

Vol. XXII

July—September, 1947

No. 3

250
192

The Indian Geographical Journal

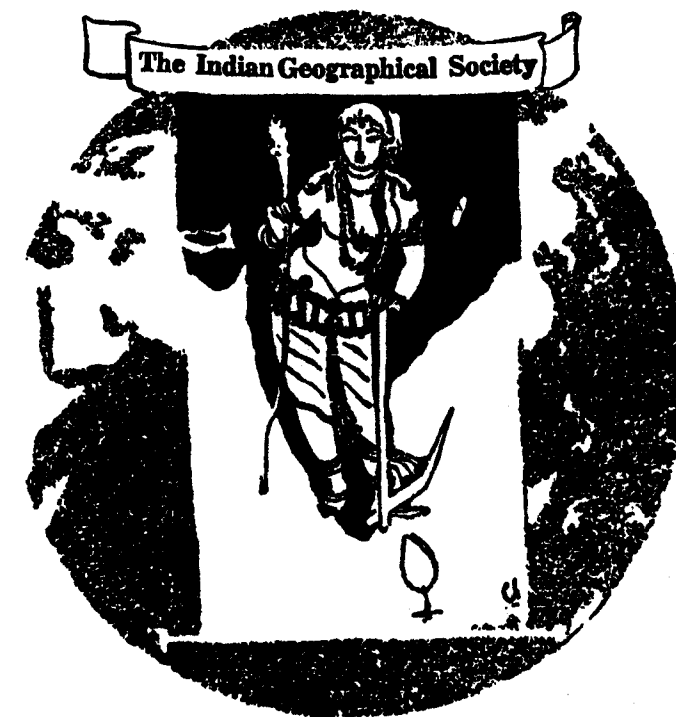
Formerly

THE JOURNAL OF THE MADRAS GEOGRAPHICAL ASSOCIATION

PUBLISHED QUARTERLY.

Editor

Dr. GEORGE KURIYAN, B.A., B.Sc., Ph.D., (Lond.)



THE INDIAN GEOGRAPHICAL SOCIETY,
Wellclose, Cathedral P.O., Madras, 6.

CONTENTS

	Page
NE. Spur of the Chota Nagpur Plateau (District of Santal Parganas) ...	108
By Miss Winifred M. Day, Aberdeen	
Climatic Provinces of China ...	127
By A. Lu	
Survey and Land use Analysis ...	136
By V. L. S. Prākasa Rao, M.A.	
Geography in the 9th and 10th Centuries A. D. ...	141
By Dr. S. Muzafer Ali, M.A., M.Sc., Ph.D. and S. M. Ziauddin Alavi, M.A.	

Foundations of College Geography

Vol. I: Physical, Economic and Mapwork	Rs. 5 8 0
Vol. II: India	" 4 0 0
Vol. III: Asia (In Press)	

BY

M. NAZIR, B.A., Hons. (Lond.), P.E.S.,
Central Training College, Lahore

AND

V. S. MATHUR, M.A. (Lond.),
Govt. College, Lahore,
Vice-President, Indian Geographical Society.

★

Published by

S. CHAND & CO.,

BOOK-SELLERS

ANARKALI, LAHORE & FOUNTAIN, DELHI.

The Indian Geographical Journal

Formerly

THE JOURNAL OF THE MADRAS GEOGRAPHICAL ASSOCIATION

Vol. XXII

JULY—SEPTEMBER, 1947

No. 3

The Editor takes no responsibility for the views expressed in the Journal. Authors alone are responsible for their respective statements.

The NE. Spur of The Chota Nagpur Plateau (District of Santal Parganas).

BY

Miss WINIFRED M. DAY, ABERDEEN

From the NE. of the Chota Nagpur Plateau, there juts a 1,000 ft. spur which forms the NE. salient of the Indian Plateau. Round this spur the Ganġes bends as it leaves the plains of Bihar, changing its course from eastward to southward, before it throws its distributaries fan-wise over the Delta of Central Bengal. This spur forms the district of the Santal Parganas, a district constituted in 1852 after the rebellion of the Santal aborigines against the oppression of money lenders from the plains. As a result of the rebellion, the boundaries of the district were drawn with unusual care and in connection with this an inner boundary line, was laid down the Damin-i-koh (or Damin), which marks off areas of tribal settlement and tribal usage from those characteristic of the plains on either side. It follows that these boundaries, particularly the Damin, when drawn, expressed the habitat of the aborigines, Santals and others, with unusual exactitude, and further that they are still of real geographical value. While the district boundary goes a little beyond the Damin, it does so for obvious reasons of convenience, utilising the Ganġes as its NE. limit. The narrow river plain, however, adds to the interest of the district and its existence must be remembered in connection with the life of the peoples on the highlands above it. A 'parġana,' it may be added

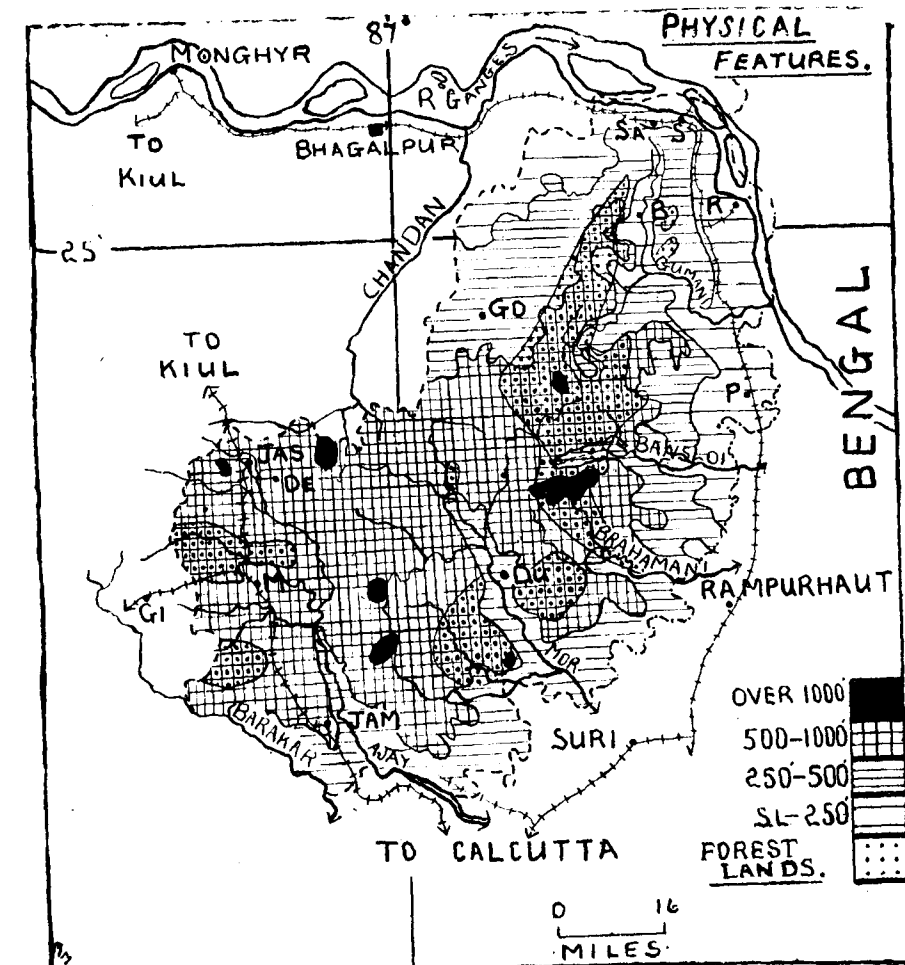
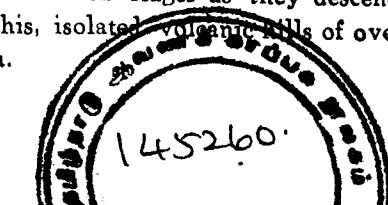
JL
Um2, N26G15.
N47.22.3-
145 260.

is a small Moghul fiscal unit, of which a score or more were required to equal the area of a modern district.

In spite of the highland or upland character which it possesses throughout, the region is one of great diversity,—in physical features, in climate and weather, in vegetation and land utilisation and consequently, in the distribution of population and its landed and racial types. The district extends over 5,500 sq. miles and is thus almost as large as the three English counties of Cornwall, Devon, and Somerset. Almost 100 miles in length from North to South, it measures at its widest nearly the same from West to East. The divisions of the district are threefold:—(1) To NE. are the Rajmahal Hills, ridges rising 1,000 ft. above the plain and 500 ft. above the surrounding plateau. They are composed of volcanic rocks, while most of the rest of the district consists of Bengal gneiss. The Rajmahal Hills are mostly covered by wood or scrub and are inhabited by hill tribes of small and backward folk, the Paharias. (2) The plateau slopes a little to SW. of (1), mostly cleared for agriculture and of relative fertility, are populated by primitive but hardy Santal tribesfolk and also by Bihari peasants. (3) The low plains around the spur and in the bottoms of the open basins near its border form the best agricultural lands and are thickly populated by Hindu and Muslim Biharis and Bengalis and by migratory Santals. The district is, however, one of unity in a sense. This is probably emphasised best by the railways which skirt it to the North and East along the Great Plain, and by the Ajay and the Barakar, which form the southern and south western borders, respectively.

The Physical Basis

Two main ridges run NNE. to the elbow of the Ganges. Of these the more westerly forms a continuous watershed which, 60 miles from the Ganges, swings westward to form the crest of the scarp overlooking the plain of Bihar. The easterly ridge, though it rises to greater heights than the other, is broken through by three rivers fed by tributaries which drain the intervening hollow which is roughly parallel to the chief ridges. These rivers are the Gumani, the Bansloi and the Mor, and to these might be added a fourth, the Ajay, though its basin heralds by its increasing size the major interior basins of the Indian plateau, of which the Damodar with its coal deposits is the most important in NE India. The Rajmahal Hills cease to form two well-marked ridges as they descend to the River Mor. South and SW. of this, isolated volcanic hills of over 1500 ft. rise above the 500-600 ft. plateau.



B—Borio; De—Deoghar; Du—Dumka; Gi—Giridih; Go—Godda; Jam—Jamtara; Jos—Jasidih; M—Madhupur; P—P Kauri; R. Raj Mahal; Sa—Saheb Jung; S—Sakrigali.

I. *Hills*: The Rajmahal Hills run NNE.-SSW. from the Ganges elbow to the Mor. They consist of a succession of hills, plateaus, valleys and ravines, the general elevation of which varies from 500 to 800 ft. above sea level, though some hills rise to over 1000 ft. and others to 1650. The hills are developed on basaltic traps while erosion of the softer sedimentary shales and sandstones has formed valleys.¹

In the North and NE. the wooded ridges overlook the Ganges; leaving a very narrow passage, enclosed within the elbow of the river. Along this moved the Mogul Armies and now it is used by the original loop rail-

¹ There is no modern Geological Memoir for the district. The Index of Records of G. S. I. has still to be consulted.

JL
UM2, 11268E N47.22.3

way line from Calcutta (1859). The main plateau, of which these hills form and NE. spur, and above which they rise, slopes very gently to the NW. and the SE.

II. *Plain.* At the elbow of the Ganges the plain is reduced to a mere river terrace 1 mile wide, which widens southwards and westwards as a low bench of Old Alluvium bordered by the New Alluvium of the Ganges plain and its marginal fans. The Old Alluvium terrian is highly dissected into *nallaks* or ravines, contrasting with the monotonous lake covered New Alluvium tracts.

III. *Plateau.* The general Plateau surface consists of rolling country, particularly in the West and SW. of the district. Long low ridges, with their intervening depressions, often rocky, and generally jungle covered, form the chief features of the physical landscape.

River Systems

The general slope of the country is from NW. to SE. (except in the small alluvial tract lying North of the Rajmahal Hills, where the land slopes to the NW. and sends its drainage to the Ganges)

In the SW. the SE. flowing Ajay and Mor with their numerous tributaries carry the drainage of the eastern half of the district south of the Bansloi into the Bhagirathi-Hooghly, a distributary of the Ganges further SE.

The streams which rise within the Rajmahal Hills follow the same general direction NW.—SE. and issuing through the passes in the hills, join the Ganges after it has made its curve southward. The chief of these—the Gumani, with its northern tributary, the Morel—forms a great longitudinal valley in the hills and by its turn eastward it enters the Plain. The human significance of this valley will be discussed later. All these hill streams have well-defined channels and high banks. In the rains they come down in flood and become rapid torrents—unfordable due to the velocity of the stream. In the hot weather they are reduced to a thin thread of water, not more than 2ft. deep trickling through the sand.

The Ganges: The Ganges forms the northern boundary of the district a few miles west of Talghari and its eastern boundary for some miles from Sakrigali, where it bends SE. The average width is about 3 miles, but it does not fill its channel in hot weather; and almost invariably overflows it in the rains. The changes in portions of its course and their effects on the land utilization will be dealt with later.

Climate.

Owing to its position on the borders of Bengal, Bihar and the Plateau of Chota Nagpur, the Santal Parganas partakes in some measure of the climatic characteristics of the three areas. The three seasons of: (1) hot and dry season (March to June), (2) hot and wet, or rainy season, June—October, (3) cool and dry (which is, dry relatively to eastern Bengal) or "cold weather", November—February, are modified according to the relative positions of the places. The *alluvial strip* of country in the East of the district has a damp heat throughout the year, which is characteristic of Bengal, while the air of the *hilly undulating portions* of the district from Deoghar on the west to the Rajmahal Hills on the NE. is less humid, save in the rains, and the tract is swept by the winds of the Chota Nagpur plateau. In the *undulating country* the hot westerly winds of April raise temperatures with very low humidity—the thermometer has reached 120°F in the shade. The cold weather temperatures, on the other hand, drop considerably, although the general range in temperature is not great. At Dumka—the headquarters—the cold weather mean temperature is 64°F. and the mean minimum 51°F. Night temperatures often fall below freezing and water is found with a thin crust of ice.

Temperatures increase steadily after February, registering the highest in late April or May. With the occurrence of thunder, cyclonic showers fall. These often termed the 'Little Rains,' or *Chota Bursat*, precede the burst of the monsoon proper, and the mean summer temperatures decrease slightly, with March 91°, April 100° but May 98°. The humidity in the hot months before the break of the monsoons is low—49 p.c. of saturation in March, 52 p.c. in April. Though rainfall does not exceed 1 inch in March and April it increases to 3.6. in. in May, due to cyclonic storms, then rises during the rains in June (10") and July (with 14 in. the maximum). There is a secondary maximum in August (13.4 in.), decreasing after this to 10 in. in September, while October is mainly fair with brief periods of cyclonic rain in the western parts of the district. Average annual rainfall is 54 in. for Dumka, which is 500 ft. above sea level.

Agriculture.

The Santal Parganas is essentially a rural district with no town having a population over 17,000. Over one-quarter of the area (28 p.c.) is forest and jungle, one-quarter is classed as cultivable waste, and rather less than half (47 p.c.) is cultivated. The three main crops are rice, maize, and millets, with smaller amounts of sugar cane, cotton, wheat and mustard.

In the cultivated area they may have one, two (or even three) crops a year, according to (a) type of land, and (b) to conditions of irrigation and drainage.

The crops are classified, according to the time of year when harvested, rather than according to the time of sowing.

The *aghani* winter harvested (or 'winter') crops form the main-stay and are sown with the burst of the monsoon in June—July and harvested in March, when the April—May showers commence.

Immediately following this harvest the *Bhadoi* or autumn crops are sown using the cyclonic showers to soften the earth. These are reaped in September.

Rice is grown on about half the cultivated area of the whole district. After rice, maize is the most important crop sown by the Santals after reclamation of forest or waste slopes, but before they are levelled or 'terraced' for rice.

The land available for cultivation naturally differs according to:—

(a) the surface features of the ground (b) the water available, and (c) the soils.

Two main divisions are prevalent:—(1) the *dhani*—or lowlying moist land utilized for rice growing in particular; (2) the *bari* (homestead)—on upland or land at higher levels—where irrigation is essential, and where crops requiring less moist conditions than rice are grown.

The best or 'first-class', *dhani* lands lie in the north and eastern parts of the district, along the alluvial Gangetic plain, and in the valley bottoms of rivers crossing the plateau. In addition, hollows in the plateau surface, where the summer rain collects, and tracts near the foot of the hills where springs emerge, are converted into floodable land by conserving the water behind low embankments. Although best suited for *aghani* rice, yet, once the water has drained off, *rabi* crops such as maize, linseed, lentils, and pulses and millet are successfully grown.

Fields on low undulations and on the lower natural alluvial terraces along the sides of valleys can be classed as 'second class' *dhani* land. The moisture here depends mostly on percolation of rain from the higher, often

2. $\frac{3}{5}$ of the total cropped area of the district is used for *aghani* crops and less than $\frac{1}{5}$ each *bhadoi* and *rabi* crops.

artificially terraced slopes. The relative value of these fields differs to a great extent; but on the whole they form poor rice land, and should the rains fail and irrigation from a temporary barrage, or *bandh*, be impossible, they have to be left unsown. Should an adequate amount be available, autumn or winter rice is usually grown, and occasionally a second crop of wheat, linseed or lentils is possible in winter. The fields on the highest slopes of the valley, on the otherhand, are entirely dependent on the rainfall retained by small ridges along the edge of the fields. On these autumn rice is the only crop.

The *bari* lands, that is, the cultivated surface of the plateau, or lower slopes of hills, as distinct from the valleys, usually have a gravelly soil or a stiff clay on a hard sub-soil and are not easy to cultivate. Irrigation is necessary, particularly in areas where erosion has been rapid and the waste newly claimed, as in the eastern parts of the Deoġhar Sub-division.

Where tanks are numerous, as in the southern part of that sub-division, the fertility of the land is reflected in the size and nature of the settlements.

However, the *bari* lands differ in fertility. Immediately around a village is the *khas-bari*, artificially manured and in addition receiving all kinds of refuse from the village. Easily accessible, each holding is carefully tilled and fields yield valuable crops as maize, mustard, tobacco, castor oil plants and vegetables for home use, or for sale in the nearby market. The extensive cultivation of these fields is particularly noticeable around such centres of population as Deoġhar, Dumka, Madhupur and Jamtara; while a different aspect of intensive cultivation can be seen in the flower gardens aligning the railway between Madhupur and Mihijam, from where daily supplies are sent to the Calcutta Market. In contrast to the *khas-bari* land is that *dangal-bari*, further from the homestead and inferior. This is cropped only once a year for millets or lentils, or a poor variety of cotton, grown as *aghani* crops.

A plateau village may include all the different types of land mentioned: the fields immediately round the village or homestead, those further away on the dry plateau surface, and the wet rice lands in the valleys of near-by streams. As a result the seasonal rhythm of agricultural labour is complicated.

The agriculturalist's year may be taken to commence in March when the ploughings are fitted in, immediately following early showers of rain expected at this time. *Bhadoi* crops of rice sown on poorer *dhani* land; and maize-sown *bari* land are planted by April.

At the same time rice is sown in seed beds for transplantation after flooding by the first downpour of the monsoons in June. This main *aghani* crop, chiefly of rice, occupies 56 p.c. of the total area cropped. From June during the rains until September—October weeding the maize, and transplanting *aghani* rice (June—July) occupies the cultivator.

By September - October the *bhadoi* crops of rice and maize and other crops of *danḡal-bari* are ready to be harvested. Ploughing of *rabi* cropland—first-and second-class *dhani* land for rice, and part of the *danḡal bari* for spring-harvested crops such as pulses, takes place during late September and in October. Crops are sown by the end of October to be harvested in March and April. November and December are very busy harvesting times and the large *aghani* crop is brought in.

The busiest times of the cultivator's year are at the rice transplanting and rice harvesting seasons. The months of March and April, when ploughing takes place only after showers of rain, are the times in which the social functions of the year such as marriages take place. The months December-February are also times of marriage and of *pūja*, or sacrifice, following the *aghani* harvest.

Rajmahal Hill Tracks:—Conditions in the hill tracks differ considerably. The Sauria and Mal Paharias are poor cultivators, unlike both the industrious Santal agriculturalist of the Plateau and the intermediate plains and the Dikku cultivators, i.e., Hindus and Muslims of the plateau and the Ganḡes plain. The plough is rare in these hills and some shifting cultivation moves along their sides, since the steep slopes of the hills with their thin, stony soils are difficult for cultivation. The plateau tops and the miniature table lands among the hills, provide space for *bari* cultivation; while valley bottoms provide *dhani* or rice lands. The Paharia, however, also utilises the hill sides intermittently, allowing these to lapse to jungle when fertility is exhausted, and returning some years later to burn the jungle and cultivate afresh. The system known in NE. India as *jhum* is known as *kuroi* here. Sabai grass is grown on these hill sides as a cash crop and sold for the purpose of paper making. On other patches of the hill sides a variety of seeds is dribbled in with a pointed digging stick and these produce different plants of which the larger protect the smaller.

The Paharia peasant's year differs from the typical round of the cultivator on the plateau to the south. By cultivation of the land surround-

* 3 See Fig. 1
* 4 See Fig. 2

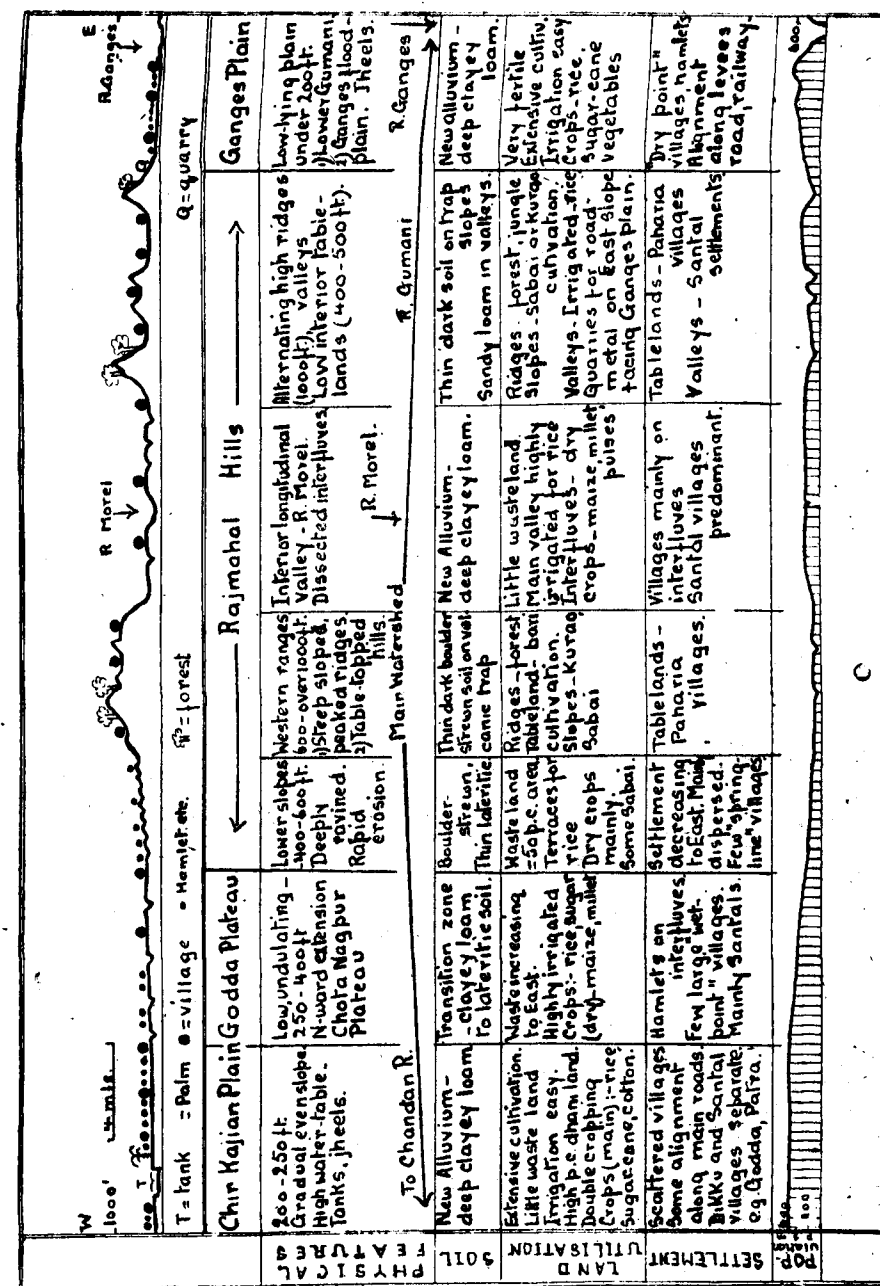


FIG. 1. Diagram to show certain aspects of district across Rajmahal Hills.

ing his home-stead, or *bari*, he receives two crops a year. The first crop planted with the first monsoon rains in June, is reaped in October; while the second crop is planted by November and harvested the following

March. The cultivation of *sabai* grass is more exacting in labour and time than the cultivation of the *bari*. This grass requires carefully cleared land for its first sowing; and careful weeding during the early growth in the summer. It is cut in the winter months. *Dhani* cultivation at lower levels occupies the intervals between *sabai* weeding.

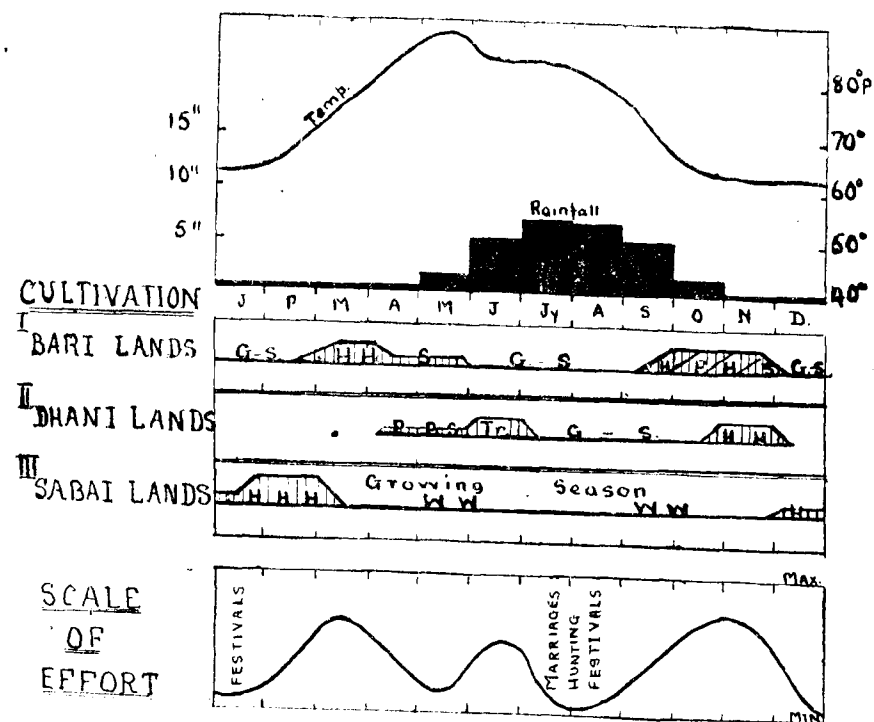


FIG. 2. Graph showing seasonal rhythm of agricultural labour for Paharias of Rajmahal Hills.
 (P—ploughing; S—sowing; G-S—growing season; W—weeding; Tr.—transplanting; H—harvest, Temp. and rainf. for Borio)

The economy of the Sauria Paharias of the Rajmahal Hills, like their methods of cultivation, differs from that of the Santals and other cultivators. The Paharias cultivate only small quantities of rice and other crops, such as millet, maize and vegetables for their own consumption. To a great extent in the past they have depended on profits from the sale of *sabai*. First planted in these hills in the late nineteenth century, it was a crop of great commercial importance till 1924. Large quantities were sold to the Titagarh paper mills by Hindu merchants who purchased the crop. Unfortunately, because of the middleman's profits, the hill tribes received little benefit until the Government intervened on their behalf and supervised the payments. The area under *sabai* decreased with the use of other raw materials for the manufacture of paper; but during the recent World War *sabai* was once again in demand.

For the Santals and non-tribal cultivators *aghani* and *rabi* paddy form the most important cash crop, whereas the *bhadoi* crop is kept for home consumption. Cotton, cultivated mainly in the Dumka and Deoghar subdivisions, is also sold, mainly for the production of coarse homespun cloth, used chiefly by the Santals.

Both tribes have depended on the clearing of wooded land for cultivation, though for some years this has been permitted only outside the Government forest preserves. The Paharias clear the land systematically and, unlike the Santals, value the timber from 'the second growth' on their *kurao* lands. As agriculturalists, however, the Santals are superior, though they still have much to learn in the use of better implements and soil conservation. The open, sloping land on which they have settled was untterraced prior to their occupation and there is no doubt that terracing has proved one of the best methods of cultivating these lands where erosion is rapid and parts of which are above the limits where irrigation can be practised successfully.

Agriculture in the district as a whole, then, is practised by three main, and differing types, of people, varying in progress as cultivators. The Paharia methods are the most primitive and, but for the return from the *sabai*, would find it very difficult to live on their crops, even though their diet is supplemented by game from the forest. The Santals, of recent years, seem to have settled down as permanent cultivators, but they find it necessary to earn more money than what they can from the sale of crops, and do so by migrating as seasonal labourers to other districts and provinces. The standard of living of the non-tribal peasants is not much higher, for, in general, the out-turn from the plateau fields is only sufficient to keep them from poverty. It is only in the valleys and on the alluvial plains in the north and east of the district that the return per acre can be considered really profitable, and even there the density of population, with the resulting small size of holding creates difficulties in feeding the vast population.

Land Tenure.

Land tenure has made its mark on the general material condition of the people. It is notable that the general standard of living has risen greatly in the twenty-year period 1911 to 1931, and also to some extent from the beginning of the century, and this rise is partly ascribed to improvements in land tenure. The chief tenures may be distinguished and an attempt made to estimate their value to the respective types of ryots and cultivators. They are those of: (1) the Sauria Paharia reserve, and (2) the Santal reserve,

both within the boundary known as the Damin-i-koh; (3) the zamindari or estate tenures, and (4) the minor zamindari tenures. The Sauria Paharias since 1914-16 pay a small nominal rent which is collected by the headman of each village. The Santal rents are low also, and are collected by the village headman in the Damin-i-koh reserve area.

Zamindari Estates are those in which the rents are collected by the landlord or zamindar of the estate and a fixed amount of revenue is paid by him to the Government.

The *Ghatwali* or minor zamindari estates are similar, save that Government has authority to depose the zamindar if this is deemed necessary and reappoint another. The duties required of them are laid down in return for the privilege of collecting rents. (*Ghatwals* were originally responsible for the policing of the Ghats or passes of the district.)

The advantages of the reserve tenure to the ryots are obvious, for rents or land taxes are low and the uncontrolled profits of the hereditary rent-collector or zamindar are eliminated.

The extent of reserve land, is, however, limited and Santals have in certain areas, for instance in the Godda subdivision, moved on to the plateau areas outside the limits of the reserve. Here they are subject to *zam* or *indari ghatwali* rental system; and soon find the difference considerable. However as each ryot is aware of the value of his land as periodically assessed by Government 'Settlement' surveys, which take place at regular intervals, he can gauge the fairness, or otherwise, of the rents collected.

Health: Disease.

Although the tenure conditions are in favour of the Santals (and Paharias), it is the physical condition of these two peoples which counts most towards their general material condition.

The Santals are a hardy race, and though they are apt to fall an easy prey to certain kinds of epidemic and respiratory diseases, they recuperate very quickly. The Paharias, on the other hand, are less hardy and more liable to the fevers typical of hill jungle.

Malaria is responsible for more deaths than any other disease in the district, and even in cases where death does not result, a general lowering of vitality is apparent. The conditions on the whole are worst in the low-lying areas bordering the Ganges and in the Damin-i-koh of Godda and

Pakaur. Malaria in general is most prevalent in those parts where drainage is defective, so that the water remains stagnant in holes and depressions during the rain. The number of tanks and of low lying swamp—ponds and *jhills*, is highest in the low Pakaur—Rajmahal plain, and in North Godda where clayey soil conditions make the retention of water possible.

Eruptive fevers, such as small pox, chickenpox, measles are endemic. These often break out just before the rains in the hot, dry season when water conditions are often not very sanitary.

Cholera is apt to break out in areas where population density is greatest; and particularly in towns, such as Deoghhar, where pilgrims are most frequent. This is characteristic in seasons of water scarcity from March to May. *Plague*, though not frequent in occurrence, is also generally connected with the larger villages and towns. Fluctuations in the population of Sahibganj reflect the plagues of 1901 and 1921.

Smallpox is never widespread. Cases break out throughout the year, though the deaths now are not numerous.

Influenza is responsible for a certain number of deaths during the winter. The aged and the children—being underfed and scantily clothed—are most susceptible. Respiratory diseases to some extent affect the town dweller, particularly in Deoghhar.

Skin diseases, including leprosy, occur, though the average for the Santal Parganas is very low in comparison with the other districts of Bihar and Orissa.

Santal Parganas	= 76 per 100,000
Of neighbouring Manbhum	= 187 per 100,000

The higher standard of living, the opening of hospitals by Governments and Missions, where medical aid and advice is procurable free or at a very nominal sum, are responsible for a lowering of the death rate due to these diseases. The people's fear of medical institutes is gradually being overcome. Thus *vaccination* is a precaution which since the beginning of the century has widely spread and is responsible for the lowering of the number of smallpox cases.

The enumeration of diseases to which the inhabitants are liable would give the impression of high mortality figures. In general, however, figures expressing mortality due to disease are not high in the last census.

(1931). The general conditions of health are greatly improved from previous figures. Cholera and smallpox are not responsible for such large numbers and malaria is gradually being overcome.

The population figures for 1941 should reflect this change for the better in the general health of the district.

