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The Superintendent of Census Operations
Kerala



CENSUS OF INDIA 1961

VOLUME VII

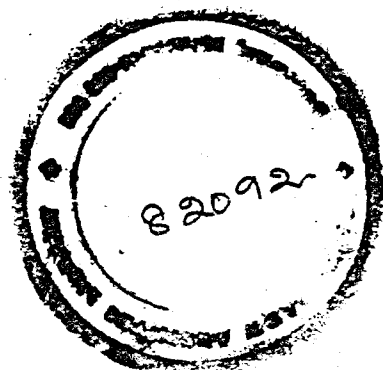
KERALA

PART IX
CENSUS ATLAS

M. K. DEVASSY, B. A., B. L.
OF THE INDIAN ADMINISTRATIVE SERVICE
Superintendent of Census Operations, Kerala
and
the Union Territory of Laccadive, Minicoy and Amindivi Islands

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FOREWORD

Few people realise, much less appreciate, that apart from the Survey of India and the Geological Survey, the Census of India had been perhaps the largest single producer of maps of the Indian subcontinent. Intimate collaboration between geographer and demographer began quite early in the modern era, almost two centuries before the first experiments in a permanent decennial Census were made in the 1850's. For example, the population estimates of Fort St. George, Madras, made in 1639 and 1648, and of Masulipatnam and Bombay by Dr. John Fryer around 1672-73 were supported by cartographic documents of no mean order. The first detailed modern maps, the results of Major James Rennell's stupendous Survey of 1767-74, were published in 1778-1780 and Henry Taylor Colebrooke, almost our first systematic demographer, was quick to make good use of them by making estimates of population in the East India Company's Possessions in the 1780's. Upjohn's map of Calcutta City, drawn in 1792-93 reprinted in the Census Report of Calcutta for 1951, gives an idea of the standards of cartographic excellence reached at that period. In the first decade of the nineteenth century, Francis Buchanan Hamilton improved upon Colebrooke's method in which he was undoubtedly helped by the improved maps prepared for the areas he surveyed.

It is possible that the Great Revenue Survey, begun in the middle of the last century, offered the best guarantee of the success of decennial population censuses proposed shortly before the Mutiny of 1857. In the experimental censuses organised between 1865 and 1872 the Survey of India, the Provincial Surveys and Census of India struck an informal but stable partnership which has been fascinatingly described by R. H. Phillimore in his monumental four-volume work on the *Historical Records of the Survey of India*. This partnership continues to this day. On the eve of each census, the Census of India proceeds by making use of (a) the cadastral surveys prepared by the Provincial (now State) Surveys and (b) the topographical surveys of the Survey of India. In the course of its decennial operation, the Census of India begins by revising and bringing up-to-date the minute jurisdictional changes made during the decade. Next, and equally important, it revises the lists of inhabited and uninhabited villages and of towns and cities. These are placed at the disposal of the Survey of India. Thirdly, at each decade the Census of India itself produces maps of its own which serve to strengthen the study of geography at official and academic levels. These are both numerous and of great range and variety. What is more, they are often unsurpassed for their wealth of authentic regional detail. For proof, if proof were needed, one has only to turn to the geographical maps published in the 1872 Census Reports of North-West Provinces, Cochin, Bengal and the very excellent volume of maps of different Collectorates of the Bombay Presidency, published as Part IV of the 1872 Census Report of Bombay, or the fine taluk maps of Mysore State published in the Census Report of 1891. The high watermark of a skilful fusion of topographical and thematic maps was reached in maps published in the encyclopædic Linguistic Survey of India and the State Census Reports of 1931 and the special All India Ethnographic Appendix published in 1933. In fact, the particular genius of the Census of India seems to lie as much

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in the high quality of its themato-topographic maps as in the pure thematic maps so essential for Census analysis and presentation.

The restricted programme in 1941 on account of World War II temporarily restrained the cartographic activities of the Census of India, although several excellent contributions were made. One of the major contributions of the 1951 Census was the excellence of detail achieved in the great bulk of taluk/tehsil maps published in the District Handbooks.

The Census of India has been a discontinuous affair up to 1961. The Census Commissioner for India in 1941 compared it to the mythical phoenix. The Census starts every time with a very limited assignment, but ends up, thanks to the vistas that open up with the progress of the work and the hunger they stimulate, by becoming the most fruitful single source of information about the country.

The seeds of the 1961 Census Atlas Project were unobtrusively sown in para 42 of the Registrar General's first 1961 Census Circular of March 1959 to State Census Superintendents as follows.

It will be very useful to have a map for every village and ward of a town showing the broad layout of the village and the house numbers shown therein. The map need not be drawn to scale but a map large enough to show the house numbers would be sufficient. A map of this kind, if prepared, will also help the maintenance of house numbers.

This suggestion was wholly accepted in the First Conference of State Census Superintendents held in September 1959, which authorised State Census Offices "to appoint one or two good draftsmen for the preparation of experimental maps, charts, graphs and histograms for their own use". Note was taken of 'the serious but avoidable blemish' left in some Census years on account of 'the lack of good maps and charts'.

That the seeds did not fall on stony ground was evident from the enthusiasm with which the States welcomed the Registrar General's next circular laying down the details to be incorporated in the village maps. It caught their imagination so well that many State Census Superintendents added of their own accord to the details stipulated by the Registrar General's Office. A zest was thus created which whetted the appetite it fed.

By August 1960 several State Census Superintendents had set up their own Map Sections. The experience and confidence gained in the process encouraged a general desire at the Second Census Conference in August 1960 to go in for a much enlarged programme of map production than had been originally proposed. It was no longer a question of selling an idea but of feeding the organisation with a project that would be worth working for.

The satisfactory progress of the sorting and tabulation programme placed at the disposal of my colleagues an exciting world of possibilities. On the eve of the Third Census Conference in February 1962 the map project had passed its tentative stage. All Census Superintendents were now thinking of producing enough maps to fill a sizable atlas.

The Registrar General's circular of September 1961 had already anticipated the general desire by proposing that Part IX of the State Census Series should take the form of an atlas. This was followed up by two circulars in November 1961 giving details of the contents of the projected atlases and the method by which each map was to be produced. This was in turn followed up sometime later by a third circular in September 1962 suggesting the levels to which analysis of data should be carried out for the purpose of each map.

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Inquiries had in the meantime been made of the Survey of India and the National Atlas Organisation on the extent to which either would be prepared to share the task with the Census of India. The Director of National Atlas Organisation was good enough to undertake the preparation on 1 : 1 M Scale of population maps for 1961. Similar maps containing the 1951 data had meanwhile been completed which the Government published at the Registrar General's request.

A chance meeting in the middle of July 1959 with Dr. Joseph E. Schwartzberg of the University of Wisconsin proved of great profit to the 1961 project. I am under a personal debt to Dr. Schwartzberg for his very thoughtful and detailed memorandum which he was good enough to send me in September 1959 on the kind of maps that should be incorporated in Census volumes. He was even more helpful when I gave him the outline of a full Atlas Project. The project owes much to the readiness with which he placed himself at my disposal to the detriment no doubt of his own work, in November 1962, when he and I, with Miss Sen Gupta joining in towards the end, went over every item and worked out many improvements. The contents of the State Atlases will explain the scope and purpose of the project and its claims to uniqueness.

The Government of India had meanwhile accepted the Census Atlas proposals and sanctioned the staff and funds.

Dr. Miss P. Sen Gupta, Map Officer to the Registrar General, joined at the end of November 1962 and immediately applied herself to several tasks at once. She instilled purpose and dedication into her rapidly expanding staff and in the course of a strenuous three-month seminar trained and equipped the staff from the State Census Offices. She followed it up with extensive tours to all State Census Offices and helped them to achieve uniformity of quality and presentation.

The 1961 Census Atlas Project is now mainly in the hands of a young, gifted and trained staff in every State. Their greatest contribution may yet prove to be the District and Tahsil maps which have been brought up-to-date with the latest administrative and demographic detail. No less significant will be the village and town maps which have opened up new vistas for the study of comparative rural and urban geography.

I would like to close this short account by quoting an extract from my colleague, Sri M. Ahmed of Orissa, which, if anything, is an understatement of what many of my colleagues cheerfully accepted in order to accomplish a task that was no part of their original assignment and yet on which they poured the ardour of pioneers.

Things, however, did not wait. Manpower was drawn just from the street.....for not a single qualified draftsman was available on deputation from the State Government in spite of requisitions and personal contact. Among the equipment to start with were some locally purchased drawing and survey instruments and few cheap items of furniture, accommodated in the temporary barrack with asbestos-sheeted roof, lighted with temporary electric fittings. There was, however, a sufficiency of light points, not only from the ceiling but also under glass-topped tables meant for tracing work. With these lights burning over the head and under the tables during working hours at daytime, and with inadequate provision of fans, the hot roof of asbestos sheets made matters pretty unbearable particularly during summer months. But the atmosphere

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was already surcharged with enthusiasm and there was the will and earnestness to produce something new. The young recruits magnificently responded to an appeal to earn distinction for themselves by building up things which did not exist.

New Delhi,
June 12, 1964

A. MITRA,
Registrar General, India

PREFACE

The Census of 1961 is unique in that many new projects were undertaken and many new parts were added to the list of Census publications, none of which had a predecessor. This part of the Census publications is one of those projects, probably the most important of them all.

2. The importance of maps in any population Census—in its operational as well as reporting stages—is too well known to need any special mention. During the operational phase, maps help to achieve thoroughness and completeness. In the reports they facilitate easy comprehension of the data and tables. Maps, accordingly, used to appear in the reports of the previous Censuses. But it was for the first time in the history of Indian Census that a Census Atlas was envisaged as a part of the 1961 Census publications. Shri A. Mitra, Registrar General and exofficio Census Commissioner of India is entirely responsible for this.

3. This volume contains 155 maps of Kerala divided into six sections viz.,

1. Orientation (Maps Nos. 1 to 3)
2. Physical conditions (Maps Nos. 4 to 11)
3. Demographic structure and trends (Maps Nos. 12 to 44)
4. Economic aspects (Maps Nos. 45 to 119)
5. Socio-cultural aspects (Maps Nos. 120 to 153)
6. Demographic regions (Maps Nos. 154 and 155)

Almost all the maps are intended to portray tabular data in an easily comprehensible manner by visual effect. In some maps taluks have been taken as the basis of preparation, and in some others, districts. The methods adopted for the preparation of maps include (i) choropleth, (ii) isopleth, (iii) circle, (iv) histogram, (v) polygon, (vi) symbol and (vii) diagram, used either alone or in combination, according to the needs of the map. The maps are presented on the left hand even pages immediately followed by the corresponding explanatory notes on the right hand odd pages. Two horizontal bar charts are given below the explanatory notes in the case of several maps. The first chart shows the number of districts or taluks as the case may be, included in each class range in both absolute numbers and percentages and the other the corresponding population in absolute numbers and percentages. It is hoped that this method of presentation will facilitate easy reference.

4. The data for the preparation of maps contained in this volume other than those taken from the Census Reports were obtained from the following sources.

Department of Survey and Land Records, Kerala
Surveyor General of India
Department of Geology, Kerala
Memoirs of the India Meteorological Department
Map Officer, Registrar General's Office
Department of Agriculture, Kerala
Department of Forests, Kerala
Bureau of Economics and Statistics, Kerala

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Public Works Department, Kerala
Agricultural Situation in India by the Director of Economics and Statistics,
Government of India, Ministry of Food and Agriculture
Health Bulletin by W. R. Aykroyd
Chief Inspector of Factories and Boilers, Kerala
Kerala State Electricity Board
Panchayat Department, Kerala
Southern Railway
Transport Commissioner, Kerala
Department of Public Instruction, Kerala
University of Kerala
Department of Health Services, Kerala

I am grateful to the above. I am particularly indebted to Shri A. Girjavallabha Menon, Director of Survey and Land Records, Kerala whose expert technical advice has been of great help to me at various stages of the preparation of these maps.

5. I had no organised cartographic section in my office. Nevertheless, as soon as the Atlas project was agreed upon in the First Conference of the Superintendents of Census Operations, I took two draftsmen from the State Service on deputation, viz., Shri K. Chellappan Asari of the Department of Survey and Land Records, Kerala and Shri K. Krishna Pillai of the Bureau of Economics and Statistics, Kerala. Subsequently, I experienced great difficulty in getting more hands from the State service as the State Government could ill-afford to spare the services of their draftsmen. There was great dearth of qualified candidates in the Employment Exchange also; but I managed to recruit Shri S. Krishna Pillai, draftsman in my office through the Employment Exchange. Later on, I was forced to re-employ two retired draftsmen Sarvashri M. Padmanabhan Asari and S. Govindan Asari, to reinforce the team. The entire work of preparing the maps was done by these five draftsmen. Shri K. P. Shanmughadas, Upper Division Clerk of my office was in charge of collecting the data as well as drafting the notes for each map. Shri Shanmughadas and all the draftsmen except Shri Govindan Asari were given a short training by Dr. (Miss) P. Sen Gupta, Map Officer in the Cartographic Section of the office of the Registrar General, New Delhi. The data collected for the maps were processed in the Central Tabulation wing of my office headed by Shri B. T. Pillai, Deputy Superintendent of Census Operations (Tabulation). I am glad to record that all the above have done their duty well.

6. The colour map No. 148 has been processed by arrangement with the Registrar General, India, New Delhi. The blocks of colour maps Nos. 11, 12, 47, 48, 94, 96, 122, 123, 149 and 150 were made at the Deepika, Kottayam and the blocks of the remaining maps and of all the bar charts at the Printers Blocks, Trivandrum. Both the above process studios have bestowed great care in securing the production of these blocks promptly and efficiently. The work of printing this volume was shared by the C. M. S. Press, Kottayam and the S. G. Press, Parur, the former printing blocks of Maps Nos. 1 to 105 and all the colour blocks and the latter the remaining blocks. The above presses under the able guidance of Shri John Mathai, Manager, C. M. S. Press and Shri M. K. Mathai, partner, S. G. Press have executed the work with the care and precision that the printing of a volume of this nature demands.

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7. Above all, I am deeply indebted to Shri Asok Mitra, Registrar General and exofficio Census Commissioner for India, for the valuable guidance and encouragement I have received from him in connection with the preparation of this volume. The assistance given by Dr. (Miss) P. Sen Gupta, Map Officer, office of the Registrar General at various stages of the preparation of these maps has been of great help to me.

8. The statements made and the conclusions drawn in this book are author's own and do not necessarily represent the views of the Government.

• Trivandrum,
January 1, 1967

M. K. DEVASSY

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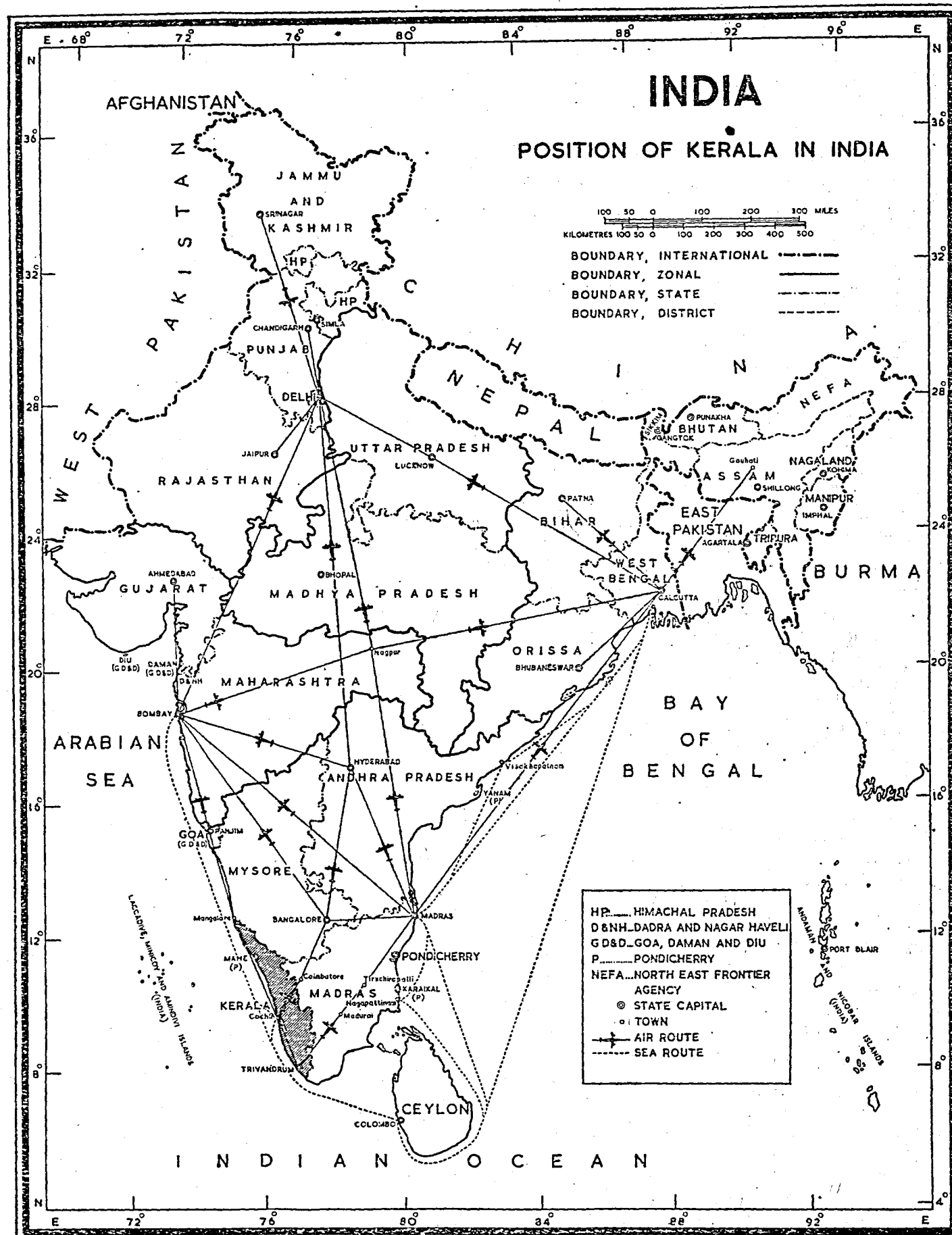
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I ORIENTATION

POSITION OF KERALA IN INDIA



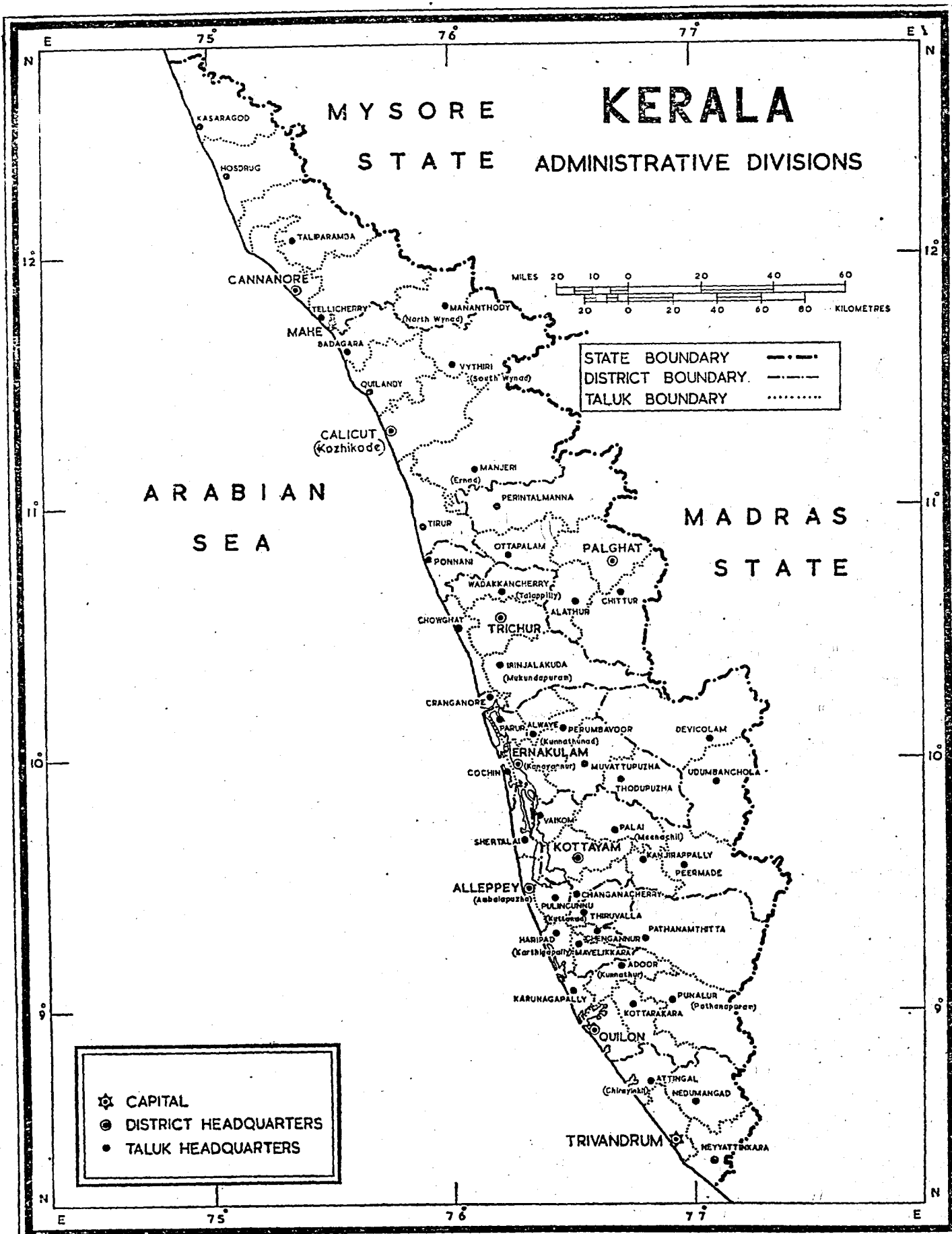
This map shows the geographical position of the State of Kerala in India.

Kerala constituted as a State as per the States Reorganisation Act, on 1-11-1956, occupies the south-western part of the Deccan Peninsula and stretches in a southerly direction from South Kanara along the West Coast up to about 35 miles north of Cape Comorin, the land's end of India. The State lies between 8° 17' 30" and 12° 47' 40" north latitudes and 74° 51' 57" and 77° 24' 47" east longitudes. It is bounded on the north and north-east by the State of Mysore, on the east and

south by the State of Madras and on the west by the Arabian Sea. Its physical boundary is marked by the Western Ghats lying on its entire eastern boundary except for a wide gap at Palghat and by the Arabian Sea stretching throughout the entire western boundary.

Kerala is the smallest State of the Indian Union occupying only a little above one eightieth of its area although her population comes to one twenty-sixth of the country's total population. The State is accessible by land, sea and air, from other parts of the country.

MAP 2



N. B. The name of the taluk or district wherever differs from its headquarters is shown within brackets.

MAP 2

ADMINISTRATIVE DIVISIONS

Purpose

This map shows the administrative divisions of Kerala down to the taluk level as well as the headquarters of the State, districts and taluks.

Method

The district boundaries are marked with dots-and-dashes and the taluk boundaries with dotted lines. The State capital, district headquarters and taluk headquarters are marked with different symbols, the names of headquarters being given against them. Wherever the name of the taluk is different from the name of the headquarters the former is given within brackets after the name of the headquarters e.g., Mananthody (North Wynad). Mananthody is the headquarters of North Wynad taluk.

Salient Features

The State of Kerala was formed under the States Reorganisation Act of 1956 and it comprises the territories of the former Travancore-Cochin State (excluding the taluks of Thovala, Agastheeswaram, Kalkulam and Vilavancode of Trivandrum district and Shencottah taluk of Quilon district) and the Malabar district (excluding Laccadive and Minicoy Islands) and the Kasaragod taluk of South Kanara district of the former Madras State.

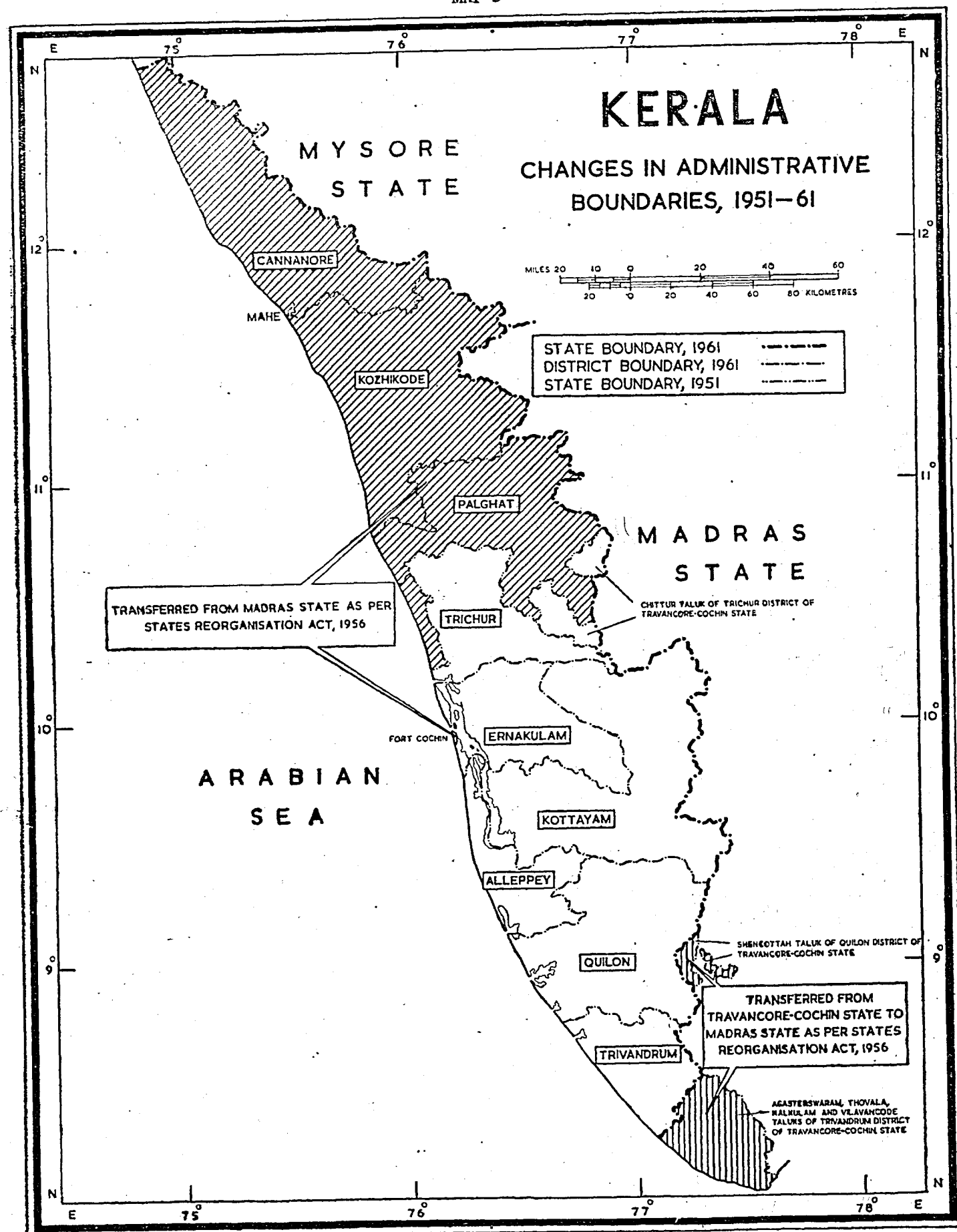
The State lies between $8^{\circ} 17' 30''$ and $12^{\circ} 47' 40''$

Source: Department of Survey and Land Records, Kerala

north latitudes, and $74^{\circ} 51' 57''$ and $77^{\circ} 24' 47''$ east longitudes. It is bounded on the north by the South Kanara district of the Mysore State, on the east by the Coorg and Mysore districts of Mysore State and the Nilgris, Coimbatore, Madura and Tirunelveli districts of Madras State, on the south by the Kanyakumari district of the Madras State and on the west by the Arabian Sea. The area of the State is 15,002.6 sq. miles (38,856.7 sq. km.). The width of the land from west to east ranges between 7 miles and 75 miles (11.27 km. and 120.70 km.). The length of the sea coast is over 360 miles (579.36 km.).

The State now comprises 9 districts subdivided into 55 taluks. These administrative divisions are shown in the map.

The largest district is Kozhikode with an area of 2,570.2 sq. miles (6,656.8 sq. km.) and the smallest Alleppey with an area of 708.1 sq. miles (1,834.0 sq. km.). The 55 taluks are distributed among the districts as 6 each in Cannanore, Kozhikode, Palghat and Quilon, 5 in Trichur, 7 each in Ernakulam and Alleppey, 8 in Kottayam and 4 in Trivandrum. Among the taluks Ernad taluk of Kozhikode district leads in point of area with 873.3 sq. miles (2,261.8 sq. km.) and Cranganore taluk of Trichur district comes last with 28.2 sq. miles (73.0 sq. km.).



CHANGES IN ADMINISTRATIVE BOUNDARIES, 1951-61

Purpose

The map shows the changes that have taken place in the boundaries of the State during the decade 1951-61.

Method

The areas transferred from the State and to the State are marked by different shades.

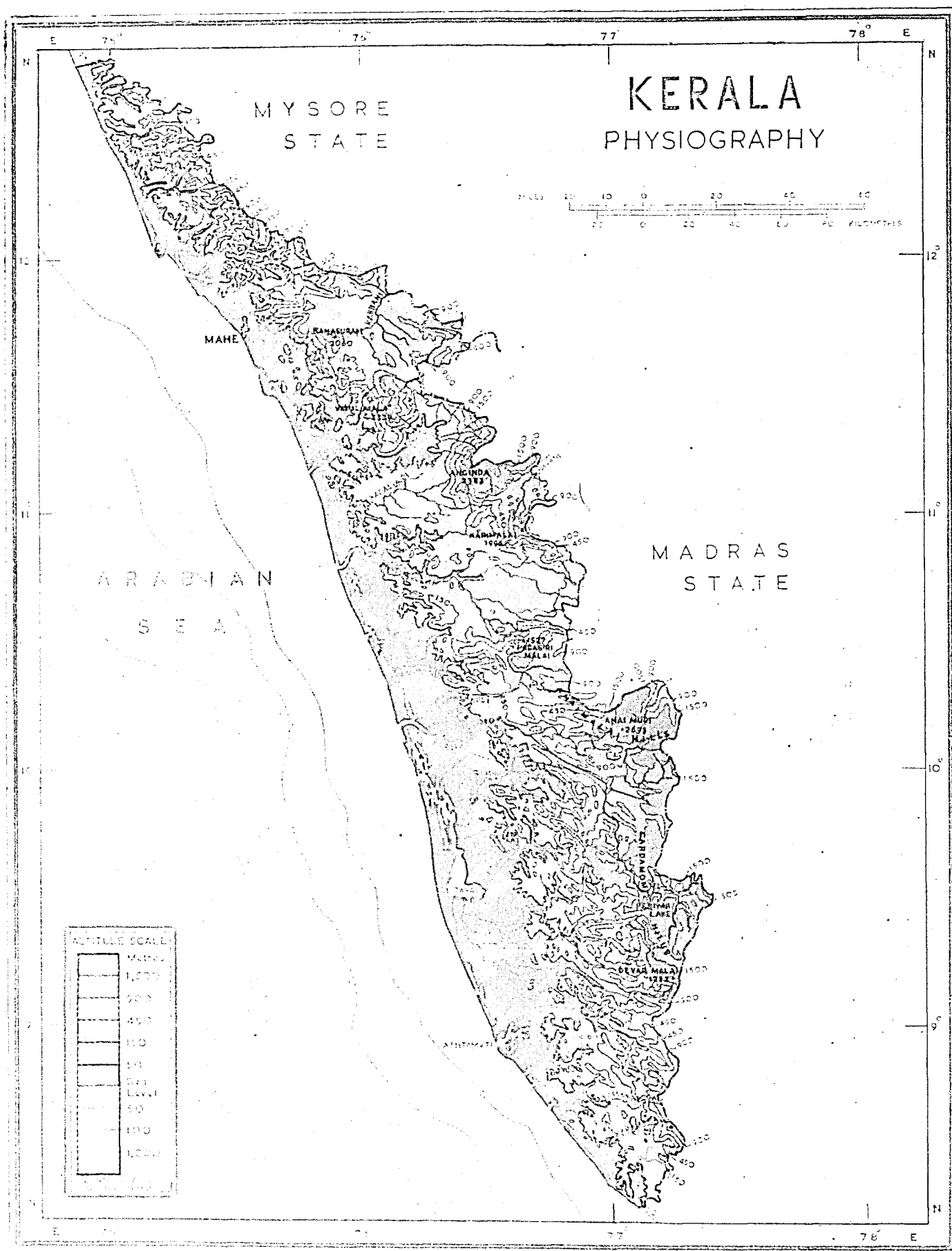
Salient Features

Kerala is a new State constituted on 1st November, 1956 consequent on the enactment of the States Reorganisation Act of 1956. At the time of attaining Independence in 1947 the areas now comprising the State of Kerala were under the administration of three different agencies. The southern portion formed part of the princely State of Travancore, the middle portion part of the princely State of Cochin and the northern portion part of Madras Province. After Independence the two princely States of Cochin and Travancore were united in 1949 to form the Travancore-Cochin State.

The only change in boundaries in respect of the areas now comprising the State during the decade 1951-61 is on account of the States Reorganisation Act. As per the States Reorganisation Act, 1956 the southern taluks of Thovala, Agastheeswaram, Kalkulam and Vilavancode and the eastern taluk of Shencottah were transferred from the Travancore-Cochin State to the Madras State. Simultaneously the Malabar district (excluding the Laccadive and Minicoy Islands) and Kasaragod taluk of South Kanara district were transferred from the Madras State and integrated with the remaining portion of the Travancore-Cochin State to form the new State of Kerala. As a result of the above reorganisation 713.3 sq. miles (1,847.5 sq. kms) were transferred from the Travancore-Cochin State to Madras State and 6,487.9 sq. miles (16,803.8 sq. kms.) from Madras State to Kerala.

Source: Census of India, 1961, Kerala—Part II A General Population Tables

II PHYSICAL CONDITIONS



PHYSIOGRAPHY

Purpose

The map shows the physiography of Kerala.

Method

The varying heights of the land surface are divided into six ranges and are shown by contours. The depths of the sea are also divided into three ranges. The contours marked are only approximate. The rivers, lakes and important peaks are also shown.

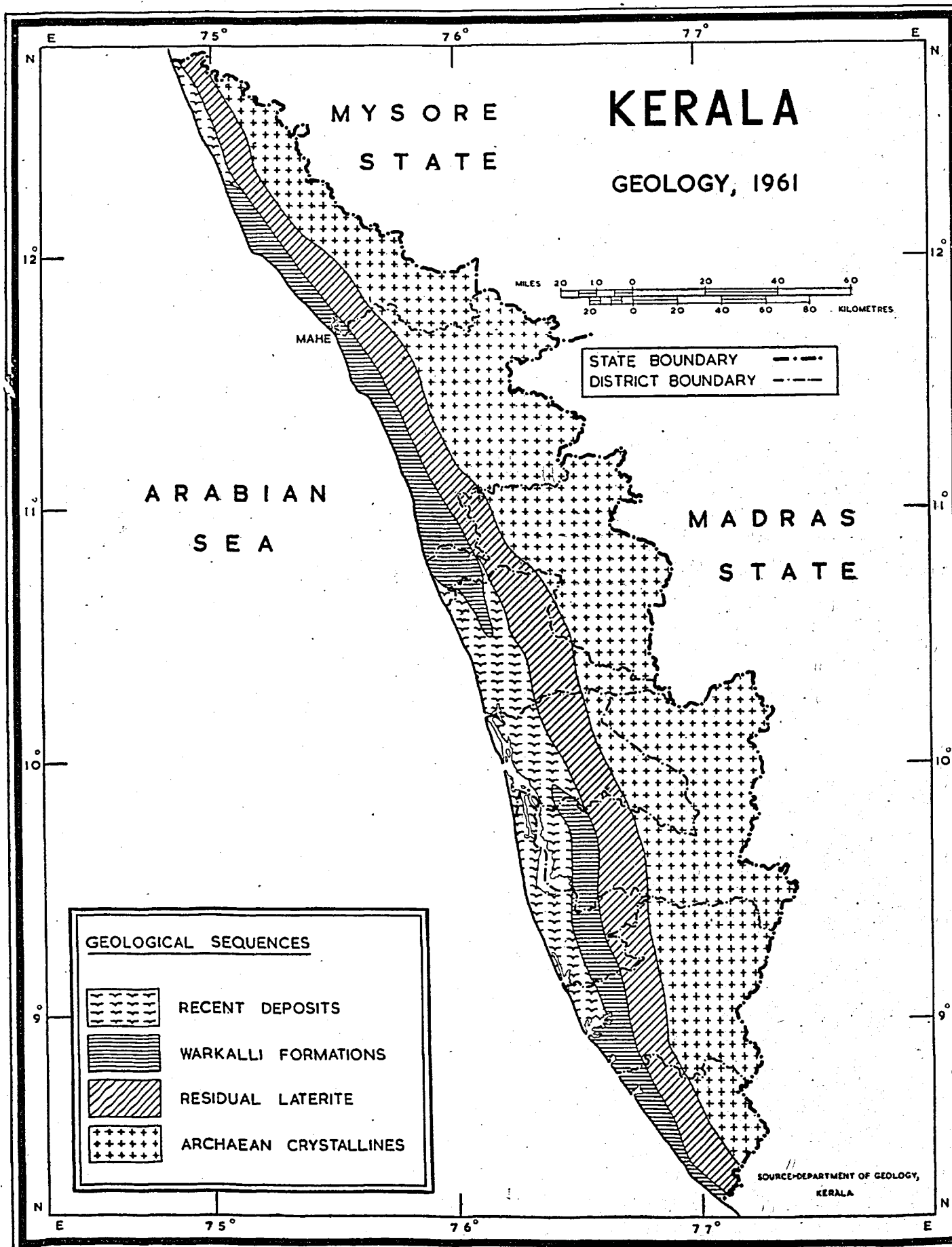
Salient Features

Kerala is singularly diversified in her physical features as in configuration. In the light of this diversity of physical features the State can be divided generally into three natural divisions consisting of the lowland or seaboard (height below 25 ft.), plains (height between 25 ft. and 250 ft.) and hills (height above 250 ft.) In the map the lowland and plains are not however shown separately, as contour for 25 ft. is not available. The coast for a short distance along the borders of the lakes is generally flat; retreating from it, the surface immediately becomes unequal roughening into slopes which gradually combine and swell into a mountainous amphitheatre, viz., the Western Ghats, which bounds it on the east. The long and narrow stretch of sandy seaboard is low and generally swampy. The numerous

backwaters and the cocoanut palms which cover most of this area lend a richness to the landscape of the region. The plain succeed the lowland in gentle ascents and valleys, but broken here and there by isolated low hills. The region is rich in agricultural produce. The Western Ghats lying as a belt on the eastern border, pierced here and there by a few gaps of which the Palghat Gap is the most important, are mostly a mountainous and rocky terrain ranging to an average height of about 5,000 ft. (1,524 m.). Anaimudi, the highest peak of South India (8,837 ft. or 2,695 m.) is in the Western Ghats in Kottayam district. The highland or the hills is thickly forested in its upper ranges, while in the lower ranges the forests are interspersed with plantations.

There are 44 rivers in the State of which 41 are west flowing and the rest east flowing. The east flowing rivers are tributaries of the Cauvery. The longest of these rivers is the Bharathapuzha 156 miles (251.1 km.) in length. A number of coastal lagoons or backwaters with their connecting canals stretch almost from the northern end to the southern end of the state which form one of the important navigation systems of the State.

Source: Surveyor-General of India



Purpose

The map shows the main geological sequences of the State.

Method

The four main geological sequences are shown by conventional signs.

Salient Features

For the purpose of stratigraphical classification the State of Kerala can be divided into four distinct zones each zone having more or less a north-south alignment. They are the following :—

- Archæan crystallines, consisting of rocks of the archæan group.
- Residual laterite, formed by the decomposition *in situ* of the archæan crystallines, subsequently.
- The Warkalli formations—lignite-bearing sedimentary beds with a laterite capping.
- Recent formations—consisting of alluvial, marine and lacustrine deposits.

Different types of rocks of the archæan group occur in Kerala. They are Dharwar formation, Champion gneiss, Peninsular gneiss, Charnockite and Closepet granite, grouped under the archæan system. Dharwar rocks are seen only in the Malabar region. They are represented by garnetiferous ferruginous quartzites, mica and talc schists and are found exposed in the south-eastern Wynad. In the Champion gneisses that are seen in the south and south-east of Wynad gold-bearing quartz veins occur. Peninsular

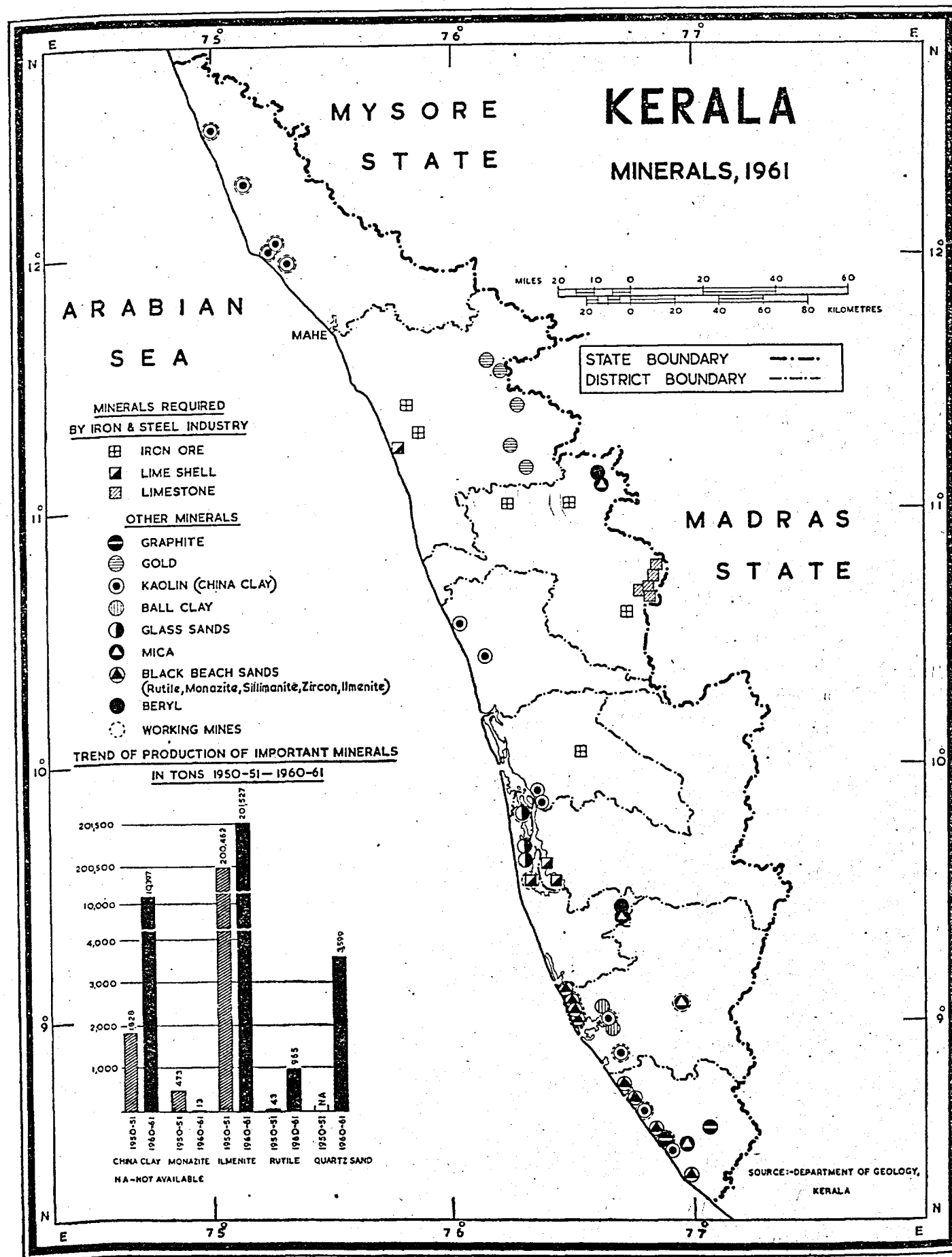
gneiss is one of the most widespread and important rock types in Kerala. The important minerals that go to make this gneiss are quartz, feldspars, biotite, garnet etc. Charnockites also occur very widely in the State. Closepet granites are found in two places in the Malabar region. The precambrian system is represented by the basic dykes of probable Cuddapah age.

Laterites of Kerala fall into two groups (i) residual laterites and (ii) sedimentary laterites. Residual laterites are found as a narrow zone to the west of archæan crystallines. Kaolin is found to occur beneath these rocks. The sedimentary laterites fall under Warkalli formations.

The Warkalli formation represents the most conspicuous sedimentary bed occurring in Kerala and as the name itself indicates is best exposed at Varkala in the cliffs near the sea-shore in Trivandrum district. Similar formations occur on the sea-shore of Cannanore and Kozhikode districts. The Warkalli beds are devoid of animal fossils.

Recent deposits are mainly developed north of Quilon and extend up to Chowghat in Trichur district and are made up of sands and silts. Similar formations are found in the beaches of Kasaragod and Hosdrug taluks also. From the economic point of view the zone of recent formations is the most important among the four zones in that it contains all the valuable mineral sands of Kerala.

Source : Department of Geology, Kerala



MAP 6
MINERALS, 1961

Purpose

The map shows the locations of deposits of important minerals in the State in 1961.

Method

The locations of different minerals are shown by different symbols. The mineral deposits which are exploited are indicated by broken circles around the symbols. The production of important minerals during 1950-51 and 1960-61 is shown in inset bar charts.

Salient Features

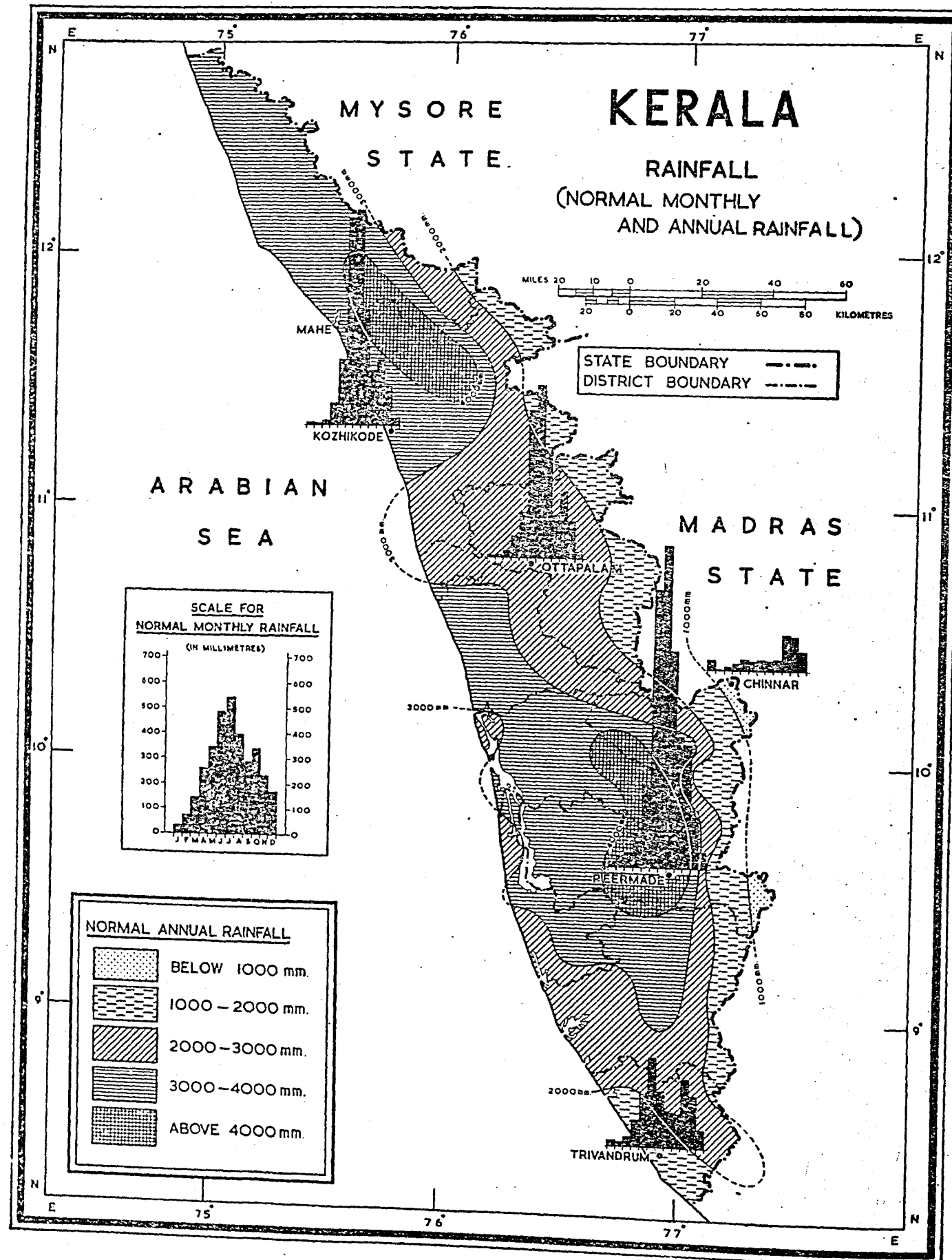
Though the State lacks in some of the basic minerals like coal, iron and copper it has many of the other important types of minerals viz., black beach sands comprising ilmenite, rutile, monazite, sillimanite, zircon etc., china-clay, ballclay, quartz (glass) sand, graphite, mica, lime shell, limestone and also iron ore and gold in small quantities.

The black beach sands are mainly found in the seashore of Quilon and Trivandrum districts and china-clay in the coastal or backwater regions of Cannanore, Trichur, Ernakulam, Quilon and Trivandrum districts. The quality of china-clay found in the State especially in Kundara of Quilon district is claimed to be one of

the finest in India. Ball clay occurs in Quilon district, quartz sand along the shores of the Vembanad lake in Alleppey district, mica in Trivandrum, Quilon, Alleppey and Palghat districts and graphite in Trivandrum district. Lime shell deposits are found along the shores of the Vembanad lake in Kottayam and Alleppey districts and also in the estuaries of certain rivers in Kozhikode district. Limestone occurs in Chittur taluk of Palghat district. Iron ores are reported in certain localities of Kozhikode, Palghat and Ernakulam districts and gold in Wynad and Nilambur areas of Kozhikode district.

