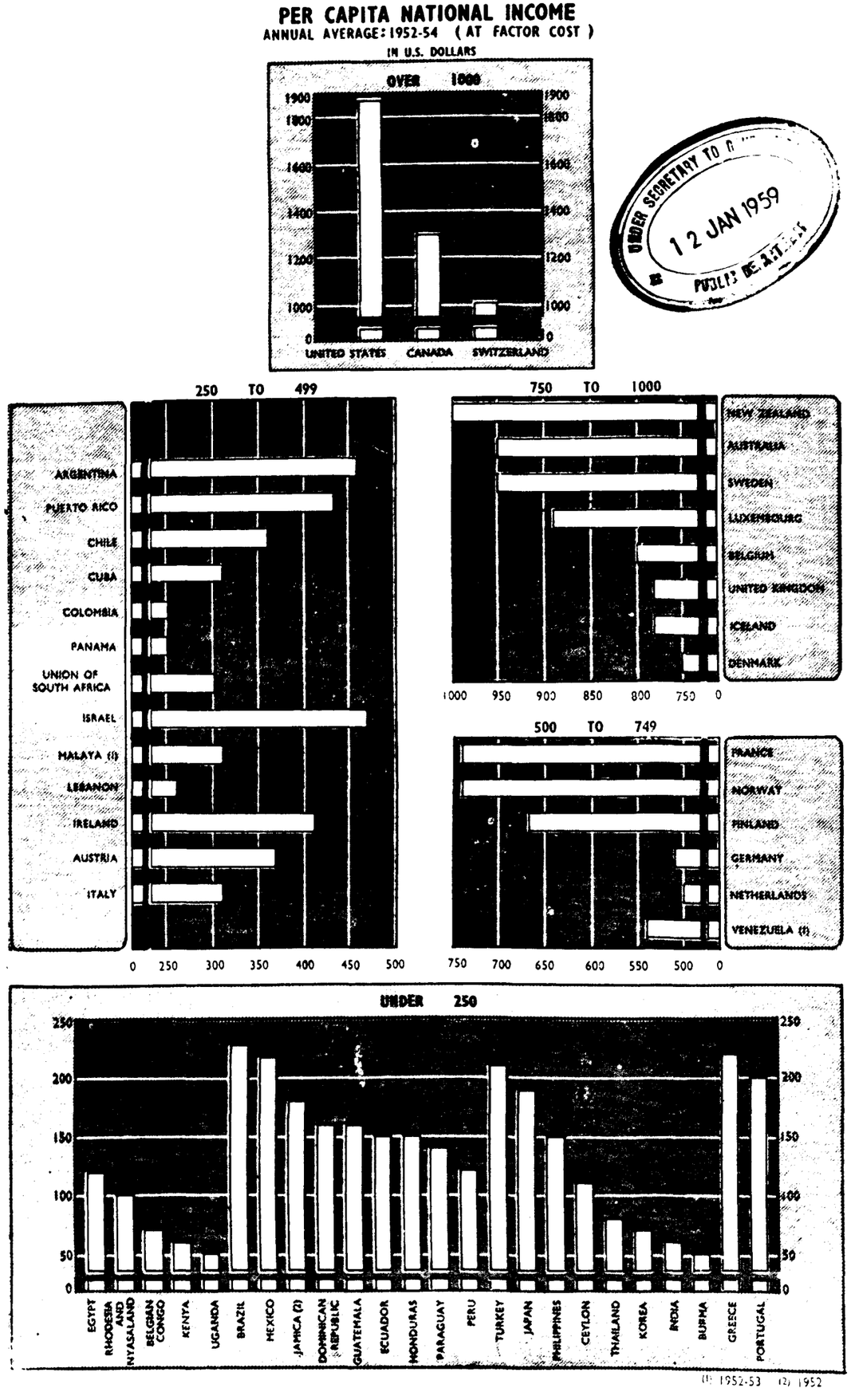
	1956-57†	1955-56	1954-55	1953-54	1952-53	1951-52	1950-51	1949-50	1948-49
1. Agriculture, animal husbandry and ancillary activities(a)	56.9	45.3	43.5	53.1	48.1	50.2	48.9	44.9	42.5
2. Mining, manufacturing and small enterprises	19.7	18.5	18.0	17.7	17.0	16.8	15.3	15.0	14.8
3. Commerce, transport and communications	19.3	18.8	18.1	18.0	17.8	17.9	16.9	16.6	16.0
4. Other services (b)	18.1	17.3	16.5	16.0	15.4	15.0	14.4	13.8	13.4
5. Net domestic product at factor cost	114.0	99.9	96.1	104.8	98.3	99.9	95.5	90.3	86.7
6. Net earned income from abroad	0.1	0.0	0.0	—0.1	—0.2	—0.2	—0.2	—0.2	—0.2
7. Net national output at factor cost= national income	114.1	99.9	96.1	104.8	98.2	99.7	95.3	90.1	86.5

(a) Including forestry and fishery.
(b) Comprising professions and liberal arts, Government services (administration) domestic service and house property.
* Abja=100 crores.
† Preliminary.

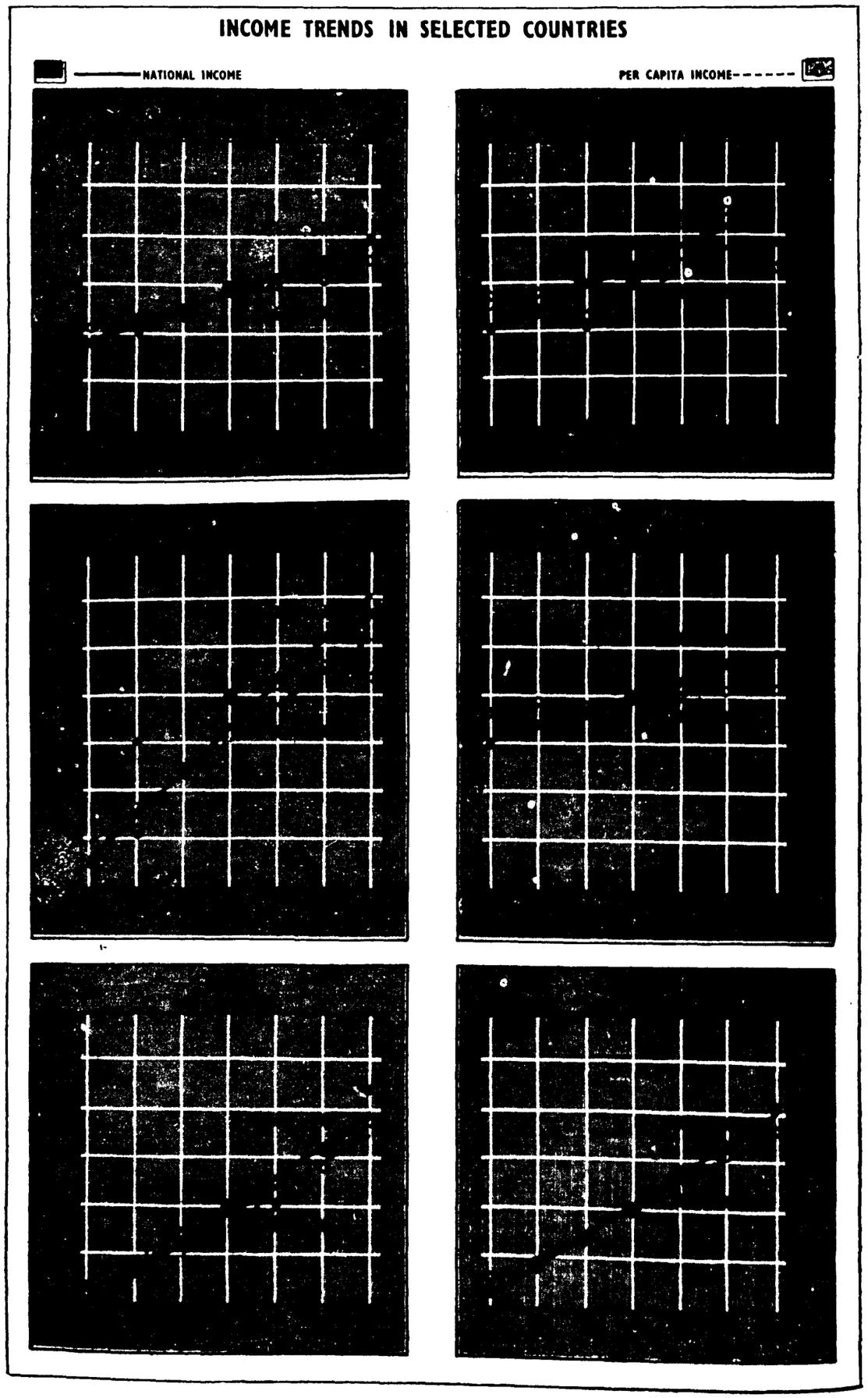
NET NATIONAL OUTPUT AT CURRENT AND CONSTANT PRICES

	1956-57†	1955-56	1954-55	1953-54	1952-53	1951-52	1950-51	1949-50	1948-49
Net output in Rs. abja*									
1. At current prices	114.1	99.9	96.1	104.8	98.2	99.7	95.3	90.1	86.5
2. At 1948-49 prices	110.1	104.8	102.8	100.3	94.6	91.0	88.5	88.2	86.5
Per capita net output in Rupees									
3. At current prices	294.3	260.8	254.2	280.7	266.4	274.0	265.2	253.9	246.9
4. At 1948-49 prices	284.0	273.6	271.9	268.7	256.6	250.1	246.3	248.6	246.9
Index number of net output with 1948-49 as base									
5. At current prices	131.9	115.5	111.1	121.2	113.5	115.3	110.2	104.2	100.0
6. At 1948-49 prices	127.3	121.2	118.8	116.0	109.4	105.2	102.3	102.0	100.0
Index number of per capita output 1948-49 as base									
7. At current prices	119.2	105.6	103.0	113.7	107.9	111.0	107.4	102.8	100.0
8. At 1948-49 prices	115.0	110.8	110.1	108.8	103.9	101.3	99.8	100.7	100.0

† Preliminary.
* Abja=100 crores.



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mate assumes the capital output ratio in the Middle East at 4.0 and the rate of growth in population at 2.25 per cent. Luckily "the oil states" of the Middle East have been able, during the last eight years, to save at rates which are significantly higher than 9 per cent of the national income; thus they have been able to raise their standards of living in terms of per capita income. On the other hand, those States which are not primarily dependent on oil for resources are under great pressure. In this list may be included the States of Egypt, Jordan, Aden Protectorate, the Trucial Coast and Yemen.

TABLE VI

MINIMUM CAPITAL REQUIREMENTS TO MAINTAIN THE PER CAPITA INCOME CONSTANT

Rate of Rise in Population

Capital Output Ratio	0.0	1.00	1.25	1.50	2.0	2.25	2.50	3.0
2.00	0.0	2.000	2.500	3.000	4.000	4.500	5.000	6.000
2.50	0.0	2.500	3.125	3.750	5.000	5.625	6.250	7.500
3.00	0.0	3.000	3.750	4.500	6.000	6.750	7.500	9.000
3.50	0.0	3.500	4.375	5.250	7.000	7.875	8.750	10.500
4.00	0.0	4.000	5.000	6.000	8.000	9.000	10.000	12.000

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	Kilograms per day											
INDIA : (1)												
1934-38	143	8	13	18	3	4(2)	2(2)	2(3)	1,970	8		56
1949-50	114	—	10	—	2	2(2)	2(2)	3(3)	1,620	7		42
1952-53	120	10	12	20	1	2(2)	2(2)	3(3)	1,710	6		47
1953-54	135	13	10	22	1	2(2)	2(2)	4(3)	1,900	6		51
1954-55	129	12	15	22	1	2(2)	2(2)	4(3)	1,880	6		51
EGYPT:												
1934-38	182	5	13	19	7	2(4)	2(4)	5	2,450	8		73
1952-53	167	8	15	9	12	3(4)	2(4)	4(1)	2,320	7		67
1953-54	189	9	13	9	11	3(4)	2(4)	4(1)	2,520	7		73
1954-55*	190	9	14	10	12	3(4)	2(4)	4(1)	2,560	7		73
ISRAEL:												
1952-53	151	32	21	5	11	4	5	15	2,740	—		88
1953-54	152	39	22	3	11	4	5	16	2,850	16		87
1954-55*	141	45	24	15	18	4	5	17	2,860	16		89
TURKEY:												
1934-38	193	6	5	7	17	1	2	6	2,450	9		79
1949-50	187	12	7	7	17	1	2	6	2,490	9		78
1952-53	195	30	8	9	17	1	2	7	2,650	9		84
1953-54	194	34	9	11	18	1	2	6	2,670	9		86
1954-55	195	32	7	10	16	1	2	6	2,650	8		84
1955-56	202	31	9	9	16	1	2	5	2,670	8		87
CYPRUS:												
1934-38	169	21	9	9	12	2	2	9	2,350	9		69
1948-49	171	42	10	11	17	2	1	10	2,500	10		69
1955	149	36	16	10	28	2	2	13	2,590	13		68

(1) 1934-38 including area now Pakistan; (2) including milk for making Butter; (3) Excluding butter.

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Authorised	1,00,00,000
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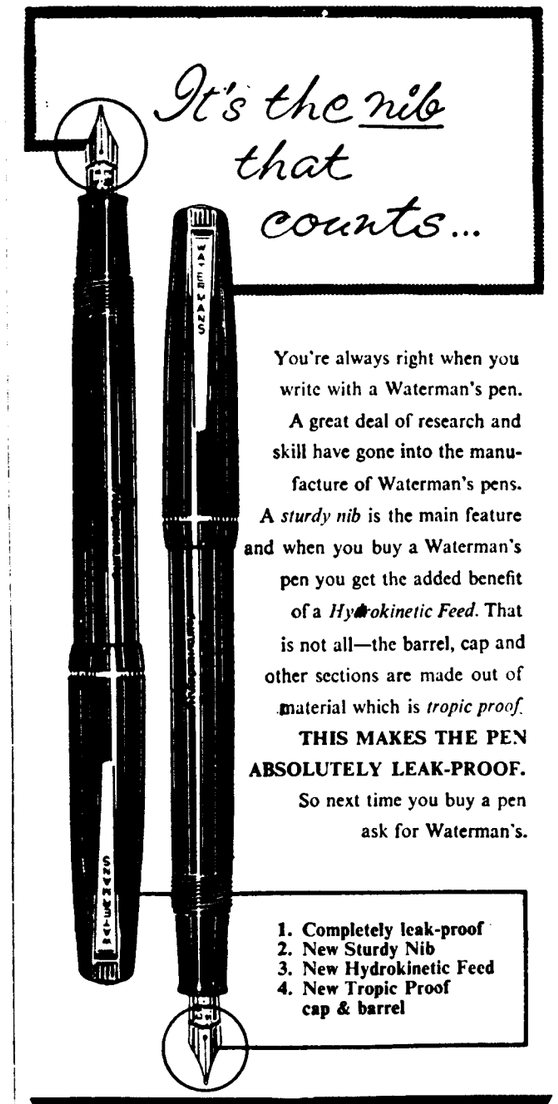
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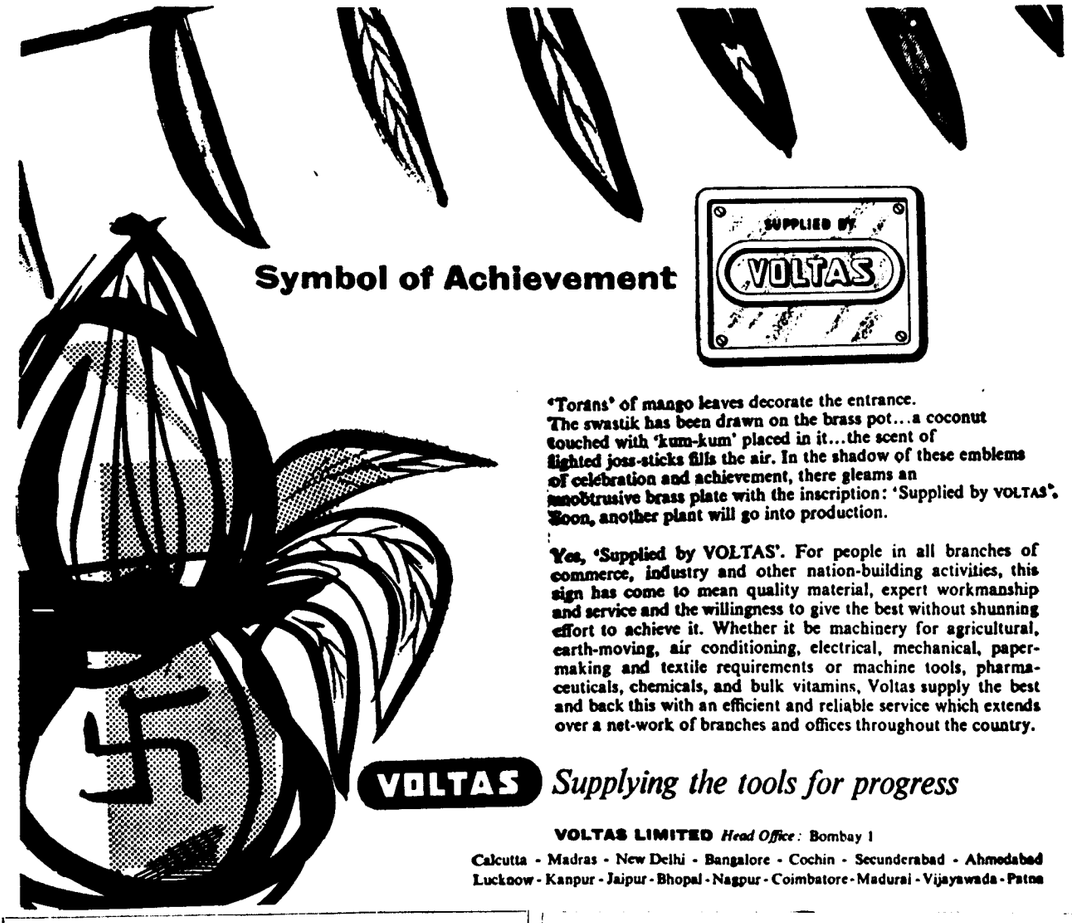


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AREA, POPULATION AND FOOD AVAILABILITY IN TWENTY YEARS

Country	Area (Sq Miles)	Population Year	Population Millions	Density of Population (Per Sq. Mile)	Crude Birth Rate	Crude Death Rate	Annual Rate of increase 1953-56%	Average Daily Cal. Supply (Per head)	Average Daily Protein (Per head)	Average Daily Animal Protein (Per head)
Iran	629,344	1957	19.3	31	37.8	8.3	—	—	—	—
Iraq	171,598	1957	6.5	38	—	—	—	—	—	—
Israel	7,992	1957	1.9	238	27.9	6.5	3.5	2860+	89+	30+
India	**1,269,838**	**1957**	**392.4**	**309**	**24.2**	**11.8**	—	**1880+**	**51+**	**6+**
Lebanon	4,015	1957	1.5	374	—	—	2.3	—	—	—
Turkey	299,992	1957	25.5	83	—	—	—	—	—	—
Egypt	386,100	1957	24.0	62	—	—	—	2580*	75*	13*
Jordan	37,301	1957	1.5	41	39.7	8.6	2.7	—	—	—
Cyprus	3,571	1957	0.5	140	26.3	6.3	1.3	—	—	—
Syria	71,228	1957	4.1	58	24.3	5.6	1.2	—	—	—
Bahrein	232	1956	0.122	526	—	—	1.7	—	—	—
Kuwait	6,000	1956	0.205	34	—	—	2.3	—	—	—

+1954-55.
* 1954-55—1955-56.

MANPOWER FOR PLAN SCHEMES IN ANDHRA PRADESH

More and more qualified and trained hands are required for implementing the Five-Year Plan Schemes and in Andhra Pradesh the Department of Technical Education offers facilities of training that are expected to meet the basic requirements of the State in this Direction.

Besides the Government Technical and vocational institutions situated in various parts of the State, there are numerous Technical and Industrial Schools and cultural institutions that receive grants in aid.

Under the Second Plan an amount of Rs. 115.021 lacs is to be spent on expanded technical education facilities in the State.

The All India Council of Technical Education, besides sanctioning a 20% increase in the intake to various degree and diploma courses in Engineering, has also approved of a scheme for the expansion of Polytechnic institutions in Andhra Pradesh.

This will result in increasing the intake from 400 obtaining in 1955-'56 to 575 by the end of the Plan for degree courses in Engineering and from 600 to 1250 for diploma courses in the three basic branches of Engineering, besides an intake of 200 for other Diploma courses, such as Automobile Engineering, Telecommunications, Fisheries Technology, and Navigation and Mining Engineering.

DEPARTMENT OF INFORMATION & PUBLIC RELATIONS, Andhra Pradesh

SALIENT ECONOMIC INDICATORS

	India	Egypt	Iran	Iraq	Israel	Jordan	Leba-non	Saudi Arabia	Sudan	Syria	Tur-key
(1) POPULATION											
Million	381.7h	23.4	21.8h	4.8	1.8	1.4e	1.5	6.0e	a	3.9h	24.8
Annual growth %	1.5	2.0	a	a	2.4L	2.0	2.0e	0.8e	a	2.0e	3.0
(2) GROSS NATIONAL PRODUCT											
Per capita (U.S. Dollars) ..	72	135	100	195	540	96	269	166	100	111	276
Annual growth %	2.0	a	a	a	5.3d	a	1.1	a	a	a	1.6
Total size (Billions) ..	27.40	3.07	2.11	0.96	0.94	0.14	0.38	1.16	0.89	0.45	6.46
Annual growth % ..	3.5ek	a	a	a	13.5k	a	3.1ek	a	a	a	4.6
Fixed capital formation (% of G.N.P.)	a	a	a	a	22g	a	a	a	a	a	15
COMPOSITION OF CAPITAL FORMATION											
Private enterprise % ..	70f	a	a	a	50g	a	a	a	a	a	a
Public enterprise % ..)	30f	a	a	a	24g	a	a	a	a	a	a
General Government %)		a	a	a	26g	a	a	a	a	a	a
COMPOSITION OF GROSS NATIONAL PRODUCT											
Agriculture %	46g	35g	a	a	13	a	19g	a	a	a	42
Manufacturing %	18jg	11g	a	a	21i	a	12ig	a	a	a	14
Trade %	18g	8g	a	a	11	a	30g	a	a	a	12
Government %	5g	16g	a	a	20	a	6g	a	a	a	8
Services %	7g	10g	a	a	11	a	10g	a	a	a	4
Others %	6g	20g	a	a	24	a	23g	a	a	a	20
(3) OTHER INDICATORS											
(a) Power Consumption											
Total (Million metric tons)	45.2	5.3	a	1.3g	1.8	0.1	0.7	a	0.4	0.7	7.6
Per capita (tons) ..	0.1	0.2	a	0.3g	1.1	0.1	0.5	a	0.1	0.2	0.3
(b) Steel Production (million metric tons)	1.7	—	—	—	—	—	—	—	—	—	0.2
(c) Manufacturing enter-prises ('000s)	6.4f1	3.7g2	a	22.5g	7.4b	a	a	a	a	a	3.9g4
(d) District of Labour Force											
Agriculture %	71c	51 3	a	a	a	a	a	a	a	a	a
Manufacturing % ..	9c	8 3	a	a	a	a	a	a	a	a	a
(e) Foreign Trade 1956											
Exports (Million dollars)	1269	409	250e	477	107	7e	40	835	192	158	305
Imports (,,)	1712	534	300e	321	364	55e	237	270	130	188	407
Per Capita Imports (Dollars)	4	23	14	67	202	40e	163	45e	a	48	16

— Zero or negligible.
(a) Figures *not* available.
(b) 1950. (c) 1951.
(d) 1950-54 adjusted to Account for immigration.
(e) Estimated.
(f) 1953. (g) 1954. (h) 1955.
(L) Jewish population only.
(i) Including mining and quarrying.
(j) Including construction.
(k) 1950-54.
1 Those employing 20 or more and using power.
2 Employing 10 or more.
3 1947.
4 'Major' industries only.

Note:
(1) Population: Million—1956.
Annual growth: 1950-55 (% per year).
(2) Per capita product: 1955 (estimate).
Annual growth: 1951-55 (% per year).
(3) Total size: 1955 Gross National Product.
Average annual rate of growth at constant prices, 1951-55 (% per year).
(4) Gross fixed capital formation as % of G.N.P., 1955 %.
OTHER INDICATORS
Power consumption, 1955 (in energy equipment of metric tons of coal) Crude Steel Production 1955.

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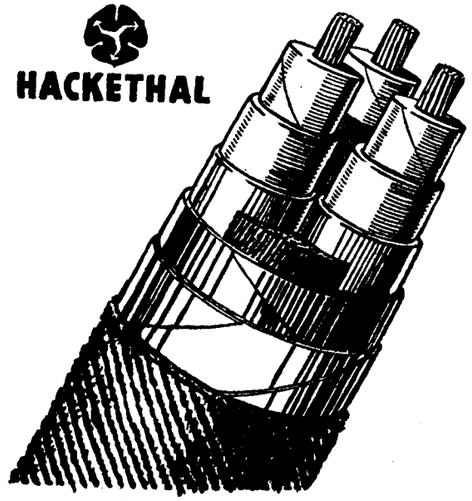
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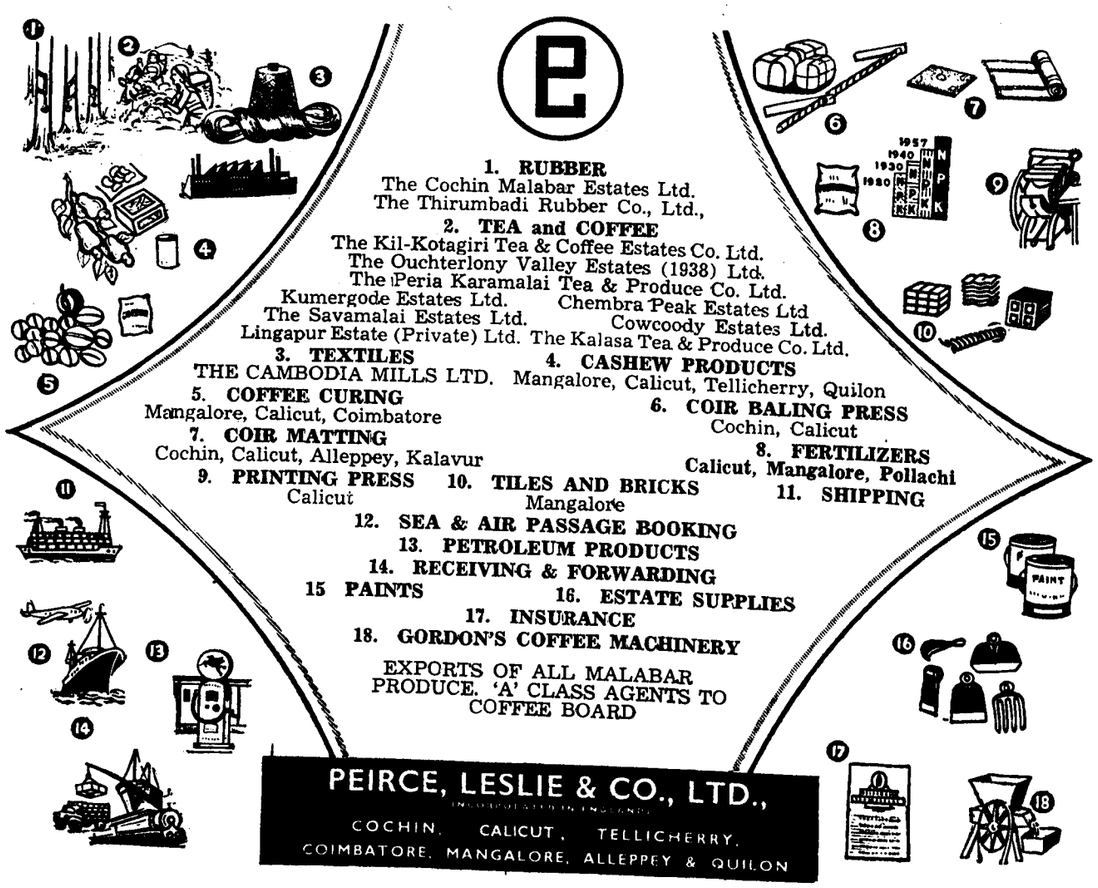
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Agriculture and Animal Husbandry

FROM the Ganges to the Nile, the intervening arid tracts notwithstanding, a panoramic picture of agriculture and animal husbandry unfolds itself in all its similarity and diversity. This picture is reflected in a series of tables in this section, constructed from the statistics available in the FAO's Yearbook for 1957 dealing with food and agricultural production. It will be seen from the figures in these tables that more than the elements of similarity, it is the elements of contrast in the agricultural patterns of India and the Middle East that are particularly striking. Of course, the elements of similarity are easily told: Both in India and in the Middle East generally (apart from Egypt and Israel) cultivation is still carried out with inadequate implements and by traditional methods; both yield per hectare and yield per capita are generally far lower than in China or Japan. The contrasting elements, interesting as they are, merit greater elaboration. It thus happens that in this comparative study covering this country and the twelve agriculturally relevant countries of the Middle East, namely, Sudan, Egypt, Syria, Turkey, Cyprus, Israel, Lebanon, Jordan, Saudi Arabia, Iraq, Iran and the Aden Protectorate, the distinctive elements of their agricultural economies get highlighted under the following heads: Land Utilisation and Man-Land Situation; Irrigation and Productivity; Patterns of Crop Production; Livestock Population and Products; and Per Capita Food Production and Supplies.

Land Utilisation and Man-Land Situation

THE most striking feature in the pattern of land utilisation in India and in the Middle East as a region is that in the former 51.5 per cent of the geographical area has already been brought under use for agriculture and in the latter only 28.7 per cent of the corresponding geographical area is agricultural area. It will be seen from Table 1 elsewhere in this section that the entire Middle East as a region has more than 2½ times the land area of this country. Although 28.7 per cent represents nearly 246 million hectares, it is to be noted that the larger part of this agricultural area in the Middle East consists of permanent meadows and pastures. If this area under pastures is left out of account, the area available for crop cultivation is nearly 63.4 million hectares, representing just 7.4 per cent of the corresponding geographical area. For the purpose of figuring out the comparative position in the matter of pressure of population on land, it is the latter area, namely, arable land for crop cultivation, that is taken into account here. It will be seen from Table 5 elsewhere in this section that the cropped area per head of population under cereals and pulses is about the same in India as in the Middle East as a whole; in the former it is 0.27 hectare and in the latter 0.26 hectare. From the point of view of foodgrains production, the currently available per capita area of land is thus identical in both India and the Middle East; the only differentiating element here is that the 0.27 hectare of land in India produces, on an average, 205 kilograms whereas the 0.26 hectare in the Middle East produces 270 kilograms. It would appear that, on an average, crop land in the Middle East is at least a third more productive than crop land in general in this country. Of course, the average in respect of the Middle East conceals some pronounced variations among the different countries in the region.

If pasture lands are taken into account in appraising the availability of agricultural land in India and the Middle East, it will be however seen that the latter region is in a comparatively more favourable position. In India the per capita availability of meadows and pastures is comparatively very little and this is a very disadvantageous factor in the situation. Among the different countries of the Middle East, Syria, Turkey, Cyprus and Saudi Arabia alone have some very high proportions of utilisation of their respective geographical areas for agricultural purposes; these high proportions of agricultural utilisation in these countries are due to the high proportions of pasture lands in them. In so far as a good part of these meadows and pastures is convertible into arable land for crop cultivation, the position in respect of potential land utilisation in these countries of the Middle East is distinctly more favourable than in India. In that region as a whole the area of land which is now unused but is potentially productive also accounts for a considerable proportion; this area is of the order of 90.3 million hectares representing 10.5 per cent of the relevant geographical area. In India, on the other hand, apart from the permanent meadows and pastures, the area of land which is classified as culturable waste and which is potentially productive is of the order of nearly 22.9 million hectares representing 7.0 per cent of her geographical area. It would also appear from the figures in Tables 1 and 2 that, from the point of view of possible maximum utilisation of the respective land areas for agricultural purposes, the position in the Middle East in general and in some of the countries—Sudan, Syria. Iraq and Iran—in particular, is distinctly more favourable than in India.

MAN-LAND RATIOS

This picture of land utilisation in India and the Middle East leads on to an examination of the man-land position in the two regions with particular reference to the availability of agricultural land. Table 2 elsewhere in this section presents the position in regard to the present per capita agricultural area and the maximum possible per capita agricultural area including unused but potentially productive land. It will be seen from the figures in that table that the present per capita agricultural area including permanent meadows and pastures in India is 0.44 hectare as against 2.40 hectares in the Middle East as a whole. The maximum possible per capita agricultural area including unused but potentially productive land is only 0.50 hectare in India as against 3.29 hectares in the Middle East as a whole. Of course, these per capita figures have been worked out on the basis of the present populations in the two regions; since utilisation of the potentially productive land will take a number of years, the increases in populations in the meanwhile would also have to be taken into account for working out the maximum possible per capita agricultural areas that will be available after a certain period in both the regions. But, then, the relative position in this respect between India and the Middle East will not have significantly changed in all likelihood.

The position in regard to the man-land ratios can be seen separately for each country in the Middle East from the figures in Table 2. The figures show that the per capita agricultural area at present available in Saudi Arabia and the Aden Protectorate is particularly large, accounting for 13.28 hectares in the former and 27.45 hectares in the latter; but it may be noted here that in either country the proportion of permanent meadows and pastures in the total agricultural area is very large. As for the other countries of the Middle East region, the man-land position is far more favourable than in India. In countries such as Sudan, Syria, Turkey, Cyprus, Jordan, Iraq and Iran, the per capita agricultural areas at present available are 3.04 hectares, 2.73 hectares, 2.17 hectares, 1.00 hectares, 1.11 hectares, 1.31 hectares and 1.22 hectares respectively. Only in three countries of this region, namely, Egypt, Israel and Lebanon, is the man-land position distinctly less favourable

than in India; the respective figures of per capita agricultural areas at presnt available in those three countries are 0.11 hectare, 0.33 hectare and 0.19 hectare respectively. These disparities in respect of some countries of the Middle East notwithstanding, there is the striking feature that in this region as a whole the pressure of population on land, especially agricultural land, is far less than in India. From this point of view alone it may be broadly inferred that India is less densely populated than Egypt, Israel and Lebanon.

Irrigation and Productivity

THERE is also another striking element of contrast between India and the Middle East and this is in respect of irrigation of arable land. The position in this respect can be seen from Table 3 which gives figures of irrigated area in relation to the arable land area in the different countries. The position in respect of India is that although her arable land area accounts for 158.3 million hectares, the area irrigated by canals, tanks and wells together accounts for only 22.7 million hectares as of 1956, representing 14.4 per cent of her total arable land area. On the other hand, in the Middle East as a whole the irrigated area is as much as 12.2 million hectares out of a total arable land area of 62.5 million hectares; the irrigated area represents 19.3 per cent of the total arable area. It would thus appear that in this respect also the position in the Middle East is currently more favourable for agriculture than in India. Of course, the comparative position in respect of irrigation is not uniform in all the countries of the Middle East. For example, in Syria, Turkey, Jordan and Iran, the proportion of irrigated area to arable land area is considerably less than in India. But in other countries, namely, Sudan, Egypt, Cyprus, Israel, Lebanon and Iraq, the proportion of irrigated area in the total arable area is greater than in India. Particularly noteworthy in this connection is the fact that the entire arable land area in Egypt is under perennial irrigation from the Nile. In Iraq, under the Euphrates system of irrigation, 51.3 per cent of that country's arable land area is now irrigated. In Sudan, a little more than a third of the arable land area is now irrigated by the Nile. By and large, therefore, the position in respect of irrigation is currently more favourable in most countries of the Middle East than in India.

TABLE 3.

IRRIGATED AREA

Country	Arable land and land under tree crops (in hectares)	Irrigated area (in thousand hectares)	(3) as a per cent of (2)
(1)	(2)	(3)	(4)
India ..	**158,341**	**22,738**	**14.4**
Sudan ..	7,100	2,409	33.9
Egypt ..	2,618	2,618	100.0
Syria ..	4,590	590	12.9
Turkey ..	24,617	1,960	8.0
Cyprus ..	434	76	17.5
Israel ..	378	106	28.0
Lebanon ..	270	48	17.8
Jordan ..	893	32	3.6
Saudi Arabia	210	—	—
Iraq ..	5,457	2,800	51.3
Iran ..	16,760	1,600	9.6
Aden Protectorate	120	—	—
MIDDLE EAST	63,447	12,239	19.3

But the fact nevertheless remains that water still constitutes a big problem in the vast arid tracts of the Middle East region. It is extremely doubtful if there is much scope, as in India, for expanding irrigation facilities in the Middle East. For example, in Egypt, in spite of the tremendous discharge of water in the Nile and the prospect of construction of the High Aswan Dam, the area that can be brought under irrigation will not be large because the present unused but potentially productive land is no more than 511,000 hectares in that country. Of course, the area that is potentially productive in Sudan is far greater; perhaps in that country there may be greater scope for expanding irrigation facilities. The only other country where there is a major river system is Iraq; probably there is much scope for expanding irrigation in the Euphrates-Tigris Valley because the potentially productive land area in that country is as much as 12.1 million hectares. It does not look as though there is greater scope for irrigation in Turkey, Syria, Israel and Iran because there are no major river systems in these countries to be exploited.

By and large, in spite of the undoubted scope for irrigation in the valleys of the Nile and the Euphrates, the potentialities in this direction in the Middle East as a whole are considerably limited; in any case they are not as great as in India with its major river systems and its more copious rainfall which facilitates tank irrigation. There is also enormous scope for irrigation from wells in India; it is, however, not known whether there is as much scope in the countries of the Middle East for expansion of well irrigation. A broad conclusion in this connection could be that while it may be theoretically possible for bringing as much as 50 per cent of the entire arable land area in this country under irrigation, it may not be possible to irrigate more than a third of the arable land area in the Middle East. Obviously, enormous investments will be required to reach these targets in respect of irrigation in India and the Middle East. Whether they can be reached in the next 25 years and whether external and internal resources in the respective regions will be adequately available for such tremendous construction activity are, however, matters for speculation in the light of difficulties confronting the Aswan Dam Project in Egypt and the major reservoir projects in India.

UNIT-AREA YIELDS

Whatever be the prospects for further irrigation development in India and the Middle East, the factor of irrigation is currently of greater significance in the matter of agricultural productivity in a number of countries of the latter region than in this country for it is well known that this factor alone, other things remaining constant, doubles the unit-area yield of unirrigated land. Particular importance is therefore attached here to irrigation, which also makes double cropping possible, as the major factor making for higher productivity although in any comparison of unit-area yields in India and the Middle East, the other factors making for higher productivity, namely, fertiliser application, use of improved seeds and adoption of improved agricultural practices, would also have to be taken into account. By and large, in India as in the Middle East these latter factors are in operation only on about the same low scale*. Only in a small part of India's irrigated area and in the irrigated lands of Egypt and Israel have fertiliser application and cultivation methods improved to such an extent that some high unit-area yields are obtained. In these comparable irrigated tracts traditional agricultural practices have been replaced by improved ones. Otherwise in the Middle East as a region agricultural practices follow more or less the traditional pattern as in India. The only exception here, in so far as rain-fed cultivation is concerned, is Turkey where vast stretches of land are not irrigated but supplied by copious rainfall. In India too, there are vast stretches

*Especially in the matter of fertiliser application, the Middle East with its 12.2 million hectares of irrigated land consumes, as of 1956, about 300,000 tons of fertilisers (in terms of N. P2 O5 and K20) while this country with its 22.7 million hectares of irrigated land uses 161,000 tons. Egypt and Israel alone, with a total irrigated area of 2.7 million hectares, consume as much as 225,000 tons of fertilisers.

TABLE 1

LAND UTILISATION

Agricultural Area

(Figures in thousand hectares)

Country	Geographical Area	Forest Area	Built on area, waste land and other	Arable land and land under tree crops	Permanent meadows and pastures	Total agricultural area	Unused but potentially productive land	(7) as a per cent of (2)	(8) as a per cent of (2)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
India	**328,888**	**50,089**	**86,431**	**158,341**	**11,155**	**169,496**	**22,872**	**51.5**	**7.0**
Sudan	250,582	91,500	87,982	7,100	24,000	31,100	40,000	12.4	16.0
Egypt	100,000	1	96,870	2,618	—	2,618	511	2.6	0.5
Syria	18,448	449	4,625	4,590	6,266	10,856	2,518	58.9	13.7
Turkey	77,698	10,418	13,462	24,617	29,201	53,818	—	69.3	—
Cyprus	925	171	196	434	93	527	31	57.0	3.4
Israel	2,070	66	124	378	222	600	1,280	29.0	61.8
Lebanon	1,040	80	290	270	—	270	400	26.0	38.5
Jordan	9,661	525	7,103	893	740	1,633	400	16.9	4.1
Saudi Arabia	160,000	400	66,630	210	92,760	92,970	—	58.1	—
Iraq	44,444	1,770	24,242	5,457	875	6,332	12,100	14.3	27.2
Iran	163,000	19,000	84,240	16,760	10,000	26,760	33,000	16.4	20.3
Aden Protectorate	29,008	—	10,864	120	18,000	18,120	24	6.3	0.1
MIDDLE EAST	856,876	124,610	449,332	63,447	182,157	245,604	90,264	28.7	10.5

TABLE 2

MAN-LAND POSITION

Country	Total Population in thousands in 1956	Present agricultural area in thousand hectares	Maximum possible agricultural area (including unused but potentially productive land) in thousand hectares	Present agricultural area per head of population (in hectares)	Maximum possible agricultural area (including unused but potentially productive land) per head of population (in hectares)
India	**387,000**	**169,496**	**192,368**	**0.44**	**0.50**
Sudan	10,226	31,100	71,100	3.04	6.95
Egypt	23,410	2,618	3,129	0.11	0.13
Syria	3,970	10,856	13,374	2.73	3.37
Turkey	24,797	53,818	53,818	2.17	2.17
Cyprus	526	527	560	1.00	1.06
Israel	1,813	600	1,880	0.33	1.04
Lebanon	1,450	270	670	0.19	0.46
Jordan	1,471	1,633	2,033	1.11	1.38
Saudi Arabia ..	7,000	92,970	92,970	13.28	13.28
Iraq	4,842	6,332	18,432	1.31	3.81
Iran	21,977	26,760	59,760	1.22	2.72
Aden Protectorate ..	660	18,120	18,164	27.45	27.51
MIDDLE EAST ..	102,142	245,604	335,890	2.40	3.29

TABLE 4

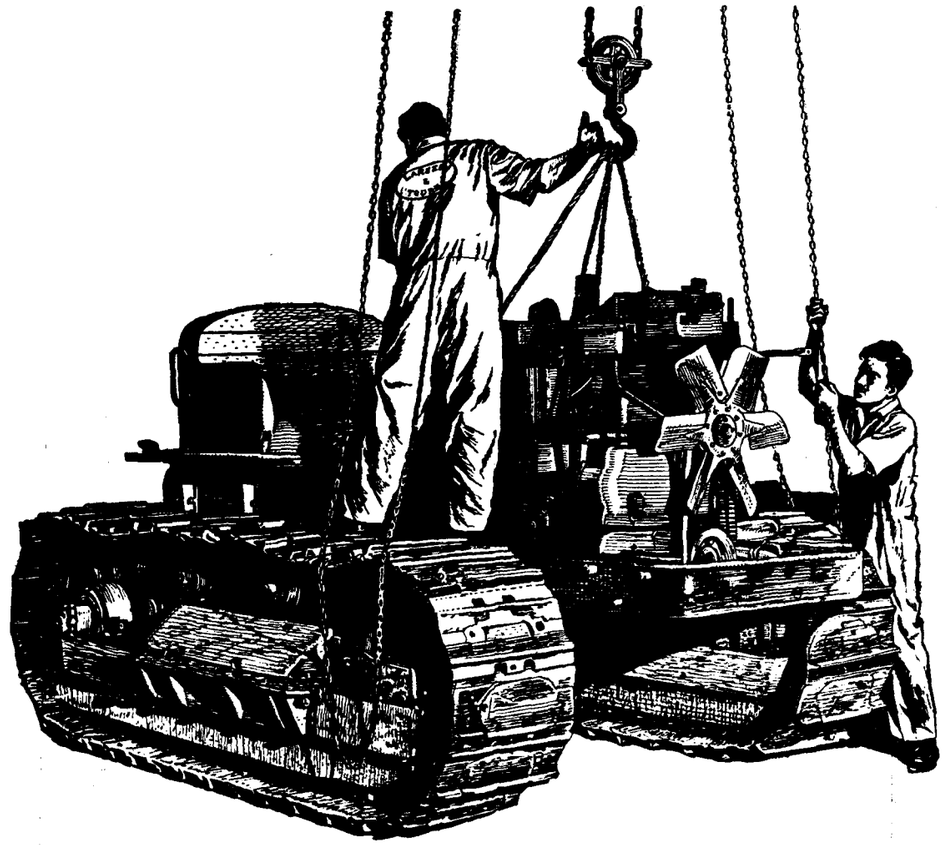
PRODUCTION OF CEREALS AND PULSES IN INDIA AND THE MIDDLE EAST

(Area in thousand hectares) (Production in thousand metric tons)

	Rice (Paddy)				Wheat			
	Cropped Area		Production		Cropped Area		Production	
Country	1948-52 average	1956	1948-52 average	1956	1948-52 average	1956	1948-52 average	1956
India	**30,092**	**31,635**	**33,383**	**42,890**	**9,290**	**12,297**	**6,087**	**8,707**
Sudan	—	—	—	—	13	12	15	18
Egypt	256	290	971	1,573	605	660	1,113	1,547
Syria	4	2	13	6	904	1,531	762	1,051
Turkey	31	42	109	153	4,770	7,458	4,771	6,519
Cyprus	—	—	—	—	75	79	48	82
Israel	—	—	—	—	34	57	24	74
Lebanon	—	—	—	—	70	70	51	62
Jordan	—	—	—	—	182	270	127	79
Saudi Arabia	2	4	2	4	18	43	15	37
Iraq	174	70	203	111	936	1,314	448	776
Iran	220	280	424	440	2,080	2,900	1,860	2,700
Aden Protectorate	—	—	—	—	2	3	3	5
MIDDLE EAST	687	688	1,722	2,287	9,779	14,397	9,237	12,941

TABLE 4 Contd.

	Other Cereals				Pulses			
	Cropped Area		Production		Cropped Area		Production	
Country	1948-52 average	1956	1948-52 average	1956	1948-52 average	1956	1948-52 average	1956
India	**38,976**	**42,235**	**16,594**	**20,367**	**13,156**	**17,087**	**5,769**	**7,530**
Sudan	1,187	1,592	802	1,409	10	—	8	—
Egypt	915	1,027	2,019	2,375	194	181	315	262
Syria	494	814	423	556	108	124	79	97
Turkey	3,444	4,424	3,921	4,780	268	312	263	307
Cyprus	58	57	50	67	10	8	5	6
Israel	61	83	57	135	2	3	1	2
Lebanon	38	34	50	44	9	8	13	13
Jordan	84	136	67	43	23	34	13	19
Saudi Arabia	56	84	49	129	—	—	—	—
Iraq	954	1,188	748	1,081	10	14	6	10
Iran	842	1,016	790	1,029	104	—	57	—
Aden Protectorate	37	28	19	24	—	—	—	—
MIDDLE EAST	8,170	10,483	8,995	12,672	738	684	760	716



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SAN. 58. 10A EVEREST

of land, amounting probably to 20 million hectares, which are watered well by adequate rainfall.

Any comparison of unit-area yields in India and the Middle East would have to be strictly done against the background of irrigation or non-irrigation of crops. In such a comparison, Egypt which has its entire cultivated area under perennial Nile irrigation tops all other countries in the matter of unit-area yields. It will be seen from the table in this sub-section that the yield of rice (paddy) in that country is 5,430 kilograms per hectare; wheat 2,340; barley 2,350; maize 2,140; Sorghum 2,950; chick peas 1,480; potatoes 16,900; groundnut (in shell) 1,980; and cotton (lint) 470. On identically irrigated lands in India, the average yield per hectare of paddy is, on the other hand, only 1,890 kilograms per hectare. This means that irrigated land in Egypt yields per unit area nearly three times as much as irrigated land in this country; the huge differential is to be attributed to the far higher level of natural fertility and artificial fertilisation in the Nile Valley. Although the unit-area yields of other irrigated crops in this country have not been worked out here, it may be broadly inferred that irrigated crops in Egypt generally yield about thrice as much as in India. But, if the average yields of crops from both irrigated and unirrigated lands together are considered as they are done in the table in this sub-section, the comparison of yields between India and Egypt is still more unfavourable to this country for the simple reason that anything up to 80 per cent of the entire cropped area in India is unirrigated whereas the entire cropped area in Egypt is irrigated.

A comparison of unit-area yields of paddy in some other countries of the Middle East region and in India would also appear to show that the position is distinctly better in the former than in the latter, if it is not more favourable than in Egypt. In Syria, for example, where the irrigated area is about the same as in India in percentage terms, the unit-area yield of paddy is twice as much as in India; in Turkey, where the proportion of irrigated area in the total cropped area is lower than in India, the unit-area yield of paddy is 3,640 kilograms per hectare as against 1,360 in this country. These higher yields, again, would have to be attributed to better manurial practices in those countries. Conditions in this regard seem to be more or less identical in India and in Iraq because the unit-area yield of paddy in the latter country (with a little more than 50 per cent of its cropped area being irrigated) is 1,580 kilograms per hectare.

Of course, a comparison of paddy yields in India and in the Middle East does not provide an adequate indication of the comparable levels of productivity for the simple reason that in this country agriculture is a largely rice-and-millet economy whereas in the latter region it is largely a wheat economy. It would, therefore, be more appropriate to institute a comparison between India and the Middle East by specifically bringing out the contrast in the yields of wheat. The cropped area under wheat in this country is about the same as the total cropped area in the entire Middle East; for this reason also, a comparison of unit-area yields of wheat in the respective regions is appropriate. It will be seen from the figures in the table in this sub-section that Egypt again tops all other countries with its high unit-area yield of 2,340 kilograms per hectare as against 710 kilograms per hectare in India being the average yield of both irrigated and unirrigated areas together; when the unit-area yield of wheat in India is separately compared with that of this cereal in Egypt, it is found that it is still lower (although it is about 1,000 kilograms per hectare) than in Egypt. In five other countries of the Middle East region, namely, Sudan, Cyprus, Israel, the Aden Protectorate and Iran, the unit-area yields of wheat are fairly high, if not as high as in Egypt. In the other countries of the region, wheat yields are as low as in India; this may be due to the fact that irrigation facilities are not available on any substantial scale for wheat as for some other foodgrain crops.

'Prima facie', there is warrant for the inference that agricultural productivity in the Middle East as a whole is still at a somewhat higher level than in this country, if the yields of other crops are also taken into account. In respect of that important commercial crop, cotton, the unit-area yields in all the countries of the Middle East are higher than in India. In this country where only about 10 per cent of the cropped area under cotton is irrigated, the average yield of this crop is only 100 kilograms per hectare. In Egypt and Israel, the unit-area yields of cotton are 470 and 580 kilograms per hectare respectively. Since even in the predominantly unirrigated areas of Turkey, Syria, Lebanon, Iran and the Aden Protectorate the unit-area yields of cotton are far higher than in India, it may be that the soils in the respective countries are naturally suitable for this crop like the fertile black cotton soils in this country. Again, that the unit-area yields of other rain-fed crops are also generally higher than in India may be partly due to the circumstance that the soils in the Middle East are somewhat more fertile by nature than the average soils in this country. The higher yields of rain-fed crops in the Middle East countries cannot be explained in terms of higher fertiliser application or improved agricultural practices, for these factors are fully in operation only

UNIT AREA YIELDS OF PRINCIPAL CROPS

(In Kilograms per hectare)

(Generally for 1956)

S. No.	Crop	India	Sudan	Egypt	Syria	Turkey	Cyprus	Israel	Lebanon	Jordan	Saudi Arabia	Iraq	Iran	Aden Protectorate
1.	Rice (Paddy)	1,360	—	5,430	2,460	3,640	—	—	—	—	1,190	1,580	2,100	—
2.	Wheat	710	1,430	2,340	690	870	1,040	1,310	890	850	870	590	930	1,690
3.	Barley	820	1,780	2,350	650	1,110	1,200	1,460	1,110	1,000	1,000	910	1,030	1,760
4.	Maize	820	1,160	2,140	1,470	1,190	—	3,100	1,800	—	1,380	760	1,590	—
5.	Millet	380	620	—	870	970	—	—	—	—	830	800	—	450
6.	Sorghum	450	1,020	2,950	—	—	—	1,490	—	560	—	—	—	—
7.	Dry Beans	220	960	760	620	1,150	770	—	2,000	560	—	—	720	—
8.	Chick peas	550	850	1,480	560	1,030	—	580	920	600	—	—	—	—
9.	Lentils	420	—	1,380	880	660	580	—	1,150	500	—	760	—	—
10.	Potatoes	6,000	—	16,900	9,500	10,000	9,400	19,600	—	—	—	—	—	—
11.	Groundnut (in shell)	780	750	1,980	1,990	2,320	—	3,730	—	—	—	—	—	—
12.	Cotton seed	210	720	920	590	460	340	1,250	—	—	—	250	600	760
13.	Sesame	210	460	890	460	560	170	460	—	320	—	670	—	550
14.	Tobacco	710	—	—	790	670	420	620	640	260	—	760	690	—
15.	Cotton	100	430	470	340	260	170	580	250	—	—	130	290	390

in the irrigated tracts of Egypt and Israel. Probably the higher yields are explained partly also by the fact that the livestock population in these countries provides organic manure for the lands to a far greater extent than in India where the larger part of cowdung is burnt away as fuel. Be that as it may, the broad conclusion emerges that, on the average, land in the Middle East region as a whole yields at least a third more than land, on the average, in India. The uniform yardstick applied here is the identical per capita cropped area under foodgrains in India and the Middle East as a whole (being 0.27 hectare and 0.26 hectare respectively) yielding, per capita, a third more of foodgrains in the latter region than in this country.

Patterns of Crop Production

THERE is also the striking contrast in the pattern of food production in India and the Middle East; this is particularly in evidence in the case of the two staple foodgrains — rice and wheat. It will be seen from Table 4, which gives figures of production of cereals and pulses and the respective areas under them, that agriculture in the Middle East is largely a wheat economy whereas in India it is largely a rice-and-millet economy. In the entire Middle East the cropped area under rice is only 0.7 million hectares as against 31.6 million hectares under that crop in India; on the other hand, the cropped area under wheat is of the order of 14.4 million hectares in the Middle East as a whole as against 12.3 million hectares under that crop in India. Again, wheat production in the Middle East comes to 12.9 million metric tons as against 8.7 million metric tons in India while rice (paddy) production accounts for only 2.3 million tons in the former as against 42.9 million tons in India. These two staple foodgrains together account for very nearly 40 per cent of the total area under all foodgrains and 65 per cent of the total foodgrains production in India whereas in the Middle East as a whole they represent nearly 58 per cent in respect of area and 54 per cent in respect of production. All other cereals — cereals other than rice and wheat — account for 41 per cent of the total cropped area under all foodgrains and about 26 per cent of the total foodgrains production in India whereas in the Middle East as a whole they represent 40 per cent in respect of area and 44 per cent in respect of production. The area under and the production of pulses in the Middle East is comparatively negligible whereas in India they are fairly sizeable.