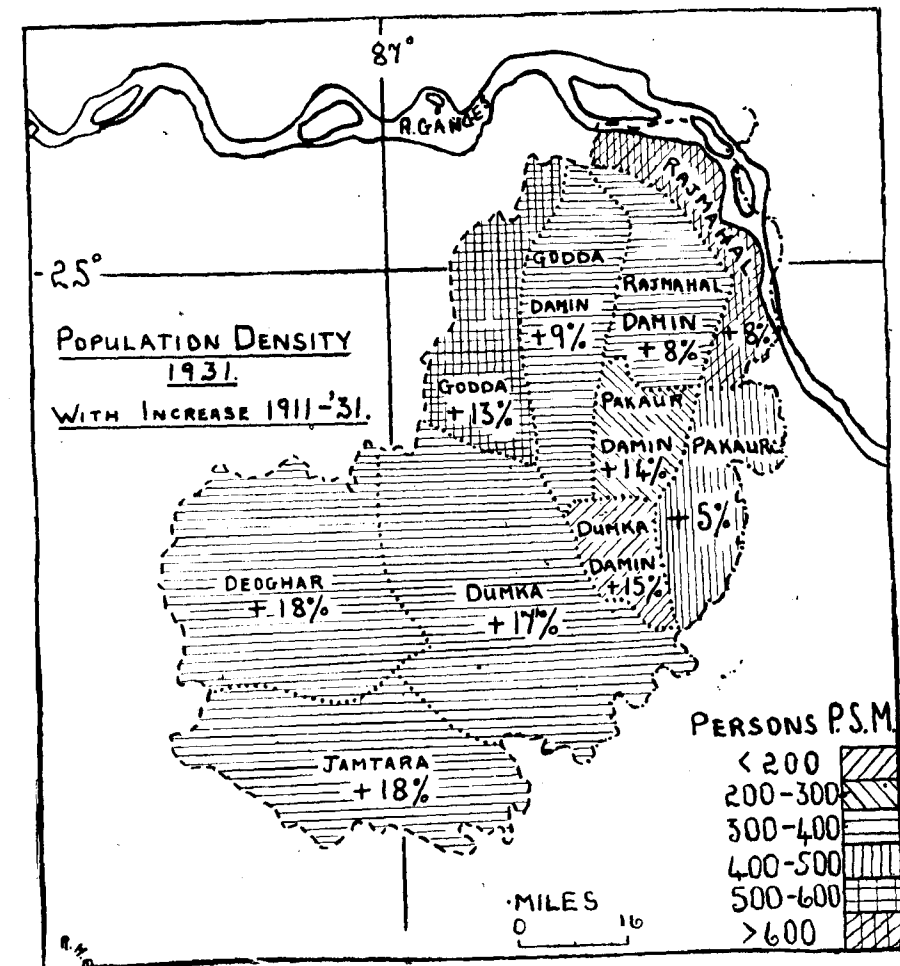
Population.

Situated in the north east salient of the Chota Nagpur Plateau with narrow tracts of the Ganget plain within its borders, the Santal Paraganas can be compared with districts of Bihar which lie wholly on the plateau, and with those of the plain. The distribution and density of its population show characteristics common to both types of country, though it is predominantly a plateau area.

The Santal Paraganas is the only district of Chota Nagpur which can boast of more than two million inhabitants. In area it is much smaller than Ranchi or Hazaribagh but a good deal more thickly populated, for it has a mean density of 376 p.s.m. compared with 221 p.s.m. in the former and 216 p.s.m. in the latter. Contrasting it with districts of Northern Bihar on the Ganget plain, the density is low, for Muzafarpur has a mean density of 969 p.s.m. and Darbhanga one of 946 p.s.m.

These relative densities are accounted for by the highly fertile character of the Ganget plain, where, within the Province of Bihar almost all the land is cultivable (80 p.c. in Darbhanga), in comparison with the purely plateau areas where the cultivable land is both less fertile and limited by the area under forest or unsuitable because of the dissected nature of the hill slopes. The most extreme conditions prevail in Hazaribagh where only one third of the land is available; whereas in the Santal Paraganas where, although the *Damin-i-Koh*, consisting largely of hills, forest or jungle, occupies one-quarter of the area, two thirds are available for cultivation. The population densities calculated on the net cultivable area within each district illustrate the concentration of population on such land. In Darbhanga there are 1029 people per square mile, in Ranchi 320; but in the Santal Paraganas 547 persons, showing that there is a distinct difference in fertility in the two plateau regions, and emphasising the importance of the plains tract in the latter.

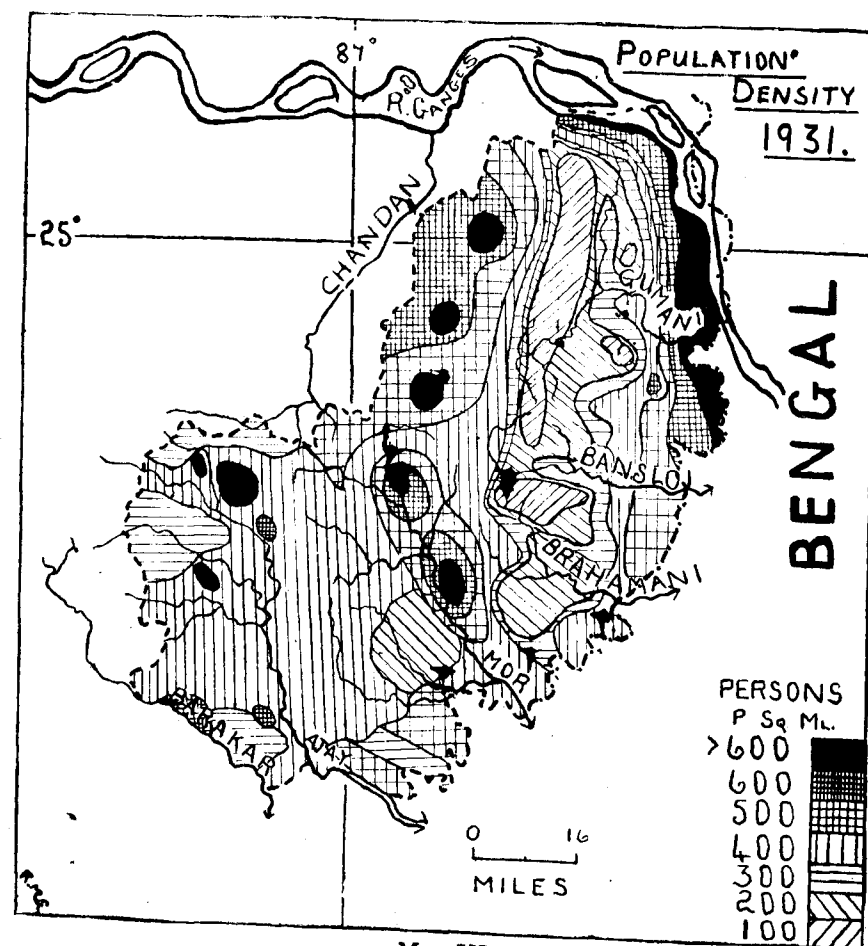
Population densities within the district differ greatly. The cartogram representation of densities recorded for the different administrative units



Map II

(Map 2) does not make this clear. On Map 3 is an attempt to give a more detailed and truer impression, recording the zoning of population in relation to physical features, forested and waste land, and general soil conditions.

Here the highest hills of the *Damin* are given as recording densities of less than 100 to the sq. mile. These are chiefly Paharia settlements on minute table lands in the hills. Densities of 200 p.s.m. are representative of the hill valley settlements and those of lower slopes where Paharias and intruding Santals have settled. The middle longitudinal valley of the Rajmahal Hills is shown by a tongue of the 300-400 density. This seems to be indicated by the numerous villages and scattered habitations of this



Map III

fertile valley. Villages which are large for the *Damin* support this idea of a higher density.

To consider the area of greatest population density recorded by the cartogram map, we must turn to Rajmahal thana, where there is a density of 625 per sq. mile. Godda thana ranks second with 537 and Pakaur third with 455 per sq. mile. The cartogram again fails to record the zoning of settlement, which is inevitable in an area such as the Rajmahal thana, where the physical aspect of the country includes the lower slopes of the hills and soils become more fertile eastwards as the strip near the Ganges, receiving the yearly silt, is reached. Sahibganj, the largest of five towns in the NW. of the sub-division, contains over 15,000 people—which figure in itself detracts from the density of the rest of the thana and has not been included in the average density figure.

THE NE. SPUR OF THE CHOTA NAGPUR PLATEAU 123

The thana of Pakaur may be said to have its highest density along the railway line in connection with which so many of the Bengali speaking inhabitants are dependent for their means of livelihood. Hiranpore—off the railway line—is responsible for an increasing population in connection with the famous provincial cattle market and the very successful hospital which opened after the 1921 census was recorded.

In the thana of Godda close observation brings out a particularly interesting distribution of relative densities. Generally speaking, there is a north to south zoning, increasing westward in density from the hill slopes in the east; and a less obvious, because broader, zoning from the south to north in the west of the thana.

This second broad zoning may be seen to be connected in general terms, with soil differences. Godda, a large market village, is situated on the south-east edge of a very fertile area. It will be observed that the approximate limit of the New Alluvium extends southward to the vicinity of Godda. The thana northwest of Godda seems in other senses, too, to face towards the Ganges plain and to the town of Bhaḡalpur on its banks, rather than southward towards the centre of the Santal Parḡanas. One indication is that the number of Santals tends to lessen and the types of houses tend to change.

Deoghar ranks next in the density of population, having 381 to the sq. mile. The highest density in this thana concentrates around Deoghar, which is a large pilgrim centre and the second largest town in the district. For a radius of 8 miles from Deoghar agriculture becomes intensive in its efforts to support the growing population of the town. In the north the lower density is due to the heavily dissected nature of the country, and in the west, to the presence of forest and jungle.

Dumka thana shows an interesting variety of distribution—according to the details observed and compiled. Densities are highest in the wide valley plain of the Mor River, an area of alluvial soils among the laterite. Dumka, the headquarters of the district and an important market town for the surrounding villages, is near the Mor River and on the direct road to the nearest railway station (39 miles to Rampur Hat in Bengal.) It boasts of a population of almost 10,000. Nunihat is the centre of the northward extension of this agricultural area.

In the south-west, east and north-east of the thana the country is hilly and unattractive for settlement, for cultivated ground is at a minimum—densities are therefore low (200 p. s. m.)

In Jamtara subdivision the zoning appears more complicated. There are not sufficient indications of the concentration of population along the valley of the Ajay to justify a tongue of higher density. The density for the whole plateau area is comparatively high (400 p. s. m.) and a similar density has therefore been recorded for the valley as well. However, the density definitely increases along the Barakar river in the south-west, and in the south-east where coal is mined in small quantities.

The zoning of population treated above is of necessity, broad. Details in soil conditions and of land forms with resulting differences in amount of cultivable and waste land within these zones, will lead to a still further complicated arrangement of settlement and correspondingly more detailed variations in density, of which the above may be regarded as a simplification.

Variation in population :

Though the population of the Santal Paraganas has increased considerably (32 p.c) since the first census in 1881, the rate of increase has not been uniform : in fact, there was a temporary decrease in the decade 1911-21. On the other hand, the increase has not been common to Hindus, Mohammedans, Santals and Sauria Paharias alike.

At the beginning of the century the rate of increase was low, due mainly to the fact that the Santals, were steadily moving eastward out of the district. The first years of the decade 1911-21 showed no decrease ; but as the result of increased cost of living during the first World War, the influenza epidemic of 1917-1919, and the failure of the monsoon in the following year, the decrease amounted to 4.46 p.c. by 1921.

During the period 1921-31 the population increased markedly by 14.29 p.c. This may be explained by a great improvement in health conditions with a consequent decrease of the death rate due to disease ; by reduced immigration and an increase in the return of immigrants of the previous decade, both the result of improved agricultural and health conditions in the district.

The various subdivisions in the district reflect this general change with a general increase between 1911 and 1931 ; the most marked being in Deoghhar and Jamtara. The "Main Line" of the railway between Calcutta and the United Provinces passes through these two areas and its presence is one of the main causes of the increase in population, for, with the gradual rise in the standard of living after the first World War, the tendency was for the classes interested in trade to live near the railway ; and in turn they were followed by others whose occupations were closely connected with them.

Also, increasing numbers of well-to-do Bengalis built houses near the towns of Deoghhar and Madhupur, treating this part of the district as a health resort easily accessible from Calcutta. Though the owners and their families would probably not be present at the time of the census, their permanent retainers would be recorded. In addition, the presence of Settlement officers and their families in the area at the time of the census would swell the numbers.

For Dumka the 1931 census recorded an increase of 17 p. c. This may be accounted for by the fact that more land was brought under cultivation by the Santals who at this time showed a tendency to settle down as agriculturalists rather than immigrate in such large numbers as in the previous decades. The increase of 13 p.c. recorded for *Godda thana* was also partly due to the same cause, for the protective policy of that area led to the Santals clearing large stretches of land and settling in great numbers. The improvement they effected in the irrigation conditions of the lower slopes of the hills benefited the area as a whole.

The low rates of increase in Pakaur and Rajmahal may be explained as the result of rather complex causes. Firstly, the influenza epidemic of 1917-'19, which took a large toll of death, would affect the people of this low-lying area more seriously than the hardy Santals, whose birth rate had reached 35 per mille by 1921. The general low resistance to disease would account for a decreasing birth rate, which would be further affected by the poor crop conditions in Rajmahal and Godda in 1923. A cholera epidemic in 1927 was responsible for a further increase in mortality.

Secondly, the subdivisions of Rajmahal and Pakaur are adjacent with the borders of Bengal, which attract a great seasonal labour supply for the harvesting of jute and rice fields. This seasonal migration would increase in numbers in years of distress in the Santal Paraganas.

Finally, previous to the 1931 census, an extra vigorous over-flow of the Ganges had destroyed several villages whose inhabitants migrated in numbers into Bengal or to more secure conditions in the interior of the subdivisions, accounting, it may be, in some measure, for the high increase in the Pakaur *Damini-koh*, which possesses a large proportion of low cultivable ground.

The low population increase in the northern *Damin* areas is very striking. This is to a great extent explained by the fact that the Sauria Paharias are among the inhabitants and their numbers are decreasing while the Santals are a healthy vigorous race, increasing rapidly. The Paharias

have decreased by over a thousand in ten years. In 1931 when the first reliable census of this tribe was taken, their numbers were 59,891 against 58,654 in 1941.

Conclusion.

The population of the district, as part of the Chota Naḡpur Plateau is great, its distribution irregular, leading to concentration on the more fertile parts; yet the solution of its economic problems seems to be in the hands of the cultivators themselves, provided they are helped to retain their lands in peace and security and are guided in utilising, to a greater extent, the cultivable area and in reclaiming the "waste." The Santal Paṛḡanas is no longer unaffected by the two main routes between Western and Eastern India, the one lying north of the district along the Ganḡes Plain, the other crossing it in the south. Still, its inhabitants cannot hope to successfully play their part in wider economic development unless their local agricultural economy further improves and remains secure.

Bibliography.

- Bainbridge, R. B. *The Saurias of the Rajmahal Hills*.
 Day, S.S.; *Final Report on the Survey and Settlement of the Sauria Paharla Hill*.
 Geddes, A.; *India: The Chota Naḡpur Plateau and its Bordering plains* (Extract descomptes Rendus du congrès International de Géographie Amsterdam 1938.-Tome Deuxieme heiden—Brill, E.J.)
 Guha, B.S.; *India: Ethnographical, part III;—Census of India 1931 Vol.I*.
 Lacey, W. G.; *Bihar and orissa, parts I-II;—Census of India Vol. VII*
 Ogilvie, A. G. *The Technique of Regional Geography with Special Reference to India;—The Journal of the Madras Geographical Association Vol. XIII, No 2, June 1938*.
 Yeates, M. W. M.,—*India Part I; Census of India, 1941, Vol.I*.

The Climatic Provinces of China

BY

A. LU,

Central Weather Bureau

(Reprinted from the Journal of the Geographical Society of China)

The classification of the world climates proposed by W. Koeppen is undoubtedly simple, definite and systematic. But as it is intended for the world at large, the climatic types so deduced are inevitably too sketchy and possess too much differences therein. One may glance over the appending chart I, newly prepared by the author and find out immediately that the Koeppen's climatic types, especially BS, Cwa, Cfa and Dw, covering too vast an area, can hardly be recognized as climatic unities. Either rainfall or temperature varies greatly within these areas. Consequently, the land utilization in their various parts is far from uniform. It is therefore necessary to make some revisions when we apply the Koeppen's scheme for classifying the Chinese climates. The following equiscalar lines are added by the author for re-classifying Koeppen's climatic types:

1. The January -6°C Isotherm. This isotherm coincides roughly with the boundary of the winter and spring wheat belts of China and Great Wall, a natural and also a historical limit of the nomads of the North-west.
2. The January 6°C Isotherm. This line separates the one-crop rice belt from the region where two crops of rice are raised in a year and is generally in coincidence with the northern limit of frost-free area, the 0°C isotherm of the absolute minima and the trend of the so-called Nanling Range.
3. The 750 mm. Annual Isohyet. The 750 mm. Annual Isohyet, a line of notable importance in China, marks out the northern limit of paddy fields without irrigation and trends parallel with the Tsingling Range and the Hweiho and the 0°C isotherm of January, dividing China Proper into two major regions; the subtropical humid South and the arid, cold North where the temperate deciduous forest gives way in most part of the year.

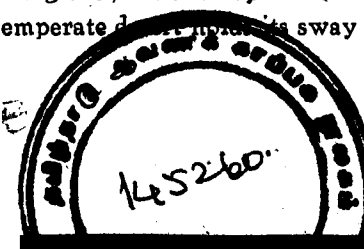
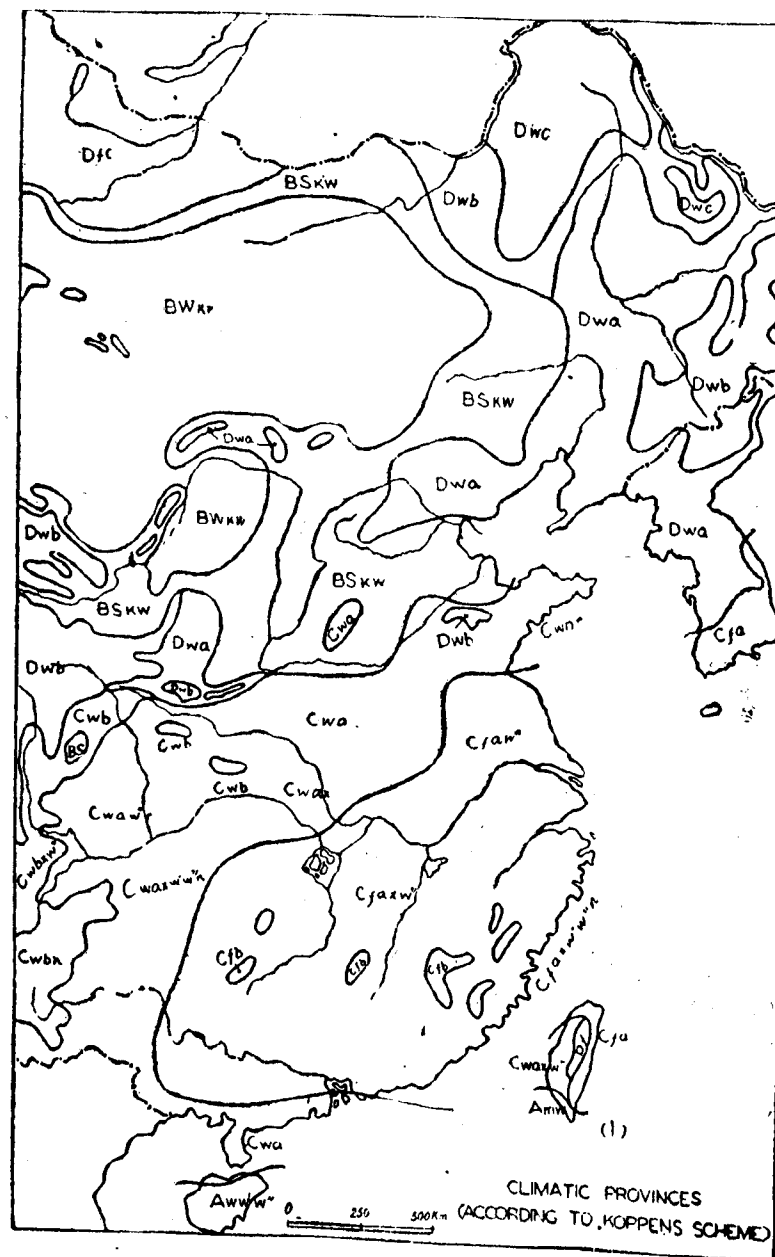
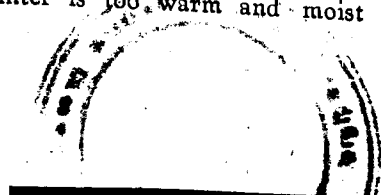


CHART I

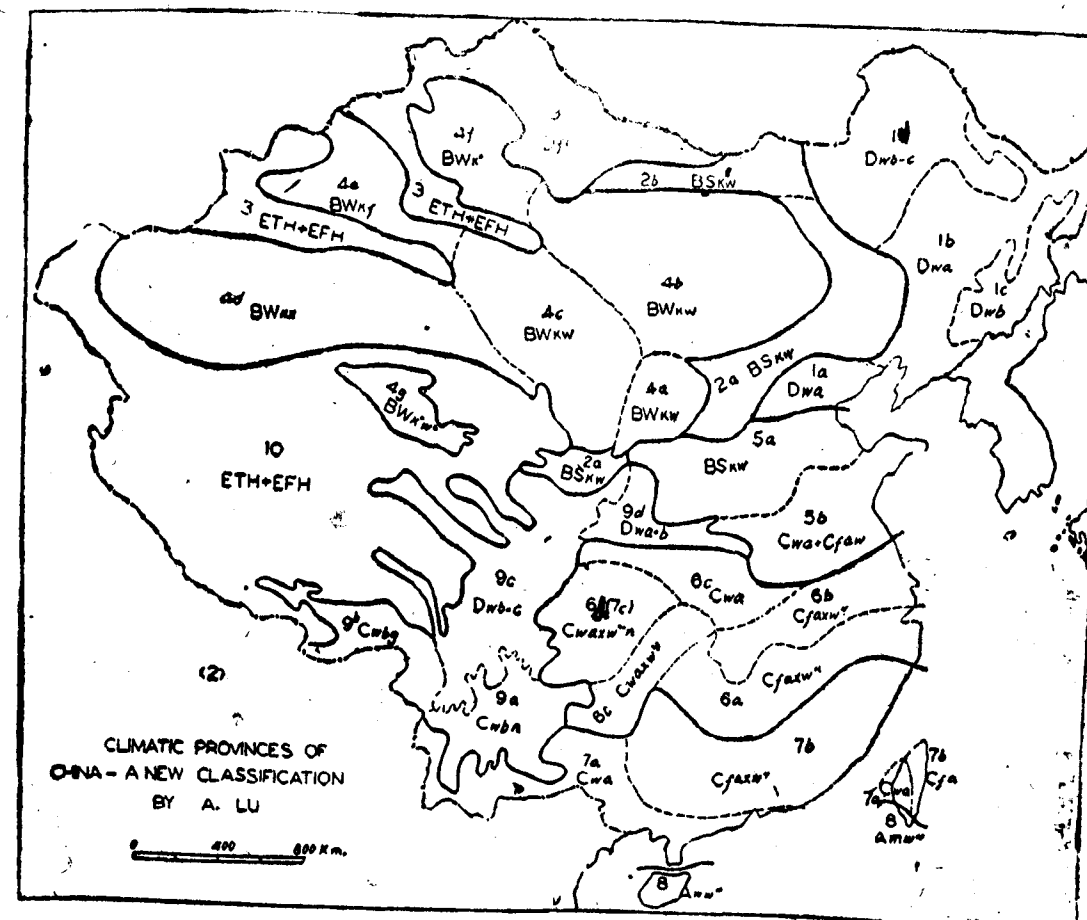


4. The 1250 mm. *Annual Isohyet*. This isohyet, or the 50 mm. isohyet of January forms the southern boundary of the winter wheat belt. Further south, winter is too warm and moist for the winter wheat cultivation.



With the Koeppen's scheme and the additional demarcations proposed above, we may classify the Chinese climates into ten types as shown in the appending chart 2. Each of them has certain characteristics:

CHART II



1. The *Northeast Type*: Dw. Its western boundary is fixed by the annual precipitation of 2 (t+14) in centimeters. ("t" refers to annual temperature in centigrade.) To the east of the line, coniferous forests dominate the natural scenery, while to the west, only arid grasses can survive owing to the scarcity of rainfall. The Northeast is the granary of China, being famed for its production of the soya beans, spring wheat, and kaolians. In the south, the -3°C isotherm of January limits its extension. The severe cold of winter, the concentration of rainfall in the hot season and the prevalence of sandstorms in spring form the

main characteristics of the climate of the Northeast. The autumn weather is lovely and attractive for its tranquility, sunniness and mildness but unfortunately is short.

1a. The Yenshan. Dwa. January temperature stands above -6°C on the average. Summer is moderately hot. July has a mean temperature of 25°C . The annual precipitation amounts to 500 mm or more and mostly falls in the hottest months, July and August.

1b. The Kwantung Plain. Dwa. The January temperature is lower than -6°C even in the south, and as low as 25°C in the north. The inclemency of the winter makes cultivation impossible. Soil freezes and the river ice-bounds at least for three months. Summer is hot and sunny but showery. July temperature exceeds 22°C everywhere. The precipitation ranges from 600 mm. in the southeast to 400 mm. in the northwest.

1c. The Changpeishan. Dwb. Summer here is cooler than in former regions. Even the hottest month has a mean temperature below 22°C as a rule. Because of the ruggedness of its relief and the nearness to the seas, the precipitation of the Changpei is the heaviest among the subtypes of the Northeast, with an annual amount over 750 mm. The rainy season reaches its height in August. In well-watered lowlying valleys, the Korean farmers plant rice in summer. The inaccessible areas, however are clad with dense coniferous forest.

1d. The Khinganling. Dwb-c. Here is the Chinese "Cold Pole" Winter cold is extremely severe. January has a temperature below 25°C on the average. The perpetual frozen soil melts only superficially even in summer. The summer is not only cool but also short. The average mercury of the hottest month stands below 22°C and less than four months have a mean over 10°C . As the growing season is very short, agriculture becomes hard and dangerous. The annual range of temperature amounts to about 50°C , being the greatest in China. This is a typical form of the snow forest climate. The precipitation amounts to merely 300 mm. in a year. But as the evaporation is not intense, a natural result of its low temperature, snowy coniferous forests thrive very luxuriantly on these boreal hills.

2. The Mongolian Steppe. BSkw and BSk'w. It has an annual precipitation of less than 2 (t+14) but more than t+14. The total amount received in a normal year is about 200-300 mm. The 6°C isotherm separates it from the North China Type. Winter is intensely cold, but summer is warm or hot with occasional showers.

2-a. The SE. Mongolian Steppe. BSkw. The summer heat with a moderate amount of rainfall makes dry-farming possible. July temperature averages more than 18°C .

2-b. The Ching-Kan Steppe. BSkw. This subtype has a natural scenery in common with that of SE. Mongolia. But the winter temperature is somewhat higher and the summer temperature slightly lower.

2-c. The Outer Mongolian Steppe. BSk'w. Owing to the coolness of its summer, northern Outer Mongolia remains still a nomadic pasturage. The warmest month July has an average temperature of 17°C only. Most of its precipitation is concentrated in the summer months.

3 The N.W. Frontier Mountain Type. The vertical distribution of the climates on the mountains of the Northwest Frontier is as follows:

The Mongolian Mts & N. Tianshan	The S. Tianshan	The N. Tibetan Borderland.
Below 1000 MBSkw & BSk'w	Below 1500 MBWkw	Below 1500 MBWkw
1-2000 Dfb	1500-3000 BSk'w	1500-3000 BSk'w
2-3000 Dfc	3000-3500 Dfc	3000-4500 Dwb-c
3-3500 ETH	3500-4000 ETH	4500-5500 ETH
Over 3500 EFH	Over 4000 EFH	Over 5500 EFH

4. The Mongolian Deserts. BW. The precipitation is very scarce over this vast area, having an amount below 100 mm. or even less than 50 mm. As most of the deserts are situated in inland basins and enclosed on all sides by the lofty mountains, the continental climate here takes its extreme form. The heat of summer and the cold of winter are both very intense. Sand-storms prevail especially in the spring season.

4-a. The Ordos Desert. BWkw. Summer is hot with occasional light showers. Winter is dry and very cold.

4-b. The Gobi Desert. BWkw. The summer rain is more scarce here than in the Ordos Desert. Winter is intensely cold.

4-c. The Alashan Desert. BWkw. The rainfall of the summer amounts to 40mm. only. Continentality intensifies.

4-d. The Tarim Desert, BWkx. Its very scarce rainfall comes mostly in the late spring and early summer. People suffer from furnace heat in summer but winter is milder than in other deserts.

4-e. The Tsungar Desert, BWkf. The rainfall is more plentiful and well distributed throughout the year. Winter cold is extremely severe. The polar or arctic air invades frequently in the spring and usually accompanies with snowstorms or duststorms.

4-f. The Khobuto Desert, BWks. Blockaded on northwest by high mountains, the Khobuto Desert is shut off from the invasion of the cold waves and in consequence enjoys a milder winter. Summer is cool and lovely, the temperature of July being less than 18°C on the average. The annual curves of precipitation show its climax in winter months.

4-g. The Tsaidam Desert, BWkw. In many respects, this subtype has a climate similar to that of the Khobuto Desert. The only difference occurs in the distribution of precipitation. The rainiest period here is the late summer and the early autumn.

5. The North China Type. BSkw in the north and Cwa or Cfa in the south. Including most part of the Hwangho Basin, this type is separated by the January -6°C isotherm from the Mongolian Steppes. Its northeastern boundary may be fixed by the annual precipitation of less than 2(t+14). On the south, the annual isohyet of 750 mm. limits its extension. Summer is hot and rainy, while winter is cold and sunny. The duststorms brought in by the coldwave invasions trouble very much the people of North China in spring months. The precipitation ranges from 750 mm. on the southeast to 350 mm. on the northwest.

5-a. The Loess plateau and Haiho Plain. BSkw. Rainfall concentrates in July and August, and varies widely from year to year. Droughts and floods threaten the people incessantly. It is a notorious famine land of the world.

5-b. The Shantung Hills and the Lower Hweiho Plain. Cwa and Cfaw. A transitional belt between the subtropical humid South and the continental arid North. Winter temperature is higher and annual precipitation heavier than the northern subtype.

6. The Central China Type. Cfaw and Cwaxw. It is bounded by the 750 mm. annual isohyet on the north, the July isotherm of 22°C on

the west and the January isotherm of 6°C on the south. The Mei-Yu of the early summer forms a striking feature of its climate. Summer is sultry, enervating and monotonous, but the weather of the spring and winter is changeable and vigorous owing to the frequent passages of the Yangtze cyclones. The coolness and dryness makes autumn the most charming season of the year. Although no month has an average temperature below 0°C, the daily minima usually drop to 5° or even below -10°C in the winter mornings. Snow and frost usually come during and after the invasions of the cold northerns. The annual precipitation averages 1000 mm. to 1500 mm. and is distributed rather evenly throughout the year.

6-a. The Southern Yangtze Valley. Cfaw. Annual precipitation exceeds 1200 mm. everywhere. Winter is mild and rainy. The passage of the cold waves usually bring snowstorms to this area. The amount of precipitation in each of the cold months exceeds 50 mm. The June peak of the precipitation curves is made up by the Mei-Yu cyclones. The secondary maximum, appearing in August, undoubtedly results from the invasion of the Pacific typhoons, but the amount of it is not comparable with that of June and even less than that of the spring months.

6-b. The Northern Yangtze Valley. Cfaw. Annual precipitation is less than 1250 mm. and winter drier than the South. On most of the precipitation curves, a single maximum appears in July, but there is one more heap occurring in April. The winter months, though colder, have averages above 0°C.

6-c. The SW. Hupei and the Kweichow Upland. Cwaxw. The annual precipitation is 1000 mm. in valleys, but increases to 1500 mm. on the windward slopes. Winter is gloomy but not rainy. There are two maxima on the precipitation curves; one in June and the other in September. The June climax is the result of the Mei-Yu, a rainy spell being common to all the Yangtze Valley, whereas the September one, exceeding even the former in amount at many places, is difficult to explain. It is also worthy of note that most of its precipitation occurs in the night-time. Because of its elevated situation, at a height of 1000 m. on an average, summer is neither hot nor moist and therefore good for health.

6-d. The Red Basin. Cwaxw. Annual precipitation is less than 1000 mm. and mostly falls in the summer half year. Either the diurnal or the annual curves of precipitation bear a close resemblance to those of the 6c subtype. The warmth and dullness of the winter and the oppressive heat of the summer make the climate of the Red Basin very unhealthy. The

climate of the Red Basin should be classified as a subtype of the South China Type in the strict sense, because the coldest month, January, has an average above 6°C, and snow or frost rarely occurs.

6-c. The Hanshui Valley. Cwa. The climatic conditions resemble those of the Red Basin in many respects, but here the precipitation is scantier and shows marked concentration in the hot months. The autumn peak of the rainfall curves disappears entirely.

7. The South China Type. Cwa & Cfxw. The January temperature is higher than 6°C but lower than 18°C. These isotherms form its northern and southern boundaries respectively. The growing season lasts for the whole year. Snow and frost rarely occur. The summer heat is less intense but even more unbearable here than in the Yangtze Valley owing to the high humidity. The rainfall ranges from 1500 to 2000 mm. During the invasion of the Pacific typhoons, in late summer and early autumn, heavy rains and high winds usually cause terrible loss to the people of the coast.