Only a few of the minerals mentioned above are exploited on a commercial basis. Among these ilmenite and china-clay are the most prominent. In 1950-51 the production of ilmenite was 200,462 tons which increased to 201,527 tons during 1960-61. The mining of china-clay has gone up from 1,823 tons in 1950-51 to 10,397 tons in 1960-61 recording a percentage increase of 468.77. The production of monazite however declined from 473 tons in 1950-51 to 13 tons in 1960-61.

Source : Department of Geology, Kerala



RAINFALL

(Normal Monthly and Annual Rainfall)

Purpose

The map shows the distribution of normal monthly and annual rainfall of the State.

Method

Isohytes are drawn by joining stations of equal rainfall at an interval of 1,000 mm. Rainfall data are taken as the average normal annual rainfall for the past 50 years (1901-50) at the eighty-three rain-gauge centres in the State. The regions between these Isohytes are shaded from deep to light corresponding to high to low rainfall. A rain-gauge centre from each of the regions is selected and the normal monthly rainfall at this centre is shown by bar diagram.

Salient Features

According to the data published by the Director General of Observatories based on records of rainfall from 1901-50 in the various States in India, Kerala stands foremost both in rainfall as well as in the number of rainy days. The rainfall in Kerala is fairly spread out over the major part of the year as it has the benefit of getting both the south-west and north-east monsoons. The south-west monsoon commencing from June and generally ending with September is, however, the most

important rainy season and accounts for the largest rainfall in the State. Most of the area in the State gets annual rainfall between 2,000 mm. and 4,000 mm. The centres which record rainfall above 4,000 mm. are in the South Wynad and Badagara taluks of Kozhikode district, Muvattupuzha taluk of Ernakulam district and Kanjirappally and Peermade taluks of Kottayam district. The highest rainfall is recorded in Neriamangalam centre in Muvattupuzha taluk. Most of these regions lie at the foot of the Western Ghats. The lowest rainfall is recorded in Chinnar centre of the Devicolum taluk.

A look at the graphs showing the distribution of normal monthly rainfall at Calicut, Ottapalam, Chinnar, Peermade and Trivandrum will reveal that the months of June, July and August, during which the south-west monsoon prevails, are the wettest in all the above centres except Chinnar, which lies on the eastern side of the Western Ghats, where the highest precipitation of rainfall is in the months of October and November when the north-east monsoon prevails. January, February and March are the driest months in the State.

Table

NORMAL ANNUAL RAINFALL IN RAIN-GAUGE CENTRES

District	Taluk	Rain-gauge centre	Number of years for which data are taken	Normal annual rainfall in millimetres (based on the available data for 50 years from 1901-50)
1	2	3	4	5
Cannanore	Kasaragod	Kasaragod	50	3,477.8
"	Hosdrug	Hosdrug	50	3,562.2
"	Taliparamba	Irikkur	50	3,978.2
"	"	Payyannur	50	3,513.2
"	"	Taliparamba	50	3,559.2
"	Cannanore	Cannanore	50	3,274.4
"	Tellicherry	Tellicherry	50	3,303.5
"	North Wynad	Mananthody	50	2,834.4
Kozhikode	Badagara	Badagara	50	3,506.1
"	"	Kuttiadi	50	4,504.3
"	Quilandy	Quilandy	50	3,356.9
"	Kozhikode	Calicut (Observatory)	50	3,178.1
"	Tirur	Tirurangadi	50	2,914.2
"	Ernad	Manjeri	50	2,985.8
"	"	Nilambur	50	2,810.1
"	South Wynad	Vythiri	50	4,435.1

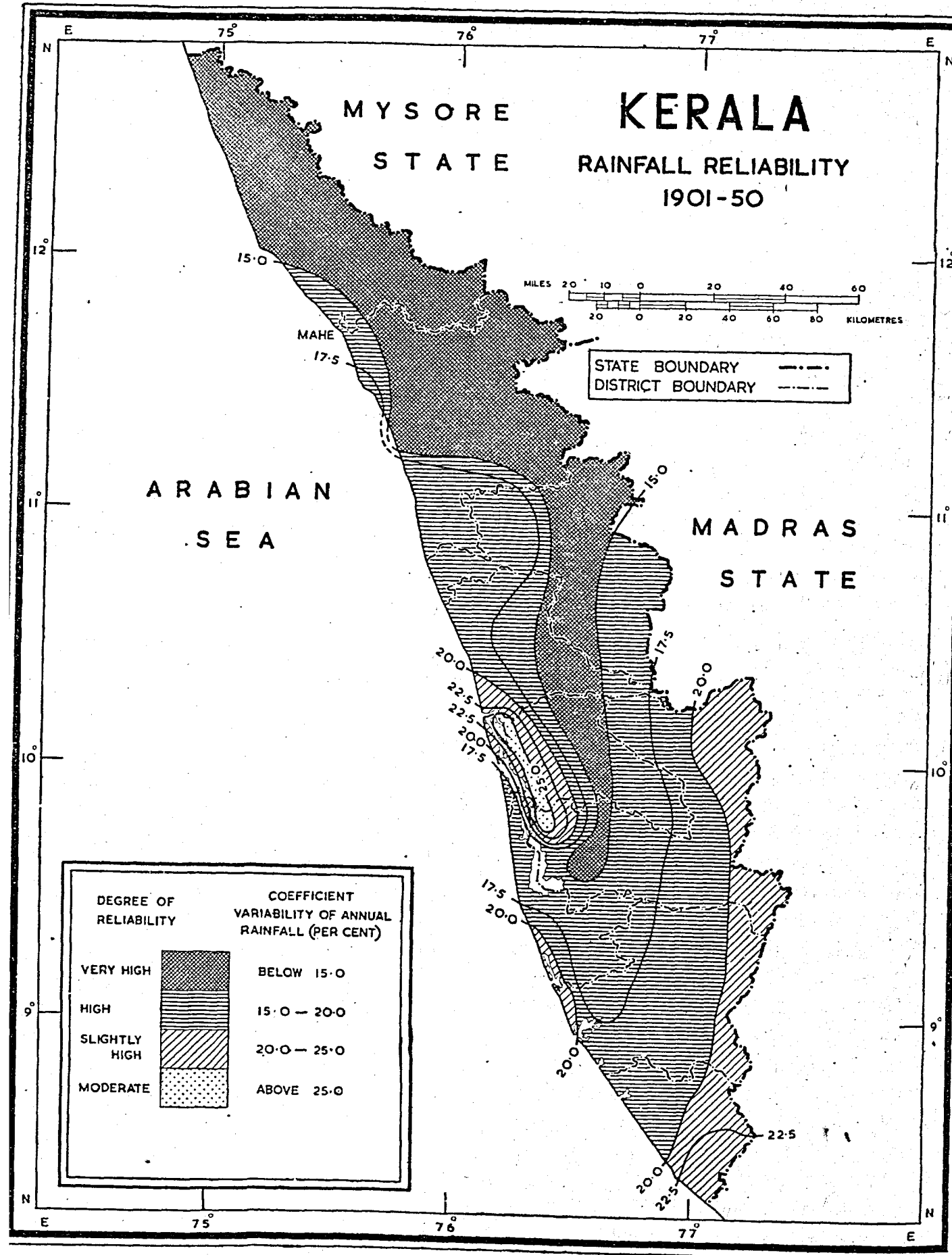
District	Taluk	Rain-gauge centre	Number of years for which data are taken	Normal annual rainfall in millimetres (based on the available data for 50 years from 1901-50)
1	2	3	4	5
Palghat	Perintalmanna	Mannarghat	50	2,890.0
"	"	Perintalmanna	50	2,834.0
"	Ponnani	Ponnani	50	2,956.8
"	Ottapalam	Cherplassery	50	2,680.1
"	"	Ottapalam	50	2,596.6
"	Palghat	Palghat	50	2,115.2
"	"	Palghat (Observatory)	8	2,019.4
"	"	Parli	50	2,452.6
"	Alathur	Alathur (closed)	45	2,254.2
"	Chittur	Chittur	50	1,794.1
Trichur	Talapilly	Wadakkancherry	44	3,092.8
"	Trichur	Trichur	50	3,096.4
"	Chowghat	Chowghat	50	3,135.1
"	"	Triprayar	50	3,111.6
"	Cranganore	Cranganore	44	3,224.5
"	Mukundapuram	Irinjalakuda	44	3,296.4
Ernakulam	Parur	Parur	50	2,698.9
"	Alwaye	Alwaye (P. W. D.)	35	3,228.5
"	"	Malayattur	46	3,535.7
"	Kunnathunad	Perumbavoor	50	3,478.4
"	Kanayannur	Ernakulam	50	3,061.7
"	Cochin	Fort Cochin (Observatory)	50	3,046.6
"	Muvattupuzha	Muvattupuzha	50	3,457.1
"	"	Neriamangalam	16	5,883.5
"	Thodupuzha	Karikode	50	3,806.4
Kottayam	Devicolam	Chinnar	43	649.2
"	"	Devicolam	46	2,917.5
"	"	Marayur	35	1,348.9
"	"	Munnar	35	3,815.9
"	Udumbanchola	Santhenpara (Puppara)	43	1,861.1
"	"	Vandanmettu	22	2,194.7
"	Meenachil	Palai	50	3,985.3
"	Vaikom	Vaikom	50	3,059.2
"	Kottayam	Ettumanoor	50	3,123.0
"	"	Kottayam (P. W. D.)	50	3,261.5
"	Changanacherry	Changanacherry	50	3,188.7
"	Kanjirappally	Kanjirappally	46	4,156.5
"	Peermade	Kumili	43	1,720.7
"	"	Peermade (Residency)	50	5,164.8
"	"	" (Taluk Office)	43	4,471.3
Alleppey	Shertalai	Arukutty	46	3,222.7
"	"	Shertalai	50	2,874.0
"	Ambalapuzha	Alleppey (Observatory)	7	3,274.8
"	"	Alleppey (P. W. D.)	35	3,097.7
"	"	Ambalapuzha	50	2,816.2
"	Thiruvalla	Thiruvalla	50	3,093.0
"	Chengannur	Chengannur	50	3,060.4
"	Karthigapally	Haripad	50	2,846.6
"	"	Kayamkulam	46	2,735.6
"	Mavelikkara	Mavelikkara	50	3,186.7
Quilon	Pathanamthitta	Konni	46	3,463.2

District	Taluk	Rain-gauge centre	Number of years for which data are taken	Normal annual rainfall in millimetres (based on the available data for 50 years from 1901-50)
1	2	3	4	5
Quilon	Pathanamthitta	Pathanamthitta	46	3,305.6
"	Kunnathur	Adoor	50	2,935.0
"	Karunagapally	Karunagapally	50	2,462.5
"	Quilon	Paravoor	46	2,081.2
"	"	Quilon (P. W. D.)	46	2,398.1
"	Kottarakara	Kottarakara	50	2,662.8
"	"	Nilamel	5	2,591.5
"	Pathanapuram	Aryankavu	46	2,542.5
"	"	Punalur	50	3,159.4
Trivandrum	Chirayinkil	Attingal	50	1,955.6
"	"	Varkala	5	2,868.3
"	Trivandrum	Trivandrum (Observatory)	50	1,812.1
"	Neyyattinkara	Neyyattinkara	50	1,653.9
"	"	Parassala	45	1,479.1
"	"	Vizhinjam	5	1,592.6
"	Nedumangad	Nedumangad	50	2,240.8

NORMAL MONTHLY RAINFALL IN SELECTED RAIN-GAUGE CENTRES

Rain-gauge Centres	Normal Monthly Rainfall in millimetres (based on the available data for 50 years from 1901-1950)											
	Janu-ary	Febru-ary	March	April	May	June	July	August	Sep-tember	Octo-ber	Novem-ber	Decem-ber
Kozhikode (Calicut) (Observatory)	11.7	8.4	18.5	86.9	261.6	824.2	857.3	439.7	220.0	262.6	156.7	30.5
Ottapalam	8.9	9.9	26.7	85.6	177.5	585.7	686.6	399.0	170.9	267.7	148.6	29.5
Chinnar	39.1	4.3	13.7	28.7	46.0	37.6	41.7	38.9	44.7	142.2	135.6	76.7
Peermade (Residency)	24.1	41.1	59.9	137.4	320.3	1,104.7	1,277.6	861.8	522.0	492.5	255.8	67.6
Trivandrum (Observatory)	22.9	20.8	38.6	105.7	207.8	356.4	223.0	145.5	137.9	273.3	205.5	74.7

Source : Memoirs of the India Meteorological Department, Vol. XXXI, Part III



RAINFALL RELIABILITY, 1901-50

Purpose

The map shows the regional variations in the reliability of annual rainfall in the State.

Method

The co efficient of variability of annual rainfall for fifty years from 1901-50 at 38 rain-gauge centres in the State is calculated according to an approved formula and isopleths are drawn for variabilities 15.0 per cent, 17.5 per cent, 20.0 per cent, 22.5 per cent and 25.0 per cent. The intervening spaces between isopleths are shaded by four different grades of hatches from deep to light corresponding to variabilities below 15.0 per cent, 15.0 per cent—20.0 per cent, 20.0 per cent—25.0 per cent and above 25.0 per cent respectively.

Salient Features

Rainfall reliability is measured by the co efficient of variability of annual rainfall. Variability is inversely proportional to reliability. The region which shows

high rainfall variability is a region of low reliability of rainfall.

Most of the regions of the State have rainfall variability below 20.0 per cent and consequently have high or very high reliability of rainfall. Slightly high reliability of rainfall (variability between 20.0 and 25.0 per cent) is observed in portions of Devicolam, Udumbanchola and Peermade taluks of Kottayam district, Pathanamthitta and Pathanapuram taluks of Quilon district and Trivandrum, Neyyattinkara and Nedumangad taluks of Trivandrum district. Most of these areas lie on the top or in the eastern slopes of the Western Ghats. Moderate reliability of rainfall (variability above 25.0 per cent) is noticed in a small contiguous region of the State lying in Parur, Alwaye and Kananur taluks of Ernakulam district and Vaikom taluk of Kottayam district.

Table

CO-EFFICIENT OF VARIABILITY OF ANNUAL RAINFALL DURING 1901-50 AT SELECTED RAIN-GAUGE CENTRES

District	Rain-gauge centre	Co-efficient of variability of annual rainfall for fifty years from 1901-50 (in percentage)	1	2	3
			Kottayam	Devicolam	22.46
			"	Meenachil	16.77
			"	Vaikom	25.07
Cannanore	Kasaragod	14.43	"	Kottayam	13.87
"	Hosdrug	14.77	"	Changanacherry	16.21
"	Taliparamba	14.21	"	Kanjirappally	17.24
"	Cannanore	16.70	"	Peermade	18.58
"	Tellicherry	16.86	Alleppey	Shertalai	16.77
Kozhikode	Badagara	16.96	"	Alleppey	15.72
"	Quilandy	18.32	"	Ambalapuzha	18.46
"	Calicut	14.47	"	Thiruvalla	17.27
Palghat	Perintalmanna	18.48	"	Chengannur	16.58
"	Ponnani	19.60	"	Mavelikkara	16.13
"	Ottapalam	18.41	Quilon	Karunagapally	23.10
"	Palghat	17.07	"	Quilon	17.59
"	Alathur	14.15	"	Kottarakara	17.38
"	Chittur	17.46	"	Punalur	19.55
Trichur	Trichur	15.88	Trivandrum	Trivandrum	19.56
"	Chowghat	19.81	"	Neyyattinkara	24.19
Ernakulam	Parur	26.72	"	Nedumangad	20.52
"	Cochin	15.34			

Source: Registrar General, India

RAINFALL REGIONS BY EXTENT OF PRECIPITATION AND RELIABILITY

(Related to Irrigational Needs)

Purpose

This map brings out, by relating normal annual rainfall and reliability of rainfall, the regions which require irrigational facilities in the State.

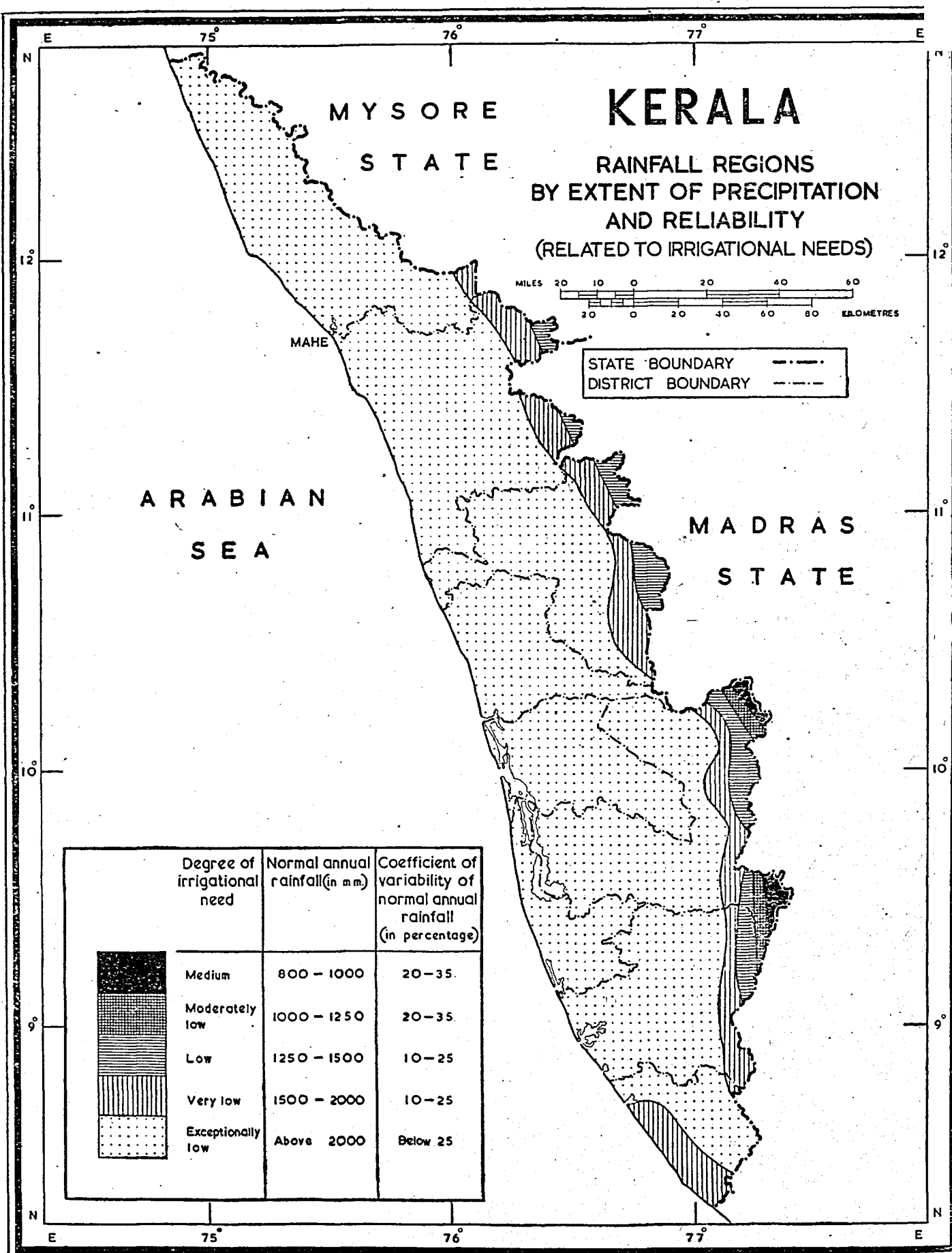
Method

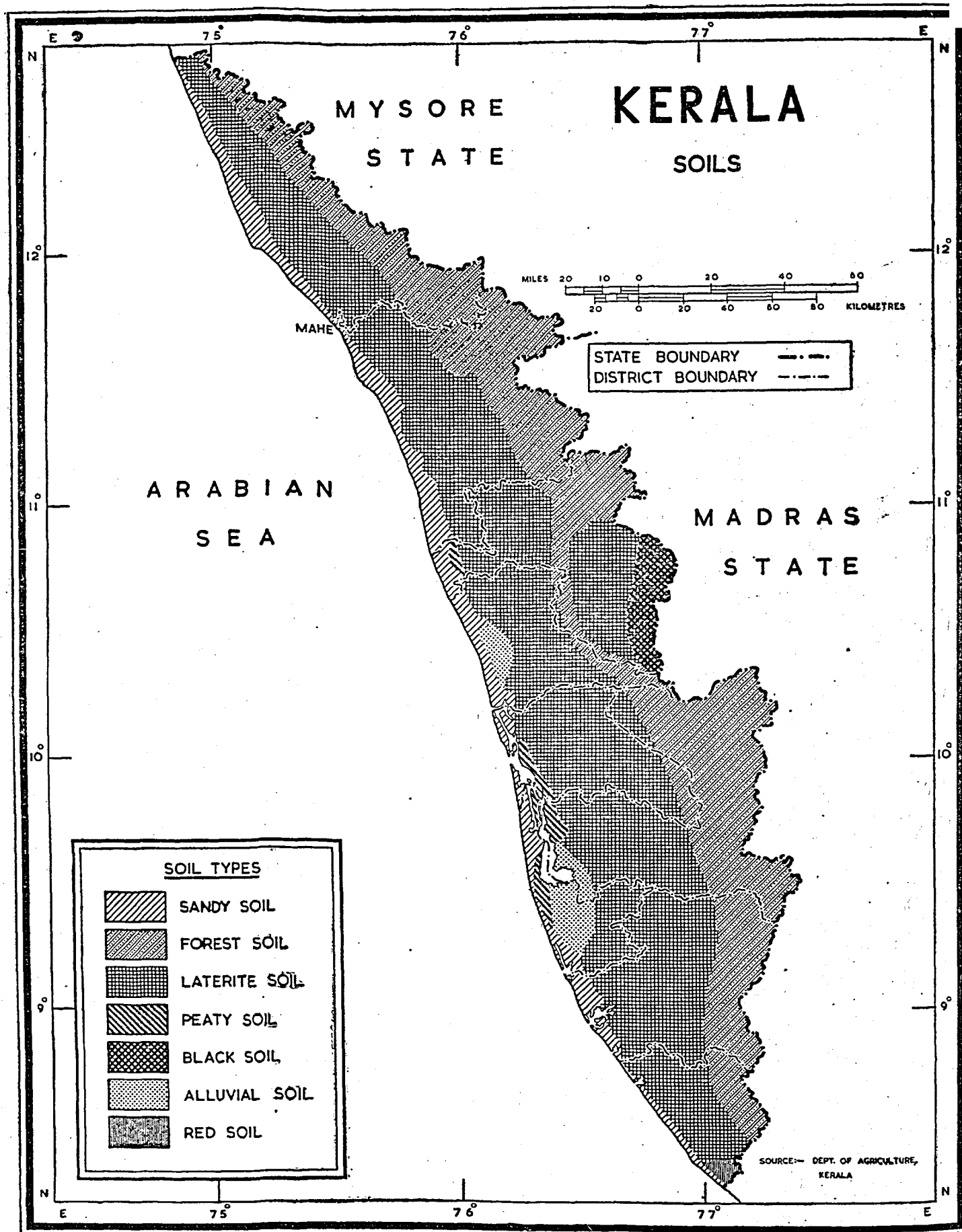
The map 7 'Rainfall (Normal monthly and annual rainfall)' is superimposed upon map 8 'Rainfall reliability, 1901-50' and regions are delineated according to irrigational needs as medium, moderately low, low, very low and exceptionally low.

Salient Features

The map reveals that in most of the regions in the state the need for irrigational facilities is exceptionally low. Areas where the need for irrigational facilities is very low, low, moderately low and medium, are considerably small and are mostly in the eastern hilly regions. This is due to the fact that the State gets good precipitation of rainfall as it has the benefit of getting both the south-west and north-east monsoons.

Source: Registrar General, India





Purpose

The map shows the pattern of distribution of different types of soils in the State.

Method

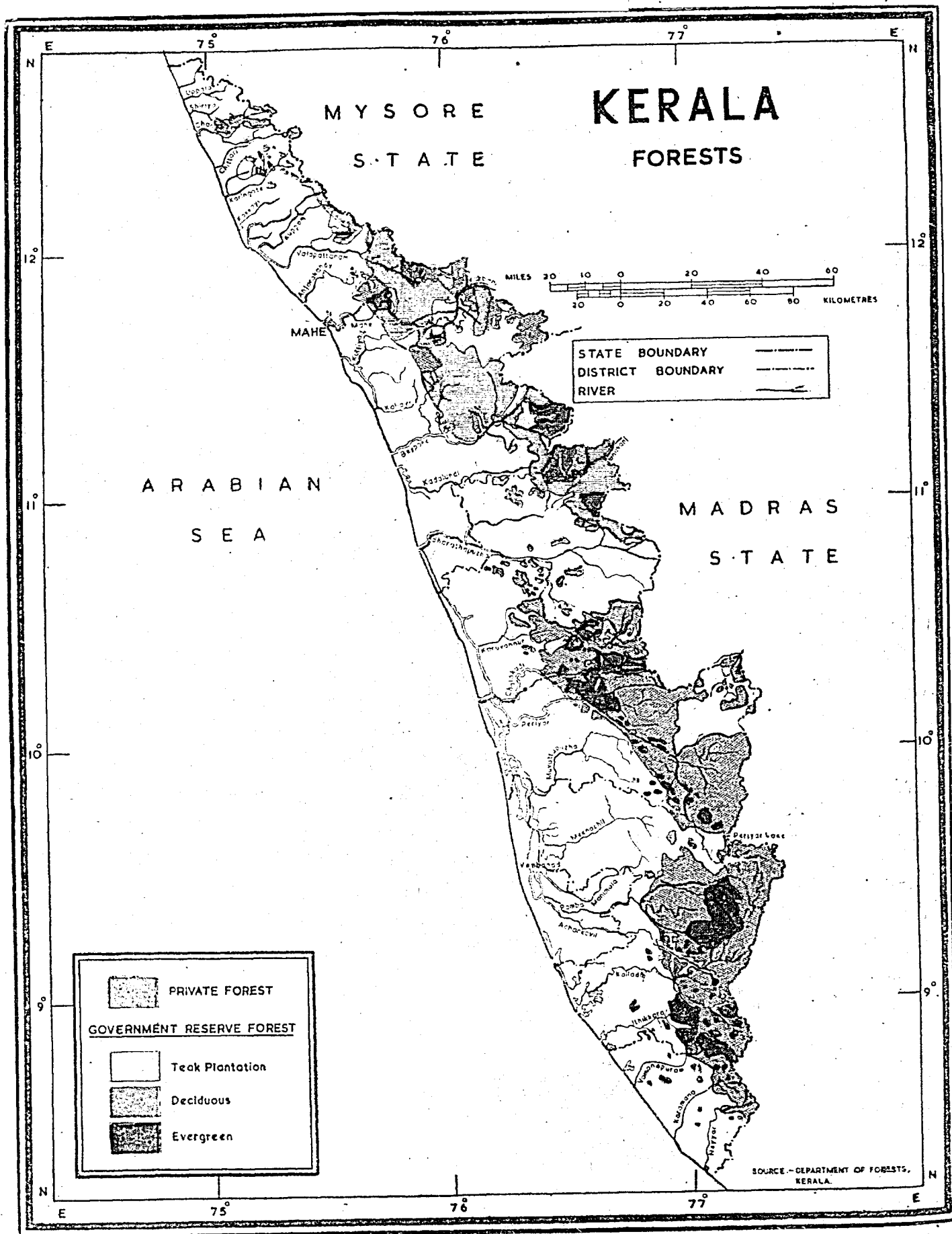
The different types of soils and the regions in which they occur are marked by different shades.

Salient Features

The soils of the State can be broadly classified into sandy, alluvial, laterite, red, black, peaty and forest soils. The sandy soils occur as a narrow belt all along the coast. They are highly porous with low retentive capacity and are extremely deficient in all the major plant foods and lime. Coconut is the only important crop found grown in these soils. The alluvial soils are transported soils and cover the entire tract of Kuttanad and the *kole* lands of Trichur and Mukundapuram taluks. They are generally well supplied with organic matter, nitrogen and potash. Laterite soils are the most important group of soils found in the State and cover the largest area. They cover almost

the entire midland. Though they are of low natural fertility, they respond well to good cultivation and judicious application of fertilisers. These soils are also used in the manufacture of bricks. Red soils are found in a small part of Neyyattinkara taluk only. They are deficient in organic matter and low in all the major plant foods and lime. The peaty or kari soils occur in the taluks of Ponnani, Kanayannur, Vaikom, Shertalai, Ambalapuzha and Kuttanad. These are clay soils with poor aeration and drainage. They are rich in nitrogen and are strongly acidic. The forest soils occupy more than one fourth of the area of the State and occur all along the eastern border except in Palghat and Chittur taluks. They are characterised by a surface layer of organic matter derived from forest growth. Plantation crops such as tea, cardamom and rubber are extensively grown here. Black soils are found in portions of Chittur and Palghat taluks. They are deficient in all the major plant foods. Cotton is the main crop grown in these soils.

Source: Department of Agriculture, Kerala



MAP 11
FORESTS

Purpose

The map shows the forest areas in the State.

Method

The actual areas of Government reserve forests and private forests are shown in the map. The Government reserve forests have been classified into deciduous forests, evergreen forests and teak plantations.

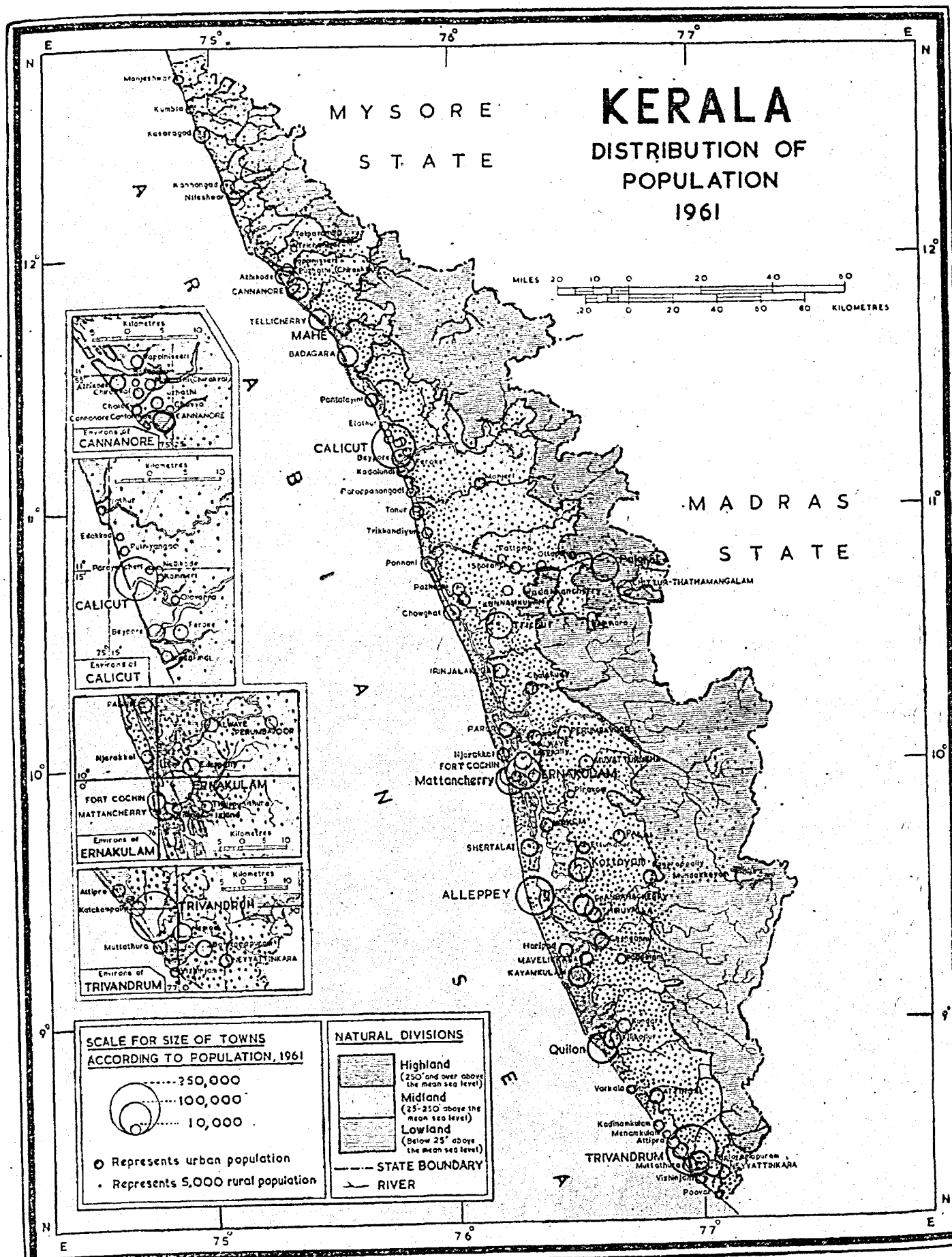
Salient Features

Forests rank among the key resources of Kerala. Nearly over one fourth of the total geographical area of the State are forests. Most of the forest area lies

on the eastern border of the State in the high ranges. Alleppey is however the only district in the State which has no area under Government reserve or private forests. Trichur and Quilon districts have the highest percentage of land area under forests. A great majority of the forests are of the deciduous type. Evergreen forests are comparatively less and occur in Quilon, Kottayam, Ernakulam, Palghat and Kozhikode districts. The teak plantations are artificially created forests. Private forests occur only in the Malabar region of the State.

Source: Department of Forests, Kerala

III DEMOGRAPHIC STRUCTURE AND TRENDS



DISTRIBUTION OF POPULATION, 1961

Purpose

The map gives a picture of the distribution of population, both rural and urban, in the State against a background of the three natural divisions of lowland, midland and highland.

Method

The distribution of rural population is shown by green dots each dot representing 5,000 rural population, and that of urban population by red circles proportional to the size of urban population in each town. The natural divisions of lowland, midland and highland are shown by three different colours.

The State has been divided into three natural divisions, the highland consisting of areas lying 250 ft. and over above the mean sea level, the midland comprising areas lying between 25 ft. and 250 ft. above the mean sea level and the lowland taking in the areas falling below 25 ft. above the mean sea level. Since maps showing contour lines for 25 ft. are not available, the classification of lowland is made villagewise based on the reports of local authorities whether the major portion of the village lies below or above 25 ft. above

the mean sea level. In the case of villages lying partly in one division and partly in another, the classification is made according to the division in which major portion of the village lies. The same method is followed in classifying the towns also into lowland, midland or highland.

Salient Features

Most of the land area in all the districts except Alleppey fall either in midland or highland. In Alleppey district 65.1 per cent of its total area falls in lowland and the rest in midland. Kottayam district has 73.3 per cent of its area in highland.

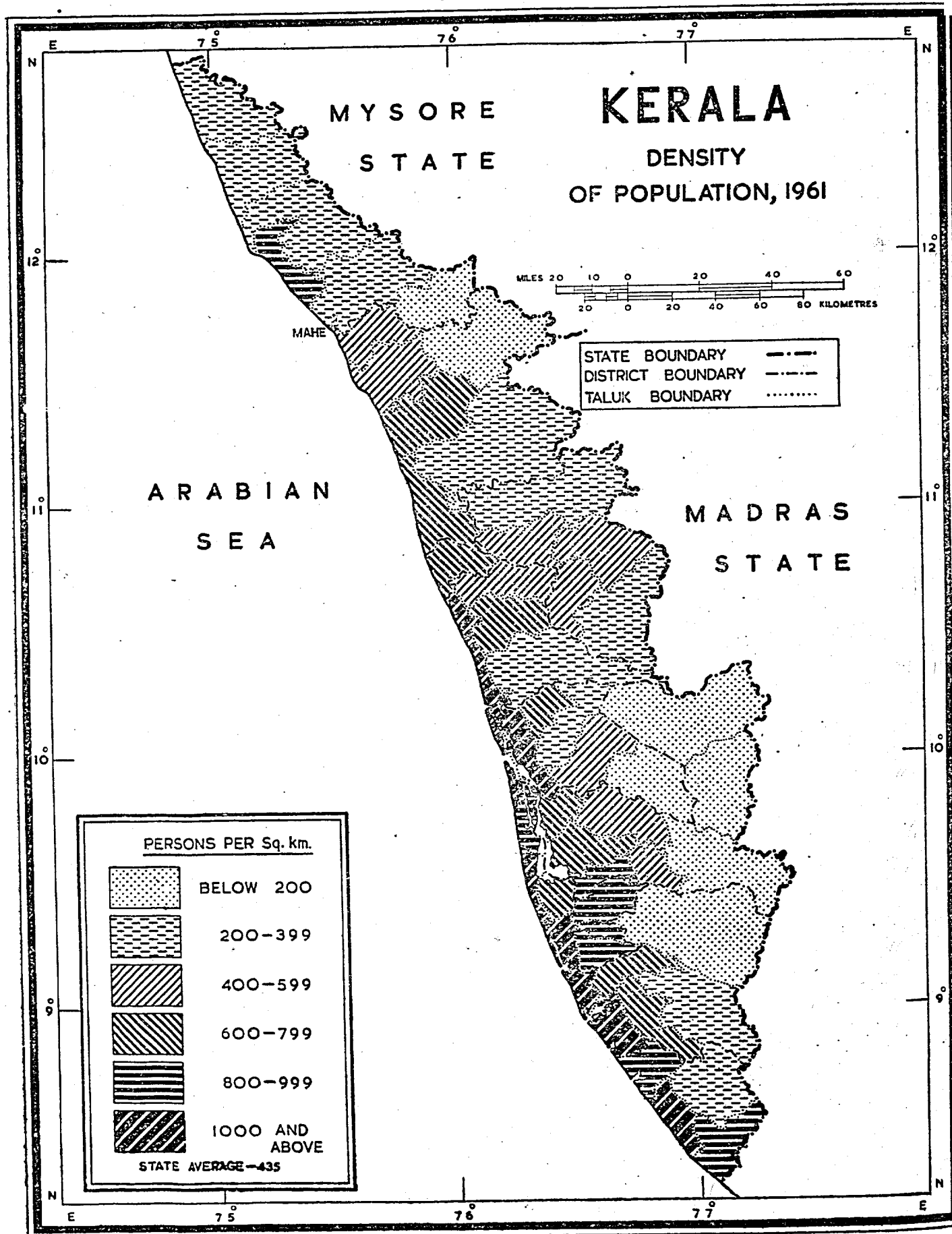
The State's population is mostly concentrated in the lowland and midland regions, the highland regions being sparsely populated. The density of population of the State as well as of districts is highest in the lowlands and lowest in the highlands. Most of the cities and towns with large population size are also situated in the coastal regions. Palghat municipality is the only town with population 50,000 and over situated in the highland.

Table

PERCENTAGE OF AREA AND POPULATION IN THE THREE NATURAL DIVISIONS BY STATE AND DISTRICTS, 1961

State/District	Area				Population			
	Total	Highland	Midland	Lowland	Total	Highland	Midland	Lowland
1	2	3	4	5	6	7	8	9
Kerala State	100.0	48.7	41.2	10.1	100.0	13.8	59.7	26.5
Cannanore District	100.0	52.7	41.4	5.9	100.0	21.0	61.1	17.9
Kozhikode "	100.0	44.2	49.1	6.7	100.0	8.9	73.8	17.3
Palghat "	100.0	54.1	44.5	1.4	100.0	31.8	63.4	4.8
Trichur "	100.0	33.3	51.4	15.3	100.0	4.1	65.4	30.5
Ernakulam "	100.0	30.0	52.7	17.3	100.0	4.6	48.6	46.8
Kottayam "	100.0	73.3	20.4	6.3	100.0	33.0	52.3	14.7
Alleppey "	100.0	..	34.9	65.1	100.0	..	31.2	68.8
Quilon "	100.0	62.9	29.6	7.5	100.0	19.2	50.5	30.3
Trivandrum "	100.0	26.3	68.6	5.1	100.0	3.5	87.3	9.2

Source: Census of India, 1961, Kerala—Part II A General Population Tables


 MAP 13
 DENSITY OF POPULATION, 1961

Purpose

The map shows the regional variation in density of population of the State per square kilometre in 1961.

Method

The talukwise density of population per square kilometre is grouped into six ranges, and the taluks are shaded according to these groupings by different shades of hatching from deep to light corresponding to high to low densities.

Salient Features

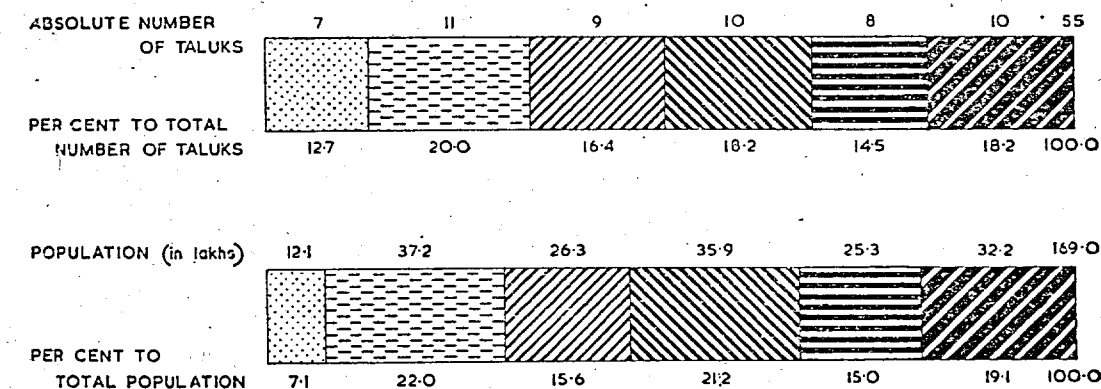
The density of population of the State, viz. 435 persons per square kilometre, is very high when compared to the all-India average of 138 persons per square kilometre and is far higher than the world average which comes only to 23 persons per square kilometre. It is also the highest among the States of India.

The map reveals significant regional variations in the densities of taluks. The density of population which is very high in the coastal regions, gradually decreases in the midland and then in the highland. The least densely populated taluks of the State are North Wynad, South Wynad, Thodupuzha, Devicolam, Udumbanchola, Peermade and Pathanamthitta, all of which have considerable forest area. The taluks of Chowghat, Cranganore, Parur, Kanayannur, Cochin, Ambalapuzha, Karthigapally, Karunagapally, Quilon and Trivandrum are the most densely populated taluks and have densities of above 1,000 persons per square kilometre. All these taluks lie in the lowland and border seacoast or coastal back-waters. 33 taluks have densities above the State average and 22 taluks below the State average. Cochin taluk in Ernakulam district has the highest density of population with 2,228 persons per square kilometre and Devicolam taluk of Kottayam district the lowest with but 69 persons per square kilometre.

Table

DENSITY OF POPULATION BY TALUKS, 1961

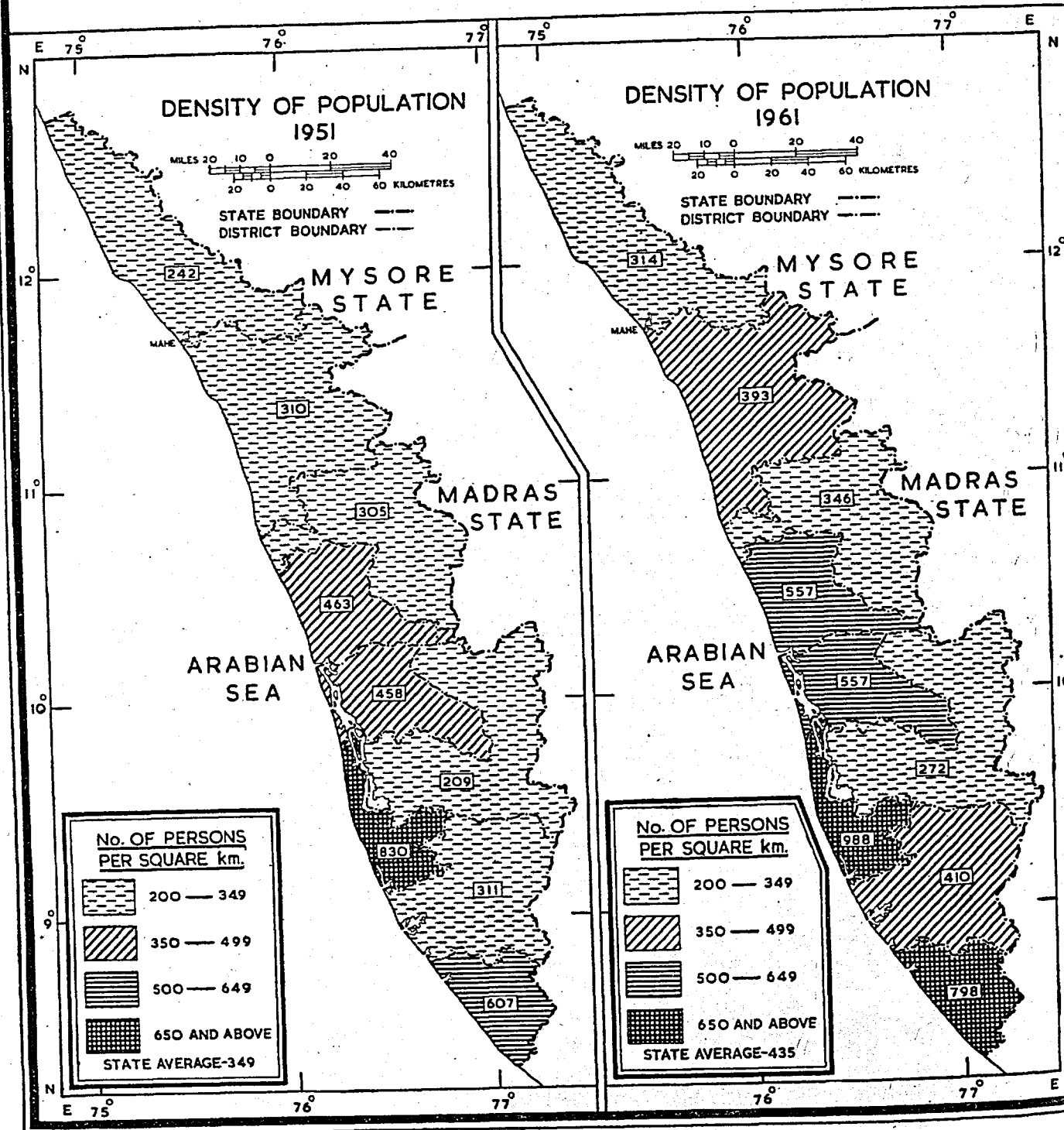
Rank	State/Taluk	Persons per square kilometre
1	2	3
	Kerala State	435
1	Cochin Taluk	2,228
2	Trivandrum	1,841
3	Ambalapuzha	1,511
4	Quilon	1,382
5	Karunagapally	1,314
6	Cranganore	1,237
7	Karthigapally	1,212
8	Kanayannur	1,177
9	Chowghat	1,172
10	Parur	1,154
11	Chengannur	988
12	Chirayinkil	973
13	Shertalai	972
14	Mavelikkara	940
15	Cannanore	918
16	Thiruvalla	888
17	Changanacherry	856
18	Neyyattinkara	806
19	Kottayam	782
20	Tirur	778
21	Trichur	726
22	Ponnani	722
23	Alwaye	694
24	Kozhikode	673
25	Vaikom	651
26	Kuttanad	636
27	Kunnathur	610
28	Kottarakara	601
29	Badagara	582
30	Ottapalam	497
31	Talappilly	482
32	Quilandy	480
33	Muvattupuzha	457
34	Meenachil	429
35	Kanjirappally	424
36	Alathur	422
37	Palghat	412
38	Tellicherry	395
39	Nedumangad	372
40	Mukundapuram	355
41	Kunnathunad	338
42	Kasaragod	278
43	Hosdurg	244
44	Chittur	236
45	Taliparamba	233
46	Ernad	232
47	Perintalmanna	211
48	Pathanapuram	201
49	Thodupuzha	183
50	Pathanamthitta	169
51	Udumbanchola	145
52	South Wynad	134
53	North Wynad	121
54	Peermade	102
55	Devicolam	69



Source: Census of India, 1961, Kerala—Part II-A General Population Tables

KERALA

CHANGING PATTERN OF DENSITY OF POPULATION, 1951-61



CHANGING PATTERN OF DENSITY OF POPULATION, 1951-61

Purpose

The map brings out the pattern of changes in the density of population of districts from 1951 to 1961.

Method

Two maps of density with districtwise figures for 1951 and for 1961 are drawn side by side. The districtwise densities of population (persons per sq. km.) are grouped into four categories and the districts are matched from deep to light corresponding to high to low densities. The same grades of hatching are used for both the maps to make comparison easy.

Salient Features

The densities of population of the State remained far higher than the all-India average in both 1951 and 1961. The average density of population of the

State increased from 349 persons per square kilometre in 1951 to 435 in 1961 as compared to 113 persons per square kilometre in 1951 to 138 in 1961 in India as a whole.