FOOD CROPS

Taking all cereals and pulses together, their total production in 1956 in India has been to the tune of 79.5 million tons as against 27.6 million tons in the entire Middle East. Their production in India represents an increase of 28.6 per cent over the average annual production in the period 1948-52; the production of all cereals and pulses in the Middle East, on the other hand, represents an increase of 33.3 per cent over their annual average production in the period 1948-52. As for the cropped area under cereals and pulses in India in 1956, it represents an increase of 12.8 per cent over the annual average cropped area in the period 1948-52; in the Middle East, on the other hand, the 1956 cropped area under cereals and pulses has represented an increase of 35.1 per cent over the average annual cropped area in the period 1948-52. It will be seen from these percentage figures that in India the increase in production in recent years has been more due to increase in yield than to increase in cropped area while in the Middle East it has been entirely due to increase in area. It would appear that agricultural development programmes in India have had the effect of improving productivity whereas in the Middle East the higher productivity continues to be what it has always been.

Of course, the foodgrains proper do not constitute the whole range of food crops which include sugar and/or beets, potatoes, sweet potatoes, yams and tapioca, bananas and fruits like apples and pears, grapes, citrus fruits like oranges and lemons and dates and figs. Tables 6 and 7 elsewhere in this section present the figures regarding the area and production of different non-cereal food crops and fruit crops respectively. It will be seen from Table 6, read along with Table 14, that non-cereal food crops account for a total production of 10.0 million tons in India whereas they account for a total output of 2.4 million tons in the entire Middle East. The larger part of the comparatively modest production of non-cereal food crops in the Middle East is contributed by potatoes (1.5 million tons as against 1.7 million tons in India); the larger part of potato production, in its turn, is accounted for by one country — Turkey. Of the total production of non-cereal food crops in the Middle East, by far the larger part is accounted for by two countries — Turkey (1.4 million tons) and Egypt (0.61 million tons).

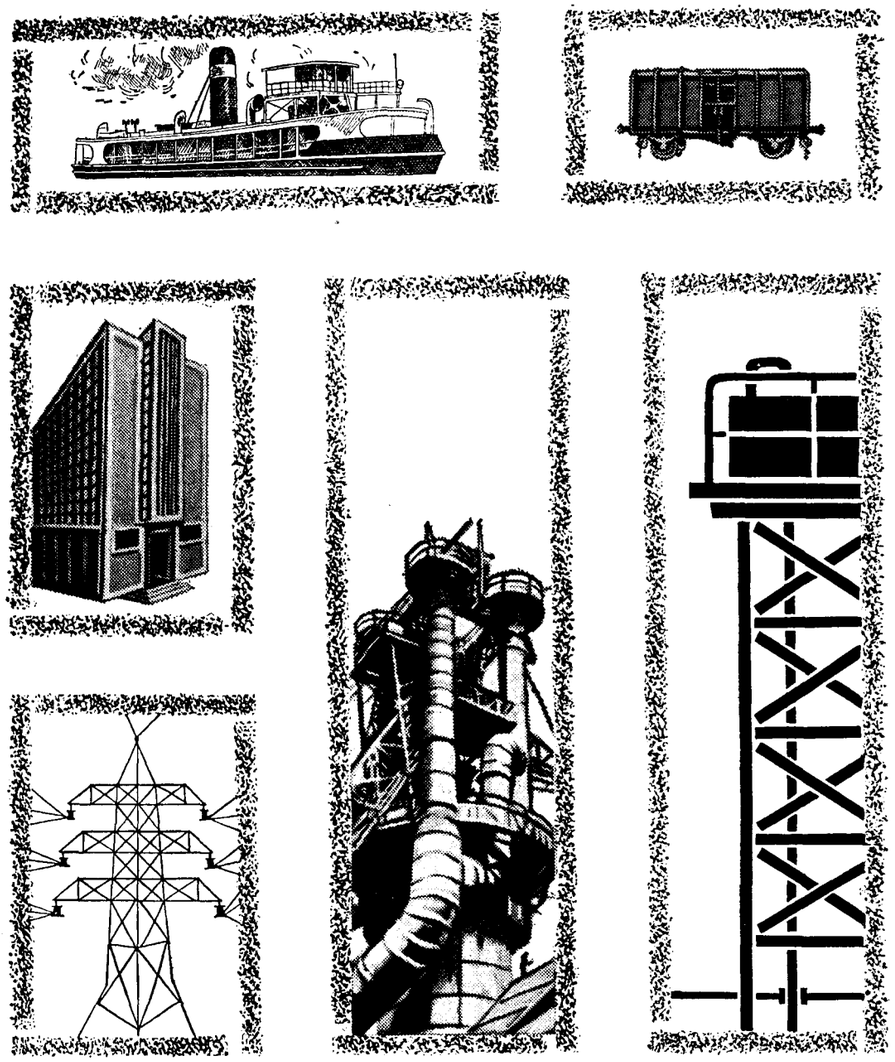
Although, thus, non-cereal food crops are not of much consequence in the Middle East, in respect of fruit production the position in that region as a whole is far more favourable than in India. It will be seen from Table 7, read along with Table 14, that the production of fruits, as of 1956, is 0.7 million tons in India whereas in the entire Middle East it is as much as 5.9 million tons. Although fruit production in the Middle East is largely accounted for by one country, Turkey (3.2 million tons), the other countries of the region also grow proportionately considerable quantities of fruits.

Taking non-cereal food crops and fruit crops together, it is found that their aggregate production, as of 1956, represents an increase of only 5.3 per cent over the average annual production in 1948-52 in India whereas in the Middle East the corresponding percentage increase is 42.3. Broadly speaking, it would appear that although both India and the Middle East have maintained in recent years a more or less even rate of increase in production of food grain crops, the increase in production of non-cereal food and fruit crops has been comparatively very small in this country. The far greater percentage increase in production of the latter set of crops in the Middle East represents a desirable trend inasmuch as it provides, in the language of nutrition, protective foods to a greater extent. As far as India is concerned, the increase in production of these protective foods is, however, too small to provide an adequate quantity thereof to an average person whereas the position in this regard is distinctly better in the Middle East. This aspect is further dealt with in a succeeding sub-section.

COMMERCIAL CROPS

The comparative position in the matter of production of commercial crops in India and the Middle East is brought out in a series of tables elsewhere — Table 8 dealing with tea, coffee and tobacco, Table 9 dealing with oilseeds and Table 10 dealing with fibre crops. It will be seen from Table 8 that tea is grown only in two countries of the Middle East, namely, Turkey and Iran; but their entire production is only 7,000 tons as against the Indian production of 304,000 tons. As for coffee, it is not grown in any country of the Middle East except Saudi Arabia where it accounts for a total production of 200 tons only as against a total production of 42,000 tons in India. On the other hand, tobacco production in the Middle East is fairly substantial, accounting for 147,000 tons as against 263,000 tons in India. By far the larger part of tobacco production in the Middle East is accounted for by Turkey which produces 116,000 tons. In the other countries of the Middle East, tobacco accounts for very small outputs ranging from 1,000 tons to 14,000 tons.

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TABLE 5

PRODUCTION OF CEREALS AND PULSES

(Area in thousand hectares) (Production in thousand metric tons)

Country	Total—Cereals and Pulses				Total Population in 1956 in thousands	1956 Cropped area, per head of population, under cereals and pulses (in hectares)	1956 Production of cereals and pulses per head of population (in Kilograms)
	Cropped Area		Production				
	1948-52 average	1956	1948-52 average	1956			
India	**91,514**	**103,254**	**61,833**	**79,494**	**387,000**	**0.27**	**205**
Sudan	1,210	1,602	825	1,427	10,226	0.16	140
Egypt	1,970	2,158	4,418	5,757	23,410	0.09	246
Syria	1,600	2,471	1,277	1,710	3,970	0.62	431
Turkey	8,513	12,236	9,064	11,750	24,797	0.49	474
Cyprus	143	134	103	155	526	0.25	295
Israel	97	143	82	211	1,813	0.08	116
Lebanon	117	112	214	119	1,450	0.08	82
Jordan	289	440	207	141	1,471	0.30	96
Saudi Arabia	76	131	66	170	7,000	0.02	24
Iraq	2,074	2,586	1,405	1,978	4,842	0.53	409
Iran	3,246	4,196	3,131	4,169	21,977	0.19	190
Aden Protectorate	39	31	22	29	660	0.05	44
MIDDLE EAST	19,374	26,240	20,714	27,616	102,142	0.26	270

TABLE 6

PRODUCTION OF NON-CEREAL FOOD CROPS

(Area in thousand hectares) (Production in thousand metric tons)

	Cane and/or Beets				Potatoes				Sweet Potatoes, Yams and Tapioca				Bananas			
	Cropped Area		Production (a)		Cropped Area		Production		Cropped Area		Production		Cropped Area		Production	
Country	1948-52	1956	1948-52	1956	1948-52	1956	1948-52	1956	1948-52	1956	1948-52	1956	1948-52	1956	1948-52	1956
India	**1,672**	**2,068**	**4,401**	**5,189**	**237**	**284**	**1,647**	**1,701**	**387**	**378**	**901**	**1,252**	**141**	**146**	**2,068**	**1,883**
Sudan	—	—	—	—	—	—	2	—	—	—	—	—	—	—	5	—
Egypt	37	46	196	300	13	14	187	235	2	3	21	52	3	3	39	48
Syria	1	4	3	7	4	3	34	25	—	—	—	—	—	—	—	—
Turkey	50	122	164	301	79	110	603	1,100	—	—	—	—	—	—	—	—
Cyprus	—	—	—	—	5	5	46	49	—	—	—	—	—	—	—	—
Israel	—	1	—	—	2	5	36	92	—	—	—	—	1	2	6	24
Lebanon	—	—	—	—	5	4	43	36	—	—	—	—	—	1	5	8
Jordan	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	2	—	12	—	—	—	—	—	1	2	16	27
Iran	34	43	58	93	4	—	37	—	—	—	—	—	—	1	5	8
MIDDLE EAST	122	216	421	701	114	141	1,000	1,537	2	3	21	52	5	8	71	107

(a) In terms of raw sugar.

TABLE 7

PRODUCTION OF FRUITS

(Area in thousand hectares) (Production in thousand metric tons

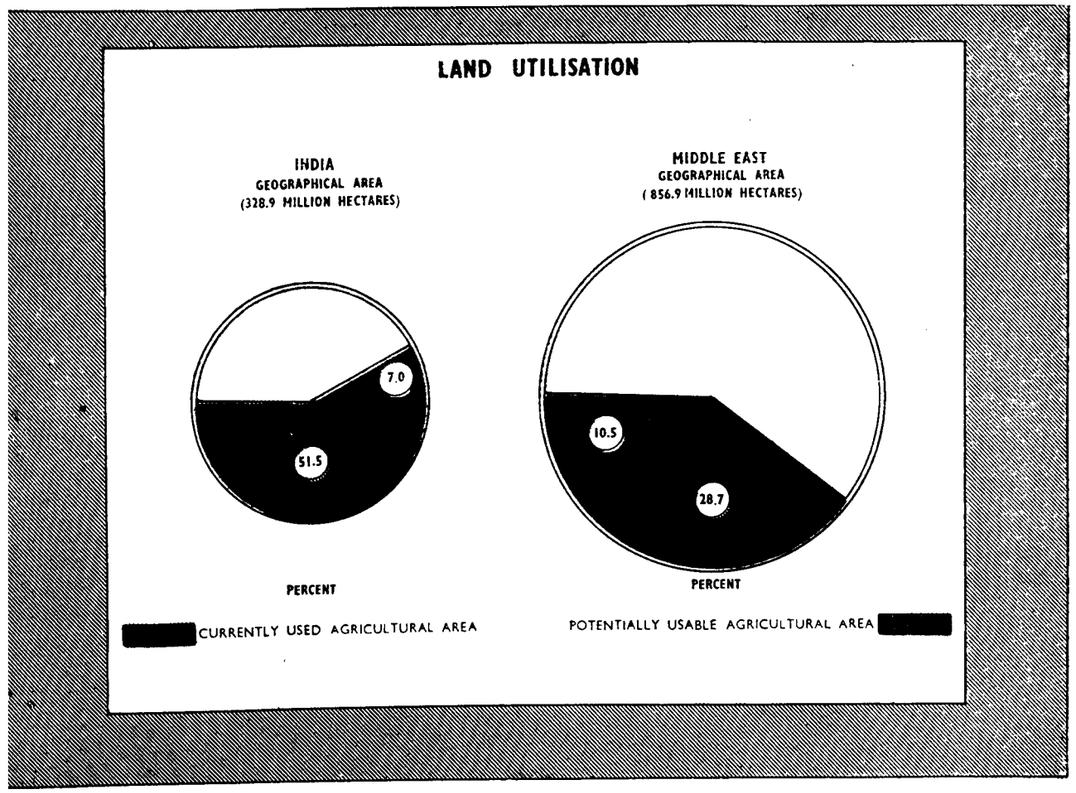
Country	Apples and Pears Production 1948-52	Apples and Pears Production 1956	Grapes Area 1948-52	Grapes Area 1956	Grapes Production 1948-52	Grapes Production 1956	Citrus Fruits (oranges, lemons, etc.) Production 1948-52	Citrus Fruits (oranges, lemons, etc.) Production 1956	Dates and Figs (fresh basis) Production 1948-52	Dates and Figs (fresh basis) Production 1956
India	—	—	—	—	—	—	**516**	**676**	**2**	—
Sudan	—	—	—	—	—	—	1	—	31	—
Egypt	3	7	8	8	79	81	303	329	196	375
Syria	8	12	67	72	172	194	4	7	42	49
Turkey	177	323	579	728	1,500	2,606	78	191	107	121
Cyprus	1	1	32	30	59	88	34	49	3	3
Israel	4	3	7	10	15	33	302	438	6	9
Lebanon	20	37	21	22	81	66	80	126	13	22
Jordan	2	3	11	16	27	52	—	—	16	13
Saudi Arabia	—	—	—	—	—	—	—	—	182	191
Iraq	—	—	—	—	—	—	—	—	310	252
Iran	—	—	—	—	254	—	47	45	131	132
Aden Protectorate	—	—	—	—	—	—	—	—	5	15
MIDDLE EAST	215	386	725	886	2,187	3,120	849	1,185	1,042	1,182

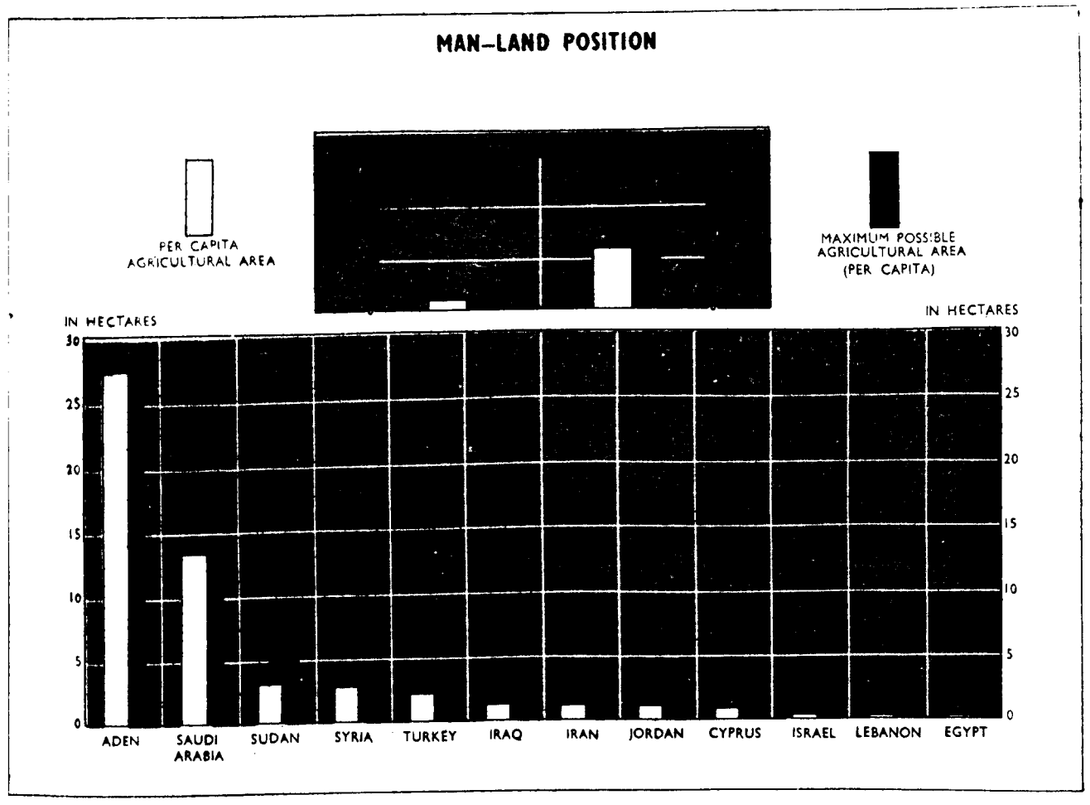
TABLE 8

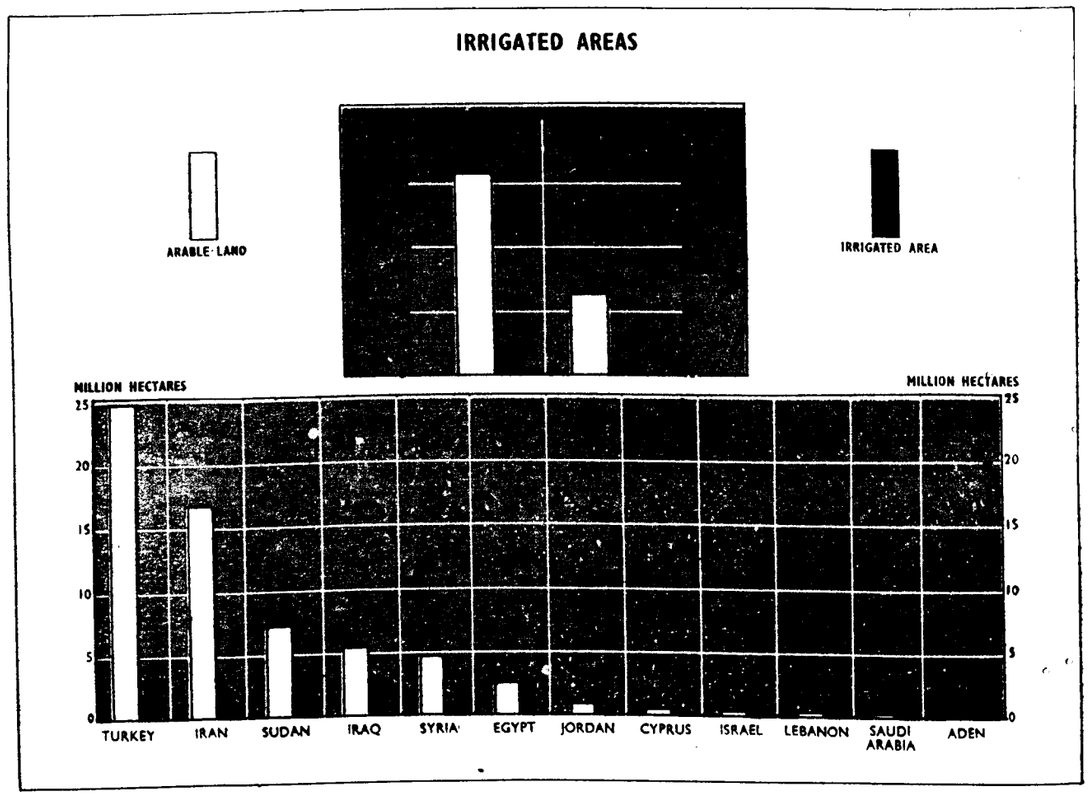
PRODUCTION OF TEA, COFFEE AND TOBACCO

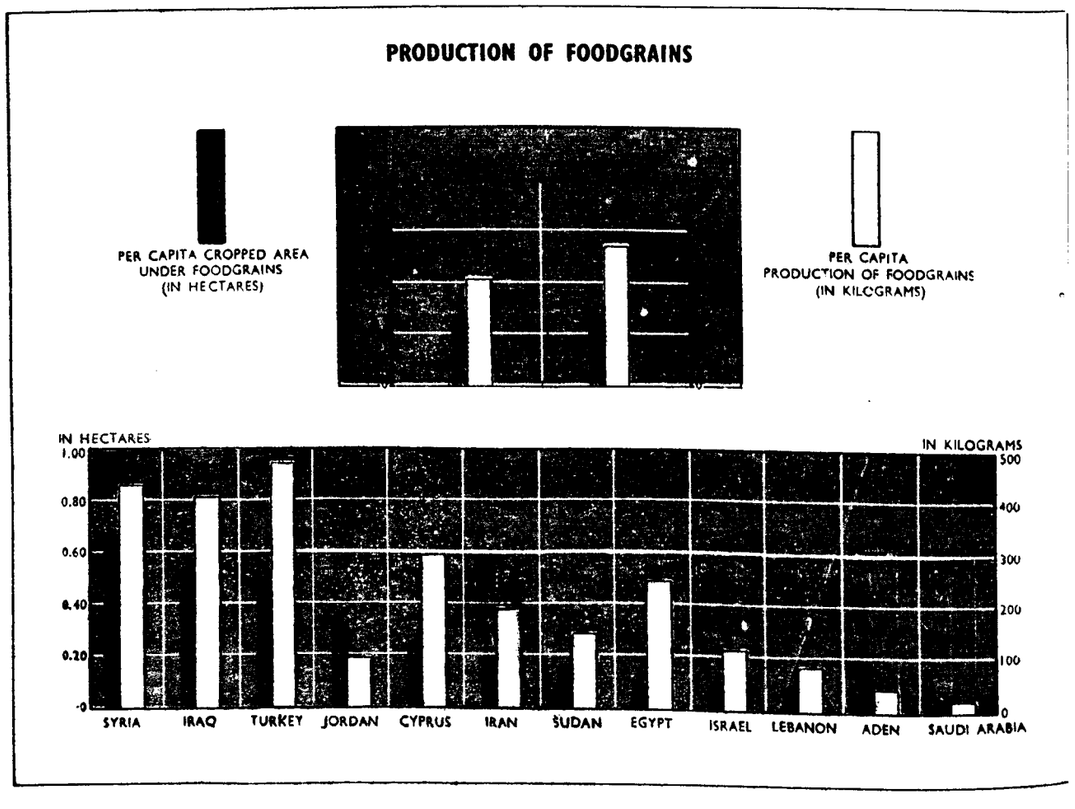
(Area in thousand hectares) Production in thousand metric ton

Country	Tea Area 1948-52	Tea Area 1956	Tea Production 1948-52	Tea Production 1956	Coffee Production 1948-52	Coffee Production 1956	Tobacco Area 1948-52	Tobacco Area 1956	Tobacco Production 1948-52	Tobacco Production 195
India	**314**	**320**	**280**	**304**	**22**	**42**	**331**	**373**	**247**	**26**
Sudan	—	—	—	—	—	—	—	—	2	—
Egypt	—	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	7	7	6	
Turkey	3	8	0.3	1.5	—	—	118	172	84	11
Cyprus	—	—	—	—	—	—	1	2	1	
Israel	—	—	—	—	—	—	4	3	2	
Lebanon	—	—	—	—	—	—	2	3	2	
Jordan	—	—	—	—	—	—	2	—	1	
Saudi Arabia	—	—	—	—	—	0.2	—	—	—	—
Iraq	—	—	—	—	—	—	4	7	3	
Iran	—	—	4.3	5.5	—	—	16	21	12	1
Aden Protectorate	—	—	—	—	—	—	—	—	—	—
MIDDLE EAST	3	8	4.6	7.0	—	0.2	154	215	113	14









The position in regard to oilseeds production in India and the Middle East is brought out in Table 9. The figures therein show that groundnut is not largely grown in the Middle East except in a few countries like Sudan, Egypt, Turkey and Israel. The total production of this oilseed crop in these countries together is 209,000 tons as against India's total production of 4.15 million tons; but a noteworthy trend here is that the Middle East has increased its groundnut production nearly fivefold since 1948. Production of rapeseed and sesame is also comparatively little in the Middle East, although these oil seeds are grown in all the countries of the region; but production is largely concentrated in two countries, namely, Sudan and Turkey. As for other oilseeds, the position is that the Middle East as a whole produces 1.6 million tons as against 2.0 million tons in India. Since, however, some of the countries in the Middle East produce olives, the comparatively low production of groundnut and sesame is partly made good by the production of olive oil. Considering the size of population in the Middle East, the production of oilseeds from which most edible oils are derived does not appear to be unsatisfactory. It may be noted in this connection that the Middle East, with about a fourth of India's population, produces about a third of this country's output of oilseeds. What is more, while India has increased her production of oilseeds by just a third since 1948, the Middle East region has increased its by about one-half.

From Table 10 giving figures of production of fibre crops in India and the Middle East, it will be seen that the latter region as a whole produces very nearly the same quantity of cotton as India does. The relevant figures of production of cotton (lint) in the Middle East is 797,000 tons as against 840,000 tons in India; as far as countrywise figures are concerned, it will be seen that four countries in the Middle East, namely Sudan, Egypt, Syria and Turkey account for most of the cotton produced in the region. But the production of that much quantity of cotton in the Middle East is being had, as of 1956, from just 2.2 million hectares of land whereas almost the same quantity of cotton could be got in India from a total cropped area of as much as 8.0 million hectares. But a redeeming trend in India is that cotton production has increased by nearly three-fourths since 1948 whereas in the Middle East the increase has been about a fourth only. As for other fibre crops, namely, flax and hemp fibres and jute and mesta, their production in the Middle East countries is comparatively very little; jute and mesta particularly are not grown in any country of the Middle East except Iran where, too, they account for a small production of 5,000 tons.

Taking all commercial crops together, it is found that the cropped area under them has increased by 28.2 per cent and their production by 32.9 per cent since 1948 in India, the corresponding percentages for the Middle East being 35.7 in respect of area and 39.0 in respect of production. As for all food crops (foodgrains, non-cereal food crops and fruits), their cropped area has increased by 13.1 per cent and their production by 26.6 per cent in India the percentages for the Middle East being 27.9 in respect of area and 35.5 in respect of production. These figures would appear to suggest that, by and large, the increases in production of commercial crops both in India and in the Middle East have been mostly due to increases in area and not due to any significant improvement in productivity as such; in the case of food crops, on the other hand, the increases in their production have been more due to improvement in productivity than to increase in area in India and more due to increase in area than to improvement in productivity in the Middle East. The most significant conclusion emerging from this examination of crop production patterns is that in India the area under commercial crops continues to be, as in 1948, about a fifth of the entire cropped area while in the Middle East as a whole the area under such crops continues to be, again as in 1948, about a sixth of that region's total cropped area. There has thus been no pronounced shift in food-growing land to commercial crop production either in India or in the Middle East.

Livestock Population and Products

What particularly distinguishes the Middle East from India is to be found in the pattern of animal husbandry. In Tables 11 and 12 elsewhere in this section are given the figures of livestock population in the respective regions. It will be seen therefrom that the total livestock population in India is very nearly 470 million whereas in the Middle East as a whole it is very nearly 211 million. It will also be seen from Table 12 that the number of livestock per head of human population in India is 1.21 whereas in the Middle East the corresponding number is 2.07. From the point of view of animal assistance to man for draught purposes and for the purpose of providing a variety of edible and non-edible products, the position in the Middle East is far more favourable than in India; countrywise, the figures convey that the position is less favourable than in India only in two countries, namely, Egypt and Saudi Arabia.

LIVESTOCK PRESSURE ON LAND

In another column in the same Table 12 are to be found figures of the number of livestock per hectare of arable land. It will be seen from these figures that in India the number of livestock per hectare of arable land is 2.97 whereas in the Middle East the corresponding figure is 3.33. Since in India permanent meadows and pastures are comparatively very little, the number of livestock per hectare of total agricultural area (including permanent meadows and pastures) is still as high as 2.77 whereas the corresponding figure in the Middle East as a whole is only 0.86. From the point of view of the pressure of animal population on land also, the position in the Middle East is vastly more favourable than in India. On an average, 227 human beings plus 277 livestock have to depend in India on 100 hectares of agricultural area. In the Middle East, on the other hand, only 42 human beings plus 86 livestock depend on 100 hectares of agricultural area. These two sets of figures alone conclusively prove that the pressure of human and animal population together on the agricultural area available is far greater in India than in the Middle East as a whole. Of course, not all the countries in the Middle East are in this particularly advantageous position. In Egypt, Cyprus, Israel and Lebanon, the number of livestock per hectare of total agricultural area is greater than in India.

This disparity notwithstanding, the general picture that emerges is that the density of animal population in the Middle East as a whole is far less than in India. If permanent meadows and pastures alone are taken into account in regard to the maintenance of livestock, the position is that 4,225 livestock have to depend on 100 hectares of permanent meadows and pastures in India whereas in the Middle East as a whole, for every 100 hectares of such meadows and pastures, there are only 116 livestock. Of course, in India every hectare of pastures does not provide grass for so many livestock. What really happens is that man and animal in this country are engaged in a fierce competition for the limited produce of arable land; even the dry fodder accruing from harvested crops is not wholly available in this country for livestock because a sizeable part of it is used up in rural areas for the roofing of huts or for burning as fuel. In this respect, Cyprus, Israel and Iraq alone in the Middle East are in a compara-

tively less favourable position than other countries in that region.

EDIBLE & NON-EDIBLE PRODUCTS

In the circumstances of ample feed and fodder for livestock it is not surprising that the Middle East as a whole produces edible livestock products to the tune of 9.2 million metric tons as against 18.5 million metric tons in India, although the human population in the Middle East is only 102 million as against 387 million in this country. The edible livestock products which have been taken into account in this connection are meat, milk, butter and cheese and hen eggs. Although the entire Middle East produces 50 per cent of India's livestock products, there are some disparities in respect of the different countries of that region. It will be seen from the figures in Table 14 that the larger part of the production of livestock products in the Middle East is accounted for by seven countries, namely, Sudan, Egypt, Turkey, Syria, Israel, Iraq and Iran.

As for non-edible livestock products like wool and hides and skins, the figures in Table 13 show that wool production is greater in the Middle East than in India while the output of hides and skins is greater in the latter than in the former. This is not surprising because the total number of sheep and goats in India is only 95,000 while their population in the Middle East is 110,000 in which there has always been a higher proportion of animals capable of yielding more wool than the Indian breeds. It is, again, not surprising that more hides and skins are produced in India than in the Middle East because the population of livestock other than poultry is 372 million in this country as against a corresponding population of 154 million in the latter region. In respect of hides and skins, the trend in India has been one of lower production on account of bans on cow slaughter while the trend in the Middle East has been one of higher production, the increase being about 50 per cent since 1948. That the lower production in India has also brought down this country's export earnings considerably in recent years, is a distressing factor in the situation.

Per Capita Food Production and Supplies

IN any comparison of food production and food supplies available for human consumption between India and the Middle East, the treatment has necessarily to be done in per capita terms. It will be seen from Table 5, which gives figures of per capita cropped area under cereals and pulses and per capita production of these food grains in the two regions, that, as of 1956, per capita production of cereals and pulses in India is 205 kilograms from a per capita cropped area of 0.27 hectare while in the Middle East as a whole it is 270 kilograms from a per capita cropped area of 0.26 hectare. It would appear that while the per capita cropped area under cereals and pulses is virtually the same in both India and the Middle East, per capita production is at least a third more in the latter than in the former.

There is, therefore, 'prima facie' warrant for the inference that foodgrains production in the Middle East is distinctly more efficient than foodgrains production in this country. However, the disparities among the different countries of the Middle East would have to be taken further into account in this connection. From the countrywise figures given in Table 5, it will be seen that Egypt with a per capita cropped area under cereals and pulses of only 0.09 hectare produces per capita 246 kilograms of those food grains; again, Israel with a per capita cropped area under cereals and pulses of 0.08 hectare produces 116 kilograms per capita. The figures in respect of other countries in the Middle East point to a general conclusion that the food economy there is in better shape than in this country; this may be attributed to the factor of irrigation and heavy fertiliser application, especially in countries like Egypt and Israel.

In per capita terms the figures in respect of non-cereal food crops and fruits together show that their per capita production is substantially larger in the Middle East in general and in most of the countries of that region in particular than in India. Thus, if per capita production of foodgrains, non-cereal food crops and fruits (which come under the category of protective foodstuffs) together is taken as an index of the level of food consumption, the position in this regard in the Middle East as a region is distinctly better than in India. Of course, when the production of livestock products which are edible is also taken into account the position is still more favourable in the Middle East than in India.

FOOD SUPPLIES

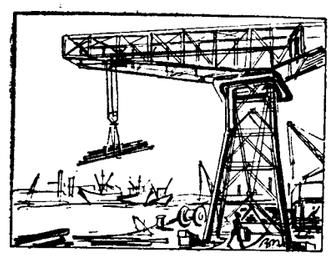
Not all of the production of livestock products may, of course, be available for domestic consumption. The position in regard to net supplies of meat and milk products in India and in four Middle East countries, namely, Egypt, Israel, Turkey and Cyprus, for which figures are available, is as follows: As of 1955, the net per capita supplies available in India are one kilogram of meat and four kilograms of milk and milk products; in Egypt, the respective figures are 12 kilograms and 5 kilograms; in Israel 18 kilograms and 9 kilograms; in Turkey 16 kilograms and 3 kilograms; and in Cyprus, 28 kilograms and 4 kilograms. It would thus appear that the per capita availability of livestock products for human consumption in the Middle East is far greater than in India.

In terms of per capita availability of fats and oils, the Middle East appears to be, again, in a better position than India. For example, as of 1955, the per capita availability of net supplies of fats and oils in India is only 4 kilograms; on the other hand, in Israel, the corresponding figure is 17 kilograms; in Turkey 5 kilograms; in Cyprus 13 kilograms; and in Egypt 4 kilograms.

When the position in respect of non-cereal food crops, fruits and livestock products is considered together, the comparative position between India and the Middle East that emerges is brought out in the last column of Table 14 elsewhere in this section. It will be seen from these figures that their per capita production aggregates 75 kilograms per annum in India whereas in the Middle East as a whole it amounts to 171 kilograms. Only in two countries of the Middle East, namely, Saudi Arabia and the Aden Protectorate is the level of per capita production of non-cereal food crops, fruits and livestock products far less than in India; in two other countries, namely, Jordan and Iran, the level of their production is nearly the same as in India; in all other countries their per capita production is much more than in India. Particularly in Turkey, Cyprus and Israel, the per capita production of non-cereal food crops, fruits and livestock products is four to six times that in India.

Since the per capita production of cereals and pulses in the Middle East is also a third more than in India, the aggregate per capita production of foodgrains and all other protective foodstuffs in that region as a whole is 57 per cent more than in India. In terms of per capita availability of foodgrains and other foodstuffs for domestic consumption, the position appears to be that in the Middle East as a whole it is generally a third more than in India. Which, again, would mean that an average person in most countries of the Middle East is at least a third more well-fed than an average person in this country.

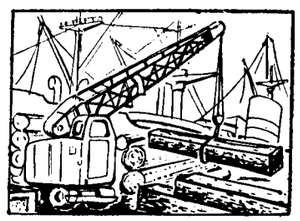




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TABLE 9

PRODUCTION OF OILSEEDS, OIL KERNELS, ETC.

(Area in thousand hectares) (Production in thousand metric tons)

Country	OLIVE Production		GROUNDNUTS (In Shell) Area		GROUNDNUTS (In Shell) Production		RAPE & SESAME Area		RAPE & SESAME Production		OTHER OILSEEDS (a) Area		OTHER OILSEEDS (a) Production	
	1948-52	1956	1948-52	1956	1948-52	1956	1948-52	1956	1948-52	1956	1948-52	1956	1948-52	1956
India	—	—	4,379	5,302	3,196	4,151	4,259	4,712	1,252	1,491	7,106	9,551	1,352	2,033
Sudan	—	—	38	187	20	141	158	333	98	153	207	322	134	232
Egypt	2	3	11	15	18	29	15	20	12	18	766	702	730	647
Syria	61	78	—	3	1	6	14	23	8	10	107	272	63	160
Turkey	269	539	4	7	6	17	70	85	36	48	582	833	347	410
Cyprus	10	13	—	—	—	—	2	1	1	—	5	4	1	1
Israel	6	25	1	4	2	14	1	3	1	1	2	7	1	6
Lebanon	32	55	1	2	1	2	2	2	1	2	3	1	3	—
Jordan	23	72	—	—	—	—	5	11	2	4	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	2	1	1	—	—	—	—
Iraq	—	—	—	—	—	—	26	19	9	13	32	64	9	17
Iran	—	—	—	—	—	—	25	15	9	10	138	210	55	129
Aden Protectorate	—	—	—	—	—	—	3	2	1	1	1	14	1	11
MIDDLE EAST	403	785	55	218	48	209	321	516	179	261	1,843	2,429	1,344	1,613

(a) Copra production in India not included here; it was 178,000 tons (1948-52 average) and 185,000 tons (1956).

TABLE 10

PRODUCTION OF FIBRE CROPS

(Area in thousand hectares) (Production in thousand metric tons)

Country	Cotton (lint) Area		Cotton (lint) Production		Flax and Hemp fibres Area		Flax and Hemp fibres Production		Jute and Mesta Area		Jute and Mesta Production	
	1948-52	1956	1948-52	1956	1948-52	1956	1948-52	1956	1948-52	1956	1948-52	1956
India	5,569	8,030	485	840	283	249	135	125	758	1,061	728	1,033
Sudan	207	309	74	134	—	—	—	—	—	—	—	—
Egypt	761	694	396	325	5	8	4	7	—	—	—	—
Syria	106	272	30	93	4	4	3	2	—	—	—	—
Turkey	474	637	119	165	66	40	14	17	—	—	—	—
Cyprus	4	3	1	1	1	1	—	—	—	—	—	—
Israel	—	6	—	3	—	—	—	—	—	—	—	—
Lebanon	3	1	1	—	—	2	—	2	—	—	—	—
Iraq	29	58	3	8	—	—	—	—	—	—	—	—
Iran	133	210	26	62	—	—	—	—	—	—	4	5
Aden Protectorate	1	14	1	6	—	—	—	—	—	—	—	—
MIDDLE EAST	1,718	2,204	651	797	76	55	21	28	—	—	4	5

TABLE 11.

LIVESTOCK POPULATION

A

(In thousands)

Country	Horses	Mules & Asses	Cattle	Cattle: Cows (including heifers)	Pigs	Sheep	Goats	Buffaloes	Camels	Poultry	Total
India . .	**1,503**	**1,391**	**158,863**	**65,400**	**4,660**	**38,636**	**56,628**	**44,766**	**599**	**97,372**	**469,848**
Sudan . .	21	660	6,907	—	4	6,946	5,748	—	2,000	—	22,286
Egypt . .	42	937	1,362	—	19	1,237	744	1,323	162	3,650	9,476
Syria . .	101	357	545	273	—	4,340	1,690	6	76	3,264	10,652
Turkey . .	1,219	1,823	11,059	2,845	4	26,444	16,267	1,056	72	25,022	85,811
Cyprus . .	4	56	35	—	34	383	182	—	1	1,100	1,795
Israel . .	13	26	109	107	—	118	140	—	4	4,960	5,477
Lebanon .	6	25	96	—	3	74	420	—	2	1,800	2,426
Jordan . .	9	63	52	—	—	364	545	—	19	887	1,939
Saudi Arabia	—	22	56	—	—	3,572	1,901	—	265	—	5,816
Iraq . .	300	1,500	721	—	—	10,000	1,689	280	200	2,000	16,690
Iran . . .	370	1,393	5,000	—	5	17,750	8,250	120	597	13,882	47,367
Aden Protectorate .	—	7	68	—	—	200	855	—	80	—	1,210
MIDDLE EAST .	2,085	6,869	26,010	3,225	69	71,428	38,431	2,785	3,478	56,565	210,945

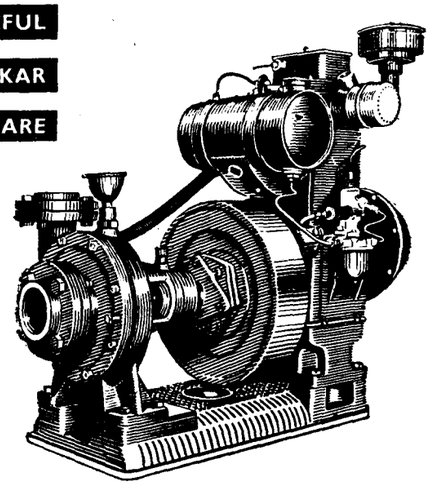
TABLE 12.

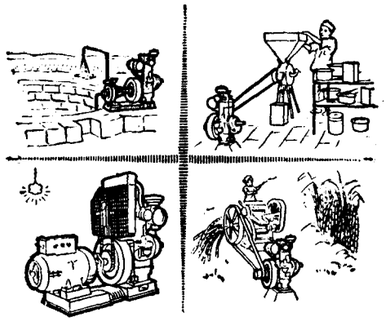
LIVESTOCK POPULATION

B

Country	Livestock population in thousands	Human population in thousands	Number of livestock per head of human population	Area of arable land in thousand hectares	Number of livestock per hectare of arable land	Area of permanent meadows & pastures in thousand hectares	Number of livestock per hectare of permanent meadows and pastures	Total agricultural area in thousand hectares	Number of livestock per hectare of total agricultural area.
India . .	**469,848**	**387,000**	**1.21**	**158,341**	**2.97**	**11,155**	**42.25**	**169,496**	**2.77**
Sudan . .	22,286	10,226	2.19	7,100	3.14	24,000	0.93	31,100	0.72
Egypt . .	9,476	23,410	0.41	2,618	3.65	—	—	2,618	3.65
Syria . .	10,652	3,970	2.68	4,590	2.33	6,266	1.71	10,856	0.98
Turkey . .	85,811	24,797	3.46	24,617	3.49	29,201	2.94	53,818	1.60
Cyprus . .	1,795	526	3.38	434	4.14	93	19.30	527	3.41
Israel . .	5,477	1,813	3.02	378	14.49	222	24.67	600	9.13
Lebanon .	2 426	1,450	1.68	270	8.99	—	—	270	9.00
Jordan .	1,939	1,471	1.32	893	2.17	740	2.62	1,633	1.19
Saudi Arabia .	5,816	7,000	0.83	210	27.70	92 760	0.06	92 970	0.06
Iraq . .	16,690	4,842	3.45	5,457	3.06	875	19.07	6,332	2 64
Iran . .	47,367	21,977	2.15	16,760	2.83	10,000	4.74	26,760	1.77
Aden Protectorate .	1,210	660	1.83	120	10.08	18,000	0.07	18,120	0.07
MIDDLE EAST .	210,945	102,142	2.07	63,447	3.33	182,157	1.16	245,604	0.86

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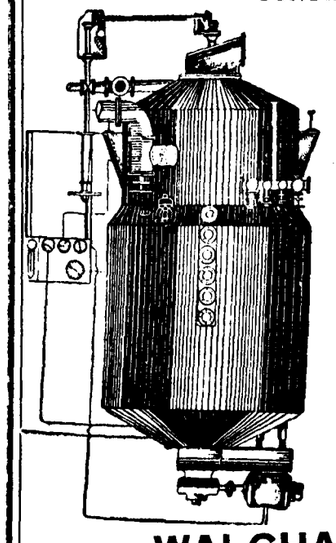
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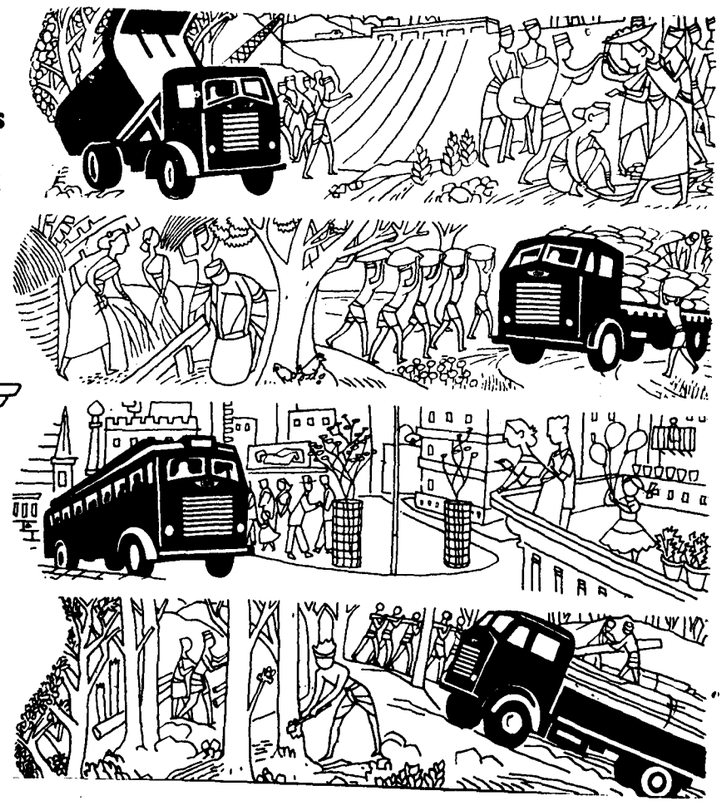
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TABLE 13.

PRODUCTION OF LIVESTOCK PRODUCTS

Country	Meat (in '000 metric tons)		Milk (in '000 metric tons)		Butter & Cheese (in '000 metric tosn)		Hen Eggs (in '000 metric tons)		Wool (clean) (in '000 quintal)		Hides & Skins (in thousand numbers)	
	1948-52	1956	1948-52	1956	1948-52	1956	1948-52	1956	1948-52	1956	1953	1956
India	**76**	**—**	**19,408**	**17,856**	**522**	**549**	**55**	**60**	**141**	**180**	**58,000**	**—**
Sudan	—	—	1,216	1,100	—	—	—	—	—	—	—	—
Egypt	207	257	1,089	966	—	—	24	35	20	18	—	1,639
Syria	44	63	307	433	16	27	9	8	35	51	870	1,043
Turkey	89	150	3,047	3,658	—	3	45	58	182	212	5,823	7,581
Cyprus	8	9	31	22	2	—	2	1	—	—	—	—
Israel	8	6	126	214	1	1	19	28	—	—	61	—
Lebanon	—	18	3	5	6	5	1	2	—	—	—	—
Jordan	1	—	37	30	—	—	1	1	—	—	—	—
Iraq	48	—	774	805	38	40	7	8	75	84	—	—
Iran	132	—	1,178	1,150	55	60	—	—	83	96	—	—
MIDDLE EAST	537	503	7,808	8,383	118	136	108	141	395	461	6,754	10,263

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TABLE 14.

PER CAPITA PRODUCTION OF NON-CEREAL FOOD CROPS, FRUITS AND LIVESTOCK PRODUCTS (EDIBLE)

Country	Population in thousands	Production of non-cereal food crops in thousand metric tons	Production of fruits in thousand metric tons	Production of livestock products (edible) in thousand metric tons	Total of (3), (4) and (5) in thousand metric tons	Per capita production (6) ÷ (2) in kilograms
(1)	(2)	(3)	(4)	(5)	(6)	(7)
India	**387,000**	**10,025**	**673**	**18,465**	**29,166**	**75**
Sudan	10,226	—	—	1,100	1,100	108
Egypt	23,410	635	792	1,258	2,685	115
Syria	3,970	32	262	531	825	206
Turkey	24,797	1,401	3,241	3,866	8,508	343
Cyprus	526	49	141	35	225	428
Israel	1,813	116	483	249	848	468
Lebanon	1,450	63	251	30	344	238
Jordan	1,471	8	68	31	107	73
Saudi Arabia	7,000	—	191	—	191	27
Iraq	4,842	—	252	853	1,105	228
Iran	21,977	93	177	1,210	1,480	67
Aden Protectorate	660	—	15	—	15	23
MIDDLE EAST	102,142	2,397	5,873	9,163	17,433	171

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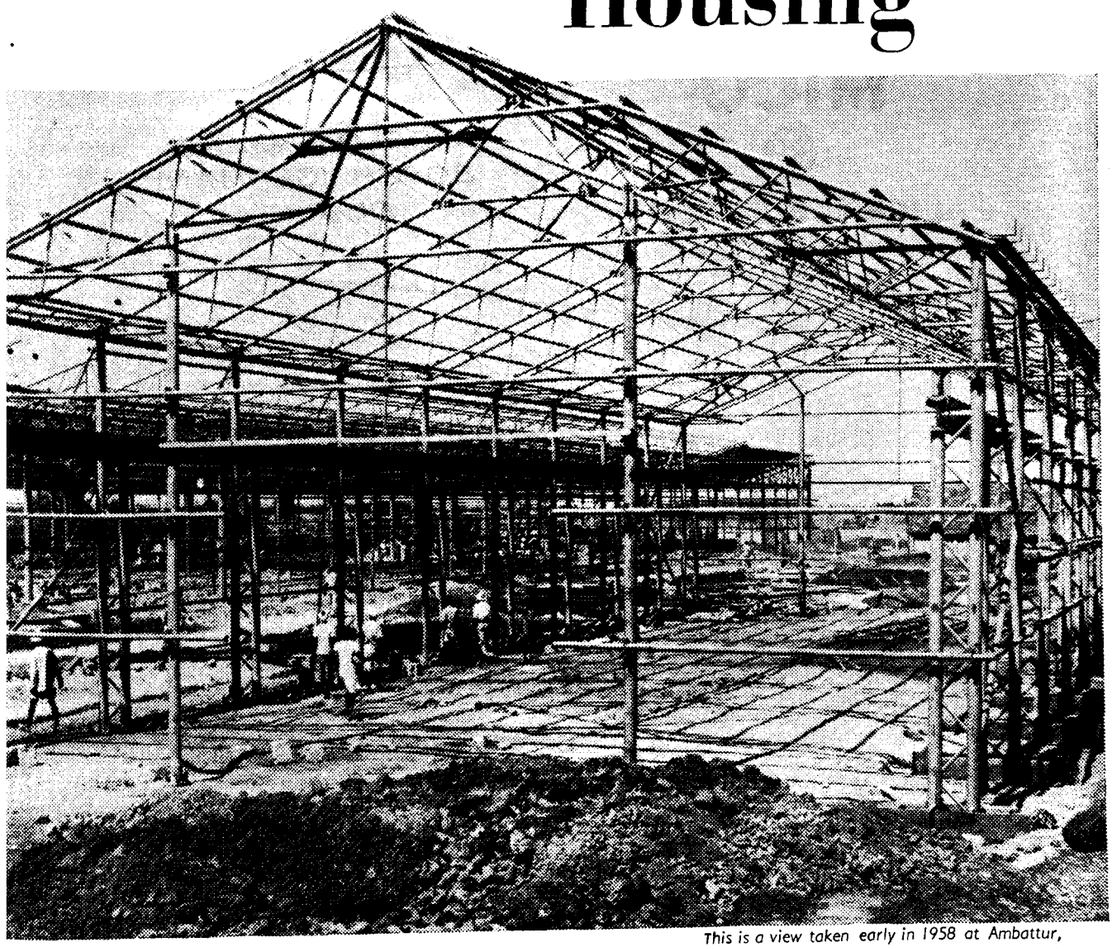
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Tubes in Industry

Housing



This is a view taken early in 1958 at Ambattur, of the factory of The Dunlop Rubber Co. (India) Ltd., then under construction.

India's Industries

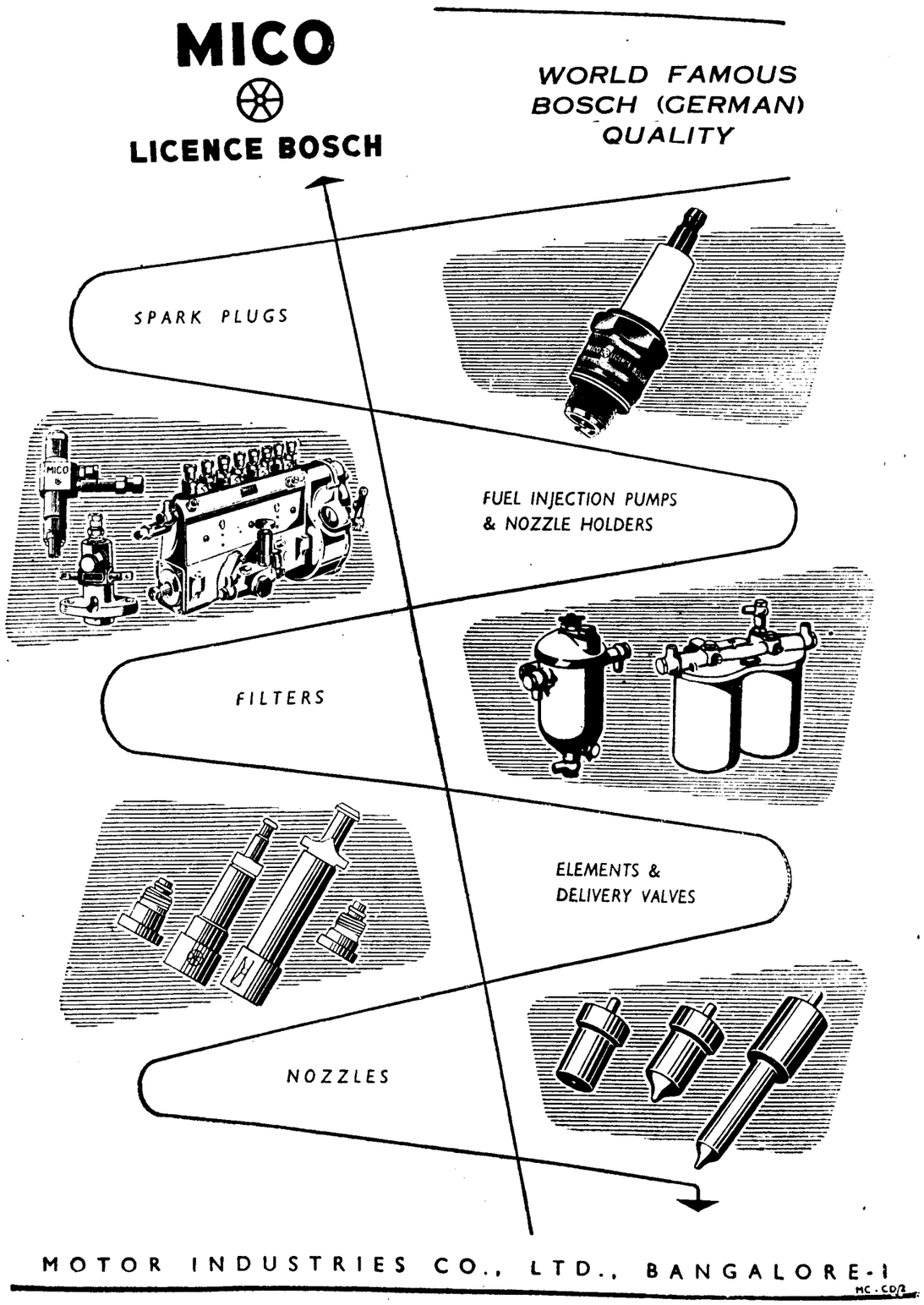
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Industry and Finance

A GENERAL SURVEY

A STRIKING feature of the Middle East economy lies in its relative backwardness in respect of industrialisation. As in many other under-developed countries, it presents a picture of low productivity and 'per capita' income and an insignificant rate of investment. The main inhibiting factors are the lack of coal and hydro-electric power, scarcity of mineral ores and some other raw materials and the poverty of the local markets. The only coalfield of any importance lies in North-West Turkey at Eregli (Heraclea) and production is only 6 million tons per annum. In the fields in the region of Iran, much smaller amounts are produced.