7-a. The Upper Sikian Valley. Cwa. Months of July and August are rainy and sultry. The warmth of the winter makes malaria prevalent throughout the year.

7-b. The Nanling Hills. Cfxw. Cfb climate scatters on hills with a height over 2000 m. The rainfall curves show two peaks: one appears in May or June, and the other in August. Winter is gloomy and drizzly.

8. The Hainan Type. Aww' & Amw. This is the only real tropical climate of China. The Hainan Island and the islets of the South China Sea have a climate of Aww, while the climate of the SW. coast of Taiwan belongs to Amw. No month of the year in these regions has a temperature below 18°C. In spite of its lowness of latitude, the summer temperature never rises so high as on the mainland. However, the moist air is truly more unbearable. Half of its rainfall concentrates in the summer months. Heavy downpours accompanied by thunderstorms or typhoons are most frequent in August and September.

9. The West China Type. Owing to diversity of its relief, the climate of West China is characterized by its great complexity. The vertical variations mask to a great extent the latitudinal changes. Even with the same height, mountains and valleys may have climates differing greatly

from each other. Generally speaking, most of the area has a climate of Dwb in the north and Cwb in the south. There are also patches of BShw and BWhw appearing in the leeward valleys and enclosed basins. The dazzling white ice-capped mountain peaks here and there, reveal the presence of the ETH and EFH climates. The vertical distribution of climates may be tabulated as follows:

Tsingling		Eastern Tibet		N. Yunnan & S. Tibet	
1000-1500 m	Dwa	Below 1500 m	Cwa	Below 1500 m	Cwa
1500-2500	Dwb	1500-3000	Cwb	1500-4000	Cwb
2500-4000	Dwc	3000-4000	Dwb-c	4000-4500	Dwb
		4000-5500	ETH	4500-6000	ETH
		Over 5500	EFH	Over 6000	EFH

9-a. The Yunnan Plateau, Cwbn. With a height of 1500 to 3000 m. the climate of the Yunnan Plateau is famed for its perpetual spring. Winter is warm and sunny. Most of its rain concentrates in the summer months and precipitates in the form of showers.

9-b. The SE. Tibet Cwb. The valleys of the SE. Tibet situated at a height of 3000 to 4000 m. puzzle the visitors with its mildness of climate. The coldest month, January, has a temperature about 0°C. The frost, however, may appear on the ground on morning hours for 7½ months owing to the strong nocturnal terrestrial radiation resulting from the clear sky and the thin, pure atmosphere of the plateau. The rainy season lasts from May to September. Thunderstorms prevail day after day. The temperature condition in summer is moderate, warm and comfortable.

9-c. The East Tibet. Dwb-c. At the height of 3-4000 m. Dwb-c climates predominate. The rainfall curves of this subtype show two maxima in June and September, being similar to those of the Red Basin. The warmth of the winter and the coolness of the summer are comparable to those of Yunnan.

9-d. The Tsingling Mountains. Dwa-b. The precipitation concentrates in summer months and reaches its height in August or September. The winter is severely cold and windy, but dry and sunny.

10. Tibet. ETH & EEH. Except the SE. valleys and the E. borderland, the Tibetan Plateau is mostly a vast waste of desolate frozen desert. No month has a temperature over 10°C. Even at the height of summer the average mercury stands only a few degrees above 0°C. Because of the scarcity of precipitation and strong evaporation, the ground remains mostly bare and free from snow accumulation. The snowline is as high as 6000 m. on the lofty mountains. The thin air and strong wind makes the life more hard and miserable.

Soil Survey and Land Use Analysis

BY

V. L. S. PRAKASA RAO, M.A.

Geography Department, Calcutta University.

The soil survey of any region should provide a basis for land use planning. In India, the Geologist, the Botanist and the Agricultural Chemist, all these study soils from their different standpoints, whereas in America and Russia the soil surveys are being conducted with a view to providing a basis for land classification and its optimum utilization. Any soil survey should provide answers chiefly to the following three questions.

- (1) What the soil is best fitted for.
- (2) Whether the fertility elements are adequate or inadequate.
- (3) What the alternative uses are.

Soil study should also be with reference to general as well as specific land use but should not solely confine itself to agricultural utilization. The soil map * should be of use not only to the agriculturist, but also to the grass-land farmer and the forester.

As a matter of fact, during the Economic-geographical survey of the Godavari region† which has been completed recently by the author, it is found that the following primary soil classification‡ is essential to serve as a basis for land use analysis but, for scientific planning of Land Utilization a systematic and detailed work regarding profile study of the different soil regions is necessary.

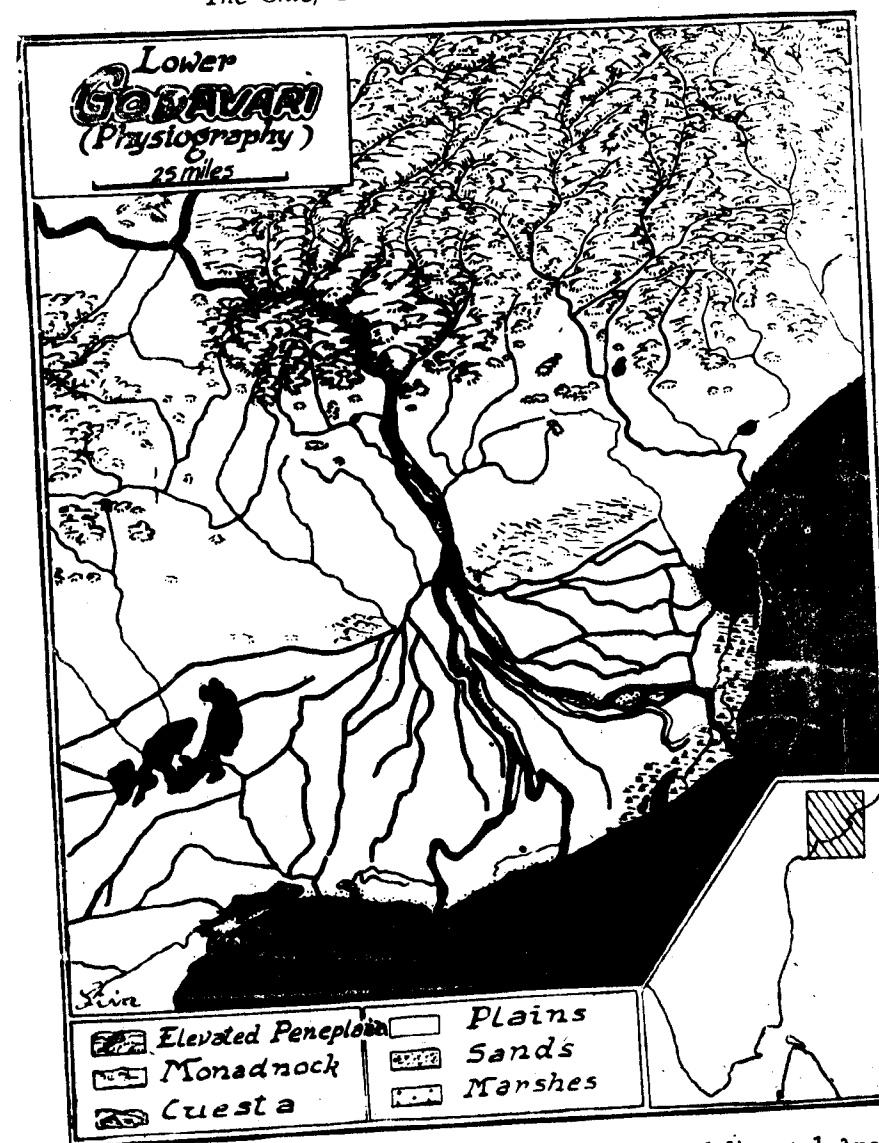
* It is learnt that the soil map of India is being prepared at the Indian Institute of Agricultural Research, Delhi.

† The Godavari Region is a representative section of the East Coast of India and extends between 16° 20' and 17° 50' parallels of latitude and 81° 30' and 82° 30' meridians of longitude. The area of the region is 3987 sq. miles and includes the following administrative divisions: Taluks Chotavaram, Ellavaram, Rajamundry, Peddapuram, Pitthapuram, Ramachandrapur, Cocanada, Amalapur, and Rajole.

‡ The basis of my classification is 1. the geographic factors of the area (Physiography, climate, natural vegetation and the present land use,) 2. Information found in the various Government reports (Revenue, Agriculture and Forest) 3. Information furnished by the experienced cultivators on the spot. 4. Views of the various officers of the Agricultural Dept. and 5. The author's intimate and personal knowledge of the local conditions. (A few soil samples are being analysed in the soil laboratory, Geography Department, Calcutta University.)

THE GODAVARI REGION

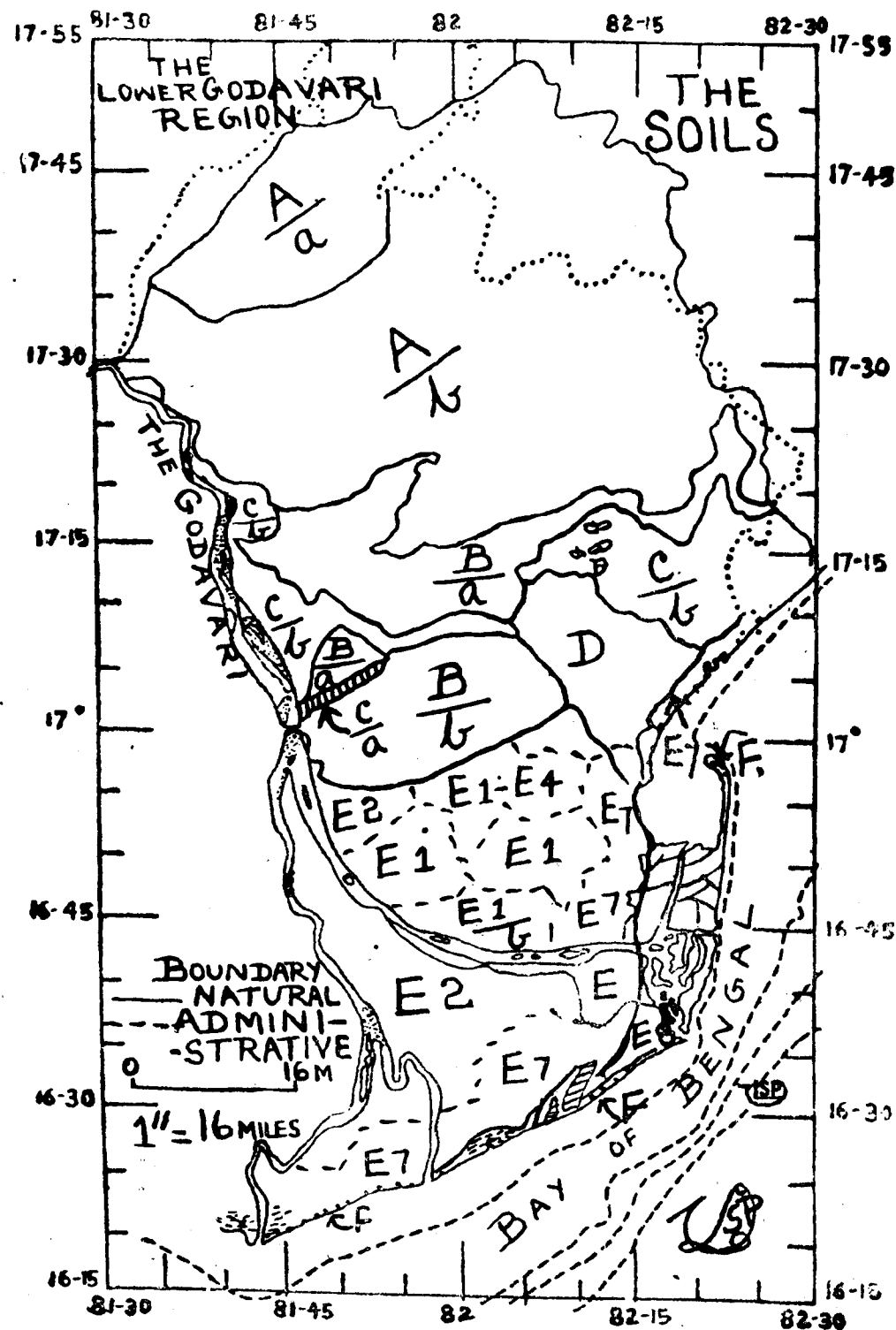
The Chief Soil Zones and Sub Zones



(A). Deciduous Forest Red soils of the uplifted and dissected gneissic zone:

Climatic sub-types.

- (a) Soils of the Northern more humid zone—transitional to sub-tropical conditions and,
- (b) The Southern Mixed deciduous zone.



In the Northern zone sub-tropical climatic conditions prevail. Rain-fall, humidity and elevation of this zone are greater than in the Southern zone. Schimper has classified these Forest soils into 6 edaphic sub-types and the local Forest Department has recognised his classification. We can re-arrange these types broadly into 3 groups:

- (1) Stony, gravelly and shallow soils of the hill sides and broken ground where there is leaching as well as erosion.
- (2) Red lateritic soils (high level as well as low level).
- (3) Forest loams and heavy clays of the valleys and the flood-plain patches.

In the Northern zone, in certain areas (Guzzumamdivalasa, Pullangi etc) garden culture is well established and there are also some coffee plantations. The favourable climate is the initiating factor for this type of land use. We can nominate these soils as the coffee soils and the garden soils (cultural soils).

This zone is composed of gneisses, granites and charnockites. The average rain-fall is just above 50".

- (B) The Xerophytic and the Scrub Red soils.
 - (a) The Red soils of the Marine denuded plain. The parent rock is the Khondalite. The rainfall is slightly greater than the scrub zone and much lower than the deciduous zone. (Red loams and Sandy loams). Rainfall 45"—50"
 - (b) The Red soils of the Scrub Zone. The parent rock is red ferruginous sand stone. Average rainfall is 40". (Sandy soils and sandy loams).
- (C) (a) The shallow black and light residual soils of the Deccan Trap.
 - (b) The Depositional black clays and clayey loams of the Coastal Plain and the areas adjoining the Godavari River—high lying and low lying, sometimes charged with salinity due to defective drainage and sometimes thickly covered with coarse rank grass. All these areas are chiefly rainfed. Wells are of no utility due to brackish water.
- (D) The Eleru well drained loams and sandy loams.
- (E) The Godavari Alluvium-canal irrigated.

- (i) The stiff clays, clayey loams and alluvial clays (Ramchandrapuram Taluk).
- (a) Higher lying well drained clayey loams—Better drainage of these lands is due to Sandy substratum—(North eastern portion of the Ramchandrapuram Taluk).
- (b) Lower lying ill drained clays and clayey loams
- (ii) The Higher lying stiff clays, loams and clayey loams—(Central and Northern lands of the Godavari delta).
- (iii) The heavy alluvial clays of the Samalkota area.
- (iv) Better drained clayey loams of the Gollala-mamidada area.
- (v) Fine sandy loams of the Karapa area in the Cocanada Taluk.
- (vi) The fine sandy and silt clays (Innavalli area-Godavari Delta).
- (vii) The low lying ill-drained saline areas all along the Godavari coast.
- (viii) The mangrove soils (Mud, Marsh and Swamp).
- (F) The coarse sandy soils of the coastal fringes. This is also the zone of sand dunes.

Soil types in one of the sample villages:—Sankaraguptam:—Coastal coconut type village (Razole Taluk).

- A. High level coarse sandy soils best fitted for casuarina trees.
- B. Fine sandy soils best fitted for coconuts. These soils are also suitable for ground nut.
- C. Lower lying sandy loams unfit for coconuts but best fitted for millets, gingelly and dry paddy.
- D. Saline soils unfit for coconuts or millets. Saline resisting paddy varieties are grown. The drainage of these soils should be improved.

A comprehensive and systematic soil survey is the key to the success of land use planning and, the soil map should enable one to interpret and evaluate in terms of the optimum use of our natural resources.

Arab Geography in the 9th and 10th Centuries A.D.

BY

DR. S. MUZAFER ALI M.A., M.Sc., Ph.D.

AND

S. M. ZIAUDDIN ALAVI M.A.

(Regional and Economic).

The Arab has always been a wanderer and his natural propensity strengthened by his duty to pilgrimage, moves him to curiosity about foreign lands and people. Even in Spain and Africa there would have been very few men of some education who might not have drunk the water of the Nile and who might not have performed the Hajj. The majority of pilgrims, on going out of Arabia returned to their homes; but a certain number visited Basra, Kufa, Baghdad, Bokhara and Samarkand. These detours not only had the advantage of bringing under their observation the cities which then occupied the first rank in the scale of civilization; but also they familiarised with the life and language of different people.

In addition to this there was the commercial aptitude of the Arabs. They were traders from even pre-Islamic days and had earned great fame as such. They were the intermediary between the far east and the far west; all the seas were known to them. The seas and deserts were nothing before the undaunted spirit of the Arab merchant.

Lastly the conquering arms of Islam facilitated travel and brought new lands within the ken of their observation.

There exists a great number of narratives of this type. These narratives are distinguished from the ordinary treatises in that they are not of a didactic character; but on the other hand are concerned with what the writers saw themselves or heard from reliable sources. These accounts are of great help in the reconstruction of the economic and regional geography of the Arabs.

In this paper an attempt is made to introduce some of the representative geographical treatises of this type, such as accounts of voyages, book of conquests, the 'itineraries' and finally the systematic geographical

Suleman further observes that the coast of China is subject to violent storms⁸ and particularly those squalls or frets of wind called in Arabic *toofan* from the Greek work which conveys an almost similar idea. The Portuguese and Spaniards derive from Arabic their word *Tufaon*, which they say comes from the eastern board and begins in the month of August and is much dreaded, especially in the passage from Indies to China. This description reminds us of the Tropical Cyclones which blow in these regions.

He mentions Kanfu⁹ as the city known to the Arabs, as it was the emporium of all commerce. He speaks of Khamdan¹⁰ as the seat of the Emperor of China which is confirmed by Chinese and Syriac inscriptions.

About the middle of the 9th century Sallam (surnamed the interpreter) was charged by the Caliph Wathiq-billah to go to explore the regions situated to the north of Volga, the Caspian Sea and the Yaxartes i.e. beyond the limits of which the Muslim armies had not passed. His mission was above all, for the purpose of investigating the people of Yajuj and Majuj. Sallam proceeded to Armenia and Georgia; he crossed the Caucasus, visited the Khazars, who, in this period formed a flourishing state, made a round of the Caspian and then advanced towards the Ural and the Altai; thus he had a chance of crossing the countries which had not been explored till modern times. Sallam returned to Mesopotamia Via Bokhara and Khorasan. The account of Sallam has been conserved for us by Idrisi and other authors.¹¹

Book of Conquests:—

A class of books which very much contributed to the Arab's knowledge of regions was the account of their first conquests. A great number of writing of this class were drawn upon in the course of the 9th century A.D. for instance we may mention the book of Abul Abbas Ahmad al Beladory who lived at the court of Caliph al-Mutawakkil. The author treats successively the conquest of Syria, the island Chypra, (Cyprus) Mesopotamia, Armenia, Egypt, Africa, Spain, Islands of Mediterranean Sea and Nubia. Finally he passes on to the east. He has taken care in interspersing his account with details pertaining to the state of conquered countries. He speaks also of certain cities founded by the Muslims for instance Kufa, Basra and Baghdad.

8. Ibid. p. 11.

9. Ibid p.11.

10. Ibid p. 43 See also notes p. 42-43.

11. French Translation of Idrisi by Jaubert Vol. II, p. 416 & foll.

Road Books:—

Another class of books which also contributed to the Arab's knowledge of different countries takes the form of Road Books. These set forth in detail the various itineraries, interspersed with short accounts of the towns passed through and gave the revenues and products of each province.

Abul Qasim Ubaidullah, Abdullah ibn Khurdadbeh¹² was the first geographer whose work has come down to us. Ibn-Khurdadbeh's work furnishes a description of routes connecting the towns and provinces and statistical data about revenues of different provinces. Starting from the neighbourhood of Baghdad he first treats the inland centres to the frontier of China, then he describes the coast route to the Yellow Sea. Then he details the western route from the Tigris to the Atlantic. Lastly he treats of the northern and southern extremities of the Earth. There is a valuable passage which indicates the manner in which Europe and Asia communicated together:

"The Jewish merchants spoke Persian Roman, (Greek and Latin) Arabic, and Frank languages. They made voyages from west to east and from east to west, either by land or by sea. They brought from the west eunuchs, slave girls, boys, silk, furs, skins, and swords. They embarked in the country of Franks on the occidental sea and went to Farma, where they put their merchandise on the back of animals and proceeded by land to Qulzum at a distance of 20 fersons. They embarked again from Qulzum to Hijaz, Jedda, then they went to Sind, India and China. On their return journey they brought musk, aloes, camphor, cinnamon and other products of eastern lands and returned to Qulzum then to Farma, where they embarked again. On the occidental sea,—some went to Constantinople to sell their merchandise and others returned to the country of Franks."¹³

The work of Ahmad Ibn Yakub¹⁴ gives a topographical account of Baghdad. The author mentions that from his youth he had felt a definite inclination for the study of strange lands and that he had voyaged for some time. In the course of his voyages he had gathered some geographical, topographical, statistical and historical notes. After having given a detailed description of the two capitals of the states of Abbasid Caliph i.e., Baghdad

12. Ibn Khurdadbeh: *Kitab al Masalik wal Mamalik* pp. 153-155 vide Reineud Introduction "*Geographie d' Abulfeda*."

13. Ibn-i-Khurdadben. *Kitab al Masalik wal mamalik*, p. 155.

14. Ahmad ibn Yakub al Katib: *Kitab al Buldan*. Edited by de Goeje.

treatises, so as to present a true picture of the Arab conception of regional and economic geography.

Expansion of Regional Knowledge:—

As typical example of the early traveller's tales of India, Africa and China which we possess is the "Chain of Histories" compiled by Suleman the merchant in 851 A.D., with a supplement by Abu Zaid dating about 910 A.D. The account of Suleman shows Arab conquest of the eastern markets. It was with these explorations that the extension of geographical knowledge and the maintenance of geographical outlook is concerned.

One of his chief remarkable features is the description of the course, the Arabs and Persians steered from al-Basra and Siraf to the Indies and China and conversely the course steered by the Chinese for Arabia and Persia. A vivid description of the route by Suleman is as follows:—

"Most of the Chinese ships take in their Cargo at Siraf where also they ship their goods which come from Basra, Oman and other places; and this they do because in the sea of Persia there are frequent storms and shores in many places. From Basra to Siraf is one hundred and twenty leagues, when ships have loaded at Siraf and taken a supply of water they sail for a place called Musqat. On the east coast of this sea between Siraf and Musqat is a place called Saif Bani Saffaq and an island Ibni Kawan; and in the sea, are rocks called Uman and a strait called Durdawr, through which small vessels do venture, but Chinese ships dare not. There also are two rocks which seldom appear above the surface of water, the Kusair and Uwair. After clearing these rocks, the ships steer for a place called Sukhar 'Uman and at Musqat take in water which is drawn out of wells. Then the ships sail to the countries of India and put in first at Kulam-Mali (i.e. Quilon) a month's voyage from Musqat with the wind aft.....Having watered at Kulam-Mali the ships set sail for the sea of Harqand (i.e. Bay of Bengal) en route to a place called Langablus' where men wear no clothes and neither understand Arabic, nor any other language in use with the merchants.....from Langablus the ships sail to a place called Kalabar (i.e. Malaca). The 'word', 'bar' serves to indicate both kingdom and coast, Kalabar is a dependency of Zabij (i.e. Java) and Zabij is to the east of India.

From Kalabar the ships sail to Tiyyuma (on the south east coast of Malay) and they reach there in ten day's time, and thence they sail to

1. One of islands of "Nicobar group." Reinaud Relation des Voyages Vol. II p. 17.
2. See Encyclopaedia of Islam, under Kalah.

Kundranj (i.e., the delta of Mekong) and the voyage takes ten days again. From Kundranj to Sanf (Cambodia) also takes ten days and when the ships have provided themselves with fresh water at Sanf they sail to Sunder-fulat³, an island in the sea and arrive there in ten days' time.

Then the ships sail through the sea of Sankhi (sea of China) and reach the gates of China, which consist of mountains in the sea, with a narrow passage in between, barely sufficient for ships to pass. When a ship has got through these gates, she goes into a fresh gulf, and drops anchor in the chief port of China, called Khanfu (Canton). It is a month's voyage from Sunder-fulat to China, inclusive of seven days spent in 'clearing the gates'.

Even more interesting is his description of islands and the countries visited en route to China. Of the island of the Harqend Sea Suleman says, "These islands, governed by a woman, are full of that kind of palm tree which bears the coconut; and are one, two, three or four leagues distant from each other, all inhabited and planted with coconut trees. The wealth of the inhabitants consists in shells and even the queen's treasury is full of them. They say there are no artificers more expert than these islanders; and out of the fibres of the coco-nut they make whole shirt, all of one piece, sleeves, bussets and all, as also half-vests (or jackets); with the same industry and the same tree they build ship and houses and they are skilful in all other sorts of workmanship⁴.

On China too Suleman supplies valuable information. Suleman says "China produces wheat, rice, and many other sorts of grains; it produces pears, apples, quinces, lemons, citrons, banana, sugar-cane, fig, cucumber, walnut, plums, apricot, services, coconuts and even almonds".

Suleman is the oldest and almost the only Arab that mentions a Chinese drink which he calls Sah.⁵ He says that it is a herb, or shrub more bushy than the pomegranate tree and of a more taking scent, it has a kind of bitterness with it. They prepare it by pouring boiling water on it, and also they believe in the healing qualities of this drink.

3. i.e., Paolo Condore; Paleo an island and Fulat is probably an Arabic plural from Pulas; Sunder represents a native form of Cander or Condore. vide, Yule Cathay and the Way Thither p. 129.
4. Suleman, 'Silsila al, Tawarikh', Arabic Text given in Reinaud, Relation des Voyages, Vol. II.
5. Ancient Account of India and China by two Mohammedan travellers. Translated by Renaudot. p. 2.
6. Ibid. p. 13.
7. Ibid. p. 25.

and Samarra, he described (but in a summary fashion) the major part of the Mohammadan countries; like Ibn Khurdadbeh, he proceeds to describe the distances of places in them and the principal routes. Ibn Busta¹⁵ has written a similar work to Ahmad Ibn Yakub, adding notes on towns and roads. He also adds remarks on the nature of the country.

The work of Qudama¹⁶ describes the frontiers of the empire, the different postal roads of the empire with their stages and distances, some general remarks upon the diverse kinds of revenue and a bird's eye view of the civilization and the history of the first conquests of the muslims.

The tenth century A.D. brings to our notice first of all, a vizier of the Samanid dynasty in Khurasan and Transoxiana. This vizier was named Abu Abdullah Mohammad ibn Ahmad Aljaihani.¹⁷ His book *Kitab-al Masalik fi Marifat al Mamalik* is distinguished by the abundance of detail. The author had collected very well the information on the valley of Indus and the peninsula of India. In this book the countries are discussed in order of 'seven climates.' He has taken care to indicate the proper resources of every country and the advantages which distinguished the principal cities. The book of al Jaihani was abridged by Ibni Faqih.¹⁸

During the time that al Jaihani was occupied in collecting material for his compilation, the Muslim empire from India to the Atlantic Ocean from Caspian to the Erythrean Sea was run over by al-Masudi. A greater part of al-Masudi's life was passed in voyages and he saw the regions which no other Arab writer had ever seen. Al-Masudi was very well informed not only in the Islamic sciences, but also in the ancient literature, history, geography, beliefs and superstitions; nothing has been left out by him. In every region which he visited he made intensive study and contacted well-informed persons. His book had been for the later Arab writers an abundant source. Although Masudi has written much, he does not seem to have composed a geographical treatise, but there is not one of his works which does not furnish some valuable facts for the geographer.

Regional Consciousness and the study of Climates:—

It will be interesting to point out in the early stages of the growth of the science, the Arabs studied the earth on the basis of 'climates', which are geometrical strips running east and west bounded by parallels

15. Ibn Busta: *I'laq al Nafisa*. Edited by de Goeje.

16. Qudama: *Kitab al Kharaj*. Edited by de Goeje.

17. Al-Maqdisi: *Ahsan al Taqasim* p. 4. Edited by de Goeje; also see Reinaud: Introduction 'Geographie d' Abulfeda'.

18. This is mentioned by Abul Feda. *Memoirs on India* p. 10.

of latitude. The division in climates is the work of the Greeks: the word itself indicates it, since it is derived from the Greek term *clima* signifying inclination; the fact that the idea of climate depends more or less on the inclination of the sun in relation to the equator. Ptolemy counted in his 'Geography' twenty two 'climates' while other ancient authors had established a division into 'Seven'.¹⁹ These 'seven climates' included all that portion of the globe which the ancients and the Arabs gave the name habitable quarter of the world. In order to comprise the most important portion of the habitable world with these 'climates' they did not begin at the equator but at about 16° north of it ending at 50° latitude. The following tables show the 'seven climates' according to al Khwarizmi:²⁰

No. of Climate	Latitude.	Length of day.	Countries. ²¹
1.	16° 27'	13 hrs.	China, Sind, Arabia, Yemen, Habesh South Beehar.
2.	24°	13 ½"	China, Hind, Sind, Bahr Khazr, Bahr Basra Arabia, Misr, Maghrib Afriqia.
3.	30° 22'	14 hrs.	China, Hind, Sind, Kabul; Sistan, Ahwaz, Iraq, Sham, Misr, Barqa, Afriqua.
4.	36°	14 ½"	Tibet, Khurasan, Samarqand Bokhara, Ispahan, Syria, Maghrib.
5.	41°	15 hrs.	Majuz, Northern Khurasan, Azarbaijan, Armenia audulus.
6.	45°	15 ½ hrs.	Yajuj, Khazar, Tabristan, Khwarizn Audulus, Room.
7.	48°	16 ½ hrs.	North Yajuj, Bilud Turk, Bilad Marjan, Saqalibs-

The most remarkable characteristic of the geographical study of the 'climates' is the repetition of different countries in many a 'climate' and

19. Pliny for instance had conceived of seven 'climates' Vide Geographical Lore of the times of Crusades,

20. There are however slight differences in degrees of latitude among different writers. According to al Ferghani the first 'climate' begins at 16°4' and the seventh concludes at 50°30'. Some geographers, divided the southern hemisphere into 7 climates thus making 14 'climates' in all (Maqdisi. P: 58).

21. The countries are given according to Ibn Rusta.

secondly that the division is made arbitrarily, without any consideration of the geographical factors. The table clearly shows that the complexity of the geographical features, the largeness of the field, and the unnecessary fragmentation of different countries was embarrassing to the Arab geographers, hence the necessity of some other method of treatment was felt. However it was the beginning of regional consciousness.

Systematic Regional and Economic Geography:—

The latter half of the tenth century brings to our notice three important geographers. They are al-Istakhri, Ibn al-Hawkal and al-Maqdisi. They fully describe each province of the Muslim empire, making a great advance on the authors mentioned above. To them we owe a systematic, regional economic and human geography. Their conception of geography as related to man's destiny found its fullest expression in this literature.

The first objective of these geographers was to remove the defects of their predecessors. They confined their geographical study to small regions, taking countries provinces and districts as the geographical unit. "I do not take" says al-Istakhri the 'seven climates' as the basis of division of the earth because the geometrical shapes even though they be correct intrinsically, involve a lot of confusion, so I have resorted to the study of earth countrywise."²²

The geographical unit in this case as well, although not based on any sort of geographical unity, yet comprises of political boundaries, which function not merely as a political whole, but to a considerable extent as an economic and social whole. Unlike the abstract concept of a region (on the basis of 'climates') the province in many respects is an unitary object. It is a piece of land sharply defined and separated from others. However, the contrast between the view point between this chorographical description and the analysis and synthesis of the 20th century regional geography is obvious.

Istakhri's book is typical of the early studies in regional geography and may be considered under two heads (a) country (b) people. The country was studied first in respect of its situation and then of its parts, under situation were studied the length, breadth, circuit and boundaries of the land. The parts of the country were again considered under two heads, individual and general; the individual parts were cities, their people, buildings, commerce and trade being matters observed; the general part included a description of mountains and valleys, plains, deserts and rivers etc; each was

22. Istakhri: *Kitab al Masalik wal Mamalik* Ed. by J. de Goeje Leyden (1870) p. 2.

considered in respect of its products. As regards the people, they were observed in regard to nature, diet, dress, religion, manners and customs. The balance between man and his environment is perhaps more justly struck in this than in earlier writings.

Istakhri takes climate as the basis of division in his description of Faras. He divided the country into two parts, the southern hot region and the northern cold region. In the cold region there are places which are intensely cold, so that nothing of fruits grow, except some agricultural products. In the hot region there are places which are so hot that not even the birds can stay there. The climate of the cold region is good for health while that of the hot region is injurious to it. Briefly it may be said that to this Arab scholar a region was merely of interest as the seat of human population. He recognised in a general way the topography and climate of the country in relation to mankind which was characterised by a few bald statements. While speaking of the inhabitants of Faras he says: "The inhabitants of the hot belt are of poor condition of health and have fewer hairs and darker complexion. The inhabitants of the cold belt are very strong and fat. They have three languages—Persian for speaking, Arabic for offices of the Kings and Nobles, and the colloquial language²³."

Of the dress of the people of Iraq Istakhri says; "Some of the customs are peculiar to Iraq—they love to dress handsomely and appear in gowns. They generally wear shoes, and let down their turban to great lengths and clothe themselves in fine linen²⁴." As regards the dress of the kings of Faras he says, "The kings wear very wide and spacious shirts and under the turbans they wear square caps, they also hang swords from belts round their waist.....the dress of the clerks are shirts and turbans, they also wear caps but they hide them underneath the turbans".