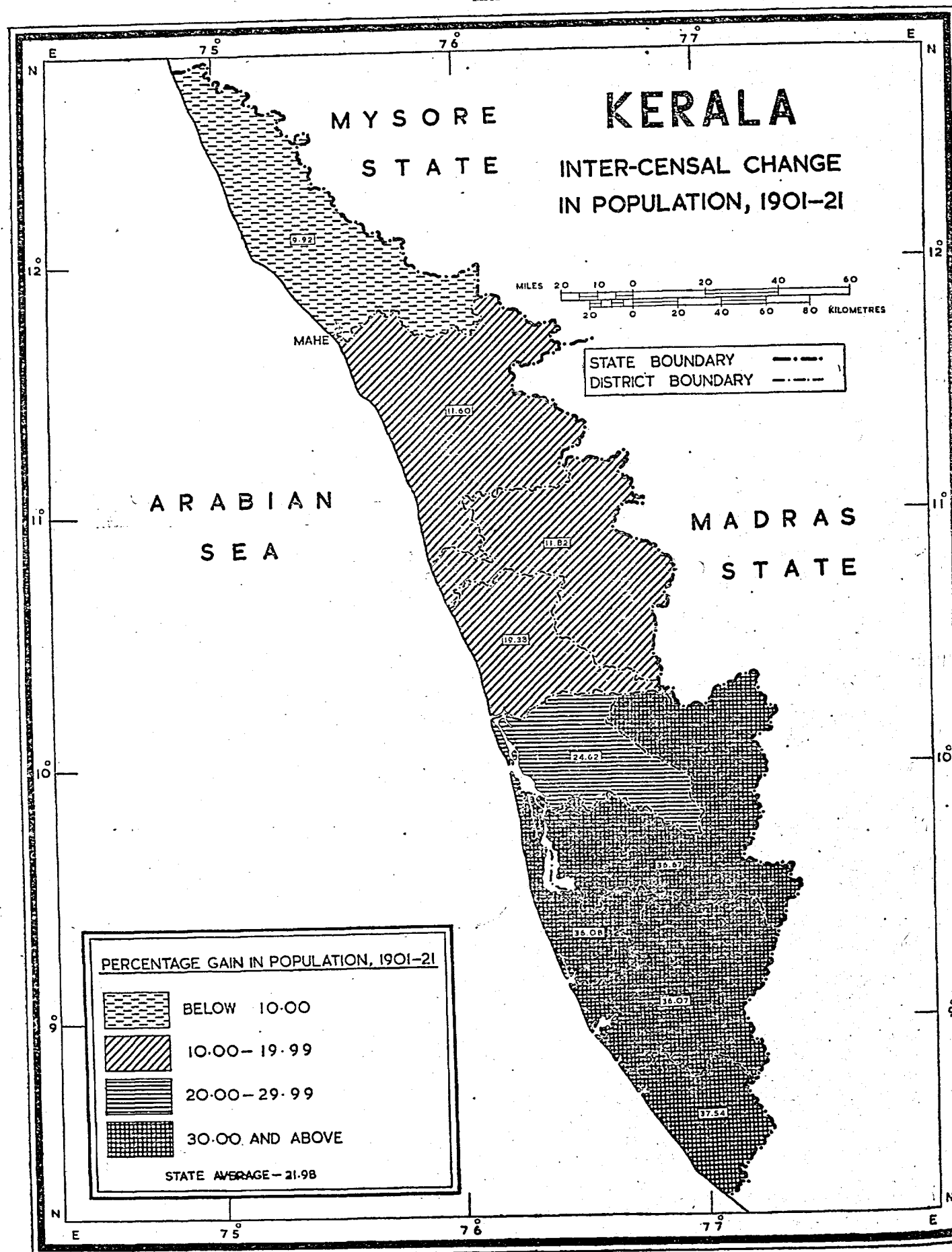
During 1951 and 1961 the ranks held by the districts in point of density of population remained the same. In 1951 Alleppey was the most densely populated district followed by Trivandrum, Trichur and Ernakulam. The three northern districts of the Malabar region and Kottayam and Quilon districts had lower densities. The reason for the low densities in these districts is mainly due to the fact that considerable portions of their land area lie in highland. In 1961, all the districts retain the ranks they held in 1951.

Table

DENSITY OF POPULATION IN 1951 AND 1961

State/District	Number of persons per square kilometre			1	2	3
	1951	1961				
Kerala State	349	435				
Alleppey District	830	988				
Trivandrum	607	798				
Trichur	463	557				
Ernakulam					458	557
Quilon					311	410
Kozhikode					310	393
Palghat					305	346
Cannanore					242	314
Kottayam					209	272

Source: Census of India, 1961, Kerala—Part II A. General Population Tables



INTER-CENSAL CHANGE IN POPULATION, 1901-21

Purpose

The map shows the percentage variations in the population of districts during 1901-21.

Method

The percentage variations during 1901-21 by districts are grouped into four ranges and the districts are shaded according to the above grouping by four grades of hatching from deep to light corresponding to high to low value.

Salient Features

The population of the State has increased by 21.98 per cent during the period of the 20 years from 1901 to 1921.

During 1901-21 all the districts have shown an increase in their population, ranging between 9.92 and

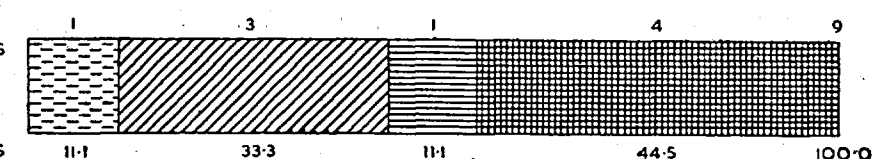
37.54 per cent. The increase was low in the northern districts when compared to the southern districts. The Trivandrum district has shown the highest and the Cannanore district the lowest increase in population during this period. In the districts of Kozhikode, Palghat and Trichur lying contiguously the population increase varies between 10.00 and 19.99 per cent. A compact area in the south comprising the districts of Kottayam, Alleppey, Quilon and Trivandrum shows an increase above 30 per cent. Thus the districts are distributed in the class ranges of percentage gain in population from low in the north to high in the south. This pattern is maintained in the absolute figures also except in the case of Kottayam, Alleppey and Quilon districts.

Table

INTER-CENSAL CHANGE IN POPULATION, 1901-21

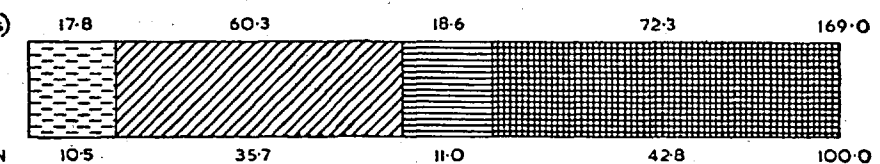
Rank	State/District	Percentage increase in population	1	2	3
			4	Quilon District	36.07
1	2	3	5	Ernakulam "	24.62
	Kerala State	21.98	6	Trichur "	19.38
1	Trivandrum District	37.54	7	Palghat "	11.82
2	Kottayam "	36.67	8	Kozhikode "	11.60
3	Alleppey "	36.08	9	Cannanore "	9.92

ABSOLUTE NUMBER OF DISTRICTS



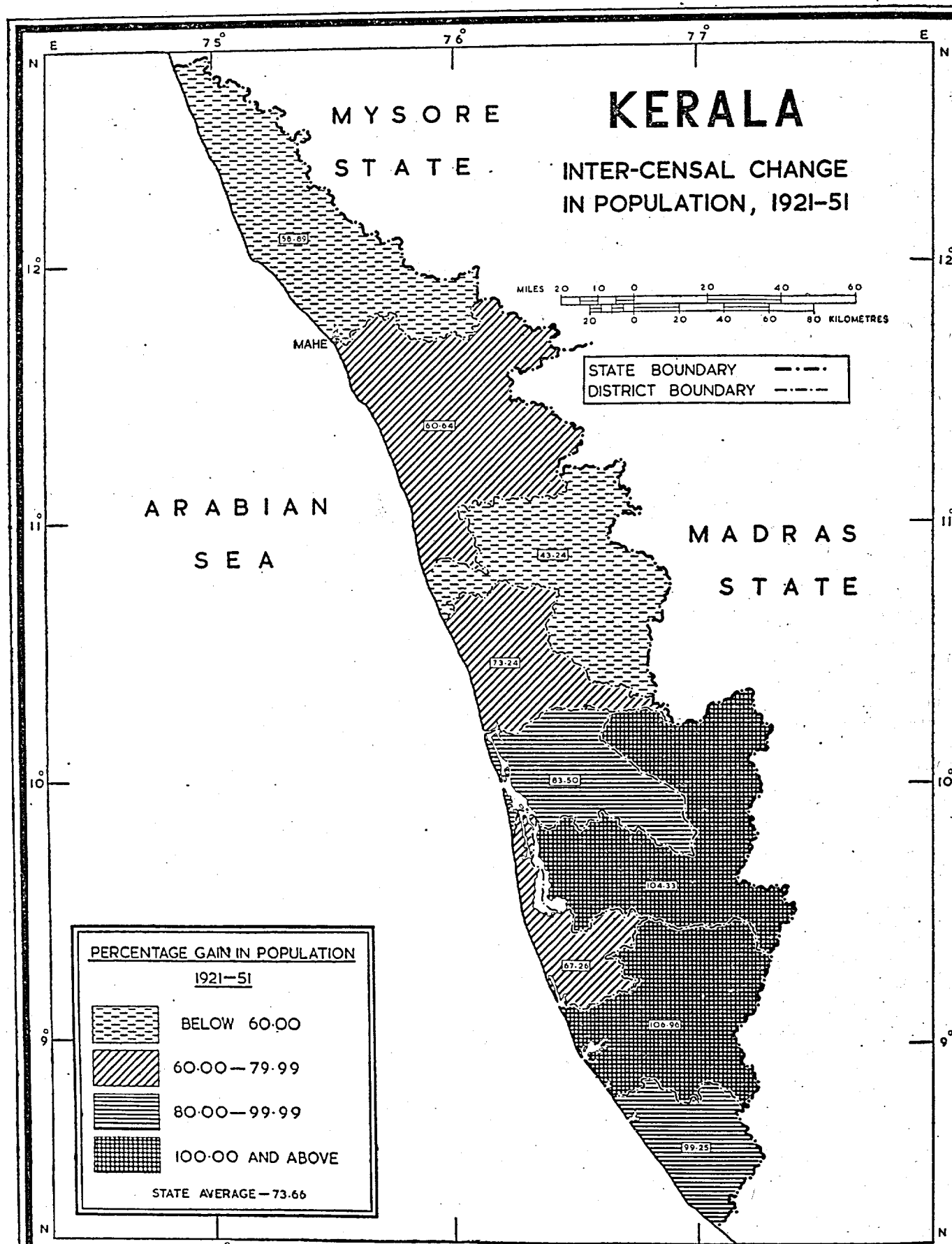
PER CENT TO TOTAL NUMBER OF DISTRICTS

POPULATION (in lakhs)



PER CENT TO TOTAL POPULATION

Source: Census of India, 1961, Kerala—Part II A—General Population Tables



INTER-CENSAL CHANGE IN POPULATION, 1921-51

Purpose

The map shows the variation in population in the districts of the State during 1921-51.

Method

The percentage variations in population during 1921-51 by districts are arranged into four categories and the districts are shaded according to the above grouping by four grades of hatching from deep to light corresponding to high to low value.

Salient Features

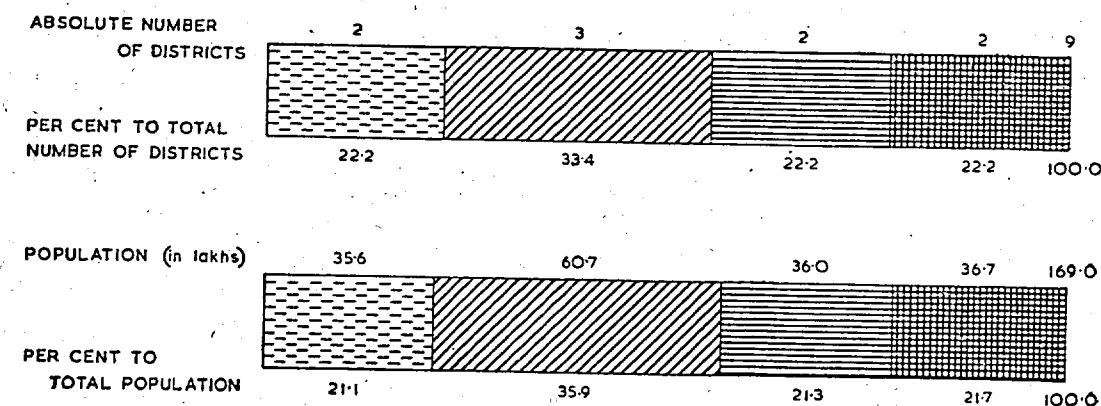
During the period of the thirty years from 1921 to 1951 the State's population has increased by 73.66 per cent. All the districts have shown increases in their population during the period, the variations ranging from 43.24 per cent to 106.96 per cent. Quilon and Kottayam districts rank as the first and the second respectively in the percentage increase of population

Palghat district has the lowest increase in population during the period.

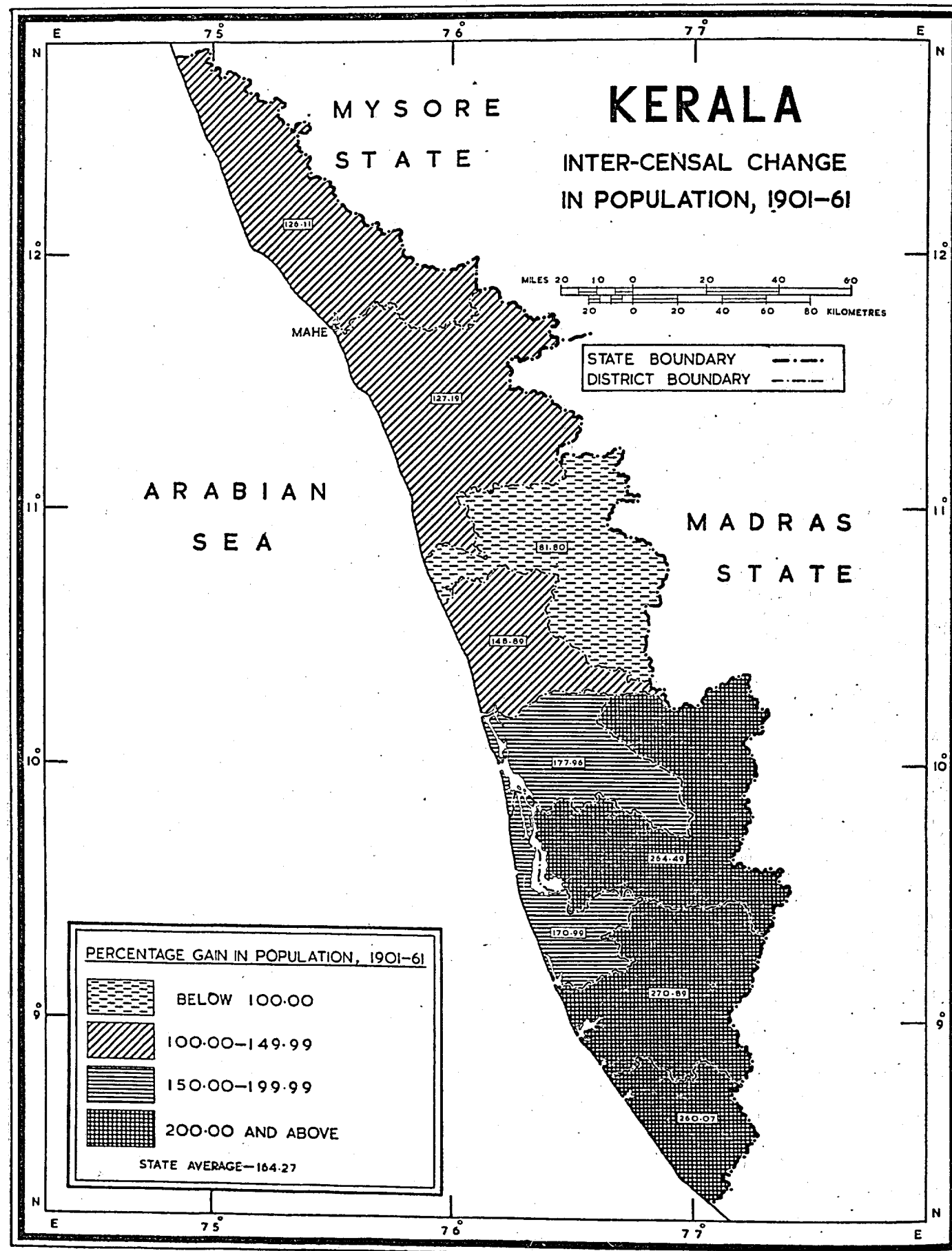
Table

INTER-CENSAL CHANGE IN POPULATION, 1921-51

Rank	State/District	Percentage increase in population
1	2	3
	Kerala State	73.66
1	Quilon District	106.96
2	Kottayam "	104.33
3	Trivandrum "	99.25
4	Ernakulam "	83.50
5	Trichur "	73.24
6	Alleppey "	67.26
7	Kozhikode "	60.64
8	Cannanore "	58.89
9	Palghat "	43.24



Source: Census of India, 1961, Kerala—Part II A—General Population Tables



MAP 17
INTER-CENSAL CHANGE IN POPULATION, 1901-61

Purpose

The map shows the percentage variation in the population of the districts of the State during 1901-61.

Method

The percentage variations by districts are grouped into four categories and the districts are shaded according to the grouping by four different shades from deep to light corresponding to high to low percentage value.

Salient Features

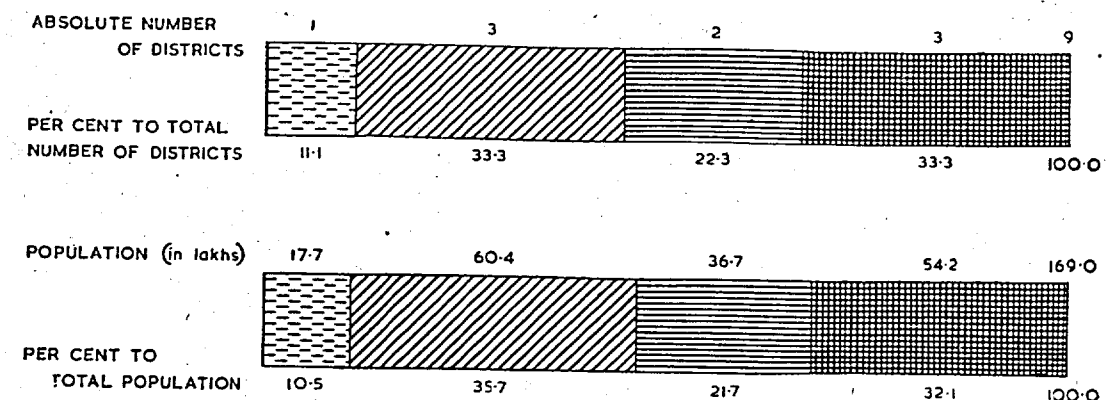
The State's population has increased by 164.27 per cent during 1901-61 against the all-India increase of 84.25 per cent. Among the States of India only Assam has a higher percentage increase during the period than Kerala. All the five southern districts viz., Trivandrum, Quilon, Alleppey, Kottayam and Ernakulam have percentage increase in population higher than that of the

State. Quilon district has the highest percentage increase and Palghat district the lowest.

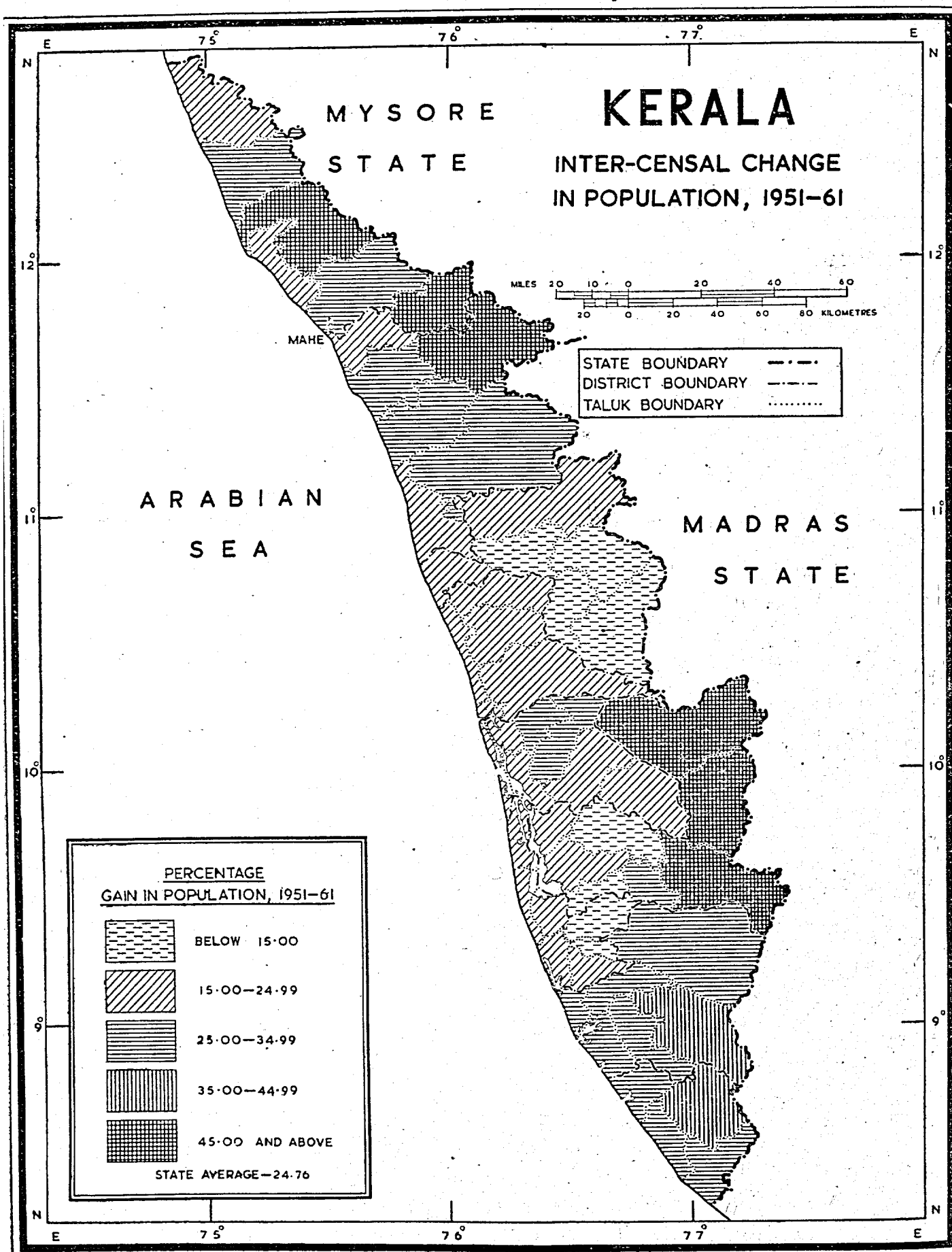
Table

INTER-CENSAL CHANGE IN POPULATION, 1901-61

Rank	State/District	Percentage increase in population
1	Kerala State	164.27
1	Quilon District	270.89
2	Kottayam "	264.49
3	Trivandrum "	260.07
4	Ernakulam "	177.96
5	Alleppey "	170.99
6	Trichur "	148.89
7	Kozhikode "	127.19
8	Cannanore "	126.11
9	Palghat "	81.80



Source : Census of India, 1961, Kerala—Part II-A General Population Tables



INTER-CENSAL CHANGE IN POPULATION, 1951-61

Purpose

The map shows the percentage variation in the population of the State by taluks for the period 1951-61.

Method

The percentage variations in the taluks are grouped into 5 categories and the taluks are shaded according to this grouping by different grades of hatching ranging from deep to light corresponding to high to low value.

Salient Features

During the decade 1951-61 the State's population has increased by 24.76 per cent against the all-India increase of 21.51 per cent.

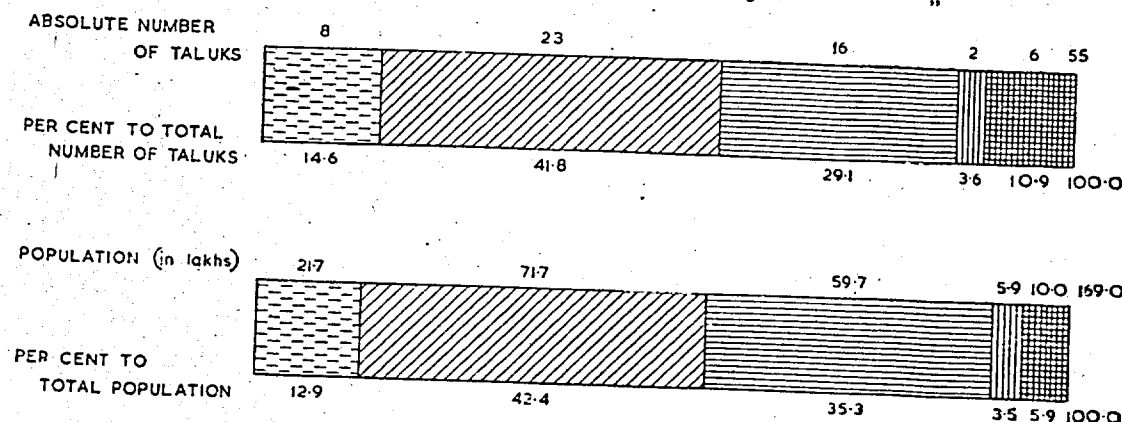
All the taluks of the State have shown increase in their population, the percentage increase ranging from 8.31 to 675.75. Only eight out of the fifty-five taluks have percentage increase below 15.00. Out of the eight taluks Ottapalam, Palghat, Alathur and Chittur taluks and Changanacherry, Thiruvalla and Chengannur taluks lie contiguously and appear as two pockets of low increase. 23 taluks have percentage increase between 15.00 and 24.99. These taluks lie scattered throughout the State. There are 16 taluks with percentage increase between 25.00 and 34.99 and 2 taluks with percentage increase between 35.00 and 44.99. The Taliparamba taluk of Cannanore district, North Wynad and South Wynad taluks lying contiguously in Cannanore and Kozhikode districts and Devicolum, Udumbanchola and Peermade taluks lying contiguously in the Kottayam district have shown increase of 45.00 per cent or above. The comparatively higher increase in these taluks except Udumbanchola, which has the highest percentage increase viz., 675.75, may be due to the large influx of persons to these taluks for working in plantation. The high increase in the case of Udumbanchola taluk may be attributed to the

development of the area leading to an increase in the tempo of colonisation.

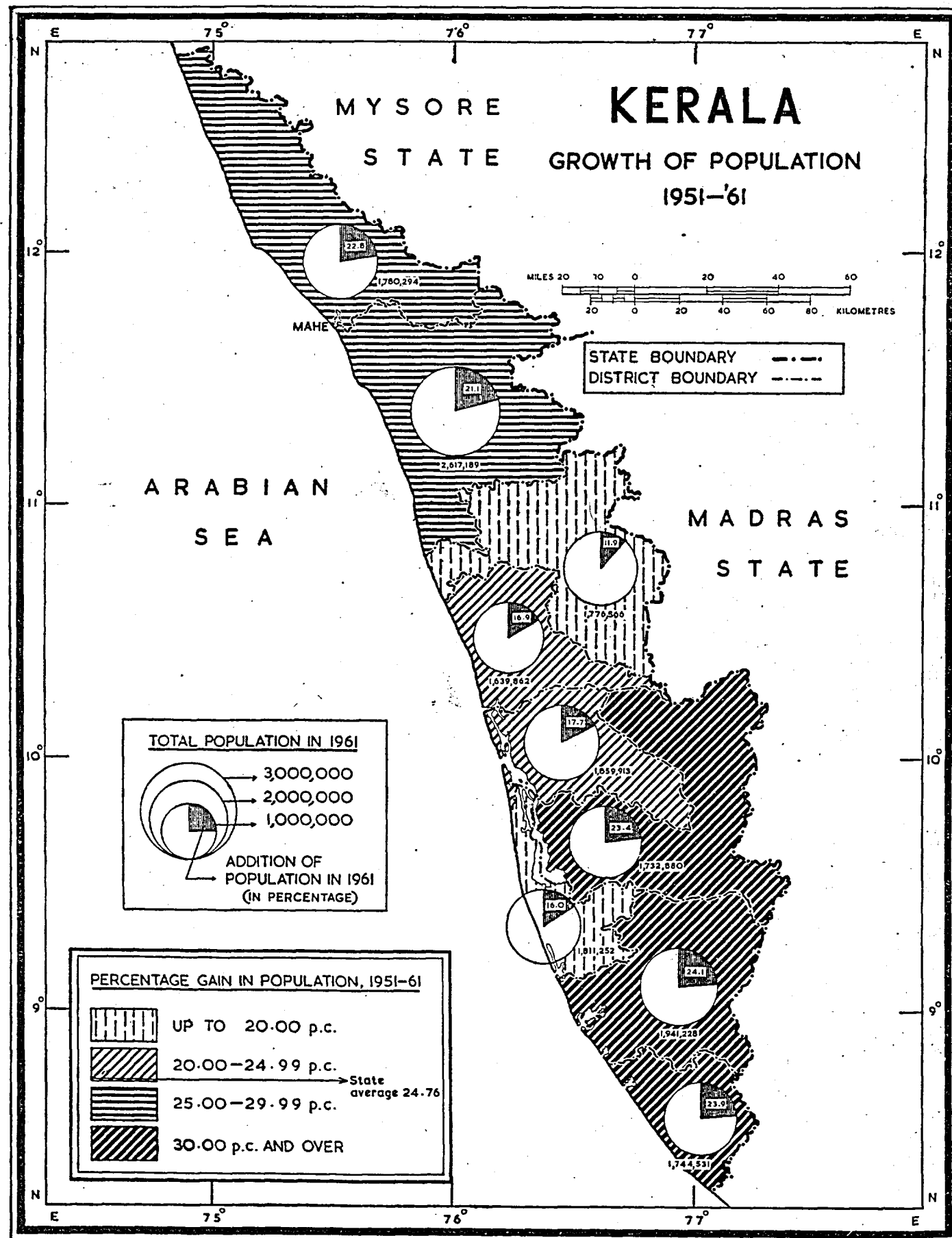
Table

INTER-CENSAL CHANGE IN POPULATION, 1951-61

Rank	State/Taluk	Percentage increase in population
1	2	3
1	Kerala State	24.76
2	Udumbanchola	675.75
3	South Wynad	68.69
4	Peermade	54.61
5	North Wynad	51.39
6	Devicolum	48.38
7	Taliparamba	47.22
8	Pathanapuram	39.85
9	Nedumangad	37.32
10	Kottarakara	32.44
11	Pathanamthitta	32.38
12	Trivandrum	32.36
13	Quilon	32.14
14	Neyyattinkara	30.94
15	Alwaye	29.86
16	Ernad	29.59
17	Hosdrug	28.94
18	Tellicherry	28.68
19	Kunnathur	28.62
20	Kanjirappally	28.31
21	Kozhikode	27.89
22	Quilandy	25.51
23	Chirayinkil	25.44
24	Kunnathunad	25.38
25	Karunagapally	25.06
26	Kuttanad	24.53
27	Mukundapuram	24.49
28	Trichur	22.93
29	Shertalai	22.28
30	Ambalapuzha	22.21
31	Badagara	22.01
32	Karthigapally	21.79
33	Kanayannur	21.50
34	Cranganore	21.11
35	Kasaragod	20.98
36	Cannanore	20.94
37	Mavelikkara	20.41
38	Cochin	20.36
39	Perintalmanna	20.27
40	Kottayam	19.36
41	Muvattupuzha	19.28
42	Parur	18.62
43	Vaikom	17.82
44	Thodupuzha	17.20
45	Tirur	16.79
46	Talappilly	15.68
47	Ponnani	15.63
48	Chowghat	15.37
49	Alathur	12.88
50	Chittur	12.37
51	Chengannur	11.98
52	Thiruvalla	11.94
53	Ottapalam	11.34
54	Meenachil	11.02
55	Changanacherry	8.57
	Palghat	8.31



Source: Census of India, 1961, Kerala—Part II-A General Population Tables



GROWTH OF POPULATION, 1951-61

Purpose

This map shows the inter-censal rate of growth of population in the districts of the State during 1951-61 as well as the variations in the pressure which the newly added population exerts on the existing population.

Method

The percentages of increase in population during 1951-61 to the population of 1951 in the districts are grouped into four categories above and below the State average. The districts are then shaded according to these groupings by four different grades of hatches from deep to light corresponding to high to low increase. The increase in population between 1951 and 61 is further shown by pie diagrams. In each district circles are given proportionate to its population in 1961 and sectors are marked with shades representing the inter-censal increase as percentage of the 1961 population. The population in 1961 and the percentage increases are also shown in the map.

Salient Features

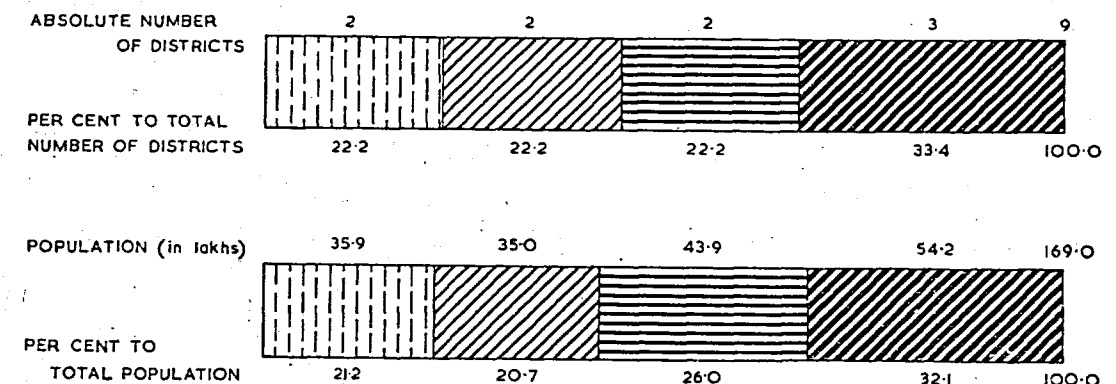
During the decade 1951-61, the State's population increased by 24.8 per cent, against the all-India increase of 21.51 per cent. The northern districts of Cannanore and Kozhikode and the southern districts of Trivandrum, Quilon and Kottayam have higher growth

rates while the districts of Palghat, Trichur, Ernakulam and Alleppey which lie contiguous have lower growth rates. The Quilon district has the highest and the Palghat district the lowest rate of growth in population. A glance at the pie diagrams reveals that in the southern districts about one-fourth of the 1961 population is new while in the central districts only 10 to 18 per cent are additions. In the northern districts again the proportion of new entrants is high, i.e. above 20 per cent.

Table

GROWTH OF POPULATION, 1951-61

State/District	Inter-censal (1951-61) variation as percentage of 1951 population	Inter-censal (1951-61) variation as percentage of 1961 population
1	2	3
Kerala State	24.8	19.8
Quilon District	31.7	24.1
Trivandrum "	31.4	23.8
Kottayam "	30.5	23.4
Cannanore "	29.5	22.8
Kozhikode "	26.7	21.1
Ernakulam "	21.6	17.7
Trichur "	20.3	16.9
Alleppey "	19.1	16.0
Palghat "	13.5	11.9



Source: Census of India, 1961, Kerala—Part II-A General Population Tables



This map shows the inter-censal variation of rural population during 1951-61 in the districts of the State as well as the variations in pressure which the newly added population exerts on the existing rural population.

The percentages of increase in rural population (percentages to the 1951 rural population) by districts are grouped into four categories and the districts are shaded according to this grouping from deep to light corresponding to high to low value. The increase in rural population between 1951 and 1961 is further shown by pie diagrams; the figures in the shaded portion inside the circle representing the inter-censal increase as percentage of the total 1961 rural population of the district.

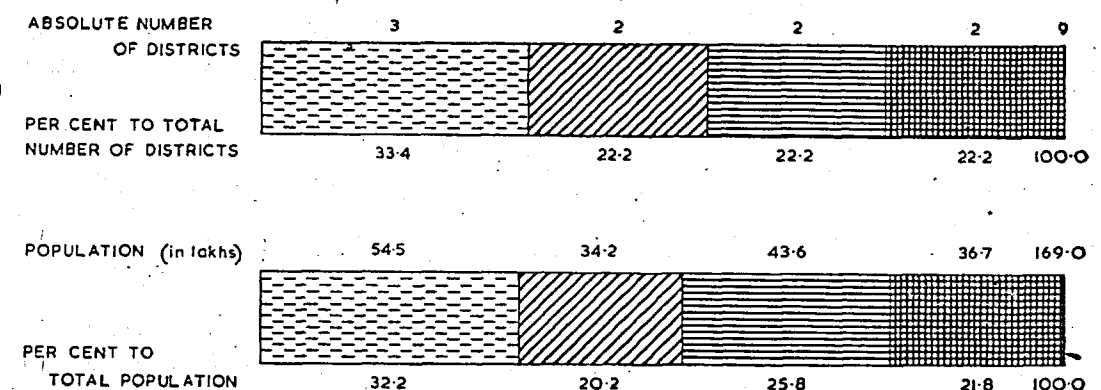
During 1951-61 the State's rural population increased by 20.0 per cent. The variation in rural population in all the districts is positive. Kottayam and Quilon districts have shown very high percentage increase ranging above 25.0 and the districts of Palghat, Ernakulam and Alleppey have shown very low percentage increase ranging below 15.0.

The pie diagrams present the extent of population added since 1951 to make up the total 1961 population of the district. A study of these diagrams along with the density of population of the districts reveals the

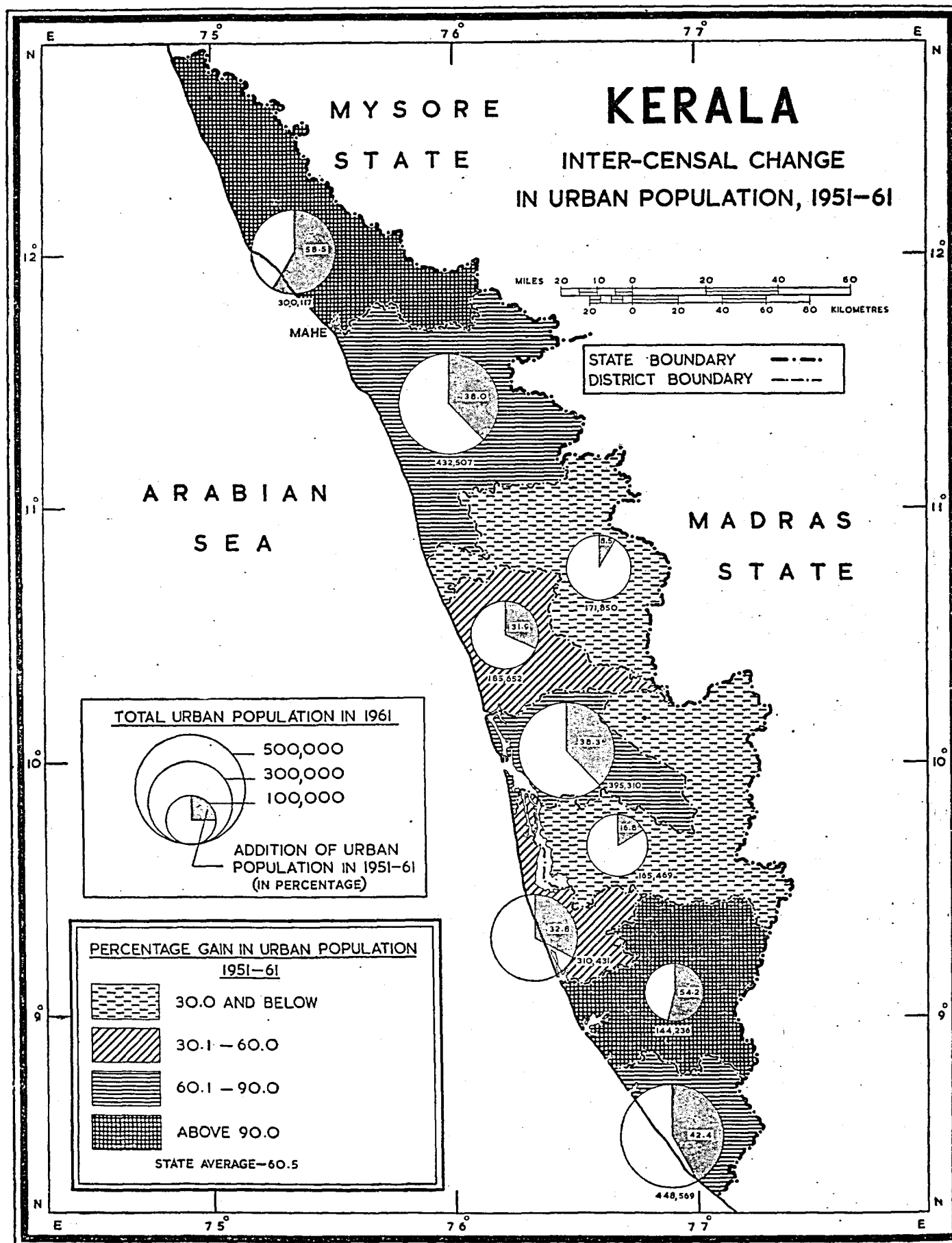
extent of pressure exerted and problems created by the newly added population over the entire existing population of the district. Kottayam, Quilon, Kozhikod and Alleppey districts which stand as first, second, third and seventh respectively in point of percentage increase hold the ninth, fifth, sixth and first rank respectively in point of density of population. The highest percentage increase in the case of Kottayam district is neutralised by her low density of population. Alleppey which holds the 1st rank in density has only very low rate of increase in rural population.

INTER-CENSAL VARIATION IN RURAL POPULATION, 1951-61

Rank	State/District	Inter-censal (1951-61)	Inter-censal (1951-6
		variation in rural population as percentage of 1951 rural population	variation in rural population : percentage of 196 rural population
1	2	3	4
	Kerala State	20.0	16.7
1	Kottayam District	31.7	24.1
2	Quilon	27.6	21.7
3	Kozhikode	21.6	17.7
4	Trivandrum	21.2	17.5
5	Cannanore	18.4	15.5
6	Trichur	17.6	15.0
7	Alleppey	14.3	12.5
8	Palghat	14.0	12.3
9	Ernakulam	13.9	12.2



Source: Census of India, 1961, Kerala—Part II-A General Population Tables



INTERCENSAL CHANGE IN URBAN POPULATION, 1951-61

Purpose

The map shows the intercensal variations of urban population in the State by districts during 1951-61 as well as the variations in pressure which the newly added population exerts on the existing urban population.

Method

The percentages of increase in urban population (percentage to the 1951 urban population) by districts are grouped into four categories and the districts are shaded according to this grouping by different grades of hatches ranging from deep to light corresponding to high to low value. The increase in urban population between 1951 and 1961 is further shown by pie-diagrams; the figures in the shaded portion inside the circles representing the intercensal increase as percentage of the total 1961 urban population of the district.

Salient Features

The State's urban population during 1951-61 has increased by 60.5 per cent. All the districts have shown increase in their urban population, the percentage variation ranging from 9.3, the lowest, in Palghat district to 141.1, the highest, in Cannanore district. Cannanore and Quilon districts have shown very high increase falling in the range above 90.0 per cent. Kozhikode, E-nakulam and Trivandrum districts come in the second range with the percentage increase between 60.1 and 90.0. Trichur and Alleppey districts have percentage increase between 30.1 and 60.0. The Kottayam and Palghat districts have shown very low increase falling in the range 30.0 per cent and below.

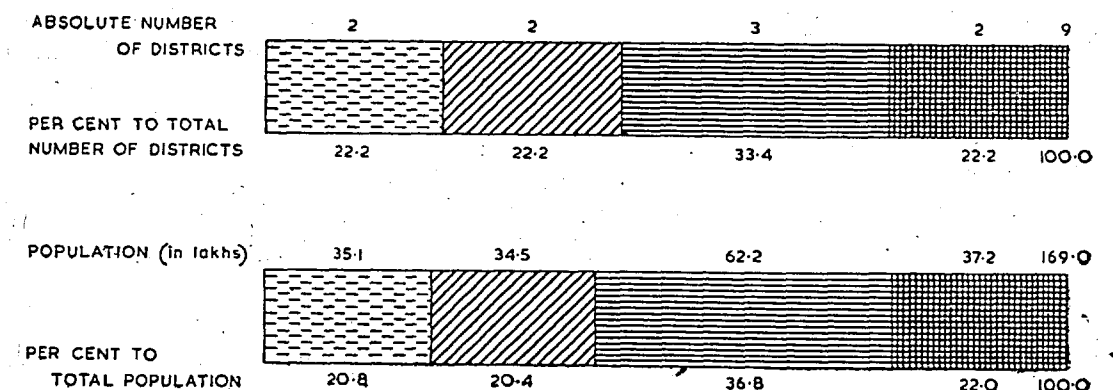
The increase in the urban population should be attributed to the growth of population of the towns, the increase in the number of towns and also the increase in the area of some of the towns in 1961.

Though there has been considerable increase in the urban population of the State during 1951-61 the density of urban population in the State has actually decreased from 2,436 persons per square kilometre (6,309 persons per sq. mile) in 1951 to 2,235 persons per square kilometre (5,919 persons per sq. mile) in 1961.

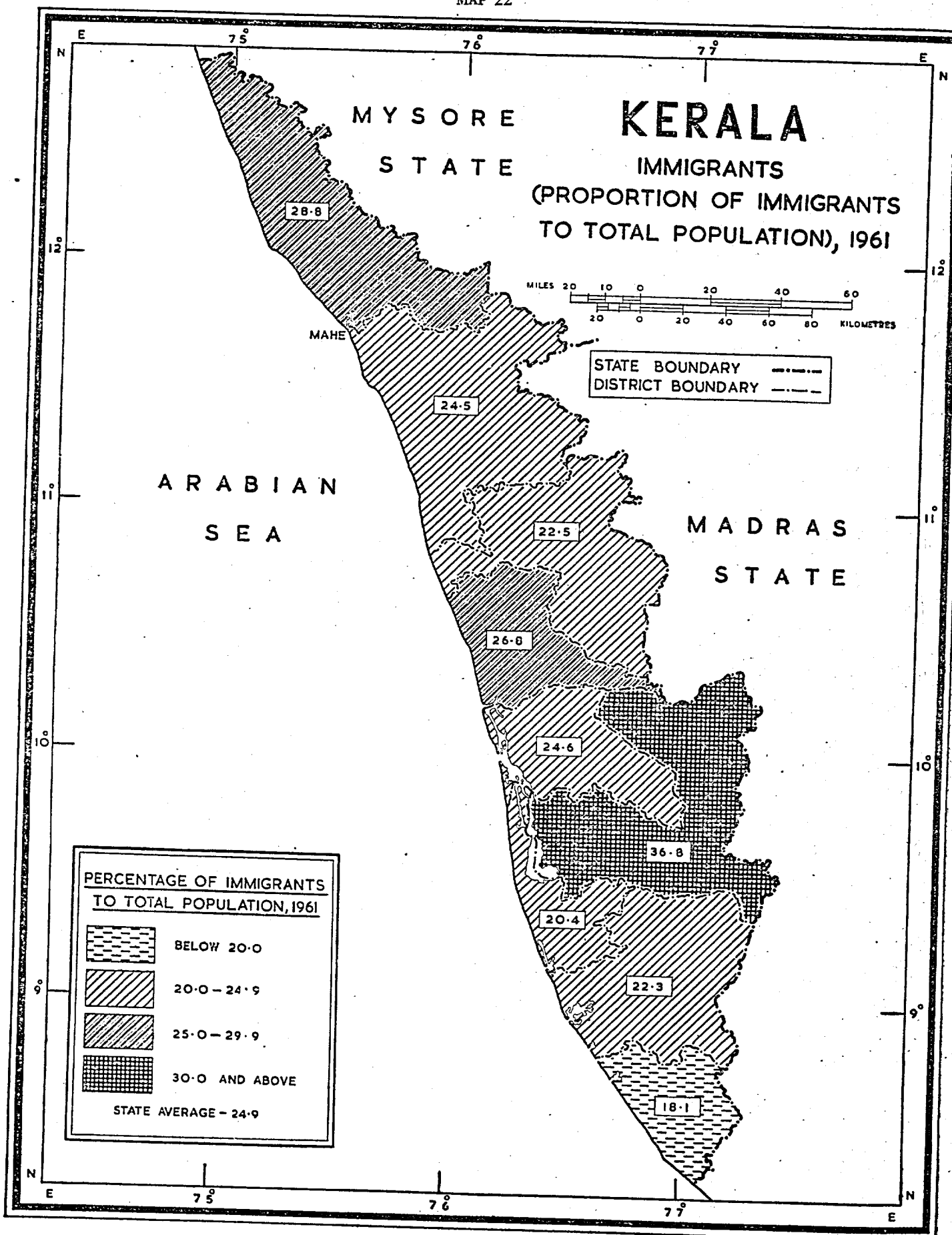
TABLE

INTERCENSAL VARIATION IN URBAN POPULATION, 1951-61

Rank	State/District	Intercensal variation (1951-61) in urban population as percentage of 1951 urban population	Intercensal variation (1951-61) in urban population as percentage of 1961 urban population
1	2	3	4
	Kerala State	60.5	37.7
1	Cannanore District	141.1	58.5
2	Quilon "	118.1	54.2
3	Trivandrum "	73.6	42.4
4	Ernakulam "	62.1	38.3
5	Kozhikode "	61.2	38.0
6	Alleppey "	48.8	32.8
7	Trichur "	46.8	31.9
8	Kottayam "	20.2	16.8
9	Palghat "	9.3	8.5



Source: Census of India, 1961, Kerala—Part II A General Population Tables



IMMIGRANTS (PROPORTION OF IMMIGRANTS TO TOTAL POPULATION), 1961

Purpose

The map shows the proportion of immigrants to the total population of the State by districts.

Method

The percentages of immigrants to the total population by districts are arranged into four groups and the districts are shaded according to this grouping from deep to light corresponding to high to low value.

Salient Features

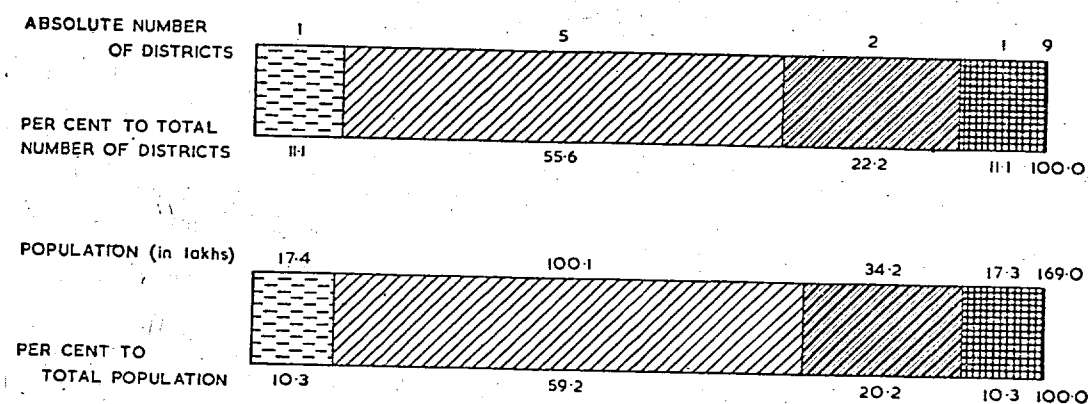
The very high proportion of immigrants in the districts may appear a bit confusing. This is because of the much wider meaning given to the term immigrant than one would normally expect from such a term. According to 1961 Census all persons who have left their village or town of birth are migrants. The immigrants in a district will therefore include all persons migrated from their village or town of birth within the district as well as those migrated to the district from other districts within the State, other States and countries. The map is, however, an indicator on the migratory habit of population.

24.9 per cent of the total population of the State are immigrants. The highest percentage of immigrants is found in Kottayam district and the lowest in Trivandrum district.