There is, however, the unique asset of petroleum which has been mainly responsible for transforming ways of life in areas where it is explored. The main oil-producing States are only four—Kuwait, Saudi Arabia, Iraq and Iran—which among themselves form 98 per cent of the area's reserves. There is no wonder that a striking inequality has been brought about among the several States in the Middle East consequent on this factor of oil. The broad classification runs as follows; the actual oil producing States which derive considerable wealth from this source for fostering economic development; the non-producing countries which have, however, locational advantages, like pipelines, good harbours or oil refineries; and finally the territories which neither produce oil nor have these locational advantages.

But it must be remembered that though oil is a great source of strength, no under-developed country can afford to have reliance only on one source of income. Confronted with a rapidly expanding population (currently the population in the Middle East is estimated at 100 million) intent on better living standards, a diversified economy with a growing accent on industrialisation has, therefore, become a matter of great urgency. There can be no denying, as the U.N. report on the Economic Developments in the Middle East (1956-57) points out, a common characteristic of the countries in this region is the intense conscious desire of peoples and Governments of the countries of the Middle East for rapid economic development on a large scale. It also points out how during the period 1953-57, industrial production showed a steadier and faster expansion than agricultural production, but even the relatively fast expansion of industry has not affected proportionately the rate of growth of total production since industrial production is only a small percentage of total production in the region.

UNEVEN DEVELOPMENT

The course of this development in regard to industry since the last world war has been rather uneven, taking the region as a whole. While States like Kuwait, Saudi Arabia, Iran, Iraq, Bahrein and Qatar have undoubtedly benefited because of oil, from the point of view of industrial production, it is Egypt, Israel and Turkey that have led the other countries. Significant progress has been made in textiles and in the transformation of agricultural products and in the making of cement for which there is good local demand. Over the last fifteen years there has also been a marked growth of new power stations, factories and mills and though heavy capital goods, such as, machinery and vehicles are still imported, there are now assembly plants for motors and electrical machinery in Turkey and Israel. There has also been growth in light consumer industries consequent on the fillip given during World War II, when there was acute shortage in respect of many of these.

It is obvious that not only the oil industry developed by foreign enterprise but the multitude of locally-owned textile, food processing and building-material factories that have sprung up since the war, have, apart from focussing attention on improved production techniques, greater technical skills and wider markets, gone a long way in giving a fillip to economic growth as a whole. The fact that the administrative structure of the Central Governments in many of the Middle East countries has been expanded to include Ministries of Industry, Public Works and Communications, provides just one illustration. Apart from this, fiscal systems have been modernised to obtain more Government revenue and channel it into productive development. In recent years, many of the States in the Middle East have devoted nearly one-half of the total Central Government expenditure to economic and social services as compared to one-third for defence and police.

The Middle East is at present in the process of a swift economic change and many of the States in the region are at the threshold of the take-off stage in industrialisation, as it were. The development programmes especially those of an infrastructure nature such as highways, irrigation system and public utilities require huge amounts of capital which are in short supply. No doubt the oil industry has provided considerable capital that has been used in greater or lesser degree in the different countries for development purposes. For example, in Iraq, as much as 70 per cent of its oil revenues has been used for economic development. But as the U.N. report, earlier referred to, points out, expanding national expenditures, public and private, for practically all the countries of the region, seem to have outstripped available domestic resources. The pressure on domestic resources has therefore made it inevitable that there should be dependence on foreign sources of finance. Economic and technical aid has so far been provided not only by the United States and Britain but by the several agencies of the United Nations. Recently the Soviet Union has also entered the field with offers of economic aid.

Though India is ahead of several of the Middle Eastern countries from the point of view of industrialisation, like many of these she has to rely on external financial assistance for accelerating her development programmes. Hence, apart from giving assistance by way of technical aid to some extent and provision of technical personnel, she is hardly in a position to assist the process of industrialisation. For her own industrialisation programme on the other hand, she is vitally dependent on Middle East oil. How much she is dependent on this source is seen from the fact that imports from Saudi Arabia alone arose from about Rs. 8.7 million in 1950-51 to Rs. 150 million in 1955-56. India's recent attempts at widening the area of oil exploration are only a modest beginning to meet her deficiency in oil. (India's present consumption of oil is 5 million tons and at present 92 per cent of her needs must be imported as crude or products). The story of Middle East oil exploration is, however, a saga when seen in this context which is dealt with in the next section separately in view of its great significance.

The Romance of Oil Exploration

IT is taken for granted now that Middle East is a rich oil-bearing area but it is hard to realise that only 50 years ago, there was no connection between oil and the Middle East. World production of oil was then only 40 million tons, the United States being the biggest contributor with 25 million tons, followed by Russia with 9 million tons. Going through the table on production of crude petroleum, it will be seen that during 1956, world production was 840 million tons of which the contribution of the Middle East was

171 million tons or 20 per cent of the total world production. In 1938, the percentage was just 5.7. The fact, however, is that the future of the Middle East oil industry is of greater importance than even its present. It is estimated that in 1965 if the world's expanding needs are to be met, the Middle East must provide about 400 million tons which will be nearly 35 per cent of free world production in that year. By 1975, an estimate puts free world demand for oil at as high as 1,600 million tons and in all probability something like half this quantity of oil have to come from the Middle East.

PRODUCTION OF CRUDE PETROLEUM

(Thousand metric tons, except as indicated)

Country	1938	1946	1950	1954	1955	1956	1957
World Total (million metric tons)	282.0	378.0	522.9	690.3	722.8	839.8(5)	—
Middle East (million metric tons)	16.0	35.5	88.5	137.8	161.8	170.7	174.3(4)
%	5.7	9.4	17	20	21	20	—
Bahrein	1138	1099	1506	1503	1502	1507	1591
Egypt	226	1282	2592	2278	1821	1723	2364
Iran	10359	19497	32259	3500	17070	26481	34920
Iraq	4298	4680	6584	30674	32705	29942(1)	21708
Israel	—	—	—	—	—	21	28(2)
Kuwait	—	800	17291	47723	54756	54984	57288
Neutral Zone	—	—	—	856	1266	1672	1205(4)
Qatar	—	—	—	4779	5438	5877	6612
Saudi Arabia	67	6200	26649	46455	47042	48201	48360
Turkey	—	—	17	59	179	306	250(3)

(1) Beginning 1956, excluding Naft Khaneh (36250 tons monthly in 1955); (2) January-June 1957; (3) First ten months; (4) Approximately; (5) Excluding mainland China.

This is quite likely since, until about 1950, the United States supplied some two-thirds of the world's oil, but in 1953 her share had fallen to no much more than one-half. It must also be mentioned that the reserves in the Middle East, almost entirely in Iran and the Iraq/Persian Gulf Area are not only the largest in any oil-bearing region, but actually 63 per cent of the world's estimated total including the U.S.S.R. These countries contain almost five times the reserves of the U.S. which are surpassed individually by both Saudi Arabia and Kuwait. Moreover, the annual withdrawal rate is low, 1957 production representing less than 1 per cent of the Middle East reserves as against 8 per cent in the United States and 2.5 per cent in the world as a whole. Table below gives crude oil reserves in the region at the end of 1957:

M.E. "PUBLISHED PROVED" OIL RESERVES, END 1957

(Mn. meteric tons)

Kuwait	8230	Neutral Zone	721
Saudi Arabia	6030	Qatar	203
Iran	4364	Southern Arabia	66
Iraq	3353	Other (Bahrein, etc.)	61
		Total M.E.	23028

Though oil was struck in Iran in 1908, in Iraq in 1927 and in Bahrein in 1932 and developed in all these three countries before World War II, it is the immense expansion of the industry since the war which has profound implications for both the region and the rest of the world. The speed and scale and the industrial romance of oil discovery in the last two decades in this region has thus created an international significance to this form of wealth which more than any other single substance is vital to every form of material activity of our civilisation, both during peace and in war. In the succeeding paragraphs is narrated the story which will bring out clearly the various stages in the evolution of this industry whose continued expansion is the basis of the expanding economies of the entire free world.

The production of oil in the principal oil producing countries in the Middle East in 1956 was as follows:—

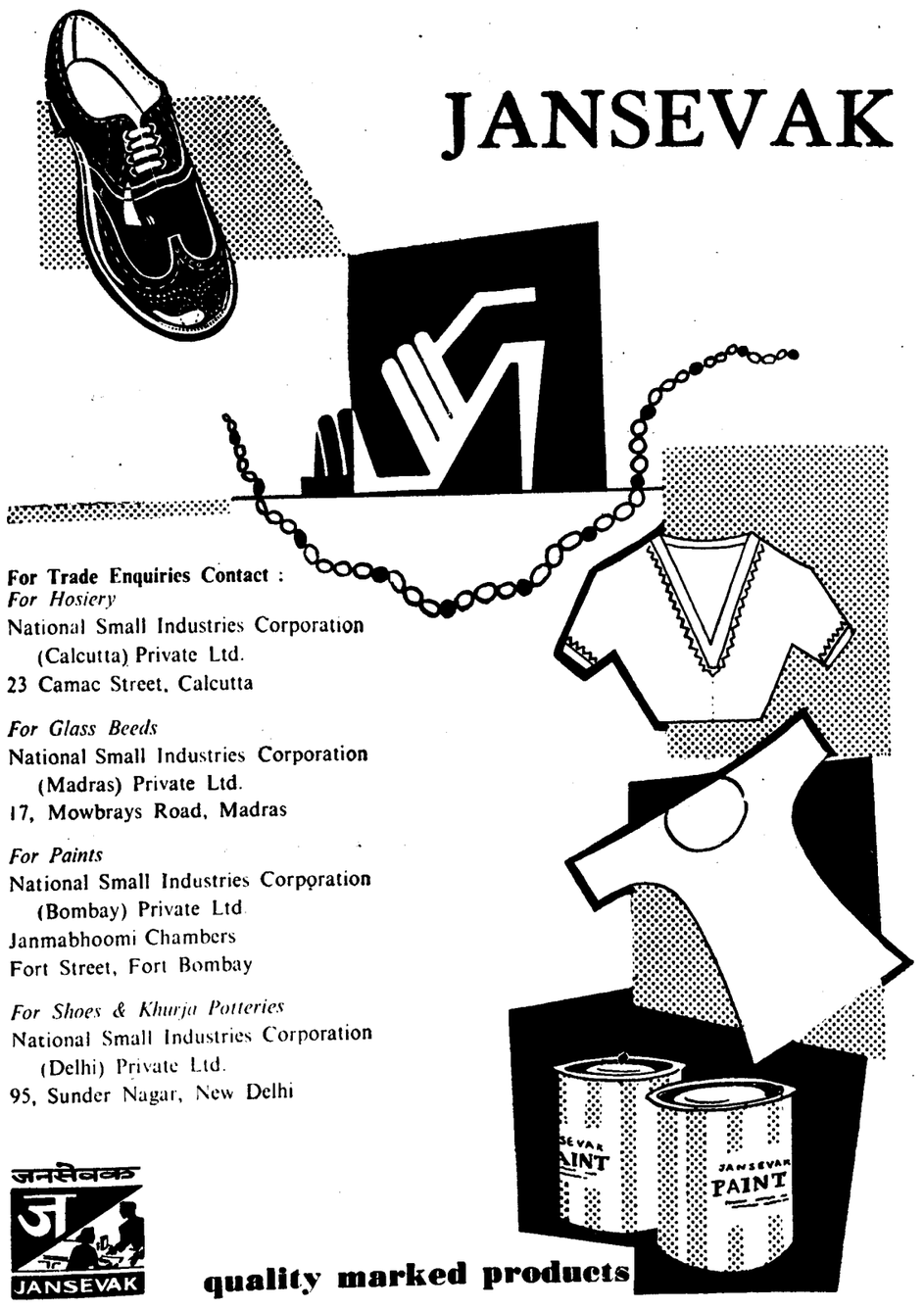
	(In 000s of tons)
Kuwait	54,100
Saudi Arabia	47,900
Iraq	31 000
Iran	27,000
Qatar	5,800
Bahrein	2,000
Egypt	1,900
Turkey	250

POTENTIALITIES OF SAHARA

Of these, the first four, namely, Kuwait, Saudi Arabia, Iraq and Iran accounted for more than 90 per cent of the total production of oil in the region. New discoveries have also been made recently in Saudi Arabia. However, Egypt, Syria and Israel have also revealed new oil-bearing areas recently. According to some observers, the Balaim discovery in Egypt may be the richest ever made in that country and can even make it self-sufficient in oil. In addition, the potentialities of the Sahara deposits seem to be quite considerable judging from the extensive explorations carried out since 1947 which have resulted in the discovery of oil in a number of areas. The expenditure on oil exploration and development in the Sahara has also been rising rapidly. By 1956 some £35 million had been spent and there is a plan to spend £350 to £400 millions during the next three years. An estimate puts the total output of Sahara oil to be of the order of 8 million tons in 1960 rising to 25 to 30 million tons five years later. Thus the Sahara promises to become a rival to the big exporting areas of the Middle East. But that is, however, still in the realm of possibility.

Turning to the Middle East, for Saudi Arabia, oil is the greatest of her natural resources and the whole economy is in fact based entirely on this industry. The oilfields situated in the eastern province of the kingdom are among the richest in the world. Before 1939, production was small. In 1946 it was 8.2 million metric tons and 1957 rose to 49.5 million metric tons. Following the discovery of oil on Bahrein Island, the Saudi Arabian

(Contd. on page 93)



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WELFARE OF BACKWARD CLASSES IN BOMBAY'S SECOND FIVE-YEAR PLAN

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SUMMARY OF
SECOND FIVE YEAR-PLAN
OF BOMBAY STATE

	Rs. in lakhs
1. Agriculture and Community Development	8,675.22
2. Irrigation and Power	13,659.17
3. Industry and Mining	1,318.97
4. Transport and Communications	2,924.41
5. Social Services	7,610.96
6. Miscellaneous	881.20
Grand total (*Excluding provision transferred to Abu Taluka*)	Rs.35,028.39

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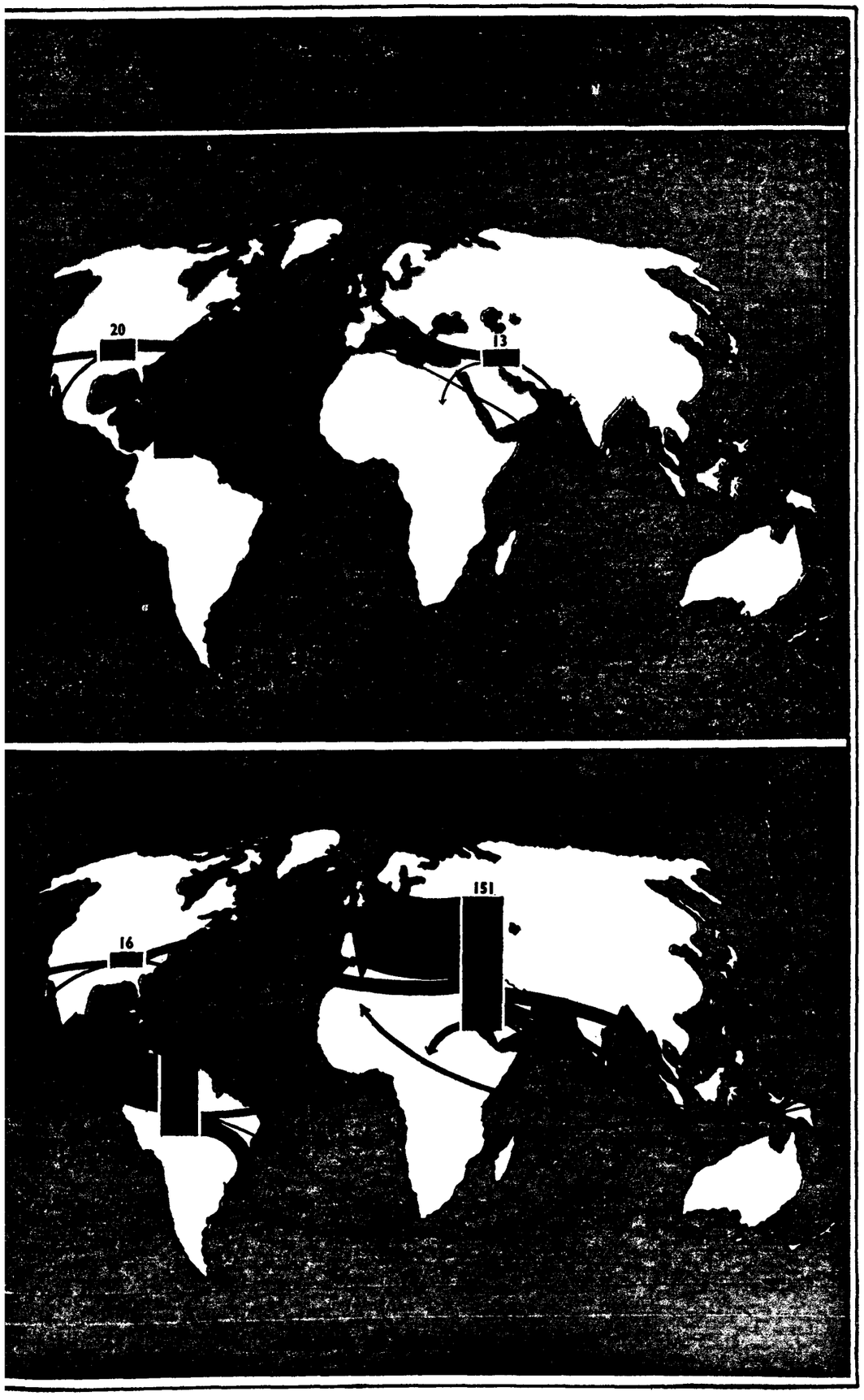
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Cables: **"Intership"**

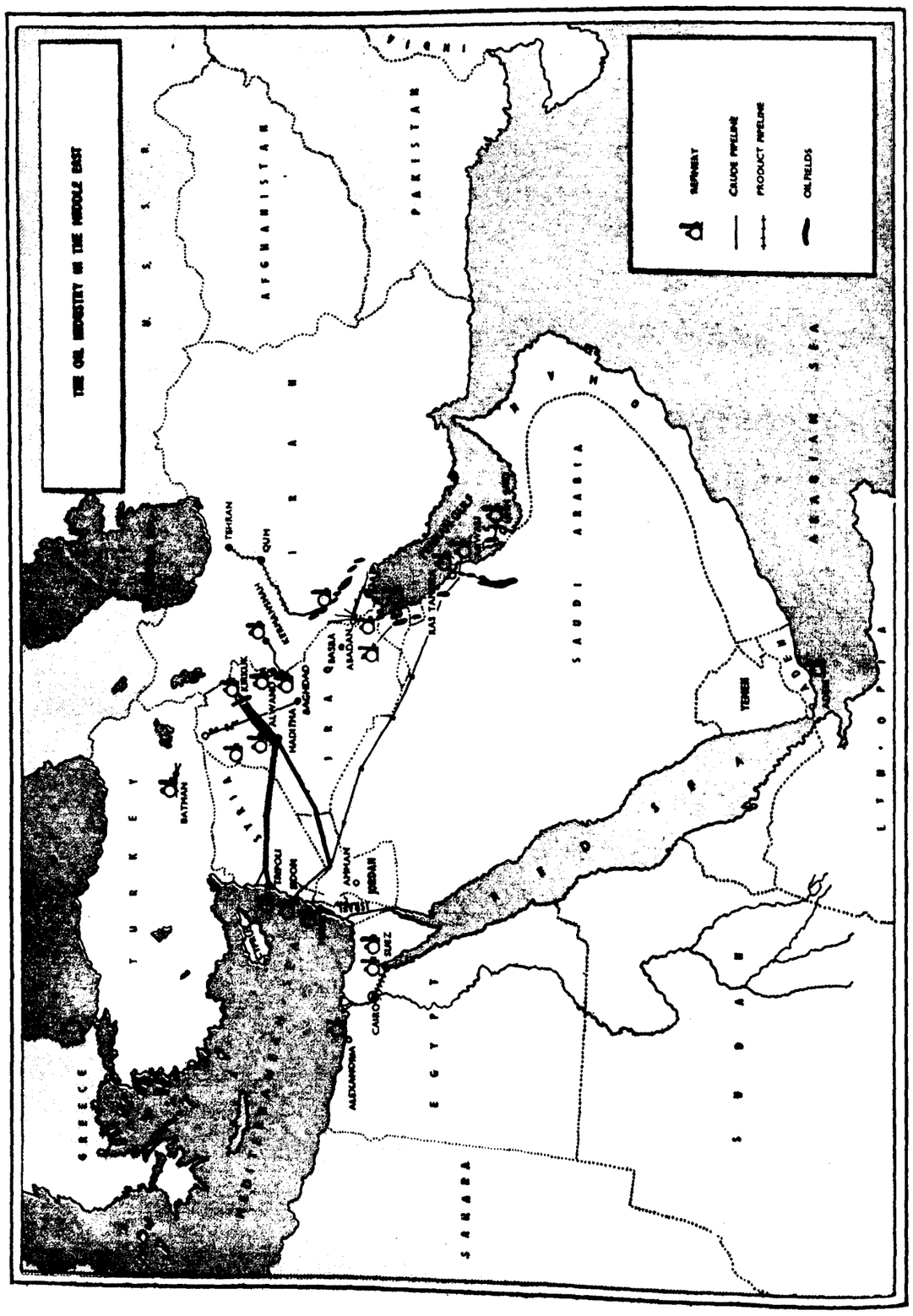
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MIDDLE EAST INDUSTRY

QUANTUM INDICES OF OUTPUT

(1953 = 100)

Product and country	1950	1954	1955	1956
Electricity (Aden, Cyprus, Egypt, Iraq, Israel, Lebanon, Sudan, Syria, Turkey)	64	116	132	141a
Electricity consumption (Egypt, Iraq, Israel, Syria, Turkey)	68	119	133	..
Sugar (Egypt, Iran, Syria, Turkey)	72	112	125	129b
Olive oil (Cyprus, Israel, Jordan, Lebanon, Syria, Turkey)	69	160	64	..
Beer (Egypt, Iraq, Israel, Lebanon, Syria, Turkey)	102	121	124	108b
Cigarettes (Iran, Israel, Jordan, Lebanon, Syria, Turkey)	76	114	109	114c
Tobacco (Iran, Israel, Jordan, Lebanon, Syria, Turkey)	77	107	95	129c
Cotton yarn (Egypt, Lebanon, Syria, Turkey)	81	111	125	124
Cotton fabrics (Egypt, Lebanon, Turkey)	73	114	118	137
Paper and cardboard (Egypt, Turkey)	79	130	158	159
Alcohol (Egypt, Israel, Syria, Turkey)	93	94	117	104
Sulphuric acid (Egypt, Israel, Turkey)	65	157	215	223
Superphosphates (Egypt, Israel, Turkey)	76	178	248	225
Nitrogenous fertilizers (Egypt, Turkey)	2	117	139	151
Refined petroleum (Bahrein, Egypt, Iran, Iraq, Israel, Kuwait, Lebanon, Saudi Arabia, Turkey)	146	111	140	151
Cement (Egypt, Iran, Iraq, Israel, Lebanon, Syria, Turkey)	79	117	137	147d
Steel (Egypt, Turkey)	62	113	129	118e
Glass (Egypt, Israel, Turkey)	59	103	120	..

Source: Economic Developments in the Middle East 1956-57 (United Nations Department of Economic and Social Affairs).

a Figure represents approximately 90 per cent of total generation.

b Excluding Syria.

c Excluding Iran and Turkey.

d Excluding Iraq.

e Turkey only.

DEVELOPMENT EXPENDITURE

(Selected Countries)

ISRAEL a

(Millions of Israeli pounds)

Item	1950	1952	1953	1954	1955	1956b	1957c
Total government expenditure	88.4	195.9	264.6	356.2	511.8	662.6	636.6
Total development expenditure	35.1	73.5	100.7	164.1	210.4	275.4	216.7
Housing	9.8	14.7	15.7	19.1	27.5	37.0	24.8
Public buildings	—	3.8	6.1	11.1	7.3	9.2	3.5
Public works	3.3	6.5	8.2	9.3	6.1	6.9	5.0
Loans: industry, local authorities, public companies	3.9	17.9	21.7	18.3	21.7	33.7	40.7
Loans to agriculture	9.7	22.6	34.7	55.2	75.8	87.9	83.6
Communications	7.7	5.6	11.6	14.8	24.7	33.1	32.3
Other	0.7	2.4	2.7	36.3	47.3	67.6	26.8

Source: Economic Developments in the Middle East 1956-57. United Nations Department of Economic and Social Affairs.

a Years ending 31 March.

b Provisional data.

c Estimated.

IRAN a

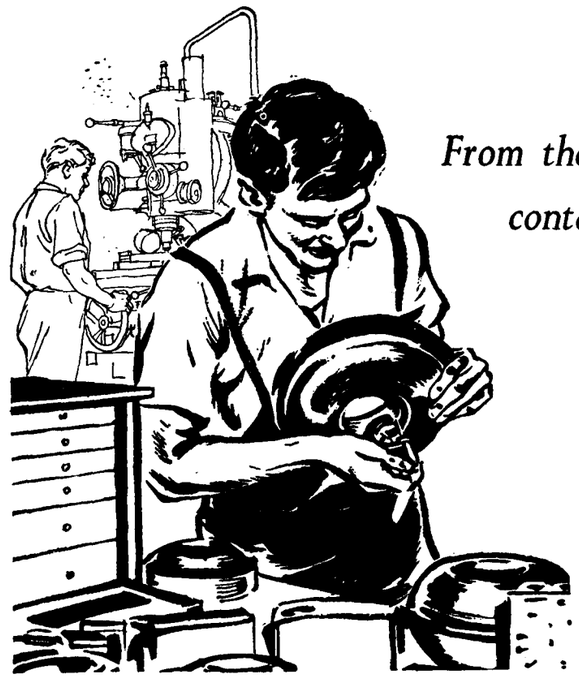
(Millions of rials)

Item	1954-55	1955-56	1956-57	1957-58b
Total revenue	1,778	4,320	5,674	8,660
Total expenditure	1,850	4,410	8,002	13,124
Agriculture and irrigation	157	723	1,633	3,253
Industry and mining	371	718	1,379	1,785
Transport and communications	448	1,454	3,300	5,510
Social	67	683	1,301	2,356
Administration and other	807	832	390	220

Source: Economic Developments in the Middle East 1956-57. United Nations Department of Economic and Social Affairs.

a Actual revenue and expenditure of the Plan Organization.

b Estimated.



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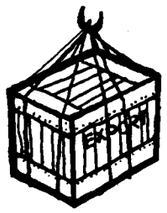
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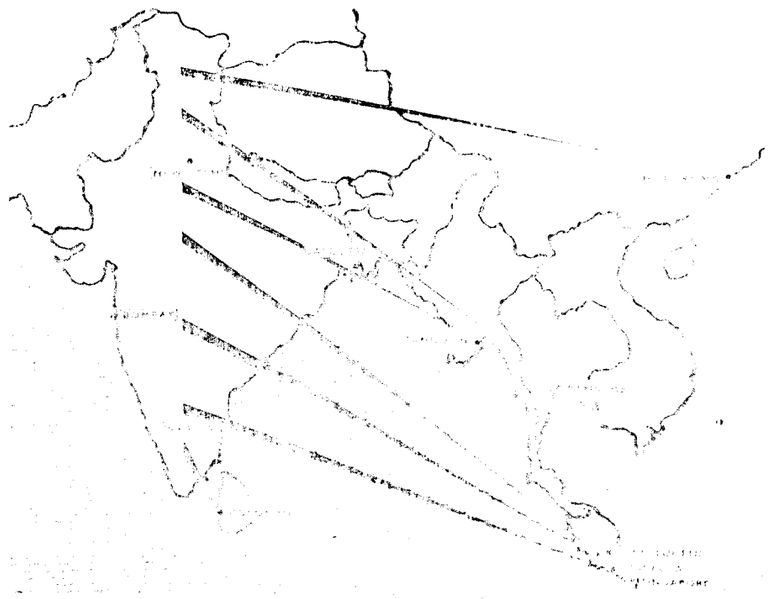
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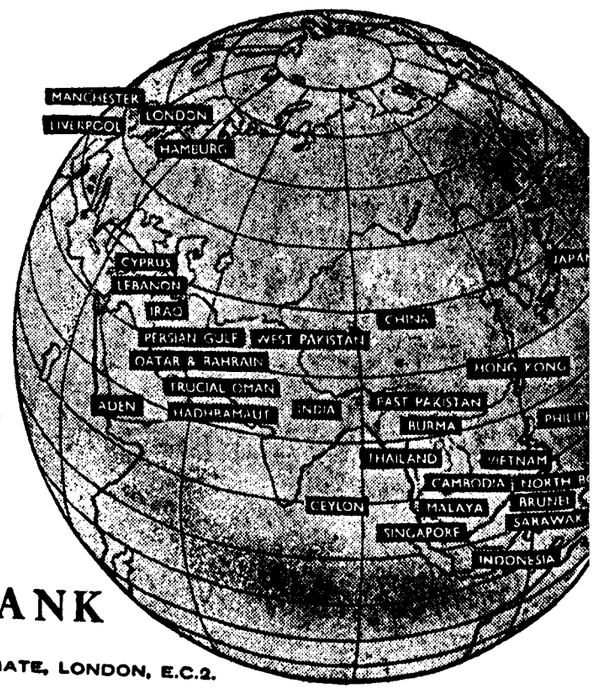
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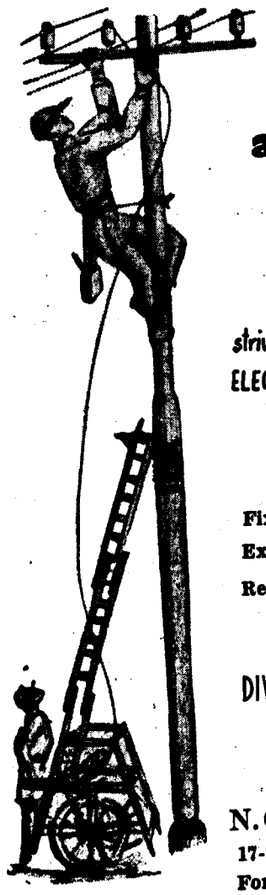
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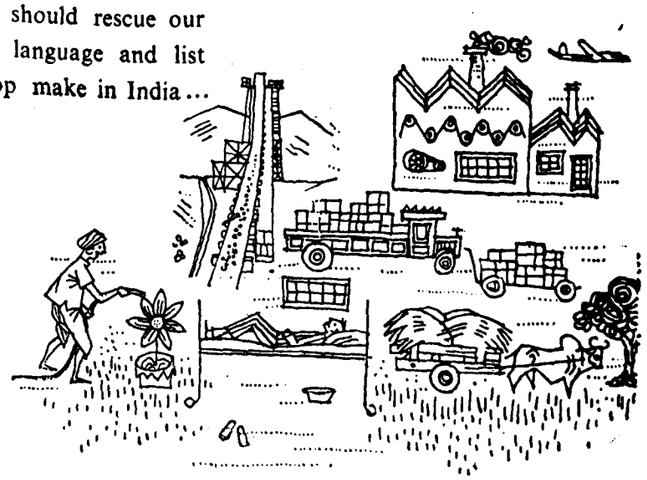
BOMBAY-CALCUTTA-MADRAS-NEW DELHI-JAIPUR-PATNA



A school boy, writing an essay on Dunlop, said: "When Dunlop first came into being it came out of a tree. There were two men walking in the forest one day one man kept throwing his knife in the trees. He came to one tree and through his knife in it and something sticky came out. After a while it stopped coming out and at the bottom of the tree there was a big ball of rubber. After a while they started playing football with it and that is how it came into being. I will now tell you what Dunlop is used for..." At this stage, perhaps, we should rescue our readers from school boy language and list the products that Dunlop make in India...

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DEVELOPMENT EXPENDITURE

(Selected Countries)

IRAQ a

(Millions of dinars)

Item	1951-52	1952-53	1953-54	1954-55	1955-56	Total
Revenue	7.5	24.0	35.3	40.7	60.8	136.5
Authorized expenditures	9.4	20.5	28.4	31.6	46.6	136.5
Actual expenditures	3.1	12.8	12.3	20.9	34.0	83.1
Irrigation and reclamation	1.6	3.5	7.1	11.5	11.6	35.3
Roads and bridges	0.6	1.7	1.9	4.3	8.4	16.9
Industries	—	0.1	0.5	2.0	2.9	5.5
Other	1.0	7.3	2.8	3.2	11.1	25.4

Source: Economic Developments in the Middle East 1956-57 (United Nations Department of Economic and Social Affairs).

a Actual revenues and expenditures of the Development Board, fiscal years, beginning in April and ending in March of years stated. For April 1956/March 1957 authorized expenditures totalled 82 million dinars, while actual expenditures amounted to 45 million.

TURKEY a

(Millions of Turkish liras)

Item	1950	1953	1954	1955	1956	1957b
Industry, mining and electric power	65.0	62.6	66.7	65.8	56.7	72.5
Agriculture	95.6	164.7	174.6	271.2	350.5	531.7
Transportation and communications	120.5	260.8	271.2	416.6	482.5	577.5
Public works	47.6	80.0	101.4	108.9	103.4	136.8
TOTAL	328.7	568.1	613.9	862.5	993.1	1,318.5

Source: Economic Developments in the Middle East 1956-57 (United Nations Department of Economic and Social Affairs).

a General and annexed budgets.
b Estimated.

SYRIA a

(Millions of Syrian Pounds)

Item	Total appropriations	Actual expenditures to end of 1956 (Categories I and II)	Loan and advances to end of 1956 (Categories III and IV)
Irrigation projects	230.8b	7.9c	26.7d
Road, seaport and airport projects	177.3	18.5e	10.5 f
Electricity	24.5	—	19.6g
Other	227.3h	52.2 i	0.8
TOTAL	659.9	78.6	57.6

Source: Economic Developments in the Middle East 1956-57 (United Nations Department of Economic and Social Affairs).

a Extraordinary budget, 1955-1961. The extraordinary budget covers certain major expenditures on development projects that have been singled out in the table. In addition, the ordinary budget usually includes funds that are devoted to development purposes.
b Including Ghab project administration with a share of 87.5 million.
c Including 2.9 million spent on a well-digging project.
d Including loan of 20 million to the Agricultural Bank, 4.3 million to the Ghab project and 2.9 million to the Aleppo Water Commission.
e Of this sum 8 million were spent on the purchase of DHP railways. The rest was devoted to road construction projects.
f Covers a loan of 10 million to the Latakia seaport and an advance of 0.5 million to cover the deficit of the Hejaz Railways.
g Covers nationalization compensations to electricity establishments.
h Including national defence, petroleum refinery, bank projects, hospitals and buildings, administrative expenditures and other projects.
i Including 50 million spent on national defence.

INDUSTRIAL PRODUCTION INDEX

(Selected Countries)a

(1953 = 100)

Country and Industry	1948	1949	1950	1951	1952	1953	1954	1955	1956
Egypt:									
Salt and phosphate	—	—	—	121	114	100	112	125	—
Crude petroleum	—	—	—	102	105	100	87	89	—
Canning, fruit preservation)									
Tobacco, mouassel, and edible oils)	—	—	—	108	102	100	101	117	—
Textiles	81	80	83	91	97	100	109	116	117
Manufacture of footwear	—	—	—	97	97	100	101	97	—
Manufacture of furniture	—	—	—	122	119	100	122	131	—
Paper, cardboard and products thereof	—	—	—	98	94	100	115	142	157
Printing and periodicals	—	—	—	89	88	100	116	121	—
Alcohol, soap and oils	—	—	—	88	96	100	103	111	—
Petroleum refineries	17	116	121	131	136	100	114	152	124
Tanning industry	—	—	—	92	102	100	107	124	—
Basic metal industries	—	—	—	55	86	100	131	149	—
Motor-car repairs	—	—	—	88	94	100	114	122	—
General index of manufactures b/	—	—	—	105	105	113	122	133	—
Israel: c/									
Minerals	—	—	—	—	—	—	—	100	144
Food	—	—	—	—	—	—	—	100	101
Textiles	—	—	—	—	—	—	—	100	102
Clothing and footwear	—	—	—	—	—	—	—	100	95
Wood cork	—	—	—	—	—	—	—	100	96
Printing and paper	—	—	—	—	—	—	—	100	94
Leather	—	—	—	—	—	—	—	100	117
Rubber products	—	—	—	—	—	—	—	100	89
Chemicals	—	—	—	—	—	—	—	100	101
Stone and cement	—	—	—	—	—	—	—	100	92
Metals	—	—	—	—	—	—	—	100	97
Vehicles	—	—	—	—	—	—	—	100	116
General index of manufactures	—	—	—	—	—	—	—	100	100
Turkey: d/									
Coal mining	73	74	77	82	82	100	101	97	103
Metal mining	32	48	46	67	89	100	62	77	117
Sulphur	24	32	61	76	85	100	102	117	142
Textiles	75	87	87	82	96	100	118	129	122

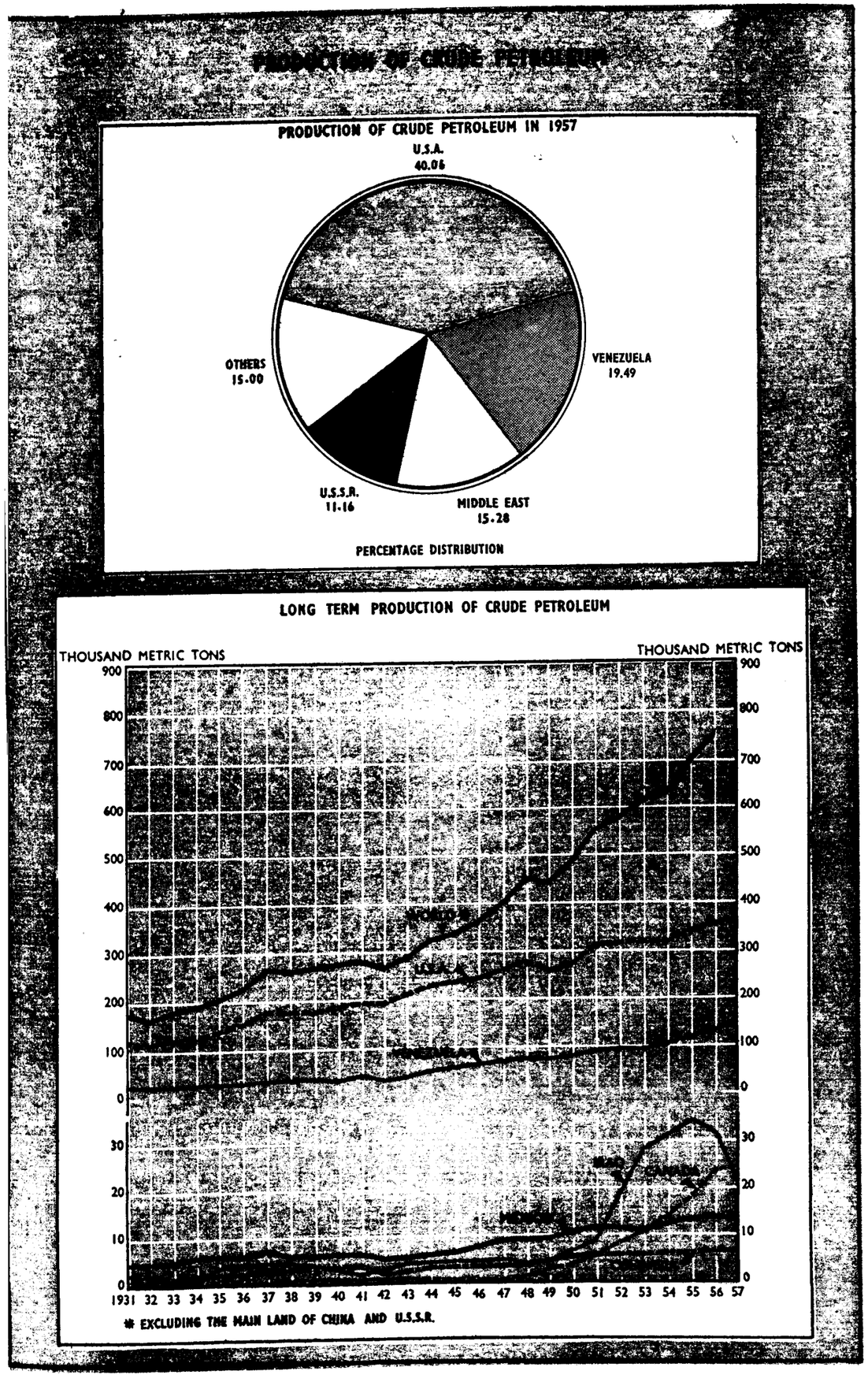
Source: Economic Developments in the Middle East 1956-57 (United Nations Department of Economic and Social Affairs).

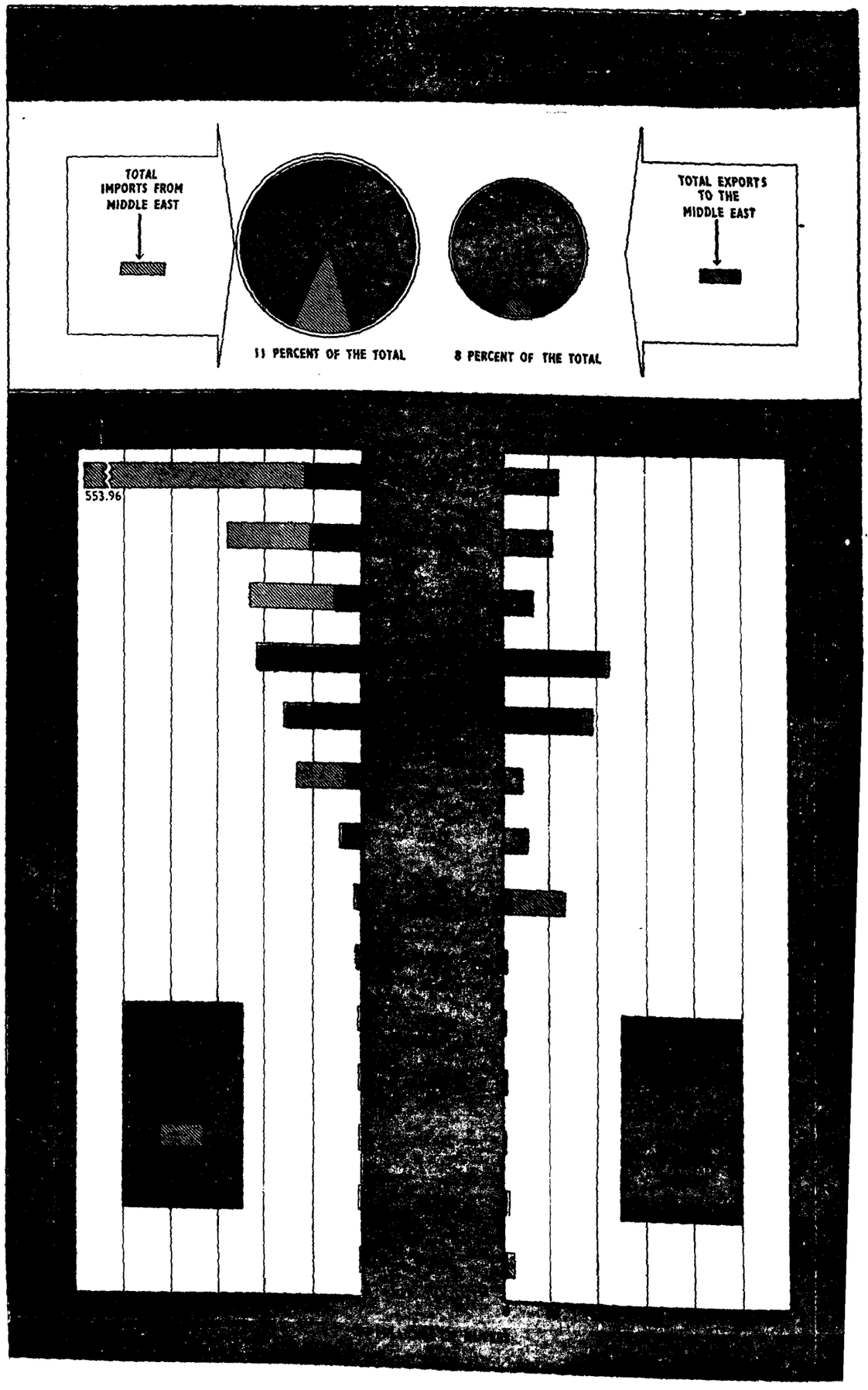
a/ Taken from International Standard Industrial Classi fication of all Economic Activities.

b/ 1950 = 100.

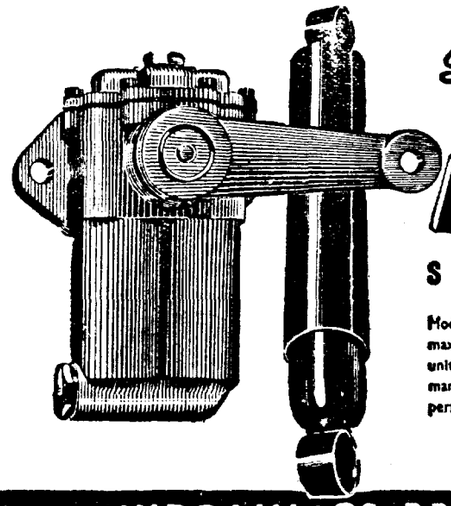
c/ 1955 = 100.

d/ Figures for Turkey are estimates of the Statistical Office of the United Nations.




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8 PERCENT OF THE TOTAL
TOTAL EXPORTS TO THE MIDDLE EAST
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(Contd. from page 76)

concession was granted in 1933 to an American company, the Standard Oil Company of California. Thereafter, Standard of California formed an operating company, California Arabian Standard Oil Company, whose name was changed early in 1944 to the Arabian American Oil Company (Aramco). The bulk of production came until recently from the Abqaiq field and the Dammam Dome but the newer Ghawar field in the southwest covers a far greater area and is being developed systematically. In December 1950 Aramco concluded with the Government an agreement providing that the Government share through taxes, royalties and other charges should equal one half of the company's net operating income. This was the first adoption of the "50 : 50" principle in the Middle East.

The whole economy of Kuwait draws sustenance from the income derived from the extraction of the country's vast oil deposits. This is carried out by the Kuwait Oil Company. It is owned jointly and equally by the British Petroleum Company Limited and Gulf Oil Corporation of America. The concession which covers the whole of Kuwait including territorial waters to a six-mile limit was granted to the company in 1934 for 75 years. Oil was first exported in 1946 and production has increased so rapidly that Kuwait has now become the fourth largest producing country in the world. It is now almost completely dependent on petroleum activities for its revenues and its national income per head is the largest in the world.

IRAQ

The oil industry in Iraq stands on a basis different from that of all other industries since it is the country's principal source of wealth and provides the capital for all State and municipal industries. Operations are conducted by the Iraq Petroleum Company and its associated companies, the Basra Petroleum Company and the Mosul Petroleum Company. Oil was struck for the first time in the IPC concession in 1957 near Kirkuk. Production, which was 4.7 million metric tons in 1946 rose to 31.1 million metric tons in 1956. Under the oil agreement of 1952, Iraq receives half of the oil companies' profit and the companies have guaranteed a minimum annual output of 30 million tons as from January 1, 1956. The recent revolution in Iraq has not interrupted the flow of oil and present plans for expansion of productive capacity in Iraq are likely to be encouraged by the new regime.

Oil is the most important industry of Iran. The oil deposits of the south until nationalisation were developed by AIOC which took over in 1909 the concession granted by Muzaffar ad Din Shah to W. K. D'Arcy in 1901. The first significant discovery was Masjid-i-Sulaiman in 1908 which was destined to remain the country's main producing field for over 20 years and is still producing at a rate of 2 million tons a year. Oil production rose from 1,100,000 tons in 1919 to over 10 million in 1938. A new concession covering areas in South Iran was granted in 1933 to run up to 1993. The Government requested an alteration of its term in 1947 and, when no agreement was reached declared the industry nationalised as from May 1, 1951. Production almost ceased by the middle of the year when the Government took over the industry through the National Iranian Oil Company. After prolonged negotiation, agreement was reached between Government and a consortium of eight foreign oil companies in October 1954. Later, nine independent American oil companies were admitted to the consortium. Two operating companies under the consortium registered in Holland are responsible for exploration and refining respectively. But the NIOC remains the sole owner of the fixed assets, the companies being granted the unrestricted use for the period of the agreement. Iran's crude oil resources are very large (4,360 million metric tons at the end of 1957, over 12 per cent of the world total) and the possibilities are more may be found. She is now slowly recovering from the experience of the sweeping upheaval between 1951 and 1954.

In no country of the world has oil development made a greater difference than in Qatar. Preliminary oil surveys to reveal the oil possibilities of the peninsula were conducted in 1924 and 1930-2. A concession for the area was obtained on behalf of the Iraq Petroleum Group in 1935 and an ad hoc company was formed as Petroleum Development (Qatar) later renamed the Qatar Petroleum Company. Oil exports from Bukhan, the country's only field, began on the last day of 1949 and production has now reached a rate of nearly 8 million tons a year. For 1957 it was 6.5 million tons, an increase of 12 per cent over 1956.

NEW PERSPECTIVE

In the countries where large oil resources have been found (as briefly explained in the foregoing paragraphs) the impact of oil has brought new perspective and a sharpened awareness of the possibilities of economic growth. The companies that sustain the oil industry in the Middle East hold their concessions or conduct their operations under agreements that have all been revised since 1950. The principle adopted conforms to the '50 : 50' pattern of division of profits between the producing country and the ruler or Government concerned. This has naturally resulted in the receipt of very large sums of money, which have been the principal and sometimes the only source of funds for development and have also formed a substantial part of their annual incomes. Especially after 1951 the direct payments by oil companies to rulers and Governmnts have increased greatly. The difference that petroleum activities have made to the economy of these States can be seen from the following table:—

REVENUE RECEIVED FROM OIL

(equivalent in mn. US$)

	1951	1952	1953	-1954	1955	1956	1957
Kuwait	28.65	165.36	191.87	217.47	280.00	280.00a	300.00a
Saudi Arabia	155.00	170.00	166.00	180.00	260.00	280.00	285.00a
Iraq	39.92	92.64	132.31	155.45	223.37	192.64	136.92
Qatar	3.31	7.04	11.18	20.73	36.75	35.84	44.80
Bahrein	2.92	4.25	5.08	11.09	8.90	11.0	—
Iran	23.30	—	—	5.60	85.10	NA	NA

a=Estimate.

The large revenues accruing to these producer States have naturally enabled them to have higher imports, plan great development schemes and improvements in the way of life. In Iraq, 70 per cent of the oil revenue is allocated by law to the Development Board providing the whole of its funds while 30 per cent goes to the budget. Under Iran's seven-year development plan (1955-62) 60 per cent of the oil revenue goes to the Plan organisation in the first three years and 80 per cent thereafter; the remainder is divided between the NIOC and the Budget. In Kuwait, about a third is used for development project, one-third is invested to build up a State reserve and one-third goes to the ruler's privy purse from which the running expenses of the State are met. Similarly, a good deal of social and economic development work has been done in Saudi Arabia through the revenues derived from oil (which is over 90 per cent of its revenue). In Qatar, expenditure of oil revenues has been directed almost entirely to the social welfare of the people including the rebuilding of the

own of Doha. The 50: 50 principle has recently been extended to become the basis of negotiation for payments to the three transit countries, Syria, Lebanon and Jordan, with obvious advantages for their economic development. A graph at the end of this section brings out how, apart from contributing for economic development by way of resources, the oil industry has also been able to solve the problem of balance of payments in the several countries of the region.

"50: 50" PRINCIPLE

As actual owners of the oil underneath their territories, the Middle East Governments recieve, with few exceptions, royalties upon the production of petroleum, regardless of the profit obtained on its sale. In addition, as sovereign governments, they tax companies working within their borders. The principle of 50/50 simply means that the Government's income from royalties and taxes equals the company's profits after such payments; hence the Government benefits equally with the oil company from the production operations within that country. In the case of some recent concessions sought under conventional 50/50, their location in highly desirable positions near existing oilfields encourages the free play of competition, and sometimes adds substantial cash bonuses to the company's offer. These bonuses are retained by the Government whether oil is found or not.

The 50/50 principle has achieved world-wide acceptance; it has given stability to the oil industry, because it is based on equity and fairness. The Government provides the oil (if any) and the rights to exploit it, and the company provides the capital, skill and market outlet, and always runs what is, even in the most eligible territory, the large risk of losing its investment by failing to discover oil. The result has been that Middle East governments have received a stable revenue which is psychologically equitable; that consumers have been charged prices which they can reasonably afford to pay and are low enough to encourage industrial development; and that oil companies can generate sufficient capital to finance the expansion and exploration needed to meet the steadily growing world demand for petroleum products.

Recently, however, new concessionary arrangements have been negotiated which may become a threat to the existing stability. The first of these, the AGIP/NIOC Agreement, is novel in that it is between two Government organisations respectively, Italian and Persian. Equally novel is the fact that the Persian Government for the first time becomes an actual shareholder, to the amount of 50 per cent, in the new company SIRIP. Persia has agreed to forgo bonus payments, although the concession area looks highly attractive, and is committed to contribute half the capital required in the development of the oilfields, if petroleum is discovered. However, the Persian Government will tax SIRIP, like any other oil company, on the 50/50 basis. Of the remaining profits, NIOC as a 50 per cent shareholder in SIRIP will get half; this explains why it is sometimes asserted that the Persian share is 75 per cent of the profits, with 25 per cent going to AGIP. But in fact the 50/50 principle is maintained, with the addition of a 50/50 shareholding basis as well. The second arrangement, the Japanese/Saudi Arabian Agreement for the Neutral Zone off-shore area, departs from the 50/50 principle, in that Saudi Arabia is to receive 56 per cent of the profits of all phases of an integrated operation; the Japanese getting 44 per cent. There is another departure, in that, besides production, the new company will undertake transportation, refining and marketing outside as well as inside Saudi Arabia.

The newcomers are able to offer terms which can be represented as more attractive than the conventional 50/50 basis because they enter the Middle East after million of pounds have been spent by major companies in surveying these areas, and prospects for oil can be assessed with greater accuracy. They can reject the long odds and accept only the short ones, in the hope of undercutting established businesses. But these newcomers also have so much less to offer in the way of assured markets, resources of capital, convertibility of currencies, research, expertise, and experience of similar operations that they have had to offer these terms, in order to get into the business at all.