In addition to the above remarks on the people and the country, there is a description of the industries and trade of different provinces. He speaks of the cotton industry of Faras with centres at Merv, Nishapur and Basm, and a special branch of industry which flourished in the Persian province of Sabur, where essences were made of violet, narcissus, fragrant pine, lilies, white jasmine, myrtle, marjoram and orange peel".

Similar notices abound in his book concerning all the provinces of the Islamic land as he discussed the geography of each province, one by one.

23. Istakhri: *Kitab al Masalik wal Mamalik*. See chapter on Faras.

24. Ibid.

Enough has been said to indicate the excellence of Istakhri's work and no systematic earlier regional description can be cited to match it. The popularity of this work is shown by the fact that it gave rise to many other books treating in the same way.

Istakhri's book was revised by Ibnī Hauqal, one of his contemporaries and friends, and later published under his own name. Ibnī Hauqal thus expresses himself in his preface "I indicate the limit of each region, the cities and the districts which are found there; the rivers which flow through it; the resources of water which have modified the surface; the resources which they present; the taxes which they pay; the routes which traverse it, the distances which separate it from adjacent lands; the type of commerce which is carried in them....."²⁵

Istakhri and Ibnī Hauqal had clear and fairly accurate ideas of all the countries of Islam especially Mesopotamia Faras, Syria and Samarqand. They draw a picture of peace and prosperity in almost every region from Nile to the Oxus and from Taurus to the Pamirs. "In all the world says Ibnī Hauqal, "There is no place more delightful or more health-giving than the plains of Samarqand and Oasis of Damascus, and the valley of Aila".²⁶ About Sughd he says, "the Sughd for eight days journey is all full of gardens and orchards and villages, cornfields, and villas, running stream reservoirs and fountains, both on the right and on the left; and if one stood on the old castle of Bokhara, one cannot see anything but rich country as far as the eyes could reach, even to the horizon where the green of the earth and azure of heavens are united".²⁷ The people too are suited to the land. They spend their money in improving roads and in building caravan-serais and bridges. In Ferghana too he mentions groves, gardens and orchards and flourishing towns with rich markets and acres of land sown with corn and furnished with wind mills and water mills.

This is certainly a splendid afflorescence. All of them distinguished geographers contributing their mite to the development of economic and regional geography, yet about the end of the tenth century we find al-Maqdisi standing head and shoulders above them. He was one of the greatest geographers of all times. Here are the words of the author concerning his approach to Geography: "I thought it expedient," says al-Maqdisi, "Therefore to engage in a subject which they have disregarded

25. Ibnī Hauqal: *Kitab al Masalik wal Mamelik*. p. 1. Edited de Goeje, Leyden 1873. See also Istakhri's book, chapter on Transoxiana.

26. Ibid. p. 345.

27. Ibid. p. 346.

and single out a branch of knowledge which they have not treated save imperfectly. And that is the chorography of the Empire of Islam, comprising a description of the deserts and seas; the lakes, seas, and rivers that it contains; its famous cities and noted towns; the resting places on its roads and its highways of commerce; the original sources of spices and drugs; the places of growth and production; of exports and staple commodities-containing an account of the inhabitants of the different countries as regards the diversity in their language and manner of speech; their dialects and complexion, and their religious tenets; their measures and weight, their coins both large and small; with particulars of their food and drink, their fruits and waters; an enumeration of their merits and demerits.....the salt lands; the rocky wastes and sandy deserts; hills plains and mountains; the limestone and sandstones; the fat and lean soils, the lands of plenty and fertility.....the industrial arts and literary avocations; lands not dependent upon irrigation and forest lands"²⁸.

An analysis of this quotation reveals certain facts of extreme importance. Firstly, that, for the first time a complete and thorough definition of geography is given by an Arab writer. Secondly in his definition he includes all such phenomena which we think worth including in that subject even today. Thirdly that the main objective in his geographical pursuit was human as well as utilitarian. Fourthly and finally al Maqdisi gives particular attention to the climatic and topographical features of a country under discussion and he sets forth other characteristic things such as plants, animals, minerals, industries, trade and trade routes etc. This arrangement clearly shows that he had a very clear conception of the geographical phenomena as a prelude to the study of man and his activities.

In his book *Ahsan al Taqasim*, al Maqdisi reveals himself a close observer of life "There are ten cities" says he, "in each of which there are certain remarkable things: humanity in Baghdad, eloquence in Kufa, manufacture in Basra, commerce in Misr, treachery in Ray, boorishness in Naya Sabur, stinginess in Merv, arrogance in Balkh and craftsmanship in Samarqand".²⁹ "The fairest of the province, he further adds, "is al Iraq, its climate is the most cheering to the heart and invigorating to the mind. With adequate means nowhere will the heart be so glad and intellect so subtle. The province which is the greatest and which produces the finest fruits and contains the greatest number of learned men and notable persons

28. Al Maqdisi: *Ahsan al Taqasim*. Edited by de Goeje Leyden 1906. p. 2

29. Ibid. p. 33

and has the coldest climate is al-Mashriq. The province which provided the greater quantity of wood and silk, and considering its size yields the largest revenue is Dailam. That which has the best milk and honey and nicest bread and the strongest saffron is al Jibal. The province which abounds in fruits and in animal food and is the cheapest in prices with the dullest inhabitants is al-Rehab. That which is peopled by men of the most degraded and worst, root and branch is Khuzistan. The province which has sweetest dates and most cringing people is Kirman. That which abounds in sugarcandy, rice, musk and infidels is al Sind. The province with most ingenious people and merchants and the greatest amount of profligacy is Faras. The hottest and famine stricken province which has the largest quantity of date-palm is the peninsula of Arabia. The province most favoured by blessings, pious men, ascetics and shrines is al-Sham. The province where there are more devotees, readers, riches, commerce, special products and grain is Misr. The province with most dangerous roads, the best horses the most noble people is Aqur. Lastly the province with the most boorish, the healthiest and the most deceitful people and which contains the largest number of towns and the most extensive area is al-Maqhrib."

When al Maqdisi remarked that there are ten cities where there are certain remarkable things, he was making one of the earliest observation upon the genuine case of geographical control. There he adumbrates the basis of a philosophy of geography, (which is mainly economic and human) when he deals with the characteristics of different provinces of the empire. Nevertheless, inspite of this promising introduction, Al-Maqdisi attempts no scientific examination, of international commerce and the location of industries. Nor does he make any analysis of the factors which govern the growth and decline of the provinces he discusses. Still less does he make any attempt to weld together the geographical background and the historical outline which he supplies of each country. Nevertheless al-Maqdisi is remarkable for his keen observation, generalisation and apt comparison.

Since the treatment of the environment and of the reactions of the people set in that environment interests the modern geographer, Al-Maqdisi's paragraph on the climate of Syria may be transcribed as typical of the tenth century method and point of view:

"The climate of Syria" he says, "is temperate except in that portion which lies in the central region of the province between as-Sharh and al Halb, and this is the hot country where grows the indigo tree and the palm. One day when I was staying at Jerico the physician said to me "seest thou

this valley." "Yes," I replied. And he continued, "It extends from hence as far as Hijaz and thence through al Yaman to Oman and Hajar, thence passing by Basra and Baghdad towards left of Mosul, it reaches Raqqa, it is always a wady of heat and palm trees".³⁰ As regards the climate of al Iraq he observes:

"The climate of this province is varied. Thus Baghdad and Wasit and the intervening country have a fine but quickly changeable climate, there being time when the heat in summer is intense and inhospitable but a sudden change sets in. Al-Kufa stands in complete contrast with this whilst in Basra a great heat prevails and it is only when a north wind happens to be blowing that the weather becomes pleasant".³¹ Here, as elsewhere, we find an unsound and dogmatic method of treatment in which no attention is being paid to the determination of climate by latitude and its modification by local topography. There is not even a mention of so important an element as the character and incidence of rainfall.

Al-Maqdisi's notions on manners and customs of people are worth consideration. "The Syrians" says he, "take pride in their dress. Both the learned and the simple, wear the rida (cloak) and they do not wear shoes in summer time, but only single soled sandals. The Syrians wear their rain cloaks thrown open; and their taitsan are not hollowed. In al-Ramla the chief merchants ride Egyptian asses, with saddle. It is only Amirs and chiefs who ride horses. It is only the inhabitants of villages and the scribe who wear durrah (a woollen garment opening in front). The clothing of the peasantry in the villages near Jerosolem and Nabloos consist of single Kisa (a kind of mantle or cloak enveloping the body) but without drawer".³²

Sometimes the various nations are being labelled with group of characters which through frequent repetition become stereotyped. "One of the peculiarities" says al-Maqdisi, "of the natives of Mecca is their pride." The people of al-Yeman have no refinement. The men of Oman give short weight and defraud and do wrong. Adultery at Aden is overtly practiced, the people of Ahqaf are bigotted heretics".³³

Geographical Determinism:

Arab geographer's philosophy of human geography, based on the principle that there is a proper spirit to every region which manifests itself in the manner, custom and physical characteristics of inhabitants is derived

30. Ibid. p 179.

31. Ibid. p 125.

32. Ibid. see chapter on Syria.

33. Ibid. p 33.

from the Greek writers Hippocrates, Galen and Aristotle. The influence of environment upon man and his social organisation has been studied from early times. Aristotle wrote in his 'Politica' on the influence of climate and geographic position upon the location of cities and the character of the inhabitants. The 'locus classicus' in which Hellenistic theory of environment found its best exposition is a treatise entitled "Influences of Atmosphere, water and situation" attributed to Hippocrates. It was translated into Arabic by Hunain ibn Ishaq under the title *Kitab al Ma' wal Hawa*, and seems to have exercised a strong influence on the thought of later muslim writers on medicine, history and geography.

Among the pioneers in this field may be mentioned Ibn Rusta whose book although feeding upon historical and topographical matters, is representative of the Arab conception of geographical determinism:

"We often find that condition and people in a particular locality or a city differ from that of the other. This is due to the influence of the position of the sun in relation to them. For example the Turks, living very far away from the direct influence of the sun; their country abounds in snow, moisture and cold and which makes their bodies loose and shabby, their hair thick and skin-colour white and red, and their humours cold. They are characterised by violence, breaking of relationship and lack of faith".

He further adds: "The people living to the north of the tropic of Cancer such as those in Babylonia, where the sun is neither very far away nor very near, have temperate natures and bodies. The uniformity of temperatures promotes temperateness in colour of the skin and the temperaments, their mental qualities and manners are also good. Knowledge, wisdom, progress and morality are found among them; this is the land of the learned and the prophets. Even here (Babylonia) the physique, the shapes and skin colour differ from one locality to another in relation to its position with regard to the sun and the fixed stars...there is a proper spirit to every region which is not found elsewhere. The contrast is obvious even in animals plants, seasons, springs and rivers; manners and customs; religion and morals etc..."

In this connection we may mention the name of al-Masudi who pushed the idea of geographical determinism to a greater extent than any of his predecessors. His conception of the relation of man to his environment is expressed in the following words:—

34. Ibn Rusta: *I'laq al Nafisa* pp. 101-2.

35. *Ibid.*, pp. 102-103.

"One part of the children of Abu came as far as the frontiers of India. The climate of the country impressed its character upon them and they are of complexion like Hindus and not like Turks".³⁶

About the physical character of the people of Hind and Zinj he says, The Hindus are distinct from other black nations as Zinj and Damadam and others, in point of intellect, government, philosophy, skin colour, appearances, constitution, talents and intelligence. Galen says that the negro has qualities which are peculiar to him and are not found in any other nation e.g., crisp hair, scanty eyebrows, expanded nostrils, thick lips sharp teeth, sticking skin and black complexion. His country being very hot, the heavenly bodies exert their influence upon it and predispose in his humours a tendency to go to the upper part of the body, hence his eyes are on high, lips thick, nose flat and long and head high".³⁷

Writing on Tibet he says: The nature of the country predisposes men and animals to be light hearted and cheerful, you will not even see old men dull, but, old and young, all equally gay. This cheerfulness, joviality and gaiety led them to indulge in music and dancing".³⁸ He further adds:

That the coconut tree is nothing but a species of palm tree which has developed its present characteristics after its transportation and adaptation to the soil of India".³⁹

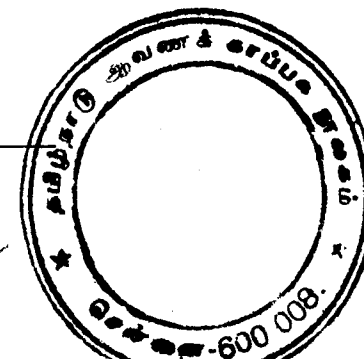
All these writers it is true found their readers and admirers in the following centuries but their influence could hardly be called widespread. Masudi's view however is much developed by Ibn Khaldun (14th century) and Qazvine (13th century). Their ideas are much more explicit regarding the nature of the influences. By anticipating some of the modern concepts of human geography they in fact paved the way for later scientific development of the subject.

36. Al-Masudi: *Muruj-al-Zahab* edited by Barbier de Maynard Paris Vol. I. p 230.

37. *Ibid.* p 250.

38. *Ibid.* p 362.

39. *Ibid.* p 336-37.



Approved by the Text-Book Committee

DESCRIPTIVE GEOGRAPHY

For Elementary Standards 4-8 according to 1941 New Syllabus

BY N. SUBRAHMANYAM,

Standards 4 to 8

For the Middle Schools

According to the latest syllabus

Prepared in accordance with the principles given in Scheme of Work and in accordance with the type syllabus, issued recently by the Madras Educational Department.

BY

N. SUBRAHMANYAM, M.A., L.T., F.R.G.S.,

Lecturer in Geography, Teachers' College, Saidapet.

TAMIL TELUGU AND MALAYALAM EDITIONS

Book I As. 10, Book II As. 12, Book III As. 12.

The following are some of the special features of the series :—

The treatment is throughout descriptive; and influences of geographical environment on human activities have been well brought out everywhere. Physical, human and political geography have been taken in combination, so as to present a synthetic picture of human societies in the different regions of the world. Constant reference has been made to local conditions and examples, making the home region the standard of comparison throughout. The main geographical principles have been treated in an elementary way, each in relation to the region of which it is a characteristic. Attempt has been made to develop the chief geographical concepts in the course of the regional study.

The exercises at the end of each chapter have been very carefully prepared not only for the purpose of testing the subject matter learnt, but also in some way to supplement the matter taught. The volumes are copiously illustrated with pictures, maps, and diagrams. The bold print on glazed paper makes the books attractive to the pupils.

P. VARADACHARY & CO.,

8, Lingha Chetty Street, Madras.

THE INDIAN GEOGRAPHICAL SOCIETY,

1947

President.

Dr. M. S. KRISHNAN, M.A., Ph.D., etc.,
Superintending Geologist, Geological Survey of India, Madras Circle,
Bheemasena Gardens, Mylapore, Madras.

Vice-Presidents.

Sri Rao Bahadur
C. M. RAMACHANDRA CHETTIAR,
B.A., B.L., Advocate, Coimbatore.

Miss A. R. IRAWATHY, B.A. (Hons.),
B.Ed., Lecturer in Geography,
Queen Mary's College, Mylapore, Madras.

Mr. KEDARNATH SRIVASTAVA,
M.A., B.T., Lecturer in Education, Vidya
Bhavan, Teachers' Training College, Udaipur.

Mr. G. NARAYANASWAMY AIYAR,
M.A., L.T., Lecturer in Geography,
Teachers' Training College, Saidapet.

Mr. V. S. MATHUR, M.A., (Lond.),
Lecturer in Geography,
Government College, Lahore.

Secretary.

Dr. GEORGE KURIYAN, B.A., B.Sc.,
Ph.D., (London), Head of the Department of
Geography, University of Madras.

Treasurer.

Sri K. RAMAMURTI, M.A., M.Litt.,
L.T., Dip. in Geog., Lecturer in Geography,
Vivekananda College, Madras.

Assistant Secretary.

Sri V. KALYANASUNDARAM,
M.A., L.T., Dip. in Geog., Junior Lecturer,
Dept. of Geography, University of Madras.

Editor.

Dr. GEORGE KURIYAN, B.A., B.Sc.,
Ph.D., (London).

Executive Committee.

Prof. T. N. MUTHUSWAMY AIYAR,
M.A., L.T., Professor of Geology,
Presidency College, Madras.
(elected by the General Body).

Mr. A. M. SATYA, M.A., L.T.,
Dip. in Geog., Assistant,
Wesley High School, Royapettah, Madras,
(elected by the Council).

Members of Council.

Mr. M. P. RAJAGOPALAN, B.A., L.T.,
Dip. in Geog., Assistant, Sir M. C. T. Muthiah
Chettiar High School, Vepery, Madras.

Mr. A. M. SATYA, M.A., L.T.,
Dip. in Geog., Assistant,
Wesley High School, Royapettah, Madras.

Prof. R. S. MANI, B.A. (Hons.), T.D. (Bom.),
Professor of Geography,
Vivekananda College, Madras.

Mr. P. KOCHUNNI PANICKER, M.A., L.T.,
Dip. in Geog., Professor,
Government College, Coimbatore.

Mr. V. S. GANANADHAN, M.A., L.T.,
Dip. in Geog., Lecturer in Geography,
Pachaiyappa's College, Kilpauk, Madras.

Mrs. R. RADHA, M.A., L.T.,
Assistant Lecturer in Geography,
Queen Mary's College, Mylapore, Madras.

Printed by Mr. M. E. Treasurywala, at Gordon Press, 768-770, High Road, Triplicane, Madras
and published by Dr. G. Kuriyan, Wellclose, Cathedral Post, Madras.

Paper Issue Card No. 97—Q.H. MS. No 53,—4-10-47.

Vol. XXII

October—December, 1947

No. 4

The Indian Geographical Journal

Formerly

THE JOURNAL OF THE MADRAS GEOGRAPHICAL ASSOCIATION

PUBLISHED QUARTERLY.

Editor

Dr. GEORGE KURIYAN, B.A., B.Sc., Ph.D. (Lond.)



THE INDIAN GEOGRAPHICAL SOCIETY,

Wellclose,

Cathedral P.O.,

Madras, 6.

CONTENTS

	Page
COORG ETHNOLOGY	
By L. A. Krishna Iyer	
Introduction	157
Yerava	163
Kuruba (Jenu)	170
Kuruba (Betta)	174
Male Kudia	177
Holeya	183
Coorg	192
Coorg (Contd.)	198
Coorg (Contd.)	204
Coorg (Contd.)	209
Amma Coorg	216
Bant	219
Gauda	222

Foundations of College Geography

Vol. I. Physical, Economic and Mapwork	Rs. 5 8 0
Vol. II. India	" 4 0 0
Vol. III. Asia (<i>In Press</i>).	

BY

M. NAZIR, B.A., Hons. (Lond.), P.E.S.,
Central Training College, Lahore

AND

V. S. MATHUR, M.A. (Lond.),
Govt. College, Lahore,
Vice-President, Indian Geographical Society.

★

Published by

S. CHAND & CO.,

BOOK-SELLERS

ANARKALI, LAHORE & FOUNTAIN, DELHI.

The Indian Geographical Journal

Formerly

THE JOURNAL OF THE MADRAS GEOGRAPHICAL ASSOCIATION

Vol. XXII	OCTOBER—DECEMBER, 1947	No. 4
-----------	------------------------	-------

The Editor takes no responsibility for the views expressed in the Journal. Authors alone are responsible for their respective statements.

COORG ETHNOLOGY

INTRODUCTION

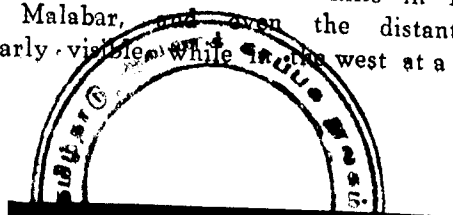
COORG is a small British Province perched on the slopes of the Western Ghats. It has an area of about 1,593 square miles of which the reserved forests occupy about 519 square miles. It is bounded on the north and east by the Hassan and Mysore districts; and on the south and west by the Malabar and South Canara districts of the Madras Presidency. It is an extremely hilly country and is situated on the summits and slopes of the Western Ghats. Its maximum length is about 60 miles from north to south, and maximum breadth about 60 miles east to west. The name of Coorg is an anglicized corruption of the word *Kodaḡu*. It is said to be derived from the Canarese term *Kodaḡu* meaning 'steep' or 'hilly'. The people are called *Kodaḡas*. In the Coorg language, the country is *Kodaḡu* and the people *Kodavas*.

Natural Features—Mountains and Their Formations

The main range of the Western Ghats extends from Subramania in the north-west to the western point of the Brahmaḡiri in the south for a distance of over 60 miles. From this backbone several long and elongated ridges branch off from east to west. The grand mountain mass of Subramania runs to a height of 5,625 feet above sea level. Among the many

ridges branching off from this part of the Ghats, the most remarkable is the one which attains the greatest height in the double peaked Kotebetta (5,375 ft.) situated 9 miles north of Mercara. Near Mercara the Bengunad Range starts west of the Ghats forming an acute angle with them. At this point is Brahmaçiri, the source of the Cauvery river, and north of it is the Sampaji valley through which descends the road to Mangalore on the west coast. Continuing on the line of the Ghats which runs south-east from here, the most important peaks are the well-wooded Tumbemala, Iggutappa, Devarabetta, Tadiandamol (5,729 ft.), and Somamala. Some distance to the south is the Periambadi ghat road to Cannanore and Tellicherry on the west coast. In the extreme south-west is the Marenad Range with the great lateral range of the Brahmaçiris, which form the southern boundary of the country, separating it from Wynad. The highest peak in this range is Devasibetta (4,500 ft.) which towers up from a beautiful plateau called Huyalemale. Many spurs from the Brahmaçiris branch off over the whole of Kiggaatnad, producing a ramification of narrow ridged hills, some ascending in almost solitary grandeur like Ambatebetta near Virarajendrapet, Bittangala, and Kundadabetta, others subsiding into the undulating slopes of the eastern elevations, enclosing innumerable rice fields, some of which are the most extensive in Coorç. The Bengunad Range also extends eastwards in two ridges south of Mercara. One culminates in the pointed peak of Nurokkalbetta, the other takes a zigzag line towards Fraserpet, its highest point being Kallurbetta, clothed with teak forests. From Kotebetta northwards runs the Santhalli hills, terminating in the bluff Mukribetta. From the northern frontier a range runs south to the Cauvery, in which are the fine conical peak of Malambi (4,468 ft.) and the Kanaçalu hill.

Coorç was primarily well wooded, and although a vast tract was cleared for coffee cultivation, it still conveys this impression, when one has a general view of it from the summit of a hill. In many parts of Coorç (South) impenetrable evergreen forests and bamboo jungles have a luxuriant growth. Towards the east and north, the country varies from the park-like tracts of Yelusarasime to the bare grass hills of Yedavanad and the thick deciduous jungle that fringes the Cauvery. The sandal tree is found in abundance in the north-eastern parts. On a bright November morning, an observer from the heights of Brahmaçiri is in rapturous delight at the picturesque view that opens out before him. Ridge after ridge of grassy or forest-clad hills appear, now gently sloping down in wavy lines, now bold and abrupt, now raising their steep summits into the clear blue air. Kudare mukhabetta bursts into view from Canara, the Bettadapur and Chamundi hills in Mysore, the Wynad mountains of Malabar, and even the distant range of the Nilgiris are clearly visible while in the west at a distance of about 30 miles below



A View of Talai Cauvery



The junction of the Kanaka and the Cauvery at Baçamandala



Pilgrims at Bagamandala



Pilgrims performing religious rites at Bagamandala

the steep precipices of the Ghats are the coast line of Malabar and South Canara, intersected by broad, bright, serpentine rivers, and beyond, the dark blue Indian Ocean, dotted with sailing craft. The eastern frontier between the Cauvery and Lakshmana rivers exhibits an almost uninterrupted jungle inhabited by the Kurumbar, Lambani, and other wandering tribes.

River Systems

Coor̥ is well favoured with rivers and streamlets which give it an abundant and perennial water supply throughout the year except South Coor̥ where there is a dearth of it. Though perennial, they are not remarkable for their breadth. Of the rivers that flow eastward, the most important are the following :—

The Barapole, rising in the Brahmagiris with its tributary the Kallhole descending from the Heḡḡala pass; the Udormbi, the Yeramakuth, the Cadiamale, and the Mundrotu rivers from the Padinalkanad Range. The Yertakarti and Nujikal rivers descend from the Pattighat, and the Maringundi river from the Pushpagiri Range.

Rivers of the eastern watershed consist of the Cauvery and its tributaries. The Cauvery has its source at Talai Cauvery near Bagamandala and is the largest and most important river in Coor̥. Its tributaries are the Ramathirtha and the Lakshmanathirtha, both of which rise in South Coor̥ and join the Cauvery in the Mysore Province. The Kakkabe, Kadanur, Muttarmudi, and Chickie rivers, all of which assume considerable dimensions during the monsoon, rise in Padinalkanad and Mercara taluks, while the Hatti, Nadapur and Choran rivers from the Harangai river, and powerful tributaries rise in Nanjarajapatna taluk.

Flora

The flora of Coor̥ is typical of the prevailing vegetation throughout the Western Ghats. According to Conner, every species of vegetation attains a high degree of luxuriance, if not rankness, quite foreign in the neighbouring countries. Both flowers and blossoms have a brilliancy and variety unknown in the plains, and many of the wild plants possess a share of aromatic qualities both as to odour and flavour. The all-prevailing forest is distinguished by the people as Male-kadu (evergreen mountain forest), and the Kanave-kadu (deciduous growth at the lower levels of the passes). Arborescent growth at higher elevations varying from 3,500 feet is mostly represented by *Vateria indica*, *Canarium stritcum*, *Calophyllum tomentosum*, *Michelia champaka*, *Polyalthia coffeoides* and others.

Fauna

Elephants range throughout all parts of Coor̥. They frequent the forests towards the eastern frontier. They are not so numerous as before.

Since 1902 systematic arrangements have been made by Government for their capture in pits as in Malabar, Cochin and Travancore. Bisons frequent the densest forests and highest hills, especially in Marenad and Hormalnad. Bears generally abound in the north-west. Tigers and leopards are also found. Sambur, spotted deer, and barking deer are general in the woods. The most important bird is the hornbill, but there are peacocks, water fowl and jungle-cock, over and above the most ordinary and common Indian birds. Snakes are plentiful and cobra haunt the bamboo forests. There is a large variety of fish. The best fish in size and quality is the plantain fish.

Meteorology and Climate

Coorǵ is a small country, and yet its high mountain ridges and narrow valleys, its wood-clad hill slopes and open champaign tracts greatly influence its atmospheric conditions. Still the dry eastern district may present as steady a climate as the moist hilly tract along the Ghats or the Mercara plateau. The hot, rainy and cold seasons have to be distinguished. Throughout the year the atmosphere is humid, and humidity is precipitated either in dense mists or in showers of rain. In July the monsoon reaches its greatest vehemence. The Coorǵ hills send the floods controlled by steep river banks to the east and west and stand forth in renewed beauty. In September the sun breaks through the dense atmosphere. In November the north-east winds carry heavy clouds from the eastern coast which discharge themselves chiefly in the east and south-east of Coorǵ. The greater part of December is foggy, but towards the end of the month the weather becomes delightfully clear and fresh. The annual rainfall at Mercara is 133 inches. On the whole, the influence of the Coorǵ climate with its average temperature of 60° F. is salubrious. The nights are cool throughout the year.

Prehistory

Our knowledge of the prehistory of Coorǵ is very scanty. Prehistoric dolmens or burial cairns are found in Coorǵ as in other parts of South India. The first discovery of them in large numbers was made by Lieut. Mackenzie in 1868 on Bane near Virajpet. Captain Cole followed it up with great enthusiasm and his excavations yielded interesting results. All the cairns found are either level with the ground, or their tops crop just a little out of it. When laid bare, they present a stone chamber 7 ft. x 4 ft. x 5 ft. composed of four upright granite slabs, 7 or 8 inches thick, and a capstone which projects over the uprights. The flooring is likewise of stone. The narrow front slab has an aperture of an irregular curve nearly 2 ft. in diameter broken out from the top and generally faces east. Sometimes a compartment may be two-chambered. These cairns are either

solitary or in groups, in some cases forming regular rows. The relics found in them are peculiarly shaped pottery, buried in the earth that nearly fills the chambers. The vessels contain earth, sand, bones, iron spear-heads and beads. The pottery consists of chatties and urns of burnt clay and is of a lead or black colour. They are smooth and shining and can hardly be said to be glazed. Bones, ashes and bits of charcoal are usually found at the bottom of the urns; grains of ragi have also been found inside the chambers. Beads of red cornelian of a cylindrical shape are occasionally met with in the smaller pottery. The iron implements, spears, and arrow heads are very much corroded so that their shape is hardly distinguishable. These cairns apparently were the resting places of the earthly remains of a generation that existed anterior to the historical records of the present local races. The dolmens are also called pandukuzhies or dwellings of the Pandus by the Coorǵs.

Traditional History

The early history of Coorǵ is based primarily on Puranic legends and surmises covering a period of over ten centuries. The three names, Brahmakshetra, Matsyadesa and Kroda-Desa are applied to Coorǵ. The Puranic account is found in the *Cauvery Mahatmya*. It describes the origin of the Cauvery, and the place from which it arises.

According to *Cauvery Mahatmya*, the Coorǵs are Uǵras by descent, that is the offspring of a Kshatriya father and a Sudra mother. The Kshatriya was a Kadamba prince of the Matsya country and known as Chandravarma. He was very religious by nature, and after a long pilgrimage to holy shrines in the south he came to Brahmagiri and propitiated the goddess Parvati, who bestowed on him a kingdom there and provided him with a Sudra wife by whom he had eleven sons. She also promised to bless the country by appearing in it as the river Cauvery. The sons brought up as Kshatriyas in their turn obtained as wives the three hundred daughters born of Sudra mothers to the king of Vidarba (Berar). Chandravarma having crowned his eldest son Devakanta as successor, took leave of him, predicting that Cauvery would soon appear as the river. These sons had more than a hundred sons each, and they spread themselves all over the country. This tearing up of the ground was like the work of boars, and the country was therefore called Kroda-Desa or boar-country from which arose the name Kodaǵu.

There is another popular legend which throws some light on the early history of the Coorǵs. In former times there lived in Malabar six brothers and a sister. Five of them accompanied by their sister, Ponnangalathamma, went to Coorǵ by the Paditoraǵhat. While they were on the road, four of them said, "How is it that our sister comes with us?"

money borrowed. This was the most general mode of transferring the usufruct, and, above all others, likely to produce the greatest wretchedness. The mortgagee had the benefit of their services for the time being, and this was considered equivalent to the interest for the sum advanced. They are now free.

The praedial servants of the agriculturists were obliged to perform the work of the Sircar. The servants of every ryot were at the disposal of the Sircar, and their service given as a matter of right which was generally admitted. Each cultivator had to supply a certain number in proportion to his means, and the Parputty of the Nad was entrusted with all arrangements for them. Each Nad had to furnish a certain number of labourers for work. The body of labourers thus collected were generally employed at Mercara, where works of some kind or other were constantly undertaken. No compensation was given to the owners of the servants thus employed, nor did they receive any wages. They were fed by the Sircar during the period of work. This system pressed hard on both masters and servants, particularly the latter, who experienced hardship. There were numerous other instances in which labour was supplied to the Government without any remuneration.

Habitations

The Yeravas live in thatched huts. The walls are made of bamboo reapers, interwoven and plastered with mud. Their migratory habits prevent them from building houses with mud walls. The huts have a verandah of about 10 feet square. Walls are half-built all round. Their fireplace is on one side, and they have a small pit to pound paddy. Their domestic vessels are mostly earthen pots and dishes. The latter are used for taking food. Before occupying a newly built house, a Yerava worships Kuttathamma and Gulikan with offerings of rice, coconut, toddy, banana and fowl with the prayer, "Oh, Divine Beings, by your grace we have built this hut. Keep watch over us."

Internal Structure

The tribe is composed of four endogamous groups, the Panjiri, the Pania, the Badava, and the Kaji Yeravas. The Panjiri stand highest in the social scale, and the Kaji the lowest, because of their habit of eating crows. The Panjiri Yeravas who came from Mysore are divided into two sub-groups, Ippumale Yeravas and the Karatti Yeravas. The former are said to have immigrated from Ippumale which is situated beyond the Manan-toddi river, and are generally found in the Srirangala and Ponnampet nads; and the latter in Parattimale near Bythor. There is no intermarriage between them. The Badava Yeravas, who are also found in Mysore, are



Yerava Male

Yerava Female

The people will say that she is our wife." One of them replied, "If she comes with us, we will spoil her caste." When they came to Chouripade hill near the Kakabi river, they felt hungry. Then Iguttappa asked her (the sister) to prepare some food. She replied that there was neither rice nor fire. Iguttappa said, "I will give you rice, but you must eat it without salt". The brothers agreed to this. Then she saw a cow, which belonged to the Paradandra house, and she milked her, allowing the milk to fall into an earthen pot full of rice. While her brothers were sleeping in the shade of a tree, she went to the bank of the river and buried the pot in the sand, when it began to boil. She then summoned her brothers to partake of the rice she had prepared. When they had partaken enough, Iguttappa took some rice, threw it into the air and exclaimed, "See how the hail is descending from this sky." The sister was incensed at this act. She took a wooden ladle, gave him a heavy blow, and said, "See how the thunder breaks in the monsoon." The other brothers then laughed at this. While they were sitting together chewing betel, Palurappa said, "Let us see whose betel is reddest." All spat out the betel in their hand, pretending that they were throwing it again into their mouth and chewing. Deluded by this act, the sister threw the betel into her mouth and began to chew. They then declared that she had lost her caste. This decision was confirmed by their brother in Malabar to whom they appealed. Their sister felt very sorry and wept very bitterly. Iguttappa then threw an arrow from Iguttappabetta and directed his sister to follow the direction of the arrow and stay where it fell. Assuming the shape of a crane, she flew towards Ponnangala. Some Holeyas were working in paddy fields near Karathandra house. She flew upon one of them who became possessed with the devil and ran towards the tree to which the arrow had stuck. The brothers separated into different villages where they settled down. The whole family was afterwards worshipped as gods. Beyturappa had a temple at Beytur in Malabar. The third has one in Maletambira forest in Chomamale in Coorǵ, the fourth on the Iguttappa hill near Kunjila, the fifth at Palur in Kuyangarinad, and the sixth Tirnalli-Timmeysa at Tirnally in Wynad. A temple was built for Ponnangalatamma round the tree where the arrow struck. At her annual feast in April, she weeps and is worshipped by the Holeyas. The arrow is seen sticking to the wild mango tree to this day.