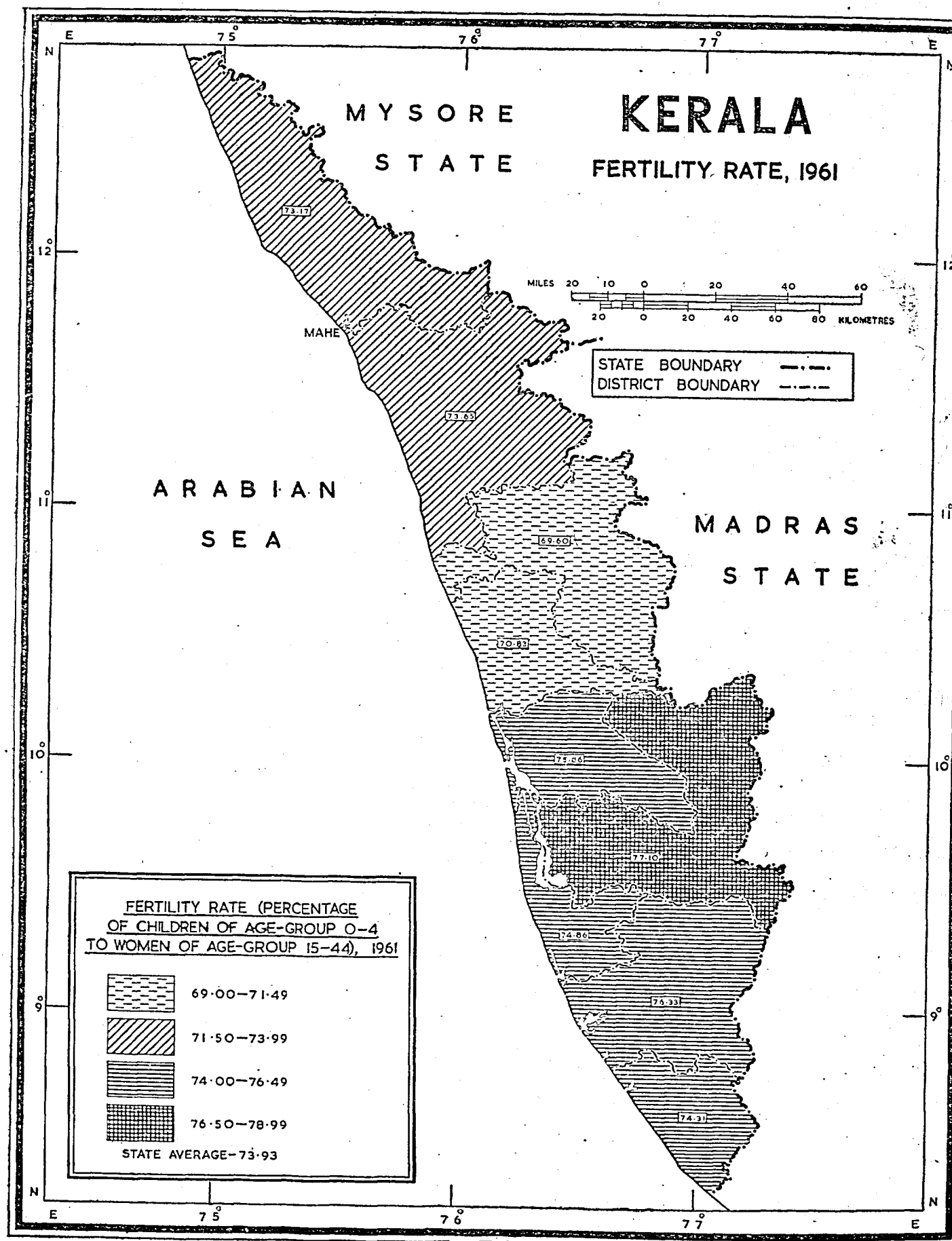
Table

PERCENTAGE OF IMMIGRANTS TO TOTAL POPULATION, 1961

Rank	State/District	Percentage of immigrants to the total population, 1961
1	Kerala State	24.9
1	Kottayam District	36.8
2	Cannanore "	28.8
3	Trichur "	26.8
4	Ernakulam "	24.6
5	Kozhikode "	24.5
6	Palghat "	22.5
7	Quilon "	22.3
8	Alleppey "	20.4
9	Trivandrum "	18.1



Source: Census of India, 1961, Kerala—Part II C Cultural and Migration Tables



MAP 23
FERTILITY RATE, 1961

Purpose

The map shows the variation in the fertility rates among the districts of the State in 1961.

Method

The fertility rates, i. e. the percentage of children in the age-group 0-4 to women in the age-group 15-44 by districts are grouped into four and the districts are shaded according to this grouping.

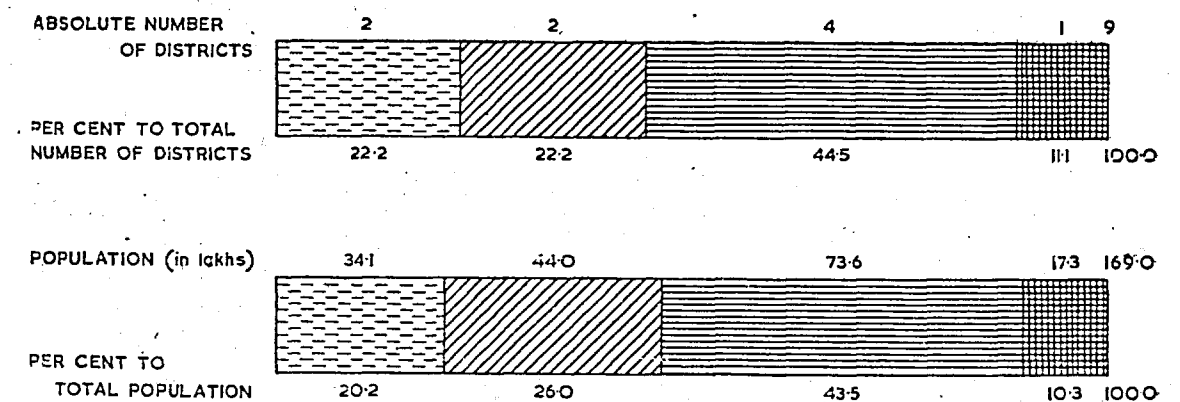
Salient Features

The fertility rate of Kerala is 73.93 per cent i. e., for every 100 women of the reproductive span of life (in the age-group 15-44) there are 73.93 children aged 4 years and below. Among the districts the rates vary between 69.60 per cent, the lowest, in the case of Palghat district and 77.10 per cent, the highest, in the case of Kottayam district. In the case of the five southern districts viz., Ernakulam, Kottayam, Alleppey, Quilon and Trivandrum the fertility rates are higher than that of the State and in the case of the remaining four northern districts the fertility rates are lower.

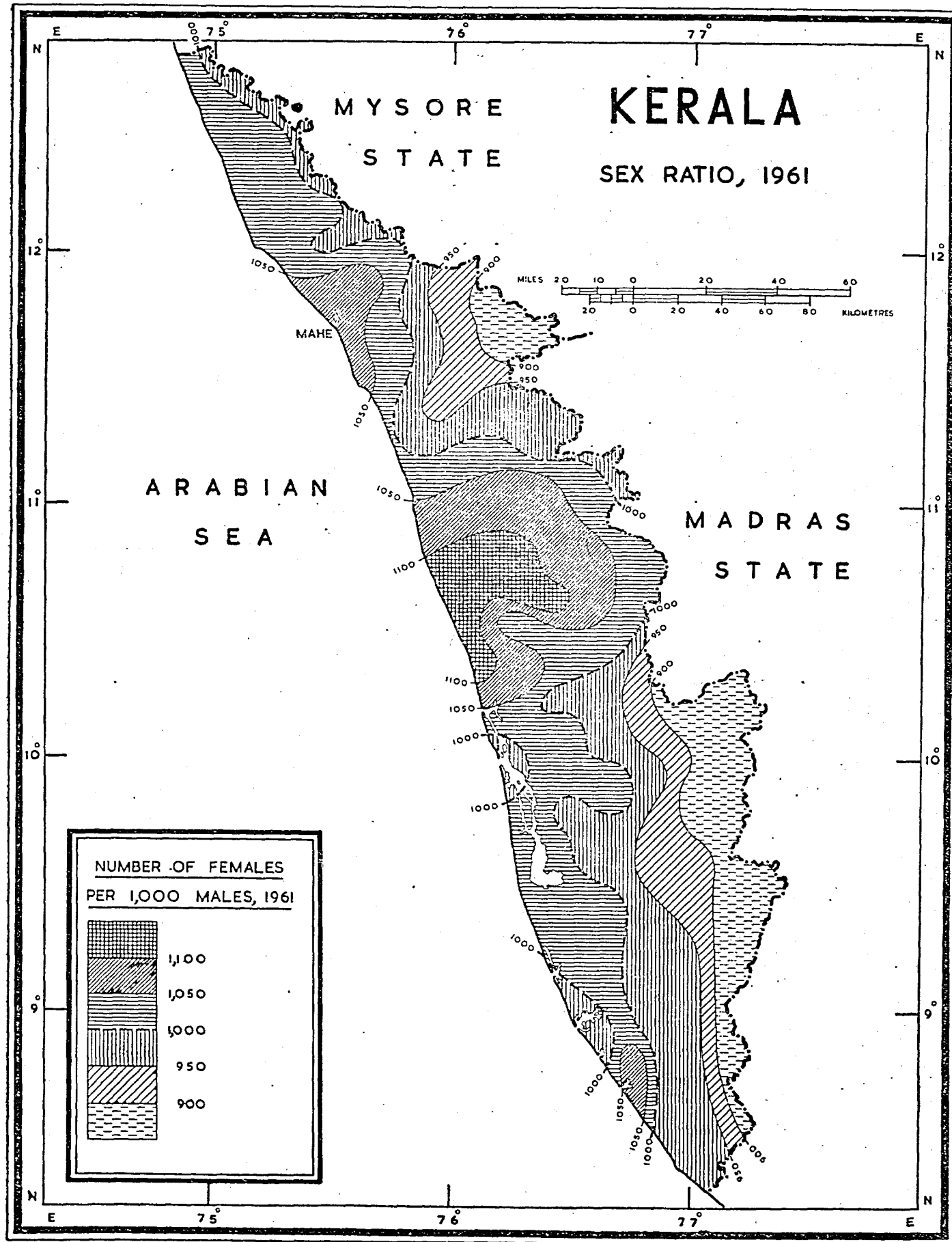
Table

FERTILITY RATES IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Fertility rate (percentage of children of age-group 0-4 to women of age-group 15-44)
1	Kerala State	73.93
2	Kottayam District	77.10
3	Quilon	76.33
	Ernakulam	75.86
	Alleppey	74.86
	Trivandrum	74.31
	Kozhikode	73.65
	Cannanore	73.17
	Trichur	70.83
	Palghat	69.60



Source : Census of India, 1961, Kerala—Part II C Cultural and Migration Tables



MAP 24
SEX RATIO, 1961

Purpose

The map shows the regional variation in the sex ratio (number of females per 1,000 males) of the State.

Method

Isopleths are drawn for sex ratios 900, 950, 1,000, 1,050 and 1,100 on the basis of taluk-wise sex ratio in 1961. The intervening spaces between isopleths are shaded from deep to light corresponding to high to low sex ratio.

Salient Features

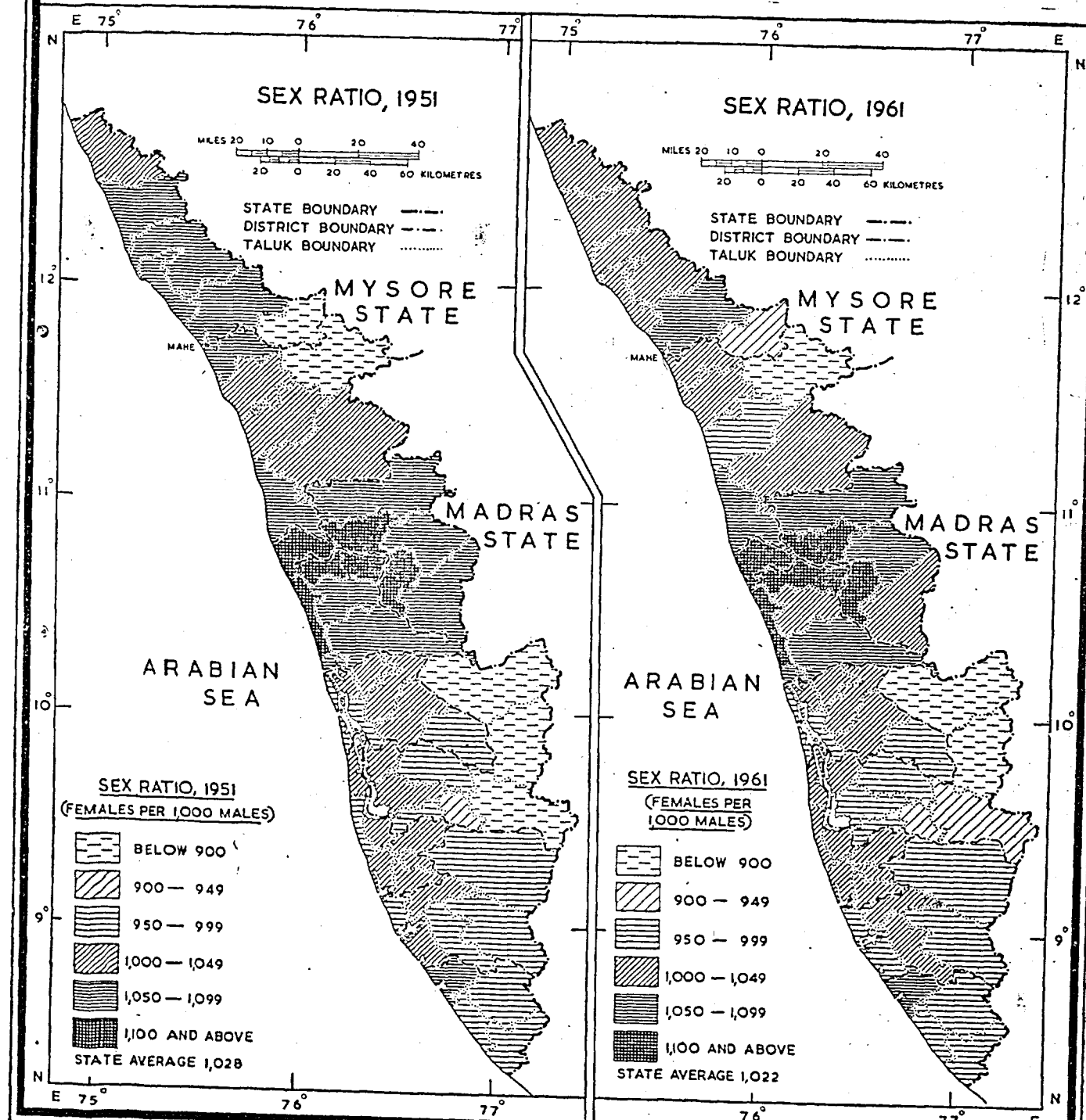
The sex ratio of Kerala (1,022 females per 1,000

males) is higher than the sex ratio of India as a whole (941 females per 1,000 males) and is the highest among the States in India excluding the Union Territories.

The map shows that the sex ratio is comparatively higher in the coastal lowland and midland regions than in the eastern hilly areas. The Chowghat taluk of Trichur district has the highest sex ratio with 1,174 females per 1,000 males while the Udumbanchola taluk of Kottayam district has the lowest with but 850.

Source: Census of India, 1961, Kerala—Part II A General Population Tables

KERALA CHANGING PATTERN OF SEX RATIO, 1951-61



CHANGING PATTERN OF SEX RATIO, 1951-61

Purpose

The map shows the pattern of change in the sex ratio of taluks during the period 1951-61.

Method

Two maps on sex ratio by taluks are given side by side, one of 1951 and the other of, 1961. In both the maps taluk-wise sex ratios are grouped into six identical grades and the taluks shaded according to this grouping by six different hatches from deep to light corresponding to high to low value. The adoption of identical ranges renders comparison easy.

Salient Features

The number of females per 1,000 males in the State has decreased from 1,028 in 1951 to 1,022 in 1961. The overall pattern of distribution of sex ratio in the taluks has more or less remained the same in 1951 and 1961. Udumbanchola taluk in Kottayam district has the lowest sex ratio of 803 in 1951 and 850 in 1961. The taluks of Ponnani, Ottapalam, Alathur, Talappilly and Chowghat lying contiguous in the central region of the State have sex ratio above 1,100 in both 1951 and 1961. Chowghat taluk of Trichur district has the highest sex ratio of 1,173 in 1951 and 1,174 in 1961.

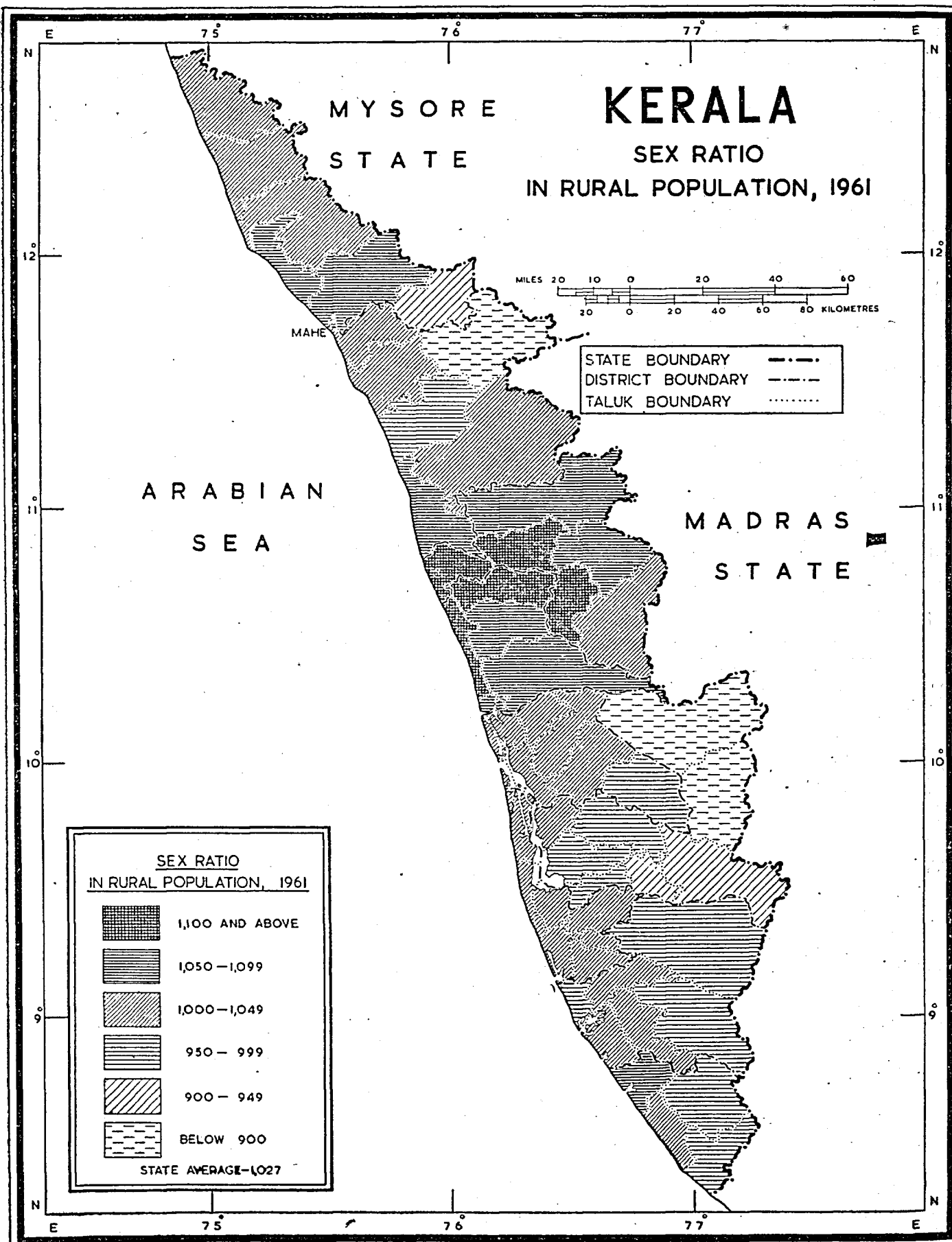
Table

SEX RATIO IN THE STATE AND TALUKS
IN 1951 AND 1961

Rank in 1961	State/Taluk	Sex ratio (Number of females per 1,000 males)		Rank in 1951
		1961	1951	
1	Kerala State	1,022	1,028	5
2	Chowghat Taluk	1,174	1,173	1
3	Ponnani "	1,132	1,112	4
4	Talappilly "	1,131	1,129	2
5	Ottapalam "	1,112	1,104	5
	Alathur "	1,107	1,124	3

1	2	3	4	5
6	Chirayinkil Taluk	1,075	1,091	6
7	Tellicherry "	1,074	1,080	7
8	Perinthalmanna "	1,069	1,075	9
9	Cranganore "	1,069	1,063	14
10	Tirur "	1,068	1,055	17
11	Palghat "	1,057	1,063	13
12	Mukundapuram "	1,056	1,070	11
13	Trichur "	1,049	1,077	8
14	Badagara "	1,042	1,054	18
15	Chittur "	1,041	1,056	16
16	Karthigapally "	1,040	1,037	20
17	Hosdrug "	1,039	1,058	15
18	Cannanore "	1,038	1,071	10
19	Mavelikkara "	1,038	1,034	23
20	Cheanganour "	1,033	1,007	34
21	Thiruvalla "	1,030	1,008	33
22	Quilandy "	1,023	1,019	27
23	Taliparamba "	1,022	1,067	12
24	Parur "	1,022	1,026	25
25	Kuttanad "	1,022	1,016	30
26	Sheralayi "	1,021	1,035	22
27	Kasaragod "	1,015	1,035	21
28	Ernad "	1,013	1,029	24
29	Kunnathunad "	1,012	1,047	19
30	Vaikom "	1,007	1,003	32
31	Ambalapuzha "	1,007	991	41
32	Alwaye "	1,003	1,025	26
33	Muvattupuzha "	1,002	1,016	28
34	Kunnathur "	1,002	1,009	31
35	Kottarakara "	1,002	998	37
36	Quilon "	998	1,002	35
37	Changanacherry "	996	959	49
38	Karunagapally "	994	997	38
39	Kottayam "	990	1,016	29
40	Kanayannur "	989	996	39
41	Meenachil "	989	988	42
42	Pathanamthitta "	989	974	46
43	Trivandrum "	989	993	40
44	Nedumangad "	989	979	45
45	Pathanapuram "	987	980	44
46	Neyyattinkara "	985	988	43
47	Thodupuzha "	982	968	47
48	Kozhikode "	981	1,000	36
49	Cochin "	979	963	48
50	Kanjirappally "	942	916	50
51	North Wynad "	930	897	51
52	Peermade "	927	892	52
53	Devicoolam "	899	868	53
54	South Wynad "	890	807	54
55	Udumbanchola "	850	803	55

Source: Census of India, 1961, Kerala—Part II A General Population Tables

MAP 26
SEX RATIO IN RURAL POPULATION, 1961**Purpose**

The map shows the variation in the sex ratio (number of females per 1,000 males) in rural areas of the taluks of the State in 1961.

Method

The sex ratios by taluks are grouped into six ranges and the taluks are shaded according to this grouping by six different grades of hatches from deep to light corresponding to high to low value.

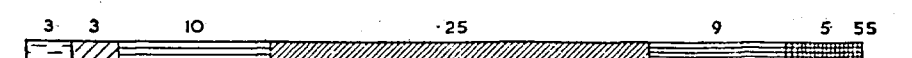
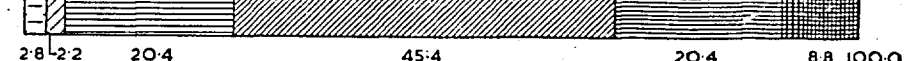
Salient Features

There are 1,027 females for every 1,000 males in the rural population of the State. Only three taluks viz. South Wynaad, Devicolum and Udumbanchola which are entirely rural have sex ratio below 900. Again only three taluks have sex ratio between 900 and 949. In the case of ten taluks the sex ratio varies between 950 and 999. All the above sixteen taluks having sex ratio below 1,000, with the sole exception of Karunagapally taluk, lie in two separate contiguous areas one in the northern and the other in the south-eastern regions of the State.

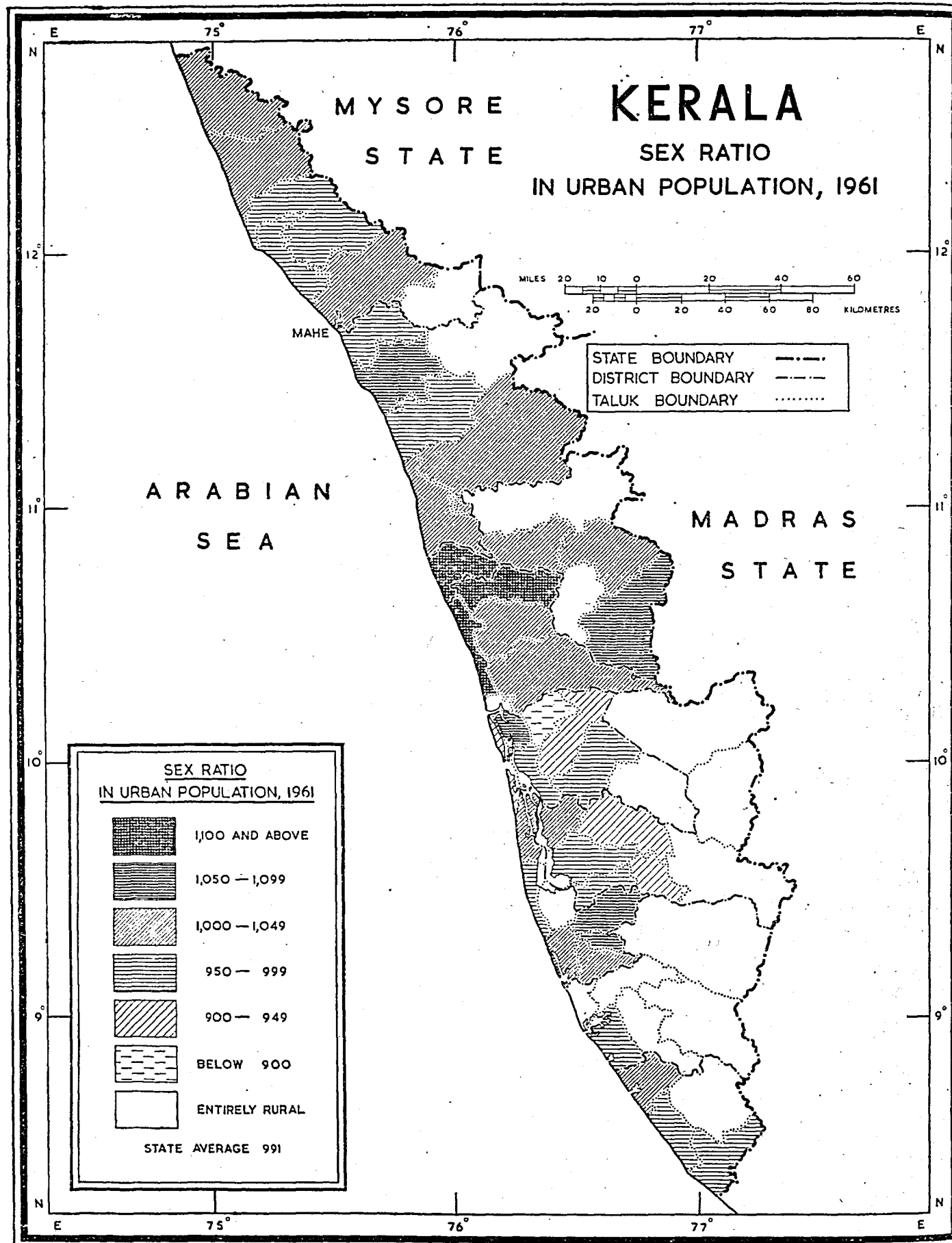
A majority of the taluks have sex ratio above 1,000 in the rural population. In the case of 25 taluks the ratio varies between 1,000 and 1,049. In nine taluks the sex ratio is between 1,050 and 1,099. Alathur, Ottapalam, Talappilly, Ponnani and Chowghat taluks have very high sex ratios ranging from 1,100 and above. All these five taluks and six out of the nine taluks having sex ratio between 1,050 and 1,099 lie contiguously in Kozhikode, Palghat and Trichur districts. Chowghat taluk in Trichur district and Udumbanchola taluk in Kottayam district have the highest and lowest number of females, 1,176 and 850 respectively per 1,000 males in rural areas.

Table**SEX RATIO IN RURAL POPULATION IN THE STATE AND TALUKS, 1961**

Rank	State/Taluk	Number of females per 1,000 males in the rural population
1	Kerala State	1,027
1	Chowghat Taluk	1,176
2	Ponnani	1,134
3	Talappilly	1,131
4	Ottapalam	1,121
5	Alathur	1,107
6	Palghat	1,079
7	Chirayinkil	1,078
8	Tellicherry	1,077
9	Tirur	1,074
10	Cannanore	1,071
11	Perintalmanna	1,069
12	Cranganore	1,069
13	Mukundapuram	1,058
14	Trichur	1,056
15	Badagara	1,049
16	Karthigapally	1,042
17	Hosdurg	1,039
18	Mavelikkara	1,039
19	Chittur	1,037
20	Cochin	1,036
21	Ambalapuzha	1,031
22	Chengannur	1,030
23	Thiruvalla	1,027
24	Taliparamba	1,023
25	Kuttanad	1,022
26	Quilandy	1,021
27	Shertalai	1,021
28	Kunnathunad	1,019
29	Parur	1,018
30	Alwaye	1,018
31	Quilon	1,016
32	Kasaragod	1,012
33	Ernad	1,012
34	Muvattupuzha	1,008
35	Kanayannur	1,007
36	Vaikom	1,007
37	Trivandrum	1,004
38	Kunnathur	1,002
39	Kottarakara	1,002
40	Changanacherry	999
41	Kottayam	994
42	Karunagapally	994
43	Meenachil	991
44	Pathanamthitta	989
45	Nedumangad	989
46	Kozhikode	988
47	Pathanapuram	987
48	Neyyattinkara	985
49	Thodupuzha	982
50	Kanjirappally	945
51	North Wynaad	930
52	Peermade	927
53	Devicolum	899
54	South Wynaad	890
55	Udumbanchola	850

ABSOLUTE NUMBER OF TALUKS**PER CENT TO TOTAL NUMBER OF TALUKS****POPULATION (in lakhs)****PER CENT TO TOTAL POPULATION**

Source: Census of India, 1961, Kerala—Part II A General Population Tables



SEX RATIO IN URBAN POPULATION, 1961

Purpose

The map shows the variation in the sex ratio (number of females per 1,000 males) in urban areas of the taluks of the State in 1961.

Method

The sex ratios by taluks are grouped into six categories, and the taluks are shaded according to the above grouping from deep to light corresponding to high to low value.

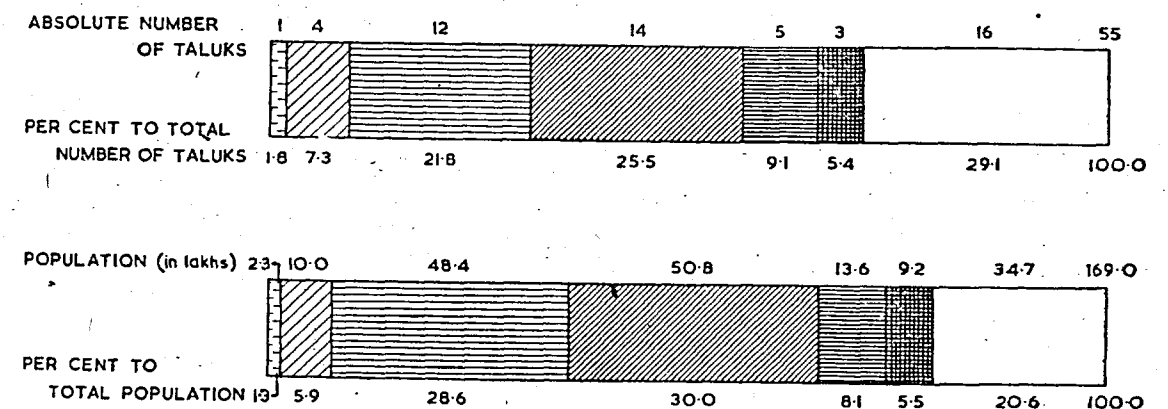
Salient Features

The sex ratio in urban areas is very much lower than that in rural areas. There are only 991 females for every 1,000 males in the urban population of the State. Out of the total 39 taluks with urban areas in them (16 taluks being entirely rural) 17 taluks have sex ratio below 1,000 and 22 taluks have sex ratio 1,000 and above. Alwaye taluk has the lowest number of females per 1,000 males in urban areas in the State coming to 875. Chowghat taluk has the maximum number of females per 1,000 males in urban areas with 1,148.

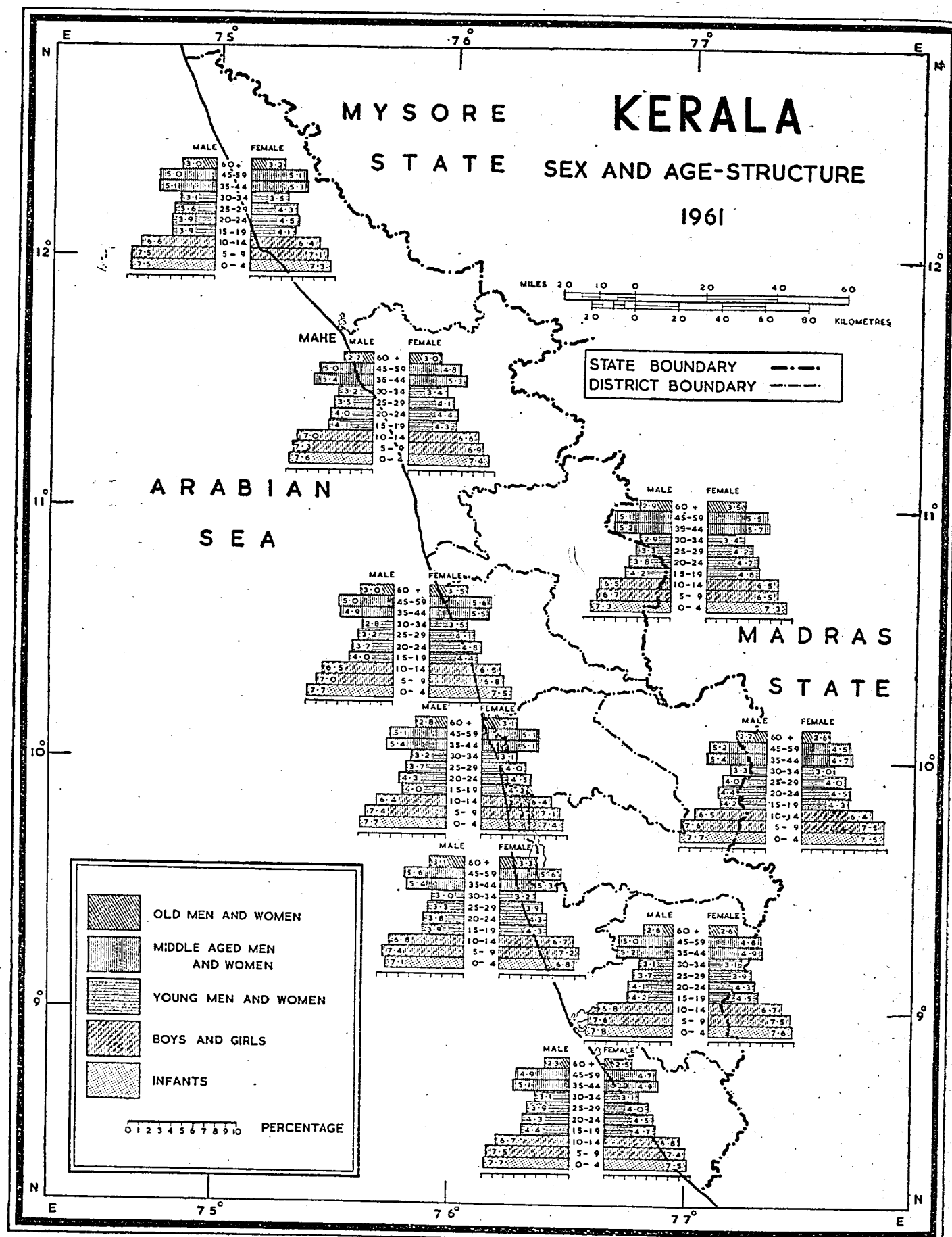
Table

SEX RATIO IN URBAN POPULATION IN THE STATE AND TALUKS, 1961

Rank	State/Taluk	Number of females per 1,000 males in the urban population
1	2	3
1	Kerala State	991
1	Chowghat Taluk	1,148
2	Talappilly	1,132
3	Ponnani	1,100
4	Chittur	1,064
5	Quilandy	1,063
6	Thiruvalla	1,063
7	Parur	1,057
8	Chengannur	1,033
9	Tellicherry	1,044
10	Chirayinkil	1,043
11	Ernad	1,041
12	Hosdrug	1,037
13	Mavelikkara	1,036
14	Ottapalam	1,035
15	Mukundapuram	1,034
16	Kasaragod	1,032
17	Tirur	1,031
18	Karthigapally	1,030
19	Shertalai	1,025
20	Trichur	1,012
21	Vaikom	1,006
22	Palghat	1,000
23	Badagara	998
24	Taliparamba	993
25	Cannanore	987
26	Ambalapuzha	984
27	Neyyattinkara	984
28	Changanacherry	981
29	Trivandrum	980
30	Kozhikode	970
31	Kottayam	969
32	Kanayannur	964
33	Muvattupuzha	953
34	Quilon	951
35	Meenachil	947
36	Kunnathunad	933
37	Kanjirapally	925
38	Cochin	917
39	Alwaye	875



Source: Census of India, 1961, Kerala—Part II A General Population Tables



MAP 28
SEX AND AGE-STRUCTURE, 1961

Purpose

The map shows the age and sex distribution of population of each district.

Method

The percentages of male and female population to the total population are shown side by side in proportionate, horizontal bars, the bars in the age-groups 0-4, 5-9, 10-14, 15-19, 20-24, 25-29, 30-34, 35-44, 45-59 and 60+ being placed one above the other progressively. The pyramid as a whole will thus represent the total population. The ten age-groups mentioned above are grouped into five classes viz., infants (0-4), boys and girls (5-14), young men and women (15-34), middle aged men and women (35-59) and old men and women (60+), and these groups are hatched by different shades. The percentage of population in each of the age-groups is also given inside the bars.

Salient Features

In Kerala 15.0 per cent of the total population are infants, 27.6 per cent boys and girls, 31.1 per cent young men and women, 20.5 per cent middle aged men and women and 5.8 per cent old men and women.

Young men and women falling in the age-group of 15-34 form the highest proportion of the population and old men and women aged 60 years and above the lowest in the State and in each district. Among 'infants' (0-4), 'boys and girls' (5-14), and 'middle aged men and women' (35-59) the percentage of males is higher than that of females. But among 'young men and women' and 'old men and women' the percentage of females is higher. There is no significant difference in the age-distributions of the population of the districts.

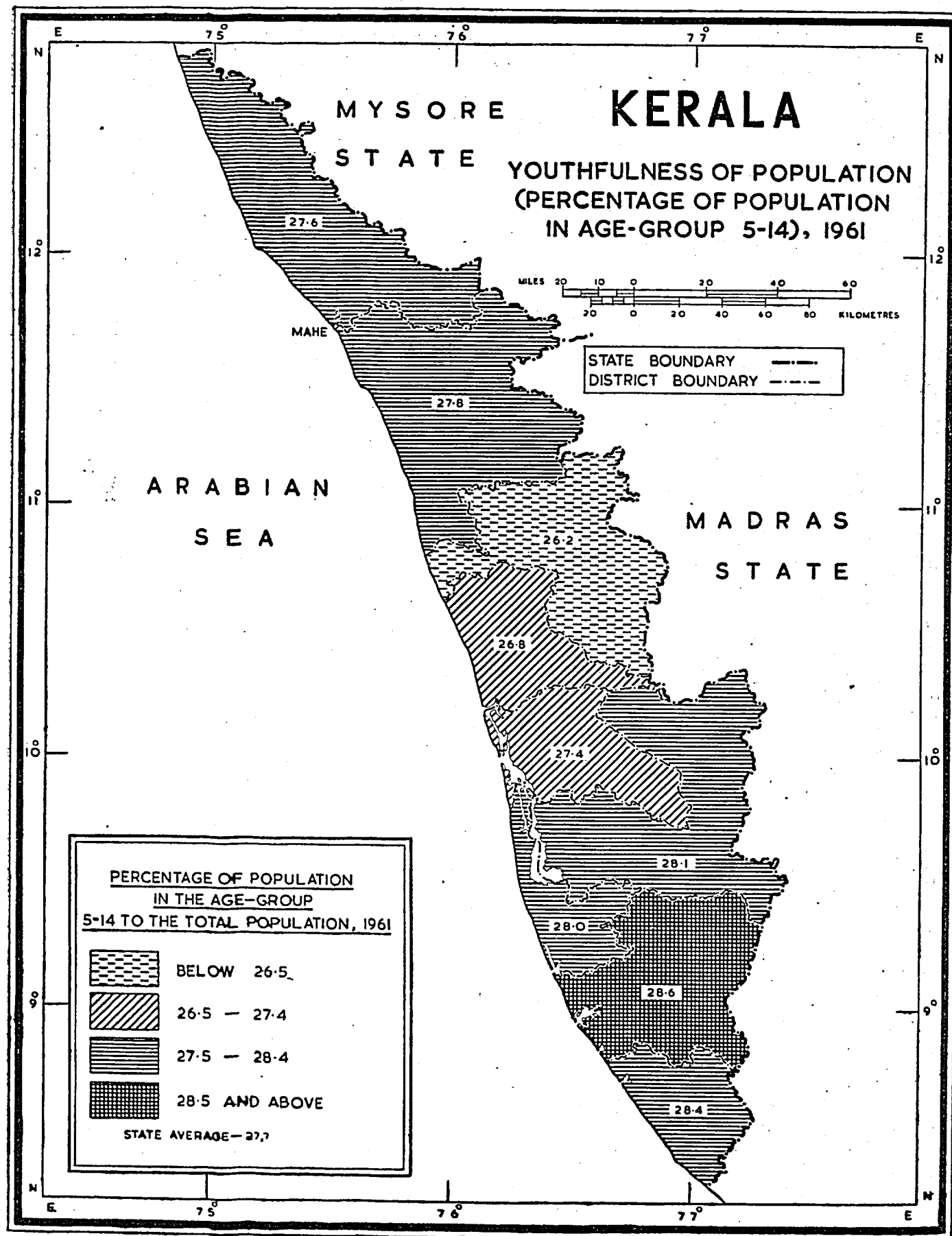
Table
SEX AND AGE-STRUCTURE, 1961

State/District 1	Age-group 2	Percentage to total population	
		Males 3	Females 4
Kerala State	0-4	7.6	7.4
	5-9	7.3	7.1
	10-14	6.7	6.5
	15-19	4.1	4.4
	20-24	4.0	4.5
	25-29	3.6	4.1
	30-34	3.1	3.3
	35-44	5.2	5.2
	45-59	5.1	5.0
	60+	2.8	3.0

Proportions of 'age not stated' are negligible

Source: Census of India, 1961, Kerala—Part II-C Cultural and Migration Tables

	1	2	3	4
Cannanore District	0-4	7.5	7.3	7.3
	5-9	7.5	7.1	7.1
	10-14	6.6	6.4	6.4
	15-19	3.9	4.1	4.1
	20-24	3.9	4.5	4.5
	25-29	3.6	4.3	4.3
	30-34	3.1	3.5	3.5
	35-44	5.1	5.3	5.3
	45-59	5.0	5.1	5.1
	60+	3.0	3.2	3.2
Kozhikode "	0-4	7.6	7.4	7.4
	5-9	7.3	6.9	6.9
	10-14	7.0	6.6	6.6
	15-19	4.1	4.3	4.3
	20-24	4.0	4.4	4.4
	25-29	3.5	4.1	4.1
	30-34	3.2	3.4	3.4
	35-44	5.4	5.3	5.3
	45-59	5.0	4.8	4.8
	60+	2.7	3.0	3.0
Palghat "	0-4	7.3	7.3	7.3
	5-9	6.7	6.5	6.5
	10-14	6.5	6.5	6.5
	15-19	4.2	4.8	4.8
	20-24	3.8	4.7	4.7
	25-29	3.3	4.2	4.2
	30-34	2.9	3.4	3.4
	35-44	5.2	5.7	5.7
	45-59	5.1	5.5	5.5
	60+	2.9	3.5	3.5
Trichur "	0-4	7.7	7.5	7.5
	5-9	7.0	6.8	6.8
	10-14	6.5	6.5	6.5
	15-19	4.0	4.4	4.4
	20-24	3.7	4.8	4.8
	25-29	3.2	4.1	4.1
	30-34	2.8	3.5	3.5
	35-44	4.9	5.5	5.5
	45-59	5.0	5.6	5.6
	60+	3.0	3.5	3.5
Ernakulam "	0-4	7.7	7.4	7.4
	5-9	7.4	7.1	7.1
	10-14	6.4	6.4	6.4
	15-19	4.0	4.2	4.2
	20-24	4.3	4.5	4.5
	25-29	3.7	4.0	4.0
	30-34	3.2	3.1	3.1
	35-44	5.4	5.1	5.1
	45-59	5.1	5.1	5.1
	60+	2.8	3.1	3.1
Kottayam "	0-4	7.7	7.5	7.5
	5-9	7.6	7.5	7.5
	10-14	6.5	6.4	6.4
	15-19	4.2	4.3	4.3
	20-24	4.4	4.5	4.5
	25-29	4.0	4.0	4.0
	30-34	3.3	3.0	3.0
	35-44	5.4	4.7	4.7
	45-59	5.2	4.5	4.5
	60+	2.7	2.6	2.6
Alleppey "	0-4	7.1	6.8	6.8
	5-9	7.4	7.2	7.2
	10-14	6.8	6.7	6.7
	15-19	3.9	4.3	4.3
	20-24	3.8	4.3	4.3
	25-29	3.3	3.9	3.9
	30-34	3.0	3.2	3.2
	35-44	5.4	5.3	5.3
	45-59	5.6	5.6	5.6
	60+	3.1	3.3	3.3
Quilon "	0-4	7.8	7.6	7.6
	5-9	7.6	7.5	7.5
	10-14	6.8	6.7	6.7
	15-19	4.2	4.5	4.5
	20-24	4.1	4.3	4.3
	25-29	3.7	3.9	3.9
	30-34	3.1	3.1	3.1
	35-44	5.2	4.9	4.9
	45-59	5.0	4.8	4.8
	60+	2.6	2.6	2.6
Trivandrum "	0-4	7.7	7.5	7.5
	5-9	7.5	7.4	7.4
	10-14	6.7	6.8	6.8
	15-19	4.4	4.7	4.7
	20-24	4.3	4.5	4.5
	25-29	3.9	4.0	4.0
	30-34	3.1	3.1	3.1
	35-44	5.1	4.9	4.9
	45-59	4.9	4.7	4.7
	60+	2.3	2.5	2.5



YOUTHFULNESS OF POPULATION, 1961

Purpose

The map shows the extent of youthful population in each district.

Method

The percentages of population in the age-group 5-14 to the total population in each district are arranged into 4 groups and the districts are shaded according to these groupings from deep to light corresponding to high to low percentage value.

Salient Features

Youthfulness of population is measured according to international concept by the proportion of persons in ages between 5 and 14 to the total population. Here it is not the actual youthful population as at present but the potentially youthful population, i. e. boys and girls who will attain youthfulness in a decade that is taken into consideration. Kerala has 27.7 per cent of its total population in the age group 5-14.

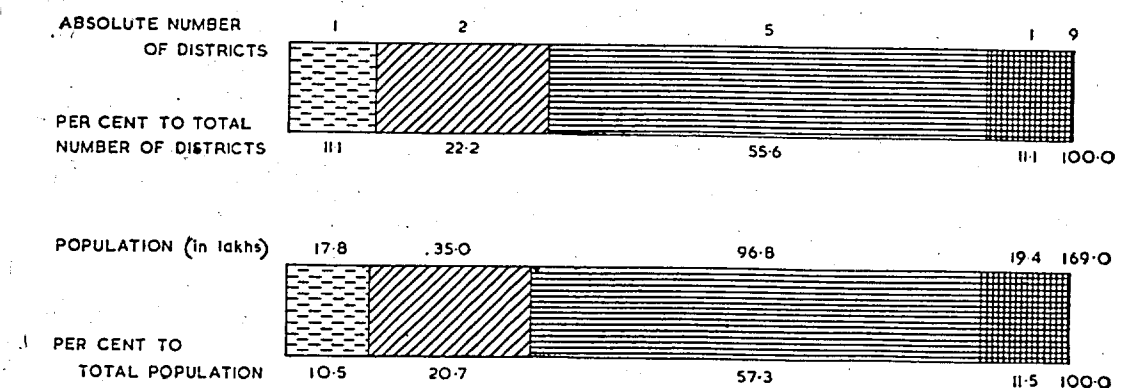
Among districts the variation in the percentages is not very significant. Palghat district has the lowest percentage of population in the age-group 5-14 (26.2) and Quilon district the highest (28.6). Four districts viz., Cannanore, Palghat, Trichur

and Ernakulam have their percentages below that of the State and the remaining five districts viz., Kozhikode, Kottayam, Alleppey, Quilon and Trivandrum above that of the State.