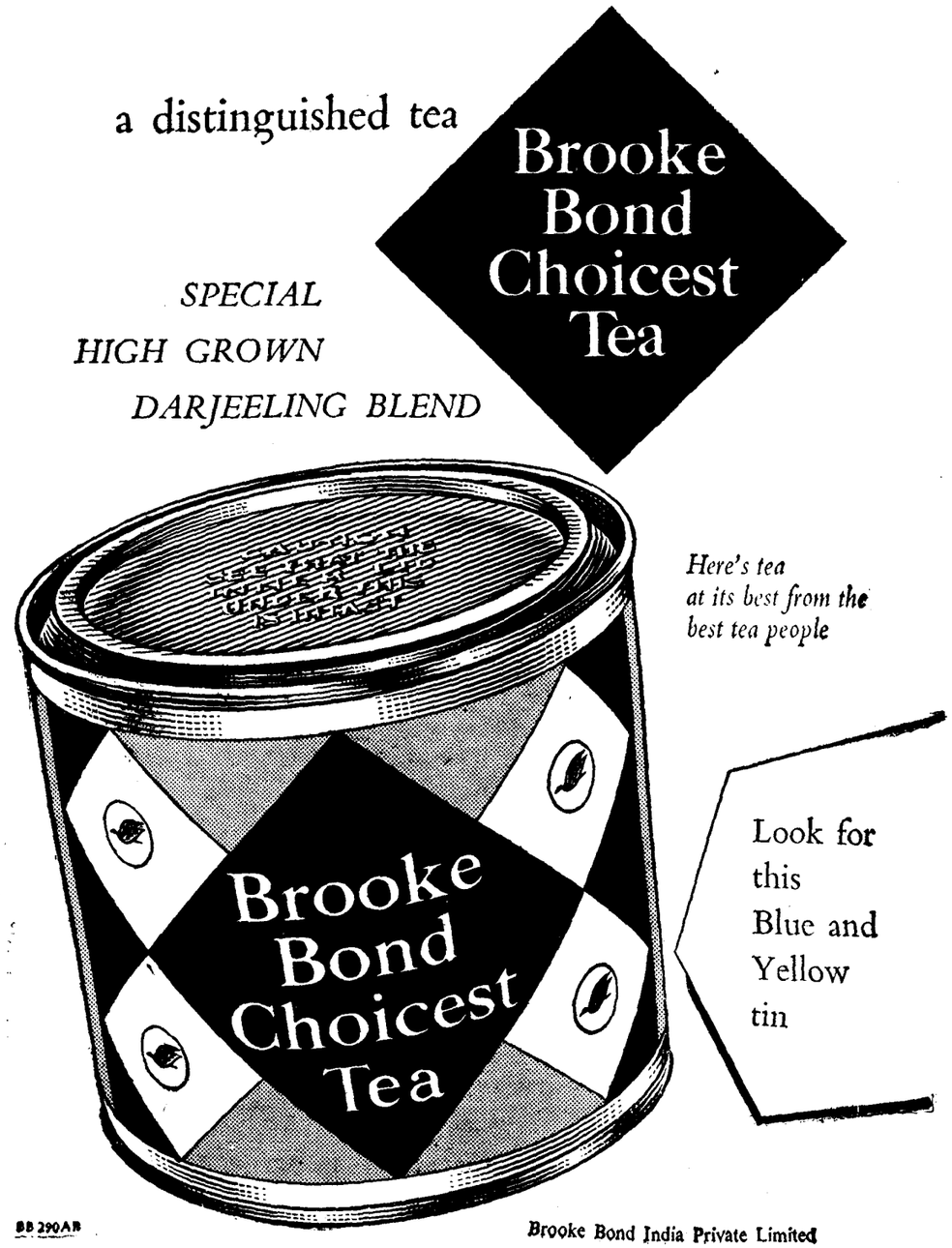
On the face of it, it seems as though there will be significant increases in the gains of producer governments. But a mere percentage increase to 56/44 (for instance) is not necessarily more lucrative than today's 50/50 if, as a result, either total sales are reduced, or posted prices go down, or operating costs are higher. The pressure of consumer governments behind these new deals could well result in a reduction of posted prices for crude oil, and thus in a reduction of the oil revenues of producing countries from all sources. At the market end, the new oil may be found to be competing with or displacing other oil from the same country of origin. In order to break in, the newcomer will have to cut prices. But there is a limit to this, since if taken far by a company with limited resources, operations will become so expensive as to reduce the profit left to be shared.

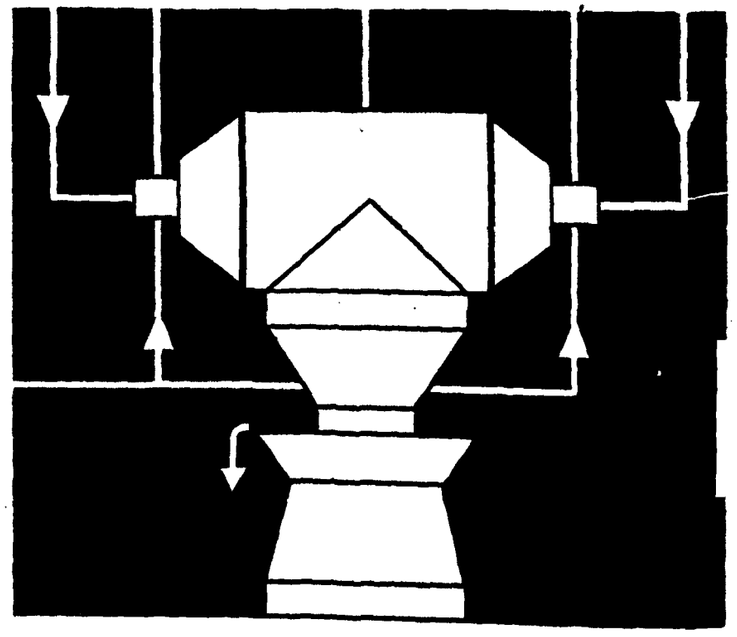
It is worth mentioning here as to what these new agreements mean to the consumer. To begin with, there will probably be no change. Should price cutting start, the consumer will stand to gain, but only for a while. If major oil companies' profits become insufficient to carry out fresh exploration while the world demand for oil continues to increase, a situation could eventually arise in which there is a real danger of world oil reserves running low. The result of this might be that new "outside" capital would have to be raised in an unfavourable capital market, and the price of oil would tend to rise. This danger is enhanced by the political unrest existing in the world today, and the objective fact that it is unwise to depend too much on any one area of oil supply. This new trend may also affect the present set-up of the oil industry. The industry may lose its stability. The international oil market is remarkably stable compared with those for other major commodities. This stability depends upon the resources of those companies with extensive international trading facilities, which enable them to cushion the fluctuations of supply and demand all over the world. In reconciling the conflicting aspirations of producers and consumers, these companies do, to some degree, actually insulate oil from the politics of individual governments because such companies have broadly to satisfy all their clients irrespective of the political strength of any one of them. There does exist a real community of interest between producers, companies and consumers in preserving these characteristics of the oil market. Direct governmental relationships of the "single source single market" type must gradually weaken the buffer function of the international oil market, and if this buffer were to disappear, it would somehow have to be replaced in order to prevent a haphazard distribution of oil supplies. Such a replacement could only be effected by cumbrous and expensive international machinery, with its inevitable political atmosphere.

New deals which depart from the principle of equal sharing of profit must make the actual split a matter of bargaining in each case. This always leads to a state of uncertainty, which will adversely affect the future of the industry, and its powers of capital generation, and can hardly be in the interests of the producer governments themselves. There are already signs of strain upon the industry's resources; one of its besetting problems remains the generation of ever-increasing sums of capital; and it is clear that a reduction of this ability is bound to impede essential development — or substantially to increase costs to the consumer.

GREAT SERVICES

There can be no denying that impartial scrutiny will show that the great oil companies operating in the Middle East have performed great services and few dis-





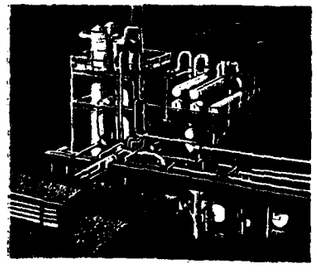
From fuels of all kind to organic chemical basic materials . . .

Carbon dioxide and hydrogen are the initial gases for many chemical syntheses. Since the classic water gas process is based on valuable coke, it was the task of technology to develop processes for the production of synthesis gas from low-grade fuel such as brown coal, bituminous coal and petroleum products of any kind.

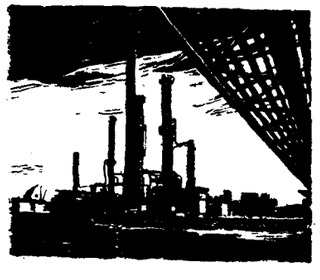


The solution of this old task which is of vital significance for the chemical industries, particularly in countries in which coking coal is not available is the

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services. This has to be particularly mentioned because of criticism often levelled against the foreign companies for their 'exploitation'. It seems unlikely that the oil producing countries will for a long time be in a position to substitute any other oil operating agency for the foreign companies hitherto employed by them to develop their natural resources. The services of the companies to the Middle East oil have been rendered not only by the free use of their own wealth and initiative but also by the willingness to co-operate among themselves. There had been many cases of mutual understanding and joint effort calculated to avoid the anarchic conditions of production and marketing from which sometimes the oil industry had to suffer. In Saudi Arabia, Aramco provides technical assistance of various kinds to the Saudi Government, particularly in the domains of education, public health and community planning. It has participated directly in the Government's campaign against illiteracy while primary schools built by the company in Arab towns in the Eastern province are run by the Ministry of Education. The company has also been acting in the field of preventive medicine and the sponsoring of a five-year programme seeking a trachoma vaccine. In Iran, besides the royalties paid to Government, large sums were spent by the company in social services in the concession areas. In Kuwait, the Kuwait Oil Company has developed various successful educational and training schemes to which preference is always given to Kuwaitis. Local spending by the oil company apart from direct payment of royalty and tax amounted to about £2.5 million in 1956.

The oil companies in the Middle East have always tried to eschew any part in local political conflict and always tried to work in harmony with the established authority so as to get on with their job of finding, producing and exporting oil. That the world demand for petroleum products will continue to increase as it has done in the past is undoubted. It is necessary that the agencies, which now produce oil in this region, should continue to work with all goodwill and possess the continued power to provide capital for the work of expansion because the Middle East oil industry can not only benefit to an incalculable degree the people of the producing States and to a lesser degree the people of transit and refining countries but it can also provide for the use of the world a precious and unique substance with which it deals. For India, thre is much to profit from the experience of the Middle East countries narrated here in brief.

Growth of Industry

FROM the foregoing article, it will be wrong to infer that in the Middle East, as a region outside oil, the economy is static. On the other hand, the progress in manufacturing industry and the development plans in progress in several of the countries (discussed in the suceeding article) show that it is far from correct. Two tables in this section, one on the quantum indices of output in certain industries in the major producing countries in the region and the other giving the industrial production index in some selected countries help one to have a general picture of the growth of industry. Three countries, especially, Egypt, Israel and Turkey, have witnessed significant industrial expansion. Thus, with 1950 as the base, the general index for Egyptian industrial production stood at 133 in 1955. In the case of Turkey, for the four industries for which reliable indices are available coal and metal, mining, sulphur and textiles there has been a steady growth. A perusal of the output indices of major industries as a whole with 1953 as base also go to show that except for one or two items, like oil and tobacco, the period 1955-56 saw a general uptrend. Production of cement, electricity, paper and cardboard, sulphuric acid and superphosphates particularly showed striking progress.

Textiles is one of the most important industries of the region though it is mainly concentrated in Egypt and Turkey. In Egypt, between 1950 and 1956, the production of cotton yarn has risen by nearly 50 per cent, while in cotton fabrics the rise has been nearly threefold. In Turkey also, progress was recorded on woven cotton fabrics. Syria and Lebanon are the other countries in the region that have developed the textile industry. In cement production, considerable progress has been made notably by Israel, Turkey, Irân, Syria and Lebanon. In the production of electricity, which has

INDUSTRIAL PRODUCTION: INDIA AND THE MIDDLE EAST
(Selected Industries)

Country	Cement (000 metric tons) 1950	1956	Per Capita 1956 (in Kgs.)	Cotton Yarn (000 metric tons) 1950	1956	Per Capita 1956 (in Kgs.)	Woven Cotton Fabrics (Million metres) 1950	1956	Per Capita 1956 (metres)	Sugar (000 metric tons) 1950	1956	Per Capita 1956 (in Kgs.)
India ...	**2655**	**5008**	**13**	**532**	**758**	**2**	**3351**	**4852**	**12.5**	**1175**	**1862**	**5**
Egypt ...	1022	1351	57	49.0	75.0	4	157.8	405.0	17.2	174.7	312.0	13
Israel ...	380	613	336	...	...	...	...	...	...	...	...	...
Turkey ...	396	972	39	30.1	26.4	1	130	153	6.2	149.8	283.0	11
Iran ...	53.5	156.3	8	...	...	...	...	...	...	28.0	76.2	4
Iraq ...	36.3	N.A.	...	...	...	...	...	...	...	...	...	...
Syria ...	68	326	8	4.70	7.95	2	...	...	...	...	...	...
Lebanon	263	488	337	2.3	4.5	3	...	...	...	...	...	...

Country	Electricity (Million KWH) 1950	1956	Per Capita 1956 (KWH)	Super Phosphates (000 metric tons) 1950	1956	Per Capita 1956 (Kgs.)	Sulphuric Acid (000 metric tons) 1950	1956	Per Capita 1956 (Kgs.)
India	**5107**	**9660**	**25**	69	157	7	37.5	80.2	3
Egypt	881	1530	67	**53**	**82**	**1**	**104.1**	**167.9**	**1**
Israel	464	1343	735	10	96	53	...	72.1	40
Turkey	790	1784	72	13	25	Nil	11.0	16.5	1
Iran	...	...	...	...	...	...	...	...	...
Syria	81.3(th)	165.7(th)	42	...	...	...	...	...	...
Iraq	117	506	92	...	...	...	...	...	...
Lebanon	114	250	172	...	...	...	...	...	...

th: Thermal only.

a considerable bearing on industrialisation, progress has been made by Egypt, Israel, Turkey, Iraq, Syria and Lebanon.

The table above on industrial production, giving a comparative picture of India and some of the selected Middle East countries is full of interest. It shows how while India's progress in all these industries has been considerable, in 'per capita' production, she seems to lag behind many of countries in the Middle East. Even in textiles, where she holds a supreme position, her 'per capita' production in woven fabrics in 1956 was only 12.5 metres compared to Egypt's 17.2 metres.

So far as heavy industry is concerned, it is Turkey that bears mention. She is one of the world's largest producers of chrome and the availability of iron and coal have enabled her alone in the Middle East to develop a heavy industry of any size. A very small iron and steel industry has also grown up in Egypt. So far as Israel (which among the Middle East countries can be considered one of the most advanced industrially) is concerned the most salient feature of her industry is that basic and pioneering enterprises such as exploitation of mineral resources, the development of electric power and the production of potash are financed by the Government in its development budgets. Private capital is largely invested in citrus, building and industries.

Development Plans

AN outstanding feature in many of the under-developed countries in Asia and Africa during the post-war period has been the efforts made for long-term plans. Following this trend, many countries in the Middle East especially since 1950 have made plans for development in the form of relatively long-term investments in fields such as irrigation, flood control, transportation and public utilities including water, electricity and communication facilities as well as in industry. A table in this Section gives a bird's-eye view of the development expenditure incurred in some selected countries in the Middle East. From these, two main charactertistics can be gleaned. One is a significant increase in spending on economic development projects during the five or six years covered. Thus between 1951-52 and 1955-56 actual expenditures on development in Iraq increased approximately eleven times. Between 1949-50 and 1955-56, Israel's development expenditure shows an increase of eight times. Between 1954-55 and 1957-58 actual expenditures of the Plan Organization in Iran expanded seven times. Between 1950 and 1957 Turkey's expenditure on development projects, excluding State enterprise, increased about four times.

The second characteristic relates to the composition of the expenditure. In view of India's own development programme under the Second Plan, the study is rather interesting. One finds, with few exceptions, there is a greater portion of development funds towards the agricultural and transportation sectors. Thus Iraq, Iran and Turkey during the periods considered devoted close to one-half, two-thirds and four-fifths respectively of total disbursements to these two sectors. Figures for Israeli development expenditures indicate that for the period 1950-51 — 1956-57 the shares of agriculture and communications averaged about 32 and 13 per cent respectively of the total, and industry's share rose from 11 to 19 per cent. In the case of India's Second Plan, it may be mentioned agriculture and community development forms 11.3 per cent, transport and communications about 30 per cent and industries and minerals 17.5 per cent. In the succeeding paragraphs an attempt is made to deal with the development plans in some of the individual countries in some detail.

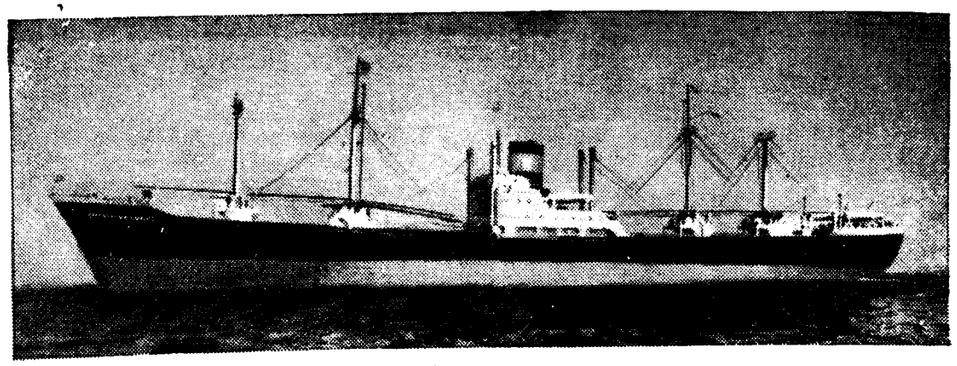
IRAQ

Taking Iraq first, it should be mentioned that the country enjoys several advantages. Apart from oil, she has a fertile soil and abundant water, and the main key to her economic progress has always been the control and use of her two great rivers. Yet another asset of hers is demographic. Unlike Egypt or India with the nightmare problem of a birth rate outstripping resources, Iraq is under-populated. Its population of 2.8 million in 1930 has risen to about 5.5 million today, but results obtainable by irrigation and drainage can produce more living space. It was during the 1930s that water development began on a large scale with the construction of the Kut Barrage (Tigris) and industries grew up. In the immediate post-war years, development was at a standstill because of deficit in the balance of payments. The position was changed by rising oil revenues and the foresight of the authorities in establishing a development planning machinery. In 1950, a Development Board was established by the Government with the function of drawing up and executing a general economic and financial plan for developing the country's resources and raising the standard of living. The Board has been allotted 70 per cent of Iraq's oil revenues. In 1952, a six-year Plan was issued covering an expenditure of ID 155 million. This was followed by a second, 1955-9 programme, with an estimated expenditure of ID 303 million which in turn was replaced by a new six-year programme, 1955-60 which is now being implemented with an estimated expenditure of no less than ID 500 million. The increase was made possible by larger oil revenues and anticipated savings. Certain modifications in the original plan have also been introduced as a result of recent housing and land drainage studies and in the light of a report completed by Lord Salter in 1955 at the request of the Government.

The result has been a remarkable development which is continuing on an increasing scale which is transforming the economy of the country. Two major projects for the control of Iraq's twin rivers were inaugurated in April 1056: the Wadi Tharthar for deflating the flood waters of the Tigris and the Habbaniya Flood Control and Irrigation Project on the Euphrates near Ramadi west of Baghdad. Also a large dam on the lesser Zab river is now under construction at Dokan. The total expenditure allocated for irrigation, reservoirs and drainage work under the current programme is ID 154 million. Other projects, in course of implementation under the development plan are: roads and bridges (ID 86.5 million); airports (8.8 million); public buildings (20.9 million); railways (24.9 million); housing (24 million); health institutes (10 million); industry, electrification and mining (67 million; agricultural development (14 million). Besides, under the 1955 development plan, many industrial projects including a bitumen plant, new cement plants, a sugar factory and some power stations have been undertaken. These various measures have materially changed the economy of Iraq in recent years and in spite of the considerable drop in oil revenues durisg the Suez crisis, the Government decided to continue to devote 70 per cent of these revenues to development.

IRAN

Under Reza Shah, the country was converted into a modern State. But economic policy aimed chiefly at the improvement of transport facilities for administrative and strategic reasons and at self-sufficiency in manufacturing industry much of which has become concentrated on Government. In post-war years, the emphasis shifted to more broad-based development and



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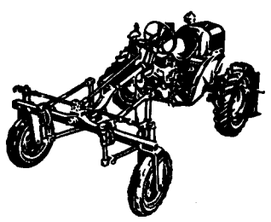
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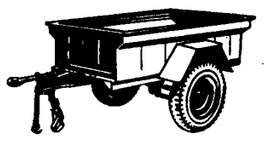
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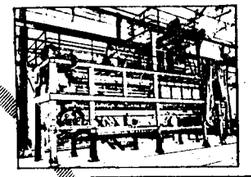
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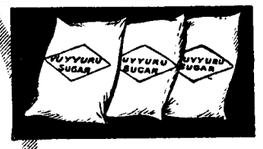


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central planning. A seven year Plan proposing an expenditure of rials 21,000 million ($656 million) was adopted in 1949. The Plan was to be financed mainly from oil revenues but provision was also made for borrowing from the Bank Melli (Central Bank) up to rials 4,500 million and a projected World Bank loan. A seven-year Plan Organisation was set up to direct the scheme and Government factories and mines formerly controlled by the Industrial Bank were handed over to it. Much had been planned but little achieved up to April 1951. From that date, the near stoppage of the oil industry dried up the main sources of revenue nor were loans forthcoming from the World Bank and Bank Melli, and between April 1951 and September 1954 the plan received only rials 883 million in revenue from all sources and spent only rials 588 million. Since the settlement of the oil dispute the organization has taken on a new lease of life and is now more efficiently directed.

A plan for spending rials 70,000 million ($935 million) for the period March 21, 1956, to September 22, 1962, was adopted in 1956. This was recently increased to rials 84,000 million ($1,110 million) and individual project allocations were revised upwards in January this year. The following table gives the second Five-Year Plan allocations intended to spend the original 70,000 million rials:

(In million rials)

	Carry-over from 1st Plan	New allocations	Total Actual	per-centage
Communication & Transport . .	5,367	17,454	22,821	32.6
Social Projects . .	2,814	15,587	18,401	26.3
Agriculture & Irrigation . .	6,260	11,958	18,218	26.0
Industry & Mining . .	2,759	7,801	10,560	15.1
Total	17,200	52,800	70,000	100.0

Under the Plan, rail extension and addition to rolling stock, road reconstruction, port modernisation, dams and associated irrigation works, industry (especially iron and cement), public health and education receive the largest allocation. Much of the work is to be carried out by foreign firms and big contracts have already been awarded. One significant feature of the Plan is a contract signed in March 1956 with the Development and Resources Corporation, (New York), under which the province of Khuzistan is being specially developed on T.V.A. lines. The main elements are a high dam on the Dez river, a power transmission system, a plastic plant and a sugar refinery.

TURKEY

In Turkey, in 1934, the first of a series of State Plans was launched and etatism, State capitalism, became part of the policy of the Republican People's Party and in 1937 was incorporated in the Constitution. The Party, however, was not opposed to private enterprise but believed that the State should retain control of vital industries. To carry out its Plans, the Republican Government set up a number of agencies, the most important being the Sumerbank, participating in industry and the Etibank to operate mining and power enterprises. These, like several other State agencies, prepare their own operational budget independently of the government subject only to audit and general review of policy. The Democratic Party, which came to power in 1950, had some major economic policy objectives. These were: a rapid development in agriculture, improvement in transport and communication system and expansion of industrial production. The Government took an active role in the implementation of its policy and as a result planned and executed a number of projects, as a result of which the economy underwent some structural changes in favour of industry and transportation though agriculture still remains the backbone of the economy. The Government is now engaged in a desperate struggle with inflation, mounting cumulative foreign trade deficits and debts. However, despite the financial strain, the Government is continuing its massive investment policy. It is now planning for the construction of a hydro-electric project on the Upper Euphrates. Besides eight major hydro-electric projects now under construction, 21 minor projects are in preparation. Besides industrial mining, transport and communication development is also being pursued.

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EGYPT

Post-war Egyptian economic policy aimed mainly at augmenting and diversifying agricultural production, expanding industry, increasing the financial autonomy of the country and improving the fiscal system. Government effort along these lines in the first half of the post-war period did not seem very effective. It was only since 1952 that progress was recorded consequent on the launching of a systematic drive for development. The Permanent Council for the Development of National Production established in January 1953 drew up a three-year Plan (1953-56) which included reclamation of desert and the extension of perennial irrigation in Upper Egypt, telegraphs and telephones, development of other communication services and a Suez-Cairo pipeline. This was followed by £E 500 million 10-year Plan announced in 1954. Besides the High Dam, this provided for several electric power stations. Yet another ambitious plan was launched in January 1957 when the Ministry of Industry decided to carry out 21 projects involving an expenditure of £E 14.5 million leading up to a five-year Plan covering roads, airports and the Sinai oilfields as well as industries.

The Suez crisis caused considerable instability to Egypt's economy and the Government found it necessary to order 10 per cent cutback in public spending. The structure of Egyptian economy now is essentially State-controlled and State-directed. For lack of sufficiently strong private initiative the State also took over development activities. By "Egyptianising" banking and insurance formerly largely in the hands of British and French interests and establishing the Government-controlled Iron and Steel Board and a general pharmaceutical company which took over the British Imperial Chemical Industries and other foreign concerns in Egypt. State authority has been extended over important branches of the economy. The Economic Organisation set up in January 1957 regulates all enterprises and organisations either established by Government or in which Government participates with not less than 5 per cent of the Capital. It is in fact a mammoth combine embracing railway administration, banks, insurance companies and several of the most vital industries. It is empowered to set up new companies and institutions, participate in them and co-ordinate the policy of public fund investment.

In consultation with the World Bank, the Egyptian Government has a long-range plan for improving the Suez Canal which has now been restored to normalcy.

This proposal for widening and dredging the Canal is consistent with Egypt's current emphasis on industrialisation. In this connection, the statement made by the Minister for Economy and Commerce of the United Arab Republic that the Aswan High Dam Scheme will be "one of Egypt's major projects for the future" is of interest. Recently, an agreement has been concluded with Russia for going ahead with the first phase of the project. However, there is reason to believe that the order of priority is being revised, and more urgent consideration is given to the Suez Canal development which will yield a more immediate return. Moreover, the World Bank is likely to give assistance to the Canal Improvement Scheme, while backing for the Dam Project is at present not obtainable. Hence postponement of work on the Dam may be acceptance of the inevitable as well as being in line with Egypt's immediate interest.

PRIVATE FOREIGN INVESTMENT

It is undoubtedly true that the oil industry is of major significance for the economic development of the Middle Eastern countries. It provides direct revenues to the producing countries but the transit countries through which the pipelines pass also are benefited. Nevertheless, many of the countries are faced with shortage of capital to accelerate development at a rate when production will outstrip population increase. There has been, therefore, recognition of the importance of foreign capital investment in promoting economic development and many of the countries have taken steps to attract foreign capital. In January 1950, to encourage foreign capital investment and to provide credits for private industry, the Turkish Government founded the Industrial Devlopment Bank of Turkey. It is under private control and makes loans and expert advice available to private industrial undertakings. Foreign and particularly American financial assistance has played an important role in the post-war advance of Turkey's economy especially as the domestic capital market has been slow in developing. Since 1950, various laws have been passed in an attempt to attract foreign capital culminating in Law No. 6224 of 18th January 1954. This law guarantees foreign capital and enterprises the same rights and facilities enjoyed by domestic capital and enterprises. Foreign investors have the right to transfer profits, interests and dividend abroad and to export that capital in the event of liquidation of enterprise. By the end of October 1955, a total 149 projects had been approved to a value of TL 154 million.

In Persia also, to attract private foreign funds into industry, a law to protect foreign capital was passed in 1955. Such capital will obtain all rights and facilities enjoyed by domestic capital, profits will be protected and compensation paid in cases of nationalisation. Remittances of net profits will be allowed each year in the foreign currency in which the original investment was made and repatriation of original capital and any increase which has taken place will be permitted. In the case of Israel, the Government from the beginning realised the need to attract domestic and foreign capital for the expansion of industry and agriculture and to direct investment into the right channels but the inflationary and unstable trends in the economy and the socialistic outlook of the Government produced an economic atmosphere unfavourable to domestic saving and unattractive to foreign capital. In March 1950, the Knesset passed a law for the encouragement of capital investment. This provided for an Investment Centre to guide investors and granted them certain privileges. The most noteworthy recent foreign capital investment in Israel is being undertaken under a commercial treaty with France whereby French companies are constructing metro in Haifa, and are considering the new pipeline to the Mediterranean and other undertakings. At a time when much confusion is prevailing here in this country *over the question of foreign capital, these examples* should prove useful.

REGIONAL INTEGRATION

While, undoubtedly, progress is being made by many of the countries for development on the national plane, there is obviously need for a wider extension to cover the entire Middle East region. With the present division of the Middle East into Arab and non-Arab sector, it is not clear how far it will be feasible. The proposal made by President Eisenhower before the U.N. General Assembly on August 13, 1958, for making more development capital available, to the Arab countries, may prove the first step in this direction. In view of its importance, it bears reproduction. President Eisenhower proposed.

"That discussions be immediately undertaken by the Secretary General of the U.N. and the Arab Nations of the Near East to ascertain whether an agreement can be reached to establish an Arab Development Institution on a regional basis.....which would attract international capital, both public and private.

"Should the Arab States agree on the usefulness of such a soundly organised regional institution and should they be prepared to support it with their own resources, the U.S. would also be prepared to support.

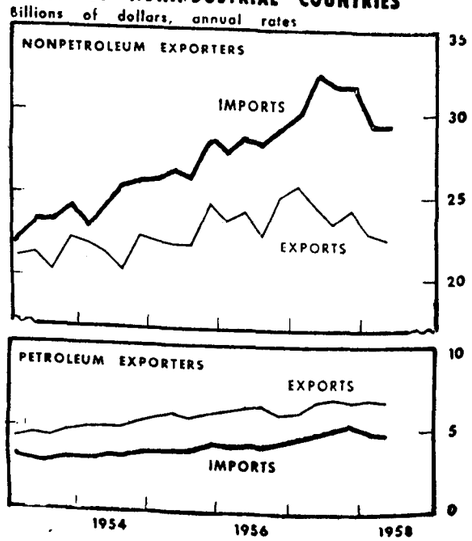
"The institution would be set up to provide loans to the Arab States as well as the technical assistance required in the formulation of development projects.

"The institution should be governed by the Arab States themselves."

It is premature at this stage to predict the outcome of this proposal. But it is worthwhile pointing out that the economic resources and the present national frontiers in the Middle East region are not well adjusted to the population pressures and the growth of individual countries. There is no doubt that regional integration would alone go a long way to give the necessary balance. Moreover, it is difficult to solve such problems as water utilisation efficiently on an exclusively national or even an Arab basis. While in the short run, there is no alternative to making plans on national lines, in the long run it is obvious that it is only a comprehensive development plan covering the region as a whole which would prove of considerable value in accelerating economic development in the Middle East which both its history and geography proclaim to be of outstanding political sensitiveness and strategic value.

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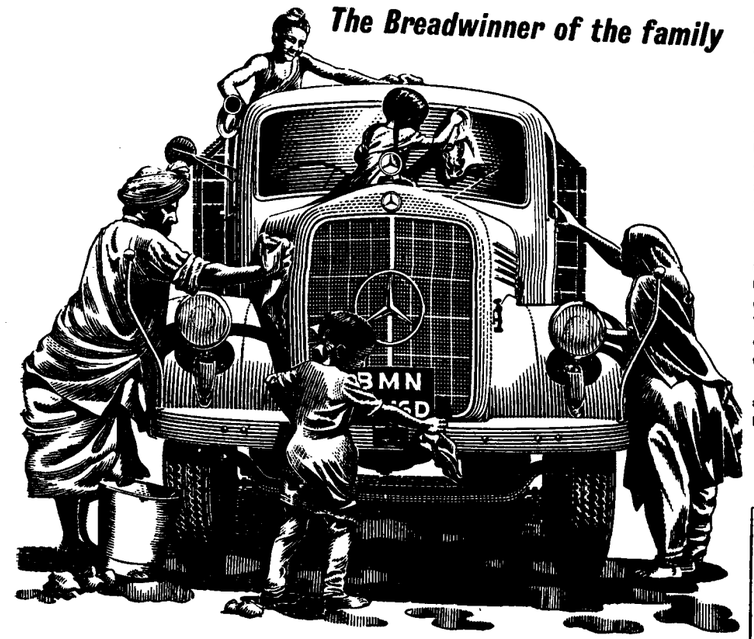
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Trade

THE strategic significance of the Middle East in world trade arises from two factors. Conventionally, the Middle East has been recognised since the middle ages as the bridge between the three continents of Europe, Africa and Asia. But with the opening of the Suez Canal in 1869 this significance has assumed an altogether different and vital character. The Suez Canal has become the veritable life-line of world trade. This factor by itself would not have raised the Middle East to a position of pre-eminence in world trade. The exploitation of the oil resources of the Middle East and their wholesale export, primarily to the consuming countries of the West, has completely transformed the face of the area. Excluding oil, the natural resources of the countries of this region are not plentiful. Agriculture and pastoralism have accounted for as high an occupational percentage of the populations of the different countries as 75 per cent to 90 per cent. There are, however, some major expectations. For instance, Kuwait derives a high proportion of its national income from oil production and trade and this is also true of other major oil-producing countries like Saudi Arabia, Iran, Lebanon and Iraq. Israel stands in a separate category altogether with a large sprinkling of manufacturing industry in her economy. This pattern of the economy of the region has made social stratification sharply defined between the wealthy land-owning and merchant classes, on the one hand, and the masses with a poor standard of living, on the other. But it would be totally wrong to presume that the Middle East economy is somewhat in a static condition. Powerful forces of growth are at work making for the diversification of the economy on a broad base. This trend has become dominant in the post-war period.

OIL TRANSFORMS THE SCALE

Oil has always occupied a predominant position in world trade. But its share in the total global trade has risen steeply in the post-war period as the consumption of oil in all countries, whether highly developed or in the process of industrialising, has increased at a phenomenal rate. Table I in this section brings this fact out in a conspicuous manner. This table excludes the percentage shares of commodities where they are less than 0.19. It is, therefore, quite representative. The share of petroleum in world trade stands at the top of all. Between 1937 and 1955 it rose markedly from 3.47 per cent to 5.82 per cent. The slight decline in its share to 5.61 per cent in 1956 is easily explained by the Suez Canal crisis. There is little doubt that in the absence of this crisis it would have pursued its onward course. It may appear almost incredible how the Middle East has risen to the position of prominence on the oil map of the world in a matter of only four decades. Commercial exploitation of oil in the Middle East may be said to have started in the real sense in 1911. In that year the share of the Middle East in the global output was a mere 0.007 per cent. But it was during the inter-war period and more significantly in the period after the World War II that output of oil in the Middle East was stepped up. The position is tabulated in the following figures:

(Million Tons)

Year	M.E. Output	World Output	% Share of M.E. output in World Trade
1919	1.34	777.00	1.73
1945	26.55	356.00	7.48
1957	176.82	880.94	20.10

It is quite patent from the above figures that the post-war period has been one of spectacular expansion in the oil industry of the Middle East. This is only a part of the truth. There cannot be an iota of doubt that in the decades to come the Middle East will emerge as the premier producer of oil. Her known reserves of oil at the present time have been placed anywhere between 50 per cent and 66.6 per cent of world reserves. These untapped reserves will undoubtedly bring considerable income to the region.

It is somewhat paradoxical that the statistical position of the exports of crude oil and petroleum from the Middle East countries to the consuming countries is not readily available in the integrated picture of Middle East trade. The country-wise analysis of trade which follows later discloses the share of oil in the total exports of individual countries without a break-up of the destinations. It is estimated, however, that oil consumption in the producing countries of the Middle East cannot be placed higher than 10 per cent of the total production per annum. But if the intake of the local refineries and bunker oil are included in this consumption the share exceeds 20 per cent. In 1955, aggregate consumption on this basis reached 24 million tons out of 160 million tons and in 1956 it rose to 27 million tons out of a higher output of 170 million tons. This assumption, however, is not technically correct for the simple reason that the refined output of the local refineries finds its way in bulk in the export trade.

The major oil-producing States of the Middle East are Kuwait, Saudi Arabia, Iran, Iraq, Bahrain, Qatar, although oil is found and exploited in varying quantities in most of the States. From the long-term viewpoint the pride of place among the oil-producers must be assigned to Kuwait, Saudi Arabia, Iran and Iraq, which, between them, account for 98 per cent of the known reserves of the area. Oil has brought sizeable income to the countries of the Middle East in two ways, first, as producing States and next as transit States through which the pipelines are operated. Undoubtedly the producing States earn income from the production of oil as well as its transport via the pipeline. But among the States which are essentially oil transit areas are included Syria, Lebanon, Jordan and Egypt. It is thus obvious that the majority of the countries of the region depend on oil for their wealth, while only a few are not endowed with this prolific resource.

RAW COTTON CRISIS

It is one outstanding characteristic of the countries of the Middle East that they rely in an excessive degree on only one or two commodities in their export trade, or, for that matter, for the sustenance of their economies. Oil is indisputably one such commodity. Another commodity is raw cotton on which the fortunes of the national income of some at least of the States fluctuate. Raw cotton produced in this region is of the superior long staple varieties and as such its significance in the value of the export trade is high. Table IV in this section discloses that the share of cotton in the export trade of Egypt rose as high as 79 per cent of the total in 1954. Normally, it is around 70 per cent. Sudan offers the next typical illustration of an economy leaning very heavily on raw cotton exports. During 1955 and 1956 the share of raw cotton in the export trade of Sudan was of the order of 67 per cent. Table IX in this section reveals that raw cotton accounts for about one-third of the total exports of this country and in 1955 it accounted for as high a percentage as 51. Table X discloses that Turkey is still another country, which, though not excessively dependent on raw cotton exports, derives between 9 per cent and 16 per cent of her export revenue from this fibre.

The recent collapse in the prices of primary commodities has taken raw cotton in its stride and hit the economies of these countries of this region. The follow-

ing three indices of raw cotton prices and ocean freight rates vividly bring out the hardships inflicted by this collapse. The base year for these index numbers is 1953=100

Year	Raw cotton	Dry Cargo Freight Trades	
		Trip Charter	Time Charter
1956 — 1st Quarter	94.5	186	240
2nd Quarter	98.4	202	292
3rd Quarter	88.3	202	285
4th Quarter	86.3	221	325
1957 — 1st Quarter	96.1	209	325
2nd Quarter	99.4	155	218
3rd Quarter	91.9	116	138
4th Quarter	92.3	101	117
1958 — 1st Quarter	88.5	83	92

The above tabulation brings out clearly the sharp decline in raw cotton prices which in fact started a little earlier in the third quarter of 1955. By contrast, it is significant that the index of ocean-freight rates in the categories of charter for dry cargo kept on its upward course right up to the end of 1957; but the increase in the index slowed down. It was only in the first quarter of 1958 that the position in cargo freight rates fell in sympathy with the sudden fall in the index of raw cotton prices. Another handicap which created an additional difficulty for the raw cotton exports of the Middle East countries was the impact of the releases of American surplus cotton in the world markets. Where the economies are dependent on this single commodity in a lopsided degree, as in the case of Egypt, Sudan and Syria, the terms of trade have obviously taken a serious adverse turn. This had its inevitable effect on the capacity of these countries to import the capital goods and equipment which have figured in the post-war period as the important items. Apart from slowing down the tempo of economic development, these countries have been faced with the problem of controlling price inflation in the non-primary sector. They have not still emerged from this critical phase.

THE OVERALL PATTERN

The overall pattern of the regional trade of the Middle East follows two trends—the trends in the production and exports of petroleum and the aftermath of the closure of the Suez Canal for communications. But in so far as the direction of the trade is concerned, the flow is, as before World War II, with the United Kingdom, countries of Western Europe and the United States in a large measure. There are, however, two exceptions in this regard. The imbroglio in which the entire region got involved as a result of the Suez Canal crisis gave a swift opportunity to the Soviet Union and other Communist countries, notably Czechoslovakia, to intermeddle with the regional trade and to give it a new twist. Furthermore, Japan seized the favourable situation to push up her export trade in this region.

But of basic importance is the change in the balance of trade of these countries. For this purpose it would be convenient to consider the pre-war average trade for a selected period and the post-war average for a selected period. Table II in this section brings out the emergence of the changing balance of trade in a sharp manner. The value of trade mentioned in this table is in terms of U.S. dollars at the official exchange rates of the currencies of individual countries. It is obvious that disparity is bound to exist between the official exchange rates and the actual rates at which trade is transacted. But it would be fair to accept the official exchange rate as a standard measuring rod of value. In terms of the U.S. index of wholesale prices, the purchasing power of the dollar was 2.1 times higher in 1934-38 than in 1950-54. In order to obtain a fair basis of comparison in the value of export-import trade, the average values for the period 1950-54 have been reduced to a constant level in terms of U.S. prices. These are shown in brackets in this table. In the result, the averages for 1934-38 and the bracketed averages for 1950-54 are comparable. There is, of course, the important qualification that these bracketed values do not give a correct picture of the decline in the purchasing power of the local currencies in the individual countries during 1950-54.

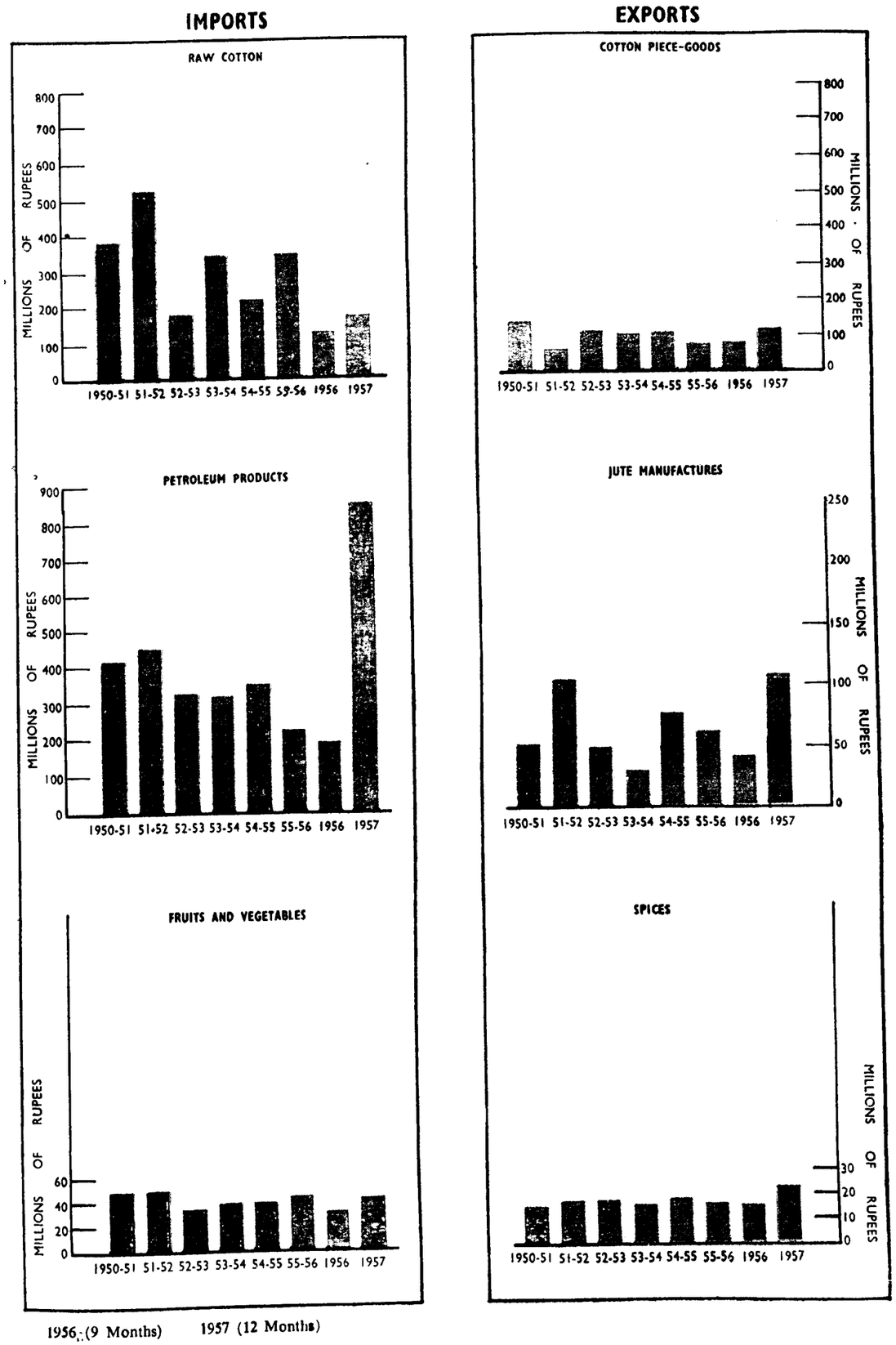
Two trends are established in an outstanding manner by this table. The first is that the volume of trade has expanded in a remarkable degree. This is in keeping with the expansion of world trade at an accelerated rate in the post-war period. In this expansion of the trade of Middle East countries, it will be noticed that petroleum has been the one predominent factor which produced this effect. The oil-producing countries enumerated above have emerged with an impressive growth in their trade. Saudi Arabia furnishes the outstanding example in this category. Iran's favourable balance of trade remained at the pre-war level of 67 millior dollars in spite of the expansion in trade. Had it not been for the crisis of Abadan in that country during the relevant post-war period, the increase in the favourable balance would have been quite impressive. Among the non-oil States, Egypt's pre-war favourable balance of $2 million has been converted into a post-war deficit of $53 million. Turkey is another instance showing a shift from pre-war favourable $9 million to a post-war unfavourable balance of $59 million. Israel has incurred, in the relevant post-war period, an adverse balance of $125 million which is nearly 2½ times her exports. Her economy stands in a class apart in respect of trade as will be noted later. These trends clearly establish the impact of two factors, first, exports of petroleum in the post-war period and a steep increase in development imports. The post-war average period selected here is free from any international crisis of trade except for Persia.

THE INTRA - REGIONAL PICTURE

In the sphere of intra-regional trade, the trends have not been changed in any marked degree. This trade remains only a little expanded which was bound to be the case because of the expansion of trade all over the world. The main items of intra-regional exports are petroleum to the non-oil States and items of border and transit trade. Israel stands virtually ostracised in the intra-regional trade with a notable exception that Turkey has encouraged free commercial intercourse with her.

The Arab World in particular, and the entire Middle East region in general, is rapidly awakening to a new sense of regional economic co-operation. Obviously the point at which this co-operation can be pushed, with-countries, is trade. Some attempts have been made to in the limitations of the pattern of exports of individual lower the level of customs barriers to promote intra-regional trade. Likewise, feelers were sent out prior to the Afro-Asian Economic Co-operation Conference held at Cairo early last month to estimate how far concerted action could be taken to meet any possible adverse repercussions of the European Common Market. In particular there was some hazy talk about the formation of an Afro-Asian Common Market and afterwards of an Arab Common Market. It was urged that Afro-Asian countries should show preferences in intra-regional trade as a measure of co-operative defence. But the practical and effective manner in which these preferences were to be shown could not be defined. It was recognized, by and large, that an alarmist attitude ought not to be taken at the introduction of lower tariffs and changed quota limits for the six Common Market countries and that the machinery of GATT should be utilized for necessary redress. To mention this, does not in any manner indicate that trade in the Afro-Asian region, or for that matter, in the Intra-Middle East region, will be inflexible. Positive measures of trade promotion are bound to be attended with success.

INDIA'S TRADE WITH THE MIDDLE EAST



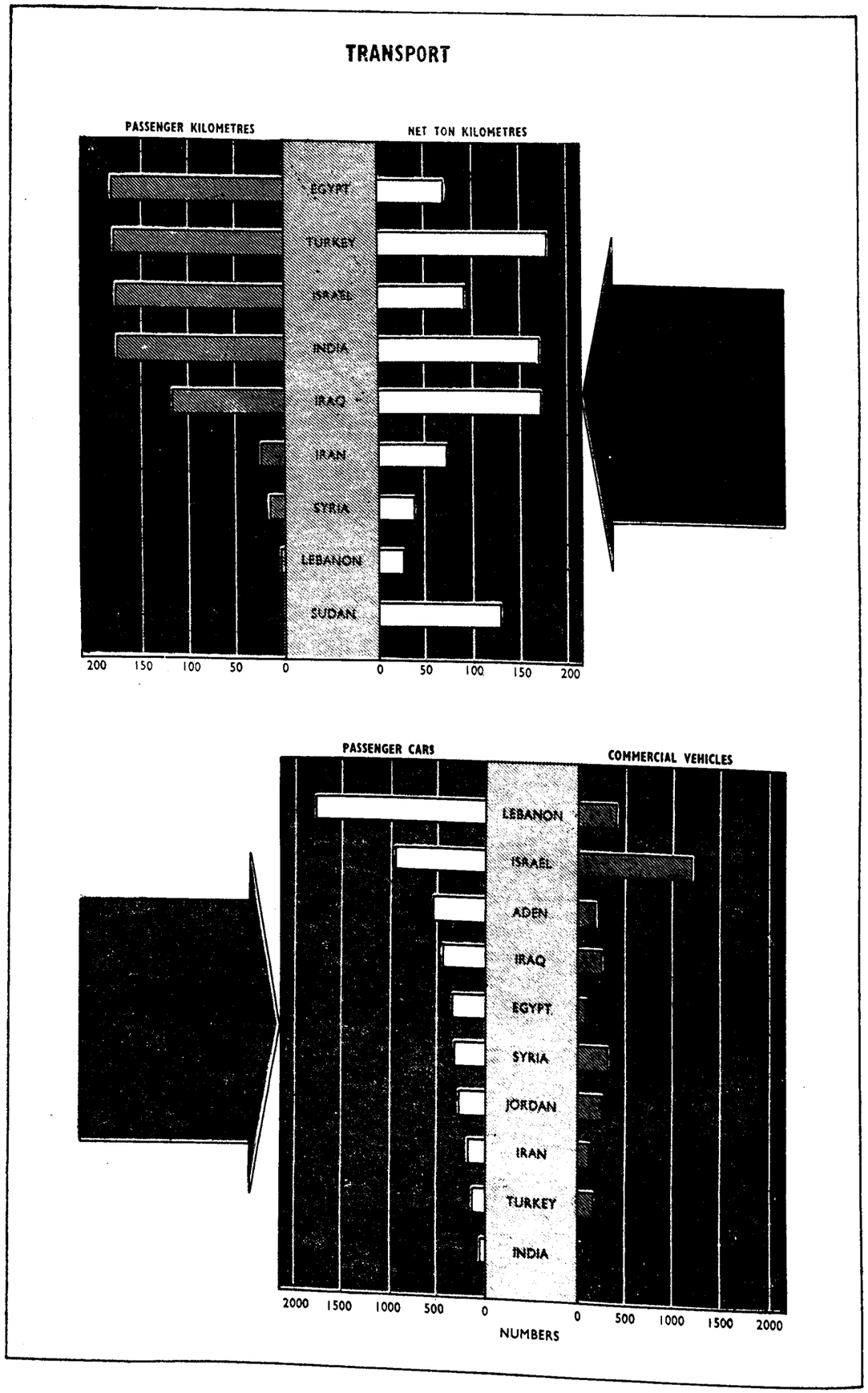


TABLE I

COMMODITY-WISE PERCENTAGE DISTRIBUTION OF WORLD TRADE

Commodities	1937	1954	1955	1956
Petroleum	3.47	5.34	5.82	5.61
Coffee	1.21	2.98	2.50	2.48
Wheat	2.20	1.73	1.62	1.93
Wool	1.84	1.88	1.72	1.63
Cotton	3.16	2.66	2.08	2.10
Pulp & Paper	1.84	2.40	2.48	2.27
Timber, Lumber	1.29	1.71	1.86	1.54
Sugar	1.35	1.24	1.25	1.15
Coal	1.99	1.11	1.03	1.11
Copper	1.24	1.13	1.31	1.40
Rubber	1.84	0.98	1.50	1.16
Rice	1.01	0.75	0.64	0.60
Tobacco	1.09	0.82	0.84	0.73
Cocoa	0.41	0.82	0.62	0.45
Tea	0.78	0.74	0.64	0.60
Jute, Bagging	0.70	0.54	0.54	0.42
Butter	0.91	0.50	0.48	0.42
Fish	0.43	0.55	0.53	0.55
Tin	0.74	0.41	0.38	0.35
Iron Ore	0.38	0.44	0.55	0.57
Bananas	0.41	0.39	0.36	0.32
Corn	0.83	0.32	0.23	0.26
Coconuts & Products	0.46	0.37	0.31	0.30
Hides & Skins	0.62	0.37	0.32	0.31
Barley	0.10	0.27	0.19	0.20
Lead	0.36	0.30	0.31	0.31
Wine	0.60	0.30	0.31	0.27
Citrus Fruits	0.30	0.25	0.26	0.27
Bacon	0.37	0.21	0.22	0.21
Zinc	0.21	0.61	0.18	0.19
TOTAL(1)	32.15	31.82	31.08	29.71

(1) Total of commodities listed.

TABLE II

PRE-WAR AND POST-WAR VALUE OF MIDDLE EAST TRADE

(U.S. $ million at official exchange rates)

Country	Exports		Imports	
	Av. 1934-8[1]	Av. 1950-4	Av. 1934-8[1]	Av. 1950-4
Aden[2]	16	120 (58)	27	154 (74)
Cyprus	8	43 (21)	9	55 (26)
Egypt[3]	171	459 (220)	169	569 (273)
Iraq	56[4]	296 (142)	39	163 (78)
Israel	24[5]	55 (26)	74[5]	314 (151)
Jordan	2[6]	7 (3)	5[6]	47 (23)
Kuwait	—	524 (252)	—	—
Persia	133[7]	336[8] (161)	66[7]	197 (95)
Saudi Arabia	14[4]	661 (317)	15[4]	191 (92)
Sudan	30	128 (61)	28	131 (63)
Syria		112[9] (54)		144[9] (69)
Lebanon		29[9] (12)	—	149[9] (71)
Turkey	94	334 (160)	86	457 (219)

1 The purchasing power of the dollar was, as mea sured by the U.S. index of wholesale prices, 2.1 times higher in 1934-8 than in 1950-4.
2 1934-48, Aden Colony and the Eastern and Western Protectorates. 1950-4, Aden Colony only, excluding the Protectorates but including trade therewith. 3 Excluding trade with Sudan. 4 1937. 5 Palestine. 6 Av. 1936-8. 7 Av. 1934-7. 8 Av. 1950-3. 9 Av. 1951-4.

Source: IMF, International Financial Statistics, April 1957; U.N., Yearbook of International Trade Statistics.

TABLE III.

PER CAPITA FOREIGN TRADE AND NATIONAL INCOME IN SELECTED M.E. COUNTRIES IN 1956

	Exports* (1)	Imports* (2)	Total* (1+2)=(3)	Population† (4)	Per Capita** Foreign Trade (3)+(4)=(5)	Per Capita** Income (6)	(5)+(6)=(7)
1. Cyprus	62.6	109.4	172.0	0.526	327	388	84.3
2. Egypt	408.6	534.2	942.8	23.520	40	111	36.0
3. Iraq	477.4	320.7	798.1	4.843	165	175	94.3
4. Israel	107.3	364.0	471.3	1.827	258	636	40.6
5. Lebanon	40.4	237.0	277.4	1.450	191	461	41.4
6. Turkey	305.0	407.3	712.3	24.797	29	312	9.3
7. India	**1268.8**	**1710.7**	**2979.5**	**387.4**	**8**	**62**	**12.9**

*Millions of U.S. dollars.
†In millions.
**In U.S. dollars.

TABLE IV.