The foregoing traditional accounts go to show that the Coorǵs belong to the Ugra race and are the descendants of prince Chandravarma. The first colonists are made out to have migrated from the Kadamba kingdom. Lewis Rice says that it is a conclusion as well consistent with what is known of the Kadamba history as corroborated by the modern annals of Coorǵ, and with the fact that every dynasty of its Rajas derived their origin from the same region. There are also other traditions which lend

support to the same view. They are narrated in the tales of the adventures of Chandrasekara and Chitrasekara, as expounded by Professor Wilson. They point to the fact that the kings of Jumcha and Coorǵ were of the same race. It is also observed that the aborigines as represented by the Holeyas were their forerunners in Coorǵ.

Population

The population of Coorǵ is composed of the following tribes and castes:—

1. Yerava
2. Kuruba
3. Mal Kudiya
4. Holeyas
5. Coorǵ
6. Bant
7. Gauda
8. Heǵǵade
9. Vokkaliǵa

Bibliography

1. Conner: "Memoirs of the Coorǵ Survey", Part II.
2. Rice, Lewis: "Imperial Gazetteer of India, Mysore and Coorǵ", 1908.
3. Richter, G.: "Manual of Coorǵ", 1870.
4. Mundanna, N. S.: "Census of Coorǵ", 1931.

YERAVA

THE Yeravas are the aborigines of Wynad from which they gradually migrated to the forests of South Coorǵ. They are now found scattered all over the villages of Ponnampet and Srimangala. They are the lowest of the jungle tribes and appear to have been in a servile condition to the Betta Kurubas from remote times. They numbered 12,810 at the Census of 1931, 6,763 being males and 6,047 females.

Praedial Slavery

Praedial slavery in Coorǵ differed only in a few respects from that which flourished in Kerala. Three to five numbers were owned by the proprietor of a small estate. Though they were not treated with severity, the general conditions of their service subjected them to great hardships. They were rarely sold, but were frequently given as security for

mostly found in Coor̃. There is neither interdining nor intermarriage between these two classes. The Panias and Panjiris neither interdine nor intermarry. A Panjiri can become a Pania, but not *vice versa*.

Marriage Customs and Ceremonies

A man marries the daughter of his mother's brother or father's sister. The Yerava adults have no voice in the choice of a maid for wife. The parents negotiate for the marriage of the sons. When a boy attains marriageable age and a suitable girl is found, the boy's parents and the headman of the tribe (Kanaladi) take the marriage badge, a *sadi*, and the articles necessary for their food to the hut of the bride-elect. They prepare the food, light an oil lamp, and offer sacrifice to the gods Kuttathamma and Gulikan along with coconut and banana. Some rice is also placed in a sieve. The maid's Kanaladi asks them the object of their visit. The young man's Kanaladi says that they have come to propose the marriage of their daughter to the young man, and the maid is produced before them. They then pray to god to help them in the celebration of the marriage. The Kanaladi of the bridegroom-elect ties the *tali* round the girl's neck, and gives the *sadi* to her with one *hana* (three annas). The parties sit together and partake of the food already cooked. The maid's Kanaladi fixes the date of marriage (*Mañala kurippu*). The betrothal takes place a month before marriage, to the celebration of which both the Kanaladis should consent. If the bride's party cancels the betrothal, they have to make good the expenditure incurred by the parents of the bridegroom-elect. The bridegroom's party forfeit their claim in case the fault is with them.

On an auspicious day prior to the celebration of the marriage, the relatives of the bride and bridegroom assemble in the respective families. Chapras are erected with ten or twelve poles in front of the huts of both the bride and the bridegroom. Pigs and fowls are slaughtered. Ancestors are worshipped. Parties assembled are treated to a feast. The night is spent merrily by beat of drum and the tuning of pipes for dancing. On the day of marriage, the young man is bathed, neatly dressed and adorned, and is conducted to the marriage in procession. He is seated on a tripod a foot high. A lamp is lit before them. His mother and other married women throw rice on him as a token of blessings and present him with a few annas. Then follow others after which the assembled guests are treated to a feast. In the evening, the bridegroom's party start in procession to the bride's hut so as to reach it before day-break. They halt near the residence of the bride-elect, when they are welcomed by the bride's party with light refreshments and toddy. They are conducted to the marri-



Yerava Men

age booth in front of the hut of the bride-elect. As the bridegroom-elect enters the booth, an elderly woman washes his feet. He is then seated on a tripod. The gods of both the parties are propitiated with parched rice, coconut and bananas. The bridegroom and bride are then made to stand together and the gods are invoked to witness the ceremony and bless them, when the assembled guests throw rice on them and give them presents varying from three pies to three annas. The Kanaladi then asks the bridegroom to grasp the hand of the bride. The guests are then treated to a feast, after which the bridegroom and his party return to his hut with the bride. Just then the bride's mother or some other elderly woman stands near the gate, when the bridegroom gives her eight annas and requests her permission to take the girl. The same formalities are gone through in the family of the bridegroom. The bride touches the feet of every one as a sign of obedience and respect to the elderly members, who make some presents of coins to her. The Kanaladi comes on the fourth day. The bride is bathed and dressed and adorned in her best. She performs the Gangapuja and brings water to the hut in a few pots. She is then dressed in a new sadi. After a sumptuous meal, the guests disperse. There is no special ceremony for consummation which takes place in the bridegroom's hut after his return with the bride. The married couple again go to the bride's family, stay there for a few days, and then return to the hut of the husband. Thereafter, they live as husband and wife. It may be stated that the joining of hands is, according to Malinowski, a ceremonial pre-representation of the actual union in marriage, assisting the union by making it safe and making it previously, and, as it were, objectively.

Elopement

When the parents are not in a position to defray the cost of the marriage ceremony, they tacitly connive at the young man's approaches to the girl, who elopes with him one day and they remain in the jungle for a few days. The girl returns to her hut, but is not allowed to enter it. Her parents place the matter before the villagers who assemble to enquire into it. The Kanaladi comes. The couple confess their guilt, and pay a fine of a rupee or two, when they are condoned. The tali-tying takes place and they become husband and wife. These formalities cost five rupees, while the marriage ceremony costs twenty-five rupees.

A man can have more than one wife. The first wife has no special privileges. Concubinage is also allowed.

Widow Marriage

Widow marriage is in vogue among them. On the day fixed for the marriage ceremony, the man goes to her hut with friends and relations,

invokes his gods for blessings, and ties a tali round her neck, and gives her three annas. Thereafter they become husband and wife.

Adultery and Divorce

When a woman commits adultery and when that is known, the elders meet to enquire into the matter. When the guilt is established, the culprit is made to pay a fine of one to ten rupees. Sometimes he is compelled to marry her after payment of the marriage expenses for which he is responsible. A man can divorce his wife at his will and pleasure, when he simply takes her to her parents and says that he does not want her. Sometimes the husband in a fit of anger sends her out of the house saying that he does not want her and that she is free to go anywhere.

Pregnancy and Childbirth

When a woman attains pregnancy, her parents visit her during the seventh month, give her sweets and stay with her for a day or two. They then take her to their hut. When she is about to become a mother, she shifts to a temporary hut put up for the purpose, and an elderly woman of the family, usually her mother, acts as her nurse. Soon after delivery, the mother and the baby are bathed in warm water, and this is continued during the period of pollution. Soon after delivery, she is given a decoction of cumin seeds, ginger and asafoetida, and fed with rice kanji. The pollution is for 11 days. She bathes on the twelfth, when the naming, feeding and cradling formalities are gone through. She continues to be in a state of pollution for a period of forty days.

Adoption

In the absence of children, a man can adopt a boy below twelve years of age. The Kanaladi comes. The boy is dressed in new cloth. The gods are worshipped with offerings of rice puddings, coconuts and bananas. The Kanaladi holds the boy's hands and says that henceforth he is the son. May the gods who are invoked bear witness. He hands over the boy to the man.

Daily Life

The Yeravas hardly own any land. Every adult member of a family works and earns his bread ordinarily. They live by the sweat of their labour and never think of the morrow. They want everything fresh. Both husband and wife work and get food and earn paddy as wages. They bring the paddy and the woman hulls as much paddy as the family requires for the night meal. The husband will sit near the fire or in the moonlight during the dry weather beating his drum and singing. The boys and girls dance, the women joining the party at times. At the time of harvest and on full moon days, the drumming and dancing last throughout

the night. They use no lamp in the hut. Often a Yerava feels reluctant to work and forgets his master. He will quietly walk with his wife into the jungle in search of honey, fruits, roots or fish. Generally the wife cooks food, but the husband may join her occasionally.

Social Organization

The villagers meet once a year to offer prayers and sacrifice to ancestor-spirits. The meeting continues for three days. Every family brings rice, coconut, toddy etc. First they enquire into cases of adultery, divorce, elopement if any. The Kanaladi presides over such meetings and gives his decisions. The deities and ancestor-spirits are propitiated with rice puddings, coconuts, toddy and fowl. The Kanaladi performs the rites, sings songs in praise of the sanity and powers of the tribal deities, Kuttathamma, Guligan and Kuttichathan, and the dead heroes, who have done great deeds such as killing tigers, driving away demons and other spirits. They then eat and make merry. The Yeravas have their own pipes and drums, and bring as many sets as they can afford. Young men, women and children join together and dance in a circle to the tune of the pipes and beating of drums. This continues day and night. It is on this occasion that women and grown-up girls are enticed by men. They quietly slip away at night and seek their abode in the jungle for some days or go away to distant villages, where they live as husband and wife. Those who escape into the forest return in a day or two. The Kanaladi fines them, and compensates the husband of the woman by payment of a few rupees. If the fine is not paid, the culprits will be expelled. Nobody dares to go against the judgment of the Kanaladi. His post is hereditary.

Funeral Ceremonies

The dead are generally buried. The dead body is washed and covered with a new cloth. It is then covered with earth. Some rice and milk, or if milk is not available, coconut water is poured into the pit. Some rice and water are also placed close by. On the eighth or tenth day, the funeral ceremony is performed. They call it *kaka pili (bali)* and keep food for the crows. The hut is smeared with cowdung. All bathe. Food, meat and toddy are offered to the ancestor-spirits. The Kanaladi calls upon the god and the sun to give a good place to the spirit of the dead, and protect the living members of the family. The closest relations keep the offerings outside the hut for the departed spirit. If crows do not eat it at once, the members of the family think that there has been something wrong, and also infer that gods and ancestor-spirits are angry with them. Often they perform the ceremony again on another day. It is said that women are buried in a sitting posture in a hole scooped out of a grave.

Religion

The Yerava gods are Kuttathamma and Kali who are believed to reside in a place near Kutta, a small town between Coor and Malabar. Chamundi and Cauvery are their chief deities. The general form of worship is as follows:—The headman keeps rice, coconut, etc. in a neat place, lights a lamp, and stands before it, facing the sun, and prays to god, requesting him to grant what the worshippers want. They keep no image, but plant a rough stone under a tree to represent Gulikan. At Kutta, their chief goddess Karinçali or Kuttathamma is represented by a stone. They offer toddy, and a fowl or two with prayers when they worship. They worship the water-goddess (Ganga) during marriage ceremonies. They observe all the Coor festivals and those of the high caste Hindus. They do not worship rocks or trees, but plant rough stones under a tree to represent their gods and demons. The fields are believed by them to be haunted by devils for which they offer sacrifice. The Kanaladi comes to Kutta during the Karinçali festival. He is the supreme authority on all religious disputes. They also worship Mother Earth, the river Cauvery, Lakshmithirtha and other springs.

Sorcery and Witchcraft

The Yeravas believe in magic, sorcery and witchcraft. The Kanaladi or one deputed by him becomes possessed of spirits, and gives information of the past. They believe in the potency of the evil eye. All kinds of disease are brought about by evil spirits to obviate which talismans, enchanted threads, and certain beads are worn by them. In practising sorcery, the sorcerer draws the picture of a demon with rice powder, and to make it appear frightful, he puts powders, coloured red and black, here and there, and lights a lamp. Bamboo sticks about a cubit long are sharpened at one end and clean cloth is tied round it, dipped in oil and lit. Beaten rice and other articles are kept on plantain leaves on one side. The sick man is made to sit before the leaves. The sorcerer with coloured water in his hand begins to utter his incantation and finally kills a fowl after sprinkling it with water. In case of exorcism with dance, the sick man is made to sit in the centre and is decorated with flowers and kumkum. The sorcerer and his men beat their drums and dance round the man singing peculiar songs. Sometimes the sick man is beaten with a cane, if he is believed to have been possessed by a spirit.

He then runs and the sorcerer takes him to a tank or river, and makes him dive and come out. He gives him new cloths to wear. The spirit is then supposed to have left him.

Occupation

Agriculture is the chief occupation of the Yeravas. They have no lands of their own, but work for wages. They have auspicious days for ploughing, sowing, transplanting and reaping. They know which rain will be beneficial for each crop, and some forestall the year's crop by the commencement of the rains. They perform no ceremonies either at the beginning or at the end of the agricultural operations. Like other agricultural tribes, they worship their implements, bullocks and the like.

Appearance, Dress and Ornaments

The Yeravas are short in stature, very dark in complexion, and have curly hair much softened by combing. The hair is tied into a knot at the top of the head, which gives them a wild and savage aspect. They have thick lips and flat noses, though both the features are being effaced. Their garments consist of a loin-cloth and they wear no headwear, unlike the Muthuvans of Travancore. Their whole appearance has an air of wretchedness.

Conclusion

The Yeravas have much improved of late. Both men and women work hard, and are in great demand in coffee estates. Contact with estate coolies has vitiated their simple habits. They are now turning unreliable. They often decamp from their huts in the jungle and travel with kin unobserved in one night beyond the reach of the pursuer. They go to Wynad, and on return find new masters with hardly any chance of discovery especially when employed in Coor's houses during the working season. They conform as much as possible to the mode of life and worship of the Coor's.

Bibliography

1. Ananthakrishna Iyer, L. K. : "Notes on the Yeravas".
2. Cipriani, Lideo : "Su Alami Gruppi Umani Del Cruz".
3. Ritcher, G. : "Ethnographic Compendium".
4. Thurston, Edgar : "Castes and Tribes of Southern India".

KURUBA (JENU)

THE Kurubas are found scattered in Ponampet, Srimangala, Kutta and Somvarpet taluks of Coor's. They are closely connected with those found in the forests of Mysore and the Nilgiris. Consequent on geographical isolation, there is no intercourse between them, nor are they connected with the Kurubas who live in the open country in mixed villages in Mysore and tend cattle. The name 'Jenu' means honey in Canarese. They numbered 6,867 at the Census of 1931, 3,710 being males and 3,157 females.



Yerava Women

Habitations

The Jenu Kurubas have no settled habitations, but wander about in search of honey. Their villages are clusters of huts calls *hadi*. There is a separate hut to serve as dormitory for the unmarried females to sleep at night, and another for the unmarried males. Both are under the supervision of the headman. The huts are made of bamboo and reed.

Internal Structure

The Jenu Kurubas are divided into two endogamous groups, the Jenu Kurubas and Betta Kurubas. There is neither interdining nor intermarriage between them.

Marriage Customs and Ceremonies

A Jenu Kuruba marries the daughter of his maternal uncle or father's sister. Marriage takes place after a girl attains puberty. The boy's party goes to the girl's hut with betel leaves, coconut and bananas to settle the marriage. The girl's party welcomes them. After settling the terms of the agreement, the date of marriage is fixed up. The former pay a *hana* to the girl's party and take leave of them.

There are two forms of marriage among them. One is similar to that of the Vokkaligar. The marriage booth is constructed with twelve poles on an auspicious day. The friends and relations who are invited are treated to a feast. The ancestor-worship also takes place the same day. On the following day, the bridegroom is bathed, neatly dressed, and led in procession to the marriage booth, where he is seated on a tripod. Rice is thrown on his head and a dose of milk is given him by his mother, and other married women, and each presents him with a *hana* or two. The members of the family and the assembled guests are well fed. The bridegroom and party then start in procession to the hut of the bride-elect, and stop at a distance therefrom, where they are welcomed by the bride's party who feed them with light refreshments. They are then conducted to the hut of the bride-elect in procession. The bridegroom's feet are washed by some woman of the household, for which she receives some coin. The bridegroom-elect is then seated in one room and the bride-elect in another. The *dara* ceremony then takes place, after which the bride is tied with a tali (marriage-badge) round her neck. The couple do not eat rice for two days, but are fed with milk and fruits. Only after the removal of the kankana are they allowed to eat rice. They are then allowed to remain in a room and live as husband and wife. The guests are treated to a feast, after which the bridegroom and his party return to his hut with the bride. At the time of departure, he is advised to treat his wife properly. The bride's party who accompany the bride are similarly entertained.



The other form of marriage is the simple one of exchange of betel leaves and arecanuts which concludes the nuptials. The bride-elect is always presented with two wedding costumes and a few necklets of glass beads. The chewing of betel leaves by the couple constitutes the essence of marriage among the Minihahas of Celebes and the Balans.

Polygamy prevails among them. The offspring of concubines are not considered legitimate.

Puberty Customs

When a girl comes of age, she is lodged in a separate shed put up for the occasion by her maternal uncle. She is under seclusion for fifteen days. On the sixteenth day she bathes, when she becomes free from uncleanness.

Social Organization

The Jenu Kurubas have a headman called Ejamanan. He is the arbiter of their disputes. His decision is final.

Funeral Ceremonies

The Jenu Kurubas used to bury their dead. Both burial and cremation now prevail among them as a result of contact with Hinduism. Children and those suffering from disease are burnt, while others are buried. Pollution lasts for twelve days. They feed the spirits of the dead on the twelfth day, when they celebrate a feast for the relatives and others who are present.

Religion

Siddeswara and Basavaswara are the gods whom they worship. They also worship the sun and the moon for whom they build sheds to give offerings on Mondays and Fridays. They also observe the Huttari and Dipavali festivals.

Occupation

The Jenu Kurubas neither own nor cultivate land for themselves nor keep livestock of their own. Their primary occupation is honey gathering for which there are two honey seasons. The chief one is before the rains when they get the hejjanu or rock hive or mountain honey, the combs of which are larger than those on branches. After the rains they gather the kadi honey or last honey, which is inferior in quality and less in quantity. They sell the honey and wax to the Government contractor. They are expert climbers and are fearless in their attempts at plundering

the bee-hives. This they do in the dark of night, having first fixed to the honey tree a bamboo whose branches are cut back to serve as a ladder, or they let themselves down over a rock by means of a cane chain.

They are very skilful in the use of the stringed bow to hit birds, and of the net which they always carry round their waist to catch the red squirrel, the grey flying squirrel, and the black monkey. They have an intimate knowledge of the jungle and the habits of animals. They fix a bag-like net with its mouth open on a thick branch in the track of the animals, and, should one enter, its weight pulls down the net which is fastened by a string in such a manner that its noose effectually closes the mouth and the animal is caught.

They also work as labourers on the Coorǵ farms during rice transplanting and harvest times, and get six seers of paddy a day, or take service for the season and get two rupees in cash for the sole season in addition to four seers of paddy per day.

Appearance, Dress and Ornaments

The Jenu Kurubas do not tie their hair into a knot, and through carelessness it often gets matted, and gives the head a bulky appearance. The women, who dress like the Canarese Vokkaligas, tie their somewhat curly hair into a knot at the back of the head. They wear brass ornaments, bangles, and necklaces.

Physical Features

The Jenu Kurubas are darker than the Betta Kurubas. Their average stature is 156.5. Their average cephalic index is 76.1. Their average nasal index is 77.8.

Games

In the dry season the Jenu Kurubas have a week of merry making. This feast is a regular saturnalia and the Kurubas dance before the houses of those whom they consider superior to themselves. In their splendid movements they use small sticks which they strike against each other keeping regular time.

Social Status

The Jenu Kurubas avoid eating food of the Aḡasa, Holeya, Madiḡa, the Christians and the Mussalmans.

KURUBA (BETTA)

THE Betta Kurubas are found in the hilly tract of Kiggathanad and Edayanalkanad taluks. They are said to have come from Wynad and Malabar, whither they often go back when they have cause to hide away. The word 'betta' means hill, but when spelt with a p signified rattan or cane. Hence the name may point to their occupation. They are skilful cane workers, making mats, baskets, cradles and fishing traps of cane and bamboo.

Origin and Early History

The Kurubas are said to be the modern representatives of the ancient Kurumbas or Pallavas who were once very powerful in South India. Very little trace is left of their former greatness anywhere. In the seventh century A.D., the power of the Pallava kings was at its zenith. It gradually declined owing to the rise of the Konga, Chalukya and Bhola chiefs. The final overthrow of the Kurumba sovereignty was effected by the Chola king Adondi about the seventh or eighth century A.D. This led to the dispersion of the Kurumbas far and wide, and many fled to the hills of Malabar, the Nilgiris, Coorg, Wynad and Mysore. Thus with the lapse of time they have become wild and uncivilised, and have, owing to their comparative isolation, lost their ancient culture. Both the civilised and the wild Kurumbas must have been identical, but the present difference is the result of geographical distribution and environment. The name Kurumbranad, a taluk of Malabar, still attests their former greatness. They may be regarded as the very oldest inhabitants of the land who can contest with their Dravidian kinsmen the priority of occupation of the Indian soil. The terms Kurumba and Kuruba were originally identical, though the one form is in different places employed for the other, and has occasionally assumed a special local meaning.

Habitations

The Betta Kurubas are settled in a hamlet of their own and their neat bamboo huts are arranged in a quadrangular form, but leaving the four corners open as passages; in the centre of the open space stands the Ambala, an open hut which serves the elders for social and ceremonial gatherings. No one is allowed to approach it with leather shoes on. At night all the unmarried boys above five years of age have to sleep here.

Internal Structure

The Betta Kurubas are divided into two sections, the Munpadi and the Yelpadi. The Munpadi means families belonging to three hamlets.



Jenu Kuruba Women

tha Pujari who is a Vokkaliga and the devotee. At the Ambala, the periodical demon possession takes place in the person of the Pujari, or one of the elders who prepares for the occasion. Their principal Bhutas are Ajja and Kuda who are perhaps their dreaded or renowned ancestors. When a possession is to take place, the Pujari bathes and goes to the Ambala accompanied by his people. A couple of women form a chorus, while he dances about and sings, shaking some brass bells in a little basket, and calling out "Come, Ajja". Then suddenly he drops the basket, an indication that the Bhuta has come upon him. In this state of assumed personal unconsciousness, the Bhuta utters words of warning, of advice and prophecy as to sickness or prosperity. The Pujari has it thus in his power to impose on his credulous hearers his own will and whim as those of the Bhuta.

Occupation

In former times the Betta Kurubas, besides working in rattan and bamboo, subsisted on a wasteful mode of cultivation called Kumri. It consisted of small plots of forest land or cleared jungle which after a couple of seasons was abandoned in favour of a new plot, which they had again to clear and where they cultivated various grains, especially ragi. They never touched a plough. All their work was done with the axe, bill-hook and hoe. The Forest Department restricted the scope of Kumri cultivation. The Kurubas have now acquired skill as bamboo or wood-cutters which has proved to be more remunerative. With the money thus obtained they have begun to lead a better life.

The Kurubas are also skilful in making good mats, baskets, umbrellas, boxes and cradles of bamboo and cane. Above all, they are lovers of personal freedom and independence, and are quite in their native element when roaming about on a hunting expedition. They are keen observers of Nature. When humoured by kind words, they give interesting anecdotes of jungle life and jungle products.

Food

The usual food for the Betta Kuruba consists of cultivated vegetables and what wholesome roots he may dig out in the jungle. The roots are a kind of sweet potatoes or yams. A welcome addition is some small game which he catches in his jungle trap. He drinks fermented juice, and smokes bhang and tobacco. It is said that the Kurubas of the Nilgiris and Mysore eat cow's flesh, but those in Coorg detest it. Earthenware vessels are used for cooking and drawing water from wells not used by the Holeyas.

Physical Features

The Betta Kurubas are dark in complexion, and have curly hair, which through neglect becomes matted. In stature they are middle-sized, well proportioned and in habits nimble and enduring. They have a long head, rather high and prominent cheek bones, a short flat nose, large lips, and dark deep-set eyes. Their average height is 153.7 cms. The average cephalic index is 74.5 and nasal index 75.4.

Conclusion

The Betta Kurubas are a good peaceable set of people, and when employed, industrious at their work as long as it pleases them.

Bibliography (Chapters III and IV)

1. Ananthakrishna Iyer, L. K. : "Notes on the Kurubas."
2. Ritcher, G. : "Ethnographic Compendium".
3. Cipriani, Lideo : "Su Alcuni Gruppi Umani Del Crug".
4. Thurston, Edgar : "Castes and Tribes of Southern India," Volume IV.

MALE KUDIA

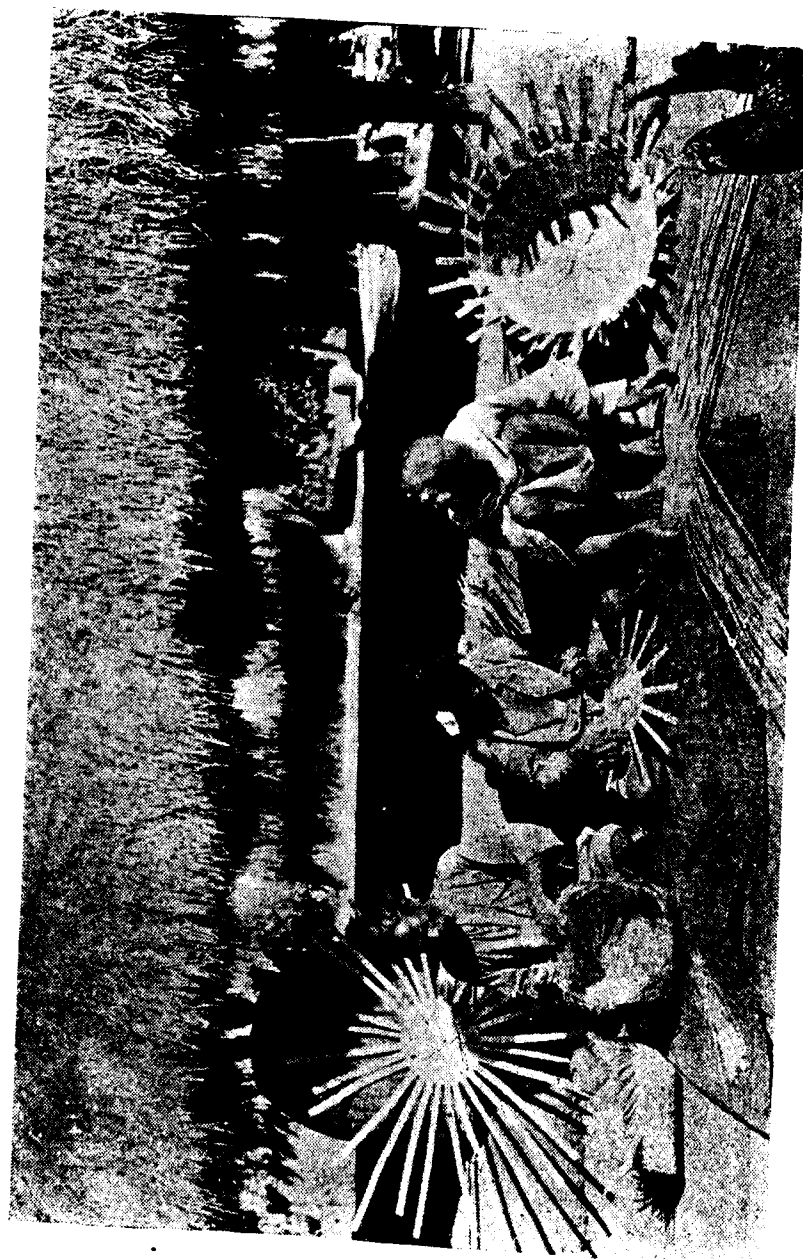
THE Male Kudias are the toddy drawers of Coorg. Lieut.-Colonel Conner speaks of them as a savage tribe scattered throughout the Coorg forests. They have nothing in common with the inhabitants of the plains, as they are in a state of nature in their life of isolation. They are also found both in the plains and on the hills of South Canara. They numbered 549 in 1931, 270 being males and 279 females.

Habitations

The Male Kudias live on the Cardamom Hills of Coorg. Their huts are mere flimsy huts thatched with the leaves of the forest in their vicinity. The floor is raised to a height of one to two feet. A number of split bamboos, woven and arranged in a line and plastered with mud, serve as walls. They have no furniture of any kind and they mostly sleep on a slightly raised floor or on bamboo mats of their own make. Their domestic utensils consist of a few bamboo tubes, a few pots, and one or two copper pots, purchased from the neighbouring village market.

Internal Structure

The Male Kudias are composed of two endogamous groups, the Umale or Ur Kudias (village Kudias near the forests) and Temale Kudias (honey-gathering Kudias). Each group claims superiority over the other.



Betta Kuruba Industry

KURUBA (BETTA)

175

The Yelpadi means families belonging to seven hamlets. Members of the same section do not intermarry.

Marriage Customs

Girls are married after they attain puberty. The marriage ceremonies are simple, sensible, and orderly. A suitable girl is selected by the boy's father who formally asks her parents, and on their agreement he gives a piece of money as a pledge. The wedding day is fixed within a month, when a sumptuous feast is prepared for which plenty of rice, a pig and betel leaves, but no liquor are required. The bridegroom's party go to the bride's hut, eat there, and the parents join the young couple by putting raw rice on their heads. They then return with the bride to the bridegroom's hut, where the bride's party are entertained. This concludes the ceremony.

Neither polygamy nor polyandry is practised. A widow remarries a relative of the deceased husband.

Puberty Customs

When a girl attains puberty, she is lodged in a separate seclusion-shed for seven days. She bathes on the eighth day and returns to the house and her usual occupation without further ceremonies.

Childbirth

When a woman is about to become a mother, she is lodged in a separate seclusion-shed, and five to ten days after childbirth she bathes and returns home. At the birth of a child, the parents give a feast to their own people. Male children are named Mada, Keta, Choma, Mara and female children, Madi, Mari and so on. The baby is taken to the Ambala, where a string of beads is tied round the child's neck, and the name is pronounced by the father.

Social Organization

The Betta Kurubas have a court of justice of their own. They hold a panchayat composed of elders at the Ambala, and the fine imposed consists of bits of iron which the headman keeps. He is also the hereditary pujari.

Funeral Ceremonies

The dead are buried, the corpse being placed sideways with the head to the west.

Religion

The Betta Kurubas are demon worshippers, and in three years they usually bring the usual offering of money, fowl, coconut and plantains to Kuttalamma or Karimkali at Kurichi. The eatables are shared between

with neither interdining nor intermarriage. Their exogamous clans are mostly based on the names of hills which they inhabit or after their ancestors. In South Canara, on the other hand, each clan is headed by a Gurikara who is also called Malamudiya. His services are indispensable in all matters, social and religious.

The Umale Kudias avoid all conjugal relations between those connected on the father's or mother's side. Cross cousin marriage is in vogue among them.

Marriage Customs and Ceremonies

When a young man attains marriageable age, his parents look out for a suitable girl, and enter into preliminary negotiations for a settlement. The young man's party is treated to a dinner. The two parties then go to an astrologer to fix an auspicious date for the marriage and prepare a Mangala Kurippu to invite friends and relations on both sides. Girls are married after puberty. The bride's price is eight rupees.

Marriage booths are erected in front of the huts of both the parties before the marriage ceremony. They have also their ancestor-worship that day. On the following day, the bridegroom-elect bathes early, and, neatly dressed and adorned, is conducted in procession to the marriage booth where he is seated on a tripod, when his mother and other elderly women throw rice on his head and give him a few annas as a token of blessing. Then follow others. Some milk is also given to him at the time. His relations and friends make a present of a few annas. After feeding the assembled guests, the party of the bridegroom-elect goes in procession to the bride's hut with a basket of rice, betel leaves, arecanut, coconut, milk, jaggery and *hana*. They first sit near a place where the bride's party plants stumps of plantain trees. The bride's party welcomes the bridegroom's party to their hut after cutting the plantain stumps. When the party enters the booth, the bridegroom's legs are washed by a woman of the bride's party for which one of his party puts three annas into the vessel. The bridegroom is then given milk to drink and his party is served with light refreshments. Then the bride is seated on a tripod by his side. All those who are assembled there then throw some rice on them as a token of blessings and give them presents or coin. After this the bridegroom stands and gives a purse of coin to the bride, and clasping her hand, helps her to stand up. They are then allowed to sit in separate places. The assembled guests are then fed, after which they are given betel leaves and arecanuts. The bridegroom's party then returns to their family with the bride who is followed by two or three of her family. The

bride's party also cuts the plantain stumps before entering the bridegroom's house. The feet of the bridal pair are then washed by a woman of the family for which she receives three annas. The married women of the bridegroom's family throw rice on the couple. The bride sits in a room and her party is treated to a feast. The guests then disperse. On the same night, the nuptials take place. The bride remains in the house of her husband on the following day; and on the third day, she returns to her family with her husband, where they stay for a few days. She then accompanies her husband to his house and leads a family life.