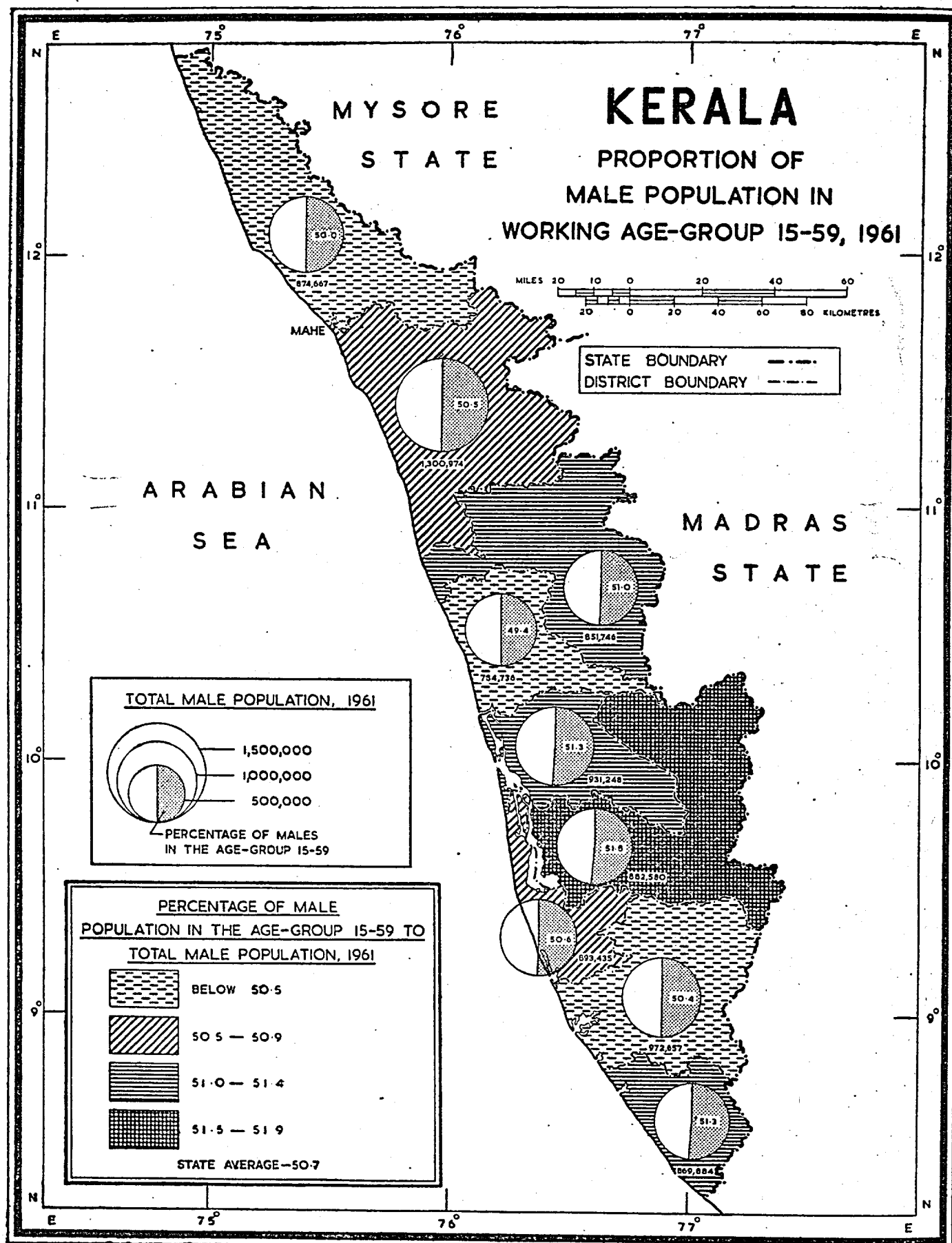
Table

YOUTHFULNESS OF POPULATION, 1961

Rank	State/District	Youthfulness of population (percentage of population in the age-group 5-14 to the total population)
1	2	3
	Kerala State	27.7
1	Quilon District	28.6
2	Trivandrum „	28.4
3	Kottayam „	28.1
4	Alleppey „	28.0
5	Kozhikode „	27.8
6	Cannanore „	27.6
7	Ernakulam „	27.4
8	Trichur „	26.8
9	Palghat „	26.2



Source: Census of India, 1961, Kerala—Part II-C Cultural and Migration Tables



PROPORTION OF MALE POPULATION IN WORKING AGE-GROUP 15-59, 1961

Purpose

The map shows the working force (population in age-group 15-59) among males in each district and its regional variations.

Method

The percentages of male population in age-group 15-59 to the total male population in each district are arranged into four groups and the districts are shaded according to the above groupings by four different shades from deep to light corresponding to high to low value. The total male population in each district is further shown by proportionate circles, in which the percentage of male population in the age-group 15-59 is marked.

Salient Features

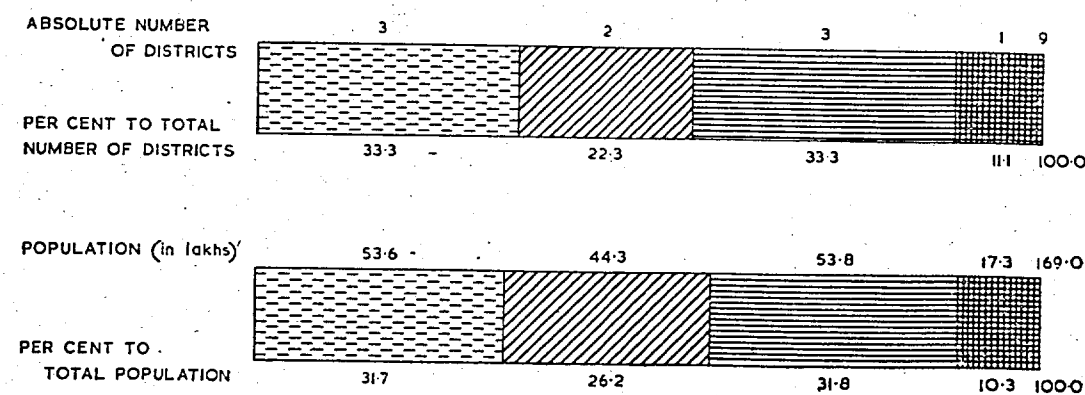
The percentage of working force among males to the total male population in the State as a whole is 50.7. District to district variation in this respect is not very significant. The Kottayam district has the highest percentage of male working force (51.8 per cent) and the Trichur district the lowest (49.4 per cent). Cannanore, Kozhikode, Trichur, Alleppey and Quilon districts have percentages of males in the working

age-group below that of the State and Palghat, Ernakulam, Kottayam and Trivandrum districts above that of the State.

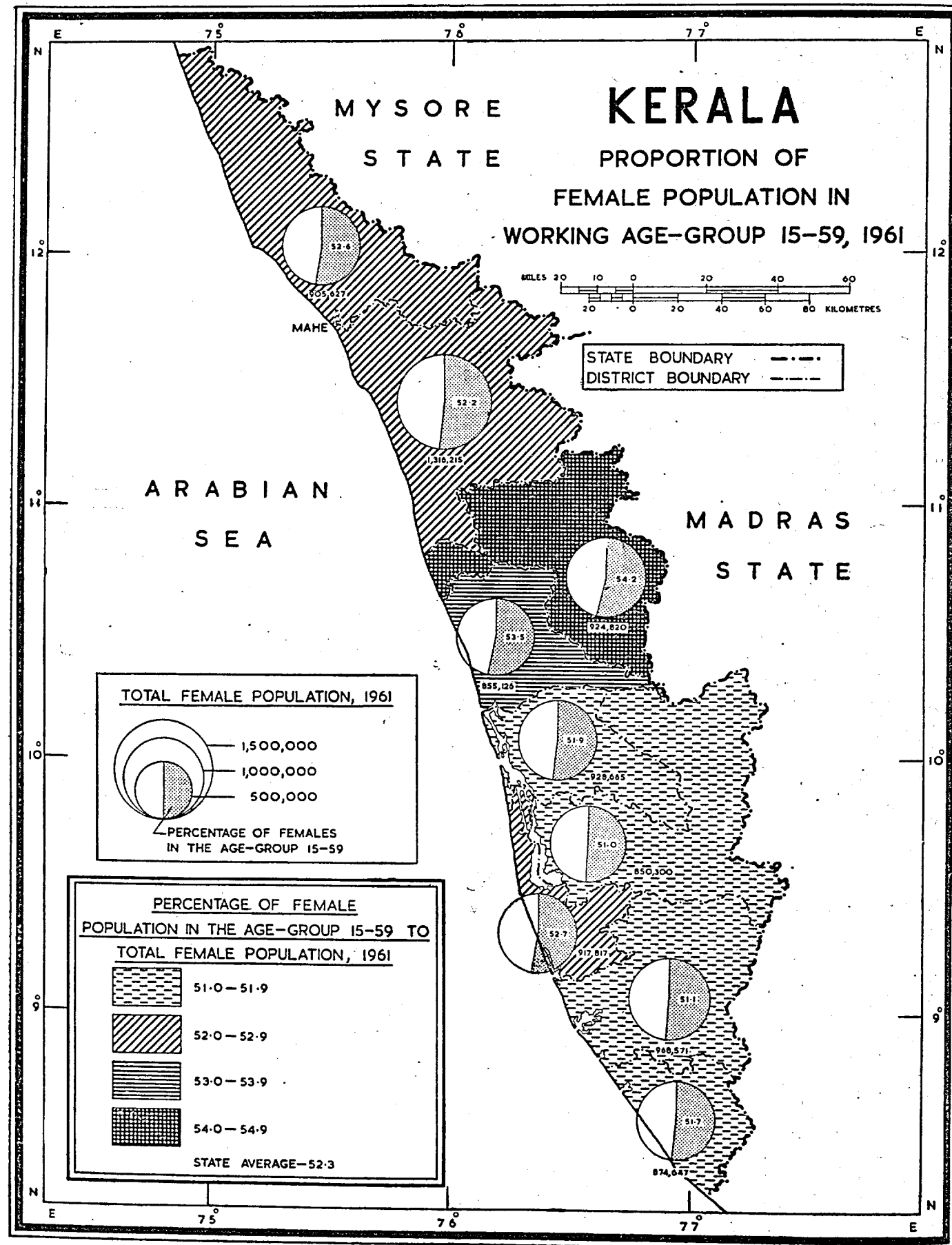
Table

PROPORTION OF MALE POPULATION IN THE WORKING AGE-GROUP 15-59, 1961

Rank	State/District	Percentage of males in the age-group 15-59 to the total male population
1	Kerala State	50.7
2	Kottayam District	51.8
3	Ernakulam "	51.3
4	Trivandrum "	51.3
5	Palghat "	51.0
6	Alleppey "	50.6
7	Kozhikode "	50.5
8	Quilon "	50.4
9	Cannanore "	50.0
10	Trichur "	49.4



Source: Census of India, 1961, Kerala— Part II-B General Economic Tables



PROPORTION OF FEMALE POPULATION IN WORKING AGE-GROUP 15-59, 1961

Purpose

The map shows the working force (population in age-group 15-59) among females in each district and its regional variations.

Method

The percentages of female population in age-group 15-59 to the total female population in each district are arranged into four groups and the districts are shaded according to these groupings by four different shades from deep to light corresponding to high to low value. The total female population in each district is further shown by proportionate circles, in which the percentage of female population in the age-group 15-59 is marked.

Salient Features

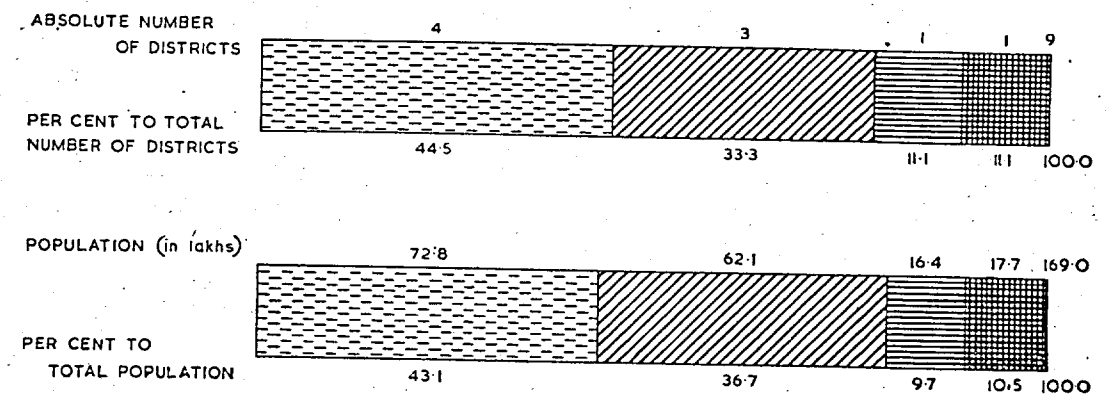
The proportion of population in the working age-group among females is greater than that of males, 52.3 per cent of the total female population of the State are in the age-group 15-59. In the districts the percentages vary from 51.0 to 54.2. Kozhikode, Ernakulam, Kottayam, Quilon and Trivandrum districts have percentages of female population in the age-group 15-59 below that of the State while Cannanore, Palghat, Trichur and Alleppey districts have percentages

above that of the State. Palghat district has the highest percentage of females in the age-group 15-59 and Kottayam district the lowest.

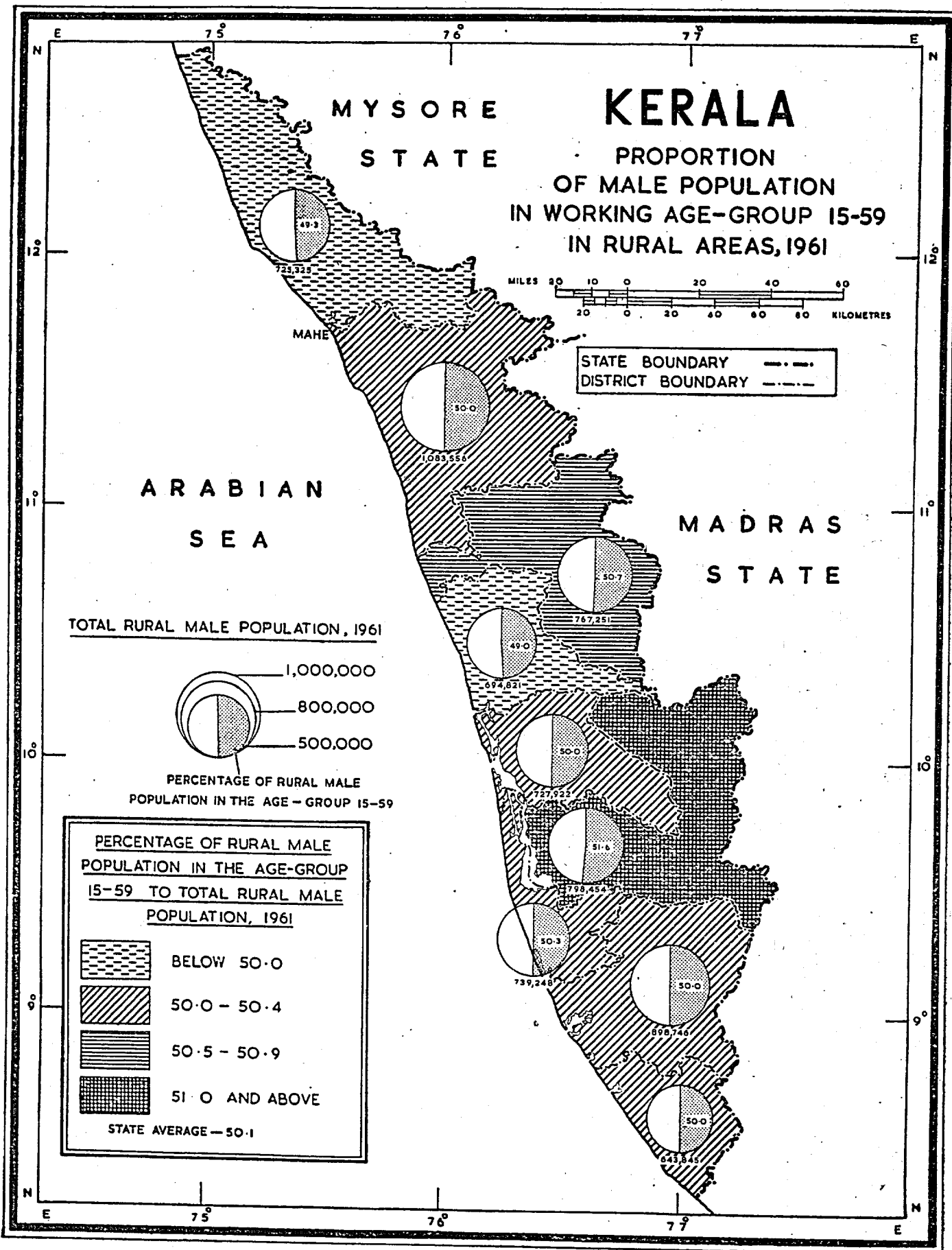
Table

PROPORTION OF FEMALE POPULATION IN THE
WORKING AGE-GROUP 15-59, 1961

Rank	State/District	Percentage of females in the age-group 15-59 to the total female population
1	2	3
	Kerala State	52.3
1	Palghat District	54.2
2	Trichur "	53.5
3	Alleppey "	52.7
4	Cannanore "	52.6
5	Kozhikode "	52.2
6	Ernakulam "	51.9
7	Trivandrum "	51.7
8	Quilon "	51.1
9	Kottayam "	51.0



Source: Census of India, 1961, Kerala—Part II-B General Economic Tables



PROPORTION OF MALE POPULATION IN WORKING AGE-GROUP 15-59 IN RURAL AREAS, 1961

Purpose

The map shows the working force (population in age-group 15-59) among males in rural areas in each district and its regional variations.

Method

The percentages of rural male population in age-group 15-59 to the total rural male population by districts are arranged into four groups and the districts are shaded according to these groupings by four different shades from deep to light corresponding to high to low percentage value. The total rural male population in each district is further shown by proportionate circles, in which the percentage of rural male population in the age-group 15-59 is marked.

Salient Features

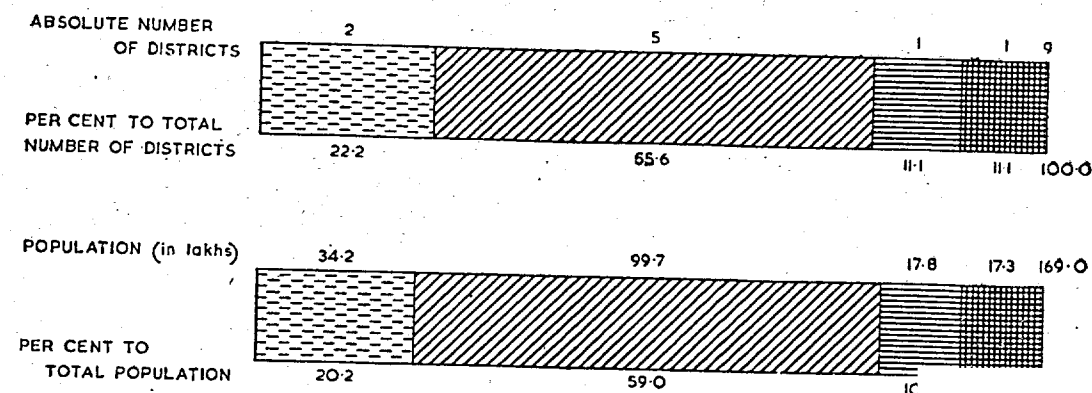
50.1 per cent of the total male population in rural areas of the State are in the age-group 15-59. The highest percentage of rural male population in the age-group 15-59 is in the Kottayam district and the lowest in the Trichur district. The percentages of rural male population in the age-group 15-59 in the districts of Cannanore, Kozhikode, Trichur, Ernakulam,

Quilon and Trivandrum are lower than that of the State while those of the districts of Palghat, Kottayam and Alleppey are higher than that of the State.

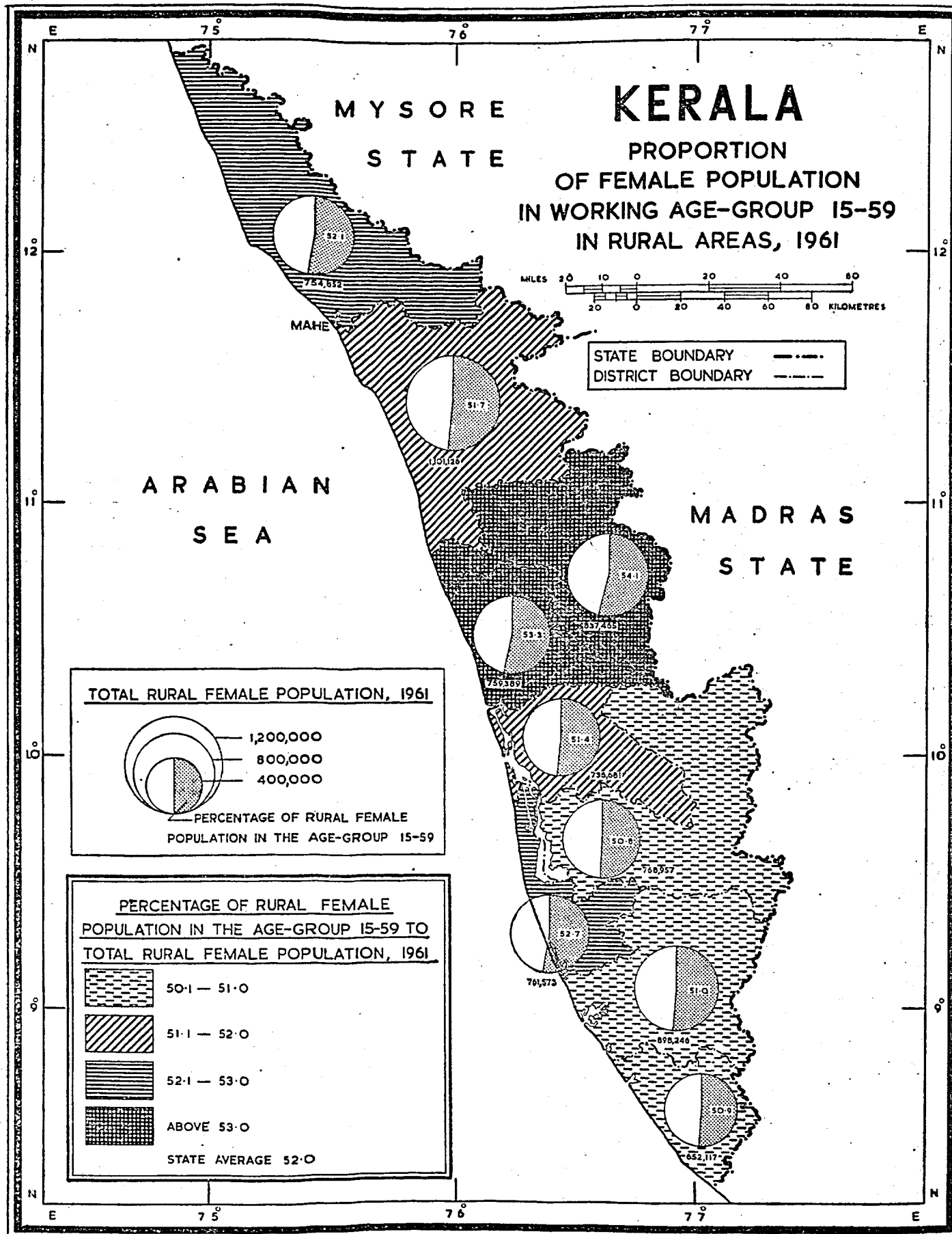
Table

PROPORTION OF MALE POPULATION IN THE WORKING AGE-GROUP 15-59 IN RURAL AREAS, 1961

Rank	State/District	Percentage of rural male population in the age-group 15-59 to the total rural male population
1	2	3
	Kerala State	50.1
1	Kottayam District	51.6
2	Palghat "	50.7
3	Alleppey "	50.3
4	Kozhikode "	50.0
5	Ernakulam "	50.0
6	Quilon "	50.0
7	Trivandrum "	50.0
8	Cannanore "	49.3
9	Trichur "	49.0



Source: Census of India, 1961, Kerala—Part II-B General Economic Tables



PROPORTION OF FEMALE POPULATION IN WORKING AGE-GROUP 15-59 IN RURAL AREAS, 1961

Purpose

The map shows working force (population in age-group 15-59) among females in rural areas in each district and its regional variations.

Method

The percentages of rural female population in the age-group 15-59 to the total rural female population by districts are arranged into four groups and the districts are shaded according to these groupings by four different shades from deep to light corresponding to high to low value. In each district a circle proportionate to the total rural female population of the district is given and the percentage of rural females in the age-group 15-59 shown by shaded sector within it.

Salient Features

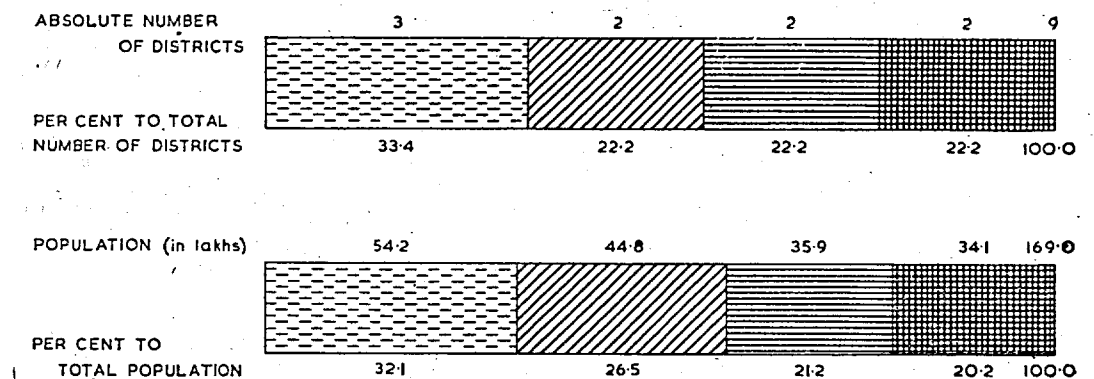
The State has 52.0 per cent of its total female population in rural areas coming in the age-group 15-59. Among the districts Palghat has the highest percentage of females in rural areas in the age-group 15-59 and Kottayam the lowest. While Kozhikode, Ernakulam, Kottayam, Quilon and Trivandrum districts have percentages of females in the age-group 15-59 in rural

areas below that of the State the districts of Cannanore, Palghat, Trichur and Alleppey have the percentages above that of the State.

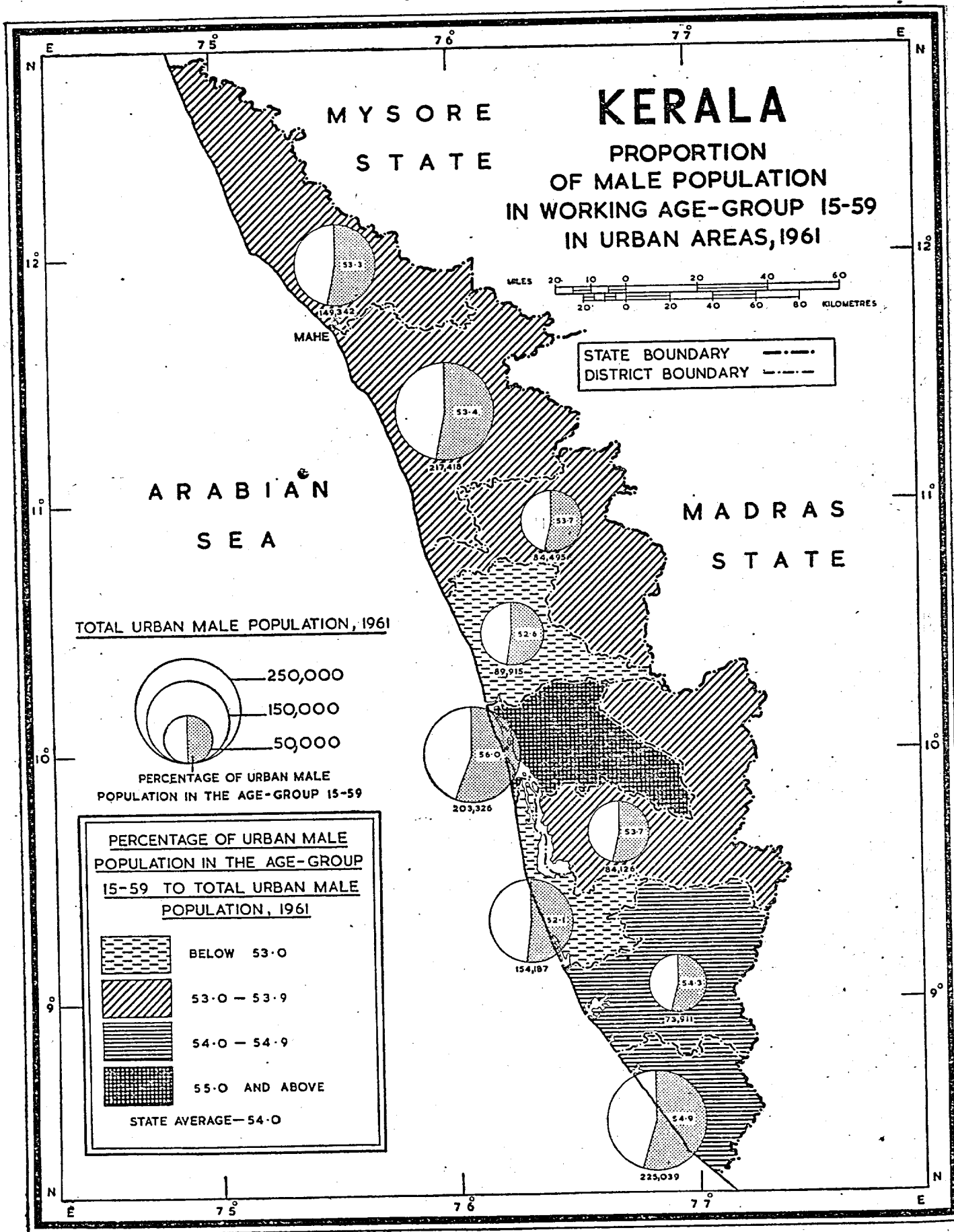
Table

PROPORTION OF FEMALE POPULATION IN THE WORKING AGE-GROUP 15-59 IN RURAL AREAS, 1961

Rank	State/District	Percentage of rural female population in the age-group 15-59 to the total rural female population
1	2	3
	Kerala, State	52.0
1	Palghat District	54.1
2	Trichur "	53.3
3	Alleppey "	52.7
4	Cannanore "	52.1
5	Kozhikode "	51.7
6	Ernakulam "	51.4
7	Quilon "	51.0
8	Trivandrum "	50.9
9	Kottayam "	50.8



Source: Census of India, 1961, Kerala—Part II-B General Economic Tables



PROPORTION OF MALE POPULATION IN WORKING AGE-GROUP 15-59 IN URBAN AREAS, 1961

Purpose

The map shows working force (population in the age-group 15-59) among males in urban areas in each district and its regional variation.

Method

The percentages of urban male population in the age-group 15-59 to the total urban male population in each district are arranged into four groups and the districts are shaded according to these groupings by four different shades from deep to light corresponding to high to low value. In each district a circle proportionate to the total urban male population of the district is given and the percentage of urban males in the age-group 15-59 shown as a shaded sector within it.

Salient Features

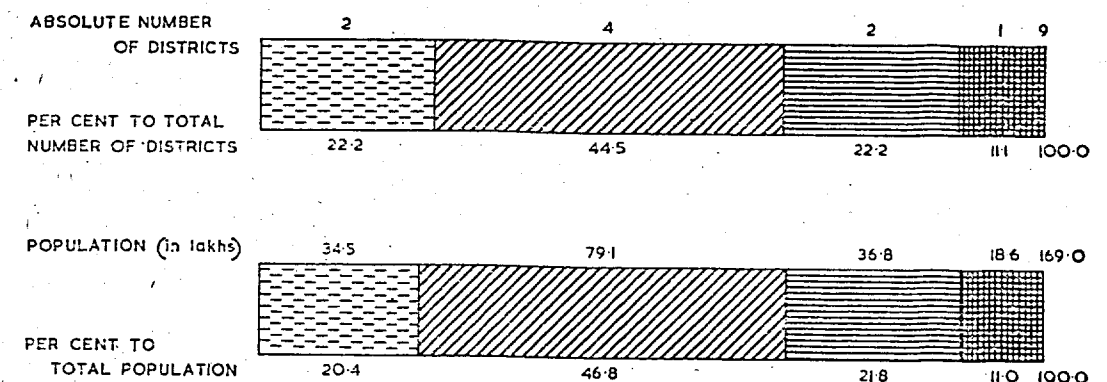
The State has 54.0 per cent of its total male population in urban areas in the age-group 15-59. The percentages in districts vary from 52.1 in the case of Alleppey district to 56.0 in the case of Ernakulam district. Only Ernakulam, Quilon and Trivandrum districts have the percentages of urban males in the age-group 15-59 higher than that of the State.

All the remaining six districts have the corresponding percentage below that of the State.

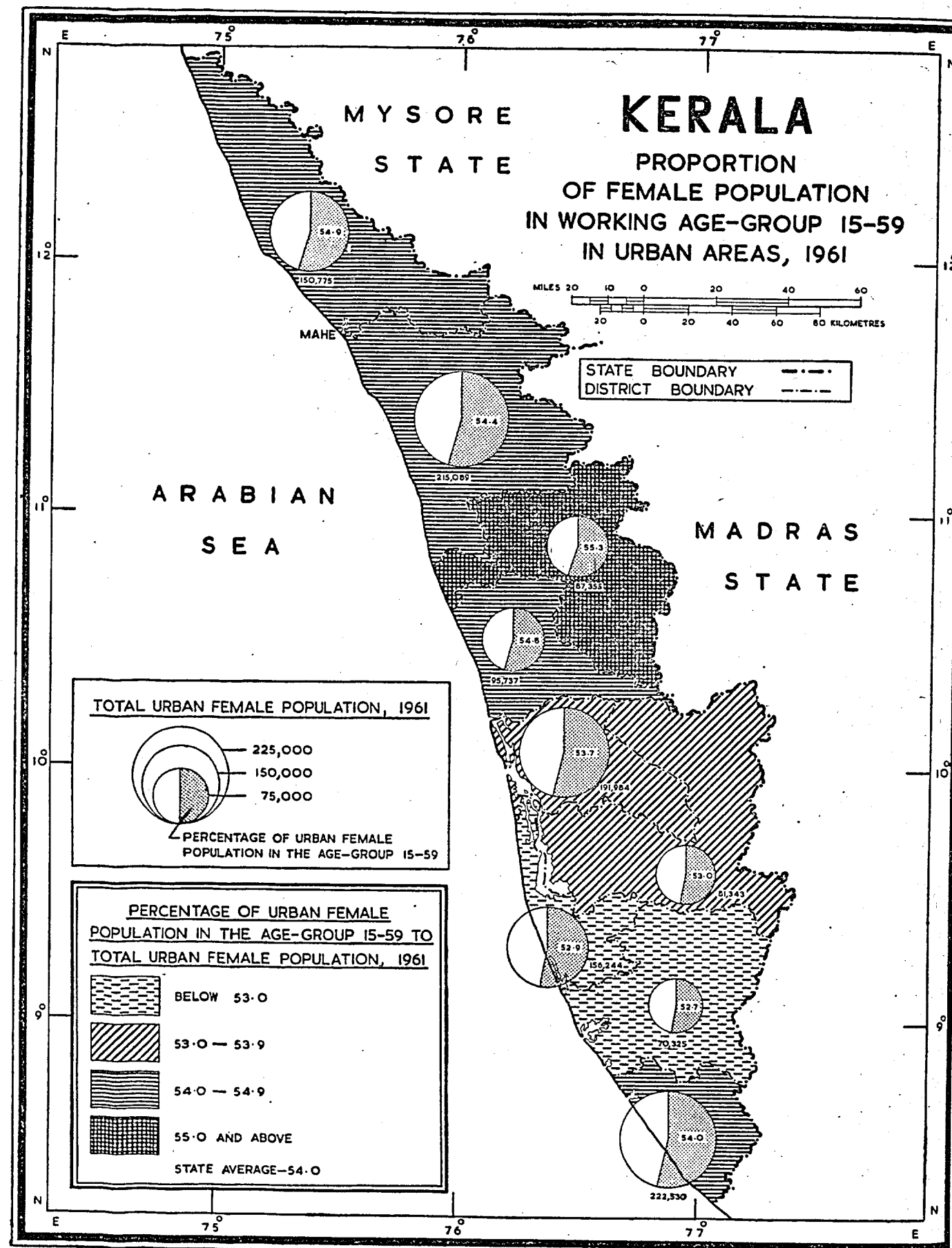
Table

PROPORTION OF MALE POPULATION IN THE WORKING AGE-GROUP 15-59 IN URBAN AREAS, 1961

Rank	State/District	Percentage of urban male population in the age-group 15-59 to the total urban male population
1	Kerala State	54.0
2	Ernakulam District	56.0
3	Trivandrum "	54.9
4	Quilon "	54.3
5	Palghat "	53.7
6	Kottayam "	53.7
7	Kozhikode "	53.4
8	Cannanore "	53.3
9	Trichur "	52.6
10	Alleppey "	52.1



Source: Census of India, 1961, Kerala—Part II-B General Economic Tables



PROPORTION OF FEMALE POPULATION IN WORKING AGE-GROUP 15-59 IN URBAN AREAS, 1961

Purpose

The map shows the working force (population in the age-group 15-59), among females in urban areas in each district and its regional variations.

Method

The percentages of urban female population in the age-group 15-59 to the total urban female population in each district are arranged into four groups and the districts are shaded according to these groupings by four different shades from deep to light corresponding to high to low value. In each district a circle proportionate to the total urban female population of the district is given and the percentage of urban females in the age-group 15-59 shown as a shaded sector within it.

Salient Features

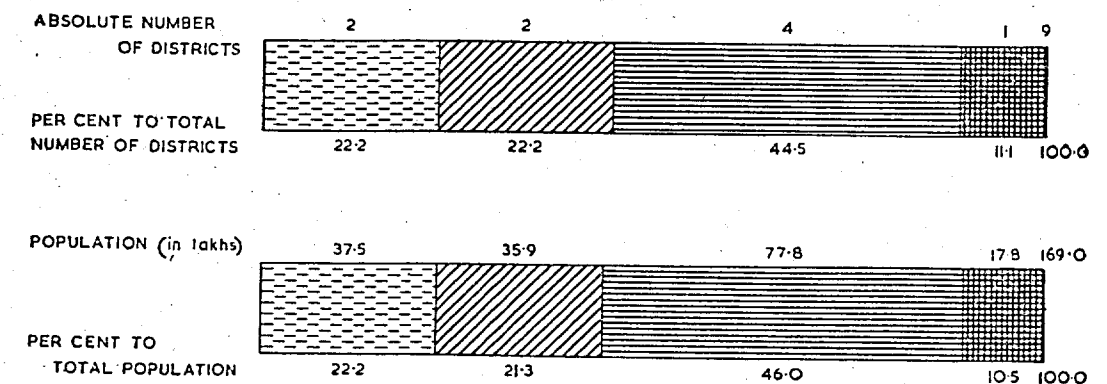
54.0 per cent of the total urban female population of the State come in the age-group 15-59. This is the same as in the case of urban males. But the district-wise pattern is different. The Palghat district has the highest percentage of urban female population in the age-group 15-59 and Quilon district the lowest. The districts of Cannanore, Kozhikode, Palghat and Trichur

have the percentages above that of the State and Ernakulam, Kottayam, Alleppey and Quilon districts have the percentage below that of the State. Trivandrum district has the same percentage as that of the State.

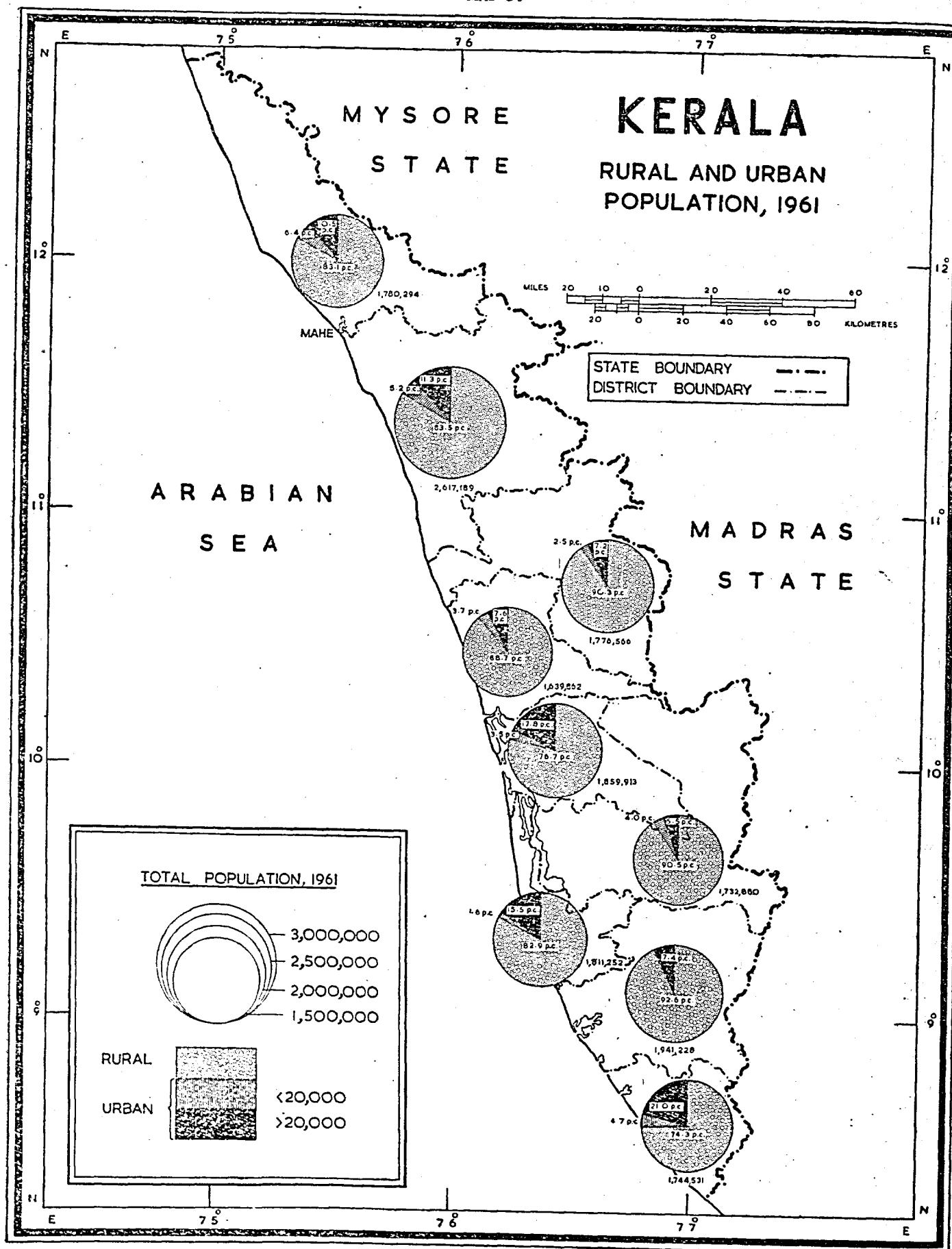
Table

PROPORTION OF FEMALE POPULATION IN THE WORKING AGE-GROUP 15-59 IN URBAN AREAS, 1961

Rank	State/District	Percentage of urban female population in the age-group 15-59 to the total urban female population
1	Kerala State	54.0
1	Palghat District	55.3
2	Cannanore "	54.9
3	Trichur "	54.8
4	Kozhikode "	54.4
5	Trivandrum "	54.0
6	Ernakulam "	53.7
7	Kottayam "	53.0
8	Alleppey "	52.9
9	Quilon "	52.7



Source: Census of India, 1961, Kerala—Part II-B General Economic Tables



RURAL AND URBAN POPULATION, 1961

Purpose

This map shows the distribution of rural and urban population in the State by districts in 1961.

Method

In each district a circle is given proportional to its total population in 1961 and the percentages of rural and urban population are shown by shades within it. The urban sector is further divided to show the percentage of urban population living in towns with population 20,000 and above, and population below 20,000.

Salient Features

The percentages of rural and urban population vary considerably from district to district. Trivandrum district has the highest percentage of urban population (25.7%) and Quilon district the lowest (7.4%). In the districts of Palghat, Kottayam and Quilon which border the Western Ghats more than 90 per cent of the population is rural. In the case of the remaining districts the percentage of urban population is comparatively higher due to the fact that most of their land area lies in the plains or in coastal region. The percentage of urban population living in larger towns (population 20,000 and above) is highest in the Trivandrum district and lowest in the Kottayam district. In Trivandrum

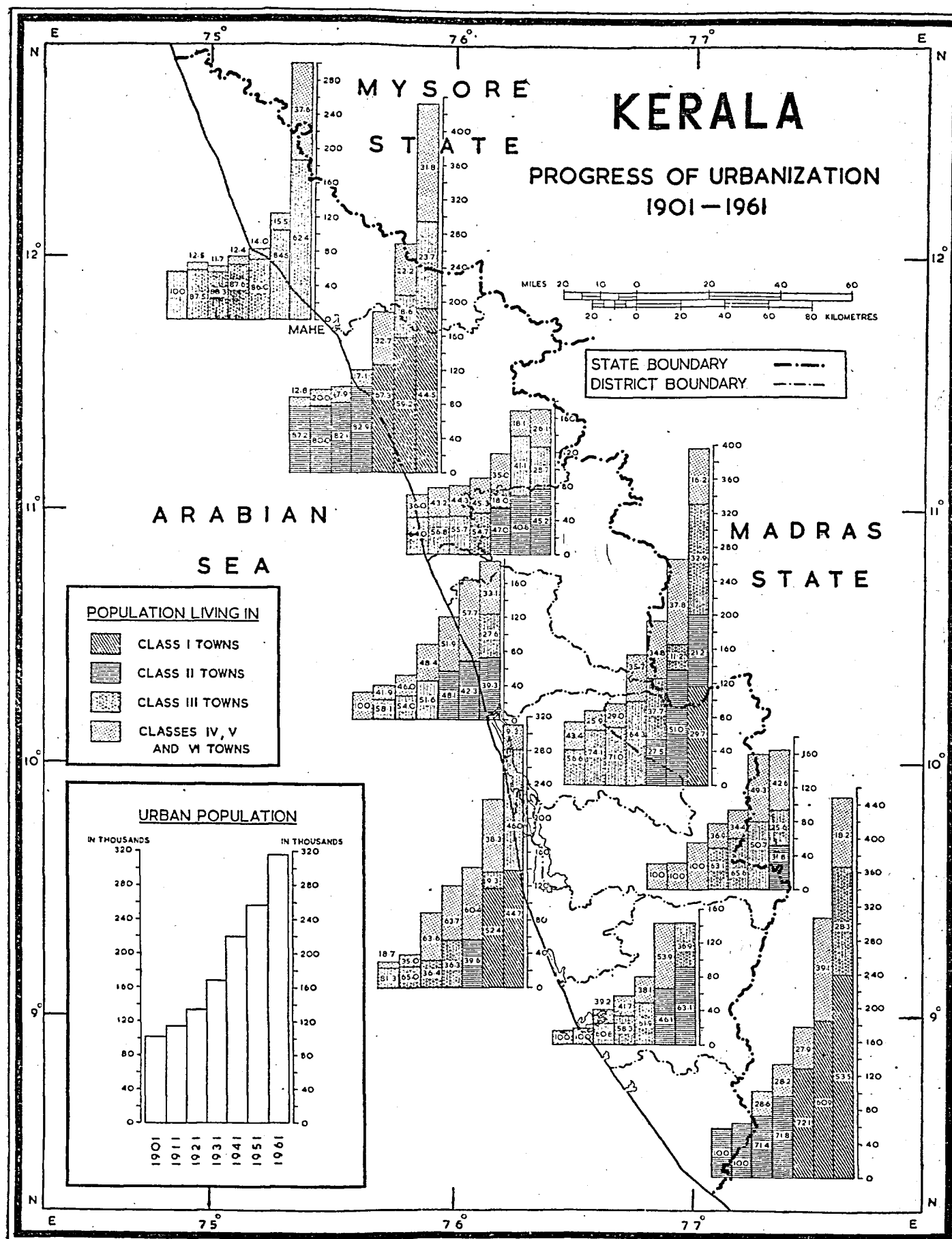
and Ernakulam districts which have the highest percentages of urban population (25.7 and 21.3 respectively) 81 per cent of the urban population live in towns with population 20,000 and above.

Table

PERCENTAGE DISTRIBUTION OF RURAL AND URBAN POPULATION, 1961

State/District	Rural	Total	Urban	
			Population living in large towns (Population 20,000 and above)	Population living in small towns (Population 20,000 and below)
1	2	3	4	5
Kerala State	84.9	15.1	11.5	3.6
Cannanore District	83.1	16.9	10.5	6.4
Kozhikode	83.5	16.5	11.3	5.2
Palghat	90.3	9.7	7.2	2.5
Trichur	88.7	11.3	7.6	3.7
Ernakulam	78.7	21.3	17.8	3.5
Kottayam	90.5	9.5	5.5	4.0
Alleppey	82.9	17.1	15.5	1.6
Quilon	92.6	7.4	7.4	...
Trivandrum	74.3	25.7	21.0	4.7

Source: Census of India, 1961, Kerala—Part II-A General Population Tables



PROGRESS OF URBANIZATION, 1901-1961

Purpose

The map shows the changes in the population of the different classes of towns in each of the six decennial Censuses from 1901 to 1961.

Method

The towns of the State are classified according to population size as given below:

- Class I towns with a population of 100,000 and above
- Class II " " 50,000 to 99,999
- Class III " " 20,000 to 49,999
- Class IV " " 10,000 to 19,999
- Class V " " 5,000 to 9,999
- Class VI " " less than 5,000

In each district bars are given proportional to the total urban population for 1901, 1911, 1921, 1931, 1941, 1951 and 1961 and the percentage share of population living in class I, class II, class III and classes IV, V and VI towns marked by four different shades. Each

town is classified according to its population in that particular year. No adjustment is made in the urban population in Censuses prior to that of 1961 to get comparable figures as those of 1961. Chittur and Thathamangalam towns have been treated as a single town viz. Chittur-Thathamangalam for the entire period from 1901-1961, though they existed as separate towns in 1901, 1911 and 1941.