PERCENTAGE DISTRIBUTION OF TRADE OF EGYPT WITH THE WORLD

	1937		1954		1955		1956		1957		1st Quarter 1958	
	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.
AREA-WISE												
U.S. & Canada ...	7	6	5	12	1	12	3	14	5	9	1	9
Latin America ...	—	4	1	2	1	1	—	1	—	2	—	2
Continental EPU ...	36	39	38	47	32	45	27	37	21	35	17	40
France	11	4	12	10	9	9	7	5	2	1	2	3
Germany ...	8	11	8	11	6	10	5	11	3	10	3	15
Italy	6	9	8	81	5	8	6	6	4	8	2	10
Sterling Area ...	37	27	27	21	18	22	13	21	7	10	3	12
United Kingdom	31	22	11	13	6	13	3	12	—	2	—	3
India	**5**	**3**	**13**	**2**	**9**	**4**	**6**	**4**	**4**	**5**	**1**	**6**
Soviet Area ...	9	11	11	6	21	7	28	12	39	22	40	20
Rest of World ...	11	12	18	11	22	13	28	15	29	24	38	17
COMMODITY-WISE												
Cotton ...	71	—	79	—	74	—	70	—	72	—	63	—
Rice	3	—	2	—	5	—	6	—	7	—	15	—

TABLE V.

PERCENTAGE OF DISTRIBUTION OF TRADE OF IRAN WITH THE WORLD

	1937		1954		1955		1956		1957		1st Quarter 1958	
	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.
AREA WISE												
U.S. & Canada ...	4	9	15	24	11	20	—	17	—	16	—	14
Latin America ...	—	—	—	2	—	1	—	3	—	1	—	—
Continental EPU ...	19	30	37	31	35	31	—	31	—	32	—	35
Germany ...	7	22	14	15	8	—	—	18	—	20	—	20
Sterling Area ...	54	19	22	16	46	22	—	24	—	25	—	26
United Kingdom	21	7	7	9	14	10	—	11	—	13	—	12
Rest of World ...	23	42	26	28	8	26	—	25	—	26	—	24
COMMODITY-WISE												
Petroleum Products	73	—	—	—	—	—	—	—	—	—	—	—
Rugs	4	—	—	—	—	—	—	—	—	—	—	—
Cotton	4	—	—	—	—	—	—	—	—	—	—	—

TABLE VI.

PERCENTAGE DISTRIBUTION OF TRADE OF IRAQ WITH THE WORLD

	1937		1954		1955		1956		1957		1st Quarter 1958	
	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.
AREA-WISE												
U.S. & Canada ...	7	7	1	14	2	15	5	14	4	15	—	—
Latin America ...	—	—	—	—	—	—	—	—	—	—	—	—
Continental EPU ...	58	20	68	25	58	25	62	31	47	27	—	—
France ...	51	1	31	3	23	4	31	5	21	3	—	—
Germany ...	1	7	6	8	6	8	7	9	7	10	—	—
Sterling Area ...	21	37	23	44	13	41	10	39	14	39	—	—
United Kingdom	18	29	16	31	12	28	7	28	6	29	—	—
Rest of World ...	14	36	8	17	27	18	22	16	—	19	—	—
COMMODITY-WISE												
Petroleum ...	50	—	89	—	91	—	92	—	88	—	—	—
Barley ...	10	—	5	—	3	—	3	—	2	—	—	—
Dates ...	9	—	2	—	2	—	1	—	3	—	—	—

TABLE VII.

PERCENTAGE DISTRIBUTION OF TRADE OF ISRAEL WITH THE WORLD

	1937		1954		1955		1956		1957		1st Quarter 1958	
	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.
AREA-WISE												
U.S. & Canada ...	—	—	18	30	20	30	20	33	16	29	9	34
Latin America ...	—	—	1	2	1	1	—	2	—	2	1	3
Continental EPU ...	—	—	38	38	38	36	36	34	42	32	42	32
Sterling Area ...	—	—	26	12	22	13	29	12	27	12	35	12
United Kingdom ...	—	—	23	10	19	10	22	10	21	10	30	11
Rest of World ...	—	—	17	18	17	19	15	20	15	25	14	19
COMMODITY-WISE												
Citrus Fruits ...	—	—	36	—	35	—	41	—	36	—	63	—
Diamonds ...	—	—	19	—	22	—	23	—	23	—	14	—



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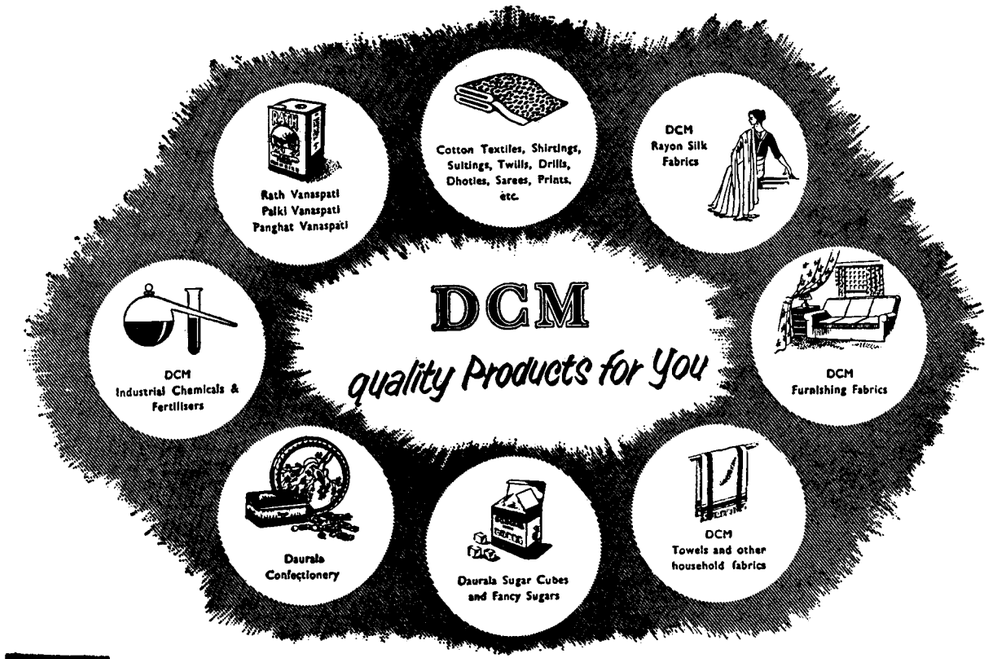
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EGYPT, SYRIA AND YEMEN

These three countries are grouped together not because of close geographical or economic affinity, but because they represent a new trend in the trade of the Middle East which is influenced by political factors. Chronic disequilibrium in the balance of payments, which is a pronounced characteristic of most of the countries of the world in the post-war era, has raised barriers to free trade and given a very powerful accent to bilateralism. In the case of Egypt, it is possible to argue that the deliberate shift in the direction of her trade to Communist countries by means of bilateral agreements presented an inevitable choice. It is not necessary in this context to enter into the complicated question of responsibility for the Suez Canal crisis. But it is clear that the one country which benefited gratuitously from this tragedy was Russia. Syria and Yemen represent two more instances in this region of countries which accepted the Communist offers of arms. As an inescapable result of it, they have entered into bilateral trade agreements with Czechoslovakia and other countries of the Communist bloc. The technical case against bilateralism is easily argued. But faced with live problems of balance of payments, it has become incumbent upon so many countries to resort to bilateralism. However, these three countries of the Middle East were influenced by political currents in forging bilateral links with Communist bloc countries contrary to the traditional direction of the trade. Because the influences were political it is not to be expected that the balance of economic advantage would be struck evenly between both the participating sides. It is not clear to what extent Egypt has entered into heavy commitments of the exports of her raw cotton to countries of the Soviet bloc.

As Table IV would show the export trade of Egypt hangs by her capacity to market her cotton abroad. Raw cotton has claimed a share in the neighbourhood of 70 per cent at least in her total exports. Her other present handicap is that there are a few other products, like rice, which can sustain her export trade. This country is now on the threshold of large-scale economic development. With the progress of the Aswan Dam Project and the programmes of industrial expansion, it will be possible for Egypt to make her economy diversified and much less susceptible to the fluctuations in individual crops or their export value. It is significant that in 1957 the Sterling Area's share of Egypt's exports was reduced to 7 per cent; or less than one-third of the traditional share, as Table IV discloses. It is easily explained by the virtual severance of trade with the UK in the wake of the Suez crisis. Her export trade with the Continental EPU in 1957 was 21 per cent of the total but lower than before. The most striking aspect is the sudden emergence of the Soviet bloc as her customer. The Soviet bloc's share in Egyptian exports has shot up to 40 per cent. The trends in imports also show a similar shift. As Table XII indicates, machinery and electric equipment account for the largest percentage of 17.7 in Egypt's imports and automobiles and buses 5.6 per cent, while steel and steel manufactures take a slice of 7.4 per cent. These are indicators of emphasis on development imports. But at the present time Egypt has been faced with a serious problem of balance of payments. Her invisible receipts which were a very potent factor in rectifying the payments in balance are now at a lower level than before.

Syria's acceptance of Czechoslovak supplies of various types, including mainly arms, has made it necessary for her to barter a good share of her cotton and agricultural crops with that country. As table IX reveals, the share of the Sterling Area in Syria's imports began to decline in 1957. But even now the Continental EPU area continues to be a larger supplier of her imports than the Communist bloc countries. Agricultural crops clearly dominate the composition of her exports as shown in Table XI. Out of total exports of $141 million, raw cotton accounted for $42 million, barley $18 million and wheat $16 million. In the sphere of imports, petroleum products and capital goods claim each a percentage share of 14.7, while vehicles figure as an important item with a share of 5 per cent, as stated in Table XII. The conventional deficit in Syria's visible trade is usually wiped out by the oil transit dues, remittances by emigrants and expenditure of international agencies.

THE TRADE PATTERN OF OTHER COUNTRIES

In the foregoing paragraphs reference has been made to the new shift in the external trade of Yemen by reason of her acceptance of arms supply from the Soviets. Yemen has entered into trade agreements on a bilateral basis with two Communist countries, namely, the Soviet Union and East Germany. Her staple export of coffee is now mainly committed to East Europe. Cotton plantations are being newly started and in course of time this fibre will supplement export income from citrus fruits, dates, etc. In the regional group of Arabian countries the factor of predominance is the small size of the sovereign States and Shaikhdoms. Saudi Arabia, which is large in the relative regional scale, has virtually little trade or resources with the significant exception of oil. But oil has brought her a position of international importance and a large proportion of luxury consumer goods in her imports. The importance of the Aden Colony arises from the fact that it is a strategic centre of entrepot trade and an oil bunkering port. Before the war Aden enjoyed a strong position as a free port. But with the provision of better port facilities by the neighbouring maritime States Aden's entrepot trade has begun to decline. The gap between the imports and exports is widening. The Aden Protectorate has to rely on a few products in its export trade such as coffee, hides and skins and animals and animal products. But its imports are as high as nearly 10 times the value of its exports. Lack of indigenous resources has sent out large sections of the population to earn livelihood abroad. Remittances by emigrants form one of the means to meet the deficit partially. Among the Shaikhdoms of the Persian Gulf, Kuwait stands in a peculiar category. As high as a proportion as 97 per cent of the State's income is derived from oil alone and the balance comes from the customs and excise. There is no agriculture, no water supply and even fodder is imported for the cattle. But exports of oil have encouraged a continuous and large flow of imports of luxury goods. The US and the UK have each shares of about 20 per cent in Kuwait's imports, while Japan, India and West Germany enjoy shares around 7 per cent.

Bahrain is the principal port for the external trade of Saudi Arabia and the other regions in the hinterland. Its strong position has enabled it to derive considerable revenue from a duty of 2 per cent on goods in transit. About 30 per cent of the State's revenue is derived from customs. But crude oil products and their refining are the pivot of its economy. The sole export trade consists of oil. The Shaikhdoms of the Trucial Coast, formerly known as Trucial Oman, owe their external commerce to profitable entrepot trade. The pearl industry of this coast is fast fading out. The adjoining Muscat and Oman regions have limited resources and their trade follows the traditional pattern of exports of dates and dry fruits. As Table V shows, the position of the exports of Iran in the last three years is somewhat obscure. But it goes without saying that oil constitutes the mainstay of her exports. In addition, there are other export items like dry fruits, nuts, cotton, carpets, rice, and so forth. Iran's imports centre mainly around textiles, tea, sugar, machinery, vehicles, iron and steel, which between them account for a share of 60 per cent of the total. The principal suppliers are the US, West Germany, the UK, and Japan. Communist bloc accounts for 10 per cent share in Iran's imports, which is small considering

her contiguous position with the Soviet Union. The occupational pattern shows 60 per cent of the population depending on agriculture, 20 per cent on trade, industry etc., while the remaining 20 per cent is semi-nomadic.

Iraq enjoys self-sufficiency in foodgrains while oil constitutes the major source of her income. She has a good share in the world oil trade. It would appear that income from oil is being utilized for economic development which is indicated by the emergence of a number of light industries. Another source of income is the considerable volume of transit trade passing to Iran, Syria, Jordan and Arabia. As Table VI indicates, in 1957 the Continental EPU area was her principal trading partner. This area had 47 per cent share in Iraq's exports and 27 per cent in her imports. But the sterling area accounts for the highest proportion of imports at 39 per cent out of which 29 per cent was due to the UK. Petroleum is the staple export. The oil royalties not only wipe out the deficit in the balance of visible trade but make it essential for this country to import consumer goods on a large scale to keep away inflation.

Israel's chronic difficulties in her economy arise not only from the hostile atmosphere in the region around but partly from her deliberate choice. She constitutes a unique example where population keeps on increasing at a rapid rate by immigration rather than by natural growth. In the first decade after her birth on May 14, 1948, Israel's population has nearly doubled. "The Law of the Return" entitles any Jew to acquire Israel's citizenship the moment he puts his foot on her soil. The influx of population cannot be regulated because of this constitutional provision and politically it is difficult to see how a way can be found to ease the problem. Defence expenditure takes a heavy toll of the national exchequer. A continuous state of armed preparation is unavoidable until the Arab countries see their way to modify their attitude to her. At the present time this is a remote possibility. The blockade of Israel has been successfully enforced, because Egypt retains a tight control on the Suez Canal and the Gulf of Acaba. Not only that but even Iraq has successfully rendered the pipeline to Haifa totally functionless. It is paradoxical, but not in the least surprising, that, although situated in close proximity of the oil producing areas of the Middle East, Israel has to import 40 per cent of her oil from the distant Soviet Union, for which she has to pay the price of a barter agreement. She is easily the most industrially-advanced State of this region. And agriculture has been improved considerably by methods of co-operation and mechanization. In spite of all these factors, it has become impracticable for Israel to check the rising tide of imports. Normally a mere one-third of the imports of Israel are paid for by exports. The large deficit in the visible trade is made good by foreign loans and grants. Shortage of foreign exchange haunts the economy in consequence. Table VII would show that in so far as exports are concerned, the Continental EPU and Sterling Area (particularly the UK) and North America are of considerable importance to her. Their intake of Israel's exports ranges between 16 and 42 per cent. Supplies of imports come principally from the Continental EPU, the Sterling Area and next from North America. Citrus fruits constitute a strong point in exports and industrial raw materials form the major imports as Tables XI and XII sharply bring out.

Jordan stands in contrast with the adjacent areas in that she is devoid of oil resources. All outlay on prospecting so far has proved infructuous. Neither is she endowed with that other source of fuel, namely, coal. This makes the outlook for industrial development far from bright. The economy is sustained by vegetable crops, fruits and animal products. But Jordan enjoys considerable invisible income from tourism. Lebanon depends for 40 per cent of her income on trade and services, while only 20 per cent of the income is derived from agriculture. Table XI discloses that citrus and other fruits accounted for $7 million and vegetables for $6.5 million out of the total exports of $41 million in the year 1956. Table XII indicates the equal importance of imports of cereals and iron and steel and their products each of which has a share of 10.6 per cent in the total imports. Textile fabrics and petroleum products are the categories of the next order with shares of 7.5 per cent each. It is clear from Table VIII that for the purposes of export markets the Continental EPU and the Sterling Areas are of almost equal importance to Lebanon. But 31 per cent of the imports are supplied by the Continental EPU, 23 per cent by the Sterling Area and 10 per cent by North America, as illustrated by the position in 1957. Lebanon's trade with the Communist bloc countries is merely fractional—3 per cent in imports and 5 per cent in exports. In the intra-regional sphere, Syria and Saudi Arabia are her important trading partners—a position which reflects geographical influence. The conventional deficit in Lebanon's visible trade is bridged by oil dues, tourism and remittances made by emigrants.

Sudan's excessive dependence on raw cotton is conspicuously shown in the composition of her exports. Table XI demonstrates the extent of this dependence. In 1956, out of the total exports of $185 million, raw cotton accounted for $120 million and cotton seed for $13 million. All other items of exports have insignificant contributions to make to export earnings. Table XII indicates that cotton and rayon fabrics represent the largest share of 17.3 per cent in Sudan's imports in 1956. Sugar claims a share of 10.2 per cent and tea and coffee take a share of 8.1 per cent. By and large, the pattern of imports has a predominating bias for consumer goods. Since independence the base of the economy is being diversified. In the traditionally poor South, rice, coffee and tobacco are being grown. In the North, citrus fruit, palm trees and wheat are being brought under intensive cultivation The private investor class is feeble in Sudan.. In the result the Government has to step out for outlay on industrial development. One handicap which Sudan has to face is the lack of power and fuel as well as a good range of industrial resources.

Political stability in Turkey is still to be matched by economic stability. Turkey's inclusion in the OEEC and the EPU have been sources of considerable strength to her economy. Since the era of Kemal Ataturk, Turkey is fast Europeanising her life. Today she belongs to both Europe and the Middle East. As Table X shows, during the year 1957 the Continental EPU, North America, Germany, the Sterling Area and France provided Turkey with her markets for exports. The direction of imports discloses the importance of the Continental EPU, North America, Germany and the Sterling Area as sources of supply. Table XI reveals that tobacco, fruits and nuts, cotton and chrome ore are, in that order, the staple exports of Turkey. The composition of imports set out in Table XII indicates as high a share as 41.7 per cent of machinery and transport equipment. From this class of exports there is a sudden fall to a share of 7.2 per cent for iron and steel and 8.8 per cent from fuels. In 1956 Turkey's total imports stood at $407 million, or an excess of $100 million above her exports. Trade deficit has raised a great problem for Turkey in the last six years. The facility in payments settlement provided by the EPU has not been sufficient to enable Turkey to tide over the payments difficulty and she had to remain in arrears in these six years. One device adopted by the Government is to charge, as an anti-inflationary measure, premiums on imports ranging between 25 per cent and 75 per cent and to utilise this premium revenue to subsidise exports. But in spite of recent emphasis on mechanization of agriculture, exports have not looked up as brightly as they need to.

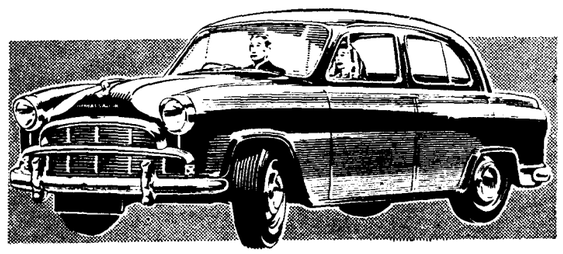
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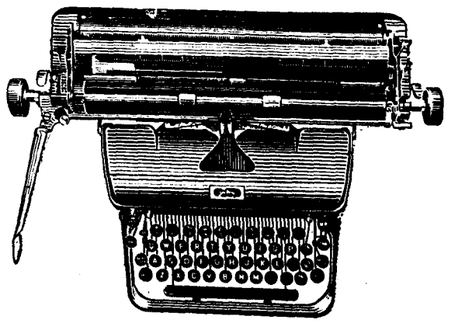
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TABLE VIII.

PERCENTAGE DISTRIBUTION OF TRADE OF LEBANON WITH THE WORLD

	1937 Exp.	1937 Imp.	1954 Exp.	1954 Imp.	1955 Exp.	1955 Imp.	1956 Exp.	1956 Imp.	1957 Exp.	1957 Imp.	1st Quarter 1958 Exp.	1st Quarter 1958 Imp.
AREA-WISE												
U.S. & Canada ...	14	6	6	15	10	14	5	11	4	12	—	—
Latin America ...	—	—	—	—	—	—	—	—	—	—	—	—
Continental EPU ...	31	36	18	27	16	31	22	32	19	31	—	—
France	14	13	4	8	5	10	8	10	5	8	—	—
Sterling Area ...	9	16	10	22	35	26	18	18	20	23	—	—
United Kingdom	6	11	4	18	5	15	7	12	5	18	—	—
Rest of World ...	45	42	65	37	37	27	55	39	57	33	—	—
Syria	—	—	14	23	11	16	11	20	12	15	—	—

TABLE IX.

PERCENTAGE DISTRIBUTION OF TRADE OF SYRIA WITH THE WORLD

	1937 Exp.	1937 Imp.	1954 Exp.	1954 Imp.	1955 Exp.	1955 Imp.	1956 Exp.	1956 Imp.	1957 Exp.	1957 Imp.	1st Quarter 1958 Exp.	1st Quarter 1958 Imp.
AREA-WISE												
U.S. & Canada ...	14	6	4	13	5	12	4	1	4	12	—	—
Latin America ...	—	—	—	2	—	3	—	3	—	4	—	—
Continental EPU ...	31	36	46	42	41	37	38	35	36	38	—	—
France ...	14	13	16	12	21	10	12	8	10	7	—	—
Germany ...	2	5	6	10	5	10	6	10	5	11	—	—
Sterling Area ...	9	16	11	18	18	26	15	25	12	20	—	—
United Kingdom	6	11	6	12	9	13	2	12	1	8	—	—
Rest of World ...	45	42	38	26	37	24	43	26	48	27	—	—
Lebanon ...	—	—	28	10	21	6	23	9	18	4	—	—
COMMODITY-WISE												
Cotton ...	—	—	27	—	51	—	29	—	35	—	—	—
Wool	—	—	5	—	7	—	7	—	6	—	—	—
Wheat	—	—	17	—	3	—	12	—	17	—	—	—
Barley	—	—	19	—	2	—	13	—	10	—	—	—

TABLE X.

PERCENTAGE DISTRIBUTION OF TRADE OF TURKEY WITH THE WORLD

	1937 Exp.	1937 Imp.	1954 Exp.	1954 Imp.	1955 Exp.	1955 Imp.	1956 Exp.	1956 Imp.	1957 Exp.	1957 Imp.	1st Quarter 1958 Exp.	1st Quarter 1958 Imp.
AREA-WISE												
U.S. & Canada ...	14	15	18	15	16	22	20	21	26	31	23	22
Latin America ...	—	2	3	2	—	2	1	1	—	—	—	—
Continental EPU ...	59	56	37	40	42	34	42	42	38	33	31	40
Germany ...	37	42	18	17	16	18	17	24	13	14	15	13
France ...	4	1	3	—	7	6	5	5	7	3	6	3
Sterling Area ...	8	8	7	14	8	11	9	11	10	10	3	10
United Kingdom ...	7	6	7	9	7	8	8	8	9	8	3	8
Rest of World ...	19	19	35	29	34	30	29	24	26	26	42	27
COMMODITY-WISE												
Tobacco ...	32	—	26	—	28	—	31	—	40	—	64	—
Cotton ...	4	—	16	—	15	—	9	—	12	—	—	—
Wheat ...	6	—	20	—	4	—	6	—	—	—	—	—
Chrome ...	3	—	5	—	6	—	8	—	6	—	6	—
Hazelnuts ...	7	—	7	—	14	—	10	—	13	—	7	—
Raising	4	—	3	—	3	—	5	—	5	—	4	—

TABLE XI

MAJOR EXPORTS OF M.E COUNTRIES EXCLUDING PERTROLEUM

(Weight in thousands of metric tons; value in millions of dollars)

Country	1954		1955		1956		1956 First Half		1957 First Half	
	Weight	Value	Weight	Value	Weight	Value	Weight	Value	Weight	Value
Egypt: b										
Vegetables (fresh, dry, preserved and vegetable preparations	217	10	221	10	264	18	239	15	—	—
Cotton, raw	288	325	278	309	235	284	167	190	—	196
Cotton yarn	11	13	10	13	11	13	4	4	—	8
Rice	49	8	186	21	221	25	150	17	—	21
All exports	—	413	—	419	—	404	—	261	—	269
Iran: c										
Rice	61	8	28	3	—	—	—	—	—	—
Dried fruits and nuts	93	18	90	15	—	—	—	—	—	—
Cotton, raw	45	35	36	22	—	—	—	—	—	—
Wool	8	7	9	9	—	—	—	—	—	—
Carpets, woollen	5	15	5	16	—	—	—	—	—	—
All exports	—	121	—	103	—	—	—	—	—	—
Iraq:										
Dates	218	10	244	8	264	7	118	3	60d	1.4d
Barley and wheat	519	26	390	22	279	14e	195f	10	19f	0.9dg
Livestock (thousands of head)	325	4	151	1	83	1.2	47	0.7	22d	0.3d
All exports	—	52	—	49	—	48	—	19	—	6
Israel:										
Oranges and grape-fruit (thousands of cases)	8096	33	6914	29	7533	38	6993	30	6995h	40h
Diamonds, polished (thousands of carats)	184	16	227	21	264	24.5	126	12	201h	19h
Other items, wholly or mainly manufactured	—	29	—	29	—	29	—	13	—	19h
All exports	—	88	—	88	—	103	—	63	—	91h
Lebanon: i										
Vegetables	89	5.3	78	4.0	99	6.5	36	2.6	19d	1.3d
Citrus and other fruits	70	6.0	68	6.0	82	7.0	47	3.6	36d	2.6d
Cotton and wool (raw and fabrics)	2.4	1.8	3.6	2.6	4.6	3.0	2.0	1.1j	2.2j	1.1d
Hides	1.3	1.2	1.8	1.3	3.0	2.0	1.5	1.0	0.7d	0.5d
All exports	—	29	—	33	—	41	—	21.0	—	12.0d
Sudan:										
Cotton, ginned	60	62	95	87	115	120	63	65	18	20
Cottonseed	106	8	101	8	152	13	90	8	38	3
Gum arabic	38	11	42	13	49	15.5	25	8	19	6
All exports	—	116	—	147	—	185	—	108	—	59
Syria: i										
Barley	431	24	29	2	301	18	13	1	43	2.4
Wheat and wheat flour	261	22	35	3	183	16	4	0.3	96	8.0
Cotton, raw	42	35	89	65	56	42	37	29	42	20
Wool, raw	5	7	7	9	8	9.5	5	5	3	4
Sheel (thousands)	520	6	735	8	554	7.0	—	—	—	—
All exports	—	129	—	128	—	141	—	54	—	65
Turkey:										
Wheat	950	67	160	12	177	18	177	18	—	—
Fruits and nuts	123	46	112	62	98	56	26	15	48	24
Tobacco	64	86	60	89	61	94	46	72	56	88
Cotton	61	52	53	46	36	27	20	15	33	23
Chrome ore	357	16	560	20	642	23	280	10	—	—
Copper	17	10	16	12	19	17	10	10	8	5
All exports	—	385	—	313	—	307	—	176	—	181

Source: Economic Developments in the Middle East 1956-5

a Domestic exports, excluding re-exports.
b Including trade with the Sudan.
c Years beginning 20 to 21 March of year stated. Data include exports of fishery products.
d First three months.
e Barley only.
f Grain, pulses and flour.
g Cereals.
h First seven months.
i Values converted to dollars at rates applicable to total exports; excluding gold.
j Raw cotton and wool only.

ber, 1958, it can be made with trade. Traditionally trade links between India and the Middle East have existed with varying fortunes. What is required is to give a new accent to the content of that trade in a manner which will serve the requirements of the trading partners. They too need to fall in line with the new global trend of regional co-operation.

Tables XIII and XIV in this section out the staple exports from India to the Middle East and staple imports from the Middle East into India. From the individual viewpoint India is, of course, interested in promoting her exports to this region. But if this level is to be sustained in the long run by the normal force of two-way traffic, India has to augment her intake of imports from the countries of the Middle East. The composition of India's imports from the Middle East follows practically the same pattern as the composition of the imports of other countries. Crude oil, petroleum products, highly refined and superior grade motor spirit and aviation fuel constitute the premier imports of India. Among the supplying countries, Kuwait, Saudi Arabia, Iran, Bahrain, stand out as the principal sources. Recent trends show that Iran's share in the export of petroleum and its products to India has a tendency to decline. To what extent India will need to import oil from the Middle East will be conditioned by two factors, namely, the rate of increase in her consumption and the extent to which indigenous reserves of oil are discovered and exploited. In respect of the second factor, present indications are optimistic, but it would be premature to be confident about the degree of indigenous resources.

Among India's exports, it would be obvious from Table XIII that cotton piecegoods, jute goods, tobacco, tea and spices are the commodities which have maintained their traditional importance. This is not to suggest that they are immune from the impact of competitive exporting countries or indigenous production. Nevertheless, it is true that rising standards of living in the Middle East region would provide a growing demand. Light engineering industries will find a potential market in several countries of the Middle East as corroborated by a survey conducted by the delegation which was deputed by the Engineering Export Promotion Council to this region early in 1957. In the Middle East, Egypt and Iraq are the only two countries with which India has concluded bilateral trade agreements. But by virtue of the treaty of commerce and friendship India extends the most favoured-nation treatment and conventional facilities to the principal countries of the region.

Any discussion of the potentiality of expanding the trade between India and the Middle East must proceed on the lines of the possibilities in relation to individual countries. Egypt constitutes an outstanding example where India has offered co-operation in trade to help Egypt overcome some of her difficulties consequent on the Suez Canal crisis. The original bilateral agreement of trade between India and Egypt signed in July 1953 was modified in 1957 by a special understanding between the two countries. In pursuance of this understanding the State Trading Corporation of India accepted the obligation to operate a special rupee account in order to facilitate payment for the imports and exports. It will be recalled that the blocking of Egypt's sterling balances brought her suddenly face to face with a critical situation. Egypt's foreign exchange difficulties could not be eased for reasons which it is not necessary here to examine. But the fact remains that in March 1958 the payments arrangement between India and Egypt came up for review in the light of the new circumstances. These circumstances disclosed the foreign exchange shortages of Egypt as well as India. Furthermore, the Government of Egypt had promulgated certain foreign exchange regulations as a measure of necessary precaution. In March 1958, the arrangement of 1957 was modified and it was stipulated that, so long as foreign exchange difficulties of Egypt continue, all imports of tea and jute from India into Egypt and exports of raw cotton from Egypt into India should be paid for in Egyptian pounds. The State Bank of India opened an export account with the National Bank of Egypt in Egyptian pounds in order to facilitate trade in these three premier commodities. It was noticed by Indian interests that the premium of about 20 per cent which the Indian rupee enjoyed in Egypt operated as a handicap to her sales of engineering goods because they tended to be priced out of the Egyptian market so long as they had to be paid for in Indian rupees. Most other countries exporting engineering goods to Egypt had extended the facility of payment in Egyptian pounds. To meet this situation, the State Trading Corporation provided credit for Rs. 15 lakhs in order to facilitate the sales of Indian engineering goods.

India had a traditional adverse balance with Egypt whose size varied with her imports of raw cotton. However, she had a small trade surplus of Rs. 66 lakhs in 1957. The total export trade of India with Egypt has also gone on increasing in recent years. From Rs. 9.60 crores in 1955 it rose to Rs. 10.89 crores in 1956 and to Rs. 10.99 crores in 1957. In the current year, however, the level of 1957 may not be retained, if the total exports in the first half year of the order of Rs. 4.39 crores are any guide. Three items contribute to the bulk of India's export value—jute, tea and tobacco. In 1957 exports of jute rose as high as Rs. 5.93 crores or one-half of the total. It would be too optimistic to expect that jute exports can be pushed above this level. It will be recalled that raw jute prices are collapsing and, therefore, the export revenue from jute manufactures will be lower for some months. Tea exports recorded a sudden increase to Rs. 6.34 crores in 1956 but in 1957 they reverted to the more normal level of Rs. 4.14 crores. Competition of Ceylon teas seems very difficult to overcome. Pharmaceuticals and engineering goods offer scope for expansion in the Egyptian market. Our exports of cotton textiles to Egypt are meeting with competition both from other exporting countries and the Egyptian domestic industry which is rapidly expanding.

Syria is the next country in the United Arab Republic with which India enjoyed a favourable balance of trade in 1957. But here jute exports take as big a slice as three-quarters in the total exports of India. The other mentionable items which enter into India's exports to Syria are tea, coffee and some varieties of engineering goods. In Syria again the strong position built up by Ceylon teas leaves little room for further expansion of Indian teas. Coffee exports can be pushed above the conventional level. Engineering goods including sewing machines, diesel engines, pipes and tubes, fans, etc., can find an enlarging market in Syria.

Raw cotton from Sudan and cotton textiles from India are the major crops of the two-way trade. India's conventional trade deficit with Sudan was turned into a surplus of about Rs. 2 crores in 1957 which should be regarded as by no means marginal considering the value of the total trade. India's exports to Sudan have gone on increasing from Rs. 6 crores in 1955 to Rs. 8 crores in 1956, Rs. 10 crores in 1957 and Rs. 5.34 crores in the first six months of 1958. Apart from cotton piecegoods, jute manufactures, sugar, tea and footwear are recording higher levels in the Sudanese market. There is an increasing demand for sugar in Sudan, but India's capacity to export sugar depends upon at least certain conditions outside the normal factors governing exports.

In spite of the fact that the original bilateral trade agreement between India and Iraq concluded in May 1953 has been renewed from time to time, the developments in the two-way traffic have not shown a tendency to expand in an impressive degree. In 1956 India's exports to Iraq declined to Rs. 1.85 crores or a shortfall of Rs. 82 lakhs below the previous year and India incurred a marginal deficit. In 1957, however, India's exports increased to Rs. 2.86 crores and a surplus was recorded.

In the first six months of 1958 the total value of Indian exports was only Rs. 90 lakhs and it would be difficult to be sure that the level of 1957 would be maintained in the year as a whole. Jute goods accounted for Rs. 43 lakhs and cotton textiles for Rs. 38 lakhs in India's exports in 1957. These have been two top items among India's exports. But the trends of the last four years show a steady decline in both of them. It is difficult to envisage how jute exports can be pushed up, but in regard to cotton textiles it is estimated that a closer study of the changing preferences in the Iraqi market and a shift in India's exports to the varieties in new demand, which are actually produced in India, can help her to recover the lost ground. Coir and coir manufactures have held the level around Rs. 15 lakhs in recent years. Engineering goods hold promise of some expansion.

Trade with Iran has taken an adverse turn for India in the last two years. This is primarily the consequence of the continued need for India to maintain a high degree of imports of petroleum or its products from Iran and her inability to promote the levels of exports to that country. Jute manufactures and cotton textiles which are two strong points in India's export trade have suffered steep decline. Jute exports to Iran fell precipitately from Rs. 70 lakhs in 1955 to Rs. 16 lakhs in 1957. Cotton piecegoods, however, had a lesser fall from Rs. 51 lakhs in 1951 to Rs. 42 lakhs in 1957. The major handicap of India in recovering the former higher levels of cotton textile exports is the special arrangement either of barters or payments facilities provided by other suppliers such as Poland, Hong Kong and the U.S. Furthermore, neighbouring Russia is pushing up her sales of coarse and medium varieties of cloth in Iran. Tea constitutes the major support of India's exports and claims a share as high as seven-tenths in the total exports. Its value which had declined to Rs. 3.02 crores in 1956 has been raised to Rs. 4.84 crores in 1957, nevertheless, it was below the 1955 level by a substantial margin of Rs. 76 lakhs. Market surveys tend to show that the demand for spices in Iran is good and India stands the chance of promoting her exports. But in respect of this item also the trends are very erratic. From Rs. 20 lakhs in 1955 exports of spices increased to Rs. 36 lakhs in 1956, but there was a steep fall to Rs. 13 lakhs in 1957. Engineering goods covering a wide range can find an increasing market in Iran, provided India can come up to the level of her competitors in the matter of providing credit facilities.

TABLE XIII.

EXPORTS FROM INDIA TO M. E. COUNTRIES

Item	1957 (12 months) Quantity ('000)	1957 (12 months) Value ('000) Rs.	1958 (8 months) Quantity ('000)	1958 (8 months) Value ('000) Rs.
Tea (lbs.)				
Egypt	1,68,21	4,14,35	1,62,62	3,44,60
Sudan	43,64	88,51	1,36,20	2,69,53
Iran	99,44	4,84,33	52,22	1,92,32
Turkey	71,17	2,14,31	49,19	1,50,26
Bahrein	16,65	78,63	15,69	37,71
Kuwait	32,03	78,63	19,75	47,74
Saudi Arabia	3,62	9,89	5,16	13,39
Trucial Oman	9,46	27,34	4,06	11,70
Tobacco (manufactured and unmanufactured) (lbs.)				
Aden	81,99	37,28	57,62	30,04
Egypt	29,30	29,29	20,18	21,06
Saudi Arabia	4,09	3,54	6,54	5,02
Kuwait	1,22	1,37	37	53
Bahrein	88	88	64	67
Artificial Silk (yds.)				
Aden	9,10	7,81	22,35	51,01
Kuwait	11	23	1,54	3,04
Bahrein	5,09	12,68	3,49	7,18
Trucial Oman	20	21	4,56	9,82
Muscat	12	17	1,83	3,37
Saudi Arabia	28	33	77	1,27
Jute Manufactures	(Nos.)		(Tons).	
Egypt	6,57,16	5,89,18	16	2,04,74
Sudan	1,79,45	1,40,10	3	37,58
Cyprus	27,68	14,28	—	9,49
Aden	12,08	11,02	—	5,70
Syria	83,68	89,98	—	1,43,21
Iraq	41,93	36,85	2	26,36
Turkey	1,81,95	97,38	1	12,45
Bahrein	53	35	—	19
Cotton Piecegoods (yds.)				
Kuwait	37,14	34,35	21,50	18,25
Muscat	27,81	21,53	14,42	9,65
Saudi Arabia	2,23,64	1,42,31	71,13	43,31
Sudan	9,76,50	4,92,24	5,43,02	2,46,93
Aden	4,15,00	2,92,03	2,31,82	1,08,52
Cyprus	19,84	9,95	17,70	14,73
Bahrein	49,98	35,52	46,45	32,47
Trucial Oman	22,63	19,20	16,43	15,06
Iran	49,36	41,38	28,72	21,40
Iraq	68,91	42,73	37,77	19,52

TABLE XIV.

IMPORTS FROM M.E. COUNTRIES INTO INDIA

Item	1957 (12 months) Quantity ('000)	1957 (12 months) Value ('000) Rs.	1958 (8 months) Quantity ('000)	1958 (8 months) Value ('000) Rs.
1. **Crude Petroleum** (tons)				
Kuwait	6,43	4,60,43	24	19,30
Trucial Oman	1,79	1,64,68	..	..
Saudi Arabia	6,72	5,90,82	921	8,01,00
Iran	18,12	16,10,36	156	1,46,75
2. **Petroleum Products** (gallons)				
(a) **Aviation Spirit**				
Bahrein	4,91	714	..	..
Saudi Arabia	8,86	1339	..	..
Iraq	..	1	..	..
Iran	3,34,30	4,82,40	1,29,56	1,98,07
(b) **Other Motor Spirit** (gallons)				
Iran	6	19	..	..
(c) **Other sorts** (gallons)				
Iran	3,33	4,87	22	47
Total for Motor Spirit				
Bahrein	4,91	714,	..	..
Saudi Arabia	8,86	13,39	..	..
Iran	3,37,69	4,87,46	1,29,78	1,98,54
Kerosene and lamp oil (gallons)				
Aden	33,31	27,82	20,96	17,48
Bahrein	4,64,86	3,71,26	1,47,67	1,22,13
Saudi Arabia	4,71,34	3,83,94	4,51,80	3,82,30
Iran	21,33,57	17,52,59	8,69,35	7,30,04
Iraq	..	..	4,33	3,92
Fuel Oils				
Aden	26	36.72	..	..
Bahrein	81	1,51,14	18	30,55
Kuwait	88,48	6,62,13	6,93	5,43,77
Trucial Oman	17	16,56	..	..
Saudi Arabia	2,72	3,84,65	95	1,05,03
Iran	30,54	14,42,71	7,23	8,87,51
Raw Cotton (tons)				
Egypt	14	9,98,44	6	3,48,13
Sudan	11	7,38,67	10	5,08,07
Aden	..	..	..	10,89
Fruits and Vegetables				
Iran	6	1,41,14	2	54,83
Iraq	39	1,96,42	21	59,57
Cyprus	..	1,49	..	..
Kuwait	2	14,94	..	..
Bahrein	..	6	..	..
Jordan	..	19	..	..
Muscat	4	47,54	2	16,30
Saudi Arabia	2	23,59	1	7,61

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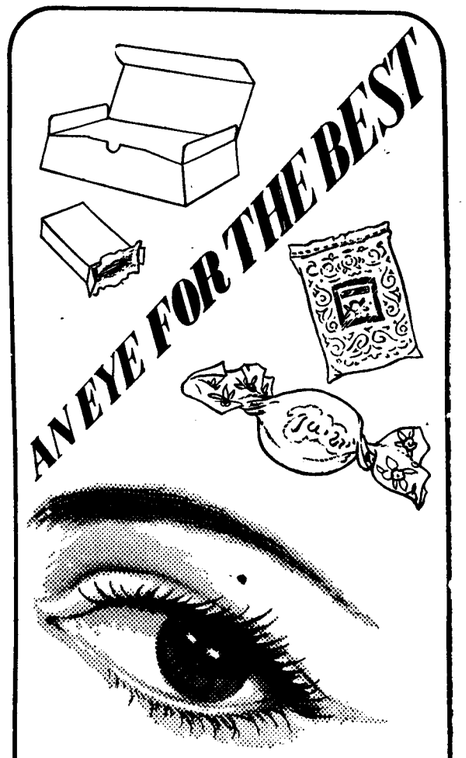
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TABLE XII

MAJOR IMPORTS OF MIDDLE EAST COUNTRIES

(Totals in millions of indicated currency units; details in percentage of total value)

Country and item	1953	1954	1955	1956	1956 (first half)	1957 (first half)
EGYPT:						
Total imports (millions of Egyptian pounds)	**176.8**	**160.2**	**182.9**	**186.1**	**104.8**	**87.1**
Commodity groups (as percentage of total):						
Wheat and wheat flour	14.5	1.5	—	4.4	4.9	17.7
Tea and coffee	4.4	5.1	5.4	4.2	4.8	8.6
Sugar, refined	1.3	0.5	—	—	—	—
Cotton and miscellaneous fabrics	3.4	2.5	2.1	1.3	—	—
Petroleum products	8.0	11.4	9.5	9.8	5.2	2.7
Wood other than fuelwood	3.8	4.7	4.7	2.9	—	—
Iron and steel and manufactures thereof	4.0	5.1	6.4	7.4	8.9	5.1
Machinery and electrical equipment	10.6	13.4	17.9	17.7	7.3 a	2.7 a
Automobiles and buses	2.3	3.0	4.8	5.6	3.4	1.8
Other	47.7	52.8	49.2	46.7	—	—
IRAN: b						
Total imports (millions of rials)	**5243.7**	**7126.5**	**8699.3**	**9215.4**	**—**	**—**
Commodity groups (as percentage of total):						
Tea	2.7	4.3	8.1	7.6	—	—
Sugar	23.1	16.0	10.9	10.2	—	—
Chemical and pharmaceutical products	3.8	3.8	3.6	4.7	—	—
Cotton fabrics	14.3	9.7	6.7	6.4	—	—
Tyres and tubes	6.0	4.6	4.6	—	—	—
Iron, pig-iron, steel and wrought products	7.5	7.0	8.5	8.2	—	—
Machinery	6.7	7.0	7.0	—	—	—
Automobiles and road transport equipment (including parts)	3.0	12.7	9.5	3.3 c	—	—
Other	32.9	34.9	41.1	59.6 d	—	—
IRAQ: e						
Total imports (millions of Iraqi dinars)	**68.3**	**72.7**	**97.2**	**114.5**	**56.6**	**29.7 f**
Commodity groups (as percentage of total):						
Tea	7.0	8.8	8.3	6.1	6.4	4.0
Sugar	7.5	7.4	5.4	6.5	6.9	6.4
Cotton and other fabrics	12.4	13.2	10.2	7.8	7.4	9.1
Machinery	19.6	18.7	17.8	23.5	22.2	18.2
Motor vehicles	7.0	8.5	10.1	7.6	4.5 g	6.1
Iron anad steel	17.4	11.3	13.4	12.4	12.9	8.4
Other	29.1	32.1	34.8	36.1	39.7	47.8
ISRAEL:						
Total imports (millions of U.S. dollars)	**282.7**	**397.6**	**337.3**	**362.8**	**102.7**	**304.1 h**
Commodity groups (as percentage of total):						
Manufactured consumer goods	20.9	17.8	16.0	15.4	14.6	16.4 i
Raw materials, including those for the food industry	45.1	50.1	50.8	46.8	46.4	—
Investment goods	23.0	21.6	23.1	28.6	28.3	21.6
Industrial equipment	9.9	6.9	7.0	9.6	—	—
Transport equipment	4.4	5.8	7.9	8.2	—	—
Fuels	11.0	10.5	10.1	8.9	10.7	13.5 j

MAJOR IMPORTS OF M.E. COUNTRIES (Contd)

Country & Item	1953	1954	1955	1956	1956 (First Half)	1957 (First Half)
LEBANON:						
Total imports (millions of Lebanese pounds)	**314.3**	**380.5**	**476.8**	**519.5**	**253.7**	**127.8 f**
Commodity groups (as percentage of total):						
Livestock	7.7	7.4	6.6	5.2	5.0	2.4
Cereals, including flour	14.5	17.2	8.9	10.6	3.2	7.6
Petroleum products	6.9	6.9	7.4	7.6	8.1	8.3
Woollen, cotton anad silk fabrics	5.0	6.2	5.1	4.7	4.9	4.8
Iron and steel bars, wire, sheets, tubes and pipes	4.6	3.8	4.7	7.5	8.4	9.2
Machinery and electrical equipment	7.0	7.9	10.3	10.6	11.5	7.4
Means of transport	4.8	5.5	7.8	5.5	5.9	4.9
Other	49.5	45.8	49.5	48.3	53.0	55.4
SUDAN:						
Total imports (million of Egyptian pounds)	**50.7**	**48.4**	**48.8**	**45.2**	**23.6**	**27 1**
Commodity groups (as percentage of total):						
Sugar	7.7	7.4	6.6	10.2	10.2	11.0
Coffee (raw) and tea	6.7	11.2	9.7	8.1	5.5	9.2
Cotton and rayon fabrics	14.6	16.1	15.6	17.2	20.0	18.0
Petroleum products	5.5	5.6	5.7	6.6	7.6	6.9
Iron and steel	3.7	3.1	2.0	1.6	1.7	2.2
Motor vehicles and parts	7.1	4.1	3.7	3.9	4.2	1.4
Other	54.7	52.5	56.7	52.4	50.8	51.3
SYRIA:						
Total imports (millions of Syrian pounds)	**286.4**	**381.7**	**392.6**	**412.7**	**209.8**	**279.8**
Commodity groups (as percentage of total):						
Sugar, raw	1.7	1.6	2.2	2.5	2.7	3.9
Woollen and cotton fabrics	5.6	4.6	4.4	3.5	3.4	2.9
Artificial silk thread	5.3	4.5	3.4	3.6	3.3	4.7
Petroleum products	13.2	11.6	11.7	13.7	14.4	9.0
Iron, cast iron and steel	6.3	6.6	7.7	4.0	6.1	8.7
Machinery and electrical equipment	14.0	15.0	15.6	13.7	14.8	13.1
Automobiles, including chassis	4.7	7.5	5.8	5.0	5.8	2.7
Other	49.2	48.6	49.2	54.0	49.5	55.0
TURKEY:						
Total imports (millions of U.S. dollars)	**532.2**	**478.3**	**497.6**	**407.2**	**221.7**	**—**
Commodity groups (as percentage of total):						
Foodstuffs, beverages and tobacco	2.6	3.2	8.4	6.5	4.4	—
Cereals	—	—	5.9	4.2	1.5	—
Raw materials	8.4	11.5	6.3	5.3	5.5	—
Fuels	10.0	8.6	8.4	8.8	8.2	—
Machinery and transport equipment	35.9	35.2	35.2	41.7	44.8	—
Iron and steel	9.6	5.8	8.2	7.2	7.8	—
Metal manufactures, other than machinery and transport equipment	3.8	4.7	5.2	4.5	4.8	—
Other	29.7	31.0	27.3	21.8	23.0	—

Source: Economic Development in the Middle East 1956-57.

a. Including machine parts. b. Years beginning March 20 of year stated. c. Passenger motor-cars only. d. Including machinery, tyres and tubes. e. Data for 1955 are largely but not entirely comparable with those for 1953 and 1954. f. First quarter only. g. Automobiles and parts. h. First nine months. i. Final consumer goods. j. Fuels and lubricating oils.

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Transport

THE transport system of the Middle East has been directly influenced by the sudden emergence of this area on the oil map of the world. This is seen in the comparative levels of development of the means of transport in the oil producing and transit States, on the one hand, and the rest of the States, on the other. There is, however, one exception to this overall influence. Railways in the Middle East have remained with a slow rate of expansion whether they are situated in the oil producing and transit States or in the purely non-oil and non-transit States. Railways are the least used for the transport of oil. In all other sectors the phenomenal expansion of oil production was accompanied by improved means of transport. One fact which needs to be emphasised, since it is not as widely appreciated as it ought to be, is that the construction of pipelines has brought in its train the construction of modern roads for their normal operation and upkeep. Then again, many of the ports of the Middle East would certainly have remained in obscurity but for the pressure of oil transport. The oil industry has also brought another singular benefit to the region. On account of the strategic importance of oil in civilian and military requirements, communications in this area of vast distances have been enriched by the rapid development of international airlines. All in all, it is the oil industry, more than any other single factor, which explains the development of transport in this region.

THE LONG NETWORK OF PIPELINES

The emergence of pipelines has been a necessary accompaniment to the exploitation of oil in far-flung or even inaccessible areas. How efficient and economical pipelines are was clearly demonstrated in America in the nineteenth century, several decades before there was any idea that the Middle East would spring up as a potential area of reserves. It was, therefore, quite natural that pipelines came to be laid in the Middle East as soon as exploitation of the wells was undertaken on a big commercial scale. The oil industry in the Middle East came into importance during the inter-war period, but its accelerated development commenced only in the period after the end of World War II. This trend in the expansion of Middle East oil is reflected in the pattern of the extension of pipelines in this region. Table I in this section establishes this fact which should be even otherwise obvious. The principal crude oil pipelines listed in that table show that the post-war trend is for pipes of larger diameters and, therefore, of higher capacity. For the majority of the pipelines the diameter varies between 12" and 16", but the Tapline has the largest diameter of 30/31". The capacity in terms of barrels per day varies for the lines constructed in the post-war period between 120,000 and 250,000 b/d. Tapline stands in a category by itself.

The key importance of pipelines in the transport of oil is explained by the simple logic of their cost. Rail or road transport on land surface and tanker transport on the ocean surface offer alternative modes of transport for oil. Once there is a reasonable certainty that a pipeline would be kept in operation to full capacity there is the automatic guarantee that it would prove the cheapest and most efficient mode of transport. It is obvious that the larger the diameter the higher the capacity of the pipeline for transport. The Trans-Arabian Pipeline (better known as Tapline), is literally one of the greatest achievements of engineering feats in recent times. It was constructed under the most adverse circumstances and in spite of the most severe handicaps of the terrain. This pipeline of 1,068 miles of length took four years to construct. It was in the month of November 1950 that the first oil conveyed in the Tapline reached Sidon and the first tanker was loaded on December 2 of the same year. The cost of the completed work is put at $230 million. It has a capacity of 15 to 15.5 million which is capable of being raised to 25 million if the original number of six stations is further stepped up. It is estimated that the Tapline has reduced the cost of transport of oil to anything between one-third and one-half of what would have been incurred by tanker transport. The Tapline running from Saudi Arabia to Lebanon has eliminated a distance of 6,000 miles which would otherwise have been involved in movement by tankers. Another significant economy in transport costs which it has brought is the saving of the Suez Canal dues levied on tankers. Transit dues has been a source of prolific revenue to the transit States and it has been of great value in promoting higher volumes of imports without overstraining the balance of payments.

RAILWAYS

Saudi Arabia forms an exception to the general rule that the railway system has comparatively a small share of direct benefit from the oil industry. Aramco has constructed a railway line of 350 miles of standard gauge from Dhamman, on the Persian Gulf to Riyadh, the capital, via Hofuf. Its construction was completed in the last quarter of 1951. More expansions are being planned. In Egypt the railway mileage stood at 2,670 miles in 1954 of which the larger part runs through Upper Egypt. Table III in this section shows that railway traffic in Egypt, as elsewhere in the world, has increased by strides after World War II. The traffic in terms of passenger kilometres increased by 200 per cent in 1956 as compared to 1,464 million kilometres in 1938. For freight traffic the increase was 130 per cent above the volume of 1,485 net ton kilometres in 1938. Iraq has a network of 1,050 miles of railways out of which 722 are of the metre gauge and only 328 are of standard gauge. The construction of this network is to be traced to the necessity which Great Britain felt for erecting the lines during World War I. The Trans-Frontier Railway Line of Iraq connects the country with Continental Europe via Turkey. Iraq's railway passenger traffic has increased in the post-war by 100 per cent, but what is significant is that the freight traffic increased still higher by 166 per cent as Table III indicates. Israel has inherited practically the entire railway system of the former mandated Palestine. But the Arab blockade has eliminated its traffic in the intra-regional direction. Railway activity in Israel has centred largely around domestic traffic requirements which increased with the phenomenal increase in population. As revealed in Table III passenger traffic in Israel increased between 1950 and 1956 by 200 per cent and freight traffic increased by 66 per cent.

During the post-war period Iran has not been able to add significantly to her former railway system. The Trans-Iranian Railway remains the main rail network. However, two branch lines were opened from Teheran in 1949 and 1957. The second Seven-Year Plan of Iran has made an allocation of 4,125 million rials for railway rehabilitation and expansion. Between 1950 and 1956 Iran's railway passenger traffic increased by 50 per cent, but freight traffic rose by a little less than 100 per cent. Sudan's railway system is obviously designed to serve commercial requirements in the first instance. This explains why the main line starts from Port Sudan. The railway network serves the agricultural region of the North. But new extensions are planned for the Central area. Syria accounts for three railways, the Northern, Hejaz and DHP. These railway systems are far from suitable for post-war requirements of traffic. Table III reveals that as compared to 1938 the post-war railway traffic in both passenger and freight sectors has declined in Syria. But an optimistic indication is that freight traffic will be stepped up. Turkey has 7,959 kilometres of rail network. New extensions are under consideration to create links with Eastern Anatolia and the Iranian frontier. A conspicuous feature of Turkey's railway system is that almost the entire lines consist of

only single tracks. In spite of this handicap, the railway system is taking the increasing pressure of traffic. As compared to pre-war, passenger traffic increased in 1956 by 266 per cent and freight traffic rose by even a higher level of 300 per cent.

THE ROADS

The relatively slow development of roads in the Middle East is to be explained in terms of the difficult terrain and the dependence of the populations on agriculture and pastoralism. The length of the roads does not necessarily give a correct idea of the capacity of the system to serve traffic under varying climatic conditions. In general it would not be erroneous to state that modernisation of roads is yet to overtake large parts of the system.