Puberty Customs

When a girl comes of age she is lodged in a separate hut. Her seclusion is for sixteen days. She bathes every day, and on the sixteenth day, pollution ceases with a bath. The temporary hut is destroyed on the sixteenth day.

Pregnancy and Childbirth

During the seventh or eighth month of pregnancy, the girl's parents visit their daughter with sweets and other eatables, stay there, and take her to their hut after a day or two. After delivery, the mother and baby are bathed in warm water, the former is given a decoction of powdered cummin seeds, pepper and jiraka boiled in water. Rice with pepper water and onions is given her during the days of confinement. After a month, she is allowed to take meat. Pollution is for sixteen days, after which she is free from uncleanness. Naming, cradling and feeding the baby take place after the third or fourth month.

Tribal Organization

The tribesmen are few and far between in isolated huts, over a large area. Consequently, there is no regular tribal organization as in other communities. All disputes are settled by a few elderly members of their community. Divorce is freely allowed.

Funeral Ceremonies

The elderly men and women are cremated. In such cases, ashes are collected on the following day and heaped beneath a tree. Their pollution is for sixteen days. On the last day, the chief mourners and the members of the family go to the cremation ground to feed the spirit of the dead. After a bath, they return home. The funeral feast also takes place on the same day, when the tribesmen are fed.

In South Canara, on the seventh day after cremation or burial a pandal is erected over the grave and a bleached cloth is spread on it by the washer-woman. A wick floating in a half coconut shell full of oil is then lighted and placed at each corner of the pandal. The relations of the deceased then gather round the place, weep and throw a handful of rice over the spot.

Religion

The Male Kudias worship the spirits of ancestors. They also worship all kinds of spirits and demons. They have their demon dances and bloody sacrifices in the dark recesses of the forests called 'Mala', 'Tirike,' or jungle shrine, their Bhutas being Thammayya and Malatampuran. Once a year they have a feast in honour of their ancestors, when they call out their names, and having killed a cock and cooked their food, they put some rice and curry and toddy upon plantain leaves in a separate place to be partaken by the spirits of the departed ancestors, whilst they enjoy themselves feeding on the rest. The prayer is to the following effect, "Lord Thammayya, once a year we offer to thee a fowl, a coconut, toddy and rice; keep sickness away from our people. Should any sickness befall our women or our children, we throw ourselves down before thee and make a vow. Dost thou remove the sickness?"

Occupation

The Umale Kudias work on cardamom and coffee estates, where they are engaged in weeding, planting and picking. Their wages vary from six to seven annas. During summer they are engaged in toddy-drawing from saḡo palm. The toddy thus drawn and collected is taken to the contractors and is exchanged for their other necessities. They sell toddy, carrying it in their bamboo tubes or the shells of a gourd or in earthen vessels to the villagers, who go to them with rice in a pot and return carrying toddy in it. They have to pay a certain sum for tapping the trees. They generally tap the bastard saḡo palm (*Caryota urens*). Their women climb the trees to remove the full vessels. They give toddy to children of even six months to drink. In the morning when fresh, it is sweet and refreshing; only in the afternoon when fermented does it become intoxicating.

Food

The Umale Kudias take their food three times a day in times of plenty. Early morning, they take raḡi cooked the previous night, and eat with some pickles. Rice and curry form their chief diet during the day and night. They eat the flesh of all animals which they hunt, and partake also of the food of Mussalmans, Christians and Holeyas.

Appearance and Dress

The members of the tribe wear loin-cloth, shirt, coat, and headgear. Their women dress like Coorḡ women. They wear ear ornaments, nose-ring, silver chain and bangles.

Conclusion

The Male Kudias still live in the jungle, but far away from villages. Both men and women imitate the Coorḡs in dress and also speak the Coorḡ dialect. They conform to the mode of life and social and religious customs of the Coorḡs who are their masters.

II. FEMALE KUDIA

The Female Kudias form a distinct endogamous group of Kudias by virtue of their occupation of honey-gathering. They are found in the hilly tracts of Baliyalathumala, Kelakochumala, Niddemala, Ponḡanmala, Kanadandimala and others. They live in huts made of bark and reeds, and their furniture and utensils are akin to those of the Umalakar.

Exogamy

The Female Kudias are exogamous. Their clans are named after the localities in which they live. A man marries outside his clan. Yelamalakkar, Yedapalikka, Sullickar, Kemmadikar, Ponḡankar are some of the clan names.

Marriage Customs and Ceremonies

A man marries the daughter of his maternal uncle or father's sister. When a young man attains the age of marriage, his parents look out for a suitable girl, and after preliminary negotiations they come to a settlement, and draw a maḡala kurippu for inviting friends and relations on both sides. Marriage booths are erected in front of the family huts of the bride and bridegroom. The bridegroom's party come with ten seers of rice, coconuts and other articles, and halt at a distance from the bride's party, who meet them with refreshments after which they are taken to the bride's hut, where they are welcomed again with refreshments. After the usual formalities, the bridegroom and party return to his hut with the bride. Thereafter, they live as husband and wife. The essential portion of the ceremony consists in a formal promise to give the bride treatment leading to a happy conjugal life.

Puberty Customs

When a girl attains puberty, she is located in a hut put up for the purpose. Her seclusion which was forty days is now reduced to sixteen days. On the bathing day, the girl is dressed and decorated in her best. The relations and friends assembled are then treated to a feast.

Pregnancy and Childbirth

The customs among the Temale Kudiyas are the same as those among the Umale Kudias. The pollution for childbirth is sixteen days. The mother and baby are bathed every morning and evening. The naming, cradling and feeding ceremonies take place on the fortieth day.

Family

The family is matrilineal and inheritance is in the female line.

Tribal Organization

The Temale Kudias have their own tribal assembly to enquire into and decide all tribal matters. The delinquents are either fined or excommunicated.

Funeral Ceremonies

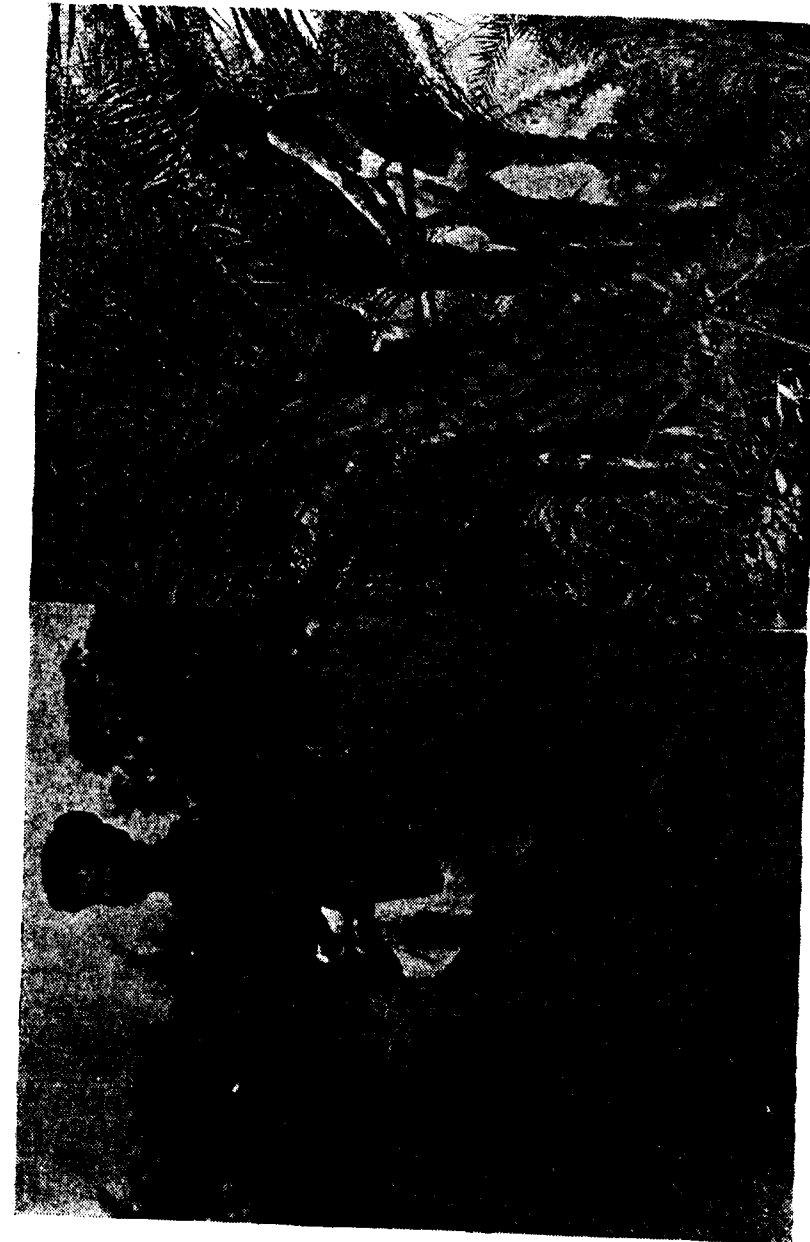
Both burial and cremation are current among them. Elderly members are cremated and the younger ones are buried. Pollution lasts for sixteen days, on the last day of which the agnates go to the cremation ground, feed the spirit of the dead, and return to the family after a bath. The tribal members assemble after invitation, each bringing five seers of rice and other articles. The relatives of the chief mourner also bring the same articles.

Religion

The Temale Kudias work in plantations and some pursue kumri cultivation, while others draw toddy. They sometimes hunt deer, sambur, and other wild animals of the forest. They collect minor forest produce. They tap the sago palm and sell toddy to the villagers in exchange for rice. They go for honey-gathering. They are very skilful in this respect, like other denizens of the South Indian forests.

Bibliography

1. Ananthakrishna Iyer, L. K., "Notes on the Kudiyas".
2. Richter, "Ethnographic Compendium".
3. Conner, "Memoirs of the Codugu Survey".



Umale Kudiya in tapping outfit (left) and climbing a palm tree (right)



Kapla Men

HOLEYA

THE Holeyas are the Adi-Dravidas of Coor̃. They go by different names in different Provinces and districts of the Madras Presidency. In Malabar, Cochin and Travancore they are known by the name of Pulaya. In Mysore and Coor̃ they are called Holeyas. In some of the Tamil districts of the Madras Presidency they are known as Parayas. The name is derived from 'hola', a field; hence, a field labourer. It also means pollution, since they are regarded as of unclean habits in dressing, eating and drinking. They are supposed to be the descendants of Matangi. Richter holds that the Parayas and Holeyas are identical, but in Malabar they are treated as different communities. In Coor̃ they are divided into two sections, the Edaḡai and the Balaḡai (the right hand and the left hand divisions) of the Dravida country. Their physical features, savage nature, and rude habits have been modified by modern civilization. They have been imbibing the customs and manners of the Coor̃s and Indian planters whose lands they have been cultivating from a remote period. They numbered 330 at the Census of 1931, 195 being males and 135 females.

Origin and Traditions

The Holeyas trace their origin to Honnaya who is still worshipped with offerings of fruits. Once when their leader was riding in a procession on an elephant the motley crowd that followed him entered into a temple on their way. The elephant could not enter the low portals of the building and Honnayya and his followers were left behind. Those that went in were the four recognised castes and Honnayya's men therefore lost the privilege of going inside the temples. The Holeyas even claim some sort of relationship with the Brahmans. Arundhati, wife of Vasista, is said to have been a damsel of Chandala origin. They still sing songs in praise of her, when they sacrifice buffaloes before their goddess Mari.

All authorities are agreed that the Holeyas have been the original inhabitants of India, but they were kept in a kind of praedial slavery by the Dravidians and the Aryans, the survivals of which exist even now in villages remote from towns. Regarding their origin, Dr. Keane says, "Judging by their short stature, thick lips, low forehead, and high cheek bones, they belong to the Negrito race, which once formed the substratum throughout the peninsula, though now submerged by the later arrivals of the Kolarians and Dravidians, and the Aryans." By others they are regarded as the descendants of the Dravidian immigrants. India has received an influx of population from other parts of the world and the black people are now merged in later invaders. From traditions it would appear that they had

at one time dominion over many parts of South India. Once upon a time, there lived one Aikkara Yajamanan, whose ancestors were Pulaya kings held in great respect by his tribesmen in North Travancore, and that the name still survives as a memento of their former greatness. Similar traditions are current among their tribesmen in Mysore, Coorġ and Canara. A few traces of their former greatness still linger. In the event of any land disputes between two persons, a Holey is called in. They enjoy a few other privileges. The term Halemakkalu (house servants or slaves) still attests to their low status under their cultivating castes, Gangadikar, Morasu Okkalu and Reddis. In all likelihood, the Holeyas were reduced to slavery by the Coorġs who constituted the aristocracy of Coorġ.

Praedial Slavery

Praedial slavery is an old institution in Coorġ; it existed more or less in an agrarian form, as it once existed on the West Coast in Canara, Malabar, Cochin, Travancore and Mysore. They are of two classes from 'honnu' (gold) and 'Mannal' (mann-earth), of which the former might, and the latter might not be transferred from the soil to which they were attached. The terms by which they were designated did not imply any notion of their servitude. Certain limits termed *mettu* were fixed, which the slaves might not pass without permission on pain of being considered a fugitive. When a slave ran away, he was brought back and punished.

The usual maintenance of the slaves in the malnad was one kolaġa of rice in the husk, equivalent to a *pakka* seer of rice for each man and five siddis for each woman per diem, which was doubled on the new and full moon days, and sometimes at the feasts. An annual supply of one kambli worth half a rupee to each man and woman, one dhoti or loin cloth worth half fanom to each man, and one panche or coarse cloth five cubits long and costing a rupee to each woman. On the occasion of marriage, the master of a man had to purchase a wife for him usually for three or four paḡodas from her owner, unless, as was most commonly done, he could give the daughter of one of his slaves in return. The practice was called 'sattai' or barter. The expenses of the marriage were borne by the master of the husband and commonly amounted to six rupees and three khandaga or 150 seers of rice; the children belonged to the owner of the man. When a slave with the permission of a master worked for another, he should supply him with food and clothing as above stated, and must besides pay an annual sum of half a British paḡoda to the master; this was called "heġa badiġe" (shoulder hire). The ordinary price of a pair of slaves, man and woman, called "ġudi sarakku" (ġudi—A Holey's habitation, sarakku—goods or stocks of any kind) was 12 British paḡodas and with a pair of bullocks they were supposed to be sufficient for cultivation of five khandaga of land.

It was considered by Mr. Stokes that the Holeyas were much better off than their brethren of Malabar. They are generally stout and healthy in appearance and show no signs of being overworked or underworked, and are rapidly approximating to the status of a better class of agricultural labourers. The Ikkeri princes and the Coorġ Rajas possessed a large number of slaves acquired by conquest or otherwise. Some of them were employed in the Palace gardens at Naġar, and others keeping in repair the forests of Lakava Kaveldruġ. They were all retained by Haider and his successors. The establishment is said to have been a source of much abuse, but the slaves considered its abolition more in the light of dismissal than emancipation.

Slavery has been abolished, but the custom dies hard in spite of the temptation of high wages offered to them by the planters. Many of the estate serfs or slaves still cling to the descendants of their ancestral masters, and do not care to leave their service so long as they are fairly treated according to the tradition of the tribe. They are still the chief field labourers and menial servants of the Coorġs near whose houses they have their flimsy huts, and in places far remote from civilization. By money advances, food and clothing, the Holeyas have more cause to be grateful to the Coorġs, to whom they still attach themselves.

Internal Structure

The Holeyas are composed of the following eight endogamous groups:

1. Kembatti Holey.
2. Kapla Holey.
3. Edagai Holey.
4. Martha Holey.
5. Malaya.
6. Adiya.
7. Maringġi.
8. Balaġai.

Of these, the Kembattis are the indigenous Pulayas and the Kaplas are later immigrants as labourers of coffee estates. The Maringġis and Malayas are from Malabar and the Balaġai from Mysore. The Maringġis are so called because of their carrying an idol of Mariamman on their heads and exhibiting them in streets to solicit arms.

I. KEMBATTI PULAYA

The Kembattis have the following clans:

1. Padu Kutta Pada.
2. Chetta Kutta Appu.
3. Kadu Kutta Kalu.

eighth day, she is taken to a tank in the morning and bathed. The relations and friends who are invited are treated to a feast.

Pregnancy

When a girl is pregnant, her parents visit her on an auspicious day during the seventh month with sweets and other eatables as also a piece of cloth. She is bathed and seated on a tripod, when men assembled leave a few drops of oil over her head and each gives a few annas as present. The guests are sumptuously fed. Either on that day or some other auspicious date, her parents take her to their family.

Childbirth

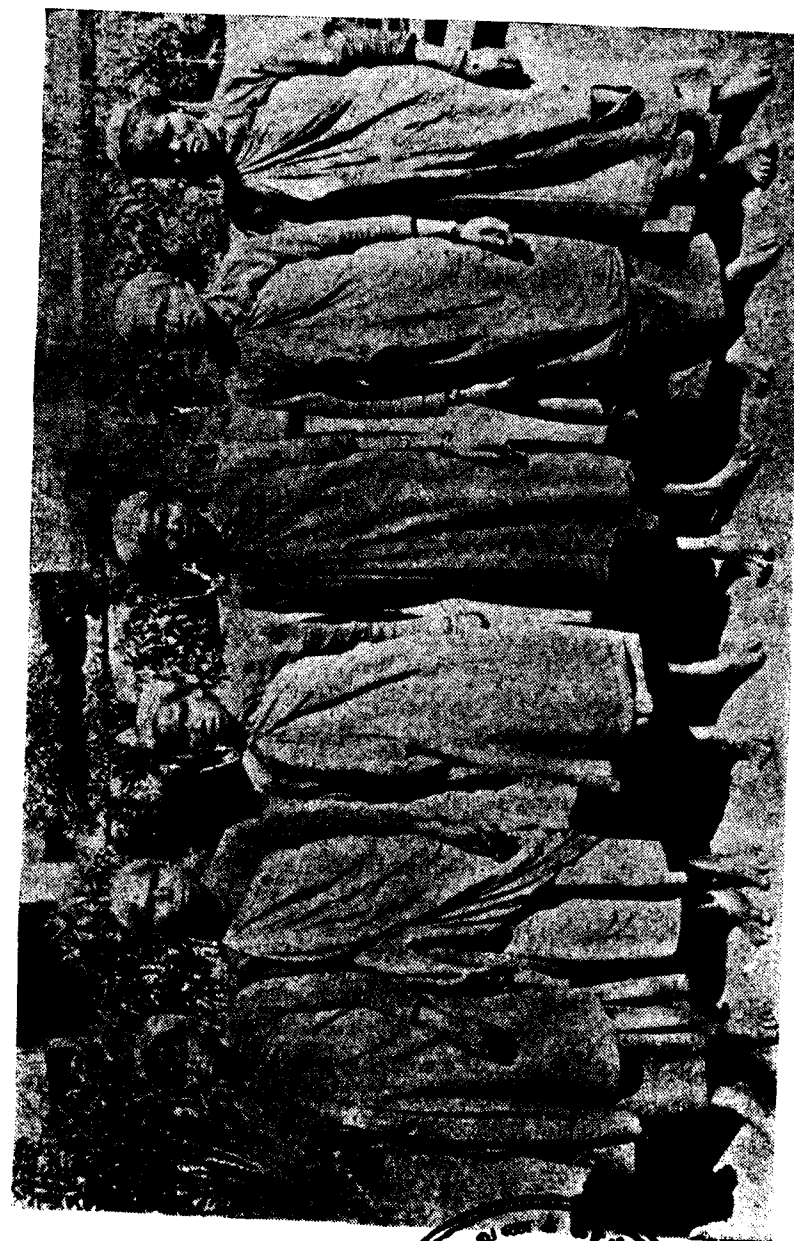
When a woman is about to become a mother, she is lodged in a temporary hut put up for the occasion. Soon after delivery, the mother and the baby are bathed. A decoction of *karinjirakam*, pepper, and cumin seed is given to the mother who is fed with rice kanji. During the days of confinement, she is subjected to a sparing diet. The period of pollution is for eleven days. On the twelfth day, the mother and baby are bathed, and they become free from pollution. Nevertheless, she is not allowed to enter the kitchen for sixty days. The naming, feeding and cradling ceremonies take place after sixty days.

Tribal Organization

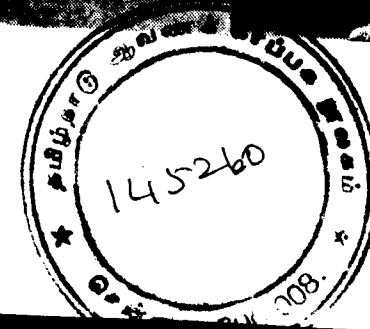
The Kembatti Holeyas have their village headman, who with the aid of elderly members regulates all social practices. The headman either alone or with the help of the Panchayat settles all social disputes, and the delinquents are punished with fine or expulsion from caste. As long as a Holeyas submits to the orders of the headman, he is recognised as a member of the community.

Funeral Ceremonies

The dead are both buried and cremated. They bury the dead divested of clothing, but covered with plantain leaves. On the eleventh day after the death of a father, the sons have to give a feast to their friends, which like the wedding feast will run the poor fellows, who have nothing but the labour of their hands to offer, into debt and bind them for a long period to personal service. Like other Hindu castes, the Holeyas, in the case of a pregnant woman's death, separate the foetus from the mother by an incision into the abdomen and lay the bodies side by side into the grave. This is done by the barber or midwife on the burial ground. As a reason for this strange custom, which obtains also among the Coorās, it has been said that its omission would bring misfortune on house and country, sickness and drought.



Kapla Women



4. Ponna Kutta Kalu.
5. Belli Kutta Ayya.
6. Kakke Kutta Kutta.
7. Kutta Kutta Kutta.
8. Chayaḡi Kutta Somu.
9. Chayi Kutta Kutta.
10. Kali Kutta Khuja.
11. Pachi Kutta Thenu.
12. Chenḡi Kutta Panju.
13. Ponda Kutta Baḡu.
14. Gadda Kutta Beli.

Members of the same clan do not intermarry. As a rule, sons and daughters of brothers and sisters do not enter into marital relations. Cross-cousin marriage is present among them.

Marriage Customs and Ceremonies

Among the Kembatti Holeyas, the young men have no voice in the choice of brides. It is their parents who select young women as wives. When a young Holeyia attains the age of marriage, his parents look out for a suitable maid for him. After preliminary arrangements, the parents of the young man with his maternal uncle with a few elderly members of the community go to the house of the girl with a few coconuts, betel leaves, arecanuts, bananas and a ring. These are handed over to the girl's parents. The bride-price of fifteen annas and the ring are given to the maid. Betel leaves and arecanuts are distributed among friends and relations who are assembled there then. The auspicious day for the marriage is fixed, when *Mangala Kurippu* is prepared and exchanged.

On the date previous to the day fixed for marriage, a leafy shed with seven poles is put up in front of the houses of the bride and bridegroom-elects. The centre pole is called *Halikambu*. The ancestral worship also takes place on that day. The relations and friends who are invited are treated to a feast. Early on the following morning, the bridegroom bathes and dresses himself in his best. He is conducted in procession from the bath room to the accompaniment of music and drum beating to the pandal. He is seated there on a tripod. The elderly married women throw some rice on him as a token of blessing, and give him some milk and present him with a few annas. The same formalities take place in the house of the bride-elect. The members of the community who assemble there are treated to a feast. The bridegroom's party with the *Aruva*, the bridal headman, go to the house of the bride-elect,

and halt on a field close by, when the bride's party meet them with some light refreshments which are given to them. They are conducted to the marriage booth, where they are welcomed and seated on mats spread on the floor covered with newly washed white cloth. The tripods are placed side by side to seat the bridal pair. Before entering the bride's hut, the bridegroom's legs are washed by a married woman of the bride's party for which she receives a *hana*. The married women and others throw rice on their heads and give them some milk and presents. The bridegroom grasps her hand and makes her stand. The bride's *Aruva* makes a solemn declaration, "I hand over our daughter in marriage as wife to your son. In the event of any misunderstanding between them at any time, I expect you to settle it and make her live in peace. We offer our girl dress, ornaments, and others." The *Aruva* of the bridegroom's party then declares that they accept her. The party assembled there are witnesses to the celebration with everything to the girl. The guests are all fed. The bridegroom returns to his family with his wife along with her party. The latter halts near his house or on a field where they are welcomed with refreshments. They are conducted to his house, where they are welcomed. The bride goes to the field with some manure to be left there. She is conducted to a well where *ḡanḡa puja* is performed, and with a pot of water, she enters the house accompanied by her friends. The guests are treated to a feast, after which they disperse. On another auspicious day, she returns to her house with her husband to stay there for a few days, after which she accompanies her husband to his family. The Holeyas practise only adult marriage. Each marriage approximately costs fifty rupees.

In South Canara, the bridegroom's party goes to the bride's hut on a fixed day with rice, betel leaves, and a few arecanuts and waits the whole night outside the bride's hut, the bridegroom being seated on a mat specially made by the bride. The next morning, the bride sits opposite the bridegroom with a winnowing fan between them filled with betel leaves. Meanwhile, men and women present throw rice over the heads of the married couple. The bride then accompanies the bridegroom to his hut carrying the mat with her. The marriage ceremonies last for four days during which time the party should not fail to sit on the mat. On the last day, the couple take the mat to a river or tank where fish may be found, dip the mat into the water and catch some fish, which they may let go after kissing them. A feast completes the marriage.

Puberty Customs

When a girl attains puberty, she is under seclusion in a leafy hut for seven days. She is bathed every morning and evening. On the



A Kembatti Holey Hut

HOLEYA

189

Religion

The Kembatti Holeyas are demon-worshippers. They adore Mari-amman who receives offerings of goats and fowls. They believe that her vengeance is the cause of all maladies which flesh is heir to. They crouch to her shrine in great fear especially in times of smallpox, from which they suffer very much owing to their dirty habits. They try to satisfy her with pious reverence and other sacrifices of goats and fowls. At the festivities of the Coorës they act as clowns and merry-makers, playing low pranks, and have their dances and orgies at some distant groves. At the Huttari festival of the Coorës, a band of them disguised in rude costumes, of which ashes, straw and old mats form the chief materials, go their rounds from house to house; and accompanied by tom-tom, they perform a dance, and collect the customary gifts of money to be spent in arrack shops.

Food

The sanitary arrangements in diet and bodily cleanliness leave much to be desired. They eat what they can, without any scruples regarding cleanliness and are immoderately fond of the fermented juice of the wild saëo palm, which is very common in Coorë. They shun water and seldom wash or bathe.

Appearance, Dress and Ornaments

The Kembatti Holeyas are generally of middle size, robust and of dark complexion. They wear moustache and beard, but also shave. The women are developed and some have regular features and are good looking, a fact which may be accounted for by the barbarous practice of the Rajas, who, when severely punishing a Coorë house, exterminated all the men and reduced the women to slavery on the Sircar farms giving them to the Holeyas as their wives.

Occupation

Both men and women have a hard time during the working season, the former with ploughing, rice planting, harvesting and threshing, and working in the coffee, but not in the cardamom gardens. The latter carry manure to the fields, pound and clean rice. The Coorë Rajas utilised the services of the Canarese-speaking Holeyas from Mysore for cultivating their farms, to watch their crops and to guard houses round the royal residence in Mercara.

Social Status

The Kembatti Holeyas conform to the Coorës in most of their social and religious practices. In the presence of their masters they keep their proper distance, to which their low social position and filthy habits confine them.

II. MARINGI

The Maringis form another subdivision of the Holeyas. They are found in the villages of Devangiri, Pythadi, Kadanur and the Kavadi village of Ambattinad. They are so called because of their carrying an image of Mari on their heads, which they exhibit in the streets to solicit alms. They say that they are the original inhabitants of Coorǵ and that their ancestors pursued the same occupation during the time of the Coorǵ Rajas.

The Maringis are exogamous. Their clans are named after their houses. Pondi Kutta, Padu Kutta, Ambala Kutta, Kochu Kutta are some of the clans. Their marriage customs, puberty, pregnancy rites, religion and occupation are similar to those of the Kembattis.

III. PALEYA

The Paleyas are an endogamous group of Holeyas from whom they hardly differ in physical features. They live on the farms of the Coorǵs along and inland of the north-western slopes of the Western Ghats. They work for them like other groups of Holeyas and wear only a small loin-cloth. Both men and women of the Tulu Paleyas wear skull caps made of tender sheaths of the arecanut flower. They are composed of five endogamous groups, the Maila, the Kari, the Aremane (Palace), the Bakuda (tree-climber) and Ajjala (demon possessors).

Marriage Customs

The Paleyas erect no pandal for the wedding. The ceremony is very simple. The bride is presented with a piece of cloth and money. On donning the cloth, she is considered married and goes to the bridegroom's house. Fraternal polyandry exists. The eldest brother marries first and his wife is common to the younger brothers. Widows remarry without ceremony.

Religion

The Ajjala Paleyas act as either devil dancers or officiate as priests on occasions of offering bloody sacrifices to their particular demons, Kalluti, Panchurli, Dumavatis and Gulika Bhuta, for whom they erect small shrines in some dusky groves. On such occasions, the Ajjala drinks toddy, puts on the mask of a demon, and works himself up into a delirious state when it is supposed that the spirit of some hero, boar or bison takes possession of him. He is kept in this frantic gesticular state by the crowd of men in mad excitement and by fierce noise of drums and horns. He is no longer himself but the mouthpiece of the demon, articulating mysterious, dubious and uncanny replies till at last the afflatus subsides and the performer sinks exhausted on the ground. In cases of sickness, they catch a fowl, wave it

round the head of the sick persons, and vow it as a sacrifice to the demon if the sick man recovers. They are in dread of the evil eye and observe the common good and bad omens.

IV. KAPLA

The Kaplas are found in Nalkanad and Napolkanad. They are said to be immigrants from Malabar, whither they still resort to make offerings at certain shrines at the Kolakali jatra. They are so called because of their fear of the demons at Beidamale, which led to their flight to the temple of Chola, Someswara, whose treasury guards or kavalkars they became. When Doddavira Raja built a palace at Kalkanad, he took the Kaplas to his service as his coolies, and afterwards gave them land to settle themselves, employing them as guards and occasionally as executioners. There are about 25 families in Nalkanad and Padinalkanad. They live in huts made of sticks and covered with the leaves of the jungle palm.

Internal Structure

The Kaplas are divided into a number of kudis or families, Bollada, Arangad and Kolkutti. They intermarry among themselves but outside the clan. They are said to be of the same origin as Bottuvas who are a secluded jungle tribe living in a savage state on the western slopes of the ghats within the Coorǵ frontiers.

The Kaplas resemble the other sub-divisions of the Holeyas in respect of marriage prohibitions, betrothal, marriage customs, pregnancy rites, tribal organization and funeral ceremonies.

The Kaplas are demon worshippers. The Arangad worship Parindra, Kolappa and Someswara; the Bollada worship Chole, Pomadi, and the Kolkutti worship Karingali, Powadi and Chamundi. They perform puja twice a year to Beirava, Jungalaya and Pulle Powadi at a shrine where Brahmans preside and offerings are made to the spirits of their ancestors. The Ajjala Paleyas perform the devil's dance and act as priests of the bloody sacrifice.

The Kaplas live by the spoils of the chase or on jungle produce. They seldom work for hire. They are adept at the use of the bow and arrow.

Bibliography

1. Ananthakrishna Iyer, L. K. : " Mysore Tribes and Castes ", Vol. III, " The Holeyas."
2. Richter, : " Ethnographic Compendium ".
3. Thurston, : " Castes and Tribes of Southern India ", Vol. II,

COORG

COORG was primarily inhabited by two distinct communities, the Yeravas and the Coor̃s. The Yeravas are the modern representatives of the original inhabitants of Coor̃ who retired to the hills before the southward march of the Aryans and other communities and sought asylum there from aggressive invaders. At a later time, the Coor̃s found in the jungles the means of satisfying their hunting propensities while the narrow passes afforded ample scope for their highly developed instincts to carry on their predatory excursions into the country of their wealthier and less warlike neighbours. Even now their fighting and sporting qualities reveal themselves in their socio-religious ceremonies. Their peculiar features are the product of their environment which stimulated a special type of culture among them. The hilly character of the country shielded them from aggression and conquest.

Origin and Early History

Sir Thomas Holland describes the Coor̃s as the finest race without any exception in Southern India and considers them as even superior to the Brahmans in respect of skin colour, stature and prominence of the nose. They are taller than the Yeravas, have a finer nose, and have a larger head with a distinct tendency towards brachycephalism. Their average cephalic index is 80.6. Dr. Hutton states that "it appears to be a much simpler and more satisfactory view to regard the brachycephalic stock as preceding the Aryans. We may suppose them to have entered into the Indus Valley during the Mohenja Daru period and to have extended down to the west coast as far as Coor̃ forming the physical basis of several of the brachycephalic or mesatocephalic castes of Western India."

Coor̃ inscriptions hardly throw any light on the early history of the Coor̃s. They show that the province was successively connected with the Gaña dynasty, the Hoysala kings, the Nayaks of Belur, and the Lingayat Rajas of Coor̃, as also with those of the Bednur family. It is said that new settlers must have been introduced into the province under various governments. This conjecture is supported by the Kaveri Purana in its account of Matsyadesa, the Puranic name of Coor̃. The Coor̃ Rajas were themselves aliens to the country and were Lingayats, while the Coor̃s were the followers of ancestor-worship. They were the most numerous in the north-west of the province, where they were closely allied to the Mysoreans. In Padinalkanad, the Malayalam element was predominant. Wynad which once formed part of Coor̃ must have afford-

ed a passage to the immigrants from Malabar. From the above facts, it may be gathered that they were not an unmixed race. The house names of some of the Coor̃ families indicate Mysore, Tulus or Tamil origin. Their language, demon and ancestor-worship do tend to show that they belong to the Dravidian. Their traits are biologically useful and related to mental capacity and intellectual endowment. Their mountain habitat, climate, food and occupation are responsible for what they are at present, and these factors have differentiated them from the people of the plains.