Salient Features

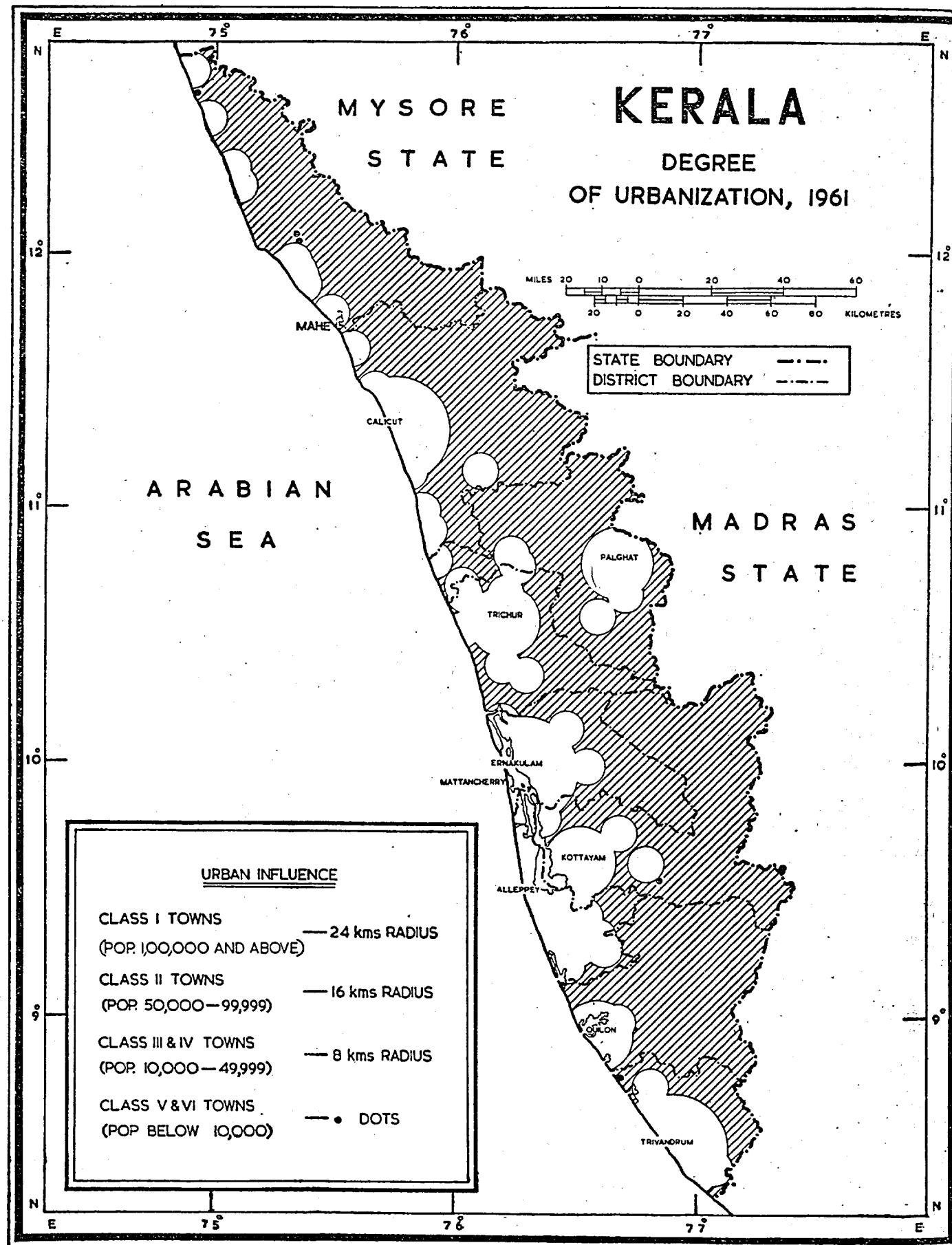
The districts of Cannanore, Palghat, Trichur, Kottayam and Quilon have no class I town in 1961 or in previous Censuses. Kozhikode and Trivandrum districts have class I towns from 1941 onwards, Alleppey district from 1951 onwards and Ernakulam district only in 1961. Cannanore district has no class II town even in 1961. In Cannanore district urban population is mainly concentrated in towns of class III throughout the period 1901-61.

Table

PERCENTAGE OF URBAN POPULATION IN THE STATE AND DISTRICTS IN EACH CENSUS YEAR
BY CLASS OF TOWNS, 1901-61

State/District	Class of Town	Percentage of urban population in						
		1901	1911	1921	1931	1941	1951	1961
1	2	3	4	5	6	7	8	9
KERALA STATE	I	..	..	..	..	21.3	25.3	27.0
	II	29.7	27.0	22.8	21.3	18.6	18.7	14.8
	III	36.7	41.3	37.3	42.1	23.1	19.5	34.7
	IV, V and VI	33.6	31.7	39.9	36.6	37.0	36.5	23.5
	Total Urban	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cannanore District	I	..	..	..	..	..	..	..
	II	..	..	..	..	..	..	..
	III	100.0	87.5	88.3	87.6	86.0	84.5	62.4
	IV, V and VI	..	12.5	11.7	12.4	14.0	15.5	37.6
	Total Urban	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Kozhikode	I	..	..	..	..	67.3	59.2	44.5
	II	87.2	80.0	82.1	82.9	..	..	..
	III	..	..	..	..	..	18.6	23.7
	IV, V and VI	12.8	20.0	17.9	17.1	32.7	22.2	31.8
	Total Urban	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Palghat	I	..	..	..	..	..	..	..
	II	..	..	..	..	47.0	40.8	45.2
	III	64.0	56.8	55.7	54.7	18.0	41.1	28.7
	IV, V and VI	36.0	43.2	44.3	45.3	35.0	18.1	25.1
	Total Urban	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Trichur	I	..	..	..	..	..	..	..
	II	..	..	..	..	48.1	42.3	39.3
	III	..	58.1	54.0	51.6	..	27.6	27.6
	IV, V and VI	100.0	41.9	46.0	48.4	51.9	57.7	33.1
	Total Urban	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Ernakulam	I	..	..	..	..	..	..	..
	II	..	..	..	..	27.5	51.0	21.2
	III	56.6	74.1	71.0	64.3	37.7	11.2	32.9
	IV, V and VI	43.4	25.9	29.0	35.7	34.8	37.8	16.2
	Total Urban	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Kottayam	I	..	..	..	..	..	..	..
	II	..	..	..	..	..	..	..
	III	..	..	..	63.1	65.6	50.7	25.6
	IV, V and VI	100.0	100.0	100.0	36.9	34.4	49.3	42.6
	Total Urban	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Alleppey	I	..	..	..	..	..	..	..
	II	..	..	..	..	39.6	52.4	44.7
	III	..	..	..	..	..	..	..
	IV, V and VI	81.3	65.0	36.4	36.3	..	9.3	46.0
	Total Urban	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Quilon	I	..	..	..	..	..	..	..
	II	..	..	..	..	..	..	..
	III	..	..	..	..	..	46.1	63.1
	IV, V and VI	100.0	100.0	100.0	63.7	60.4	38.3	9.3
	Total Urban	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Trivandrum	I	..	..	..	..	..	..	..
	II	100.0	100.0	71.4	71.8	72.1	60.9	53.5
	III	..	..	..	..	..	..	..
	IV, V and VI	..	..	28.6	28.2	27.9	39.1	18.2
	Total Urban	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Census of India, 1961, Kerala—Part II-A General Population Tables



DEGREE OF URBANIZATION, 1961

Purpose

The map shows the extent of influence of the towns in the State.

Method

Class I towns (100,000 persons and above) are assumed to have urban influence extended up to a radius of 24 km., class II towns (50,000-99,999 persons) a radius of 16 km., and classes III and IV towns (10,000-49,999 persons) a radius of 8 km. Towns are plotted and circles with radii proportional to the above are given around each town. Wherever the circles overlap the areas are joined to demarcate the contiguous urban areas. As the urban influence of classes V and VI towns will be very little they are shown simply by black dots if they lie outside the contiguous urban areas. The areas outside the circles are shaded to differentiate the rural from urban areas. The names of class I towns and class II towns are also shown in the map.

Salient Features

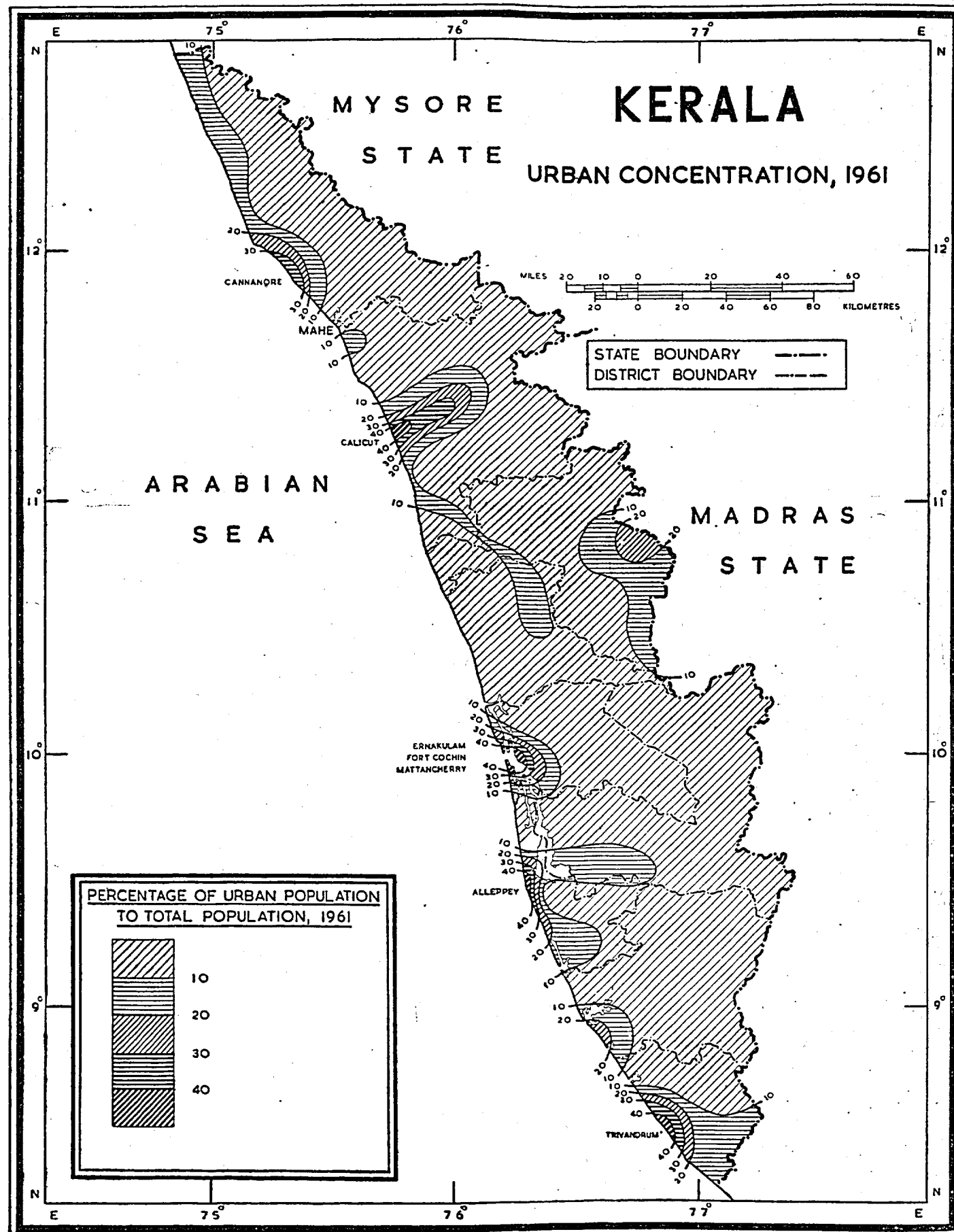
The towns of the State lie more or less as a continuous belt from the northern end to the southern end concentrated mostly in the coastal regions. There is continuous urban influence throughout the entire coastal region in Ernakulam & Alleppey districts and from Calicut to Trichur in Kozhikode, Palghat and Trichur districts.

Table

NUMBER OF TOWNS BY CLASSES, 1961

Class of town	Number of towns in each class
1	2
Class I (Population 100,000 and above)	4
Class II (" 50,000—99,999)	5
Class III (" 20,000—49,999)	31
Class IV (" 10,000—19,999)	33
Class V (" 5,000—9,999)	18
Class VI (" below 5,000)	1

Source: Census of India, 1961, Kerala—Part II A—General Population Tables



URBAN CONCENTRATION, 1961

Purpose

The map shows the regions of urban concentration in the State.

Method

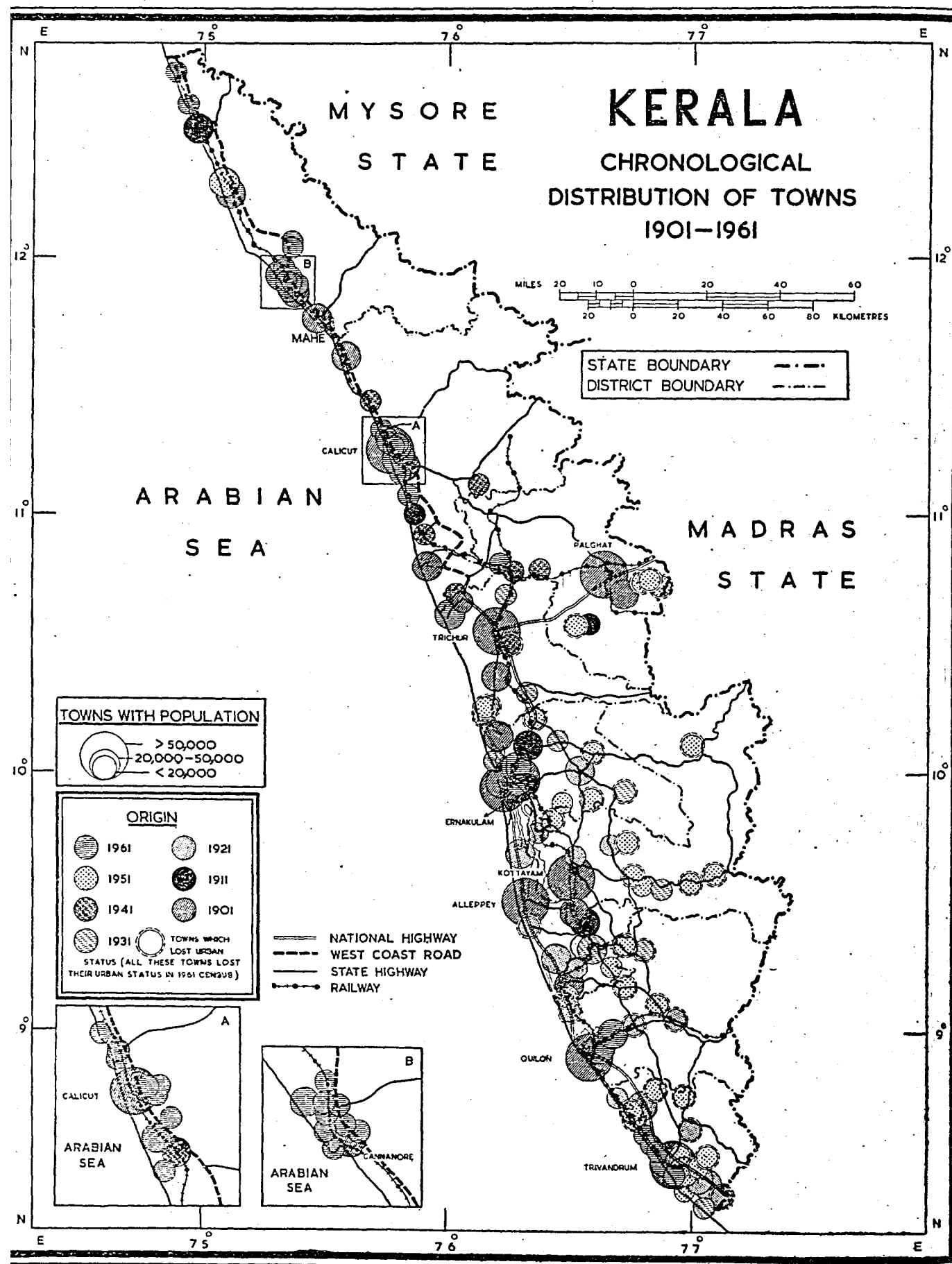
With the help of talukwise percentage of urban population to the total population which is plotted approximately at the centre of each taluk, isopleths are drawn for urban percentages of 10, 20, 30 and 40. The intervening spaces between isopleths are shaded from deep to light corresponding to high to low urban percentage. The names of important towns forming the nuclei of urban centres are also given in the map.

Salient Features

Major portion of the State has urban population

Source: Census of India, 1961, Kerala—Part II A—General Population Tables

below 10 per cent. There is only one zone in the eastern highlands having concentration of urban population which is around Palghat municipal town. There are six distinct zones with high urban concentration in the coastal regions. These regions are situated around the municipal towns of Cannanore, Calicut, Ernakulam, Fort Cochin, Mattancherry, Alleppey, Quilon and Trivandrum. All the above regions except the regions around the towns of Cannanore and Quilon are areas of comparatively very high urban percentage viz., above 40 per cent and are growing centres of industrial or commercial activity.



MAP 40
CHRONOLOGICAL DISTRIBUTION OF TOWNS, 1901-1961

Purpose

The map shows all towns in existence in any of the decennial Censuses from 1901 to 1961 and the years in which the towns first attained their urban status.

Method

All the towns from 1901 to 1961 are arranged according to population size into three groups (i) population above 50,000, (ii) between 20,000 and 50,000 and (iii) below 20,000, and the towns plotted by circles proportional to the population size. In the case of towns in existence in 1961 the population in 1961, and in the case of towns which lost their urban status the population in the year in which the place existed as urban for the last time are taken into account. The year in which a town first obtained its urban status is indicated by one of seven shades corresponding to the seven censuses from 1901 to 1961. The places which lost urban status are distinguished by an additional outer broken circle. The railways and important roads (national highways and State highways) are also shown in the map.

Salient Features

129 places (inclusive of declassified towns) in the State have been treated as towns in one Census or another during the period 1901-1961. The number of towns has been progressively increasing from Census to Census up to 1951 and then declines in 1961. In 1901 there were 21 towns in the State. By 1911 their number increased to 27. In 1921, 1931, 1941 and 1951 there were 44, 53, 62 and 94 towns respectively. None of the places treated as towns had lost their urban status

in any of the years from 1901 to 1951. But due to the more rational application of the concept of 'urban area' in 1961 Census, 36 towns of 1951 were declassified and one was merged with another town, and 35 places were classified as towns for the first time in 1961. The total number of towns thus decreased from 94 in 1951 to 92 in 1961. If the declassified towns are excluded the increase in the number of towns has been progressive throughout the period 1901-61.

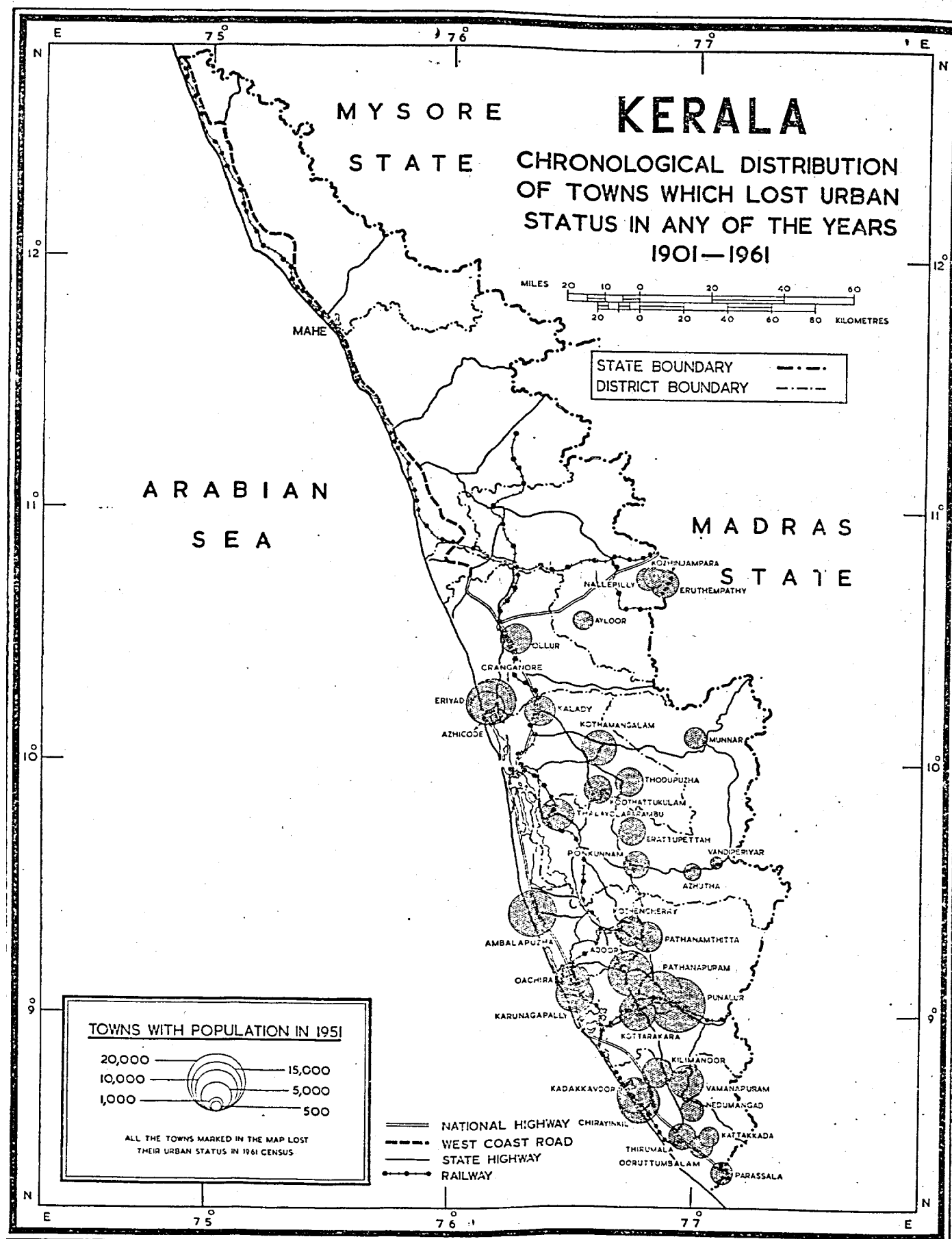
Table

NUMBER OF PLACES WHICH ATTAINED URBAN STATUS NEWLY IN THE DECENNIAL CENSUSES FROM 1901 TO 1961

State/District	Number of places which attained urban status newly in						
	1901	1911	1921	1931	1941	1951	1961
1	2	3	4	5	6	7	8
Kerala State	20	6	18	9	8	33	35
Cannanore District	2	1	..	..	..	1	14
Kozhikode	2	1	..	..	4	..	10
Palghat	3	1	..	..	2	4	1
Trichur	3	..	1	2	2	2	1
Ernakulam	4	2	1	3	..	4	2
Kottayam	2	..	3	1	..	7	..
Alleppey	2	1	4	1	..	1	..
Quilon	1	..	3	1	..	4	2
Trivandrum	1	..	6	1	..	10	5

Note: Chittur and Thathamangalam are treated as a single town in 1901, 1911, and 1941 Censuses though they existed as two separate towns in those years.

Source: Census of India, 1961, Kerala—Part II A—General Population Tables



CHRONOLOGICAL DISTRIBUTION OF TOWNS WHICH LOST URBAN STATUS IN ANY OF THE YEARS 1901-1961

Purpose

The map shows places which were treated as towns in any of the Censuses from 1901 onwards but which subsequently lost their urban status and were declassified as rural.

Method

The declassified towns are marked by circles proportional to their population in the Censuses in which they last remained as towns. The railways and important roads (national highways and State highways) are also shown in the map.

Salient Features

It has been the practice in the Censuses prior to 1961 to accord recognition to all municipalities, cantonments and civil lines as towns. In the case of other places, the place should have a minimum population of 5,000 to be censused as a town. The 1961 Census laid down a three fold criterion for classification of an area as a town viz., a minimum population of 5,000 and a minimum density of not less than 1,000 persons per sq. mile with at least 75 per cent of the adult male population following non-agricultural pursuits, besides corporations, municipalities, civil lines and cantonment boards which were automatically included in the category of towns. Exceptions to these criteria were however allowed in the case of certain places.

According to the above criteria 36 towns of 1951 were declassified and one town viz., Poonthura was merged with Muttathura, a new town of 1961 Census. There has been no declassification of towns in any of the Censuses from 1901 to 1951. Of the declassified towns 4 are in Palghat district, 4 in Trichur district, 4 in Ernakulam district, 6 in Kottayam district, 1 in Alleppey district, 8 in Quilon district and 10 in Trivandrum district. 7 of these towns had attained their urban status in 1921, 2 in 1931, 1 in 1941 and the rest in 1951. No town was declassified in Cannanore and Kozhikode districts.

Source: Census of India, 1961, Kerala—Part II A—General Population Tables

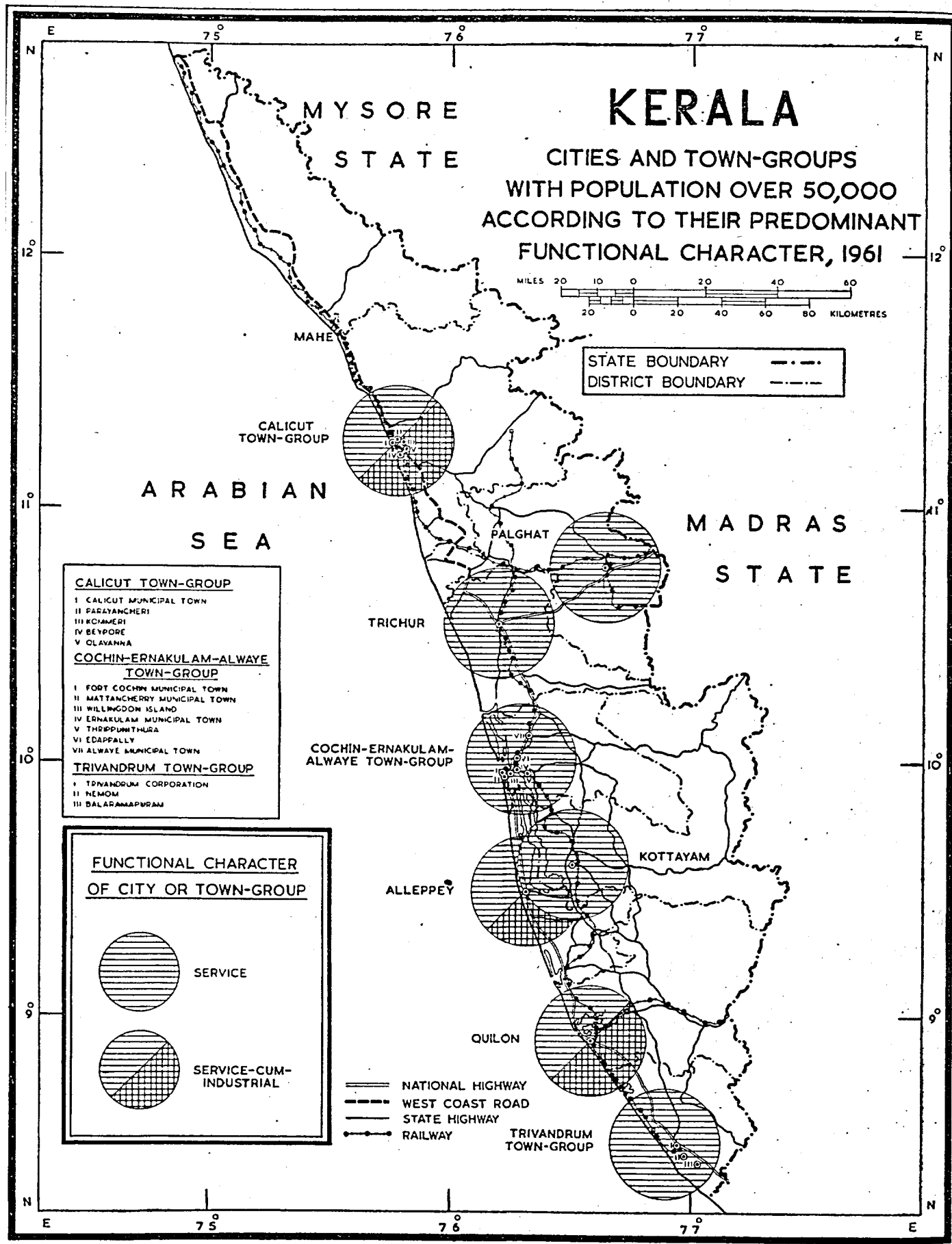
Table

TOWNS WHICH LOST URBAN STATUS IN ANY OF THE YEARS 1901-1961

District	Towns which lost urban status	Population in 1951
1	2	3
Palghat	Eruthempathy	4,909
	Nallepilly	3,337
	Kozhinjampara	2,761
	Ayloor	2,107
Trichur	Cranganore	12,862
	Eriyad	11,892
	Azhicode	7,119
	Ollur	5,827
Ernakulam	Kothamangalam	7,657
	Kalady	5,663
	Thodupuzha	5,141
	Koothattukulam	4,687
Kottayam	Thalayolaparambu	6,496
	Erattupettah	4,771
	Ponkunnam	4,402
	Munnar	2,938
	Azhutha	1,775
	Vandiperiyar	808
Alleppey	Ambalapuzha	13,416
Quilon	Punalur	18,995
	Adoor	13,745
	Pathanapuram	11,050
	Kottarakara	8,436
	Karunagapally	7,419
	Oachira	6,392
	Pathanamthitta	5,846
	Kozhencherry	5,426
Trivandrum	Chirayinkil	11,517
	Kadakkavoor	7,957
	Vamanapuram	7,327
	Kilimanoor	5,827
	Poonthura *	5,662
	Thirumala	4,390
	Nedumangad	3,098
	Ooruttambalam	3,046
	Parassala	3,000
	Kattakkada	2,601

All the towns lost their urban status in 1961

* Included in Muttathura town of 1961 along with some additional areas.



CITIES AND TOWN-GROUPS WITH POPULATION OVER 50,000 ACCORDING TO THEIR PREDOMINANT FUNCTIONAL CHARACTER, 1961

Purpose

The map shows the predominant functional character of cities and town-groups in the State with a population over 50,000 in 1961.

Method

The predominant functional character of a city or town-group is decided as follows. The nine industrial categories of workers adopted in the 1961 Census are first grouped as

1. Agriculture and its allied activities (Categories I, II and III)
2. Industries including Construction (Categories IV, V and VI)
3. Trade and Commerce (Category VII)
4. Transport, Storage and Communications (Category VIII) and
5. Other Services (Category IX)

The percentage of workers in each of the above five groups to the total workers in each of the cities and town-groups with population over 50,000 is worked out. If any one single group takes in 40 per cent or more of the total workers, then that town will be designated by the corresponding function, viz., primary activity for the first group industrial for the second, commercial for the third, transport for the fourth and service for the fifth group. If the highest percentage figure is less than 40 then the next predominant group is added. If the two groups together take in a minimum 60 per

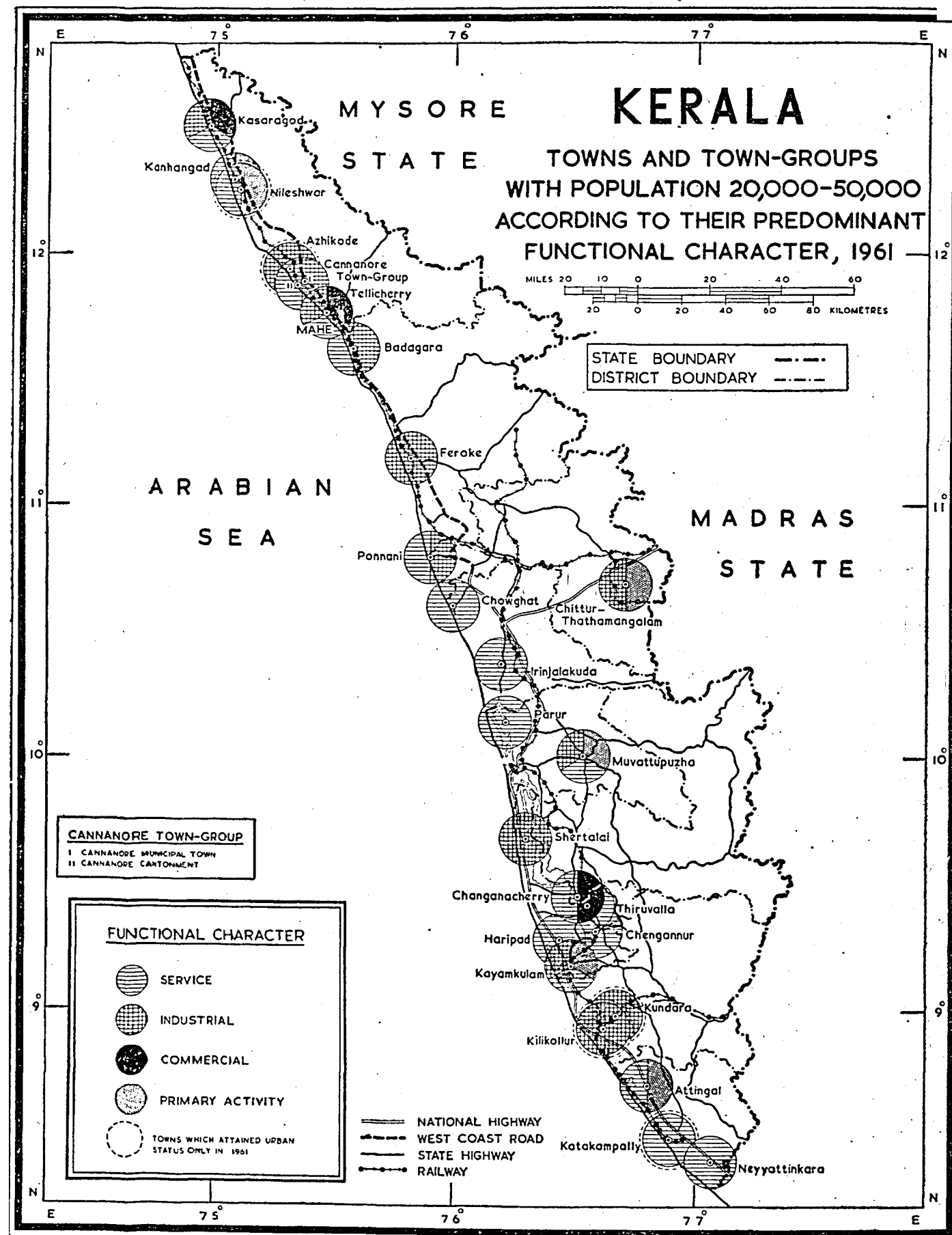
cent of the total workers, the town will then be designated by both the functions e.g. industrial-cum-transport. When the sum of two groups does not reach 60 per cent then the third predominant group is taken into account and the town is designated by all the three functions.

The cities and town-groups with population over 50,000 are plotted by uniform sized circles and the predominant functional character decided as above marked in the circles by different shades corresponding to the functional characters. If a town or town-group has more than one predominant functional character, the shades for all the predominant characters are marked inside the circle. The railways and important roads are also shown in the map.

Salient Features

Out of the eight cities and town-groups in the State five have service as the predominant character. The remaining three viz., Quilon (Municipal), Alleppey (Municipal) and Calicut town-group are service-cum-industrial. It is to be noted that service occupies the highest percentage of workers in all the cities and town-groups mentioned above except Alleppey which has 35.9 per cent of the total workers in industry and only 30.1 per cent in service. The major industries in Alleppey are manufacture of coir, coir products and wooden furniture, preservation of fish etc.

Source : Census of India, 1961, Kerala—Part II B (i)—General Economic Tables



TOWNS AND TOWN-GROUPS WITH POPULATION 20,000-50,000 ACCORDING TO THEIR PREDOMINANT FUNCTIONAL CHARACTER, 1961

Purpose

The map shows the predominant functional character of towns and town-groups in the State with population between 20,000 and 50,000 in 1961.

Method

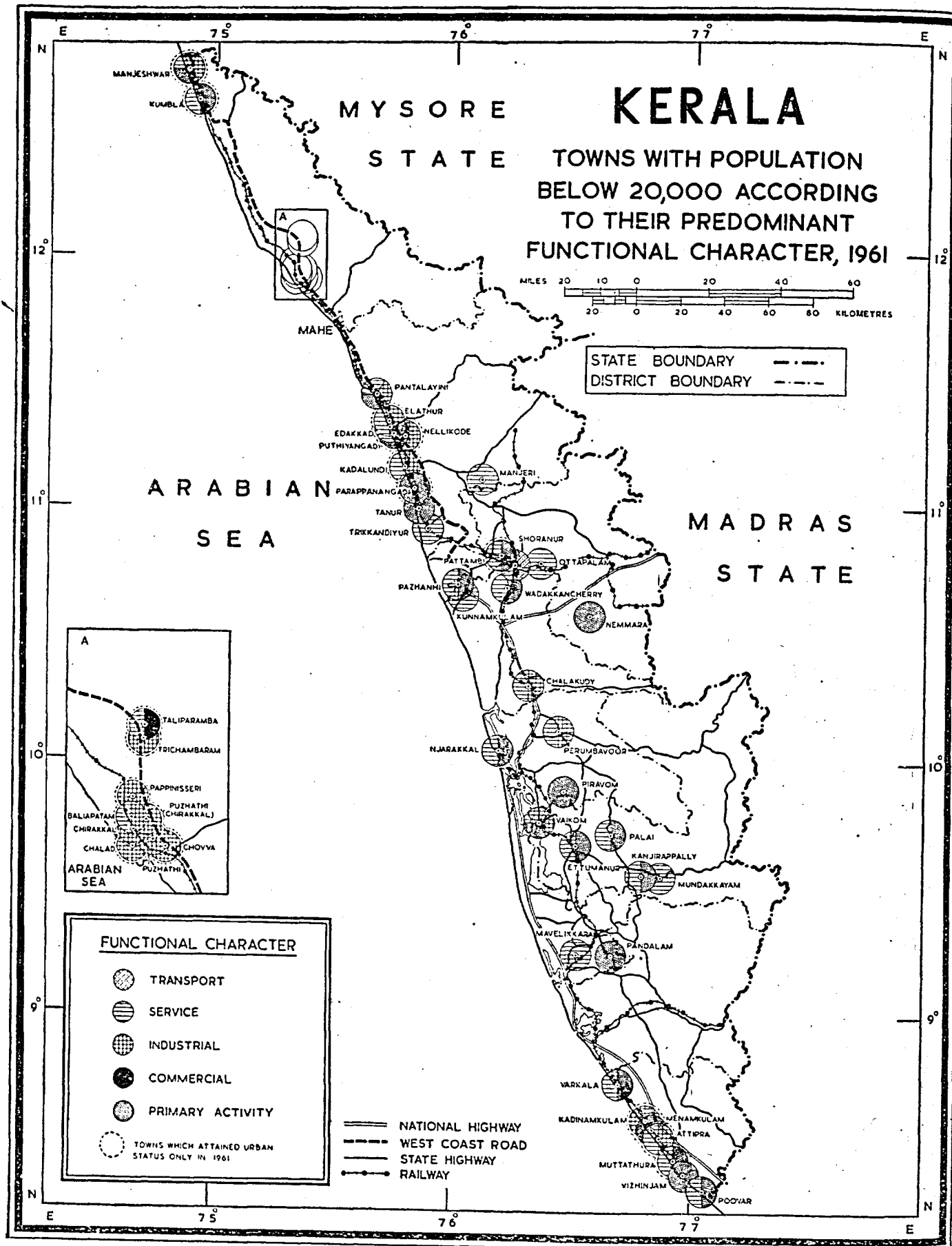
The procedure adopted for assigning a town to a particular functional type is the same as that for Map 42.

The towns and town-groups with population between 20,000 and 50,000 are plotted by uniform sized circles and the functional character marked in the circle by different shades corresponding to the characters. If a town has more than one predominant functional character the shades for all the functional characters are marked inside the circles. The towns which attained their urban status only in 1961 are differentiated by an outer broken circle. The individual component towns of town-groups are not marked separately. The railways and important roads are also shown in the map.

Salient Features

There are 24 towns and 1 town-group (Cannanore town-group) in the State with population between 20,000 and 50,000 in 1961. Of the 24 towns 8 are service towns, 5 industrial, 3 service-cum-primary activity, 2 service-cum-industrial, 1 service-cum-commercial, 1 industrial-cum-primary activity, 2 service-cum-industrial-cum-commercial and 2 service-cum-primary activity-cum-industrial. The Cannanore town-group is classed as service-cum-industrial. The nature of industry in the five industrial towns is handloom weaving, cotton spinning in mills, etc. in the case of Azhikode, manufacture of coir, sawing of wood, etc. in the case of Feroke, manufacture of coir and coir products in the case of Shertalai, sawing of wood, manufacture of wooden furniture, processing of cashewnuts, manufacture of chinaware and crockery in the case of Kundara and processing and packing of cashewnuts, manufacture of wooden boxes and packing cases etc. in the case of Kilikollur. Of the above towns, Azhikode, Kundara and Kilikollur attained their urban status only in 1961.

Source: Census of India, 1961, Kerala—Part II B (i)—General Economic Tables



TOWNS WITH POPULATION BELOW 20,000 ACCORDING TO THEIR PREDOMINANT FUNCTIONAL CHARACTER, 1961

Purpose

The map shows the predominant functional character of towns in the State with population below 20,000 in 1961.

Method

The procedure adopted for assigning a town to a particular functional type is the same as that for Map 42.

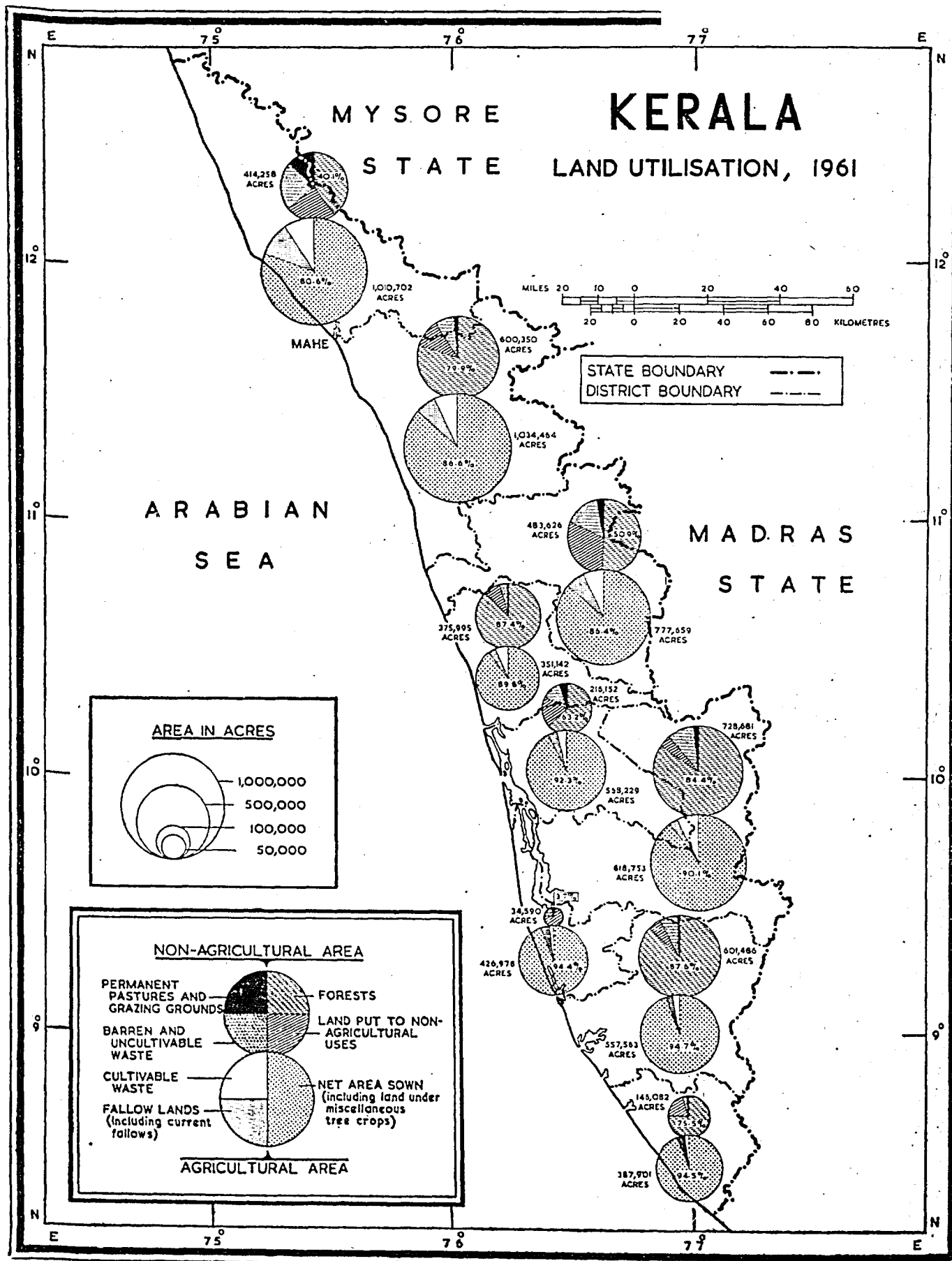
The towns with population below 20,000 are plotted by uniform sized circles and the functional character marked in the circles by five different shades corresponding to the five characters. If a town has more than one predominant functional character the shades for all these characters are marked inside the circle. The towns which attained their urban status only in 1961 are differentiated by an outer broken circle. The railways and important roads are also shown in the map.

Salient Features

There are 46 towns in the State (excluding the components of town-groups) with population below 20,000 in 1961. Eight of these towns have predominant functional character as primary activity, 8 towns industrial and 7 towns service. There are 20 towns with two predominant functional characters out of which 11 towns are service-cum-primary activity, 7 service-cum-industrial, 1 service-cum-commercial and 1 service-cum-transport. In the case of 3 towns there are three predominant functional characters viz., industrial, service and primary activity. Out of the 8 industrial towns 7 towns viz., Trichambaram, Pappinisseri, Chirakkal, Puzhathi (Chirakkal), Chalad, Puzhathi and Chovva are in Cannanore district, the major industry being handloom weaving, and one town viz., Kadinamkulam in Trivandrum district the major industry of which is manufacture of coir and coir products. 22 out of the total 46 towns, attained their urban status only in 1961.

Source: Census of India, 1961, Kerala—Part II B (i)—General Economic Tables

IV ECONOMIC ASPECTS



LAND UTILIZATION, 1961

Purpose

The map shows the extent of agricultural and non-agricultural area put to various uses in each district in 1961.

Method

The total land according to village records in each district is divided into non-agricultural and agricultural areas. The non-agricultural area is classified into (a) forests, (b) land put to non-agricultural use, (c) barren and uncultivable waste and (d) permanent pastures and grazing grounds, and the agricultural area into (i) cultivable waste, (ii) fallow lands (including current fallows) and (iii) lands under cultivation including miscellaneous tree crops (net area sown). Two circles are drawn in each district one below the other, the upper one proportional to the non-agricultural area and the lower one proportional to the agricultural area. In each circle sectors are marked according to the percentage share of the classes of land mentioned above to the total agricultural or non-agricultural area as the case may be and shaded by different hatchings. The data taken for this map relate to the agricultural year ending 30th June, 1961.

Salient Features

62.2 per cent of the total area of the State accord-

ing to village records is agricultural. The percentage of agricultural area is highest in the Alleppey district with 92.5 and lowest in the Quilon district with but 48.1.

In the State as a whole 72.5 per cent of the non-agricultural area is forests, 14.0 per cent land put to non-agricultural use, 10.4 per cent barren and uncultivable waste and 3.1 per cent permanent pastures and grazing grounds. The percentage of forest area is above 75 in the case of Quilon, Trichur, Kottayam, Kozhikode and Trivandrum districts. Quilon district has the highest percentage of forest area viz., 87.6 and Alleppey district the lowest viz., 3.7.

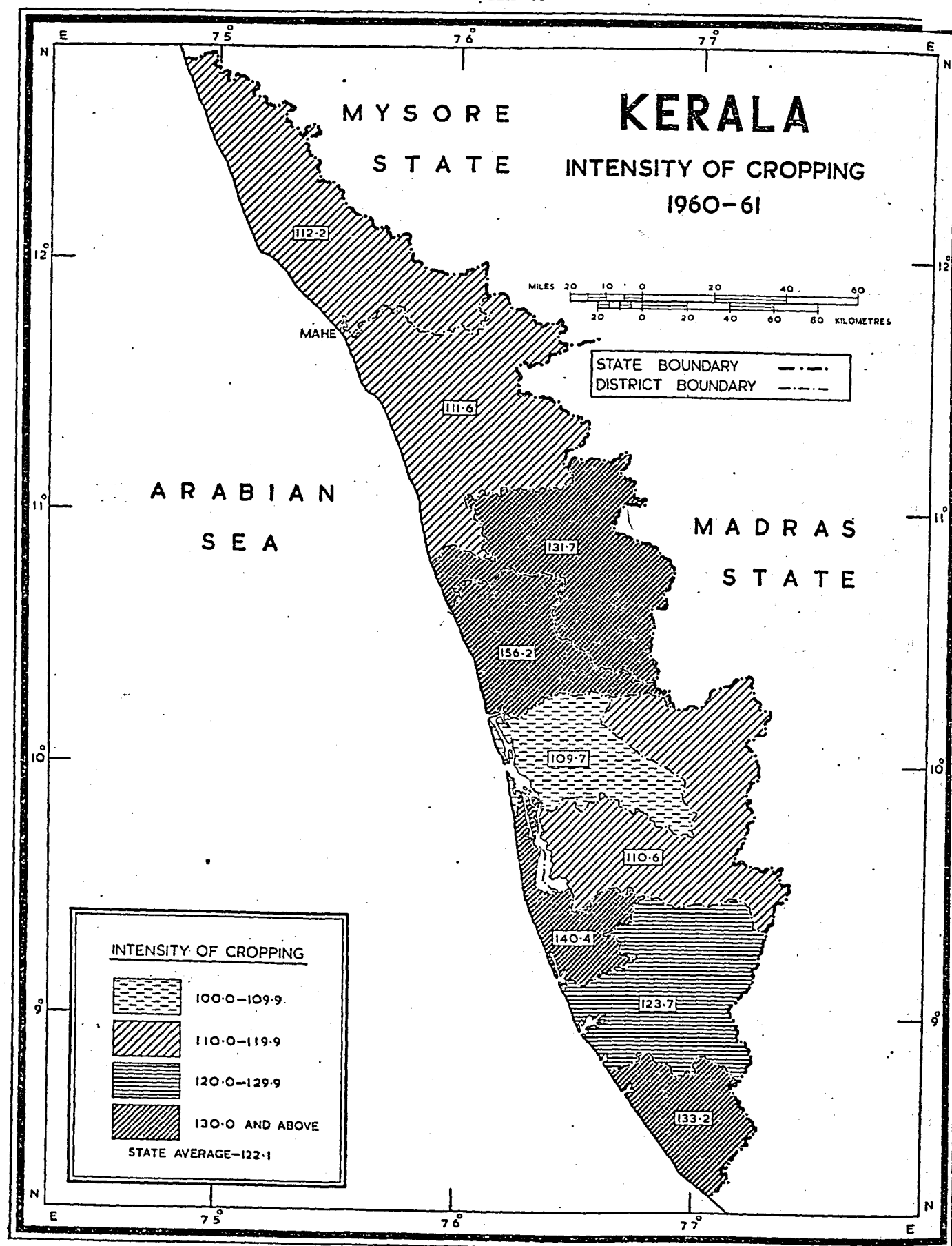
88.6 per cent of the agricultural area in the State comes under net sown area, 6.0 per cent under cultivable waste and 5.4 per cent under fallow lands. The net area sown is above 80 per cent of the agricultural area in the case of all the districts, the Quilon district having the highest percentage with 94.7. Cannanore district has the highest percentage of area in both fallow lands (including current fallows) and cultivable waste. Quilon and Kottayam districts have the lowest percentage of area under fallow lands (including current fallows) and Alleppey district the lowest percentage under cultivable waste.