Saudi Arabia has a network of 900 miles which are motorable, but part of them only in fair weather. The constant stream of pilgrims to Mecca explains the attention paid to roads. The trunk road system of Cyprus is poorly equipped for the increasing volume of traffic and good motor services are lacking. Asphalted roads cover a distance of 800 miles only, but other roads are spread over 2,000 miles. Egypt's road network has not received proper maintenance and inadequacy is felt particularly in Lower Egypt. Iraq has a good account of her road system to give. At the close of World War II, her road system covered a length of 5,000 miles out of which one-third had metalled surface. The expansion plan provides for increasing outlay on roads and bridges. Motor transport is developing rapidly in this country. Israel's road network covers 3,260 kilometres. Beersheba is becoming the focal centre of the expanding road system and in fact greater attention is being paid to the motor transport requirements in the Negev. Iran's road system extends over 17,000 miles which is quite sizeable in the regional scale. Motor transport has become common and pack animals are being rapidly replaced. Sudan is opening new commercial routes by roads. In Syria it is a peculiarity of the road system that it is taking increasing pressures of motor traffic. The numbers of vehicles registered in Syria do not give the correct idea of the volume of traffic because vehicles belonging to Lebanon and Jordan are operating the road services of Syria in a considerable measure. In Turkey the difficult terrain, long distances at which even villages are situated and thin population have combined as adverse factors regarding the growth of roads.

Table IV which shows the trends in the utilisation of motor vehicles should give a clear idea of the quality of the service rendered by the road system of this region. A comparison between the number of commercial vehicles in operation in 1948 (figures for the earlier years are only fractionally available) and 1955 brings out the fact that the increase has been between 75 per cent and 300 per cent on varying scales in different countries. That shows a reassuring expansion of modern mechanised transport by roads.

CIVIL AVIATION

As observed in a foregoing paragraph, the oil industry has accounted for the rapid expansion of civil aviation in the Middle East region. Undoubtedly, an equally important factor in this expansion is the geographically strategic position of the region in world communications. Aviation has very quickly broken the isolation of the Middle East. Civil aviation has become a matter of compulsion for all countries, whatever the level of their economic development. The distinctive feature of the civil aviation in the Middle East is the relatively large share of the international airlines in the traffic passing through the region. There are, of course, airlines of each individual State which operate the international routes in addition to the domestic routes. Cairo's one-time importance as the principal airport is being taken by Beirut.

Table V alongside gives the development trends for passenger, cargo and mail traffic carried by airlines belonging to different nations operating in this region. The general conclusion established by this table is that air traffic is expanding at a rapid rate. To this conclusion there is one exception offered by the cargo traffic of Egypt. It will be seen that as compared to 1952 cargo net ton-kilometres carried in Egypt have fluctuated below 1.74 million. Israel shows another trend. There the increase in cargo traffic is quite clearly established, but this increase has followed erratic trends. Over the rest of the region as a whole the increase for passenger, cargo and mail traffic have been steady.

TABLE V.

CIVIL AVIATION: SCHEDULED SERVICE
Kilometres flows and revenue traffic

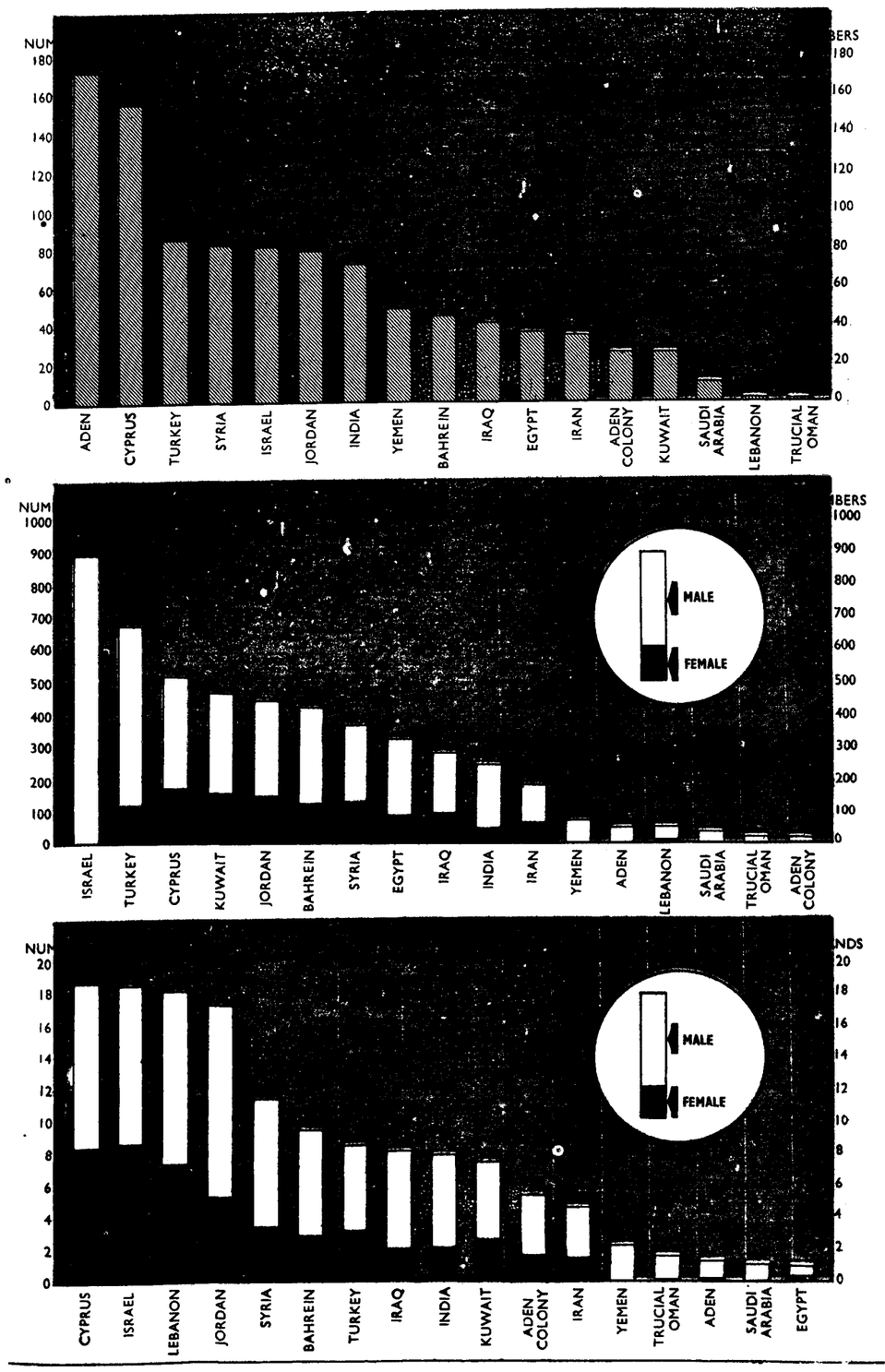
(Thousands)

Country & Traffic	1937	1952	1955	1956
INDIA: (1)				
Kilometres flown	856	31476*	34224	37789
Passenger—Km.	318	389468*	515010	679139
Cargo Ton—Km.	2	20909*	27194	29685
Mail Ton—Km.	86	5247*	7354	8896
EGYPT:				
Kilometres flown	1592	4001	3213	3274
Passenger—Km.	—	51566	47527	56319
Cargo Ton—Km.	—	1711	1165	1123
Mail Ton—Km.	—	74	92	90
IRAN:				
Kilometres flown	—	1156	3440	4635
Passenger—Km.	—	13889	30925	34075
Cargo Ton—Km.	—	189	605	1260
Mail Ton-Km.	—	16	46	70
IRAQ:				
Kilometres flown	—	1024	1380	1781
Passenger—Km.	—	10932	20923	33117
Cargo Ton—Km.	—	216	228	384
Mail Ton—Km.	—	17	21	55
ISRAEL:				
Kilometres flown	—	3703	4237	4363
Passenger—Km.	—	104051	141404	141676
Cargo Ton-Km.		3094	3035	3262
Mail Ton—Km.	—	518	508	580
TURKEY:				
Kilometres flown	—	2986	4293	5367
Passenger—Km.	—	46444	67967	83485
Cargo Ton—Km.	—	833	1217	1199
Mail Ton—Km.	—	79	93	97

Note: The figures cover both domestic and international scheduled services operated by airlines registered in each country. Cargo means all goods, except mail, carried for remuneration.
Ton-kilometres figures are net.
* Incomplete data
+ Provisional, preliminary or estimated figure.
(1) 1937-38: including area now Pakistan.

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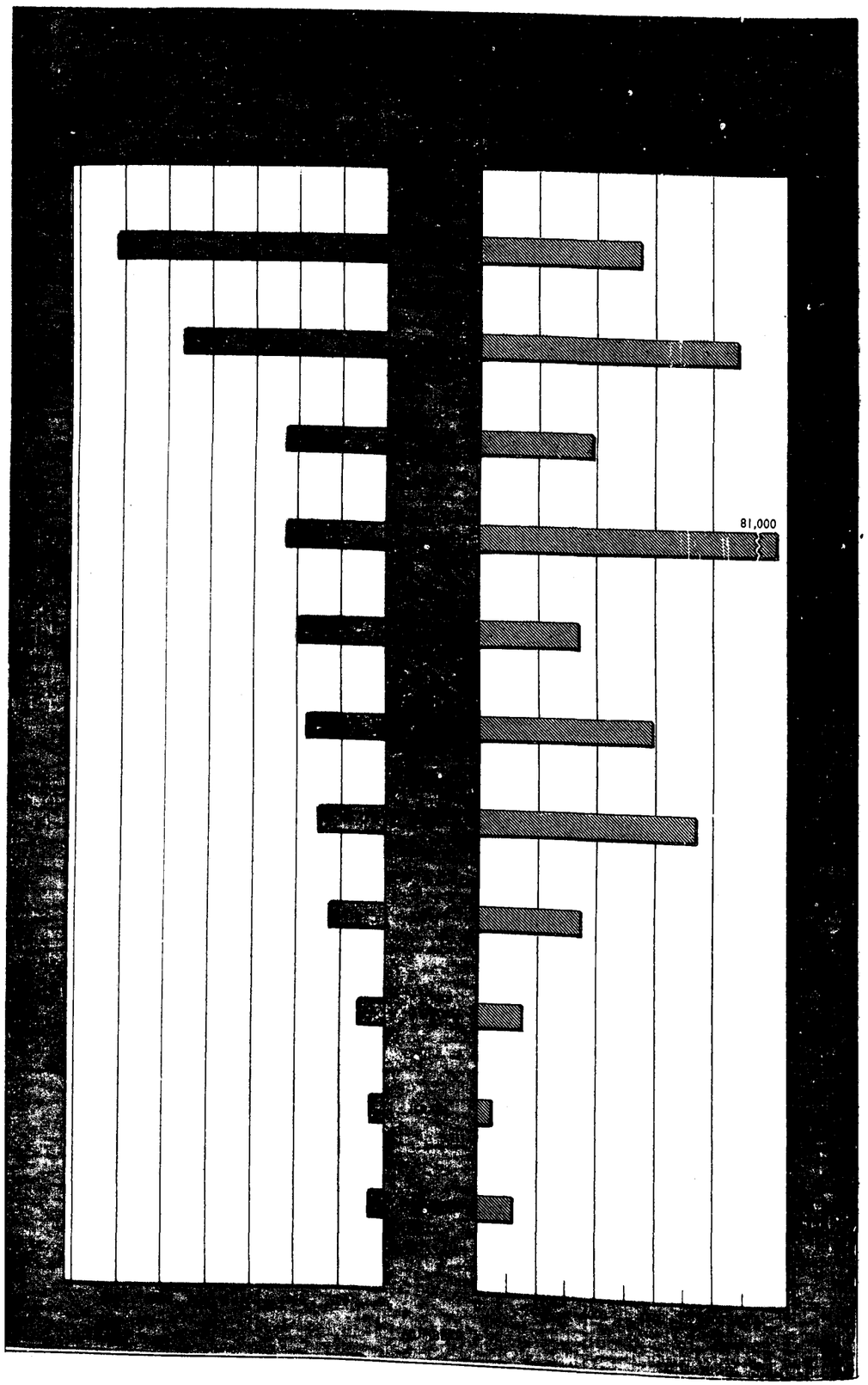


TABLE I

PRINCIPAL CRUDE OIL PIPELINES IN THE MIDDLE EAST

From	To	Ownership[1]	Length (miles)	Capacity ('000 b/d)	Diameter	Date Opened
Abqaiq	Sidon	Tapline/Aramco	1,068.2[2]	320	30/31″	1950
Kirkuk	Haifa	IPC	617)		(12″	1934
Kirkuk	Haifa	IPC	617[3])		(16″	
Kirkuk	Tripoli	IPC	531	40	12″	1934
Kirkuk	Tripoli	IPC	531	120	16″	1949
Kirkuk	Banias	IPC	556	370	26/30/32″	1952
Ain Zalah	K. 2. Baiji	MPC	136	26	12″	1952
			74)		(12/16″	1951
Zubair	Fao[4]	Basrah PC	)	250	(	
Zubair	Fao	Basrah PC	65)		(24″	1953
Dukhan	Umm Said	QPC	71	170	12/14½/20″	1950

1 American Independent Oil Co. and Getty Oil Co. operate their concessions jointly.
2 314.7 miles from Abqaiq to Qasiuma owned by Aramco; 753.5 miles from Qaisuma to Sidon by Tapline.
3 Only 575 miles completed, 42 miles short of Haifa. 12″ line has been cut in two places and has been inoperative since 1948.
4 First 22 miles have been lifted; next 30 miles inoperative; remaining 22 miles cross-connected into 24″ line to Fao.

TABLE II.

SUEZ CANAL TRAFFIC, SELECTED YEARS

Year	Number of transits		Goods carried (Millions of metric tons)			
					Northbound	
	All Ships	Oil Tankers a	Total	Southbound	All cargoes	Oil
1870	486	—	0.3b	—	—	—
1900	3,441	—	7.8b	3.8b	4.0b	—
1913	5,085	—	25.8	11.3	14.5	0.3
1917	2,353	—	6.8	1.3	5.4	—
1920	4,009	—	17.0	6.3	10.7	0.8
1930	5,761	—	28.5	9.4	19.1	4.1
1938	6,171	1,100	28.8	7.8	21.0	5.2
1942	1,646	—	—	—	—	—
1947	5,972	2,400	30.6	7.8	22.8	13.8
1948	8,686	4,600	49.4	9.7	39.7	28.9
1949	10.420	5,500	61.0	13.0	48.0	37.0
1950	11,751	6,600	72.6	12.1	60.5	47.5
1951	11,694	5,900	76.8	17.4	59.3	42.9
1952	12,168	6,200	83.4	22.0	61.4	45.9
1953	12,731	6,500	90.4	22.5	67.9	49.4
1954	13,215	6,900	96.9	22.4	74.5	57.0
1955	14,666	8,000	107.5	20.1	87.4	66.9
1956 Jan.-Oct.) ..	13,291	—	100.9	18.1	82.8	—
1957 (Apr.-July) ..	3,805	—	16.0	3.7	12.3	—

Source: Economic Development in the Middle East 1956-57.

a Approximate figures to the nearest hundred.
b Estimate based on taxable tonnage.

TABLE III.

RAILWAY TRAFFIC

A. Passenger Kilometers. B. Net Ton—Kilometres. (In millions)

Country	Traffic	1929	1937	1938	1950	1951	1952	1953	1954	1955	1956
India(1)	**A**	**35,880**	**30,331**	**30,164**	**67065***	**63,651**	**60183**	**60429**	**62200**	**62,900**	**68,309**
	B	**33,895**	**37,244**	**36,234**	**44162***	**47,449**	**47356**	**48349**	**52532**	**59,615**	**65,338**
Egypt(2)	A(3)	1,462	1,376	1,464	2475*	2,778	3002	3060	3263*	3,577	4,287*
	B	—	—	1,485	1534*	1,369	1304	1215	1463	1,647	1,616
Sudan	A	—	—	—	—	—	—	—	—	—	—
	B(4)	—	—	534	738	982	950*	1107	1109	1,194	1322
Iran	A	—	—	—	297	316	309	377	412	473	448
	B	—	—	—	770	680	768	950	1187	1251	1351
Iraq(5)	A	97	251	249	531	501	474	525	570	—	—
	B(4)	165	302	296	647	726	711	855	843	—	—
Israel(6)	A	—	—	—	67(7)	111	153	169	200	234	318
	B(2)	—	—	—	71	103	90	99	124	131	162
Lebanon(8)	A	—	—	118	4.9*	4.7	4.7	5.8	7.9	6.9	4.9
	B	—	—	139	43.7*	45.3	41.7	43.9	42.5	43.8	40.5
Syria(3)	A	—	—	118	21.9*	24.8	29.8	37.0	47.6	46.8	51.3
	B	—	—	139	11.6*	114	124	130	139	124	152
Turkey(9)	A	349	—	1186	2502	2618	3080	3449	3893	3917	4480
	B(2)	307	—	1098	2487	2718	3341	3569	3792	3973	4440

* Incomplete data.
(1) 12 months beginning 1st April, 1929-38. Former British Provinces and Indian States including the area now Pakistan.
(2) State Railway only. Prior to 1952, 12 months ending in year stated. Beginning 1952: 12 months ending 30th June;
(3) 1929-38, 1954-55 excluding Suburban traffic;
(4) Kenya, Uganda and Tanganyika Excluding Live stock.
(5) 12 months beginning 1st April.
(6) Including military traffic.
(7) April December.
(8) 1938: Total traffic in Lebanon and Syria.
(9) 1929-38: 12 months beginning 1st June.

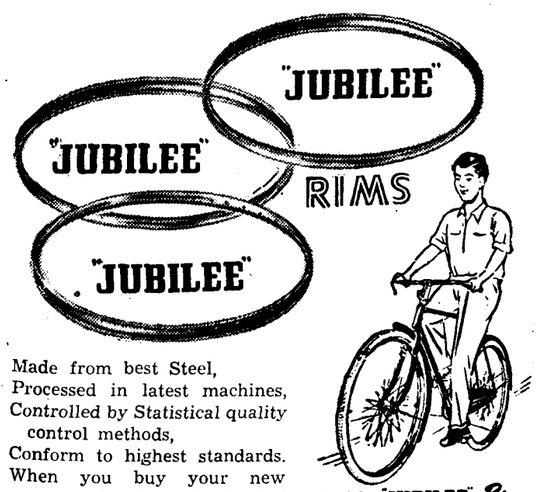
TABLE IV

MOTOR VEHICLES IN USE

A. Passenger Cars **B. Commercial Vehicles** (Thousand Units.)

Country	Code	1928	1937	1938	1948	1950	1951	1952	1953	1954	1955	1956‡
India	**A**	**—**	**—**	**88.1[1]**	**119.9***	**154.4**	**159.3**	**161.6**	**168.4**	**173.7**	**186.0**	**202.4**
	B	**—**	**—**	**36.4[1]**	**86.1***	**113.1**	**120.2**	**118.7**	**130.2**	**150.2**	**156.1**	**175.4**
Egypt	A	20.4	27.2	29.4	42.4	59.9	65.9	67.9	69.4	71.0	73.2	—
	B	4.1	4.0	4.1	12.8	18.0	19.7	19.5	19.5	20.5	21.7	—
Sudan	A	—	—	—	3.0	4.0	5.2	5.2	6.2	7.1	8.2	8.5
	B	—	—	—	4.0	5.3	5.8	6.3	7.2	9.8	10.1	11.0
Aden	A	—	—	—	1.08	1.26	1.59	2.60	3.06	2.79	3.25	4.26
	B	—	—	—	0.34	0.38	0.40	1.03	1.31	1.81	1.44	1.63
Iran	A	—	—	—	—	14.8	18.4	19.5	22.4	24.3	28.6	—
	B	—	—	—	—	18.2	19.9	18.9	20.5	21.2	24.1	—
Iraq[2]	A	—	4.9	5.2	8.7	13.2	14.0	12.5	13.0	18.4	20.6	23.8
	B	—	1.9	1.6	6.1	5.9	6.5	10.8	11.5	11.5	12.4	14.0
Israel	A	—	—	—	4.6‡	10.7	11.9	13.8	15.0	16.1	—	—
	B	—	—	—	7.8‡	14.6	16.4	17.9	19.0	20.7	—	—
Jordan	A	—	—	—	1.4[3]	2.2‡	2.9	3.4	3.4	3.7	4.4	4.0[4]
	B	—	—	—	1.4[3]	2.3‡	2.8	2.1	2.6	3.3	3.9	3.9[4]
Lebanon	A	—	—	5.3[5]	8.1	10.7	12.8	14.8	16.6	18.7	22.6	26.6
	B	—	—	1.0[5]	3.1	3.7	3.9	4.1	4.2	4.5	5.3	6.0
Syria	A	—	—	—	4.7	4.2	5.4	6.7	7.2	9.1	10.5	12.3
	B	—	—	—	5.5	5.4	5.7	5.7	6.0	6.9	12.6	13.6
Turkey	A	—	3.8	4.6	5.8	10.1	13.4	16.4	23.9	27.7	28.6	30.0
	B	—	3.7	4.9	12.8	16.4	19.2	23.0	30.01	33.5	36.9	41.3

‡ Provisional, Preliminary or estimated figures * Incomeplete data;
1. 1939, British India excluding Indian States . 2. Passenger Cars include buses (Kenya Prior to 1962; Pureto Rico 1948-53; Iraq 1937-51)
3. Eastern Jordan.
4. Excluding vehicles exempt from Taxation.
(Algeria Prior to 1955; Belgium Cango: beginning 1955)
5. 1939.



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BANGALORE
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Colaba
Churchgate
Fort
Kalbadevi
Malabar Hill
Sion
BHUJ (Kutch)
CALCUTTA
23-B, Netaji Subhas Road (Main Office)
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West German Minister for
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(from a speech in New Delhi in October, 1958)

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Industrial Relations

IT is only recently that the problem of industrial relations has assumed major importance in the countries of the Middle East. This is so because the emphasis on industrialisation in these countries is perhaps the most significant aftermath of World War II. Hence the realisation that the maintenance of satisfactory working relationship between management and labour is even more important than machinery and raw material, the other two agencies in production. The problem, however, does not lend itself to an easy solution as both sides lack the tradition and experience enjoyed by their counterparts in the more industrialised countries. Industrial relations, comprehensively speaking, cover not only employer-employee relations, but also questions pertaining to and arising out of wages, working conditions, problems of recruitment of labour, their training, productivity and matters relating to the retirement benefits for the working class like provident fund, gratuity etc. In this article only a few of the many aspects of this subject like the trade union movement, employers' organisations, industrial disputes and the machinery for their settlement have been dealt with. And for the purposes of the study only countries like Egypt, Syria, Lebanon, Jordan and Iraq have been taken into consideration.

LABOUR UNIONS

It may be of interest to note that in the matter of organisation and trade unionism generally the progress achieved is of a limited nature. In fact they are still in a formative stage lacking in strength and bargaining capacity. Even in Egypt with a large industrial labour force and a union membership of over a quarter million in some 900 unions, the movement has not succeeded in making the degree of impact on employers which would force the latter to recognise the value of having a central organisation of workers with whom they could negotiate. The other countries under study show even slower progress. Syria has some 250 unions with only 28,000 members of whom about 15 per cent are in industry — or less than 3 per cent of the industrial labour force. Iraq has 12 unions with some 7,000 members; Lebanon 42 with 5,000 members and Jordan 23 unions with 4,000 members. The unions in these countries are not confined to industrial workers alone but have amongst them members of hotel and restaurant employees. It is, therefore, very difficult to gauge the relative power of labour movement in industry. The only generalisation that can be safely made is that the right of association and the appreciation of its utility have not gone very far at all outside Egypt, its power is even smaller than its numerical strength might suggest. The number of unions that exist more often echo the wishes of the Government and of the employers. The weakness of the unions may be ascribed to the fact that trade unionists are inexperienced in the art of establishing and operating trade unions.

In India, the trade union movement has shown a steady progress especially after political independence. It has not, however, reached the stature that the movement has attained in countries such as U.S.A. or U.K. This, of course, is understandable. Only a small percentage of the working force is organised. Trade unions with a few exceptions are not strong enough to bargain collectively. The main trade union organisations in the country are four, Indian National Trade Union Congress; All-India Trade Union Congress; United Trade Union Congress; and Hind Mazdoor Sabha. The verified membership of these organisations in 1955-56 was INTUC — 971,741, AITUC — 422,851, UTUC — 159,109 and HMS — 23,798. The causes of weakness among the trade unions can be traced to outside leadership, low finances and multiplicity of unions.

EMPLOYERS' ORGANISATIONS

The employers' organisations, on the other hand, are well-knit. In India they are of four categories: Chambers of Commerce which one finds in all important business centres; Industrial Associations like those of Millowners in Bombay and Ahmedabad, Coimbatore and Kanpur; Employers' Associations; and the All-India Manufacturers Organisation. The two Employers Associations which have been recognised as the most representative are the All-India Organisation of Industrial Employers, and the Employers' Federation of India. In the Middle East, Employers' Associations, at least those formed for purposes of industrial relations, including collective bargaining have not developed much. In the Middle East countries the emphasis has been placed rather on the development of Chambers of Commerce and Industry devoted more to matters of economic and industrial planning than to industrial relations. An interesting feature in the attitude of employers' organisation in India towards trade unions is the increasing disposition to promote the establishment of harmonious relations between capital and labour. In the Middle East countries the employers have not shown adequate awareness of their responsibility to invest in training, social security and social insurance and other benefits and amenities to labour, even when labour laws require some or all of these. While this is the general tendency in the matter of management-labour relations, there are exceptions as in the case of large corporations in Egypt, and to a small degree in Iraq where an enlightened policy has come to be displayed.

GOVERNMENT ATTITUDE TOWARDS LABOUR

Under the circumstances, the Governments of the Middle East countries feel that they cannot without serious consequences of social unrest leave it to labour to fight its own battle unaided. The result is a paternalistic attitude towards labour. Legal provision exists for the settlement of labour disputes by the establishment of a conciliation machinery, compulsory adjudication and agency for arbitration. At the one extreme is Egypt, with legislation covering most aspects of labour relations such as recruitments and contracts, minimum wages, maximum hours of work, leave, pensions, family allowances, special amenities, employers' liability to compensate in the event of workers' illness, disability and death, apprenticeship, women and children employment, strikes and disputes, and the settlement of the disputes. The procedure for the settling of disputes provides that either party to a dispute may request the services of the Labour Department. Once either party has made such a request, the conciliation and arbitration procedures are compulsory. If the representatives of the Labour Department fail to conciliate the parties, a tripartie Conciliation Board must be set up. Failure of this conciliation agency entails the automatic reference of the dispute, within three days, to the competent Regional Arbitration Board. The award of this authority is binding and not subject to appeal. At the other extreme is Jordan which has no labour code, but only a few ad hoc provisions. Lebanon and Iraq fall between the two extremes, with Lebanon the least provided with legislation, because it is the least agreeable to government interference in the operation of the economic system. Syria also provides an example of a country where management-labour relations are to a large extent determined by Government legislation and direct intervention by the State.

THE INDIAN PATTERN

In India the pattern of industrial relations has been woven through a long period of trial and experience as compared to the Middle East. This will readily be understandable when it is known that the first Trade Union Act was placed on the statute book of the country as far back as 1926. Notwithstanding this fairly long growth of nearly half-a-century in trade unionism this country still has to depend on compulsory adjudication as a last resort. Owing to inherent weakness in trade unions, State interference by means of legislation has been resorted to in a fair measure. On the legislation side, the Industrial Disputes Amended Act provides for a three tier system consisting of Labour Courts, Industrial Tribunals and National Tribunals. The functions of the Labour Courts is mainly to adjudicate upon certain minor matters. The jurisdiction of the Industrial Tribunal is wider and extends to more important matters like wages and allowances, hours of work, leave, holidays and bonus. The National Tribunals can be appointed by the Central Government to decide disputes which involve questions of national importance and those which affect establishments situated in more than one State. Since wages and allied matters are the major source of frictions between employers and workers the Government of India have decided to set up a Tripartite Wage Board. These Boards have been already constituted for the Cotton Textile Industry, Sugar Industry, and the Cement Industry. Significantly, however, the Government have refrained from resorting to legislation in fostering the concept and practice of workers' participation in management as this is something which can thrive only on goodwill and not by compulsion.

THE FUTURE

It may be observed that there are many similarities in the field of industrial relations between India and the Middle East countries. The question now arises as to what should be the policy in future of settling industrial disputes in these countries — compulsory adjudication or voluntary negotiation. While labour experts have agreed that ultimately the two wings of the industry should be left to settle their own differences, there is also a general agreement that the time for this is not ripe yet. The number of collective agreements concluded so far can be counted on finger tips, and this shows that conditions for voluntary agreements do not exist in India and the Middle East countries.

The present labour policy of the Government of India, the largest democracy in the East, is born out of appreciation of what Abraham Lincoln, the architect of the largest democracy of the West said, "Inasmuch as most good things are produced by labour, it follows that all such things ought to belong to those whose labour has produced them. But it has happened in all ages of the world that some have laboured and others, without labour, have enjoyed a large proportion of the fruits. This is wrong, and should not continue. To secure to each labourer the whole product of his labour as nearly as possible is a worthy object of any good government". This concept and approach may fittingly be commended to the Middle East countries so right to the good things in life may be established indisputably.

Education

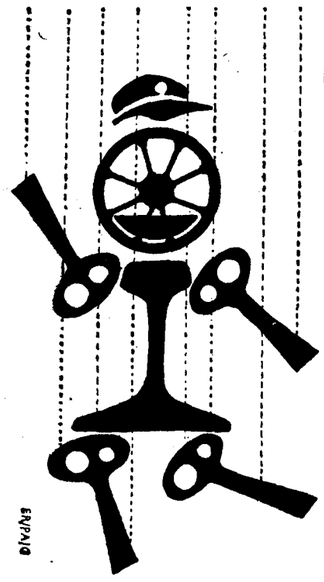
ARTICLE 45 of the Constitution of India states that the State shall endeavour to provide within a period of 10 years from the commencement of the Constitution for free and compulsory education for all children until they complete the age of 14 years. The Educational Acts of countries like Egypt, Iraq, Iran, Bahrein, Israel etc. also lay down some such steps to provide free and compulsory education for children. This will indicate that the ultimate aim of Governments of India and the Middle East countries as regards education is the same. Their methods of implementation, however, are totally different. In most of the Middle East countries, there is a centralized authoritarian system of education. Programmes are devised on top by the Ministry. The teacher must teach a particular programme. There is no scope for creativeness on the part of the teacher. The result is the frustration of the youth on account of the authoritarianism in the social order in which they live and on account of the conflict of values to which they are exposed. There is emphasis of religion in the schools in countries like Egypt, Syria and Iraq because for the Moslem child the study of religion and Koran is considered to be necessary for advancement. New educational laws have been devised that apply more stringent inspection measures against private and foreign schools in Syria, Egypt and Jordan. To what extent such stringent measures are really justified, it is hard to tell. Whatever, may be the defects of these schools, the fact can not be ignored that these foreign schools have tried to render some useful service by implanting in the youth of the Middle East a breadth of vision and an appreciation of human, scientific and philosophical values.

While there is this national feeling in the countries of Egypt and Syria to isolate itself from the humane currents of Western thought there is in India an equally dangerous tendency to change over too quickly from English to Hindi. It cannot be gainsaid that both these tendencies are unwise, and unhealthy. Another undesirable development in the field of education in Egypt is that military training has been introduced in secondary schools. An aggressive outlook tends to be fostered at an early age, when teachers have the military mind.

PROGRESS IN EDUCATION

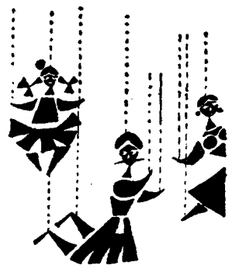
In so far as the progress of development in education in Middle East is concerned, it has been quite striking in the number of students enrolled. Most of these countries have changed (or are tending to change) to a system of three stages, i.e., the system which has been applied in Egypt in several years: primary school, post primary school and secondary school. An analysis would show that the school network has grown in size. Hundreds of thousands of people have entered primary schools, and tens of thousands of others have qualified for secondary schools. In Syria in 1943, the last year of French rule there were 63,068 students in Government elementary schools. In 1954-55, these figures increased to 336,221 which means that the number of students in elementary schools jumped to more than five times the 1943 figure. In Egypt the number of students rose from 1,563,591 in 1940 to 2,387,086 in 1956. Iraq, Sudan, Jordan and Saudi Arabia, have also a similar tale to tell. In India the development has been equally substantial. In 1951-52 the number of students on rolls in lakhs was 265.72, in 1955-56, it was 339.24.

So far as the progress made in the education of girls in Middle East is concerned, it undoubtedly is most noteworthy in recent years. Although it is only very recently that Moslem girls in the Middle East



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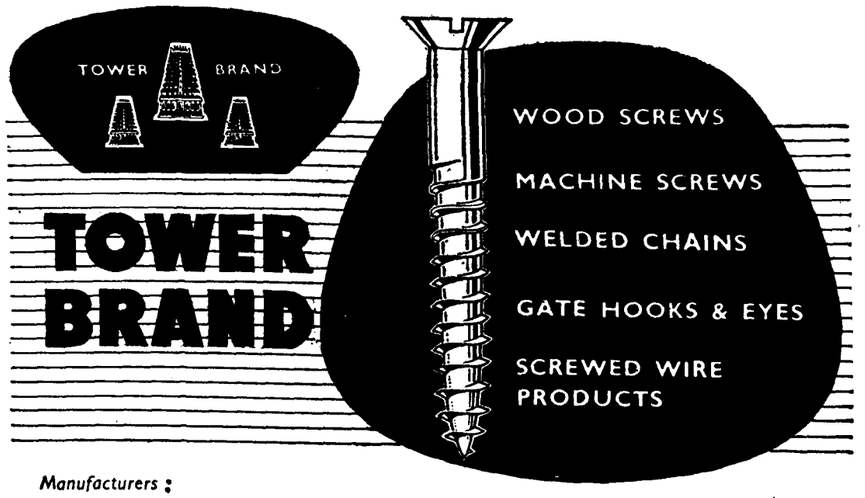
With the completion of Sindri's expansion scheme in 1958, two new nitrogenous fertilizers, ammonium sulphate-nitrate (148,000 tons per year) and urea (24,000 tons per year) will be produced. Sindri will thus make a further significant contribution towards the development of the fertilizer industry and increased food production in the country.

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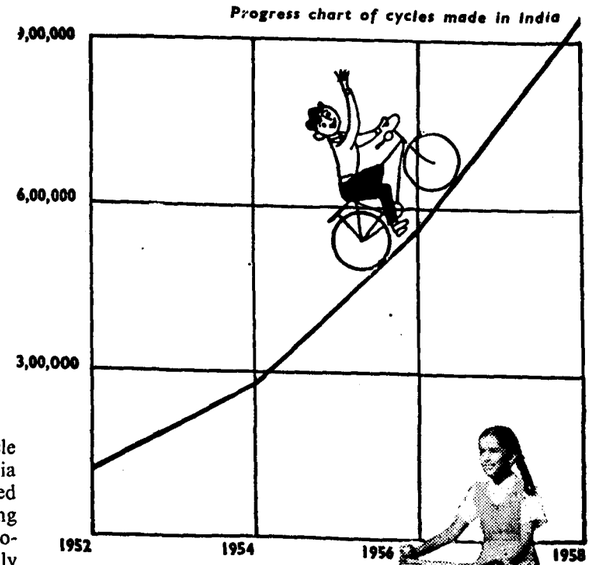


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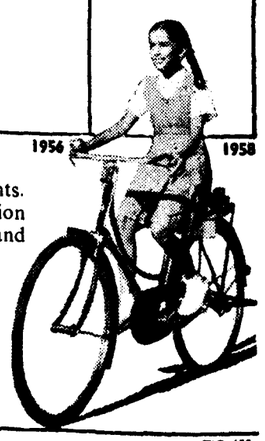
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were allowed to study, the number of girl pupils in elementary schools has already reached hundreds of thousands. Tens of thousands of girls are studying in secondary schools and a considerable number are entering the Universities. But as compared to boys the number of girls in primary schools is markedly lower and this applies even more to higher and secondary schools. This is because of the traditional attitude of indifference to the education of girls and the lack of financial means in comparison with the demands made by the schools. In India the progress in women education can also be taken as satisfactory. The number of girl pupils in recognized educational institutions in 1954-55 was 8,284,000 as compared to 7,555,000 in 1953-54.

A COMPARATIVE STUDY

A comparison amongst the different Middle East countries and India is quite revealing. From the table appended it is found that there are only 302 female students enrolled in Egypt for every lakh of population. It is 1984 in India, 1207 in Iran, 1942 in Iraq, 8710 in Israel, 3168 in Syria and 3026 in Turkey. So far as the position of teaching staff is concerned, it is revealed that there is a great paucity of teachers in Iran, India, Iraq, Egypt and Syria, although the position has considerably improved in the case of India. In comparison Israel and Turkey are said to be much better off. In regard to the number of schools the same story is repeated. Iran with 34 school shows the smallest number, Egypt shows 36, Iraq 40 and India 92. Turkey, Syria and Israel show conparatively a better position. If the per capita expenditure on education is taken into consideration, Israel again comes out first on the list where the expenditure is as high as 9.5 dollars. Then comes Syria, Turkey, Lebanon, Egypt, Iraq, Iran and India. The table at the end of this article in this respect is illustrative. The low per capita expenditure in India is understandable in view of its huge population.

Despite the progress made, statistics pertaining to illiteracy would show that in the age groups 10 and over and 60 and over, the illiteracy percentage is quite high in countries like Egypt, Aden and Turkey. In countries like Bahrein, Kuwait and Yemen there are no facilities for higher education. The opportunities for technical education, medicine, agriculture, etc, in countries like Egypt, Syria and Turkey are highly limited as will be brone out by lower number of students enrolled. The present reform movement, however admirable it may be, leans heavily on academic approach in Middle East countries. The result is thousands of graduates in Egypt, Iran and Lebanon with no opportunities of employment. Although the position in regard to India has improved somewhat in regard to technical education, it is still deplorably poor as compared to its requirements. It is estimated that when all the schemes undertaken under the second Five-Year Plan are fully implemented and the expansion of the existing institutions is achieved, the annual admission for the first degree courses in all branches of engineering and technology will be of the order of 10,500 students and for the diploma course 19,000 students by 1960-61. While providing of skilled artisans and mechanics is necessary, the large expenditure on the so-called "multi-purpose schools" may be a needless distraction.

PER CAPITA EXPENDITURE ON EDUCATION

(In U.S. Dollars)

Country	('000 $) Total Amount	Year	Per Capita expenditure on education
India	**194,670**	**1952a(c)**	**0.5**
Egypt**	82,369	1954a(c)	3.7
Iran	28,015	1954b(c)	1.4
Iraq	17,920	1953	3.4
Israel*	15,457	1953b(c)	9.5
Jordan	2,425	1953	1.8
Lebanon*	6,202	1953b	4.6
Syria**	22,800	1952b(x)	6.8
Turkey	132,804	1955c	5.7

* Expenditure by Department of Education only.
** Covers a period of 18 months ending December 1952.
a Actual Expenditure.
b Budget Amount.
c Including Capital Expenditure.
x Excluding Capital Expenditure.

Public Health

INFORMATION on the state of health in the Middle East countries is at present far from adequate for a satisfactory review of the health situation in that area. However, the data that are available paint a very poor picture of the standards of health in those countries. In many parts certain communicable diseases either in epidemic or endemic form are still a serious menace, and constitute the main causes of mortality and morbidity among the population. In Egypt, ninety-two per cent of the fellahin suffer from bilharziasis; the rate of infant mortality is over 65 per cent in the first year of life; trachoma affects one half of the population; 64 per cent of the rural population suffers from an intestinal parasite called ankylostomaiasis and the threat of cholera is ever present. In Iran, sand-fly fever, tape worm, typhoid, eye diseases and veneral diseases are quite common. Intestinal and other diseases carried by infected drinking water are widely prevalent in Syria; so too are tuberculosis and other diseases, which low standards of nutrition and housing help to spread. Preventive medicine is in the early stages and the death rate in Syria, particularly the rate among the young children, is comparatively high. These are only a few of the instances which indicate the magnitude of the problem.

The standing menace to public health, in these countries, however, comes from malaria, and bilharziasis. Biharziasis continues to be a public health problem in a larger measure, with the increasing expansion of and intensification of irrigation. In the countries of the region, the disease is almost related to irrigation schemes as it is transmitted through the agency of aquatic snails with their habitat primarily in rivers and in the irrigation canals and drains. Thus human exposure to the disease occurs in daily contacts with irrigation water. Notwithstanding national programmes of control over relatively long periods, and considerable efforts in many parts of the Middle East to find economical and effective methods of controlling biharziasis no fully satisfactory answer to the problem has been found.

COMPARATIVE CONDITIONS

A comparative picture of the health standards in India and the Middle East is given in the table at the end of this article. In this the common statistical approach, that of the ratio of personnel of various categories in health services to the total population, has been used to designate the state of health of a country. These statistics are not strictly comparable as the years differ and the methods of collection vary from country to country. Startling revelations are brought to light in particular by the ratio of physicians to the population served. In the consideration of this problem, Sudan

stands extremely low, far removed from the prescribed standards of public health. As against 400 inhabitants per physician in Israel the inhabitants per physician in Sudan number 81,000. The other countries where ratio of inhabitants per physician is high are Iran, Jordan, Iraq and Egypt with 8,800, 6,800, 5,900 and 3,499 inhabitants respectively. Israel stands in a separate category in the rest of the region. It is significant that it does compare well with several of the progressive countries of the West. Among the remaining countries, Lebanon, Cyprus, and Turkey have a better physician ratio in purely relative terms, than the rest of the countries.

The case of India needs separate assessment for the population in this country is very high. That, however, does not mean that India is really better off. The health standards in this country pale into insignificance as a comparison is made with Western standards where the ratio of inhabitants per physician is only 900 or so. The ratio of 7,124 inhabitants per physician in India is significantly high and indicates the acute dearth of medical personnel in this country. When the figure of midwives in India is taken into consideration, it is discovered that in the year 1952, it was only 17,000 for the whole country which points to the conclusion that the provision of maternity and child services is woefully inadequate. The shortage of midwives is an equally serious handicap in the Middle East countries. It would be clear from the table that the number of midwives qualified and certificated in Jordan, Israel, Lebanon, Syria, is pitiably small. Turkey and Iraq seem to be relatively in a comfortable position which speaks of the increased attention being paid in these two countries towards the maternity and child services. So far as dentists, pharmacists and nursing personnel etc., are concerned, the state of affairs does not in general seem to be better.

HEALTH PROGRAMMES

In the countryside the spread of health services is negligible in the Middle East and limited in India. This is on account of the present unsatisfactory condition in respect of housing and facilities for education of the children. The Governments no doubt are conscious of providing increased medical facilities, but the lack of funds stands in the way. In many countries, the provision of health services is limited by a shortage of health personnel. These being the circumstances, the obvious remedy to meet the demands of the rural areas appears to be to strengthen the mobile medical units. Efforts on the whole continue to be directed by the Governments and the World Health Organization to combat the spread of bilharziasis and other infectious diseases, including the purification of water in infected areas. A number of maternity and child welfare centres have been opened in the chief cities of the countries. At the end of 1957, increased funds in the Malaria Eradication Special Account enabled WHO to plan and put into operation eradication measures for most of the countries in the region exposed to malaria. As a result of the combined efforts of the respective Governments and the WHO, malaria has been eradicated from the Aden Colony, Cyprus and the Gaza strip. Considerable efforts have been made to activate and expand the assistance given by the WHO to the tuberculosis control programme by the national health authorities. Studies are under way on the epidemiology of the bilharziasis.

The Government of India's health programmes, in which WHO has co-operated, cover such fields as malaria, tuberculosis, venereal diseases, environmental sanitation, maternal and child health, health education of the public, nutrition, professional and technical training specially for doctors and nurses, trachoma control, dental education and vital health statistics. The training of national health workers at all levels is a vital common denominator underlying WHO activities in all these fields. Apart from training facilities available at the various projects, WHO experts have been assigned to many nursing schools and medical colleges and other training institutions to upgrade the training in various specialities.

As a result of this assistance, malaria and tuberculosis, the mass diseases in India have been brought under control and smallpox and plague under complete control. With a decision to change over from a programme for control to a programme for eradication of malaria, the position is expected to improve still further. As a result of a well conceived health planning the general death rate per 1000 of population has diminished from 19.7 in 1947 to 12.9 in 1954 and the infant mortality rate from 146 to 113. A sum of Rs. 274 crores has been allocated for health in the second Plan. At the Centre, the important provisions to protect the health of the people are malaria control, urban water supply and sanitation, medical education and family planning. In the States the principal items are hospitals and dispensaries, urban and rural water supply and sanitation, control of diseases and training programmes. All this is encouraging. But if the popular definition of health as a condition of physical fitness and immunity from disease is to be accepted as a goal for achievement, it is plain that India and the Middle East countries will have to traverse in a long distance in the field.

MEDICAL FACILITIES IN INDIA AND MIDDLE EAST COUNTRIES

Country	Year	No. of Physicians	Dentists	Midwives Qualified & Certificated	Midwives other or not specified	Nursing personnel Qualified & certificated	Nursing personnel other or not specified	Phar. macists	Population ('000)	Inhabitants per physician
Egypt	1954	6,420	617	—	—	—	—	1,797	22,462	3,499
Iran	1952	2,302	475	—	578	—	3,234	861	20,193	8,800
Iraq	1954	833	107	722	—	754	—	286	4,948	5,900
Israel	1954	3,887	920	220	—	—	—	865	1,674	400
Jordan	1955	209	43	266	—	—	—	77	1,427	6,800
Lebanon	1954	1,164	414	299	—	334	—	310	1,383	1,200
Sudan	1954	103	31	547	—	—	3,017	37	8,343	81,000
Syria	1954	922	174	233	56	79	133	348	3,670	4,000
Turkey	1954	6,913	978	1,737	—	1,137	—	1,231	23,441	3,400
Aden Colony	1954	39	—	—	20	58	5	6	150	3,846
Cyprus	1954	340	112	497	—	154	329	209	514	1,500
India	**1953**	**52,262**	**3,701**	—	**17,000**	**15,000**	**7,100**	**27,530**	**367,500**	**7,124**

SCHOLLS, STAFF AND STUDENTS FOR EVERY 1,00,000 OF POPULATION IN INDIA AND THE MIDDLE EAST COUNTRIES

Country	Year	Number of Schools	Teaching Staff		Students Enrolled	
			Total	Females	Total	Females
India	**1953**	**72**	**252**	**42**	**7796**	**1984**
Egypt	1954	36	331	76	920	302
Sudan	—	—	—	—	—	—
Aden Colony	1953	25	21	7	5220	1469
Aden Protectorate	1953	171	48	—	1184	132
Bahrein	1954	44	432	121	9467	2655
Cyprus	1954	156	517	173	18667	8275
Iran	1954	34	180	54	4434	1207
Iraq	1955	40	281	85	8080	1942
Israel	1955	81	896	—	18528	8710
Jordan	1955	78	455	149	17332	5272
Kuwait	1954	25	472	156	7352	2401
Lebanon	1954	2	48	9	18185	7318
Qatar	1953	—	—	—	—	21
Saudi Arabia	1953	10	38	—	1103	—
Syria	1954	83	378	127	11416	3168
Trucial Oman	1956	1	25	—	1542	87
Turkey	1952	85	679	113	8487	3026
Yemen	1956	48	67	—	2104	—

TOTAL PER CAPITA NEWSPRINT CONSUMPTION

(Total thousand metric tons) (Kilograms)

Country	Average 1935-39	1946-50	1954	1955	1955*	Average 1935-49	1946-50	1954	1955	1956*
India(1)	36.1	52.0(1)	80.5	76.9	83.4	0.1	0.2(1)	0.2	0.2	0.2
Egypt	10.9	12.7	23.2	19.8	25.2	0.7	0.6	1.0	0.9	1.1
Cyprus	—	0.6(2)	0.4	0.5	0.7	—	1.3(2)	0.8	1.0	1.3
Iraq	0.2	0.5	1.0	0.8	0.9	0.1	0.1	0.2	0.2	0.2
Israel	—	3.0(3)	4.1	5.9	4.9	—	2.4(3)	2.4	3.4	2.7
Syria (5)	0.7	1.0(4)	0.8	1.0	1.1	0.2	0.2(4)	0.2	0.2	0.3
Turkey	8.3	7.2	16.2	17.9	16.9	0.5	0.4	0.7	0.7	0.7

(1) Prior to 1947, including area now Pakistan; (2) All kinds of printing and writting paper; (3) 1950; (4) 1946-49 average; (5) 1935-49: including Lebanon.
*Provisional

ILLITERACY

By Age and Sex

Country / age group	Population (1000) Male	Population (1000) Female	% Illeterate Male	% Illeterate Female	% Illeterate Male & Female
India: (1951)					
10 and over	13,351	12,393	70.4	90.6	82.1
10 - 14 —	2,227	2,006	69.1	85.8	77.1
15 - 24 —	3,077	2,988	66.1	86.8	76.3
25 - 34 —	2,794	2,648	68.7	91.4	79.3
35 - 44 —	2,211	1,942	72.3	93.5	82.2
45 - 54 —	1,577	13,87	74.2	95.0	83.9
55 - 64 —	910	857	76.6	95.9	86.0
65 and over	551	570	78.4	96.4	87.5
Unknown	11	12	88.3	96.4	92.4
Egypt: (1947)					
10 and over	6,878	7,,045	64.4	84.3	74.5
10 - 14 —	1,142	1,071	54.2	66.6	60.2
15 - 19 —	984	917	62.4	76.4	69.2
20 - 24 —	678	706	62.3	82.0	72.4
25 - 29 —	686	787	63.6	86.7	75.9
30 - 39 —	1,279	1,343	66.0	90.3	78.4
40 - 49 —	998	981	68.1	92.0	80.0
50 - 59 —	582	622	70.6	92.7	81.9
60 and over	519	618	76.4	92.8	85.3
Unknown	25	33	57.0	73.4	66.4
Aden: (1946)					
10 and over	42.1	22.9	70.2	94.1	78.6
10 - 14 —	6.1	2.9	69.9	89.9	76.3
15 - 19 —	5.8	3.1	72.5	92.8	79.6
20 - 29 —	12.6	6.3	70.6	94.0	78.4
30 - 39 —	9.3	4.6	70.1	94.1	78.1
40 - 49 —	4.9	3.0	68.1	95.9	78.6
50 - 59 —	2.2	1.8	66.9	97.1	80.5
60 and over	1.2	1.2	71.7	98.2	85.0
Cyprus: (1951)					
7 and over	184	190	21.3	49.6	35.7
7 - 14 —	37	37	17.7	24.1	20.8
15 - 19 —	21	22	7.1	21.9	14.6
20 - 24 —	19	19	6.8	27.5	17.3
25 - 34 —	31	33	11.7	45.2	29.0
35 - 44 —	25	27	20.7	51.3	42.3
45 - 54 —	21	22	29.3	77.0	53.8
55 - 64 —	15	15	44.8	87.1	66.2
65 and over	14	15	59.7	92.8	76.9
Israel: (1940) **(Jewish Population)**					
5 and over	326	302	4.5	9.5	6.9
5 - 14 —	61	57	10.3	9.9	10.1
15 - 29 —	99	90	2.0	4.3	3.1
30 - 44 —	96	91	2.1	7.4	4.7
45 - 59 —	49	40	4.4	15.3	9.3
60 and over	22	23	9.7	27.1	18.8
Unknown	1	1	6.5	19.5	13.4
Turkey: (1950)					
10 and over	7,594	7,663	50.6	80.0	65.4
10 - 14 —	1,274	1,081	43.4	61.6	51.8
15 - 19 —	1,270	1,118	46.3	70.4	57.6
20 - 24 —	990	973	39.8	76.2	57.9
25 - 34 —	1,250	1,342	43.4	81.8	63.3
35 - 44 —	1,239	1,195	54.1	86.9	70.2
45 - 54 —	888	917	67.2	90.4	79.0
55 - 64 —	411	619	71.6	92.9	84.4
65 and over	273	418	75.4	93.6	86.4
Unknown	14	13	62.1	70.0	66.0

(1) Data are a 10 per cent sample of census returns concluding data for 7295870 displaced persons and 157196 additional schedules destroyed by fire; (2) Excluding nomad population numbering 55073; (3) Colony only; (4) Excluding persons in special military and interment camps, numbering 12422; (5) Data based on sample tabulation of census returns.

PART C

A CULTURAL COMPARISON

The Cultural Pattern

INDIA and the Middle East have a common past, and innumerable common features even in their present ways. The three oldest civilizations—Egyptian, Mesopotamian, and Indian — flourished in almost neighbouring regions. A certain unity characterises the three centres of civilization. They lie in the valleys of great permanent rivers: of the Nile, of the Tigris and Euphrates, and of the Indus. Gradually, over scores of centuries, the primitive peoples of Egypt, Mesopotamia, and the Indus Valley learnt to control the rivers, to reap full benefit from the natural water supply. Channels were dug, both to remove surplus water and supply deficiencies. Especially in Egypt, in the struggle to master the caprecious Nile, the more intelligent noticed that the rising of the water coincided with certain aspects of the stars. This led to astronomical observations and the invention of the calendar. The Egyptians learnt to keep records of the level of the river at different seasons for a number of years, and from these they could predict with considerable accuracy the extent of the annual flooding. The necessity of keeping records led naturally to the invention of writing, and so on to the mastery of the science of hydraulics, digging dykes, irrigation canals, and reservoirs in which the surplus water could be stored against a bad season. The annual obliteration of landmarks made it necessary to devise a precise system of surveying so that the land could be accurately re-parcelled and this led to the development of geometry, which was applied later to the planning of buildings.

THE PHAROAH'S EGYPT

This struggle to master the Nile threw up an intellectual elite, the mathematician, the engineer—and since, among primitive people, science is closely linked with religion, efforts were made invariably to clothe these discoveries in a religious garb. Simultaneously there arose another class of rulers, the military class. The prosperous inhabitants of the valley tempted the nomad tribes. In the subsequent fighting the bravest and the cleverest soldiers were raised to the top; they became the natural leaders, founding a hereditary aristocracy. Gradually, units of government grew high, until towards the end of the Pre-Dynastic period, as it is called, Egypt was divided into two kingdoms, the North and the South. The Southern King controlled the river valley down to the Delta and the Northern King ruled the Delta itself. This division persisted in theory long after the two countries had been united. One of the Pharoah's title was "King of Upper Egypt and Lower Egypt."

By the time of the rise of the First Dynasty, Egyptian civilization had reached its heights. This assertion is supported by the fact that when the distinguished English archaeologist, Sir Flinders Petric, excavated the tombs of the First Dynasty kings of Abydos, he found articles of palace furniture in ivory, alabaster reflecting fine artistry and craftsmanship, beautifully fashioned jewellery, including a gold ornament inscribed with the name of Menes, which may have been borne by the Pharoah himself. But for the huge tribute levied and collected by the Pharoah's functionaries, it would have been impossible to build huge structures and live and die in conspicuous luxury. This in itself could not have been made possible except by the development of Egyptian agriculture to the farthest degree possible then.