Habitation

The Coor̃ houses are like those of the Nayars of Kerala. They are situated by the side of their paddy fields on a sheltering slope of Bane-land, surrounded by plantain trees, bastard são, orange, jack and guava trees. A coffee garden and a small plot of land for the growth of vegetables are not absent on the Hittelmandala land. There is a small pond well stocked with fish. The position and type of building bear an analogy to those of the Nayars of Kerala. The approaches to the Coor̃ house strongly mark the design of fortification, and tradition goes back to a time of general feuds, when chief fought against chief and clan with clan. Deep trenches with high embankments are visible memorials to the warlike state of affairs in days gone by. These trenches intersect the mountainous district in every direction.

A deeply cut passage paved with rough stones and overgrown with shady trees, its sloping side walls decked with a variety of ferns, leads one in angular lines to a doorway passing under an outhouse. Houses are located in the midst of their plantations remote from the public gaze. A paved courtyard is surrounded by stables, store rooms, and servants' quarters, in front of which is the main quadrangular building which has one storey and is raised about three feet from the ground. All the buildings are roofed with bamboo and thatched with rice straw which is annually repaired and renewed. There is an open square hall in the centre known as batte or nundumane, the four sides of which are provided with rooms for the inmates to occupy. In front of the building there is an open verandah which is the reception hall. It is raised and covered with a wooden plank almirah two or three feet broad, so as to form convenient seats for the male members and visitors. From it rise three or four wooden pillars square, round and tapering, and sometimes carved. The floor is well beaten with mud and cleaned with cowdung. The ceiling is of wood, arranged in small compartments. In some, the verandah is separated from the inner hall by a wall with a sort of window or lattice made of wood. It is a contrivance intended for the benefit of the Coor̃ women who are curious to see visitors. On the right side of the verandah there is a main

door leading into the inner hall which is lit by the skylight formed by the junction of the four slopes of the inner roof into an inner space (mittam) which is a masonry reservoir in which rain water is collected and drained off by an underground passage. The inner roof is supported on four pillars, resting on thick board slabs of jackwood upon the walls of the reservoir, and forming convenient seats for the inmates of the house, the inner rooms of which are without windows and open by small doors into the central hall only. On the side diagonally opposite to the door of the verandah, and likewise on the inner right corner, there are two doors leading to the exterior of the house. The first room of the house is occupied by the master of the house and his wife. The next room is the kitchen-dining room whence the smoke issues and fills the hole house, coating and preserving the woodwork. The small rooms of the remaining two wings are tenanted by the married couples, the widows and unmarried women. One room near the left corner is set apart as sacred to the family deity. From the ceiling are suspended match-locks, the wooden bells for cattle, the trappings of pack bullocks, and other domestic utensils. The space under the roof and above the wooden ceiling, which is covered with a thick layer of earth to keep the rooms below dry and fireproof, serves for storing bags of rice, baskets, pots and culinary provisions. There is also a deep well built with stone in the compound to supply water for cooking purposes, and another hut by the side of the paddy fields for bathing in hot water.

The simplicity of the habits of the Coor̥s is reflected in the furniture that they use. Wooden cots are generally used, with straw, coir, or cotton mattresses and cushions, sheets, and blankets; on the floor, they have coarse mats for rubbing their feet before going to bed. Occasionally they use wooden stools. A wooden shelf is fixed to the wall in each room to keep their brass vessels, plates and lamps. Rattan or wooden boxes contain their clothing and jewels. There is always a spittoon in one corner of the room. Where there is a baby, a rattan cradle is suspended from the ceiling within reach of the mother's bed. Young Coor̥s of the present-day have better houses and good furniture as also comfortable arrangements in the European style.

Internal Structure

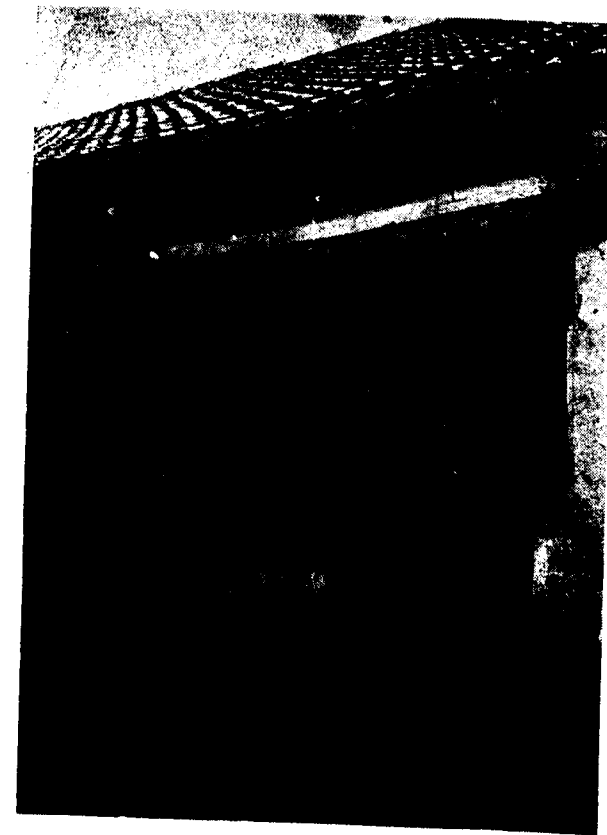
The Coor̥s are composed of four endogamous groups, Amma, Sanna, Malla and Boddu Coor̥s. The Amma and Sanna Coor̥s are found in all parts of Coor̥. The Malla and Sanna Coor̥s are united and are no longer distinguishable. They form the principal class of Coor̥s.

Exogamy

The Coor̥ clans are too many to mention. Most of them are their local house names. Some are alien. Marriage within the clan is prohibited.



A View of a Coor̥ House and its sylvan environment



A Front View of a Coor̥ House

Marriage Customs and Ceremonies

The marriage customs of the Coorgs are a curious medley of old and new rites, fashions and notions. Formerly, their marriage customs had a communal character. On an auspicious day, a family would call together the whole village, comprising all the families of the rice valleys occupying the whole village, comprising all the families of the rice valleys occupying farm houses, for a feast. The youths would have their ears pierced by the village carpenters to wear ear-rings, and the maidens had rice strewn over their heads. This was called the marriage feast. The whole community feasted together and the younger people were at liberty to go in search of husbands and wives. This communal character has now changed. Young men express their desire to marry to their parents, grandparents, or the senior members of the family, who look out for suitable girls not in any way related to them. All consanguineous unions are prohibited. Among the prohibitions are:

- (i) The descendants of the father's side of the same family name.
- (ii) The descendants of the mother's sisters.
- (iii) Paternal or maternal uncles or aunts.

A friend of each of the contracting parties becomes the intermediary or Aruva and he is the master of the ceremonies. The father of the young man or his elder brother with the Aruva goes to the house of the young woman, where their advent is expected. On a favourable response, the whole house is well swept and cleaned, and a lamp is lit, when the Aruvas on both sides with prominent members of respectable families stand before it, facing each other, and shake hands in token of the inviolable contract having been concluded. Such betrothals are seldom broken. If the bridegroom dies before consummation of the marriage, the bride becomes a widow. She is then entitled to an inheritance and sustenance in the bridegroom's family, and may enter into conjugal relations with his brother or first cousins.

The Coorg weddings generally take place in April and May, when the rice fields are dry and there is little to do. The day for the wedding is fixed in consultation with the local astrologer, and invitations are sent by the Aruvas to the relations of the bride and bridegroom, to the married Coorgs of the same village, to friendly neighbours of other castes, or even to Muhammadans.

On the wedding day at about 9 a.m. the invited guests assemble in festive array at the houses of the bride and bridegroom, and while the women go to the inside of the house and give a helping hand to the mistress, the men are accommodated in the spacious verandah or in temporary sheds in the courtyard and served with pansupari to assist the flow of village



A Coorg Male Group



A Coorg Married Couple

three pebbles which he binds to the hem of her garment. This is a token of sealing her right to her husband's property. The bridegroom then takes the bride by the hand and leads her out of the house. This act of possession forms the principal part of the ceremony.

As a mark of respect, he makes his obeisance to those assembled by touching their feet. In like manner, the wife fetches a pot of water from the well to the kitchen and carries a basket of manure to the nearest field, and then returns to her room to indicate her willingness to share in the labours of the house. The Aruva then takes the bridegroom to the room of his wife, and thenceforth, while she remains in his house as his wife, she bears a new name, but will always be called by a familiar one under the parental roof. The married daughter receives from her parents a certain dowry and a good bed, but thenceforth she has no claim on the family property.

In bygone days, there was a custom of so called cloth marriage. Kittel writes that a man gave a cloth to a girl, and she, accepting it, became his wife without any further ceremonies. He might dismiss her at any time without being under the least obligation of providing either for her or the children born during connection. The custom was abolished by one of the Lingayat Rajas, who being unable to obtain as many girls for his harem as he wished from wanton selfishness put a stop to it.

Bibliography

1. Ananthakrishna Iyer, L. K. : "Cochin Tribes and Castes," "Notes on the Coorgs".
2. Holland, : "J. A. S. B.," Part III, 1931.
3. Hutton, J. H., : "The Census of India", Part I, 1931.
4. Richter, : "Ethnographic Compendium", "Manual of Coorg".
5. Thurston, Edgar, : "Ethnographic Notes in Southern India."

COORG (Contd.)

IN the absence of a male issue in a house, a daughter is retained and married to a Coorg on condition that the children born are considered as the children of the wife's, and not of the husband's house. Such a husband may have another wife with children in his own house, and these have no share in the property of the other wife. Polygamy is not forbidden, but is seldom practised.

It is worthy of note that the Coorgs have no priest to preside over the wedding ceremony. There are no religious functions such as those prevailing among the higher Hindu castes. There are some magical acts,



Coorgs in National Costume



A Village Takka (headman)

gossip, which is now and then broken by the noisy band of musicians. Meanwhile, the bride and bridegroom are bathed, he is dressed in his new kuppasam (coat) with a long red cotton or silk sash round his waist and his friends fasten into it the new pichathi, a present from his father, together with a watch, and put jewelled gold rings on his fingers and a carefully tied turban in the approved Coor̃ fashion. A bright coloured handkerchief thrown over his shoulder completes his dress. The bride who is fully decked is left to the care of her friends.

In the bridegroom's house the wedding party proceed to the kaymada, carrying a light which had been kindled at the sacred house lamp, and ignite an earthen lamp there and invoke the blessings of the ancestors. On returning to the house the principal members of the family enter first into the inner hall, and the younger men follow and offer their customary salutations. At the auspicious hour, the bridegroom seeks the permission of the master of the house, and the elders to seat himself on the low three-legged stool kept in readiness and placed upon a carpet between two lighted lamps. These lamps trimmed with many wicks stand in metal dishes filled with rice by the side of which is a spouted brass vessel with milk. On the bridegroom being seated, the master of the house takes a handful of rice and strews it over his head and shoulders uttering the words, "Live well; and prosper well by God's favour", gives him a sip of milk, and drops a piece of money or other present in his lap, and passes on. Four men closely related to him do likewise. Then five of the nearest female relations including the mistress of the house repeat the same formalities. Then the guests, male and female, do the same. Old people only touch the bridegroom's shoulder, those of equal age shake hands, while those below touch his feet as a mark of respect. As the presents accumulate, they are taken care of by a friend who sits near him and watches what and by whom they are given. Widowers and widows do not take part in the proceedings because they are unlucky.

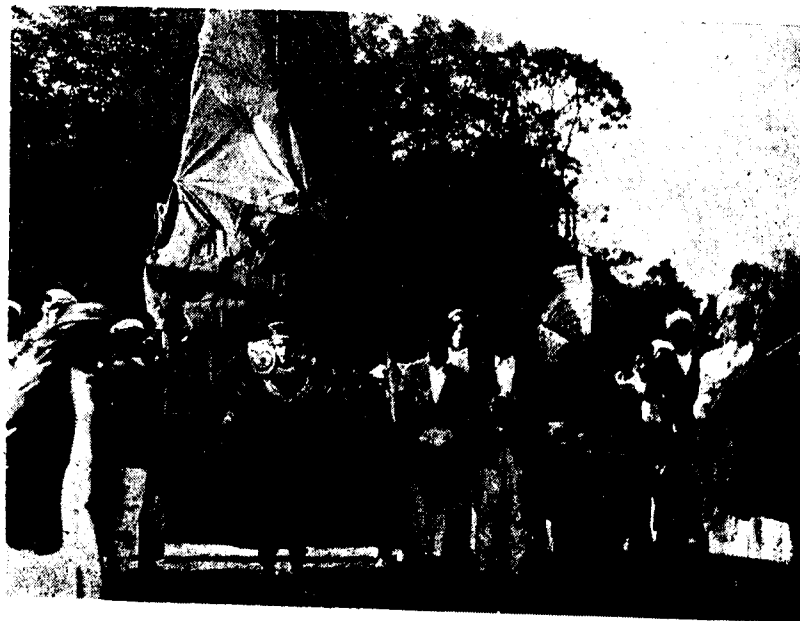
The same ceremony is gone through in the bride's house at about the same time, but women have precedence over men. After this ceremony, the bridegroom rises and takes his meal with a group of twelve of the nearest relations (groomsmen) and the Aruva. The guests who are invited are sumptuously fed in the leafy shed put up for the occasion. Various kinds of liquor are served. During and after feasting, the music makes a discordant and deafening noise.

After feasting, the bridegroom's party go to the bride's house, which is generally some miles away. On such occasions a Coor̃ bridegroom, mounted on a pony, dismounts at the gate of the bride's residence which he approaches barefooted. When he has advanced

within the gate, men hold upright the stems of a plantain tree with the leaves on them. A large broad Coor̃ war-knife is put into his hand, and he has to cut through a plantain stem with one blow. Three chances are allowed to him. It is clear that the possession of physical strength has always been regarded as an essential requisite in a suitor, and the survival of this custom is a safeguard against the premature marriage of children which prevails elsewhere. The bride's party come to meet them there and some of their servants bring chairs and mats along with refreshments. Both parties with the united efforts of the musicians advance to the house. The bridegroom is received by his parents-in-law. After the customary salutations, refreshments of pansupari are freely sent round. Then a meal is served and enjoyed with liberal potations. The bride is conducted by her maids over an outspread cloth into the bridal chamber, where she is seated on a low stool. The bridegroom's party approach her and repeat the ceremony of rice throwing which was performed at noon by the bride's relations. At last the bridegroom who is seated on a low stool all along is conducted to the bridal chamber, and is seated by the right side of the bride who with bent heads sits veiled all over. Soon he rises and strews rice over her and gives her some milk to sip, but speaks nothing. He then presents her with a small bag containing a silver or gold ring, a gold coin for her pattakku or necklace, and some silver coins. Then both eat together for the first time, being served by some women of the household. After this wedding meal the young couple have the exchange of looks and words. The bridegroom grasps her hand and leads her out of the house, and this act of possession constitutes the essential part of the ceremony. He then returns home with his wife accompanied by his party. If the house is distant, the young wife with her maids are conveyed to a bullock cart. If it is nearer, she is conducted by her two best friends. The mother of the bridegroom or the mistress of the house welcomes and conducts her to her own room and gives her refreshments. The guests are treated to a feast after which they take leave of the host, Aruva and ten married Coor̃s of their nearest kin remain behind. The members of the family along with them assemble round the sacred lamp, when the Aruva gives some homely advice about the duties and privileges of a married Coor̃. Hearing this, the bridegroom grasps her right hand and goes with her towards the door, but as he steps outside, she remains within. Her relations now form two rows in front of the door, and the Aruva of the bride tells the Aruva of the bridegroom, "You have desired Puraka from us Mandanna. We have given her, and now ask you, "Has she any claim on Mandanna's property, house and yard, field and jungle, gold and silver, if she becomes his wife?" The bridegroom's Aruva says, "Puraka has a lawful claim on Mandanna's property." This is repeated thrice, and as a typical pledge of possession, like the 'gatti jamma fee' on the investment with land, the bridegroom's Aruva hands over to that of the bride's family



A Coorg Temple (Kaymada)



A Ghost Mask (Karnakola)

which are related here. The bride's hand is grasped in order that she may be delivered into the hands of her husband. She eats with him on the wedding day to create community of life. Marriage ceremonies in all stages of culture are intended to neutralise the dangers and to make the union safe, prosperous and happy. It referred to the permanent joint life of man and woman, and the essence of the union is the joining together of the bridal pair. The practice of throwing rice may have originated in the idea of giving food to the evil influences to induce them to be propitious and to depart. It is considered as a token of blessing. In many cases, it seems to have developed into a sympathetic mode of fertility. At one stage of the wedding, the bride veiled approaches the husband, and they see each other. These ideas may explain the origin of the bridal veil. Besides there is sexual shyness, and the ideas associated with women that these are dangerous as well as improper, and so they lead to effeminacy. Accordingly, the bride spends the wedding days with her girl friends and the bridegroom with young men who in the marriage institution are respectively called bridesmaids and groomsman.

Polyandry

It has been observed that, in warlike races, the clannish feeling and family spirit often predominate over and absorb individual consciousness and personal rights. Among the Coorgs, family property descends not from father to son, as from generation to generation the eldest member acts as the head of the house. In olden times, the Coorgs are said to have lived in a state of general warfare, chief against chief, and Nadu against Nadu. As a relic of that age, the deep trenches which to this day are found intersecting the country in all directions may be considered. In such an age, destruction of life must have been great. But it was of course the male community that principally suffered in the turmoil. The people must soon have been exterminated under such a state of affairs. But if the surviving brothers were to become the rightful husbands of the widows, a second and an undiminished generation might in time take the place of the fallen. In more recent times, the Rajas used to keep a large number of armed men constantly in attendance on themselves. They were absent from home for weeks and months. On their return, their brothers would have to go to the Palace or accompany the Raja on some hunting or fighting expedition. The brothers at home would then take the place of the absent from home and family. It is clear that the law of inheritance by the sister's son is unknown among the Coorgs. This, according to Richter, affords the strongest proof that polyandry is no Coorg custom.

Widow Marriage

Widows may remarry. Should any of the deceased husband's brothers choose to marry her, he may do so or she may be married to any

of the pile concludes the ceremony. Pollution lasts for eleven days. In the case of a husband's funeral, the widow with two of her own and relative's children, carrying a brass vessel and a coconut, brings an earthen pot full of water and carries it round the corpse thrice on the funeral ground, the coconut is broken and its water put into a dish for the purpose already mentioned, the widow standing near the feet of the corpse and with averted face lets the earthen water pot fall sideways from her shoulder to the ground as a symbol of her shattered happiness, and the Aruva breaks the brass bangles on her wrist. The next morning the relatives remove her garments, but her hair remains. As a mark of mourning, a woman leaves off wearing for one year her kerchief on the head and ties it round her neck. While in this state of widowhood, she neither wears bangles, nor necklace, nor ear-ornaments.

On the twenty-eighth day or some time later, as late as six months, when due honour is intended for the departed, a final ceremony, the Thithi, is performed. In the interval the relatives who offer themselves for this service undergo some fasting. They forego the early and the second meal. At noon they bathe, prepare their own simple food, eat part of it themselves, and give the rest to the crows, which consume it for the dead. When the Thithi, the great day of the conclusion of funeral rites, arrives, the whole village community is again invited to the feast in honour of the departed and for the repose of the soul which ceremony concludes the funeral rites.

Bibliography

1. Ananthakrishna Iyer, L. K. : "Notes on Coor̄s".
2. Conner, : "Memoirs of Coor̄ Survey".
3. Moēgling, : "Coor̄ Memoirs".
4. Richter, : "Ethnographic Compendium".
5. Thurston, : "Ethnographic Notes in Southern India".

COORG (Contd.)

THE worship of the demons and ancestor-spirits constitutes the religion of the Coor̄s. They have been influenced by contact with the Malayali, Canarese, Brahmanical and Lin̄ayat superstitions. The Malayalis have made themselves indispensable at their demon and ancestor worship. The Tulus are their Pujaris. The worship of Mariamman (the smallpox demon) was introduced by the Mysoreans. The domiciled Brahmans of Coor̄ have succeeded in the introduction of Mahadeva and Subrahmanya, and have temples erected and idols set up for worship. The Lin̄ayats or Sivachars are also endeavouring to introduce the worship of Lin̄a. Since

the days of Vira Rajendra, Christianity was introduced in Coor̄, and there is a Roman Catholic Settlement with a fine church at Virajpet, but Christianity has not made much headway in Coor̄.

Ancestor-Worship

The ancestor-worship of the Coor̄s is based on the belief that the spirits of the dead hover inside and outside the Coor̄ dwellings and cause endless trouble in the absence of adequate propitiation. Each Coor̄ house has a *Kaimatta* (a building close at hand) under a tree in the fields or in the yard close to the house. This is a raised mud platform where carved stones representing the images of their ancestors are placed. Sacrifices of fowls and pigs are made to them. Sometimes the Coor̄s become possessed of the spirits of the dead and express all their desires when they are sumptuously fed and given drink. The spirits of ancestors are believed to hand over their locality and become angry now and then. A male ghost is called *Karana*, and a female one *Sodalachi* or *Karanchi*.

It is a belief among the Coor̄s that ghosts cause trouble, and females even more so. The Sodalachis are ever inclined to smite children with sickness and sometimes even the adult males and females of the house. In fact they are ever inclined to do harm. With a view to appease their wrath, rice, arrack, milk and other delicacies are offered on various occasions during the year to them. Once a month, a fowl or two are offered at the *Kaimatta* to please them. In such cases a member of the community becomes possessed. He then puts off his head dress and walks in front of the house in a state of trance. While in this condition, the members of the family appear before him to represent their grievances. He makes some incoherent utterances which are believed to be emanations from one of the ancestors who has not been propitiated with offerings. At once he is treated to meat and drink, and neighbours are allowed to come in and put questions to the possessed. These gifts are called *Karana Barana*.

The Coor̄s perform another ceremony called ghost-mask (*karanakola*) with the object of finding out the particular wishes of the ghosts. It is performed every second or third year and occasionally also every year. For this, the services of a Malayali performer, a Panikkan or Benna, are requisitioned. At night he puts on, one after the other, five or more different costumes to represent the number of ancestors especially remembered at the time. Arrayed in these different costumes, he dances to the accompaniment of a drum beaten by his companions and behaves as if he were possessed by the Coor̄ ghosts. After each kola or mask, he leaves the house with a fowl, a coconut, fried rice and other eatables, and some arrack, and offers them in the courtyard to a particular ghost. Various questions are put to

him by the members of the family and by the neighbours while he is in a state of trance. The food given him during the trance is called *Karana Barani*. The masks having been finished, a pig especially fattened for the purpose is decapitated in front of the *Kaimatta* and then taken up to be given to the performer. The rest of the carcase and bodies of the fowls decapitated are taken to the house. In the absence of a *Kaimatta*, the pig offering takes place at the *Karanakotta*. Women also behave likewise, when possessed by an ancestral spirit. While thus affected, they roll on the ground, but they do not give utterance to oracular responses. Sometimes sorcerers, Coorgs or aliens, are invited to exorcise the ghosts. With the recitations of certain formulae in loud tones, they resort to flagellation. If it proves ineffectual, offerings are given.

Village Gods

Tradition has it that human sacrifices were offered in former times to secure the blessings of Grama Devatas, Mariamma, Durga, and Bhadrakali, who are supposed to protect the villages or nads from all evil influences. These deities have their annual feasts among the Coorgs, but they pay special attention to Ajappa, Kaliat Ajappa, and Kuttamma in Kizhatnad, whose shrine is annually visited with gifts.

Every forest ground has its presiding deity to which an annual sacrifice of pork and cakes is offered. If it is not propitiated, the *Kadevaru*, the tending god, will withdraw his favour, and sickness and death among cattle will ensue. Besides, there are extensive forests called *Devarukadu*, which are untrodden by human foot and reserved for the abodes or hunting grounds of deified heroic ancestors.

Serpent Worship

Traces of serpent worship or tree worship are found in Coorg. The *Natas* or spots on which cobras have finished their course of terrestrial life are the place of solemn ceremonies. To prevent any human being from setting foot on the hallowed spot, it is marked by a little stone enclosure. During the month of November, a lamp is lighted every evening to *Natas*, and coconuts are offered as oblations.

Pilgrimage

The Coorgs go on pilgrimage to Irjatre at the foot of Lakshmanatirtha fall in Kizhatnad after the Sivaratri in February or March, and on the Talai Kaveri Jatra to the source of the river Cauvery in October. Amongst the Jatra beyond their country, those visited by the Coorgs are four, Subramania on the northern frontier of Coorg in December, Baitur in Malabar, in February, and Nanjangud in Mysore which comes off in December. In exceptional cases they go to Benares.

Demon Worship

The Coorgs are demon worshippers because of the evil influences of certain malignant spirits, which can render their life more gloomy and wretched. The demons are called *Kulis*, who are believed to be capable of carrying away the souls of the dying members in a family. When any trouble arises in a house, and strange voices are believed to be heard in or near it, a *Kanya* (a Malabar astrologer) is consulted as to the cause of it, and he speaks of the influence of some *Kuli* who must have carried away the soul of somebody either in the house or in the neighbourhood. He suggests that a demon mask has to be performed for the liberation of the soul. It takes place once a year at Kutta, or at any other place once in two or three years.

The master of the house ties some money in a piece of cloth which is suspended from a rafter of the house as a pledge for the performance of the ceremony. Sometimes he ties his brass plate up there and eats his food on a plantain leaf as a vow. For the demon mask, either a Malayali magician or a true *Ajjala Palya* is sent for, and the ceremony is performed in the courtyard of the house owner. Demon masks are performed in the name of one or two of the five demons, *Bhamundi*, *Kallugutti*, *Panjurli*, *Gulika* and *Goraka*. The details of the ceremony are the same as those described for the exorcism of the ancestral spirits. The food of the performer in trance is called *Kuli Barani*. The liberation of the soul is thus effected. The demon that has thus committed the theft begs to leave the soul free. In the event of his refusal, the performer throws a handful of rice on the member of the house standing near him, and thus transfers the spirit to him. The spirit alights on his back, when he falls in a swoon, and is soon carried away by others into the house. The final act of a demon mask is the decapitation of pigs in front of the so called *kuzhikota* or demon abode. It may be near to or far away from the house or village. Fowls are sacrificed upon it. One pig suffices for house affair, but several pigs are required when a whole village is involved. The heads are given to the performers, and the trunks supply the house or village diviner.

Festivals: (1) Huttari

The Huttari is the feast of first fruits. The name is said to be derived from the Malayalam 'pudiyari', or new rice. It occurs at full moon at the end of November or beginning of December. After various preliminary ceremonies, the person chosen to cut the first sheaves goes at sunset to the fields in procession with a lighted torch in a dish of rice carried before him. He has a sickle in one hand and a bamboo bottle of fresh milk in the other. He cuts the sheaf and distributes the stalk to those present, and puts some into the milk. This is carried in procession to the

house, the people shouting. "Poli, poli, Deva", that is, "Increase, increase, O God," followed by a blast of the shrill Coorg brass horn. It is truly a national and thanksgiving feast entirely uninfluenced by Brahmanism. It lasts for seven days. It begins with village rejoicings and extends to Nad or district gatherings, and ends every day with the peculiar cane dance of the men and boys to the tune of the most melancholy and monotonous sound of horns, drums and songs. Other games vary the proceedings, but the most interesting part is always the champion fight in playful dance, which often ends in a general skirmish in which the canes are freely used.

(2) Kaylmurtha

The Kaylmurtha is the festival of arms celebrated by the youths and men of Coorg sometime in August. When the hard labours of ploughing, sowing, and transplanting of rice are over, a break in the monsoon spreads its bright light and sunny warmth over the hills and dales, forests and fields in Coorg, when a holiday is most welcome. The Takka of the grama calls some respectable men to accompany him to the astrologer's home. They ascertain the most propitious day for the celebration of the festival.

On the morning of the joyous day, the whole armoury of the house is placed in the verandah, gun and spear, bow and arrow, sword and knife. Some of the young men sit down to burnish the familiar weapons. When this is done, they are carried to a room or central hall, where they are placed in a corner. When the auspicious moment arrives incense is burnt before the weapons, sandal paste is dotted on them in profusion, and a show offering, *Nivedya*, is offered to them and the idols. As soon as the festival is over, the whole house sits down to dinner. The men then proceed with their arms to the village green, *uru-mandu*, to spend the afternoon in shooting at a mark and in athletic sports. The following day is devoted to a hunt in the forest belonging to the village. This is followed by a great hunt of the whole Nadu. It is a repetition of the village hunt on a larger scale. Whatever game is obtained, the man who killed the animal receives a hind quarter and the head. The rest goes to the company. The Kaylmurtha is the most glorious of all festivities to the young Coorgs, and the popular song of the Coorg mountaineer does full justice to this sentiment.

(3) Bhagavathi Feast

The Bhagavathi feast has been introduced by the Tulu Brahmins. It takes place two months preceding the monsoon. It is connected with demoniacal possessions, and extends over nine days. Tantri Brahmins, Coorgs and Holeyas have their share in the feast, and votaries disport

themselves in their orgies in as noisy a manner as the Ajjala Palyas. The chief object of the feast is the collection of votive offerings to Tantri Brahmins who are an object of dread to the Coorgs.

(4) Devasthanas

The Coorg Devasthanas are rude village shrines of mud walls and thatched roof within a gloomy grove. The only ones deserving notice are those at Bhagamandala, Palur, Irupu and Omkareswara Devasthana at Mercara, the latter of which is built in the same Moorish style as the Rajas' tombs.

Bibliography

1. Ananthakrishna Iyer, L. K.: "Mysore Tribes and Castes". "Notes on Coorgs."
2. Richter: "Ethnographic Compendium".
3. Rice, Lewis: "Imperial Gazetteer of India, Mysore and Coorg", 1908.
4. Thurston, Edgar: "Ethnographic Notes in Southern India".

COORG (Contd.)

THE principal occupation of the Coorgs is agriculture. Wet land cultivation predominates, but cultivation in dry and high lands is also made for the maintenance of large united families with numerous dependents. Agriculture is of a rude type and is similar to that prevailing in other parts of India. It is a system of rural economy formed at a remote period and transmitted for ages unchanged. Wedded to primitive modes of cultivation, the Coorg views with disapprobation any attempts at innovation. The industry of the people of the Highlands is confined exclusively to rice. The narrow valleys between the high grounds are very productive. The agricultural implements are of a rude type. And yet the yield has furnished an unfailing supply from ancient times both for consumption and for export to Malabar. Wherever practicable, the valleys have been formed into flat terraces for cultivation.

The agricultural year begins about the middle of April. With the onset of the first showers in April or May, the ploughing commences. On an auspicious day before sunrise, the house lamp, *Tali-akki-baleke* (dish-rice-lamp) which plays a conspicuous role on all festive occasions, is lighted in the inner verandah, the members of the family assemble and invoke the blessings of their ancestors and Kaveri Amma. The young men make obeisance to their parents and elders and drive a pair of bullocks to the paddy fields, where they turn the heads of them to the east. The landlord now offers coconuts and plantains, rice and milk to the presiding deity of his Nad and lifting up his hands to the rising sun, he invokes his blessings. The oxen are yoked and three furrows are ploughed, when he takes a clod to the

granary, and offers his prayers to Siva to grant him an increase of one hundred times. From 6 to 10 in the morning the ploughing is continued in the fields and turned two or three times. Then the borders are trimmed, the channels are cleaned, and the little banks repaired to regulate water.

Regulated by the monsoon rain, the rice-transplanting takes place during July and August. The women covered with gorakas, which rest on the head and protect the whole body, pull out the plants from the nursery and tie them in small bundles which are collected in one spot. Meanwhile, the submerged fields are repeatedly ploughed and levelled, till the soil becomes as soft as treacle. All the members of the family standing in a line knee deep in the muddy fields begin the transplanting. The bundles are conveniently deposited in the field, and each man takes a handful of plants at a time into his left hand, and presses into the mud with great rapidity seven or eight seedlings together, keeping a regular interval of six inches. Before the completion of the largest field, an open space of about ten feet wide is left throughout the whole length. This is the Coorg race-ground, offering good sport which greatly enlivens their monotonous work. From the men engaged in work, fifteen are selected for the race on 100 butties of land. Wearing a pair of short drawers they are eager for the run for which their strong legs qualify them. The signal is given and away they scramble, plunge, and stagger in deep mud, roars of laughter greeting the unfortunate persons who sink in. Having reached the opposite bank, they return in the same way struggling to the winning post. Four or five only win the race. The first-comer is rewarded with a piece of cloth, the second with a bunch of plantains, the third with a jack-fruit, the fourth with a bunch of oranges, and the fifth with parched rice. When all the fields are planted, a feast is given by the landlord.

As a protection against the evil eye, some half-burnt bamboos about six feet long are erected in a line through the middle of the fields. It is now the farmer's business to regulate the water supply of each field, and to fill up the holes made by crabs in the embankments. The weeding is then attended to and failures replanted. At the end of October, when the ears of corn are fully out, small huts on high posts are erected, one for every hundred butties, for the watchman who guards the crop against wild animals and at times fires a gun to scare them away. In November and December the paddy ripens, and the feast of the first fruits or Huttari is celebrated, after which the paddy may be reaped. The water is drained off the fields. The paddy is then cut down with a sickle close to the ground and then spread out to dry. After six or eight days it is bound into sheaves, carried home, and stacked in a heap, the ears turned inside. In January or February, chiefly in moonlit nights, the sheaves are taken to the threshing floor, spread round a stone pillar in the middle, and trod out by bullocks and

buffaloes, when the paddy is winnowed. The best quality is reserved for seed and the rest stored for consumption or sale.