Table

LAND UTILISATION IN THE STATE AND DISTRICTS DURING THE AGRICULTURAL YEAR
ENDING 30TH JUNE, 1961

State/District	Total non-agricultural area (in acres)	Percentage of non-agricultural area under				Total agricultural area (in acres)	Percentage of agricultural area under		
		Forests	Land put to non-agricultural use	Barren and uncultivable waste	Permanent pastures and grazing grounds		Cultivable waste	Fallow lands (including current fallows)	Lands under cultivation including miscellaneous tree crops (Net area sown)
1	2	3	4	5	6	7	8	9	10
Kerala State	36,01,220	72.5	14.0	10.4	3.1	59,33,391	6.0	5.4	88.6
Cannanore District	4,14,258	40.1	24.2	22.7	13.0	10,10,702	9.2	10.2	80.6
Kozhikode	6,00,350	79.9	10.8	7.9	1.4	10,34,464	7.2	6.2	86.6
Palghat	4,83,626	50.9	31.3	14.6	3.2	7,77,659	7.2	6.4	86.4
Trichur	3,75,995	87.4	8.4	3.3	0.9	3,51,142	6.3	3.9	89.8
Ernakulam	2,16,152	63.2	19.3	12.8	4.7	5,68,229	3.9	3.8	92.3
Kottayam	7,28,681	84.4	4.5	9.4	1.7	8,18,753	7.2	2.7	90.1
Alleppey	34,590	3.7	73.1	19.8	3.4	4,26,978	1.6	4.0	94.4
Quilon	6,01,486	87.6	4.9	6.8	0.7	5,57,563	2.6	2.7	94.7
Trivandrum	1,46,082	75.5	19.1	3.7	1.7	3,87,901	1.7	3.8	94.5

Source: Bureau of Economics and Statistics, Kerala



INTENSITY OF CROPPING, 1960-61

Purpose

The map shows the intensity of cropping or in other words the extent of utilisation of the area available for cultivation more than once in the districts.

Method

The index for intensity of cropping is obtained by dividing the gross area sown by the net area sown multiplied by 100. The indices of intensity by districts are arranged into four categories and the districts are shaded according to the grouping by different shades from deep to light corresponding to high to low value.

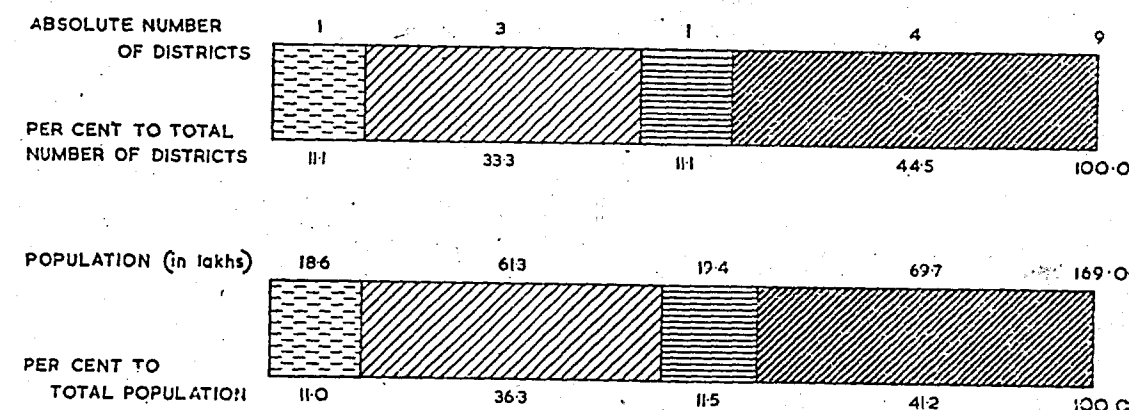
Salient Features

The intensity of cropping is below that of the State (122.1) in the case of four districts viz., Cannanore, Kozhikode, Ernakulam and Kottayam. It is lowest in the case of Ernakulam district. Palghat, Trichur, Alleppey and Trivandrum districts have the intensity above 130.0. Trichur district has the highest intensity of cropping in the State.

Table

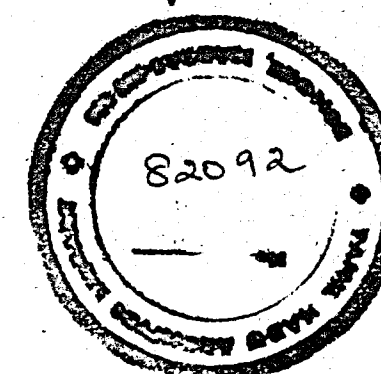
INTENSITY OF CROPPING, 1960-61

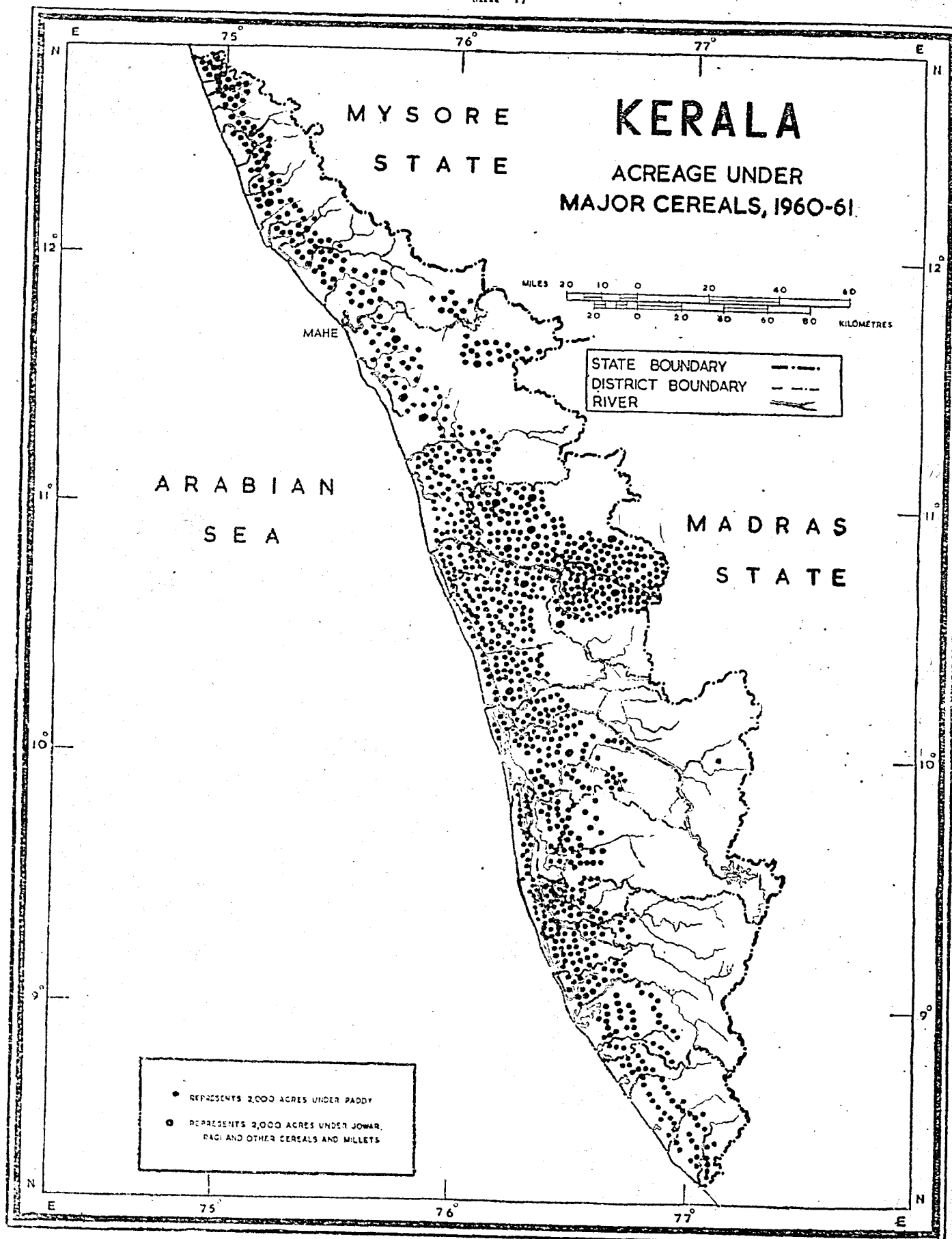
Rank	State/District	Intensity of cropping, 1960-61 (Gross area sown Net area sown × 100)
1	Kerala State	122.1
1	Trichur District	156.2
2	Alleppey	140.4
3	Trivandrum	133.2
4	Palghat	131.7
5	Quilon	123.7
6	Cannanore	112.2
7	Kozhikode	111.6
3	Kottayam	110.6
9	Ernakulam	109.7



Source: Bureau of Economics and Statistics, Kerala

21/11/61
NGI. 7-9





ACREAGE UNDER MAJOR CEREALS, 1960-61

Purpose

The map shows the distribution of cropped area under paddy, and 'other cereals and millets' in the State for the agricultural year ending 30th June, 1961.

Method

The acreage under paddy and other cereals and millets is shown by dots, coloured dots for paddy and black dots for jowar, ragi and other cereals and millets. The areas of cultivation of these crops shown in the map are only approximate. The crops coming under 'other cereals and millets' are jowar, ragi, chama, thina etc.

Salient Features

Rice is the staple diet of the people of the State and paddy the main cereal cultivated. The cultivation of paddy is fairly widespread in the lowland and midland regions, because of the comparatively better nature of the soil and irrigation facilities. There is concentration of paddy cultivation in the Alleppey and Palghat districts. The cultivation of this crop in the highlands is only to a negligible extent. The total acreage under paddy in the State during 1960-61 is 1,924,727 acres. Palghat district has the highest acreage under paddy and Trivandrum district the lowest.

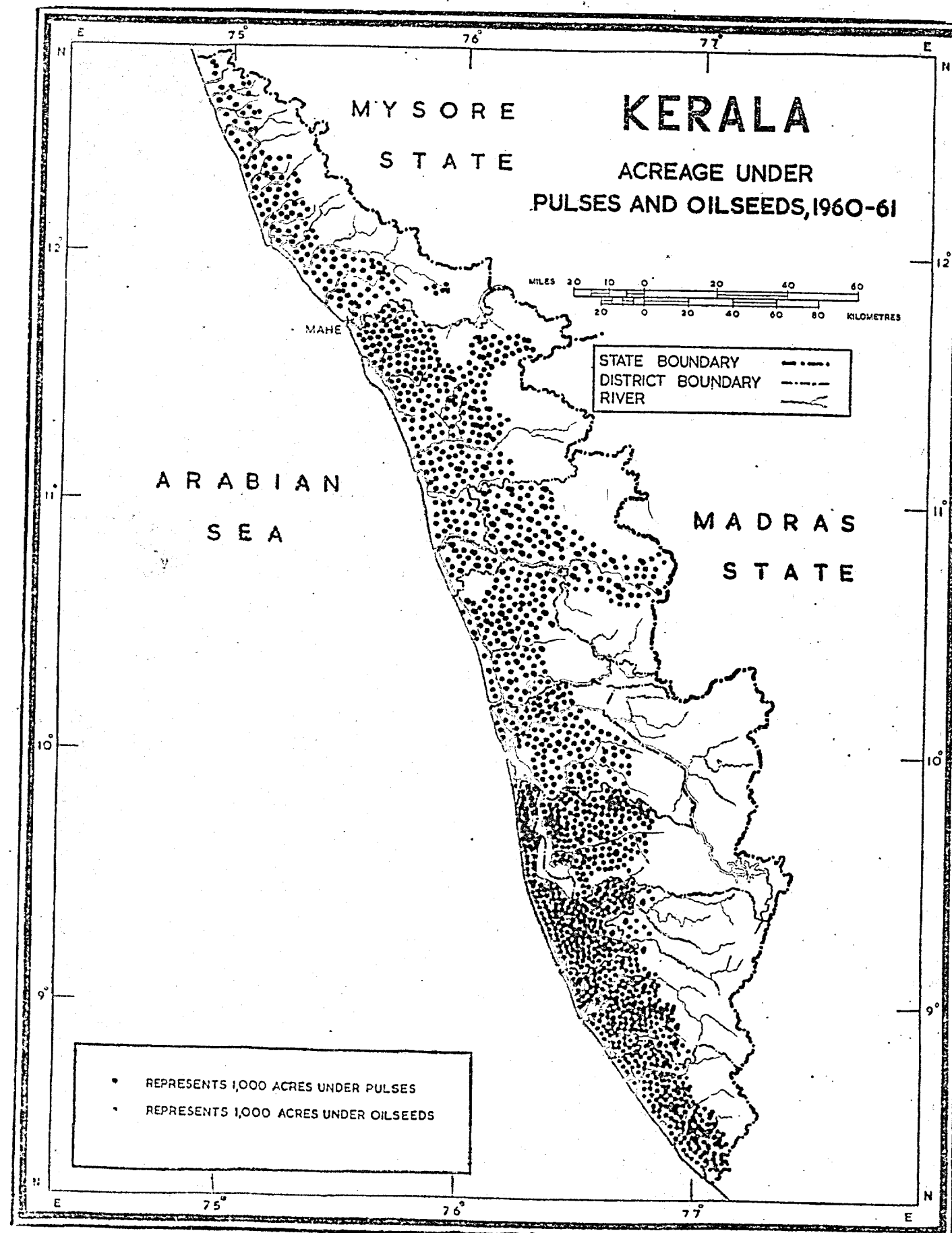
Source: Bureau of Economics and Statistics, Kerala

The total area under other cereals and millets is only 31,855 acres during 1960-61. Ragi is the main crop cultivated under these items and has a total acreage of 13,770. Kozhikode district has the highest acreage under ragi cultivation.

Table

AREA UNDER PADDY AND OTHER CEREALS AND MILLETS IN THE STATE AND DISTRICTS DURING THE AGRICULTURAL YEAR, 1960-61

State/District 1	Area (acres)	
	Paddy 2	Other cereals and millets 3
Kerala State	1,924,727	31,855
Cannanore District	236,470	2,521
Kozhikode "	267,152	7,069
Palghat "	474,699	15,813
Trichur "	252,529	3,310
Ernakulam "	192,476	1,892
Kottayam "	98,753	115
Alleppey "	196,171	103
Quilon "	114,020	977
Trivandrum "	92,457	55



ACREAGE UNDER PULSES AND OILSEEDS, 1960-61

Purpose

The map shows the distribution of area under pulses and oilseeds in the State during the agricultural year ending 30th June, 1961.

Method

The distribution of area under pulses and oilseeds is shown by dots, black dots for pulses and coloured dots for oilseeds. Pulses include tur, black gram, green gram, horse gram, peas, beans etc., and oilseeds include coconut, groundnut, castor, sesamum, rape, mustard, linseed, and other oilseeds. The location of these crops shown in the map is only approximate.

Salient Features

In Kerala there are 109,023 acres under pulses and 1,331,374 acres under oilseeds cultivation. Palghat district has the highest acreage under pulses and Kottayam district the lowest.

Among oilseeds coconut is the most important oilseed grown in the State. The cultivation of this is spread throughout the entire length and breadth of the State except in certain areas of the highlands. Kozhikode district has the maximum acreage under coconuts

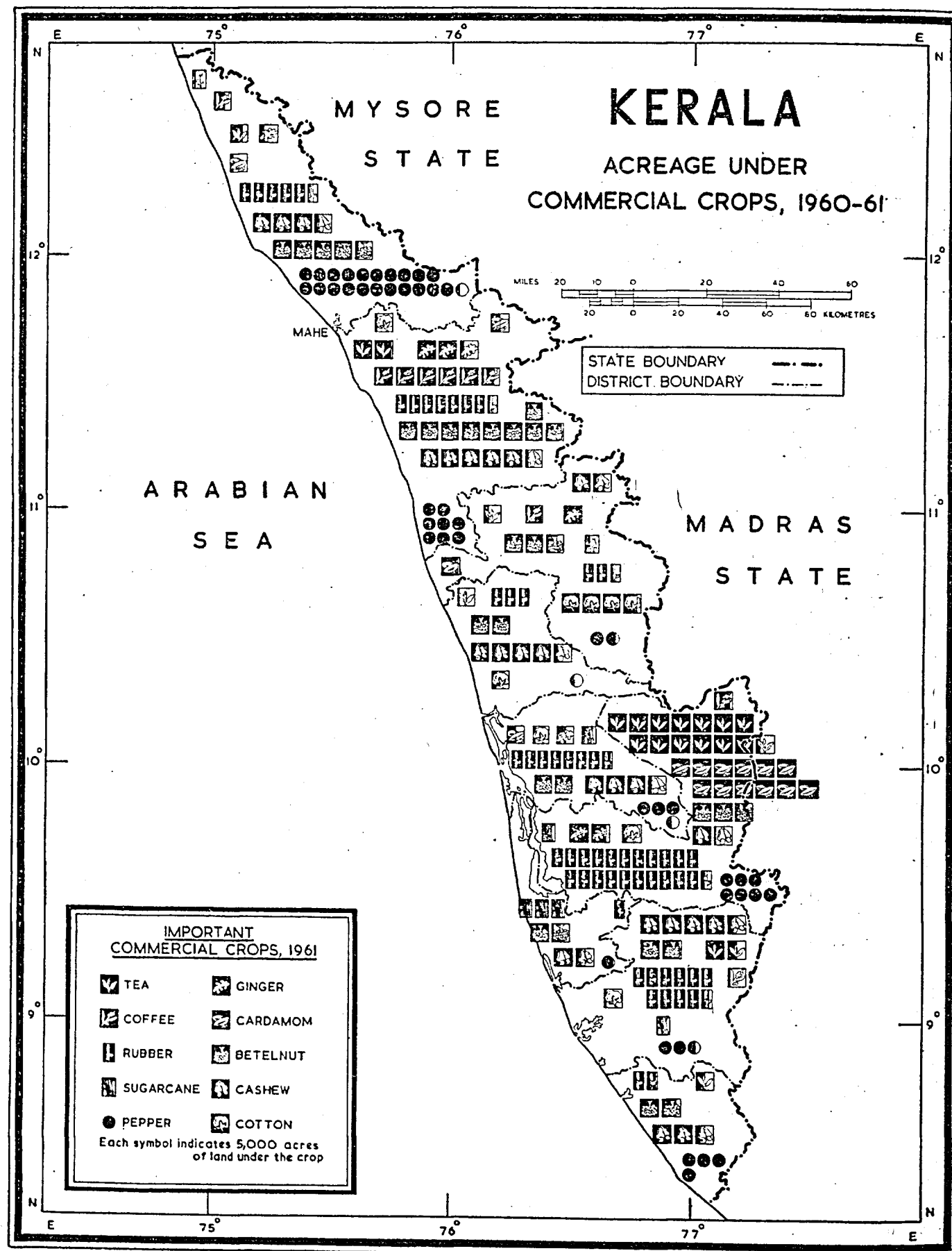
and Palghat district the minimum. Other important oilseeds of the State are groundnut and sesamum.

Table

AREA UNDER PULSES AND OILSEEDS IN THE STATE AND DISTRICTS DURING THE AGRICULTURAL YEAR, 1960-61

State/District 1	Area (acres)	
	Pulses 2	Oilseeds 3
Kerala State	1,09,023	1,331,374
Cannanore District	7,587	120,983
Kozhikode "	13,893	247,005
Palghat "	32,465	88,784
Trichur "	22,149	94,041
Ernakulam "	5,030	116,965
Kottayam "	1,787	158,632
Alleppey "	2,710	198,046
Quilon "	16,824	167,812
Trivandrum "	6,578	139,106

Source : Bureau of Economics and Statistics, Kerala



ACREAGE UNDER COMMERCIAL CROPS, 1960-61

Purpose

The map shows the districtwise acreage under various commercial crops in the State during the agricultural year 1960-61.

Method

The acreage under the various commercial crops, viz., tea, coffee, rubber, sugarcane, pepper, ginger, cardamom, betelnut, cashew and cotton is shown by the pictograph method using separate symbols, each symbol indicating 5,000 acres of land under the crop. Acreage below 500 is not shown in the map.

Salient Features

Cocoonut is the most important and widely cultivated commercial crop of the State. Since this crop has been covered under oilseeds and shown in map 48 viz., 'Acreage under pulses and oilseeds, 1960-61', it is not included in the present map. Rubber, pepper, cashew, betelnut, tea, cardamom, coffee, ginger, cotton and sugarcane are the other important commercial crops of the State. The largest acreage under pepper is in Cannanore district, under cashew, betelnut, coffee and ginger in Kozhikode district, under cotton in Palghat district, under rubber, tea and cardamom in Kottayam district and under sugarcane in Alleppey district.

Table

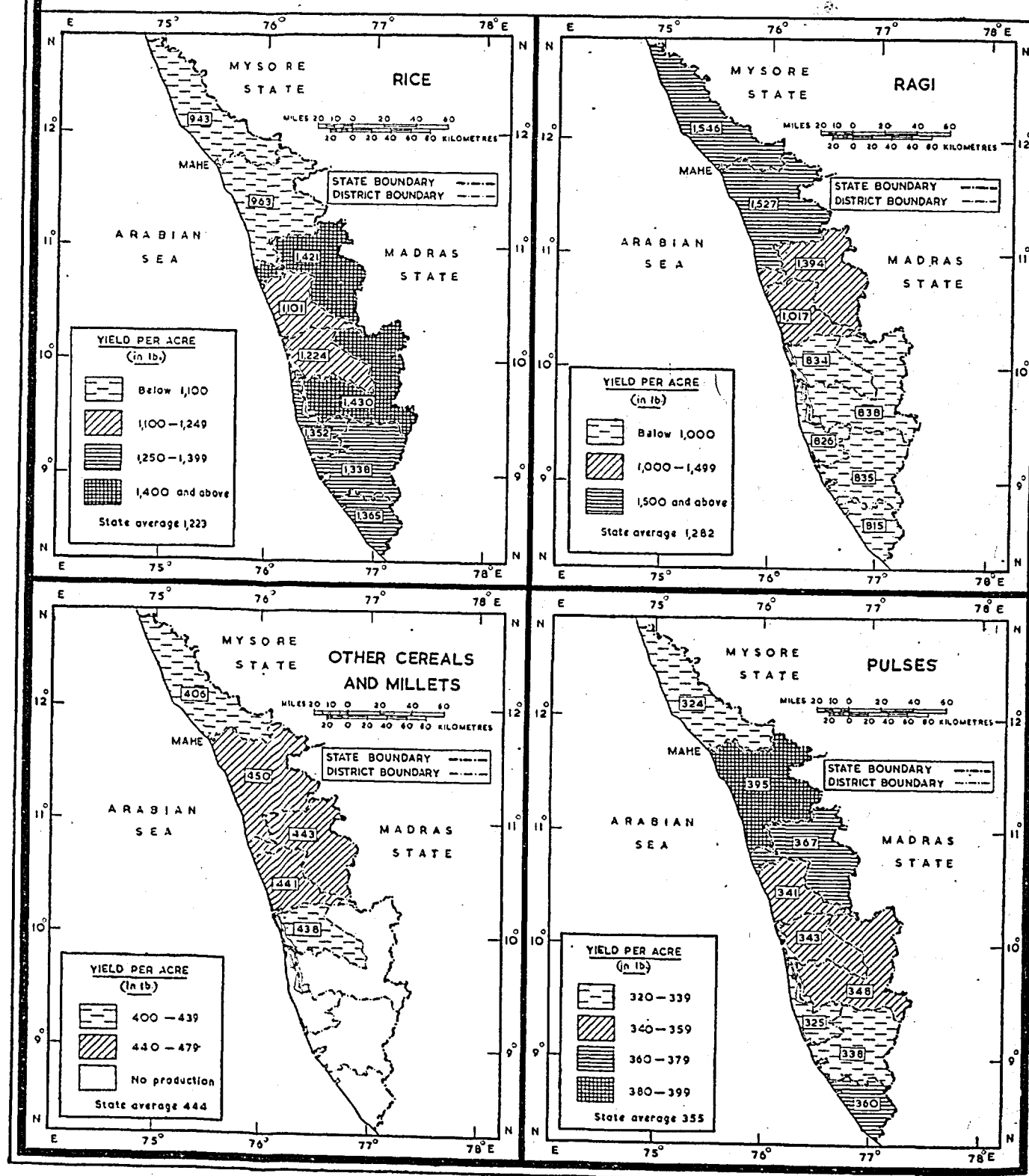
ACREAGE UNDER COMMERCIAL CROPS IN THE STATE AND DISTRICTS DURING THE AGRICULTURAL YEAR, 1960-61

State/District	Acreage under									
	Rubber	Pepper	Cashew	Betelnut	Tea	Cardamom	Coffee	Ginger	Cotton	Sugarcane
Kerala State	303,605	246,500	131,222	134,069	92,988	70,689	41,509	29,662	24,270	22,600
Cannanore District	25,653	106,755	16,245	20,992	3,685	956	3,262	1,156	410	860
Kozhikode "	36,885	39,695	25,702	44,553	9,801	2,633	28,449	10,875	600	70
Palghat "	12,514	8,455	8,031	13,015	1,459	4,422	4,814	4,773	18,980	1,390
Trichur "	15,469	1,710	21,949	10,233	991	..	..	199	1,150	..
Ernakulam "	39,262	16,875	16,081	10,064	333	2,574	170	2,883	700	1,110
Kottayam "	106,588	34,790	5,563	11,190	66,456	60,104	4,228	8,997	1,120	3,570
Alleppey "	4,844	4,330	7,294	5,665	..	..	..	150	290	13,500
Quilon "	53,211	13,045	22,024	9,486	7,472	..	586	379	740	2,100
Trivandrum "	9,179	20,845	11,333	8,871	2,791	..	..	250	280	..

Source: Bureau of Economics and Statistics, Kerala

KERALA

YIELD PER ACRE OF RICE, RAGI, OTHER CEREALS AND MILLETS, AND PULSES, 1960-61



YIELD PER ACRE OF RICE, RAGI, OTHER CEREALS AND MILLETS, AND PULSES, 1960-61

Purpose

The map shows the variations in the average yield per acre of rice, ragi, other cereals and millets, and pulses in the districts of the State in 1960-61.

Method

The average yield in pounds per acre of four varieties of crops viz., rice, ragi, other cereals and millets, and pulses is shown districtwise by choropleth method in four maps of the State set in one frame. The districtwise average yield of rice is classified into four ranges, of ragi into three ranges, of other cereals and millets into two ranges and of pulses into four ranges, and the maps are shaded accordingly. The average yield relates to the year 1960-61.

Salient Features

The yield per acre of rice in Kerala is 1,223 lb. In the districts the average yield per acre is highest in Kottayam district (1,430 lb.) and lowest in Cannanore district (943 lb.). In six districts the average yield is above that of the State and in the remaining three districts below that of the State.

The average yield of ragi in the State is 1,282 lb. per acre. The average yield is above that of the State in the case of three districts. Cannanore district has the highest average yield (1,546 lb. per acre) of ragi and Trivandrum district the lowest (815 lb. per acre).

'Other cereals and millets' include *chama*, *thina* etc. These crops are not cultivated in the districts of Kottayam, Alleppey, Quilon and Trivandrum. The average yield of these crops in the State is 444 lb. per

acre with Kozhikode district having the highest yield per acre (450 lb.) and the Cannanore district the lowest (406 lb.)

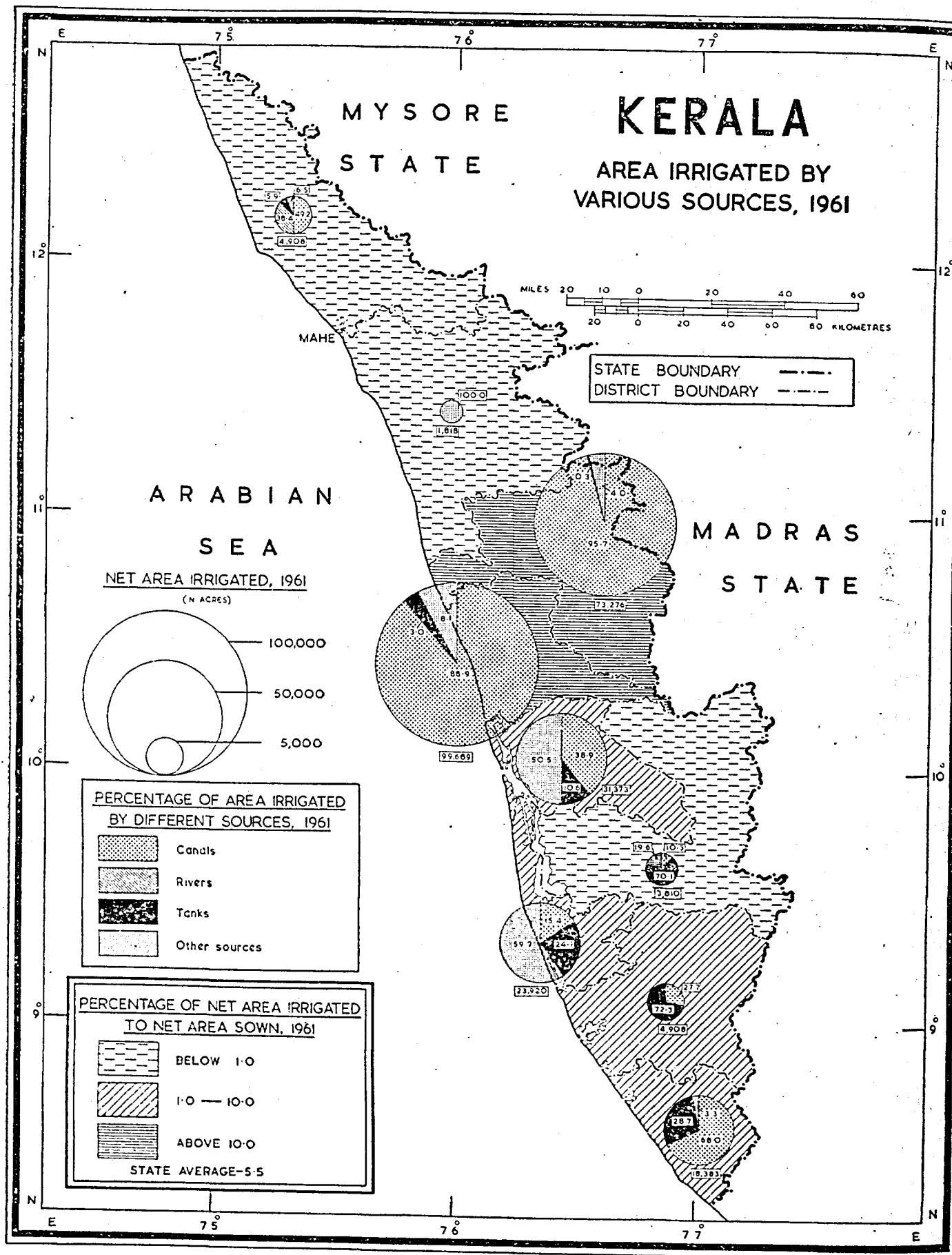
The average yield per acre of pulses in Kerala is 355 lb. The yield is highest in Kozhikode district (395 lb. per acre) and lowest in Cannanore district (324 lb. per acre). In addition to Kozhikode district two other districts viz., Palghat and Trivandrum also have the average yield per acre of pulses above that of the State.

Table

YIELD PER ACRE OF RICE, RAGI, OTHER CEREALS AND MILLETS, AND PULSES IN THE STATE AND DISTRICTS, 1960-61

State/District	Yield per acre in pounds			
	Rice	Ragi	Other cereals and millets	Pulses
1	2	3	4	5
Kerala State	1,223	1,282	444	355
Cannanore District	943	1,546	406	324
Kozhikode	963	1,527	450	395
Palghat	1,421	1,394	443	367
Trichur	1,101	1,017	441	341
Ernakulam	1,224	834	438	343
Kottayam	1,430	838	..	348
Alleppey	1,352	826	..	325
Quilon	1,338	835	..	338
Trivandrum	1,365	815	..	360

Source: Bureau of Economics and Statistics, Kerala



AREA IRRIGATED BY VARIOUS SOURCES, 1961

Purpose

The map shows the variation in the percentage of net area irrigated to net area sown and the percentage share of area irrigated by various sources of irrigation in each district of the State as at the end of March, 1961.

Method

The percentages of net area irrigated to net area sown by districts are grouped into three and the districts are shaded accordingly by different grades of hatches. In each district circles proportionate to the net area irrigated are given and the percentage share of area irrigated by different sources viz., canals, rivers, tanks and other sources marked by different shades in them.

Salient Features

The information on the net area irrigated by various sources of irrigation is obtained from the State Public Works Department. Since the various divisions attending to the irrigation works of the P. W. D. are not coterminous with the revenue districts, the data presented in the map by revenue districts are only approximate.

In Kerala the net area irrigated is 262,085 acres in 1961. This forms only 5.5 per cent of the State's net area sown. The percentage is higher than that of the State only in four districts viz., Palghat, Trichur, Ernakulam and Alleppey. The highest percentage of net area irrigated to net area sown is in Trichur district with 32.0 and the lowest in Kozhikode district with 0.2.

The main source of irrigation in Kerala is Canal which alone irrigates 73.0 per cent of the net area irrigated. Rivers and tanks irrigate 0.7 per cent and 9.3 per cent respectively of the net area irrigated. The remaining 17 per cent of the area is irrigated by 'other sources.'

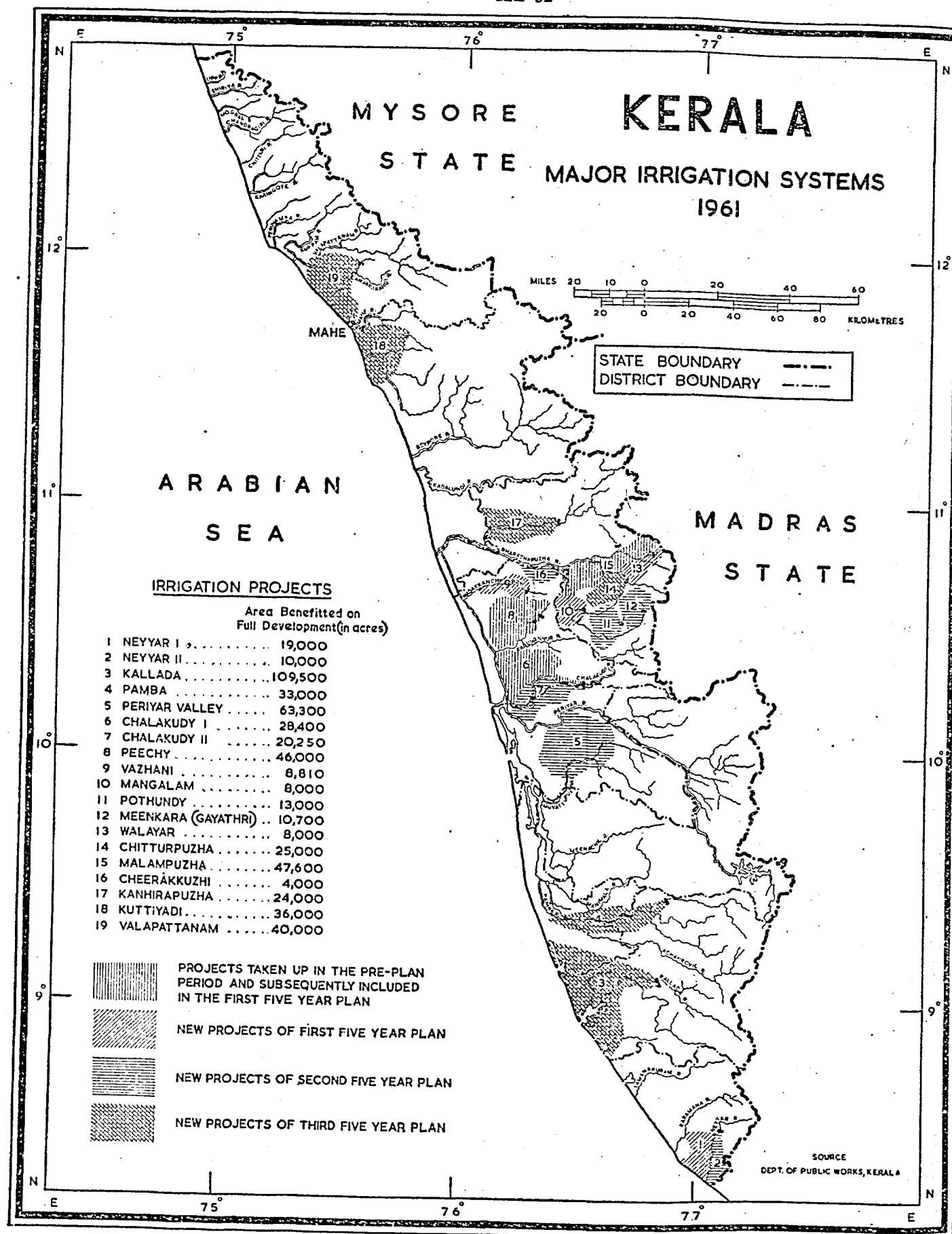
Canals are the main source of irrigation in Cannanore, Palghat, Trichur and Trivandrum districts, tanks in Kottayam and Quilon districts and 'other sources' in Kozhikode, Ernakulam and Alleppey districts.

Table

PERCENTAGE OF NET AREA IRRIGATED TO NET AREA SOWN AND THE PERCENTAGE SHARE OF AREA IRRIGATED BY VARIOUS SOURCES IN THE STATE AND DISTRICTS, 1961

State/District	Net area irrigated (acres)	Percentage share to net area irrigated by				Percentage of net area irrigated to net area sown
		Canals	Rivers	Tanks	Other sources	
1	2	3	4	5	6	7
Kerala State	262,085	73.0	0.7	9.3	17.0	5.5
Cannanore District	4,908	49.2	38.4	5.9	6.5	0.8
Kozhikode "	1,818	..	..	..	100.0	0.2
Palghat "	73,276	95.7	..	0.3	4.0	12.3
Trichur "	99,689	88.9	..	3.0	8.1	32.0
Ernakulam "	31,373	38.9	..	10.6	50.5	6.3
Kottayam "	3,810	10.3	..	70.1	19.6	0.5
Alleppey "	23,920	15.4	..	24.7	59.9	6.1
Quilon "	4,908	27.7	..	72.3	..	1.0
Trivandrum "	18,383	68.0	..	28.7	3.3	5.0

Source: 1. Department of Public Works, Kerala
2. Bureau of Economics and Statistics, Kerala



MAJOR IRRIGATION SYSTEMS, 1961

Purpose

The map shows the locations of the major irrigation projects, existing as well as under construction, in the State and the area irrigated by them.

Method

The projects are classified into four viz., (i) Projects taken up in the pre-Plan period and subsequently included in the First Five Year Plan (ii) new projects of the First Five Year Plan (iii) new projects of the Second Five Year Plan, and (iv) new projects of the Third Five Year Plan. The areas benefited by them are shaded by four different shades according to this classification.

Salient Features

There are 19 major irrigation projects in the State, either existing or under various stages of execution. These projects on full development are estimated to irrigate an area of about 554,560 acres in the State.

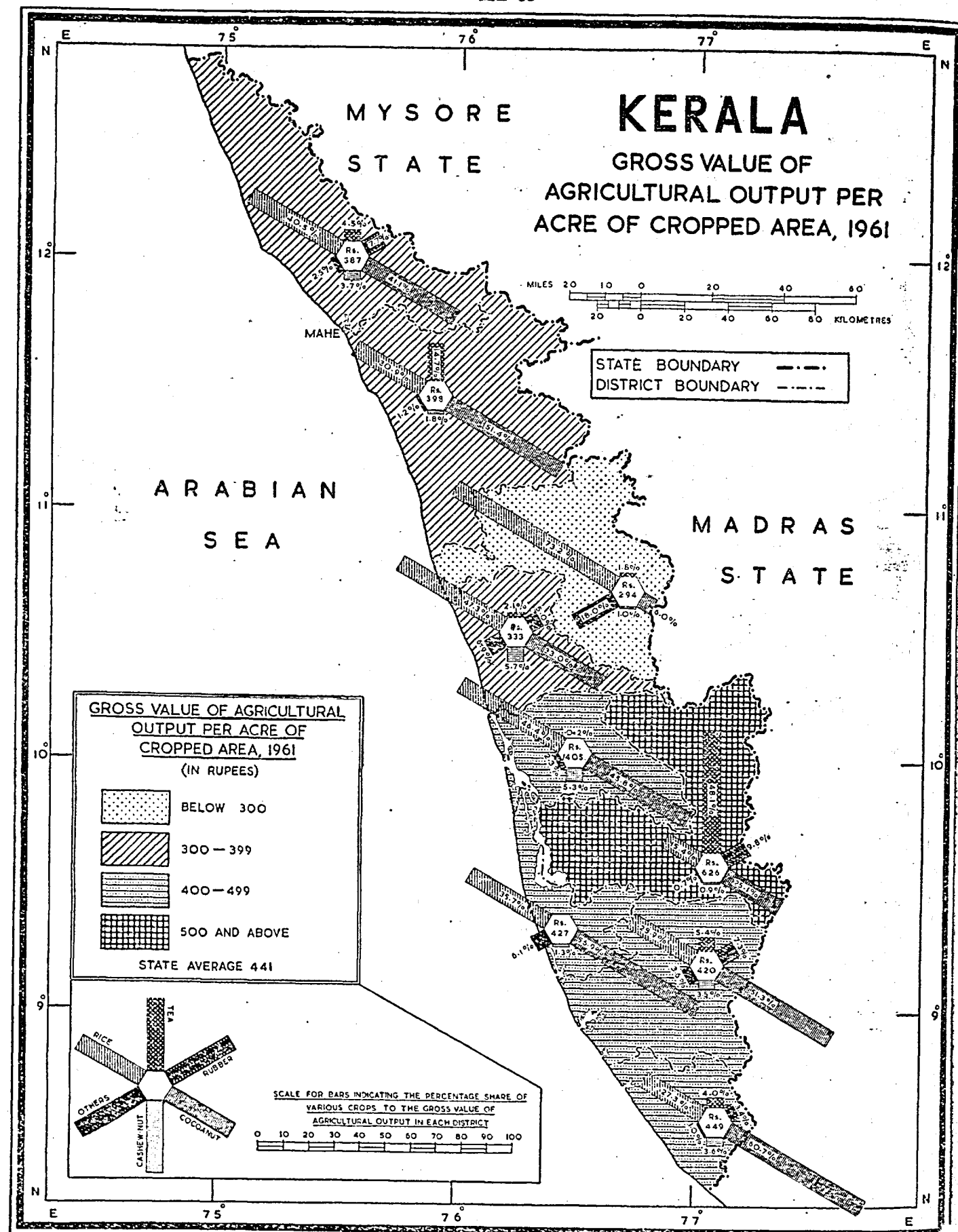
The Malampuzha project in Palghat district and the Peechy and Chalakudy I projects in Trichur district were taken up in the pre-Plan period but were subse-

quently included in the First Five Year Plan. The new projects started in the First Five Year Plan are Walayar and Mangalam projects in Palghat district, Vazhani project in Trichur district and Neyyar I project in Trivandrum district. All these projects have been commissioned and they irrigate an aggregate area of about 165,810 acres.

Six new projects viz., Meenkara (Gayathri), Pothundy and Cheerakuzhy in Palghat district, Chalakudy II in Trichur district, Periyar Valley in Ernakulam district and Neyyar II in Trivandrum district were taken up during the Second Five Year Plan and are now under various stages of execution. On full development these projects are estimated to irrigate a total area of 121,250 acres approximately.

The new projects of the Third Five Year Plan are Valapattanam in Cannanore district, Kuttiyadi in Kozhikode district, Kanhirapuzha and Chitturpuzha in Palghat district and Pamba and Kallada in Quilon district. It is estimated that these projects on final completion will serve the irrigation purposes of about 267,500 acres.

Source: The Department of Public Works, Kerala



GROSS VALUE OF AGRICULTURAL OUTPUT PER ACRE OF CROPPED AREA, 1961

Purpose

The map shows the regional variation in the productivity of agricultural land in terms of gross value of agricultural output per acre of cropped area.

Method

Gross value of agricultural output per acre of cropped area for each district of the State is calculated. A hexagon is drawn in each district inside which the gross value of agricultural output per acre of cropped area for that district is indicated. On the sides of the hexagon rectangles proportional to the percentage share of each crop to the gross value is drawn for the different crops. The districts are arranged into four groups based on gross value of agricultural output per acre of cropped area and hatched by deep to light shades corresponding to high to low value of gross agricultural output per acre of cropped area.

Salient Features

Gross value of agricultural output per acre of cropped area for Kerala works out to Rs. 441. Among the district this value varies from Rs. 294 in the case of Palghat to Rs. 626 in the case of Kottayam.

An outstanding feature indicated by the data presented in the map is that the value of agricultural output in the State as a whole is mainly contributed by coconut which is no doubt the predominant crop of the State. The largest share to the gross value of agricultural output is contributed by coconut in the districts of Cannanore, Kozhikode, Alleppey, Quilon and Trivandrum. In the districts of Palghat, Trichur and Ernakulam which form a contiguous region in the central portion of the State the main item of cultivation contributing towards the gross value is rice which is the staple diet of the people of Kerala. In Kottayam district which stands as an isolated region the main item of agricultural produce contributing to the gross value of agricultural output is tea.

Table

GROSS VALUE OF AGRICULTURAL OUTPUT PER ACRE OF CROPPED AREA, 1961

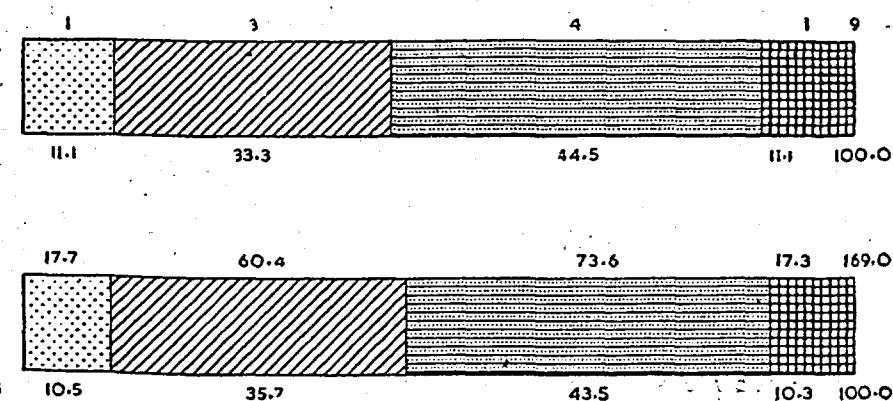
Rank in value per acre	State/District	Value per acre (in Rs.)	Percentage share of												Total
			Rice	Tea	Rubber	Cocoa-nuts	Cashew-nuts	Millets	Pulses	Oil seeds	Tobacco	Sugar-cane	Cotton	Coffee	
1	Kerala State	441	36.7	12.6	4.1	39.2	2.6	0.3	0.2	1.4	0.2	1.2	0.1	1.4	100
1	Kottayam District	626	15.4	48.1	9.8	25.1	0.9	...	...	...	...	0.7	...	...	100
2	Trivandrum	449	27.3	4.0	3.4	60.7	3.6	0.3	0.1	0.4	...	0.1	0.1	...	100
3	Alleppey	427	35.7	...	...	56.9	1.3	0.2	...	0.8	...	5.1	...	...	100
4	Quilon	420	28.9	5.4	7.3	51.3	3.5	...	0.2	1.1	...	2.2	0.1	...	100
5	Ernakulam	405	46.4	0.2	...	45.8	5.3	...	...	0.2	...	0.5	...	1.6	100
6	Kozhikode	398	30.9	14.7	...	51.4	1.8	0.5	0.3	0.1	0.1	0.2	...	...	100
7	Cannanore	387	40.5	4.5	7.7	41.1	3.7	0.4	...	0.1	1.6	0.4	...	...	100
8	Trichur	333	47.3	2.1	5.0	33.0	5.7	0.3	0.2	5.7	...	0.6	0.1	...	100
9	Palghat	294	73.2	1.8	...	6.0	1.0	1.1	0.7	4.6	...	0.5	0.6	10.5	100

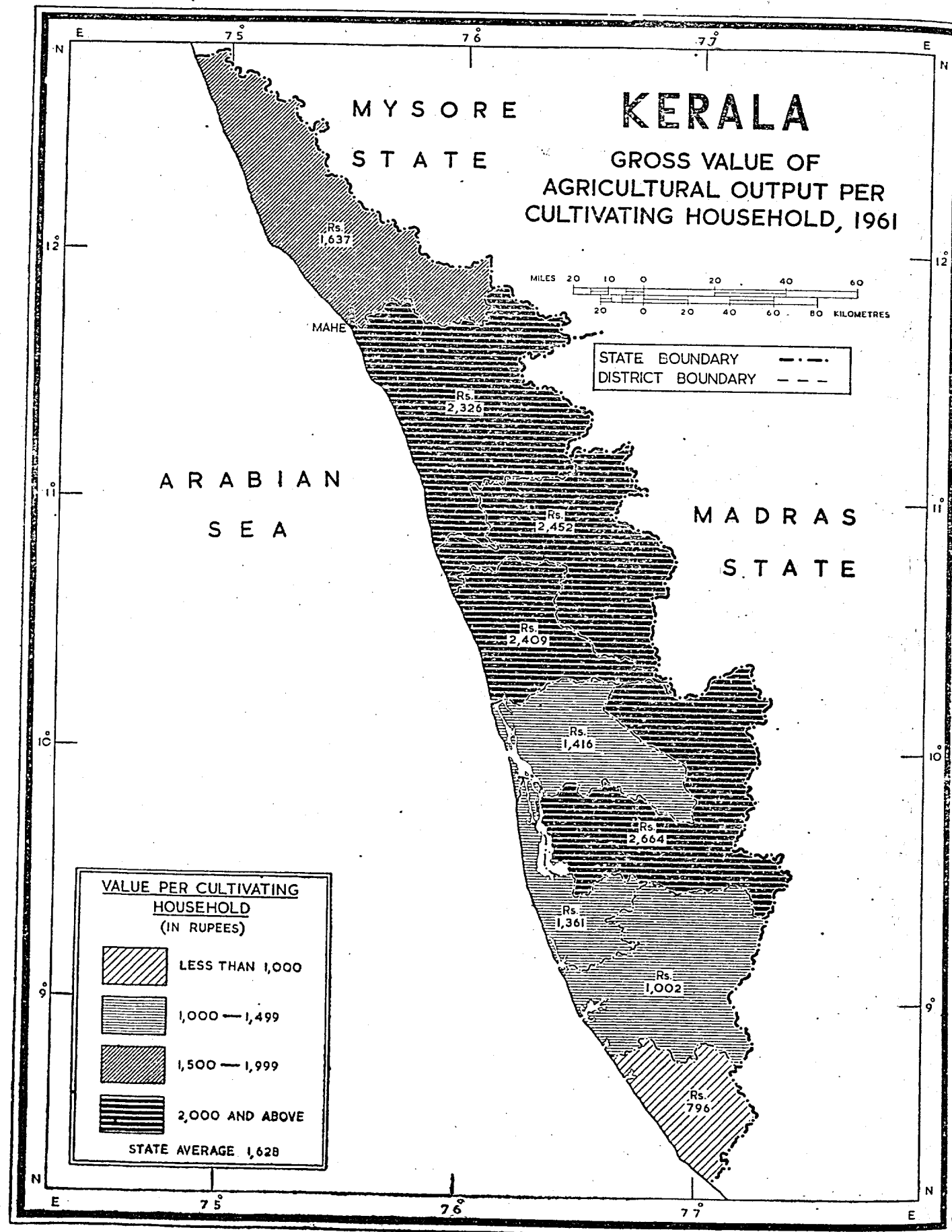
ABSOLUTE NUMBER OF DISTRICTS

PER CENT TO TOTAL NUMBER OF DISTRICTS

POPULATION (in lakhs)

PER CENT TO TOTAL POPULATION





GROSS VALUE OF AGRICULTURAL OUTPUT PER CULTIVATING HOUSEHOLD, 1961

Purpose

The map shows the regional variation in the gross value of agricultural output per cultivating household in the State.