As time went by, the tombs grew into Pyramids and the luxury articles which were deposited with the dead grew in weight, number and variety. Through the unchallengable control of manpower and of the Nile, huge public works were built from the Third to the Sixth Dynasties which together constitute the 'Old Kingdom' (3270-2270 B.C.). These public works inspired awe even in the 20th century. This was a period of vigorous growth. Egyptians of later centuries look back upon the Pharoahs of this period as a race of Titans and their period as a golden age. It were the Pharoahs of these Dynasties who built Pyramids. The rule of the Pharoah was authoritarian in the extreme. He had a large number of courtiers through whom he controlled every department of administration. It is generally accepted that the 'Old Kingdom' had established an elaborate system of State-functionaries under local officials such as was not found in Europe until far down in the history of the Roman Empire. Gradually, priesthood assumed greater influence over the court until in the Fifth Dynasty (2,560-2.420 B.C.) the names of the reigning Pharoahs included the name of the god—for example, Sahure, Neferirkere. Shepseskere, Nuserre.

With the passage of time, the powers of the courtiers and nobles grew to the detriment of the Pharoahs. After a succession of weak rulers, and continued chaos, the 'Middle Kingdom' was established. It was also during this period that the conception of the oasis as a 'jungle of souls' became predominant for the first time; the idea of accountability in the after life for the sins committed on earth began to take hold of the human mind. In the sphere of art, the freedom of the craftsman was circumscribed and limited by a rigid religious convention; but within the limits set by this convention, even perhaps because of them, the 'Old Kingdom' sculptors produced work of an austere beauty and majesty; work which was never equalled by Egyptian craftsmen of later centuries. The wonderful dioride statue of Chephren in the Cairo museum epitomises this art in all its dignity and power.

Like that of the 'Old Kingdom', the latter end of the 'Middle Kingdom' was chaos resulting from a succession of weak rulers for nearly 150 years. During this period Egypt was attacked by the Hyksoys, or Shepherd Kings. They were driven out by the son of the last of the 'Middle Kingdom' rulers, Kawose. Thus began the 18th century B.C. and the commencement of Egypt's greatest imperial expansion, an epoch known to the historians as the 'New Empire' (1555-712 B.C.) After 187 years, Egypt was conquered by the Persians under Cambyses and remained a Persian province until 337 B.C. when Alexander the Great added it to his Empire. But the tenacious Egyptian religion and the culture of the Mecadonian conquerers began to influence each other—with the result that the Macedonians became more Egyptian than the Egyptians themselves. Finally, in 30 B.C. Egypt became a Roman province. With the rise of Christianity and the subsequent Arab conquerers, the old religion died out. But the old civilization persisted, and even today its fragnance is spread on the ancient desert sands.

The Indus Valley Civilization

THE Indus valley civilization, of which impressive remains have been discovered as far apart as Mohenjodaro in Sind, Harappa in West Punjab and several places in Saurashtra and in the Ambala district of East Punjab, provides us the most authentic picture of India's past. On the strength of this picture there also is reason to believe that the Indus valley civilization spread to the Gangetic Valley. Though yet not fully deciphered, the inscriptions at Mohenjo-daro and ruins and remains at the various sites show that the Indus valley civilization was highly developed and must have taken thousands of years to fructify. According to Sir John Marshall "India must be recognized, along with Persia, Mesopotamia and Egypt, as one of the most important areas where the civilizing processes were initiated and developed".

Urban in its character, the Indus valley civilization indicates a merchant class wealthy and enjoying a high standard of living. The number and variety of ornaments of gold, silver, precious stones and vases found at the sites discovered and explored so far bear an eloquent testimony to this. These merchants had maintained contacts with the Sumerian civilization of that period and there is even some evidence of an Indian colony, probably of merchants, at Akkad. The use of cotton was common, and was extended to the Western world two to three thousand years later. Well-built baths, not known to any other antique civilization, are also found in abundance. Town planning and drainage system had reached a high stage of perfection in the Indus valley; Rig Veda, "the first word spoken by the Aryan man", was, according to Professor Max Muller, uttered here on the shady banks of the Indus. Again, though Europe got its early arithematic and algebra from the Arabs, the latter had, in fact, learnt these from India. It were also the Indians of the Indus valley who had invented, what are now commonly known as the "Arabic numerals", including the sign of zero, thus liberating the human mind from long, tedious and bothersome calculations.

Surprisingly, unlike the other ancient civilizations of the East, the Indus valley civilization was predominantly secular. While in countries like Egypt, Mesopotamia and Persia, we find much money being spent on the building of magnificent temples for the gods and on the palaces and tombs of the kings, in the Indus valley, the picture is reverse: the finest structures were erected for the convenience of the citizens. Again, unlike Mesopotamia and Egypt, there are few visible signs of any internecine conflict among the inhabitants of the Indus valley. It can also be said with some justification that in spite of the apparent economic unity of the Indus valley, political unity had not been achieved. It must, however, be conceded that, due to its inherent strength, the Indus culture has remained practically unchecked and unmodified from without from the dawn of pre-history on the banks of the Indus to the era of British occupation, in spite of the successive raids, depradations, invasions and conquests by Persians, Greeks, Scythians and even Mohammedans. The last were the only conquerers, except the British, who brought with them a new way of life.

In 712 A.D., Mohammed bin Kassim conquered Sind and thereby opened, in reverse direction, once again, India's north-western frontiers to the incursions of the pedatory tribes from Arabia and Central Asia. The monastic degeneration of Buddhism and the moribund orthodoxy of Brahminism with their disintegrating influence on the entire Indian society also greatly helped the Muslim conquerers just as Christian monasticism had done elsewhere. The almost invariable success of later Mohammedan conquerors brought Islam many adherents among the primitive people of the north-western frontiers of India to whom fighting had become a religion and victory in the field the highest proof of inspiration. But in spite of the proselytizing zeal of the Muslim conquerers there is, according to Professor Max Muller, "an unbroken continuity between most modern and the most ancient phases of Hindu thought extending more than 3,000 years." This basic current of Indian culture which lay dormant for centuries, is, once again, sprouting into the open since independence.

The Mesopotamian Adventure

The second great fluvial civilization of antiquity was that of Babylon. It flourished in the alluvial plain of Chaldaea—Mesopotamia, as it was called later—between the lower waters of the Euphrates and the Tigris. This valley was not, however, a unified whole, unlike the valley of the Nile. The two were also different as regards climate, and, consequently flora. Mesopotamia was much more exposed; Egypt, surrounded by desert, was easily defensible, and from the beginning of the historical period successfully closed its doors against invaders—save for brief interludes like the Hyksos occupation—for 2,000 years. The history of Mesopotamia is, on the other hand, punctuated with raids from, or periods of domination by. Elam, Gutium, Awan, Hittites, Assyrians, Chaldaeans, Persians and raiding hordes from the Arabian Desert.

But Mesopotamia was, like Egypt, one of the chief granaries of the world in its time. According to Theophrastus, the most celebrated of Aristotle's pupils, the crop bore fruit two or even three hundred-fold, and the land, even after the second reaping, provided abundant pasture. The capital, Babylon—after which the civilization has been named by archaeologists and historians—on the banks of the Euphrates, rose to be the biggest city known to antiquity. We know it by descriptions of the Hanging Gardens, though prior to the arrival from Arabia of the Semites, who founded the Babylonian civilization, native tribes had developed a civilization known as Sumerian and had laid the foundations of religion, language, law, irrigation and urban life. Even gem-cutting, for which the Babylonians are known to us, had reached a high degree of perfection before the coming of the Semites. It would not be accurate, indeed, to say that the Sumerian way of life was 'adopted' by the comparatively backward Semites; it was taken over in entirety.

Religion was of supreme importance in the Babylonian civilization and culture. The priestly class possessed so much of power and wealth that even the Kings waited on it. The Assyrian conquerers could secure their authority only by making obeisance to the Marduks, the patron-deity of Babylon. Although an admirable administrative system was organized during the reign of Khammurabi, an Assyrian King, the chief feature of his reign is the Code of laws which regulated with precision the laws dealing with, among other things, property and contracts, agri-

culture, trade and banking, marriage, adoption, and bequest. The Code remained in force till the dawn of the Christian era, and even influenced the laws of the Mohammedan conquerors of the East. Because Mesopotamia was even less self-sufficient than Egypt, and as it lay on the caravan routes between Egypt and India, it favoured the rise of a commercial and industrial civilization. It is a sign of the highmark of the Babylonians civilization and culture that their language, currency, and measures of weight prevailed all over the civilized East.

The Assyrians who supplanted the Babylonians were first and last a warrior people. Their kings were generals who commanded a military nobility. Their history is a record of wars and conquests. Such culture as they acquired was unabashedly borrowed from the Babylonians. Their only contribution to the inherited culture was that they replaced the annual conscription by a standard army and supplemented chariots by cavalry. But as the hardy Assyrians had overthrown the Babylonians, so the Persians, a vigorous and martial peasantry of Indo-European stock, supplanted them. The empire of the Assyrians vanished from the history, and its stone records were soon buried beneath the Mesopotamian sand. A new civilization, of Aryan origin, grew up to sway the East.

The Iranian Interlude

ONCE the Iranians embarked upon the conquest of the known world, it was soon divided between them and the Greeks. Being a land-bridge between the valleys of the Nile and the Indus, as also between the Hellenic world and the East, the culture drew simultaneously from the two different worlds. From the East, the Iranians were influenced by atavism, and its style of animal portraiture in metal work, such as the rich and valued horse-strapping and distinctively decorated vases, and in jewellery. From the West, they learnt the principles of urban life, architecture, applied art and science. It was due to the confluence of these two cultural streams that Iran was able to develop what Dr R. Ghirshman calls "a hybrid civilization." But this seems to be an over-statement. Iran enriched its legacy of civilization in a number of fields; the keeping of accounts in Persia's chancellory gave rise to the oldest script in India; the art of the Maurya Dynasty initiated that of the Great Kings; the sea routes between the Far East and the Mediterranean were explored by the Iranian navigators and merchants; its greatest contribution was to oriental agriculture: the Persian wheel.

Although conquered by Alexander the Great, in 332 B.C., and ruled by the Greco-Bactrians for nearly 200 years, the Iranians refused to accept political defeat and cultural subjugation permanently. The Sassanian dynasty, rooted in the old Irano-Oriental culture, overthrew the remnants of the foreign rulers in time and ushered in a new period of Iranian civilization. The Sassanian Iran stood like a shield in defence of the culture of Western Asia, halting the onrush of the Romans who beat against its northern frontiers. But this very struggle in defence of oriental civilization exhausted the Iranians in the long run. The stagnant world that ensued seemed to offer nothing to the people. A large number amongst the Iranians began to seek escape in prayer and meditation. Superstition, tradition, and orthodoxy began to oppress the people at large. It was this oppressed and suffering world that encouraged the spread of Islam in place of the Zoroastrian faith, which, hidebound by rigid formulae, stood remote from human suffering.

Despite the moral and political deterioration of the Iranians, which was aggravated by the Arab conquest, the old traditions survived and continued at the Court of the Caliphs. After the decline of these rulers, there was a fresh rennaisance of the Iranian spirit under the Samanids. A long period of political instability and foreign rule, and the overlordship of the Western powers, during the 18th and 19th centuries, and the first half of the 20th century, once again enforced the Iranians into slumber. The revival of Iran during the last three decades or so has taken a form of a national upsurge, as in the rest of Asia. Because of its geographical position, rich natural resources, and an industrious population steeped in the traditions of one of the oldest cultures of the world, it is sure in the foreseeable future to rise again to its ancient place of cultural eminence.

The Rise of Islam

JUST as the ancient world was dominated by the Egyptians, Mesopotamians and Indians and the modern world by the Europeans and the Americans, the Middle Ages were dominated by the Arabs. The Arab invasion of Persia that began shortly after the death of Mohammed (632 A.D.) was another of those onward surges resulting from over-population of regions with scanty resources. Islam, no doubt, provided the immediate cause as well as a sense of unity and common purpose, a 'mystique' which organized and in a way sublimated with religious essence the Bedouin's old love for war and loot.

The followers of Mohammed carved out an empire from Gibralter to Djakarta within fifty years of his death. Islam spread at an incredible speed largely because of its historically progressive sociological programme. The principle of equality proclaimed by Islam proved to be a factor in its spectacular triumph no less potent than the scimitar. It contrasted sharply with the oppressive laws governing the class-and caste-ridden society of the Roman, Byzantine, Persian, and later, the Indian empires. In India, Islam won converts mainly because people were sick of the monastic degeneration of Buddhism and the hide-bound orthodoxy of Brahminical Hinduism. The conquest of India by a small band of followers of the Prophet of the Desert and the easy consolidation of their power in this country would otherwise have been impossible. Almost the same factors explain the easy Arab conquest of large portions of the Middle East and of Europe.

Contrary to the general belief, the Arabs in their hayday offered hospitable asylum to the persecuted Jews as well as unorthodox Christians. The Islamic authorities then seldom objected to or interfered with the "imperfect faith" of their subjects. It were, again, the Arab scholars who rescued, collected, preserved, annotated, profusely commented upon and developed further the works of the sages of ancient Greece. In fact after the oblivion of the Middle Ages, the works of Plato, Aristotle, Appolonius, Ptolamy, Hippocrates, Galen, and others were available to the fathers of Modern Europe only in Arabic versions. In India, the rise of reformers like Kabir, Guru Nanak, Tukaram. Chaitanya etc. was to a great extent promoted by the teachings of Islam. Modern Europe also learnt its

medicine and mathematics from the Arabs. In chemistry and physics, the Arabs did some original work which carried these sciences for beyond the limits attained by the Greeks. But for the researches of al-Khawarizmi and al-Battani, it is doubtful whether the European scientific revolution of the 17th century could have taken place when it did. Copernicus quoted al-Battani and al-Zarkali, the two Arab astronomers, in support of his thesis. Ibn Rushd, known in the medieval Europe by the corrupt Latinized version of his name, Averroes, was the greatest of the Arab commentators on Aristotle, besides being an authority in jurisprudence, medicine, mathematics and philosophy. As late as the 17th century, Latin translations of his medical 'Canon' were still used at all European centres of medical study as the principal textbook. Al-Baruni's learning embraced physics, chemistry, geography, history, mathematics, astronomy and medicine, while al-Kindi combined philosophy with mathematics, alchemy, optics and musical theory. The commentaries on Aristotle of al-Ghazali, the great mystic and philosopher-theologian, were translated into Latin and exercised much influence on European thought. Ibn al-Arabi, another mystic, described heaven and hell in terms which are reproduced in Dante's 'Divine Comedy' closely. There is also the unique figure of Ibn Khaldum (born in 1332). He formulated the philosophy of history and was the first great systematic sociologist. Of his work Professor Arnold Toynbee says that it "is undoubtedly the greatest work of its kind that has ever yet been created by any mind in any time or place".

One of the greatest contributions of the Arabs to the science of geography and to the great geographical discoveries that ushered in the modern age was keeping alive during the Dark Ages of Europe the idea first put forward by the Greeks—that the earth was a sphere. For it was this idea that inspired Columbus with his tremendous project and led to the discovery of the New World. It is also interesting to know that when Vasco da Gama reached the East Coast of Africa in 1498 it was an Arab pilot that took him across the Indian Ocean to Calicut. The Arabs are also credited with expounding the concepts of longtitude and latitude. But the Indian Ocean or the Mediterranean Sea were not the only highways of Arab commerce; "the ship of the desert" had opened a new land route to India and China.

J. B. Trend points out, in the 'Legacy of Islam', that European musical theory was influenced both by the treatises which the Arabs translated from the Greeks and by their own original contribution. The fact that a new principle that the notes have exact time-value among themselves — appeared in European music about the same time as the Latin translations of the Arab musical theoricians suggests Arab parentage. In the sphere of architecture, some authorities even assert that the mosque supplied features for the church, and the citadel for the castle; that the ornamental battlements of Gothic structure came to Europe from Cairo as also did decorated carved inscriptions of late Gothic. The word 'Arabesque' which described the low relief pattern used by the English since Elizabethan times, clearly indicates the origin of this form of decoration. Neither painting nor sculpture is to be found in Arab art, because of the religious ban on all representations of the human figure.

As with the Arab conquest in the early days of Islam, other motives, in addition to religious fervour, namely commercial gains and the control of eastern markets, impelled Christendom to launch upon the Crusades. But the Crusades did not inflict any permanent damage on the structure of the Arab empire, or cause any radical change in its character. A more devastating experience was the Mongol invasion, started under Genghiz Khan and culminating in the capture and destruction of Baghdad in 1258, by Halaku Khan, who had the nominal Abbasid Caliph executed. The Mongols, however, like the Seljuq Turks before and the Ottoman Turks after them, embraced Islam just as the Goths had embraced Christianity.

Meanwhile the process of fragmentation continued in North Africa. But the greatest reverse that the Arabs suffered was in Spain. For there a whole country—Spain—that had been for many centuries a part of the Arab empire and a centre of Arab civilization was eventually won back by the European Christians in 1492. It was not, however, until the occupation of Cairo by the Ottoman Sultan, Selim I, in 1517, that the Arabs lost the position of rulers, and gradually fell into some kind of slumber, to stir again in the 19th century. In that century a new culture moved to life with new political aspirations. The 20th century has seen these aspirations begin to receive satisfaction.

SUMMING UP

From the study of the three antique civilizations of the East, one thing emerges clearly: all of them rested upon the same fundamental ideas, discoveries and inventions. These ideas and discoveries can hardly be regarded as independent inventions accumulated in similar environments. Direct commerce between the valleys of the Indus and the Tigris-Euphrates and of the Nile, which is undisputed, perhaps undisputable, must have resulted in the diffusion of culture from one centre to another. Besides the merchants, the migrants, slaves and free, must also have helped and accelerated this process. In short, these civilizations not only flourished in close proximity — in the matter of both times and geography — but also helped one another to profit from their different experiences, discoveries and inventions.

Conclusion

IT is convenient to draw together the argument of all three sections of this Annual Number. It has sought to present a case for much more careful study of the problems of the Middle East by Indian students and administrators with the object not merely of giving content and form to the great Bandung idea, but also to fulfilling our destiny in regard to economic development in this great area of the world. Politically, our object must be to maintain and develop as large a measure of co-operation as is possible with the Afro-Asian group in order to secure an independent line of foreign policy unassailed by Cold War politics; but this of itself will be of small account unless at the same time we help one another on economic problems and can develop new cultural bonds. In the last analysis, an alliance which is not creative and dynamic will fall apart.

It has been argued that history has looked with favour on such a venture by reason of the fact that almost the whole of this area has been integrated emotionally by its aversion to Colonialism and to Western discrimination based on race and colour. The ground has thus been well prepared for a basis of co-operation, and the powerful emotional foundation is capable of surviving substantial differences which still exist. Thus India as a great democracy, while it cannot reconcile itself with dictatorship as a suitable system of Government for any country, has nevertheless cordial relations with many countries that have chosen, wrongly in our opinion, to develop under military dictatorships. Secondly, we as a great Seculiar State, maintain equal regard for all religions; we hope the Middle East will think likewise and there will be no bar with our great Hindu majority to the fullest appreciation and co-operation with the great Muslim States of Middle East. There is already a pattern of secularism in our international affairs, which unfortunately is not yet apparent to a great neighbour, Pakistan. We will need to demonstrate over and over again that our principles are not only applicable to ourselves, but contain a sound universal moral base, often described as the Gandhian faith which rests on the victory of right-doing without recourse to physical force.

In presenting the problems of this pattern of co-operation it has been indicated that India has not yet made much headway in giving any substantial content to either a political or economic partnership with the Middle East. This is, in fact, because we have failed to live up to the best in ourselves. For example, in the non-recognition of Israel we have failed to show moral courage. In any case we cannot contend that the solution of problems depends upon our supporting any aggressive intentions that the Middle East countries might have in regard to Israel, any more than we should support Israel against the Middle East. In point of fact, there is scope for the relaxation of tensions by the methods of non-violence, and it is only appropriate that India's services to understanding in this area should take a form consistent with our own claims of the worth of the doctrine of satyagraha practised on a universal scale.

In economic terms it has been shown that there are great possibilities of exchange and of technical co-operation in this area which may develop in time as a regional group. This is not a matter of trade only. It is a matter of integrated planning and the recognition that national plans have done not a little to isolate the nations of the area from one another. There is need for a much more comprehensive outlook in economic affairs, recognising that new thinking is urgently required to fill many serious gaps in translating knowledge and understanding into friendly and profitable deeds. This traffic in ideas will be far from one-way. The Middle East has achievements in economic progress which match and even surpass our own. On oil, in particular, we will need to take a leaf out of the Middle East book.

As the cultural picture has unfolded itself it has shown that while there have been great links in the past and that there are cultural bonds some of which have been in force for centuries, there is now relative stagnation. The great religions of the world outside Hinduism and Buddhism have come from the Middle East, and a great spirit of tolerance and understanding such as India has given to the world can now be reflected back in forms of cultural thought which should be more acceptable to the Middle East now that the fire of proslytising religion has passed away. There is room for a more concerted exchange of students and scholars and for a more pointed preparation of curricula designed to awaken knowledge of the Middle East in India and of India in the Middle East. Courses of Arabic and Persian studies could well be given greater place than at the present time in India, and we could well ask of the Middle East in return that they should give greater emphasis in their universities to our religious and cultural thought. Almost nothing has been done on either side to awaken the people of each side to a creative understanding of the cultural life of the other.

Much will depend in the years that are to come on the organised work of those persons and institutions which are to carry the message of one nation to another. Little has been said in the Annual Number of specific duties of the Press in both countries but they are none the less great on this account. One must hope for a number of leaders in the cultural field who will also assist to give cultural content to a partnership, which is growing apace because of the vital interests which keep India and the Middle East in step with one another. Because we are better placed to make a beginning, the initiative should be with us. We will need to widen our horizons by taking in and assimilatng cultures of many countries, instead of being absorbed, as though we were mesmerised, by the cultural and other activities of the U.S.S.R. and the People's Republic of China. The Middle East is likely to be a greater partner with us than either the U.S.S.R. or China. There has been all too little that has been done in this direction and much valuable time has been lost already. The more is the necessity that we should act with urgency and with imagination to prepare ourselves for the task which destiny has placed at our doors.



Company Meeting

THE DECCAN SUGAR AND ABKHARI COMPANY LTD.

SIXTY-SECOND ANNUAL GENERAL MEETING

Mr. C. R. Srinivasan's Review

Presiding over the Sixty-Second Annual General Meeting of the Shareholders of the Company held on 16th December 1958, Mr. C. R. Srinivasan, Chairman, said:

Gentlemen:

"The Report of the Directors and the Statement of Accounts for the year ended 31st May, 1958, have been in your hands for the necessary time stipulated by law and, with your permission, we will take them as read.

2. I have no doubt the Shareholders will agree with me that the result of the Company's operations for the year we are now reviewing has been most satisfactory and has enabled your Directors to propose payment of dividends on the Ordinary Share Capital totalling 18%.

3. A perusal of the Directors' Report and the Accounts for the year 1957-58 together with the Notes accompanying the Accounts gives, I think, a very clear picture of the Company's operations for the past year. You will see that sales at just over Rs 3,28,00,000/- constitute a record. The gross figure of sales was over Rs 1 crore above the figure for the previous year but, of this figure, additional tax accounted for Rs 35,00,000/-.

4. I shall, of course, do my best to answer any questions which Shareholders may wish to raise about the accounts at the conclusion of my speech but there are a couple of points on which I will comment now which have not been covered by the Directors' Report or the Notes on the accounts.

5. The first one is that Shareholders will be glad to know that as a result of the substantial improvement in the Company's cash position, your Directors have decided, since the close of the financial year we are now reviewing, that the mortgage loan advanced to the Company by the Industrial Finance Corporation of India can be dispensed with. At 31st May the amount outstanding on this loan was Rs 10.4 lakhs and the whole of this was repaid on 1st November, 1958, together with interest accrued up to the date of repayment.

6. I would like to take this opportunity of expressing to the Industrial Finance Corporation of India the appreciation of the Company, its Shareholders and Directors, for the assistance rendered by the Corporation and for the unfailing courtesy and co-operation we have at all times received from the Corporation.

7. The second point I would comment on is that in Note 10 on the accounts Shareholders may have noticed a substantial increase of nearly Rs 7 lakhs in the item of Consumable Stores.

8. The reason for this is the inclusion under this heading of new items of machinery and spares which have since been installed at the factories but which at 31st May last were in store awaiting issue when the time came.

9. Turning now from the accounts themselves, Shareholders will be glad to learn that the reconditioning of the factory at Samalkot and the expansion of the boiling house at Pugalur to which I referred in my speech last year are now practically completed except for the installation of a new boiler at Samalkot which will be finished in the next off-season as all the material for this item had not been received in time for it to have been installed before the recommencement of crushing at Samalkot at the beginning of December. The supply of cane to both factories was satisfactory throughout 1957-58. Although production of sugar at Samalkot has been maintained the price realized continues to be low. This is because nearly two-thirds of the production has to be sold outside Andhra in far-off markets like Cochin. This is a difficulty we share with most other factories in coastal Andhra and it is likely to continue since Andhra has a large surplus for export to its neighbours. The increased cess on cane of Rs 5/- per ton has come to stay in Andhra as appeals to the Government have not had any effect. It was only to be expected that the Government of Madras would raise the cess next and this they have done by fixing the rate at Rs 2/- per ton, an increase of 100%.

10. An outstanding event in the sugar industry this year was the announcement by the Government of India in June last of a quota of 50,000 tons of sugar for export through the agency of the Indian Sugar Mills' Association. The quota represents 2½% of the production of all factories for the 1957-58 Season. This is the first time Indian sugar has been offered in a competitive world market, that which was sold abroad in 1957 having had the benefit of the unusual circumstances that followed on after the Suez crisis. The loss on export is of the order of Rs 300/- per ton and this is to be borne by the factories out of the profit margin on internal sales. Export, in other words, is possible only so long as there is a strong internal demand at profitable prices. The export quotas of the Pugalur and Samalkot factories were 534.2 tons and 253.7 tons respectively and the loss, about Rs 2.40 lakhs, will be reflected in the figures of lower realization for sugar in the accounts for the current year.

11. Soon after the export quota was announced there was an increase in sugar prices in the North largely due to speculative activities following the political upheaval in Iraq. As this event faded from the headlines and manufacturers offered their sugar freely, prices started to come down, but, just then, the Government of India intervened and imposed control over ex-factory prices in U.P., North Bihar and the Punjab and introduced a system of allotments of sugar to anyone who applied for it. It is the contention of the industry that the prices fixed are unremunerative and, having failed to convince Government of the justice of this case, some factories have filed an application in the Supreme Court for a writ restraining the Government from exercising control.

12. The Government of India has abandoned the traditional practice of announcing a minimum price payable for cane and has amended the Sugarcane Control Order in such a way as to provide an initial minimum payment as also a subsequent payment designed to give the grower a share of anything the factory realizes above a certain minimum. I do not quarrel with the growers' right to share in excess realization but, in common with a majority of those responsible for the affairs of sugar manufacturing concerns, I wonder if the new formula will provide the essential margin that any Company needs before price linking can apply. I am sure you will agree that the Shareholder is entitled to a dividend equal to that which he can look for from investment in other industries before he is asked to share with the grower. I am equally certain that he is entitled to be certain that adequate sums can be put to reserve before profit-sharing applies. Holding these views, I am

happy to know that the Indian Sugar Mills' Association as mentioned later in these remarks is actively engaged in presenting the industry's case. Even though not opposed to sharing prosperity, there is one serious criticism of the new proposals which I must point out. Hitherto if our technical staff suggested a scheme involving capital expenditure designed to improve efficiency, we considered it from the angle of the increased earning per rupee of expenditure and decided for or against largely on merit. Under the new formula the benefits of any such increases will automatically accrue more substantially to the growers than even to shareholders and therefore the same degree of inducement to invest with a view to improved performance is no longer there. I hope the Government will give this aspect due consideration before the next cane price announcement is due to appear.

13. As a consequence of the protest made by the Indian Sugar Mills' Association against the imposition of control and the introduction of what they believe to be an unrealistic formula, a reference was recently made by Government to the Tariff Commission for a fresh examination of the cost structure of sugar and the fair price payable to the industry. The Commission has also been requested to submit a preliminary report on the allowances for rehabilitation and profits—two items of the cost structure on which there is divergence of views between the industry and Government. The Tariff Commission s findings will be awaited with interest.

14. The sugar industry has often been accused of crying before it is hurt, but I must risk exposing this Company to that accusation in making a reference to the danger which the industry faces from the encouragement that is given to the khandsari industry. Khandsari is not very well known in South India. It is really a refinement of the jaggery industry and employs the principle of centrifuging the massecuite in order to produce a near-white sugar. Under normal conditions of taxation the khandsari industry cannot thrive, but with sugar paying Rs 350/- per ton as between Cess and Excise, khandsari enjoys a measure of protection that is afforded to no other industry. I have said that khandsari is a refinement of the jaggery industry, and if its activities are confined to taking cane from areas that do not provide sugar factories, then as a sugar manufacturer I can watch it with envy because of the immunity it enjoys from taxation, but without animosity. When, however, as is happening in North India, khandsari units are set up in factory areas, the threat to the white sugar industry is very real. Supplies of vital raw materials are taken off and factories are left with less than enough cane for economic crushing. Thus the cost of manufacture of white sugar is increased. Furthermore, the quantity of white sugar is reduced and, if we are to export, this has serious repercussions. I have mentioned earlier in this speech that there is a loss of Rs 300/- a ton on each ton of sugar exported. With 2½% of total production exported, the loss per ton on total production is only one-fortieth or approximately Rs 8/- per ton on total production. If the total quantity of white sugar is reduced and the quantity Government set aside for export increased, the percentage rises. At 5% the cost per ton on total production is Rs 16/- per ton and at 10%, the loss per ton on total production has risen to Rs. 33/-. These are facts that must be taken into account by the Centre and, if we are to retain a healthy white sugar industry and to use this as an instrument for earning foreign exchange, then Government must interfere and prevent khandsaris taking cane from factory areas.

15. Adverting to production and prospects for the current year, the Pugalur Special Season closed on 4th November, 1958, after crushing 49,700 tons of cane from which a sugar recovery of 9.05% was obtained. This constitutes a welcome improvement over the recovery for last year's Special Season which was only 8.79%. The Main Season at Pugalur started on 7th December and during the month between the close of the Special Season and the start of the Main Season the programme of additions and modifications to this factory was completed and we confidently expect a further improvement in its performance.

The target of crushing at Pugalur is 1½ lakh tons of cane during the current Main Season, to be followed by 60,000 tons to be handled during the 1959 Special Season.

16. At Samalkot, production began on 8th December and despite the potential hazards associated with the commissioning of new machinery you will be pleased to hear that the turbine-driven mills are operating smoothly.

The target of cane to be crushed at Samalkot during the current season is 1 lakh tons.

17. Production of Co2 gas at Samalkot continues to make quite a useful contribution to the earnings of that factory and no difficulty is being experienced at present in selling the entire production. Unfortunately, demand for spirit for industrial uses in the area served by the Samalkot Factory is not good and so no contribution is arising at present to the factory's earnings from this particular source.

18. **Labour:** After prolonged discussions, an Agreement was concluded with the Labour Union at Samalkot in August, 1957, settling the question of wages, dearness allowance, and bonus for three years. A satisfactory settlement was also concluded with the Staff of this Factory. Unfortunately, it has been impossible so far to conclude such a comprehensive agreement with the Labour at Pugalur, as, though the questions of wages and dearness allowance have been settled, the Labour at this Factory have refused to sign an agreement on the question of bonus.

Meanwhile, certain work, mainly in the Cane Yard and Sugar Godown which hitherto was carried out by Contractors at Pugalur, has been taken over directly by the Factory. The workers are, however, engaged on a piece-work basis with a minimum guarantee wage and, so far, the results are satisfactory.

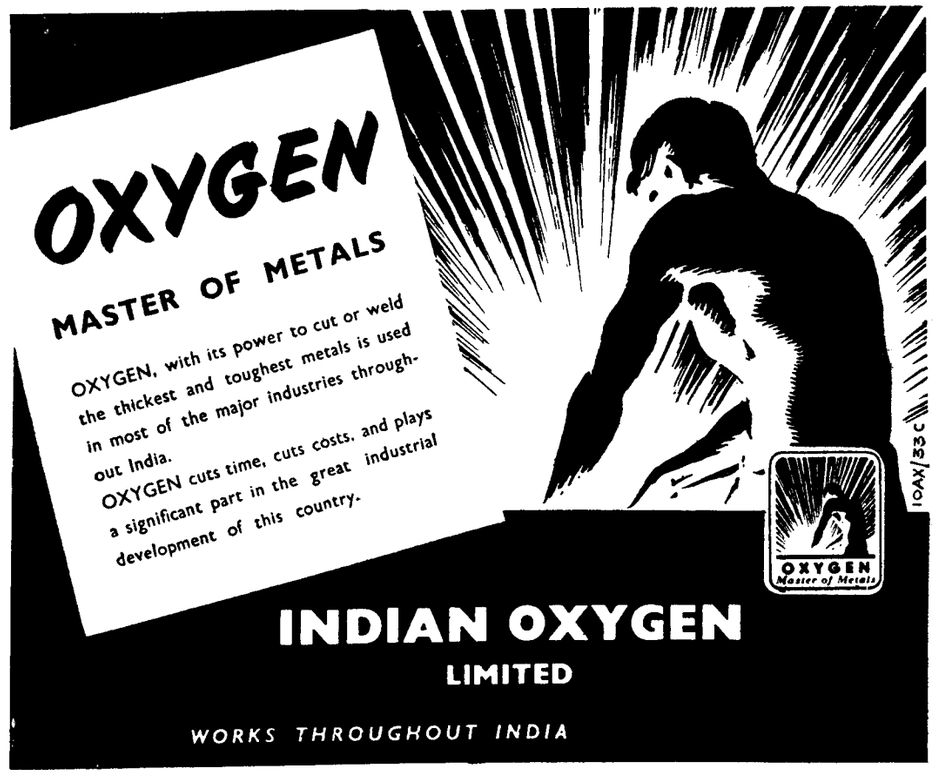
You will have noticed a good deal in the Press about the Code of Discipline in Industry, which, if implemented fully, could have nothing but good results. Unfortunately, I have to report that at Pugalur, where we have two different Unions affiliated to different political parties, each has, within the last few months, called an illegal strike. While the consequences of neither have been serious and the trouble has been speedily settled, the fact that the Code of Discipline can be so totally ignored by Union leaders gives cause for considerable disquiet.

19. Before I close I would like to express our appreciation of the work done by the Staff at our two factories. At Pugalur, with the very long season, staff is under unusual strain and they have responded magnificently. Samalkot staff has been very hard pressed to instal the new machinery and get the factory ready for the 1958-59 season and I am told that the manner in which their work has been carried out is deserving of much praise. I am sure you will join me in extending our thanks to our Staff at both the factories."

The Report and Accounts for the year ended 31st May, 1958, were unanimously adopted and a final dividend at the rate of 10%, free of Income-tax (making a total of 15% for the year), plus a special dividend of 3% free of Income-tax was declared on the Ordinary Share Capital of the Company for the year ended 31st May, 1958, the dividends being payable on the 17th December, 1958.

The retiring Director, Kumararajah M.A.M. Muthiah Chettiar of Chettinad, was re-elected and Sir T. S. Venkataraman was re-appointed a Director of the Company by a Special Resolution passed in accordance with Section 281 of the Companies Act, 1956. The retiring Auditors, Messrs Lovelock & Lewes, were re-appointed on the same remuneration as for the previous year.

N.B.:— This does not purport to be a Report of the Proceedings of the General Meeting.

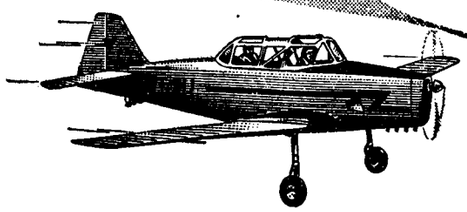


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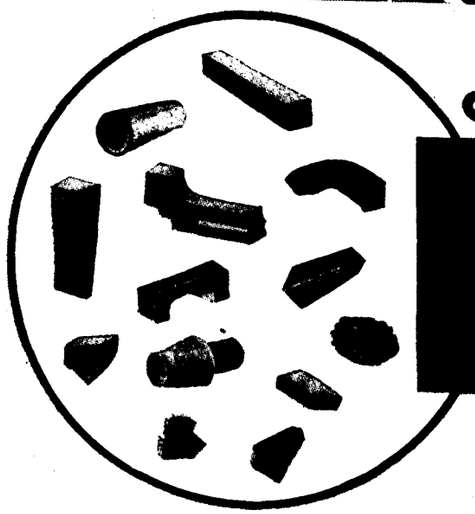
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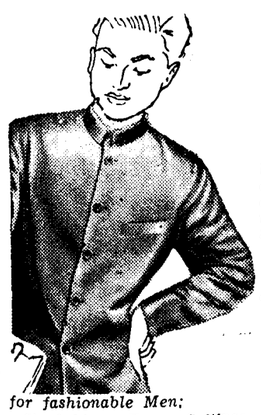
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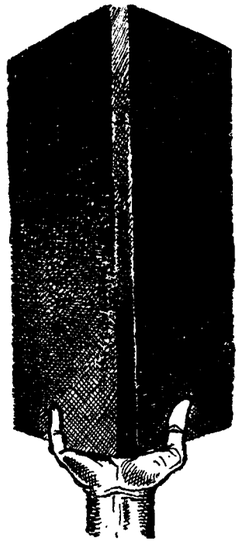
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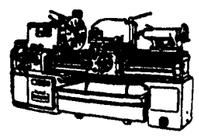
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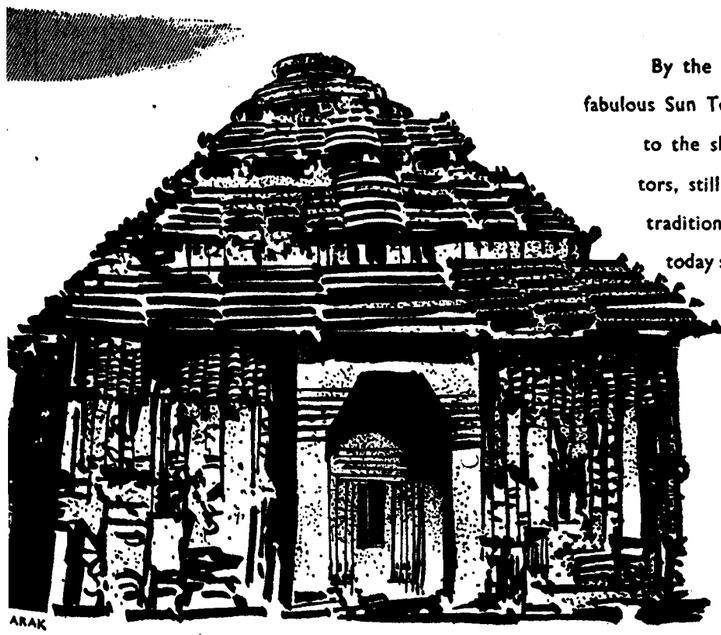
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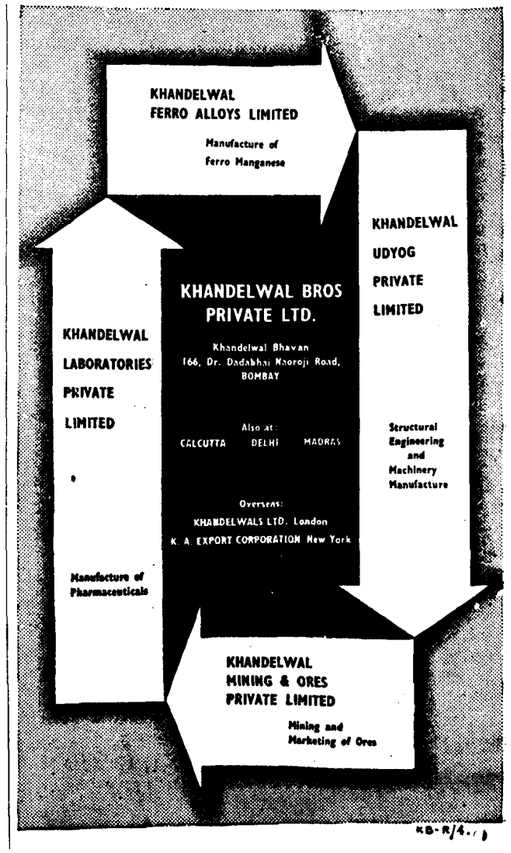
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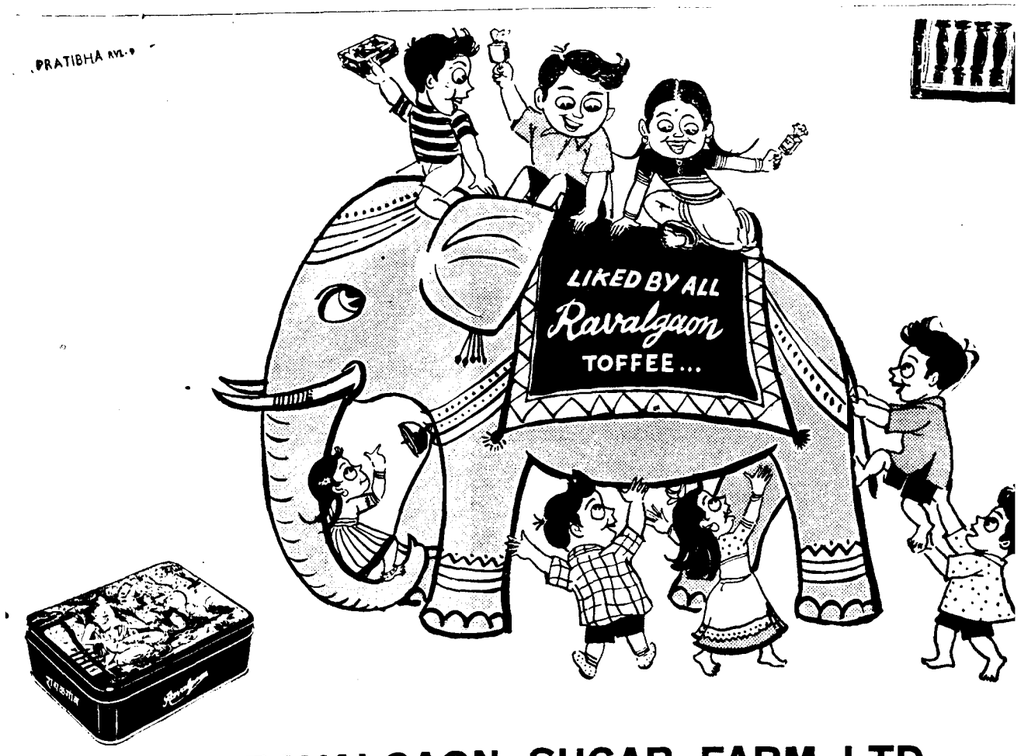
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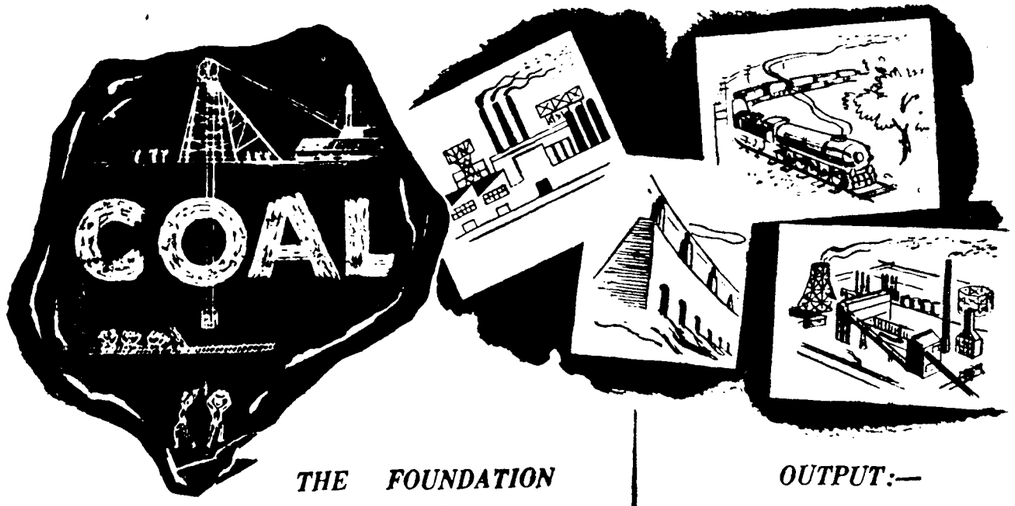
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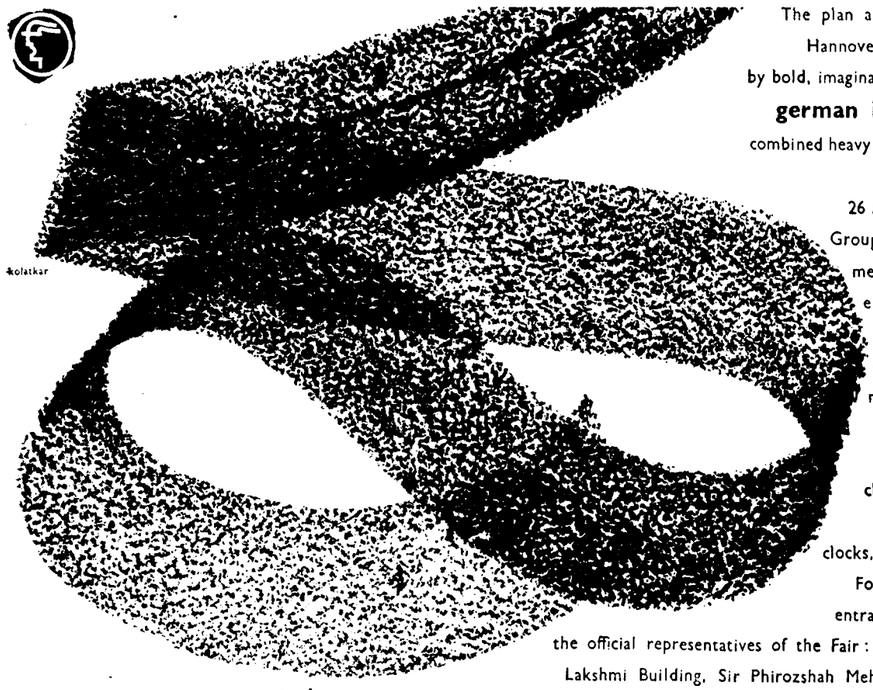
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PAID-UP CAPITAL	„	**66,19,625**
RESERVE AND OTHER FUNDS (INCLUDING SHARE PREMIUM)	„	**91,61,883**
DEPOSITS AS ON 30TH JUNE 1958	„	**38,00,96,415**
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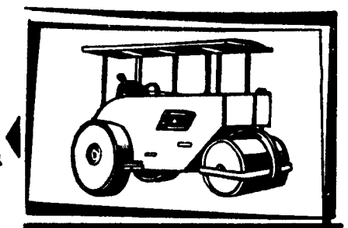
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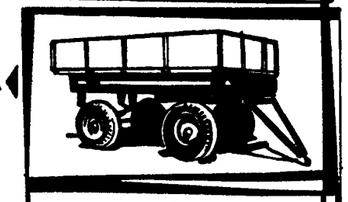
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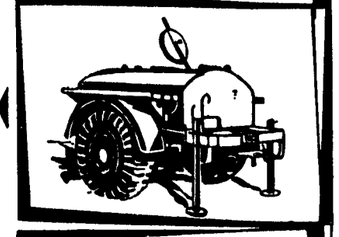
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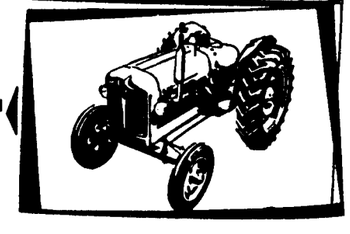
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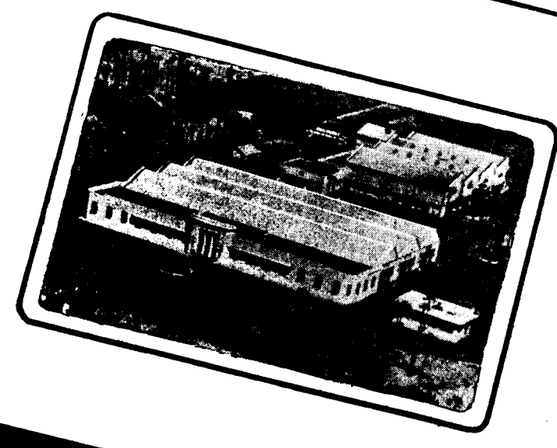


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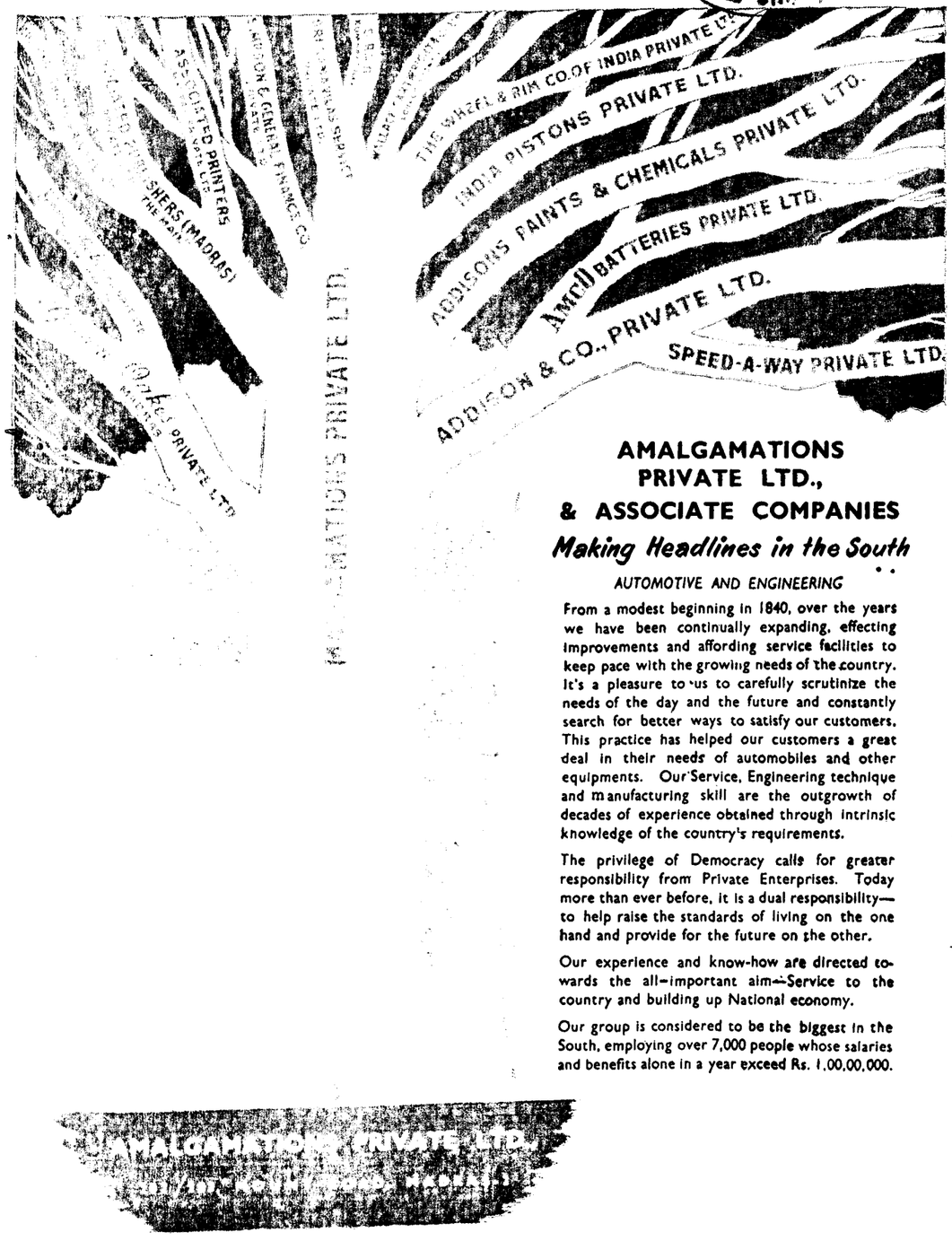
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VOL. IV NO. 5. NEW DELHI: JANUARY 2, 1959 Single Copy 50 Naye Paise

The Indian Economy in 1958

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Introductory Review

THIS Blue Supplement attempts to set out in narrow compass the main features of the Indian economy in the calendar year 1958. Largely because figures for agricultural production are still provisional, and for industrial production are not available beyond September 1958, the picture is an incomplete one. Certain fairly obvious conclusions can nevertheless be drawn. Thus, the agricultural year 1958-59 is obviously much better than the previous year; it may be that agricultural production will be 10 per cent higher. On the other hand, whilst there are conflicting figures at present, it would appear over the year as a whole, industrial production in 1958 in organised industries will be lower than in the preceding year. As a consequence, transport has made relatively little progress, and an extraordinary situation in which transport as a major bottleneck has been abolished from large areas of the Railway system, has arrived. Thus midway in the Plan, we have entered into a period of surprising stagnation.

The reasons which have led to the current crisis are not far to seek. The holding back of consumption in respect of cloth and of cement has only reflected what seems to be a general decline of purchasing power in the hands of urban users; while in 1957-58 rural consumption was also held back. But much of the reduction in consumption, so far as corporate users are concerned, has a reflection, in cement at least, of the shortage of steel; and, in other industries, construction work has been held back because of the absence of foreign exchange for the necessary plant. Bank deposits have continued to rise, partly because with foreign exchange not being available, rupees are not being withdrawn from the banking system in the private sector. Thus easy money conditions have tended to prevail and it would appear that over the next year the position will become easier still. The cost of living has been two-way and having reached all-time peak is now declining fairly rapidly, under the influence of lower food prices. Part of this influence is undoubtedly seasonal, but because of the favourable agricultural production of the year a major deflationary influence is also at work.

All in all, the inflationary pressures at the moment have suddenly subsided, and the risks are mostly on the other side. The implication is that we will be acting far more in the region of support than to counter inflationary factors in the next year. There appear to be abundunt sources of supply of food grains, cloth and cement at any rate. Only steel makes its shortage acutely felt and even this will be partly met in 1959.

It is strange that at the time of relative deflation, the Government is preoccupied with the problem of restricting deficit financing and raising resources by taxation. More has been done in the last four months to destroy confidence by unwise official pronouncements of Government policy than almost at any time in the previous years. The economy at the present time badly needs a new note of confidence to counteract the errors which flow fast from unwise pronouncements of Ministers of the Central Government led by the Prime Minister himself. As the year ends, the public sector-private sector controversy, which was subdued in 1957, has assumed disappointingly large proportions. No one need contend that the climate for private investment has improved.