Cardamom Cultivation

The cultivation of cardamoms was formerly second in importance to that of rice, and a fine cardamom jungle at an elevation of 3,000 to 5,000 feet was regarded as a great asset. Cardamom grows in evergreen jungle at an elevation of 3,000 to 5,000 feet, but it requires subdued light for its growth. This is obtained by the felling of trees which let in light. February or March is the time for this, and the shaking of the ground causes the young plants to shoot up in three months. The capsules appear in the third year, and ripen in September or October, when the crop is gathered. A good crop is gathered for seven years, when the felling of another big tree is needed to reinvigorate them. In the time of the Coorg Rajas, cardamoms were a Government monopoly. Now the jungles are held from the State on a lease of ten years.

Coffee Cultivation

The cultivation of coffee is another great industry in Coorg. It was first introduced by the Moplas, and the Coorgs borrowed it from them. It became a popular industry which effected great changes in their economic life. But the depression which has since followed led to the abandonment of many estates and to renewed interest in rice cultivation.

Fruit Cultivation

Of fruit trees, plantains and oranges are common all over Coorg. Coorg oranges are famous. The best variety is the luscious loose jacket, so called because the rind of the ripe fruit is almost detached from the pulp. Pineapples, pomegranates, and jack fruit are abundant.

Honey and Wax

Honey and wax are of great importance to the Coorgs. The latter is one of their articles for sale and export. The native bees are rather small, dark brown or black. Most swarms live in hollow trees or among rocks. But the Coorgs make hives, put them near the old swarms and wash them inside with honey in the hope that new swarms will settle in them. Such swarms belong to the maker of the hive, while other swarms belong to the finder. The hives are made in hollowed logs loosely fitting in set ends. They are usually three to five feet long and about one foot in diameter. They are laid horizontally in the forks of trees often as much as 20 feet from the ground. This is to protect the swarm from animals. To obtain the honey and wax, the swarm is first stupefied with smoke from torches. The end of the comb is then fried out and all the comb is then removed at once destroying

Dress

The principal dress of a Coorǵ consists of a long coat of dark coloured cloth open in front and reaching below the knees. The sleeves end below the elbow and show the arms of a white shirt which is generally of the English pattern. This is folded across and confined at the waist by a red or blue girdle wound several times round and round, and knotted at the left front. On the right front, the Coorǵ short knife is stuck to the girdle having an ivory or silver handle, and fastened with silver chains. The large broad-bladed waist knife (*odikathi*) is very rarely worn. Its place is at the back, where it is carried in a brass clasp with its point directed towards the left shoulder. Like the kukri of the Gurkhas, it was a formidable weapon in hand-to-hand fighting. It is now used as a test of skill and strength on festive occasions, as when a bridegroom is expected to cut through the trunk of a plantain tree at one stroke. Their head-dress is a red kerchief or the beautiful fashioned turban, rather flat and large at top and covering a portion of the back of the neck. They are found in all shades of complexion, and when dressed in a costume they look very grand. The officers and students have now taken to the European style of dress in preference to their own.

The women are more conservative in their dress. It consists of a white or light blue cotton jacket with long sleeves fitting tight and close up to the neck. The skirt is white muslin or blue cotton stuff wrapped several times round and tied at the waist by a string. One end is brought over the bosom and knotted on the right shoulder. To give usefulness to the skirt, the other end is arranged into folds, which, contrary to the fashion of Hindu women, are gathered behind. The head is covered with a white muslin and coloured kerchief, one end of which encircles the forehead, and the four corners are joined together at the back, allowing the ends to fall over the shoulders.

Ornaments

The richness of the ornaments worn by a woman is the criterion to judge the status of a Coorǵ family. Glass, silver or gold bracelets are worn round their wrists. Their necks are adorned with chains of coral, pearls, or gold, from which are suspended old Portuguese coins. They have ornaments for the nose and the rims of the ears. They wear gold rings or rings set with precious stones, and silver ones are worn on the toes. These are similar to those of Hindu women. The bridal dress adds to all this finery a many-coloured shawl which covers the body, and in the absence of a kerchief, golden hair ornaments, *chourigubbi* are worn. Coorǵ women are skilful in embroidery work, with which they adorn their white kerchief and the seams and corners of the men's white cotton dress. They use red marking cotton and their patterns are very complicated and elegant, and are equally visible on both sides of the dress.

Martial Spirit

The Coorǵs have earned a high reputation for their martial prowess. In the words of Lt. Conner, they may be said to be armed from their childhood and the martial spirit is inculcated from the beginning of a man's life. War and agriculture seem their twin natural pursuits, and no harm arises from this happy combination of soldier and husbandman. They show no trace of the savage disposition which often characterises the martial class. They resemble the Nayars in some respects. Both are devoted to arms. Both are characterised by a gallant spirit of generosity and delicate sentiments of honour. The feelings which attach the highlander to the mountains and that fondness for their country which distinguishes subjects of small States are observed among the Coorǵs.

Physical and Mental Characters

The Coorǵs are a hardy race. They have given proof of being brave soldiers and were much dreaded for their fierce intrepidity in encounters with their enemies. Military officers have commended their fitness for the formation of regiments. They are tall, muscular, broad-chested, strong limbed, and swift footed. Their colour is lighter than might be expected in this latitude. Their features are regular, often distinguished by an aquiline nose, and finely chiselled lips, set off by a well trimmed moustache. According to Holland, the Coorǵ is taller than the Yerava, has a finer nose, a larger head with a distinct tendency to brachycephalism, and a more perfect approach to orthognathism. Apart from anthropometric results, we have the contrast of colour between the fair (light brown) Coorǵ and the very dark skinned Yerava. The hair of the former is straight, while that of the Yerava is distinctly wavy, and the broad nose of the latter is accompanied by thick, slightly everted lips. The Coorǵs and the Yeras are belong to two distinct ethnic types. The maximum, the minimum, and the average stature, cephalic and nasal indices are given below :

	Stature		Cephalic Index		Nasal Index	
	Male	Female	Male	Female	Male	Female
Max.	184.5	166.0	90.7	93.2	100.0	74.0
Min.	149.1	131.5	66.5	70.9	46.3	50.9
Avg.	167.1	151.2	80.6	82.9	65.2	60.3

The intellectual and moral faculties of the Coorǵs have been for ages dormant for want of opportunities. Consequently they have been observed to be ignorant and superstitious in common with people of lower cultures. The march of civilization during the last 50 years has brought considerable improvement. English schools for boys and girls have been started in important centres. It has been found that Coorǵ students are by no means

the colony. A large wooden bowl of special type is used for collecting the honey. Another method of gathering honey is to take a number of pots with small holes, the inside of which are either washed with honey or rubbed with beeswax. These pots are placed in the forest at a distance from their homes. Bees are gathered and form a colony in each pot. The inmates of the house go there at night, cover them with a kerchief, bring them home, and place them conveniently on a plank five feet from the floor, and allow them to remain until the comb is developed. When honey is finally gathered by pressing, it is strained through cloth, and preserved in vessels before being used. After the honey is pressed out, the residue is boiled and strained to collect wax which is poured in shallow vessels where it becomes solidified. It is then sent to the market for sale.

Hunting and Fishing

The Coorgs have been skilful hunters, and still keep up their hunting habits. Their chief weapons were the gun and the big knife in addition to the small handy waist knife. They no longer use the bow and arrow, or the sling. The long matchlock gun has gone out of use, and the wealthier Coorgs are now equipped with English guns and rifles of the best kind. The big broad-bladed curved Coorg knife, *odikathi*, is a most formidable weapon in a hand-to-hand fight. The bulk of them hunt partly for sport, and partly to supplement their vegetable diet. Pigs are coursed with dogs, brought to bay, and killed with spears, which are short, heavy, and broad in the blade, or with ordinary fighting spears. Old boars fight fiercely, and hunters are sometimes wounded or killed. Most animals are trapped. When they go hunting in a party, they have dogs which are set on tracking. When they bark, and the hunters approach, the animal is disturbed. It tries to run away or charges them. In the latter case they aim at the animal with guns and kill it.

In their spare moments the Coorgs fish in streams, rivers and tanks. They use nets. The ordinary one is the *thaduvala* which is spread across the stream to prevent fish from escaping. At a distance of about a furlong, they spread another net so as to drive the fish within the net. When the nets are brought closer, many fish are caught by hand. They use also another net known as *beesvala* by which they catch fish by shooting and throwing baits.

Dietary

The Coorgs have an abundant variety of food materials. They eat pigs and goats. Their chief article of food is rice, and on festive occasions cakes and sweetmeats are prepared. Earthenware vessels are used. Their kitchens are remarkable for the cleanliness of their cooking vessels in use

which are in charge of the cook. Like their Hindu sisters, the Coorg women attend on elderly members before they take meals. Before serving the meals, a little of the cooked food is offered to the family deity at the Kanni-kombare. They take an early breakfast of rice seasoned with curds and pickles. A substantial meal is taken at noon with rice and curry. At 3 p.m. kanji is again taken, and in the evening a hearty meal of boiled rice with vegetable and meat curry and other condiments. Toddy tapped from the bastard sago palm, arrack and a kind of beer made of fermented rice, brandy are the usual beverages. Of late European liquors have become common beverages at festivities.

Coorg Hospitality

The Coorg women deserve much for their industry. They rise very early, clean the kitchen, and do all kinds of work. They bear the brunt of the labour on the farm. The men plough the fields, transplant, and reap the rice. The women carry the manure, pluck weeds and clean the paddy. The men do no menial work. They leave that to women and servants, and enjoy a dignified repose chewing betel and gossiping. Some are expert tailors. Others with gun on shoulder wander through the jungle in search of game.

The Coorgs are noted for their hospitality and they enjoy visits from friends and relations. Should a male guest arrive, the men of the house meet him at the *kayale* and exchange greetings. The method of doing so is by both sexes alike and is very charming. The salutant being always the younger, stoops down, and touches the feet of the other who rests his head on the person concerned and blesses him. Meanwhile, the cook has spread a mat or carpet on the verandah bench, where he rests after washing his feet. He is then served with a chew, and later on with a meal, after which is discussed the special business of his visit. On his return, he pays his parting salutation in the above manner to the old men and women of the house, and the young men accompany him for some distance and take leave of him in the same manner.

When a female guest arrives, the cook or any other woman of the household meets her with a vessel of water and after saluting takes the kerchief from the guest's head and conducts her into the inner hall where she is received by the women, who enter into a free and hearty flow of conversation without any formalities. On leaving the house, the guest's kerchief is returned to her and an old man of the house with one or two women accompany her some distance. These visits of women are never made without the knowledge of their husbands, and they are always accompanied by some old man or female servant.

backward in intellectual brightness and acquisitiveness. They have a high standard of morality in common with their brethren in other parts of India.

Language

Richter believes that there is a close relationship between the Kodaḡu and other Dravidian languages; but being neither cultivated beyond its colloquial use, nor possessing any original literature, it hardly deserves the distinction of being elevated into a special Dravidian language, as Bishop Caldwell does. It may be considered a more local dialect.

Conclusion

The Coorḡs numbered 41,026 in the Census of 1931, 20,752 being males and 20,274 females. Their mode of life and pride of race impart to their whole bearing an air of manly independence and dignified self-assertion, well sustained by their peculiar and picturesque costume. In the words of Sir Erskine Perry they are by far the finest race he has seen in India in point of independent bearing, good looks, and all the outward signs of well-being.

Bibliography

1. Ananthakrishna Iyer, L. K. : "Notes on Coorḡs."
2. Cipriani, Lideo : "Su Alcuni Gruppi Umani Del Coorḡ".
3. Conner : "Memoirs of the Coḡḡu Survey."
4. Holland : "J. A. S. B.", 1901, Part III.
5. Ritcher : "Manual of Coorḡ,"
"Ethnographic Compendium".
6. Rice, Lewis, "Imperial Gazetteer of India, Mysore and Coorḡ," 1906.

AMMA COORḡ

THE Amma Coorḡs belong to the indigenous priesthood of Coorḡ. They numbered 666 in the Census of 1931, 336 being males and 330 females. Their common name is Amma Kodaḡa, which would naturally signify Coorḡs devoted to the worship of Amma or the goddess of the chief river of the country, the Cauvery. The Brahmans invented a mythical origin which is not in accord with the Cauvery Purana.

As reward for his austerities the sage Kavera, was blessed with a daughter, Kaveri, who was proposed to be given in marriage to Aḡastya, another sage who resided on the Brahmaḡiris. Kaveri did not accept the proposal. She assumed the shape of a river and fled from the mountain. Aḡastya in hot pursuit overtook her at Kadianad and persuaded her to submit their dispute to the arbitration of their friends. They called three families of Amma Kodaḡas and six of Coorḡs. The former sided with



Tree Worship



Huttari Festival



A typical Coorǵ in his smart attire



Amma Coorǵ Male Group



An Amma Coorǵ House

Aḡastya and the latter with Kaveri. The Amma Kodaḡas decided that Kaveri should not be allowed to go. The Coorǵs said that a woman should not be forced to marry aḡainst her will. This provoked Aḡastya, who pronounced a curse that the generation of Coorǵs should become less, that their women should not tie their garments in front, that the sown rice should not grow, and that their cows should not give milk. But Kaveri Amma who was the patroness of the Coorǵs counteracted the curse as well as she could, and said, "The Coorǵs shall increase, but the Amma Coorǵs decrease, the Coorǵ women shall tie their garments behind; the sown paddy shall be transplanted, the cows shall be milked after the calves have drunk". So saying, she tried to escape and on being held by Aḡastya by the border of her garment, she turned to the right and flowed rapidly away. Hence the place where this occurred is called Balamuri (turning to the right). A liṅga was erected at the spot by the Brahmans. It is yearly visited in the month of November at the time of the Kaveri feast by Coorǵs and others, who bathe in the river. Dodda Vira Rajendrar built here a rest-house, which, though built a century aḡo, is in tolerable preservation. Nothing more is known about the real history of the Amma Coorǵs, but a few facts may be given as evidence that they are the remains of an ancient priesthood.

The Amma Coorǵs observe in common with the Coorǵs the great festivals of the country, and act as priests. They dress like Coorǵs and at the same time wear the holy thread. It seems that they inclined towards the professed patronaḡe of the Brahmans and that they gradually dropped into brahmanical habits of life and thought. A good many now wear the holy thread, and all profess to abstain from meat and fermented liquors. The return to Brahman initiation and dress was brought about by a Haviḡa Brahman whose family exercised spiritual influence over the Amma Kodaḡas. They are still unlettered. There is a tradition current among them that in former times one half of Coorǵ belonged to the Ammas, and the rest to the Coorǵs. The Ammas by virtue of their priesthood held their land free of rent. Their lands are even now very lightly taxed.

Internal Structure

The Amma Coorǵs form a homogeneous community. There are two gotras among them, the Baradwaja gotra and Viswamitra gotra. They marry within the same gotra.

Marriage Customs and Ceremonies

The Amma Coorǵs do not intermarry with the Coorǵs, but the separation may be of recent origin. Marriage settlement is made only after the aḡreement of horoscopes. The young man's father, uncle, and

other close relations assemble, when coconuts, plantains, and betel leaves are handed to the bride in token of settlement. The auspicious day for celebration is fixed to send invitations to the relatives on both sides. The dress and ornaments to be given to the bride are also settled. The preliminary formalities that are gone through are :—

1. The boy's party going to the house of the bride.
2. Their welcome with refreshments.
3. Nischithambulam.

The essential formalities are *mukadarsana*, and garlanding and *panigrahana*, tali-tying, presenting the bride with the wedding dress and ornaments, and feasting. There is no *homam* as among the Coor̄s, but there exists the cutting of plantains in common with the Coor̄s. On the arrival of the bride at the bridegroom's house, she puts rice on the lamp. On the third day they bathe, and celebrate the *sobhanaprasta*, if the girl has attained puberty already.

Pregnancy and Childbirth

When a girl becomes pregnant, *pumsavana* and *simantha* are performed. When she is about to become a mother, she is confined to a separate room. Her mother or some aged woman acts as midwife. Pollution lasts for eleven days after which she bathes to become pure. But it is only after 40 days that *gan̄a puja* is performed, when she bathes and becomes pure. Only then can she enter the kitchen. Cradling the baby takes place on the eleventh day. The naming ceremony takes place the same day.

Disposal of the Dead

The Amma Coor̄s used to bury the dead which is now being abandoned. Pollution lasts for ten days.

Occupation

The Amma Coor̄s are agriculturists. They do all agricultural operations, ploughing, sowing and harvesting. Both men and women work.

Conclusion

The Amma Coor̄s follow the Coor̄s in point of inheritance. They worship the Hindu deities and observe Hindu holidays. They are inferior to the Coor̄s in physical appearance and strength of body. They are now trying to improve their condition. They are strict vegetarians. They marry within the same *gotra*. This may eventually hasten their extinction.

BANT

THE Bants (Bunts) are a sect peculiar to Tulluva and form the principal body of cultivators or landlords. In Tulu, the word *Bant* signifies a powerful man, a soldier. They formed a military class like the Nayars of Malabar. With the end of the first world war, they have become a land-owning and cultivating class. Barring the Billavas or toddy drawers, they are the most numerous community in South Canara. Most of them are Hindus, but a thousand of them are Jains. In Coor̄, they numbered 1,369 at the Census of 1931, 872 being males and 497 females. In spite of their adherence to Hinduism or Jainism, all continue to follow the demon worship of the early Dravidians, much of which is absorbed in Hinduism.

Origin

The origin and early history of the Bants is veiled in obscurity. During the early centuries of the Christian era, the Tulluvas must have had kings, who were sometimes independent, sometimes feudatories or overlords, such as the Pallavas, the early Kadambas, the Western Chalukyas, the Kalchurins, and the Hoyasala Vettalas. This points to frequent opportunities for fighting, which would account for an important class of the population being called Bant or warrior. In fact they became the owners of land which did not fall to the share of the priestly class. Ancient inscriptions speak of Tulluva kings whose inscription found at Kalasa date from as early as the 12th century, and who may have exercised power throughout Tulluva or the greater part of it. When the Vijayanaṣar dynasty became supreme in Canara in 1336, there were then a number of chiefs among the Bants who were powerful. The numerous titles prevailing among the Bants and Jains and the local dignities known as *pattom* and *ḡadi* point to the existence of a number of more or less powerful local chieftains. The system peculiar to the west coast under which property vests in females and is managed by the seniors of the family was also favourable to the continuance of landed properties.

Internal Structure

The Bants have exogamous sub-divisions :

1. Nasadika Bants who are ordinary Bants.
2. Nadava or Nad Bants who speak Canarese.
3. Parivadra Bants who do not follow the matriarchal form of inheritance.
4. The Jain Bants.

Marriage is generally confined within the group. Instances of inter-marriages between Nasadika and Nad Bants have recently occurred. There

are twenty exogamous clans corresponding to Brahman gotras except that they are traced in the female line. Children belong to the clan of the mother. A man cannot marry his father's brother's daughter though she belongs to a different clan.

Marriage Customs and Ceremonies

The Bants appear to be more advanced than the Nayers. The *talikettu kalyanam* which once prevailed among the latter is unknown among the Bants. A wife leaves her house after age and resides with her husband, unless she occupies a senior position to manage the affairs of her family. Infant marriage is not prohibited, though marriage is generally adult.

There are two forms of marriage. One is known as *Kaidari* which is performed between bachelors and virgins, and the other *Budhare*, between widows and widowers. After the match is decided, the formal betrothal called *Ponnapathiru* takes place. The bridegroom's friends and relations proceed in a body to the bride's house and are entertained at a grand dinner to which the bride's relatives are bidden. Subsequently the *Karnavans* of the two families formally engage to perform the marriage, and plates of betel and nut are partaken of by both parties.

The actual marriage ceremony is performed in the house of the bride or bridegroom as may be convenient. The proceedings begin with the bridegroom seating himself in the pandal. He is then shaved by the village barber. He then retires and bathes. This done, both he and the bride are conducted to the pandal by their relations or sometimes by the village headman. They walk three times round the seat and then sit down side by side. The essential and binding part of the ceremony called *dhare* then takes place. The right hand of the bride being placed on the right hand of the bridegroom, a silver vessel which is filled with water with a coconut over the mouth and the flower of an areca palm on the coconut is placed on the joined hands. The parents of the two families, and the village headman, touch the vessel, which with the hands of the bridal pair is moved up and down three times. In some families, the water is poured from the vessel into the united hands of the couple, and this betokens the gift of the bride. It still survives in the marriage ceremonies of various castes, and the name of the Bant ceremony shows that it must have been universal among them. The conjugal pair receive the congratulations of the guests who express a wish that the happy couple may become the parents of twelve sons and twelve daughters. An empty plate and another containing rice are next placed before the pair, and their friends sprinkle rice from the one and place a gift of four annas generally in the other. The bridegroom makes a gift to the bride. This is called *tirtochi*, and varies in amount with the position of the parties. This must be returned to the husband if the wife

leaves him, or if she is divorced for misconduct. The bride is taken back to her home. A few days later, she is again taken to the bridegroom's house and she must serve her husband with food. He makes another money present to her, and after that the marriage is consummated.

Widow Marriage

Widows are allowed to remarry with much less formality. The ceremony consists simply of joining the hands of the couple. Although all widows are allowed to remarry, only the young do so.

Inheritance

Inheritance is in the female line among all but the Pariwar Bants and a few Jains. It is a relic of bygone days when the military followers of conquering invaders or local chiefs married women of the landowning classes and the most important male members of the family were usually absent in camp or in court, when the women remained in the family house on the estate and managed the farms. The titles and pattoms were always held by the male members. But as they go with the landed property, they devolve on the sister's son of the deceased holder, whence has arisen the name *Aliyasantan* which means sister's lineage. This line of descent is not chosen because the real father is equivocal, but it would appear to be in consonance with immemorial custom, and the usage presents a striking example of the potent influence of manners and prejudice over opinion and feelings.

The Bants burn their dead. The funeral pile consists of mango wood as among the Nayers. The ceremonies take place on the ninth day, when people are fed in large numbers. Once a year, generally in October, the ancestor spirits are propitiated. The ceremony is called *Ajila*.

The Bants do not object to the use of animal food except cow's flesh, but the headman of the family among the Bellalas abstains from flesh eating. They have no intermarriage with the ordinary Bants. The Jain Bants are pure vegetarians and they abstain from alcoholic liquors, the consumption of which is permitted among the Bants. All take three meals a day, a little *kanji* in the morning, dinner at noon, and supper at night.

The Bants are fond of outdoor sports. Football and buffalo racing are among their favourite amusements, but the most popular of all is cock-fighting. Every Bant who is not a Jain takes an interest in cock-fighting and large assemblages of cocks are found at every festival throughout South Canara.

The Bants are a fine stalwart race with sturdy independence of manners and the fair complexion common on the west coast. According to Logan, both men and women are amongst the comeliest of the Asiatic races, having high foreheads and well turned aquiline noses. Their mean cephalic index is 78 and nasal index 72.2.

Conclusion

The Bants are industrious, well-to-do ryots who also engage in various trading speculations and learned professions. They are of simple manners, and are diligent and persevering. They are agriculturists. They have not till recently availed themselves of the benefits of Western culture and very few are in Government service. They consider themselves superior to the Coor̥s, with whom they have no social service.

Bibliography

1. Ananthakrishna Iyer, L. K. : "Mysore Tribes and Castes", Vol. II.
2. Conner: "Memoirs of the Coorgu Survey."
3. Thurston : Edgar, "Castes and Tribes of Southern India", Vol. I.

GAUDA

THE Gaudas form a large caste of Canarese cultivators. They are called Tulu Gaudas and are chiefly from the Tulu community. They are largely found in Padinalkanad and Yedanalkanad taluks, especially along the Coor̥-Canara boundary. They numbered 14,016 at the Census of 1931, 7,388 being males and 6,628 being females.

Internal Structure

The Gaudas belong to 18 *balis* or clans. Bangara, Nandara, Malaru, Salu, Hemmana, Kabru, and Gali are some of the clans. Members of the same clan cannot intermarry.

Marriage Customs

Marriage is generally adult. The *dhare* form of marriage is adopted, but the bridal pair hold in their joint hands five betel leaves, one arecanut, and four annas, and after the water has been poured, the bridegroom ties the tali to the neck of the bride. Divorce is freely allowed.

Widow Marriage

Widows are allowed to remarry. One with children must marry only her husband's elder brother. If she marries anyone else, the members of her former husband's family will not drink water touched by her.

Social Organization

The Gaudas have an elaborate social organization. In every village there are two headmen, the *Grama Gauda* and the *Gottu Gauda*. To every eight or nine villages, there is another head called *Kattumanne Yava*. It is their duty to settle all trade disputes and punish the delinquents with fine or excommunication.

Funeral Ceremonies

The dead are generally cremated. On the third day, the ashes are collected and made into the form of a man, cut into two, buried, and a mound made over it. In the house two planks are placed and covered with a cloth. On one is placed a vessel containing milk, and on the other a lamp, coconut, rice, and pumpkin. The agnates and some boys go round the planks thrice and then go to the mound taking with them various articles in a piece of cloth. Three plantain leaves are placed in front of the mound and cooked food is placed on them. Four posts are set up round the mound and clothes spread over them and placed round the sides. On the 16th day, 16 leaves are laid in a row and one leaf is laid apart. Cakes, cooked fowl's flesh, toddy, and arrack are placed on the leaf in leafy cups. The assembled agnates then say, "We have done everything as we should do, and so our ancestors who have died before must take the man who is now dead."

Religion

The Gaudas offer worship to Venkataramana Swami to whom they make offerings once a year in September. They employ Brahmans to give them sanctified water and *prasadam* to be free from pollution. Once a year, in June or July, they perform a ceremony for ancestor worship.

Occupation

The Gaudas are mostly farmers and a few are day labourers. The latter receive two to four seers of paddy as wages.

Social Status

The Gaudas wear the Coor̥ dress, and those in North Coor̥ are most anxious to pass off as Coor̥s and affect their customs. The Coor̥s are reluctant to admit them into their community and look down upon them as their inferiors.

Approved by the Text-Book Committee

DESCRIPTIVE GEOGRAPHY

For Elementary Standards 4-8 according to 1941 New Syllabus

BY N. SUBRAHMANYAM.

Standards 4 to 8

For the Middle Schools

According to the latest syllabus

Prepared in accordance with the principles given in Scheme of Work and in accordance with the type syllabus, issued recently by the Madras Educational Department.

BY

N. SUBRAHMANYAM, M.A., L.T., F.R.G.S.,

Lecturer in Geography, Teachers' College, Saidapet.

TAMIL TELUGU AND MALAYALAM EDITIONS,

• Book I As. 10, Book II As. 12, Book III As. 12.

The following are some of the special features of the series :—

The treatment is throughout descriptive; and influences of geographical environment on human activities have been well brought out everywhere. Physical, human and political geography have been taken in combination, so as to present a synthetic picture of human societies in the different regions of the world. Constant reference has been made to local conditions and examples, making the home region the standard of comparison throughout. The main geographical principles have been treated in an elementary way, each in relation to the region of which it is a characteristic. Attempt has been made to develop the chief geographical concepts in the course of the regional study.

The exercises at the end of each chapter have been very carefully prepared not only for the purpose of testing the subject matter learnt, but also in some way to supplement the matter taught. The volumes are copiously illustrated with pictures, maps, and diagrams. The bold print on glazed paper makes the books attractive to the pupils.

P. VARADACHARY & CO.,

8, Lingha Chetty Street, Madras.

HEGGADE

The Heggades are immigrant cultivators from Malabar. They are found all over the province, but especially in Yedanalkanad and Padinalkanad. Like the Gaudas they conform to Coorǵ customs, but they are excluded from the Coorǵs in whose presence they are allowed to sit only on the floor, while the former sit on a chair. They must keep some distance from the Coorǵs while mixing with them on festive occasions. They eat food prepared by the Coorǵs.

LIN AYAT

The Linǵayats are found above the Ghats in Coorǵ. They numbered 5,068 in 1931. The Coorǵ Rajas belonged to this sect. They are either cultivators or merchants and are more distinguished for shrewdness and activity in the latter than perseverance or industry in the former. They are strict Saivites and they abstain from animal food and intoxicating liquors. They bury their dead. They talk Kannada and style themselves Sivachar.

VOKKALIGA

The Vokkaligas are the proprietary agriculturists of Coorǵ. The ancestors of this sect were brought from the Naǵar frontier of Mysore by Doddā Vira Rajendra, who granted them lands for cultivation at a low rent. Fifty families are supposed to have composed the body of immigrants. The term Vokkaliga means one who belongs to the same class as the cultivators of ryots, who in South India are the dominant class, but go by different names in different countries. They numbered 7,948 in 1931, 4,233 being males and 3,715 females.

In their mode of life and dress they conform to the Coorǵs, who neither eat nor intermarry with them. They adopted the religion of the Coorǵs and worshipped Kaveri Amman. As the Coorǵs refused to admit them into their families, they reverted to their original Guru at Talkad in Mysore and now consider themselves superior to the Coorǵs. They speak the Coorǵ language.

BRAHMAN

The climate of Coorǵ is not conducive to the growth of the Brahman population. They thrive neither physically, nor socially, in spite of their intellectual superiority. Their mental equipment has little scope for exertion, as most of the appointments are filled by the indigenes.

No Brahman is a native of Coorǵ. Brahmans did not find favour with the Coorǵ Rajas, but they appear to prosper under British rule. Left to

the Coorǵs themselves, they would have disappeared, as Coorǵ customs and religious practices have nothing in common with Brahmanism. They numbered 1,407 in 1931, 760 being males and 647 females. The Canarese Brahmans are the largest in number.

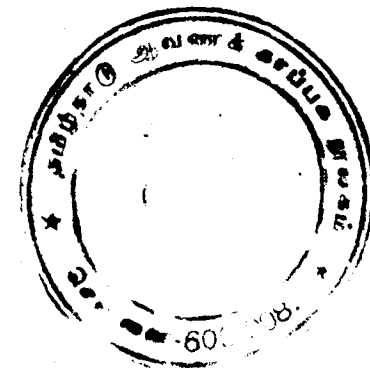
The Brahmans are in large demand in Kiggatnad taluk. They are required for purifying a house at the birth of a Coorǵ child by sprinkling holy water. At a Coorǵ wedding, they offer *prasada* and utter a blessing for which they receive a gift of money. They are sent for to implore the deity in case of illness.

The Brahmans who are domiciled in Coorǵ have succeeded in introducing Mahadeva and Subramania (Iguttappa), in entirely Brahmanising the worship of the Kaveri, in having temples erected and idols set up, in spreading puranic tales, and in usurping to some extent the puja at the places of worship.

MAPILA

The Mapilas are chiefly found in Yedanalkanad and Padinalkanad taluks. They are the descendants of intermarriage between foreign traders, Arabs and Persians, and women of the Malabar coast. The same name has been given to the children of those who were converted to Islam during the time of Tipu Sultan. Some were admitted as Jamma ryots by the Coorǵ Rajas. They numbered 8,804 at the Census of 1931, 6,051 being males and 2,753 females.

END



JL
1002, N 26018
11.11.22-3

THE INDIAN GEOGRAPHICAL SOCIETY,
1947

President.

Dr. M. S. KRISHNAN, M.A., Ph.D., etc.,
Superintending Geologist, Geological Survey of India, Madras Circle,
Bheemasena Gardens, Mylapore, Madras.

Vice-Presidents.

Sri Rao Bahadur
C. M. RAMACHANDRA CHETTIAR,
B.A., B.L., Advocate, Coimbatore.

Mr. KEDARNATH SRIVASTAVA,
M.A., B.T., Lecturer in Education, Vidya
Bhavan, Teachers' Training College, Udaipur.

Mr. V. S. MATHUR, M.A. (Lond.),
Lecturer in Geography,
Government College, Lahore.

Secretary.

Dr. GEORGE KURIYAN, B.A., B.Sc.,
Ph.D. (London), Head of the Department of
Geography, University of Madras.

Assistant Secretary.

Sri V. KALYANASUNDARAM,
M.A., L.T., Dip. in Geog., Junior Lecturer,
Dept. of Geography, University of Madras.

Executive Committee.

Prof. T. N. MUTHUSWAMY AIYAR,
M.A., L.T., Professor of Geology,
Presidency College, Madras
(elected by the General Body).

Mr. A. M. SATYA, M.A., L.T.,
Dip. in Geol., Assistant,
Wesley High School, Royapettah, Madra
(elected by the Council).

Members of Council.

Mr. M. P. RAJAGOPALAN, B.A., L.T.,
Dip. in Geog., Assistant, Sir M. C. T. Muthiah
Chettiar High School, Vepery, Madras.

Mr. A. M. SATYA, M.A., L.T.,
Dip. in Geol., Assistant,
Wesley High School, Royapettah, Madra.

Prof. R. S. MANI, B.A. (Hons.), T.D. (Bom.),
Professor of Geography,
Vivekananda College, Madras.

Mr. P. KOCHUNNI PANICKER, M. A., L.
Dip. in Geol., Professor,
Government College, Coimbatore.

Mr. V. S. GANANADHAN, M.A., L.T.,
Dip. in Geog., Lecturer in Geography,
Pachaiyappa's College, Kilpauk, Madras.

Mrs. R. RADHA, M. A., L.T.,
Assistant Lecturer in Geography,
Queen Mary's College, Mylapore, Madras.

Printed by Mr. M. E. Treasurywala, at Gordon Press, 768-770, High Road, Triplicane, Madras
and published by Dr. G. Kuriyan, Welliclose, Cathedral Post, Madras.