Agriculture

THE salutary effect on official thinking that the pressure of prices produced constitutes a notable feature of the year on the agricultural front. The general uptrend in prices, especially the sharp rise in food prices which reached an all-time peak since 1953 in August this year, compelled the authorities to cast off all complacency on the food front and devote greater attention to increasing agricultural production. This wholesome reorientation in outlook was also facilitated by the severe criticism of official policy both inside and outside the Parliament. Although periodic recurrence of food crises has been a familiar feature of the Indian economy, it is strange that the positive aspect of raising agricultural output has not received due attention. On the other hand, whenever the country has been faced with a severe food shortage, the Government has always thought first in terms of controls. It is, therefore, necessary to stress the point that the increase of food output alone can provide an effective and lasting solution to this perennial problem. Realising this, a few leading businessmen recently prepared a practical and realistic plan for stepping up agricultural output, which deserves not only to be carefully studied but promptly implemented. The plan, which aims at an increase of food production by about 50 per cent in ten years, is expected to bring a return of about Rs. 1,350 crores per year at current prices on the completion of the Plan. The authors of the Plan pertinently observe: "Food production is stagnating, mainly because no intensive effort has yet been made to increase the yield from land. The yield per acre in India is the lowest in the world. As compared to 3,750 lbs. in Japan, 2,387 lbs. in China and 3,000 lbs. in the U.S.A., the average yield per acre in India is only 700 lbs. The average yield in wheat is 600 lbs. as compared to 1,800 lbs. in Japan. The basic problem, therefore, is to increase the productivity of land". In order to achieve this, the Plan suggests, 'inter alia', the following four main factors on which agricultural output depends: (a) provision of irrigation and water facilities; (b) adequate supply of fertilizers and their application to different types of soil, (c) mechanised way of farming and use of tractors; and (d) supply of better quality seeds to the agriculturist. Far from approaching the problem realistically on these or similar lines, the Government is proceeding even now with its land reform measures aimed at reducing land holdings further and thereby paving the way for more fragmentation which, according to expert opinion, goes against the basic objective of increasing food production. How impracticable the Government's approach is will be obvious from the Plan, according to which about 60 per cent of the holdings are below five acres. As it rightly says, "unless something is done immediately to enable the agriculturists to make his holdings economic and introduce scientific methods of cultivation, no progress in terms of increased food production will be possible".

Be that as it may, thanks to the persisting shortages, the upward trend in prices which started from the very beginning of the year touched the peak figure of 116.9 during the week ending September 13, 1958 and continued to revolve around that level up to the second week of October. Thereafter, however, the trend became slightly downward, with the index coming down to 113.3 for the week ended November 22. And the present indications are that this may continue with the index dropping down further to the last year's level of 109.3.

The main reason for the mid-year spurt in prices, particularly in the food articles group, was undoubtedly the reported ten per cent fall in foodgrains output in 1957-58, as against the corresponding period of last year, the relevant figures for the two years being 62 million tons and 68.7 million tons, respectively. The contribution made by rice towards this fall was substantial, being 3.5 million tons. Thus, it was more the fall in production, and not monetary or credit policies, that was responsible for the rise in prices. Hence the urgent need to increase production by adopting practical and realistic measures and eschewing all ideological or emotional bias.

Complete official data on agricultural production are available only for the agricultural year 1956-57. These data, as the relevant table shows, clearly reveal that the overall agricultural production in that year increased by 6 per cent with the index (year ended June 1950 : 100) rising from 115.9 to 123. It further shows that the rise in production of the non-foodgrains group was higher 'vis-a-vis' that of foodgrains:

AGRICULTURAL PRODUCTION

Commodities	Production in 1956-57	Production in 1955-56	Percentage increase in 1956-57 over 1955-56
Foodgrains (million tons)	68.7	65.3	5.2
Sugar (raw) (million tons)	6.7	6.0	12.8
Oilseeds (million tons)	6.0	5.7	5.6
Cotton (lakh bales)	47.2	40.0	18.0
Jute (lakh bales)	42.9	42.0	2.1

According to the latest published estimates, the outlook for 1957-58 does not appear to be as encouraging. With the prolonged draughts in a number of places, such as Uttar Pradesh, Bihar, Madhya Pradesh, Rajasthan, Orissa, etc. the 'Khariff' cereals, particularly rice, suffered considerable damage. Official estimates place the output of rice during 1957-58 at 24.8 million tons which shows a fall of 12.2 per cent over the production of 28.3 million tons in 1956-57. However, the provisional figures for 1958-59, which have since been released, are quite encouraging, in that they place the production at around 29 million tons. The production of other food articles, such as bajra, jawar and maize, in 1957-58, is estimated to have gone up by 23.6, 11.1 and 1.8 per cent, respectively, while the output of ragi is estimated to have been maintained at the previous year's level.

COMMERCIAL CROPS

With regard to commercial crops, the production of all the important oilseeds — groundnut, rape and mustard, sesamum, linseed and castorseed — went up during the year 1956-57 to 60.3 lakh tons, registering thereby an increase of 5.6 per cent over the previous year's level of 57.1 lakh tons. According to the latest all-India final estimate, the output of all the other oilseeds, except castorseed and sesamum, which show a fall of 21.8 per cent and 17.9 per cent, respectively, is expected to be higher than that of last year. With regard to jute, although the output in 1957-58 was lower at 41 lakh bales as against 43 lakh bales in 1956-57, the 1958-59 estimate is appreciably higher at 51.78 lakh bales. The outlook with regard to cotton is fairly satisfactory according to the latest indications, although it would seem that the Indian cotton crop may not exceed 52.50 lakh bales in the current season (1958-59), as against the appreciably higher preliminary estimate for this season of 54.25 lakh bales. The following table gives the region-wise break-down for the 1958-59 season:

(In lakh bales of 400 lbs.)

Bombay	..	28.00
Punjab	..	7.20
Mysore	..	4.90
Madhya Pradesh	..	4.85
Madras	..	3.30
Rajasthan	..	1.90
Andhra Pradesh	..	1.80
U. P.	..	0.30
Assam/Tripura	..	0.20
TOTAL	..	52.50

The production of two other important commercial crops, namely, that of sugarcane and tobacco, also recorded sizeable increases in 1956-57; while sugarcane production went up to 67.5 lakh tons in 1956-57 or by 12.8 per cent, the production of tobacco went up from 2.95 lakh tons in 1955-56 to 3.06 lakh tons in 1956-57. As the Tobacco Extension Scheme, designed to improve the quality of tobacco in the country, is already under implementation in some States, such as Andhra Pradesh and Orissa, the outlook appears to be fairly promising in the coming years for this crop. With regard to sugar, the all-India estimate shows an increase of 6.9 per cent in 1957-58, as compared to the preceding year's output.

Now what is the outlook for next year? A careful examination of all the relevant factors seems to suggest that there is no need to be unduly pessimistic, subject to there intervening no unforseen calamity. In the first place, official estimates of certain food articles like rice are much lower than the unofficial estimates. Secondly, there are now substantial stocks of foodgrains with the Government — these are put around some seven lakh tons. Thirdly, additional supplies are assured under the United States Public Law 480. And above all, the indications are that we shall have a favourable monsoon.

Industry

INDUSTRIAL production which maintained a remarkably rising trend right from 1948, despite severe handicaps, took a rather disconcerting turn, for the first time in nine years, during 1957. This slowing down of the tempo of industrial production became, if anything, more pronounced during the year under review. Thus, the index of industrial production, with 1948 as the base, rose to 108.1 by 1951, 114.2 by 1953 and 143.3 by 1956. But, during the year 1957, the rate of growth was retarded and the index showed a rise of hardly 3½ per cent over the preceding year, the relevant figure for that year being only 148.3 (137.31 according to revised series with 1951 as the base year). The available figures for the current year in regard to production in the organised industrial sector make even more discouraging showing. There has thus been, in 1958, a fall of about 4.7 per cent, according to the seasonally uncorrected figures for the first seven months, over the corresponding period in 1957. In other words, the level of production during 1958 might well be lower than in 1956.

As the following table indicates, the fall has occurred mainly in the manufacturing industries. The fall in this sector, which forms nearly 91% of the organised sector, has been of the order of about 6 per cent. The mining and quarrying section on the other hand, shows a rise of 6.3 per cent.

INDUSTRIAL PRODUCTION: 1957 and 1958

Base: 1951—100)

(Average January to July)

Year	General Index	Mining and Quarrying	Manufacturing
1957 ...	150.9	125.4	152.1
1958 ...	143.8	133.3	143.1
Percentage change in 1958 over 1957	—4.7	6.3	—5.9

Undoubtedly, the main factor responsible for this disquieting performance in the manufacturing sector has been the unprecedented fall in the production of cotton textiles, due to the grave crisis which that industry has had to face during the years 1957 and 1958. To this should be added two general factors, namely the impact of tax burden on manufacturing industries and the stringent import restrictions even on essential raw materials and accessories imposed during the preceding two years. It is probable that, in 1959, the structure of industrial production may change, following the progress at Rourkela, Bhilai and Durgapur; nevertheless, the consumer industries group will continue to have a big weightage in the overall industrial set-up.

Be that as it may, the rot that has set in in the industrial sector of the economy should be stopped by taking prompt and appropriate corrective measures. How urgent and necessary this is is evident from the following extract from the brochure entitled "Industrial Progress—who gains" prepared by the Federation of Indian Chambers of Commerce and Industry, which, while clearly showing the extent of the heavy burden of taxation on the industrial sector, also pleads for the promotion of maximum business growth.

"Additional taxation has been imposed by the Central Government alone during the last three years to yield about Rs 150 crores per annum and has affected both the capacity of the manufacturer to collect necessary finance for his expansion programme, as also the purchasing power of the consumer. Even the increases in the excise duties on textiles and cement which were stated to have been levied with a view to restricting demand, continue even now when the problem of these industries is that of disposing of the stocks. Revenue considerations seem to be given by the authorities a higher priority than the interest of production.

"The policies adopted in the field of taxation are having an adverse effect on the formation of new companies and the progress of existing ones. As the following figures will show, the number of joint-stock companies is continuously declining from 1957 onwards:—

As on	Public Limited Companies	Private Limited Companies	Total
31st March, 1956	9,954	20,427	30,381
„ 1957	9,640	20,311	29,951
„ 1958	9,109	19,798	28,907
30th June. 1958	8,999	19,706	28,705

"The number of liquidations is rising, while the number of new registrations is falling.....the programme

of raising per capita income and the standard of living of the people will obviously depend upon the industrial sector contributing a larger and larger share to the national income. In fact, the best way for a nation to improve the living standards is through policies that promote maximum business growth."

In short, a time has come when the entire approach to our economic policies, particularly tax and trade policies, has to be revised and reorientated. With these general remarks, we may now pass on to a brief review of the performance of some of our major industries during 1958.

STEEL

With a view to laying a firm foundation for future industrial development, it is now common knowledge, expansion of steel-making capacity has been given the pride of place in India's industrial programme. Accordingly, during the second Plan period, viz., between the years 1956 and 1961, our steel capacity is expected to be quadrupled. In physical terms, the target is six million ingot tons. While nearly half of this will be provided by the two steel companies in the private sector — the Tata Iron and Steel Co., Ltd. and the Indian Iron and Steel Co., Ltd. — both of which are undertaking vast expansion programmes, the other half is expected to be provided by the three major steel plants — Rourkela, Bhilai and Durgapur — in the public sector. The contribution of the Mysore Iron and Steel Works — the fourth State-owned steel plant — is, however, negligible. The latest cost estimate of the three big plants in the public sector is as follows:

	Rourkela	Bhilai	Durgapur
Plant . . .	170.00	131.00	138.00
Auxiliaries & Mines .	27.25	30.00	20.00
Township . . .	14.00	14.00	14.00
TOTAL . .	211.25	175.00	172.00

In the private, sector, the Rs. 87-crore expansion project of the Tata Steel Company is nearing completion. An important event in 1958 was the "blooming in", on October 10, of the new blast furnace, which is one of the largest in the world. Built at a cost of seven crores of rupees, this new furnace has a capacity of 1,650 tons per day without the sinter binder. Likewise, the IISCO has also been making satisfactory progress in regard to its expansion programme. On October 11, 1958, the second blast furnace of this Company was also "blown in". Despite labour unrest, production of steel (ingots and metal for steel) went up from 849,000 tons during the half-year ended June, 1957 to 854,000 tons during the corresponding period of 1958. During the third quarter also, the output of TISCO showed a fair improvement at 205,400 tons, as against 201,400 tons during the corresponding period of 1957. As the appetite for steel is bound to increase in a rapidly industrialising country such as ours in the years to come, it is proposed to produce 15 million ingot tons of steel by the end of the third Five-Year Plan. As to the desirability of this country's launching on an immediate expansion of the steel industry to this extent, however, opinion is sharply divided.

TEXTILES

The grave crisis caused, among others by (i) a higher labour cost that is not reflected in higher productivity, (ii) a high level of taxation that is still impinging heavily on the industry — even after the interim relief provided by the Government following the recommendations of the Joshi Committee — and (3) the unnecessary obstacles placed in the way of modernisation, produced a depressing effect on the cotton mill industry. Consequently production in this premier industry, as the table below shows, registered a sizeable decline during the year:

	CLOTH		YARN	
	1958	1957	1958	1957
	(million yards)		(million lbs.)	
January . .	437	484	147	156
February	391	435	133	143
March .	406	453	138	150
April .	408	464	134	154
May .	421	453	139	150
June .	388	402	126	137
July .	419	460	145	150
August .	408	411	140	139
September .	411	436	144	153
October .	422	422	147	143
November (provisional) .	380	429	130	146
	4491	4849	1525	1621

The disastrous effects of the fiscal novelties introduced during the last two years have clearly manifested themselves in the form of reduced consumption and, therefore, of distinctly lower production, causing distress not only to this industry but to the entire industrial sector. Unless a more rational tax policy and a realistic attitude towards modernisation and labour policy are in evidence soon enough, the cotton mill industry is bound to face more trouble in the New Year. Fortunately, one sees refreshing evidence of these in the horizon.

JUTE

For the jute industry, notwithstanding the concern caused by the delay in the purchase of jute goods on the usual scale by the U.S.A., the year 1958 may be said to be a fairly satisfactory year. The production and stock trends for the first ten months of the year are as under:

	Production		Stocks	
	('000 tons)		('000 tons)	
1958	Hessian	Sacking	Hessian	Sacking
January .	34.4	57.3	29.7	53.5
February .	30.1	49.3	27.3	53.4
March .	30.4	49.5	24.5	54.8
April .	30.9	50.6	20.4	60.2
May .	34.2	53.7	25.0	71.8
June .	31.3	45.9	31.0	87.9
July .	35.3	49.0	19.0	89.6
August .	35.4	44.3	19.0	86.4
September .	35.9	45.7	17.0	80.2
October .	33.3	43.0	17.8	77.1
November .	35.8	44.9	—	—

It is clear from the foregoing table that, except for a short spell in the middle of the year, when there was a setback, thanks to the suspension of import licences by the Argentine Government and the All-India Dock Workers' strike, and a break, again, in October, the position of hessian has been very satisfactory. The position with regard to heavy goods was, however, different, with production steadily increasing, despite mounting stocks. With regard to export too, whereas hessian shipments improved to 300,084 tons during the first eleven months of the current calendar year, as against 379,232 tons in the corresponding period of last year, exports of heavy goods came down substantially from 266,800 tons in January-August 1957 to 220,100 tons during the corresponding period this year. This may be attributed to the recessionary trends abroad, coupled with the political unrest in the Far East and the growth of the indigenous production of jute manufactures in a number of countries like Burma, China, Thailand, Philippines, etc. By reason of the fact that the recession in the U.S. has definitely receded since and the Government as well as the Indian Jute Mills' Association are taking an active interest in boosting exports, the emerging picture for the next year should be brighter.

SUGAR

Following a sizeable diversion of sugarcane to khandsari units, sugar production recorded a slight setback during 1957-58 season. Thus, as against 20.26 lakhs tons in 1956-57 the production in 1957-58 was just 19.75 lakh tons. That such should be the course of production in an industry where the capacity was increased by 140,000 tons with the working of ten new units during the year, not to speak of the completion of expansion schemes by a number of factories, seems rather paradoxical. But this situation has arisen from the growing competition of 'khandsari' and the increasing tax burden. This disquieting trend has to be arrested as early as possible: otherwise, the country's export promotion scheme will be affected adversely, resulting in a shrinkage of the anticipated foreign exchange earnings.

CEMENT

With regard to cement — India's most dynamic industry — the production went up by only 0.64 million tons from 30.8 million tons in January — July last year to 3.72 million tons during the corresponding period this year. The slackening in the rate of growth of output in this industry is attributed mainly to the accumulation of stocks brought about by the increases in the excise duty and the intervention by the S.T.C. The story of coal, the ready availability of which is so very vital for rapid industrialisation is, however, encouraging. Available statistics indicate that the phenomenal increase of 3.4 million tons recorded last year would be maintained during the year under review as well. The achievement of the private sector, which has accounted for an increase of 5.4 million tons in the output of coal since 1955, as against an increase of just 1.2 million tons in the public sector over the same period is remarkable. That it has achieved this, despite severe restrictions from Government, is all the more commendable.

In the case of other industries, in general, most of the existing industries have recorded sizeable increases in production—the performance of some of them between the years 1947 and 1957 has indeed been remarkable. For instance, the production of diesel engines has gone up from 684 in 1947 to 16,664 in 1957, of power-driven pumps from 6,000 to 63,676, of electric motors from 38,000 H.P. to 469,590 H.P. of power transformers from 32,000 kva to 1,219,101 kva, of radio receivers from 3,036 to 190,690, and of sewing machines from 5,856 to 167,478. In the chemical group, the output of sulphuric acid has increased from 60,000 tons to 196,068 tons, caustic soda from 3,312 tons to 42,653 tons, soda ash from 13,620 tons to 91,925 tons, liquid chlorine from 1,704 tons to 15,693 tons. The production of sheet glass has risen from 5.72 million sq. ft. to 54.23 million sq. ft. In the transport group, the output of automobiles, however, was down to 15,058 vehicles in the first seven months of the calendar year, as against 19,505 vehicles during the corresponding period of last year. In the case of bicycles, on the other hand, the output, both in the small-scale and in the large-scale sectors, increased appreciably. While the production in the 78 units in the small-scale sector crossed the one-lakh mark in 1957 and reached the figure of about 109,000 bicycles, as against 22,000 in 1956, the large-scale sector, comprising 20 units, produced 7.91 lakhs bicycles in 1957, as against 6.64 lakhs in the preceding year.

UNREALISTIC POLICY

It is clear from the cursory review presented above that the rate of growth, wherever, it has been affected adversely, has been due, mainly, if not solely, to the unrealistic official policy. Only when the complete figures for the current year are available will it be possible to measure precisely the extent of loss which the economy has suffered on account of the unrealistic attitude and policies of the authorities. From the available data, very meagre though it is, it is abundantly clear that the 1958 rate of increase in industrial output will be the lowest on record for the last five years. This disconcerting situation should serve as an eye-opener to our policy-makers, who, it is to be hoped, will, at least now adopt a realistic attitude in respect of the three vital policies — industrial policy, labour policy and taxation policy — on which industrial production depends.

Transport

IT is generally conceded that annihilation of distance and facilities for speedy and massive movements of goods and services are essential prerequisites to economic expansion. Yet one finds, strangely enough though, that all the components of this sector, especially road transport, have not been given due importance, not to speak of formulating an integrated policy, for which this journal has been pleading for long. According to the recent reappraisal of the second Five-Year Plan, the revised target for transport stands as under:

	ORIGINAL				REVISED			
	Centre	States including Union territories	Total	% of Total	Centre	States incig. Union territories	Total	% of Total
Transport and Communication ...	1,203	182	1,385	28.9	1,175	170	1,345	28.0

Considering the great demand which growing industrialisation is bound to create for transport, this outlay seems to be quite small. But the Planning Commission could not probably help it because of the meagre resources position—both internal and external. When even the earlier allocation has been reduced thus, the only alternative left is better utilisation of the existing resources. In fact, one of the premises on which the targets of the second Plan were fixed, it may be noted here, was that a ten per cent increase in the effective use of engines and wagons would be accomplished. The need for translating this into action is, therefore, of paramount importance today. Various measures are no doubt being adopted to achieve this

end, and, as the table below indicates, the performance too has been steadily improving:—

Net Ton Miles Per Wagon Day

	1938-39	1942-43	1948-49	1956-57
B.G. ...	351	451	358	570
M.G. ...	147	182	171	210

Net Ton Miles Per Goods Engine Per Day (On Lines)

	1938-39	1942-43	1948-49	1956-57
B.G. ...	15,144	17,749	15,312	22,315
M.G. ...	7,019	7.281	6,048	9.360

Nevertheless, there is need for a good deal of rationalisation of transport and at least wherever it is clearly established that an alternative mode of transport could deliver the goods, the required facilities for pressing it into service should be created.

A reference to two other issues—analysis of railway accidents during the last twenty years and the Government's decision on the new railway freight structure that were discussed during the year may not be out of place here. Giving a factual review of accidents on the Indian Railways during the past twenty years, a pamphlet circulated to Members of Parliament says that the post-independence peak-figure of 24,120 accidents of all kinds recorded in 1948-49 came down steadily to 9,011 in 1957-58. This figure includes 17 serious accidents which were enquired into by the Government Inspectors of Railways. Secondly, the Government of India announced its decision on the recommendations of the Railway Freight Structure Inquiry Committee—the most important event of the year relating to the Railways. These recommendations, as decided upon, took effect from October 1, 1958. In consequence, the freight burden on foodgrains has been reduced and special treatment has been afforded to handloom products, khadi, books, newsprint, etc. From the same date, the scale of rates for parcels traffic also has been revised. All the new goods rates and parcels rates are now expressed in decimal system. The additional revenue yield from the revised parcel rates is expected to be about Rs. two crores per year.

It is well known that the general attitude of the Railways ever since their inception, about 105 years ago, has not at all been helpful to road transport. Although having an investment of about Rs. 1,000 crores and enjoying a privileged position, the Railways earn for the exchequer a revenue of only about Rs. 40 crores a year. Road transport, on the other hand, earns for the public coffers about twice as much as a year. Looked at from the point of view of employment potential and speed also, road transport seems superior. Thus, as against one million persons employed in Railways, roads employ 2.7 million persons; similarly, while a railway wagon covers just 48 miles a day, a road truck covers as many as 150 miles. These hard economic facts should be recognised at least now and road transport provided with all facilities for steady development. The main obstacles in the way of proper development are the unhelpful attitude of the Government, which seem to be concerned more with revenue than with the development of road transport, and the threat of nationalisation. The Road Transport Reorganisation Committee, appointed by the Central Government, with very wide terms of reference, may be expected to look into these and other aspects of road development and pave the way for the healthy growth of road transport in India at least in future.

SHIPPING

For the Indian shipping, the year 1958 has been a momentous one for a number of reasons. It saw the enactment of the Indian Merchant Shipping Bill—one of the most important prices of legislation in post-Independence India—and the expansion of the Indian fleet. The Indian fleet, consisting of about 131 vessels aggregating 576,000 tons at the end of 1957, has expanded to 141 ships of about 630,000 gross tons. It is interesting to note that, of the 13 vessels added to the fleet during the year, as many as nine were acquired under the Deferred Payment or the Self-Financing Plan. The most important problem that is confronting the shipping interests, who are anxious to reach and, if possible, exceed the modest tonnage target of 900,000 gross tons fixed under the second Five-Year Plan, is the burden of taxation. Without going into details, we may just mention the specific instance of the Development Rebate. Considering the special characteristics of this industry, this rebate should be raised to at least 50 per cent. Similarly, the Capital Gains Tax and Section 10(2) (VII) of the Indian Income-tax Act which eat away even the meagre available resources for replacement of old tonnage should be removed as far as the Indian shipping industry is concerned.

While on the subject of shipping, it is perhaps imperative to mention that tramp shipping has become virtually a missing component in Indian shipping, although it forms a vital and integral part of the national shipping in other countries. Tramp shipping not only supplements liner capacity but also provides an effective service in capturing an increasing share in overseas shipping. As such, "from the long-term view", as this journal has said ere now, "it is essential that policy for shipping at least in the third Plan should provide for the establishment of a nucleus of tramp tonnage, even as the second Plan has provided a definite place for a nucleus of tanker tonnage."

AVIATION

The heralding of the jet age is undoubtedly the most outstanding event of our air transport during 1958. Although the impact of jets on the future cost of commercial aviation is very heavy, the jet era has come to stay with us. Jets promise—albeit in the long run—to be a commercial proposition. It is indeed remarkable that, in spite of contracting profit margins —last year's figure of $50 million for the member lines of IATA were actually 40 per cent below the 1956 level—there has been a progressive reduction in passenger fares over the last decade. It is difficult to answer the question posed by Mr. J. R. D. Tata, President of the IATA, in this connection, namely, whether the spectacular investment now being made will help or hinder the process of making aid travel cheaper for the lower income sections to enable them to avail themselves of this facility.

Trade

THE latest statistics of India's foreign trade in the period January-September 1958 show that the deficit has been of the order of Rs. 146 crores. Merchandise imports during this period have been to the value of Rs. 571 crores while exports have been to the tune of Rs. 425 crores. The deficit on trade account for the whole of 1958, on the basis of the trend till the end of September last, may well come to Rs. 195 crores. This likely deficit may be compared with an all-time high deficit of Rs. 383 crores in the calendar year 1957. Imports in that year (1957) were to the value of Rs. 1,026 crores while exports were to the tune of Rs. 643 crores.

The results for the nine-month period of the current year thus show that there has been a more favourable trend in the sector of India's foreign trade. It would further appear from the statistics of commodity-wise imports during this nine-month period that food items, liquor and tobacco have been responsible for a total import bill of Rs. 78 crores as against Rs. 55 crores in the corresponding period of 1957. Although there has been an increase in the imports of food items, there has been a sizeable reduction (of about Rs. 32 crores) in the value of imports of crude materials other than fuels in the January-September period of the current year.

There has been a sizeable reduction in the imports of chemicals in the January-September period of this year, their value being Rs. 48 crores as against Rs. 61 crores in the corresponding period of 1957. Under the head, "Manufactured Goods", there has been a steep reduction in imports from Rs. 213 crores in the January-September period of 1957 to Rs. 129 crores in the corresponding period of the current year. This steep reduction has been largely due to the fall in the imports of iron and steel and of a number of non-ferrous metals, besides consumer goods. The reduction in the imports of machinery and transport equipment has, on the other hand, not been so steep during the first nine months of 1958; the relevant figure of imports is Rs. 181 crores as against Rs. 219 crores for the comparable period of 1957.

It would appear from the reduction of imports of chemicals that items like coal tar dye-stuffs and other inorganic and organic chemicals which are necessary industrial raw materials, have been substantially affected. At the same time, the reduction in the imports of non-ferrous metals, which also come under the category of raw materials and intermediate goods, has also been substantial. The reduction in the imports of iron and steel, though it has accounted for Rs. 50 crores, should have been mostly due to the reduced inflow for the use of the public sector iron and steel projects. Other raw materials like cotton, pulp and waste paper, jute, etc., have also registered a substantial fall in imports during the relevant nine-month period of the current year. If the reduction in the imports of petroleum and petroleum products is also taken into account in this connection, it will be seen that the overall cut in the imports of a variety of industrial raw materials has been considerable; the fall has also been crucial in the sense that it has brought down the level of industrial production in the country.

If imports in some crucial lines have thus fallen during the first nine months of the current year, so have exports also. It is indeed surprising that the export promotion drive has not had any significant effect in the matter of increasing exports. If anything, the fall in exports during the first nine months of the current year has been a rather disquieting trend. The commodities, the exports of which have registered substantial declines during the relevant period of the current year, are sugar, raw wool, non-ferrous metal ores, vegetables oils, leather, standard cotton fabrics, made-up textile articles other than clothing, etc. Particularly under the head "Manufactured Goods," exports of standard cotton fabrics have come down from Rs. 52 crores in the January-September period of 1957 to Rs. 35 crores in the corresponding period of the current year; exports of made-up textile articles other than clothing have also declined from Rs. 471 crores to Rs. 37 crores. It is indeed surprising that in spite of the efforts of the State Trading Corporation, exports of non-ferrous metal ores have declined by Rs. 10 or Rs. 11 crores during the first nine months of the current year. Another disappointing trend has been in respect of sugar exports which were to the tune of only Rs. 2 crores in the nine months of the current year as against Rs. 14 crores in the comparable period of the last year.

By and large, merchandise exports during the January-September 1958 period have come to a total value of only Rs. 425 crores as against Rs. 491 crores in the corresponding period of the last year. Although imports of both industrial raw materials and consumer goods have been brought down drastically under the austere import policy that has been in force during the last one year and, thus, the deficit on trade account has been greatly reduced, exports have not only not increased in value but have actually declined substantially. The year is thus closing with two disappointing trends — the trend of a fall in export earnings and a fall in the imports of crucial industrial raw materials so very necessary for maintaining the level of industrial production in the country. But the only redeeming factor in the situation is the trend of a lower adverse balance of trade.

Banking and Currency

THE year 1958 may well be described as historic in the field of Indian banking. At the end of the year and to be precise, on December 19, deposits of the scheduled banks stood at an all time peak of Rs. 1,573 crores. At the same time, investments in Government securities also reached the peak of Rs. 643 crores. While advances were also at the highest figure they have attained, the margin between deposits and advances was larger than at any time in the last two years. The ratio of advances and bills discounted to deposits has dropped to as low as 54.67 per cent in spite of the fact that we are in the midst of the busy season.

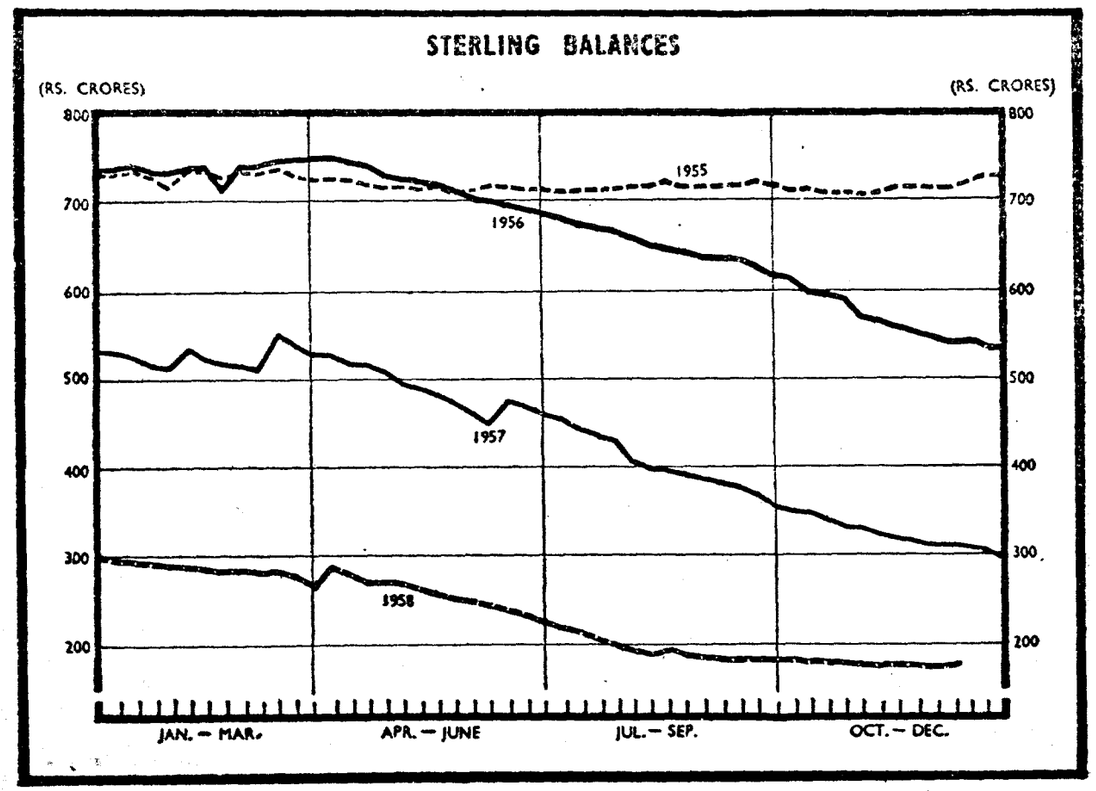
It is obvious that basic changes are under way in regard to the character of India's banking system. For one thing, the rise in deposits is restricted markedly in personal deposits showing that the area of banking is increasing. Undoubtedly, this is partly the result of the new incomes, but it is also in some measure which it is difficult to define, due to an increase in the banking habit. In any case, it is now clear that the banking system impounds a larger percentage of the national income than two years ago. The result is that the loan market is now a valuable source of rupees for the plan and full evidence of this has been available in the over-subscription of Government loans which were higher in 1958 than in any year since the War. The easiness of the money position is likely to continue so long as the foreign exchange crisis restricts imports and so long as deficit financing continues to throw rupees into the economic system. In that sense it might be said that 1959 will continue to be a year of easy money.

While all this is of advantage to the country it has created a problem for the banks. Many of their deposits, particularly the large and increasing fraction of fixed deposits, are obtained with an overall high rate of interest up to nearly 4 per cent. If this money is invested in Government securities the banks are left without any profit. It is now clear that the margin of profit is declining because the opportunity for advances at rates above 6 per cent has fallen markedly in the last six months. Meanwhile, there are the usual excursions and alarums on the renewal of a banking award after the Shastri Award expires in March, 1959. The banks' receipts are, therefore, likely to decline while their costs are likely to rise. It is difficult to say what the immediate effect will be, but some observers consider that 1959 will be a crisis year for the banks on account of the factors mentioned above.

The main features in the monetary field during the year 1958 were a considerably smaller expansion in money supply than in the previous year, a slight reduction in the bank credit compared to a large rise of Rs. 97 crores in the previous year and also a smaller decline in both foreign assets and the extent of deficit financing. Thanks to the comfortable money supply conditions, the remarkable success of Governments' (both Central and State) loan operations and the resumption of sales of Treasury Bills, the year actually ended with more cash balances to the credit of both Central and State Governments than at the end of the previous year. Because of the relatively smaller increase in total money supply—in fact, the smallest for the past six years — and a decline in bank credit, partly due to the selective credit control of the Reserve Bank — since relaxed to a considerable extent — and partly due to the drastic import cuts, the net rise in commodity prices over the year was less than 5 per cent. However, the increase in food prices was quite sharp, the index of prices for food articles having risen from 105.1 (base 1952-53 : 100) to 114.2. From an examination of the index numbers of the prices of the components of the food articles group, it is seen that the sharpest increase was under pulses, while edible oils were the only item which registered a slight decline. Do these conditions mean that inflation has been successfully contained by the action taken by the monetary authorities? This is a rather difficult question to give a straight answer. 'Prima facie', there would appear to be no inflation or, at any rate, not much of it, but, at the same time, it cannot be contended that there is no inflation, call it incipient or concealed. There is an inflation in the form of the counterpart funds, being the sale proceeds of P.L. 480 foodgrains remaining to the credit of the Government with the State Bank of India. It is not possible to say exactly how much this amount is today. But with the P.L. 480 programme continuing, on the one hand, and the operations of the Refinance Corporation having not begun on any extensive scale, on the other, one has constantly to reckon with what we may describe as an element of inherent weakness in the prevailing situation.

Money supplies with the public at the end of November at Rs. 2,319 crores are only Rs. 45 crores higher. The corresponding increase in 1957 and 1956 were Rs. 97 crores and Rs. 132 crores, respectively. Two factors in the main contributed to the slow tempo of increase in money supply in 1958. In the first place, the expansionary effect of deficit financing by Government was very much lower during the year, being only Rs. 207 crores compared to Rs. 478 crores a year ago. It is true that the offsetting contractionist effect of the balance of payments deficit also was at a relatively lower level; according to the figures of the foreign assets with the Reserve Bank, this decline was no more than Rs. 113 crores, as against a sharp fall of Rs. 283 crores in 1957 and of Rs. 205 crores in 1956. The lower decline in 1958 was largely due to the substantial assistance received from foreign countries, on the one hand, and the drastic cut on imports, on the other. As on December 13, 1958, our foreign assets stood at around Rs. 185 crores. The second reason for the slow tempo of increase in money supply was the sharp increase in investments of scheduled banks in government securities. The investment portfolio of the banks rose by Rs. 214 crores to stand at Rs. 647.71 crores as on December 13, 1958 which is nearly four times the increase registered in 1957.

Although the highest figure of money supply during the year under review was Rs. 2,350 crores, i.e. in July 1958, money supply at the end of November at Rs. Rs. 2,319 crores was more or less the same as in January, 1958 at Rs. 2,318 crores. This is probably explained by the delayed onset of the busy season this year due to the cultivators, particularly of cotton, withholding their stocks in the expectation of higher prices and the fear of State trading in foodgrains. Such is clearly reflected in the decline of Rs. 7 crores over the year in the scheduled bank credit; on December 13, 1958, this figure was no more than Rs. 850 crores. In the year 1957, on the other hand, there was a credit expansion of Rs. 80 crores, while, in 1956, the credit expansion was even more at Rs. 178 crores. It is only towards the end of the year that bank credit began to show an increase which, again, is a reversal of the trend noted in the previous year.



Stock Markets

FOR the first time since the Korean War boom, stock markets at all the principal centres experienced a bull phase for the major part of the year during 1958. After a protracted period of sluggishness, the markets began to put on a cheerful note even at the beginning of the current calendar year. With the progress of the year, the market sentiment strengthened gradually and the investors who had been feeling sorry for having invested in equities instead of in precious metals towards the end of 1957 evidently began to revise their opinion during the first quarter of the current calendar year. This change in market sentiment constitutes perhaps the most remarkable feature of 1958.

Share prices, which presented a continuously declining trend in the preceding two years, took a turn for the better during the year under review. Thus, the index of variable dividend industrial securities, which came down by 11 per cent and 16 per cent in the years 1950 and 1957, respectively, went up by about 20 per cent during the first ten months of the current year, thereby making up completely for the losses of 1957 and also for those of 1956 in a considerable measure. Again, during the year itself, the Reserve Bank's all India index of variable dividend industrial securities (1952-53: 100), which touched the low point of 119.7 during the week ended January 4, rose to 144.7 by the week ended September 27, 1958, before it came down again to 139.7 on November 29. The net rise in value since January amounts approximately to 16.7 per cent. As the following table indicating the net change over the year in the values of some of the leading scrips shows, equity values recorded not only spectacular gains in 1958, but also covered the preceding year's losses and even crossed the highest recorded in 1956:

Name	December 24, 1958	A year ago
Tata Steel	173.00(z.r)	160.50(c.r)
Indian Iron	25.30	18.56
Bombay Dyeing	55.40	49.80
Century	416.50(x.r)	382.00(c.r)
Swadeshi	204.00	165.50
Bombay Burmah	476.50(x.r)	520.00(c.r)
National Rayon	233.25(x.r)	211.25(c.r)
Scindia	21.04	17.08
Telco	156.00(x.r)	137.25(c.r)

The same feature is also observed from the table showing the trend of variable dividend securities which moved as under:

	December 13, 1958	A year ago
All India	138.2	123
Bombay	140.0	122
Calcutta	136.	119.6
Madras	149.8	142.5

It is thus abundantly clear that there was a complete reversal of the trend in the behaviour of the market during the year under review. In striking contrast to the bearish psychology that prevailed in the preceding years, there was in evidence, during 1958, a strong bullish fervour.

Viewed against the background of both the official policies and the prevailing economic conditions in the country, the 1958 recovery seems somewhat paradoxical. A formidable array of bearish factors haunted—and still continues to haunt—the investor. The Socialistic Pattern of Society is still the accepted goal of the Government. The 1956 Industrial Policy Resolution has continued to dictate the demarcation between the public and the private sectors and, what is more, there has been no sign of any change in the so-called policy of integrated tax-structure introduced by the former Finance Minister, Mr. T. T. Krishnamachari. Apart from the dogmatic adherence of the powers-that-be to such policies, the economy was also subjected during the year, to severe stresses and strains in the form of shortage of consumer goods and paucity of foreign exchange resources. Furthermore, the trend of industrial profits and the pattern of yields were none-too encouraging. On the top of it all, there were labour troubles at Jamshedpur and Burnpur and drastic import restrictions, not to speak of the highly uncertain international political situation. In short, when the economy was virtually in a straitjacket, our markets started to boom and have been booming, which bewilders the best of analysts and makes one wonder whether the markets really serve as the barometer of the economy as they are supposed to.

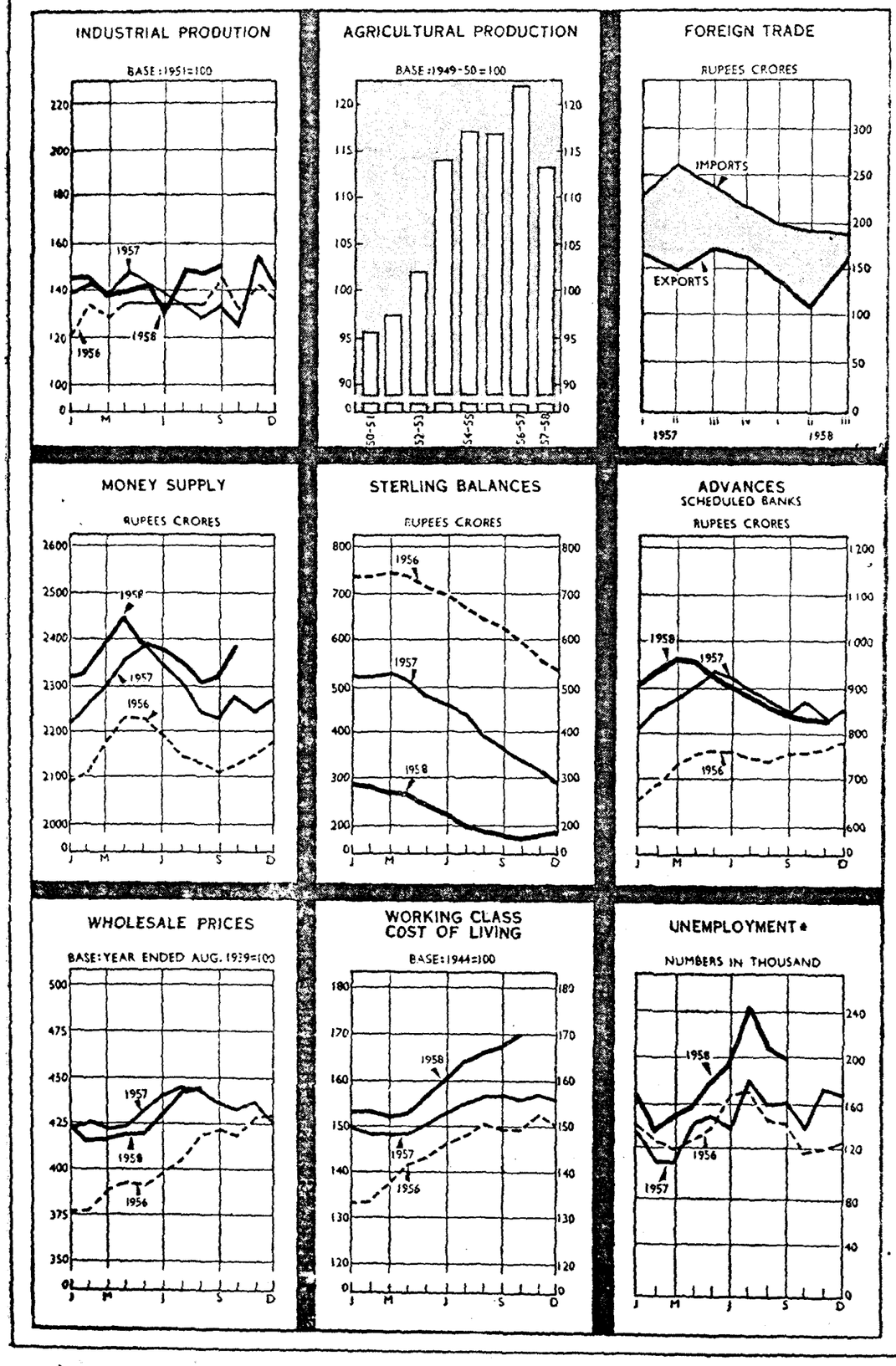
But it is difficult to brush aside all the gains as merely speculative, although there was undoubtedly a powerful speculative element in this recovery, as is always the case during recovery phases. However, there were also unmistakable evidences of a change in sentiment. And coupled with this psychological factor was the pressure of idle money seeking investment. Those two factors, in fact, helped sustain the bullish fervour in the markets.

L.I.C. INVESTMENT POLICY

Up to the end of the third quarter of the year, the markets continued to remain more or less bullish thus. But, later, probably something in the nature of a corrective phase set in. Operators who evidently found they had taken the prices to somewhat unrealistic levels began to pause and ponder. The study of the Reserve Bank of India in respect of the assets of joint-stocks companies, which showed a disquieting picture of the trend of profits, apparently tempered their optimism with caution.

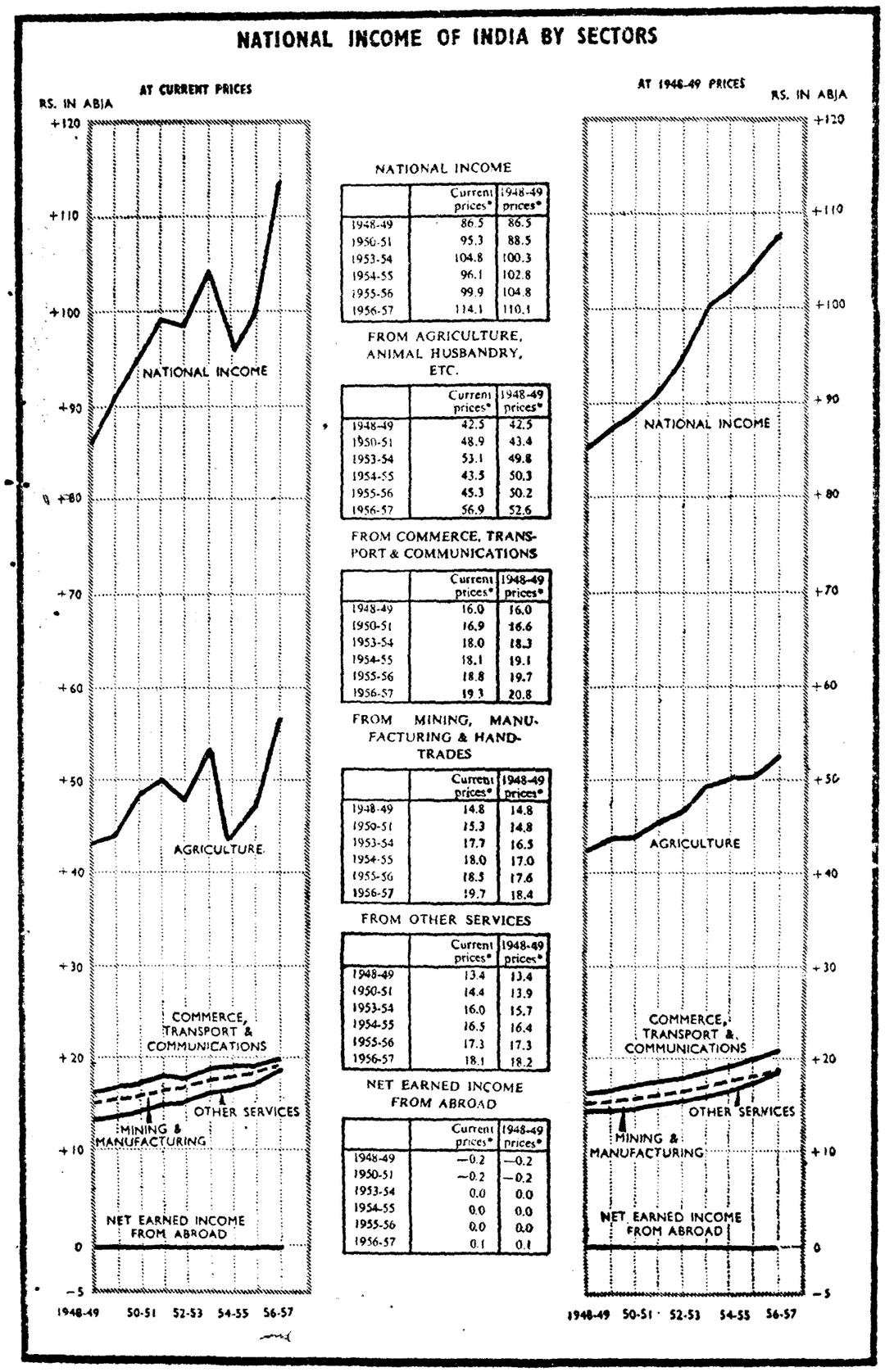
A factor that contributed to the reversal of the upward trend was the announcement of the investment policy of the Life Insurance Corporation according to which the L.I.C. is to invest in any one concern to the extent of 30 per cent of its issued ordinary capital. This led to a sense of concern among a section of the market which feared that this move would lead to backdoor nationalisation. The Reserve Bank's directive suggesting the scheduled banks to be cautious whilst advancing money against shares, also dampened investors' enthusiasm considerably. but the most severe blow came towards the fag-end of the year, in the form of the publication of the Congress Working Committee's six-point programme of austerity. In the wake of this the markets witnessed an avalanche of selling, more or less reminiscent of the reaction to Mr. T. T. Krishnamachari's budget proposals. Nearly all equities slumped heavily, and, but for the support lent by the L.I.C., they would perhaps have touched even lower levels. Thus, the market looked pretty exhausted and difficult as the year drew to a close. While a few factors, such as brighter prospects of foreign aid, better harvests and easy money conditions, suggest that the equities may resume their uptrend, other equally powerful bearish factors, such as the uncertainty regarding the decision of the A.-I.C.C. on their the six-point programme, have been exerting a distinctly downward pull. The outlook, therefore, for the immediate future, at any rate till the forthcoming budget, is far from predictable.

ECONOMIC INDICATORS



* Registered with Employment Exchanges.

NATIONAL INCOME OF INDIA BY SECTORS



NATIONAL INCOME

	Current prices*	1948-49 prices*
1948-49	86.5	86.5
1950-51	95.3	88.5
1953-54	104.8	100.3
1954-55	96.1	102.8
1955-56	99.9	104.8
1956-57	114.1	110.1

FROM AGRICULTURE, ANIMAL HUSBANDRY, ETC.

	Current prices*	1948-49 prices*
1948-49	42.5	42.5
1950-51	48.9	43.4
1953-54	53.1	49.8
1954-55	43.5	50.3
1955-56	45.3	50.2
1956-57	56.9	52.6

FROM COMMERCE, TRANSPORT & COMMUNICATIONS

	Current prices*	1948-49 prices*
1948-49	16.0	16.0
1950-51	16.9	16.6
1953-54	18.0	18.3
1954-55	18.1	19.1
1955-56	18.8	19.7
1956-57	19.3	20.8

FROM MINING, MANUFACTURING & HANDTRADES

	Current prices*	1948-49 prices*
1948-49	14.8	14.8
1950-51	15.3	14.8
1953-54	17.7	16.5
1954-55	18.0	17.0
1955-56	18.5	17.6
1956-57	19.7	18.4

FROM OTHER SERVICES

	Current prices*	1948-49 prices*
1948-49	13.4	13.4
1950-51	14.4	13.9
1953-54	16.0	15.7
1954-55	16.5	16.4
1955-56	17.3	17.3
1956-57	18.1	18.2

NET EARNED INCOME FROM ABROAD

	Current prices*	1948-49 prices*
1948-49	−0.2	−0.2
1950-51	−0.2	−0.2
1953-54	0.0	0.0
1954-55	0.0	0.0
1955-56	0.0	0.0
1956-57	0.1	0.1

AGRICULTURAL PRODUCTION

Estimated Area and Yield of Principal Crops

(Crop years ending June unless otherwise stated)

Crops	1952-53		1953-54		1954-55		1955-56		1956-57		1957-58	
	Area ('000 Acres)	Production ('000 Tons)	Area ('000 Acres)	Production ('000 Tons)	Area ('000 Acres)	Production ('000 Tons)	Area ('000 Acres)	Production ('000 Tons)	Area ('000 Acres)	Production ('000 Tons)	Area ('000 Acres)	Production ('000 Tons)
Rice (1)	74,056	22,537	77,313	27,769	76,020	24,821	77,891	27,122	79,320	28,282	79,027	24,821
Jowar	43,340	7,243	43,882	7,954	43,155	9,056	42,903	6,619	40,367	7,249	41,411	8,056
Bajra	26,613	3,142	30,145	4,475	28,087	3,463	28,018	3,374	27,884	2,885	27,453	3,565
Maize	8,903	2,825	9,561	2,991	9,265	2,928	9,132	2,561	9,197	3,009	9,762	3,064
Ragi	5,542	1,316	5,767	1,846	5,678	1,627	5,701	1,817	5,831	1,715	5,897	1,716
Small Millets	12,464	1,895	14,028	2,438	13,912	2,455	13,184	2,037	12,230	1,964	11,979	1,759
Wheat	24,286	7,382	26,394	7,890	27,822	8,900	30,559	8,622	33,580	4,314	29,657	7,654
Barley	8,021	2,882	8,719	2,905	8,437	2,933	8,447	2,771	8,726	2,827	7,531	2,175
Total Cereals	**203,230**	**49,222**	**215,814**	**58,268**	**212,376**	**56,813**	**215,835**	**54,923**	**217,135**	**57,245**	**212,717**	**52,810**
Gram	17,930	4,142	19,689	4,756	22,852	5,532	24,166	5,332	24,265	6,264	22,405	4,754
Tur	5,930	1,675	5,942	1,834	5,940	1,692	5,650	1,832	5,686	1,954	5,598	1,396
Other pulses	25,179	3,227	28,064	3,860	25,359	3,553	27,552	3,707	28,264	3,285	26,652	3,060
Total Food grains	**252,269**	**58,266**	**269,509**	**68,718**	**266,527**	**66,960**	**273,203**	**65,794**	**275,350**	**68,748**	**267,372**	**62,026**
Potatoes	629	1,961	635	1,925	658	1,736	691	1,830	702	1,674	—	—
Sugarcane (2)	4,272	50,190	3,485	43,709	3,999	57,811	4,564	59,587	5,057	66,998	5,021	63,954
Black Pepper	202	22	208	24	212	26	220	28	221	27	229	26
Chillies (Dry)	1,235	283	1,336	303	1,582	381	1,493	355	1,476	342	1,534	355
Ginger (Dry)	46	14	33	14	37	14	41	16	39	15	39	14
Tobacco	96	241	912	268	856	251	1,013	298	1,022	306	—	—
Groundnut (3)	11,848	2,883	10,495	3,391	13,693	4,178	12,685	3,801	13,450	4,200	14,457	4,271
Castor Seed	1,326	102	7,346	103	1,370	122	1,418	123	1,415	124	1,325	97
Sesamum	5,874	464	6,351	554	6,490	593	5,667	460	5,446	442	5,268	363
Rape and Mustard	5,201	844	5,545	858	6,027	1,021	6,316	846	6,311	1,026	6,050	905
Linseed	3,366	366	3,428	379	3,362	384	3,777	413	4,156	384	3,318	271
Cotton (4)	15,713	3,194	17,265	3,944	18,646	4,250	19,981	3,998	19,893	4,735	20,158	4,753
Jute (5)	1,813	4,592	1,229	3,091	1,243	2,929	1,739	4,198	1,908	4,288	1,754	4,088
Mesta (5)	484	682	463	650	438	901	571	1,153	733	1,478	726	1,241
Tea (6)	778	675	776	589	779	646	781	637	782	668	—	—
Coffee (6)	228	49	230	57	229	59	240	68	—	—	—	—
Rubber (6)	149	36	169	45	172	43	174	50	184	49	—	—
Coconut (7)	1,608	4,498	1,638	4,649	1,656	4,614	1,580	4,297	1,582	4,217	—	—

(1) Production of Rice is in terms of cleaned rice.

(2) Production of sugarcane is in terms of cane and not gur.

(3) Production of groundnut is in terms of nuts in shell.

(4) Production of cotton is in terms of lint cotton and in thousand bales of 392 lbs. each.

(5) Production of Jute and Mesta is in terms of dry fibre and in thousand bales of 400 lbs. each.

(6) Production of tea, coffee, and rubber is in million lbs.; figures of tea and rubber relate to calendar years.

(7) Production of coconuts is in million nuts.

Source: Ministry of Food and Agriculture.

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