Method

The districts are arranged into four groups viz., less than Rs. 1,000, Rs. 1,000-1,499, Rs. 1,500-1,999 and Rs. 2,000 and above based on gross value of agricultural output per cultivating household and hatched by deep to light shades corresponding to high to low values.

Salient Features

Gross value of agricultural output per cultivating household for the State as a whole works out to Rs. 1,628. Trivandrum is the only district falling in the lowest group viz., less than Rs. 1,000, the gross value of agricultural output per cultivating household being Rs. 796. Districts falling in the immediate higher group viz., Rs. 1,000-1,499 are Ernakulam, Alleppey and Quilon. Cannanore with Rs. 1,637 is the only district falling in the group Rs. 1,500-1,999.

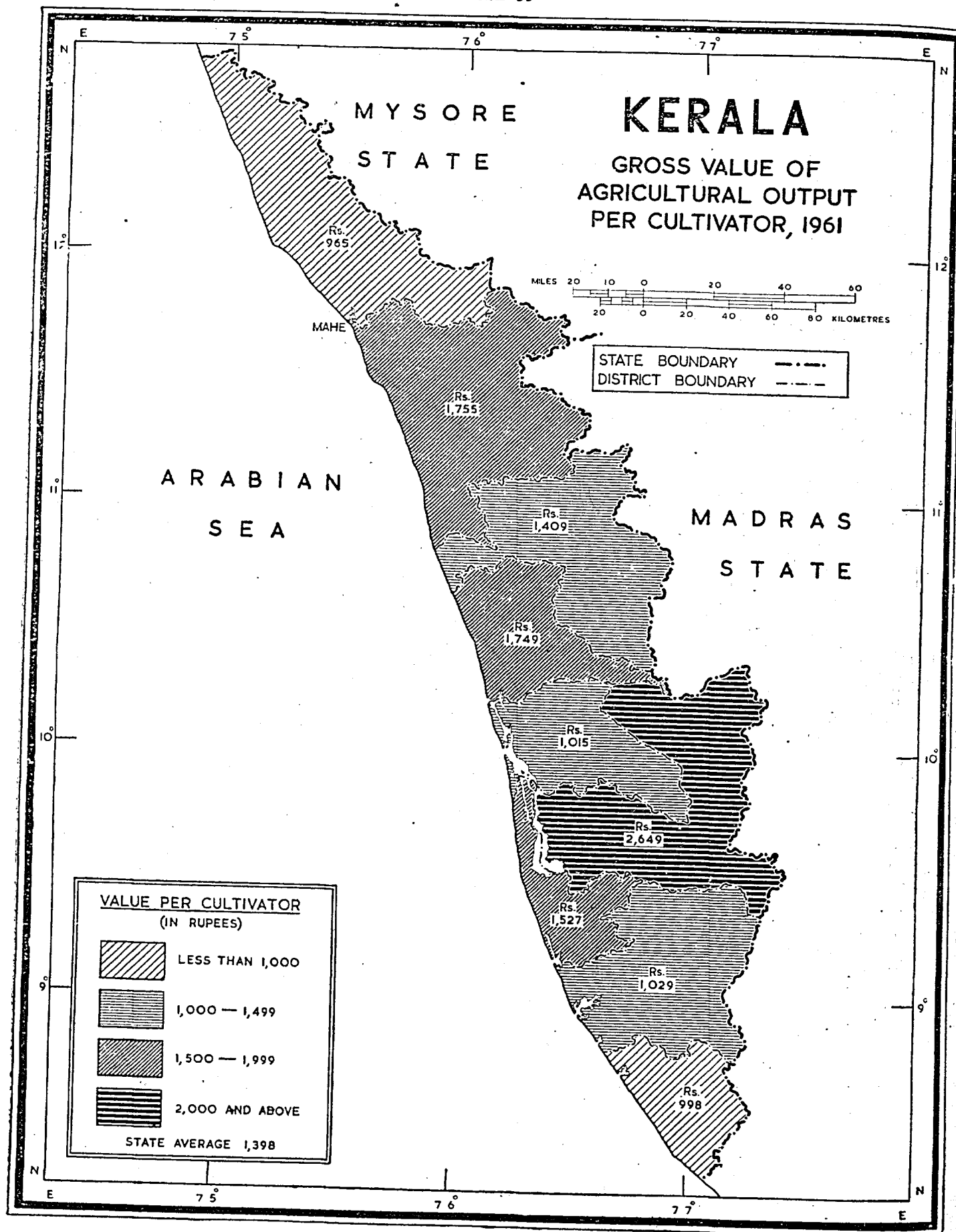
The districts falling in the highest group viz., Rs. 2,000 and above are Kozhikode, Palghat, Trichur and Kottayam.

Table

GROSS VALUE OF AGRICULTURAL OUTPUT PER CULTIVATING HOUSEHOLD, 1961

Rank	State/District	Value per cultivating household (in Rs.)
1	2	3
	Kerala State	1,628
1	Kottayam District	2,664
2	Palghat	2,452
3	Trichur	2,409
4	Kozhikode	2,326
5	Cannanore	1,637
6	Ernakulam	1,416
7	Alleppey	1,361
8	Quilon	1,002
9	Trivandrum	796

Source: (i) Agricultural situation in India by Director of Economics and Statistics, Ministry of Food and Agriculture
(ii) Census of India, 1961, Kerala—Part III Household Economic Tables

**GROSS VALUE OF AGRICULTURAL OUTPUT PER CULTIVATOR, 1961****Purpose**

This map shows the regional variation in the gross value of agricultural output per cultivator in the State.

Method

The districts of the State are arranged into four groups viz., less than Rs. 1,000, Rs. 1,000-1,499, Rs. 1,500-1,999 and Rs. 2,000 and above based on gross value of agricultural output per head of cultivator and hatched by deep to light shades corresponding to high to low values.

Salient Features

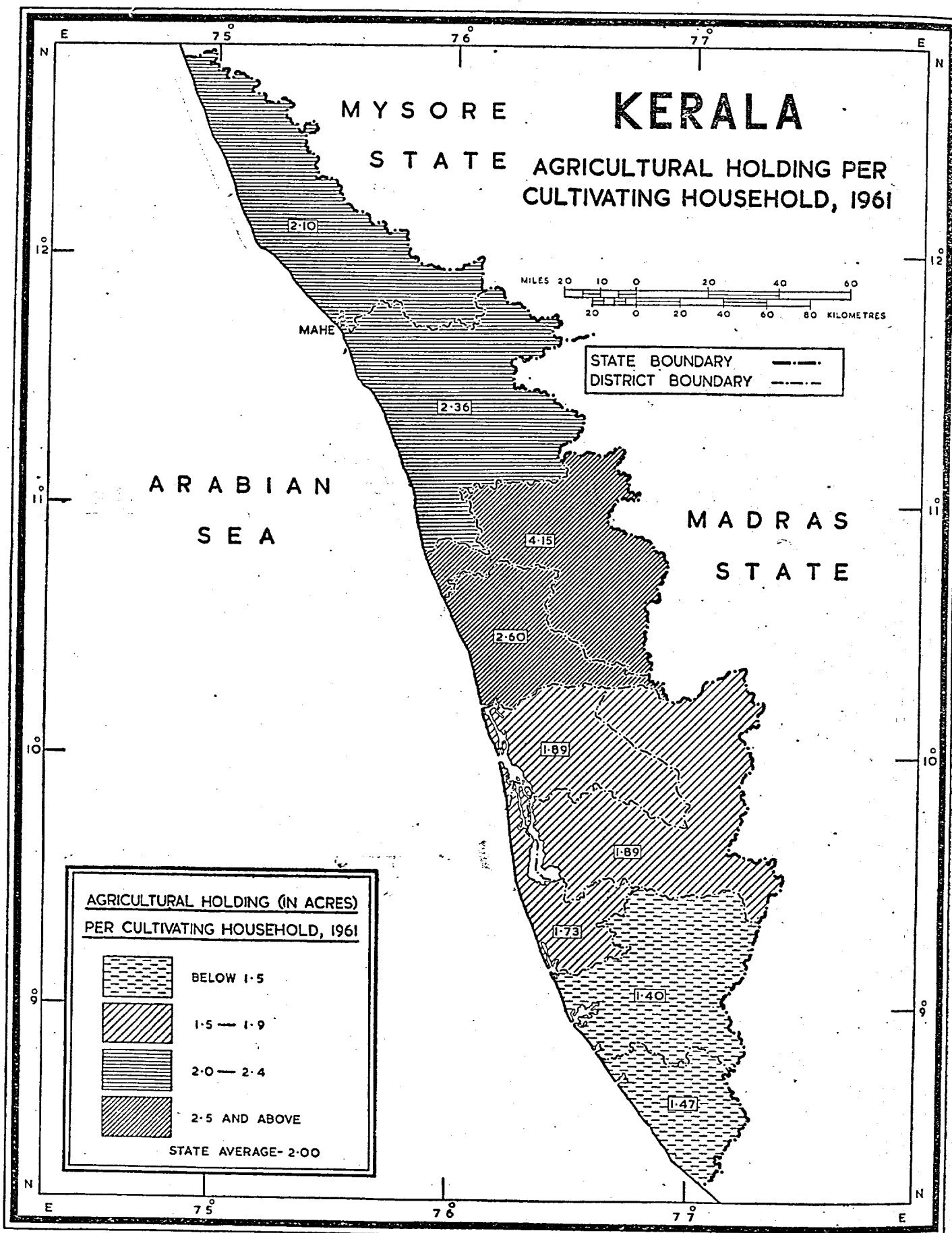
Gross value of agricultural output per cultivator for Kerala works out to Rs. 1,398. Cannanore and Trivandrum are the two districts falling in the lowest group viz., less than Rs. 1,000. Palghat, Ernakulam and Quilon come in the next higher group viz., Rs. 1,000-1,499. Kozhikode, Trichur and Alleppey fall in the next higher group viz., Rs. 1,500-1,999.

Kottayam is the only district which falls in the highest group Rs. 2,000 and above.

Table**GROSS VALUE OF AGRICULTURAL OUTPUT PER CULTIVATOR, 1961**

Rank	State/District	Value per cultivator (in Rs.)
1	2	3
	Kerala State	1,398
1	Kottayam District	2,649
2	Kozhikode „	1,755
3	Trichur „	1,749
4	Alleppey „	1,527
5	Palghat „	1,409
6	Quilon „	1,029
7	Ernakulam „	1,015
8	Trivandrum „	998
9	Cannanore „	965

Source: (i) Agricultural situation in India by Director of Economics and Statistics, Ministry of Food and Agriculture
(ii) Census of India, 1961, Kerala—Part II A. General Population Tables



AGRICULTURAL HOLDING PER CULTIVATING HOUSEHOLD, 1961

Purpose

The map shows the extent of agricultural holding per cultivating household in the districts of the State in 1961.

Method

The agricultural holding (in acres) per cultivating household in the districts is grouped into four categories and the districts are shaded according to this grouping from deep to light corresponding to high to low value. The agricultural holding and cultivating households have been compiled from a 20 per cent sample of household schedules.

Salient Features

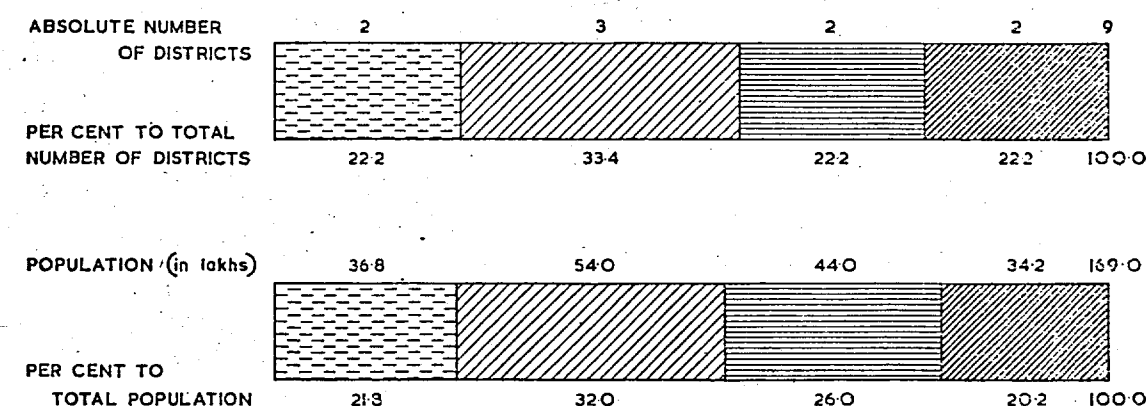
The average area under cultivation by a household in the State is 2.0 acres. In the case of Quilon and Trivandrum districts this is below 1.50 acres. Trichur and Palghat districts are the two regions having comparatively larger agricultural holdings per cultivating household falling in the range of 2.5 acres and above. Palghat district has the highest agricultural holding

(4.15 acres) per cultivating household and Quilon district the lowest (1.40 acres.)

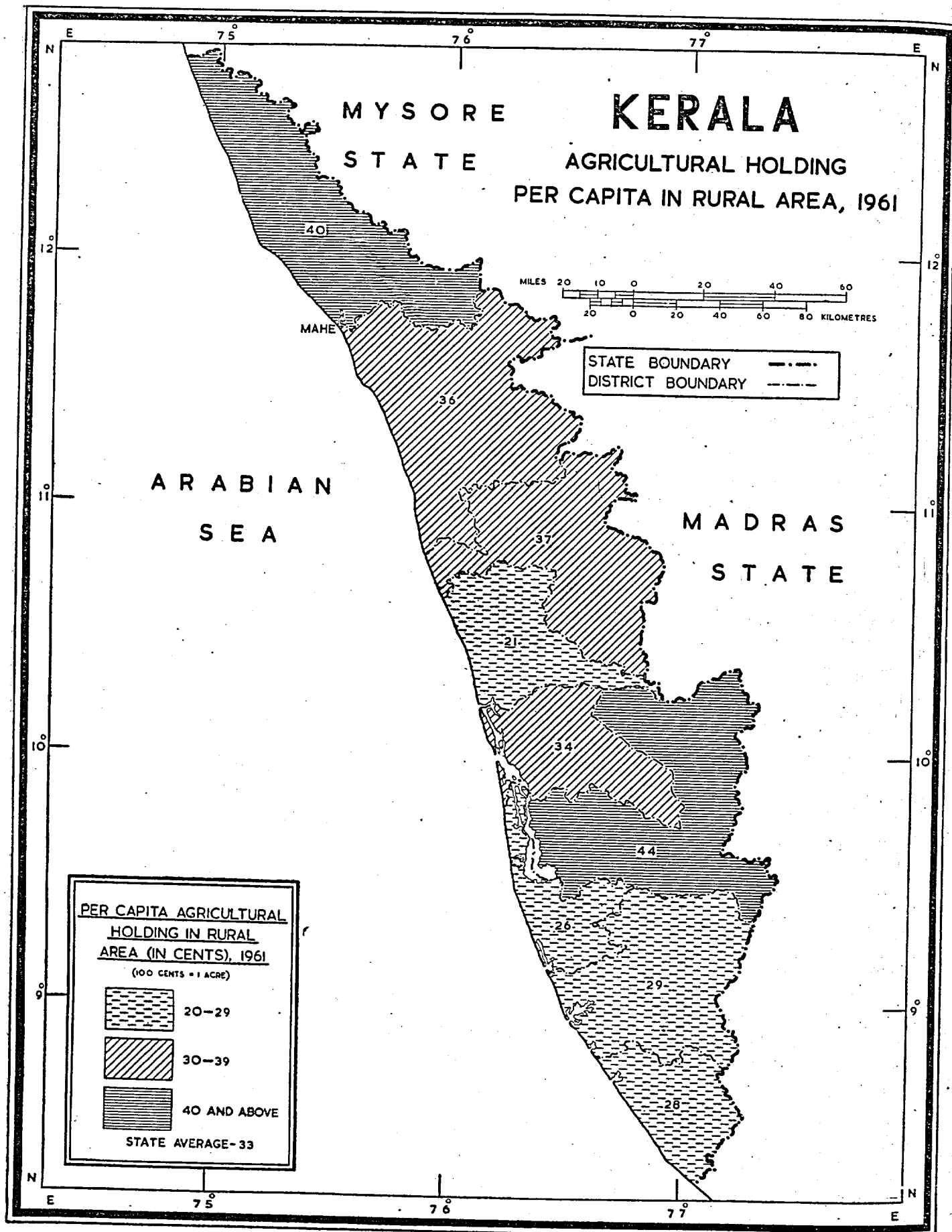
Table

AGRICULTURAL HOLDING PER CULTIVATING HOUSEHOLD IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Agricultural holding (in acres) per cultivating household
1	Kerala State	2.00
1	Palghat District	4.15
2	Trichur "	2.60
3	Kozhikode "	2.36
4	Cannanore "	2.10
5	Ernakulam "	1.89
6	Kottayam "	1.89
7	Alleppey "	1.73
8	Trivandrum "	1.47
9	Quilon "	1.40



Source: Census of India, 1961, Kerala—Part III Household Economic Tables



MAP 57 AGRICULTURAL HOLDING PER CAPITA IN RURAL AREA, 1961

Purpose

The map shows the per capita agricultural holding in the rural areas of the districts of the State in 1961.

Method

The 'net area sown' according to the Bureau of Economics and Statistics, Kerala is taken as the total 'agricultural holding'. This includes the agricultural holding in both rural and urban areas. But since there is hardly any agricultural area in urban areas the total agricultural holding above is taken as the total agricultural holding in rural areas and the per capita agricultural holding of rural population arrived at.

The districtwise per capita agricultural holding in rural areas is grouped into three categories and the districts are shaded according to this grouping from deep to light corresponding to high to low value.

Salient Features

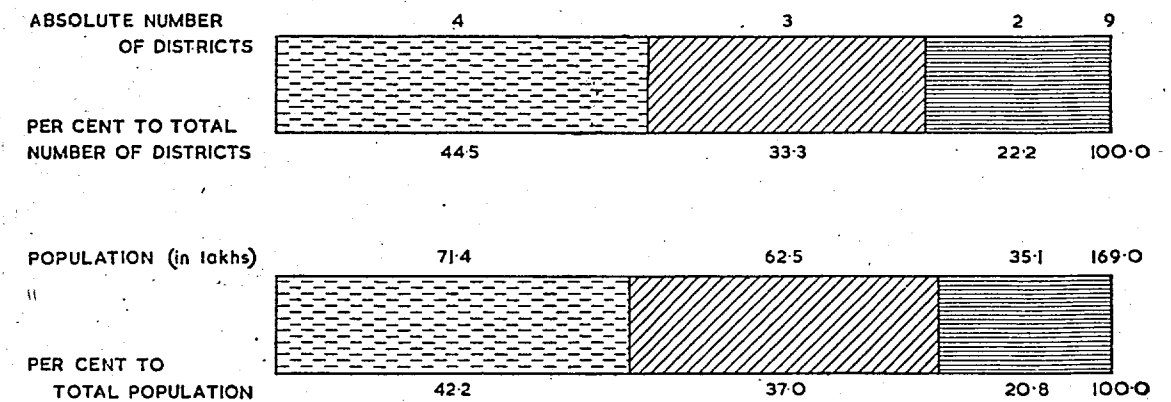
The average per capita agricultural holding in rural areas in the State in 1961 is only 33 cents. The per capita holding is below the State average in the case of four districts and above the State average in the case of the remaining five districts. The agricultural holding

is comparatively lower in the southern districts than in the northern districts. Kottayam district has the highest per capita agricultural holding in rural areas and Trichur district the lowest.

Table

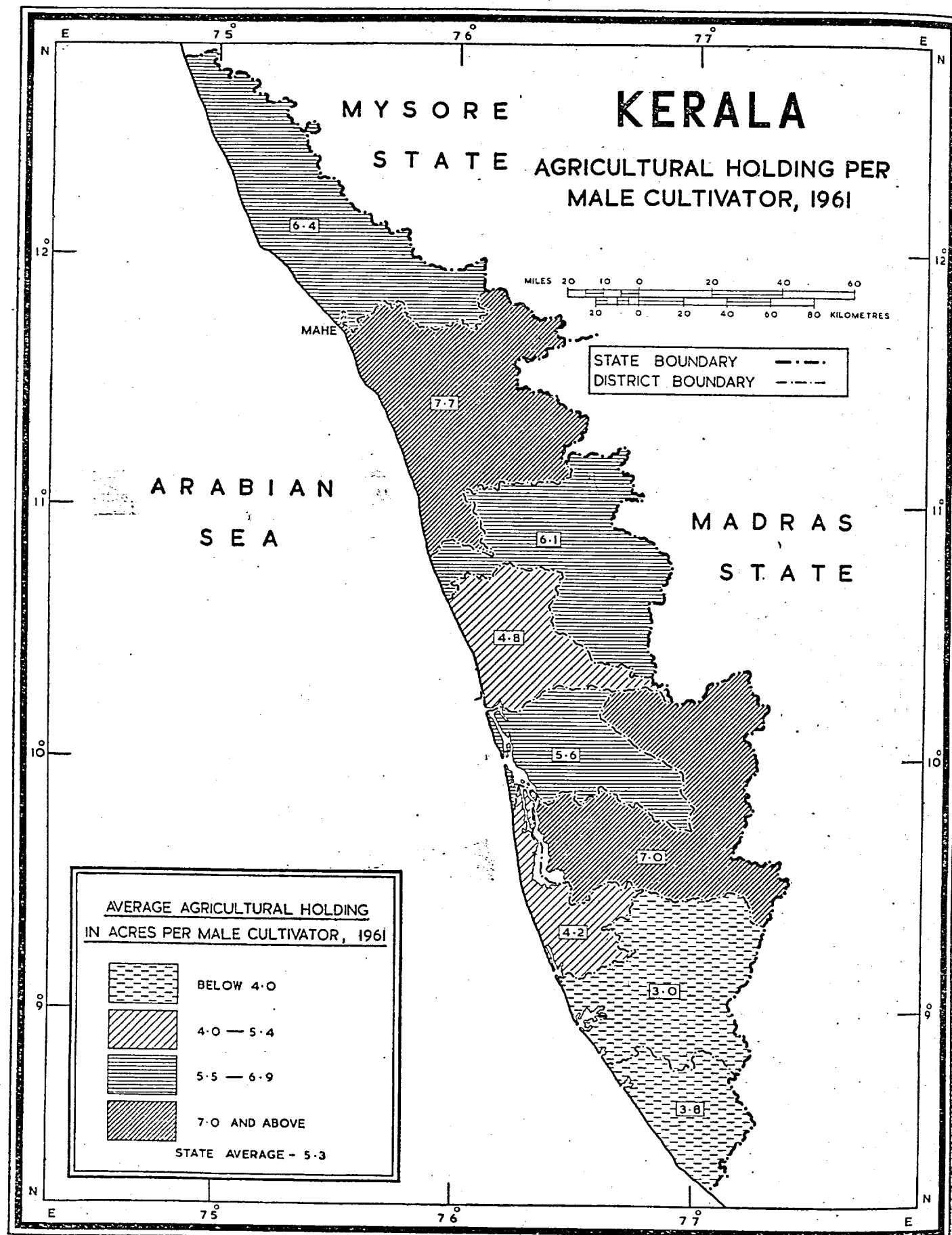
PER CAPITA AGRICULTURAL HOLDING IN RURAL AREA IN THE STATE AND DISTRICTS 1961

Rank	State/District	Agricultural holding (in cents) per capita in rural area
1	Kerala State	33
1	Kottayam District	44
2	Cannanore "	40
3	Palghat "	37
4	Kozhikode "	36
5	Ernakulam "	34
6	Quilon "	29
7	Trivandrum "	28
8	Alleppey "	26
9	Trichur "	21



Source: 1. Bureau of Economics and Statistics, Kerala

2. Census of India, 1961, Kerala—Part II A General Population Tables



AGRICULTURAL HOLDING PER MALE CULTIVATOR, 1961

Purpose

The map shows the extent of agricultural holding per male cultivator in the districts of the State in 1961.

Method

The 'net area sown' according to the Bureau of Economics and Statistics, Kerala is adopted as the total agricultural holding to obtain agricultural holding per male cultivator.

The districtwise agricultural holding per male cultivator is arranged into four groups and the districts are shaded according to this grouping from deep to light corresponding to high to low value.

Salient Features

According to the 1961 Census definition, a cultivator is a person engaged either as employer, single worker or family worker in (a) cultivation of land or supervision or direction of cultivation of land owned or held from government and (b) cultivation of land or supervision or direction of cultivation of land held from private persons or institutions for payment in money, kind or share.

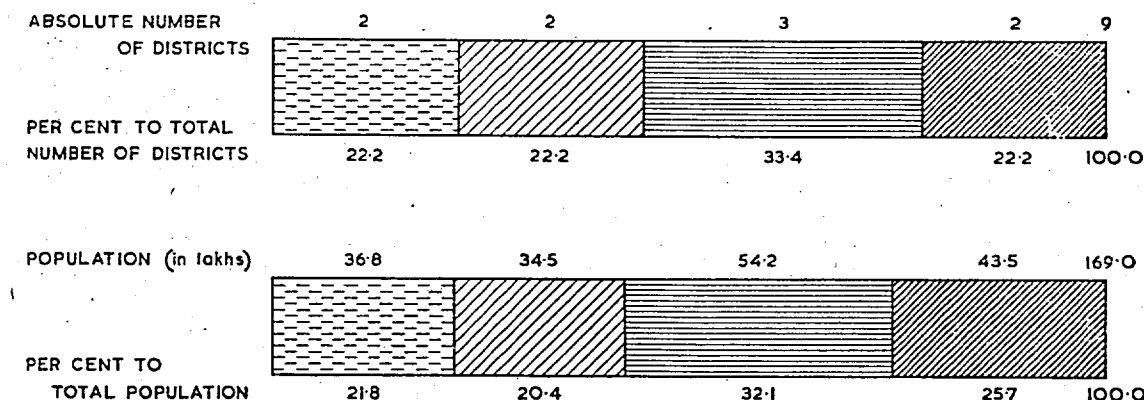
The average agricultural holding per male culti-

vator in the State is 5.3 acres. The holding is lowest (3.0) in the case of Quilon district and highest (7.7 acres) in the case of Kozhikode district.

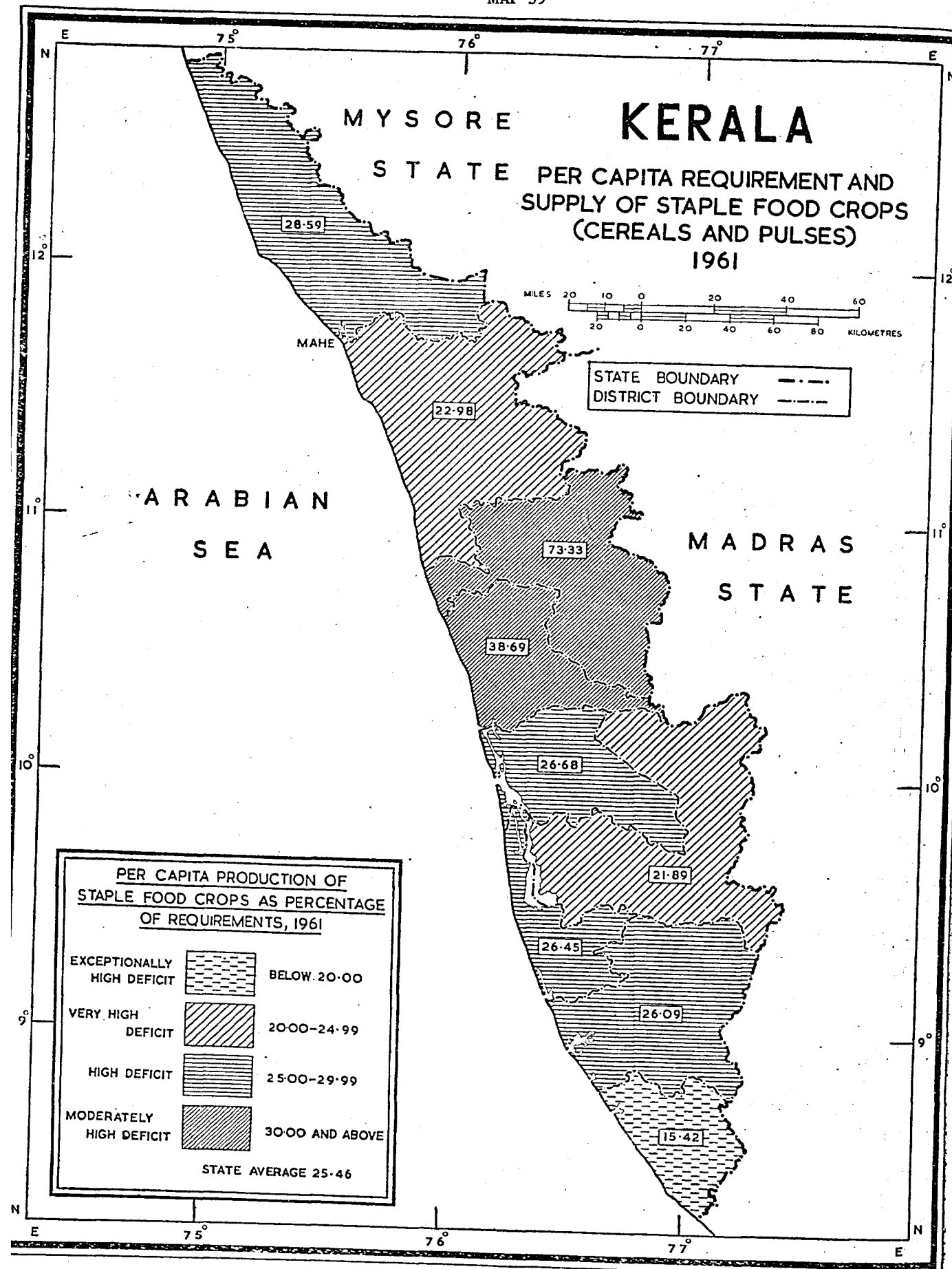
Table

AGRICULTURAL HOLDING PER MALE CULTIVATOR IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Agricultural holding (in acres) per male cultivator
1	2 Kerala State	3 5.3
1	Kozhikode District	7.7
2	Kottayam "	7.0
3	Cannanore "	6.4
4	Palghat "	6.1
5	Ernakulam "	5.6
6	Trichur "	4.8
7	Alleppey "	4.2
8	Trivandrum "	3.8
9	Quilon "	3.0



Source: 1. Bureau of Economics and Statistics, Kerala
2. Census of India, 1961, Kerala—Part II B (i) General Economic Tables



PER CAPITA REQUIREMENT AND SUPPLY OF STAPLE FOOD CROPS (CEREALS AND PULSES), 1961

Purpose

The map shows the variations in the percentage of per capita production to per capita requirement of staple food crops (cereals and pulses) in the districts of the State in 1961

Method

17 oz. of staple food items viz., 9 oz. of rice, 5 oz. of wheat or millet and 3 oz. of pulses are taken as the standard requirement of cereals and pulses per day for an adult male (aged 18 years and above) as recommended by the Nutritive Advisory Committee (vide Health Bulletin No. 23 by W. R. Aykroyd). The per capita production of cereals and pulses as percentage of per capita requirement is worked out at the above rates taking into account the population of each sex in different age-groups. The adult equivalents of females and children of various age-groups adopted for calculating total requirement of cereals and pulses are the following:—

Female	18+	0.9
Children	13-17	0.8
	8-12	0.6
	3-7	0.4
	0-2	0.1

The percentages of per capita production to per capita requirement by districts are grouped into four and the districts are shaded according to this grouping by four different grades of hatches from deep to light corresponding to high to low value.

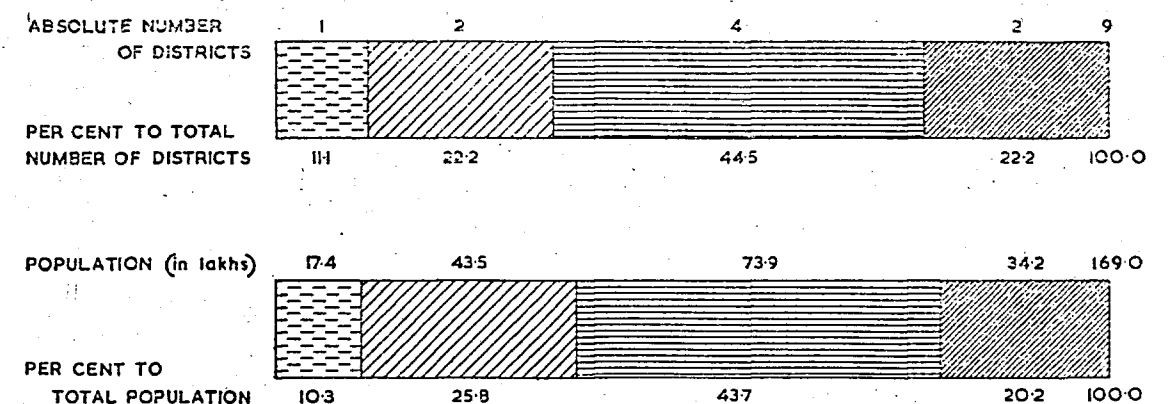
Salient Features

The per capita production of cereals and pulses in the State and in all districts is lower than the per capita requirement of these items. The State is therefore deficit in the supply of staple food items. The per capita production in the State is only 25.46 per cent of the requirement. Among the districts the percentage of per capita production to the per capita requirement is highest in Palghat district and lowest in Trivandrum district.

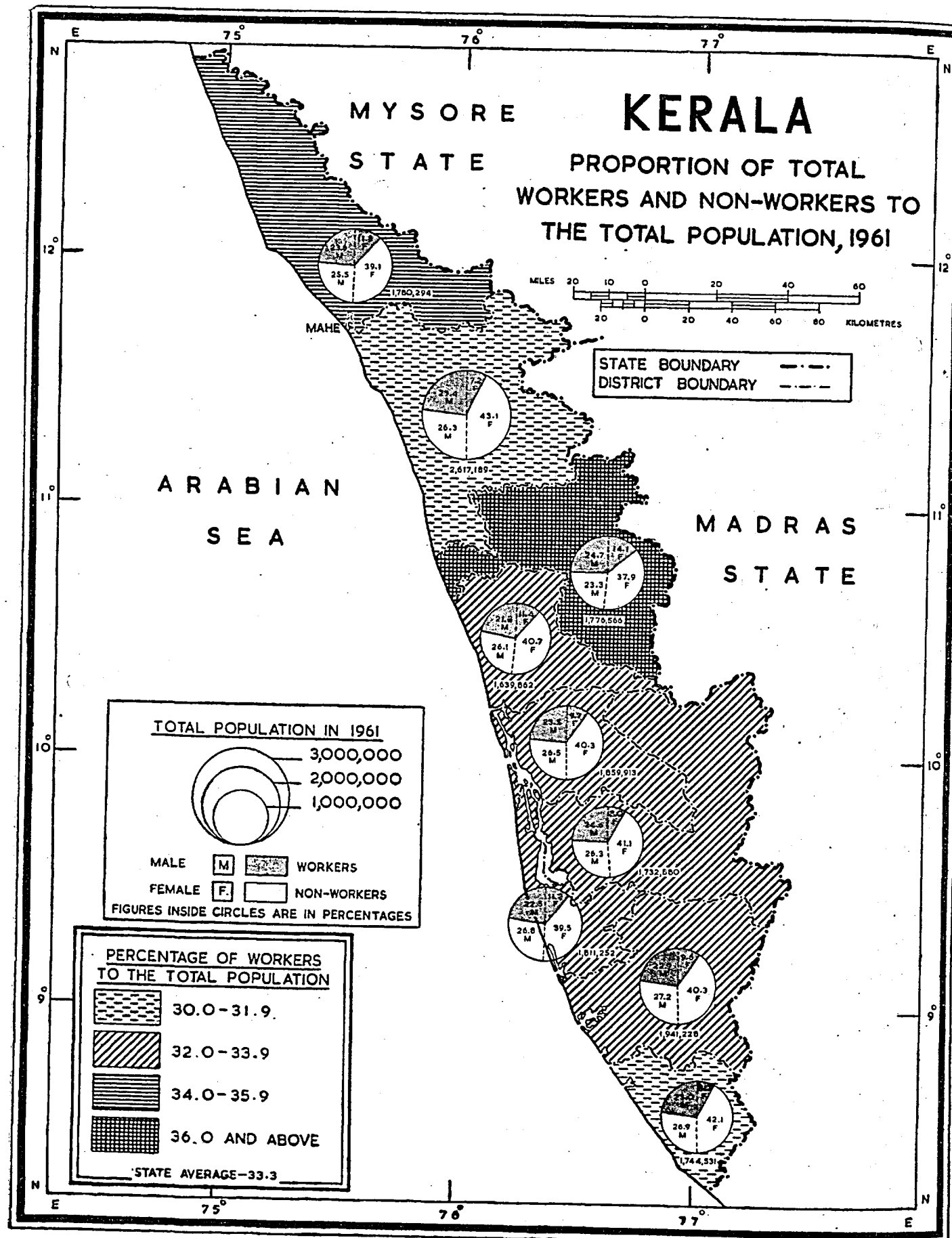
Table

PERCENTAGE OF PER CAPITA PRODUCTION TO THE PER CAPITA REQUIREMENT OF STAPLE FOOD CROPS IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Percentage of per capita production of staple food crops to the per capita requirement
1	Kerala State	25.46
1	Palghat District	73.33
2	Trichur "	38.69
3	Cannanore "	28.59
4	Ernakulam "	26.68
5	Alleppey "	26.45
6	Quilon "	26.09
7	Kozhikode "	22.98
8	Kottayam "	21.89
9	Trivandrum "	15.42



Source: Data worked out and supplied by the Office of the Registrar General, India, on the basis of the 'Food Balance Sheet' for India and on the recommendations of the Nutritive Advisory Committee contained in Health Bulletin No. 23 by W. R. Aykroyd.



PROPORTION OF TOTAL WORKERS AND NON-WORKERS TO THE TOTAL POPULATION, 1961

Purpose

The map shows the percentage of workers and non-workers to the total population by sex and districts in 1961.

Method

Circles are drawn proportional to the total population in each district. The percentages of male and female workers and non-workers to the total population of the district are marked by sectors inside the circle. The percentages of workers to the total population by districts are arranged into four groups according to value and the portions outside the circles in the districts are shaded according to these groupings from deep to light corresponding to high to low value.

Salient Features

According to the 1961 Census the term workers includes all persons who work, effectively supervise or direct work. The basis of work will be satisfied in the case of seasonal work like cultivation, livestock, dairying, household industry etc., if the person has had some regular work of more than one hour a day throughout the greater part of the working season. In the case of regular employment in any trade, profession, service, business or commerce a person is taken to be a worker if he was employed during any of the fifteen days preceding the day on which he is enumerated. If he was working but was absent from his work during the said fifteen days due to illness or other causes he is still treated as a worker.

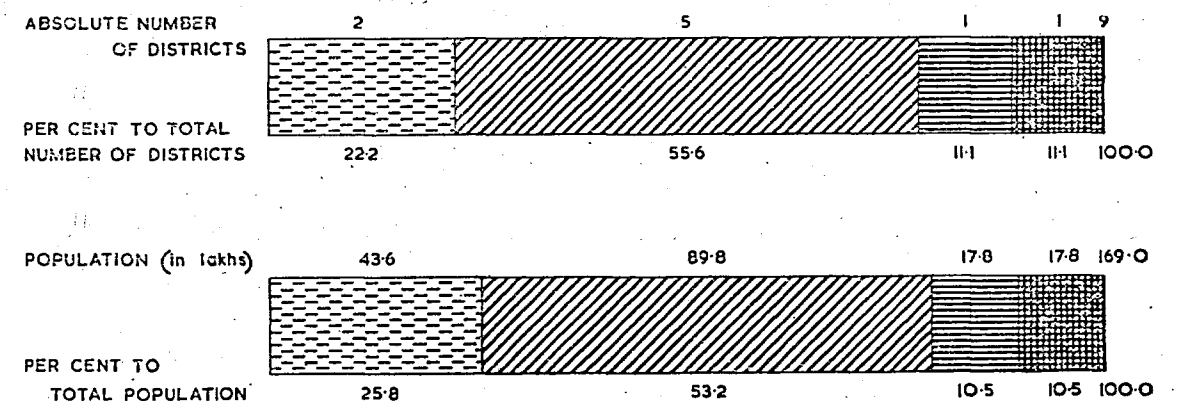
33.3 per cent of the total population of the State are workers according to the above concept as against

the all-India percentage of 42.98. Among the districts Palghat has the highest percentage of workers viz., 38.8 per cent and Kozhikode the lowest viz., 30.6 per cent. As regards workers by sex the number of male workers exceeds the number of female workers in the State as well as in all the districts. While 23.3 per cent of the total population of the State are male workers, the percentage of female workers to the total population is only 10.0. Palghat district has the highest percentage of male and female workers viz., 24.7 per cent and 14.1 per cent respectively of the total population. Trichur district has the lowest percentage of male workers (21.8) and Kozhikode district the lowest percentage of female workers (7.2).

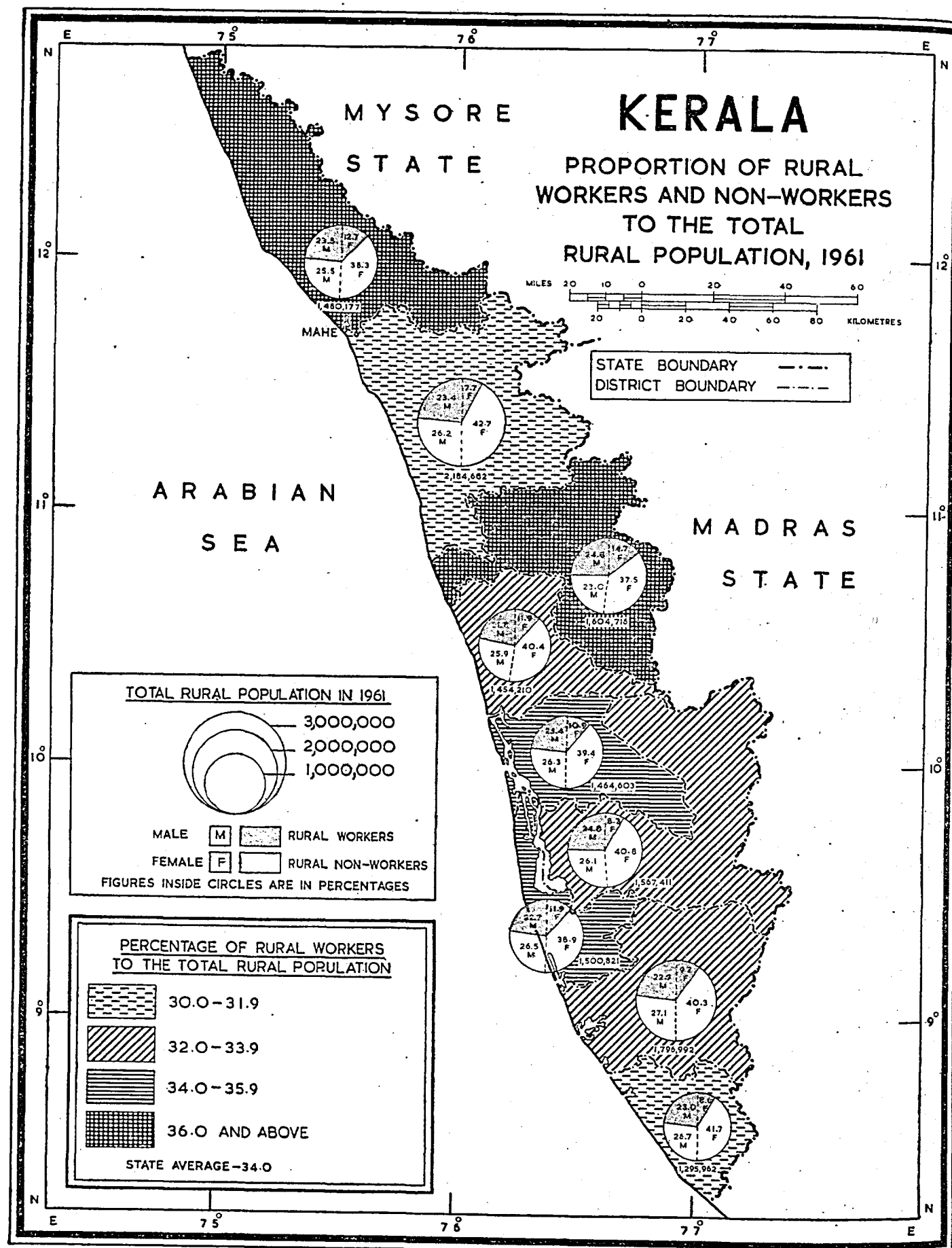
Table

PERCENTAGE DISTRIBUTION OF WORKERS AND NON-WORKERS BY SEX IN THE STATE AND DISTRICTS, 1961

State/District	Percentage of workers			Percentage of non-workers		
	Persons	Males	Females	Persons	Males	Females
1	2	3	4	5	6	7
Kerala State	33.3	23.3	10.0	66.7	26.1	40.6
Cannanore District	35.4	23.6	11.8	64.6	25.5	39.1
Kozhikode "	30.6	23.4	7.2	69.4	26.3	43.1
Palghat "	38.8	24.7	14.1	61.2	23.3	37.9
Trichur "	33.2	21.8	11.4	66.8	26.1	40.7
Ernakulam "	33.2	23.5	9.7	66.8	26.5	40.3
Kottayam "	32.6	24.6	8.0	67.4	26.3	41.1
Alleppey "	33.7	22.5	11.2	66.3	26.8	39.5
Quilon "	32.5	22.9	9.6	67.5	27.2	40.3
Trivandrum "	31.0	23.0	8.0	69.0	26.9	42.1



Source: Census of India, 1961, Kerala—Part II B (i) General Economic Tables



MAP 61

PROPORTION OF RURAL WORKERS AND NON-WORKERS TO THE TOTAL RURAL POPULATION, 1961

Purpose

The map shows the percentage of rural workers and non-workers to the total rural population by sex and districts in 1961.

Method

Circles are drawn proportional to the total rural population in each district. The percentages of rural male and female workers and non-workers to the total rural population of the district are marked by sectors inside the circle. The percentages of rural workers to the total rural population by districts are arranged into four groups according to value and the portions outside the circles in the districts are shaded according to these groupings from deep to light corresponding to high to low value.

Salient Features

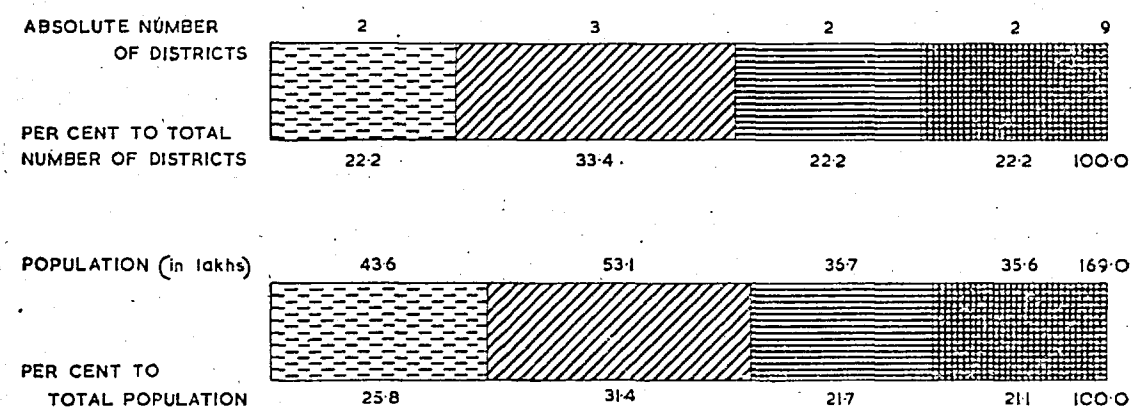
Among the rural population of the State 34.0 per cent are workers. The percentage of rural workers is higher than that of the State in the case of Cannanore, Palghat, Ernakulam and Alleppey districts and lower in the case of the remaining five districts. Palghat district has the highest percentage of workers in the rural areas while the Kozhikode district has the lowest percentage. As regards rural workers and non-workers by sex, in all the districts and State the percentage of male workers is higher than that of female workers while among non-workers the percentage of females is higher

than that of males. Among the districts the highest percentage of male workers is shared by Palghat and Kottayam districts, while Trichur district has the lowest percentage. Palghat district stands first in the percentage of female workers while Kozhikode district stands last. The highest percentage of male non-workers is in Quilon district and female non-workers in Kozhikode district.

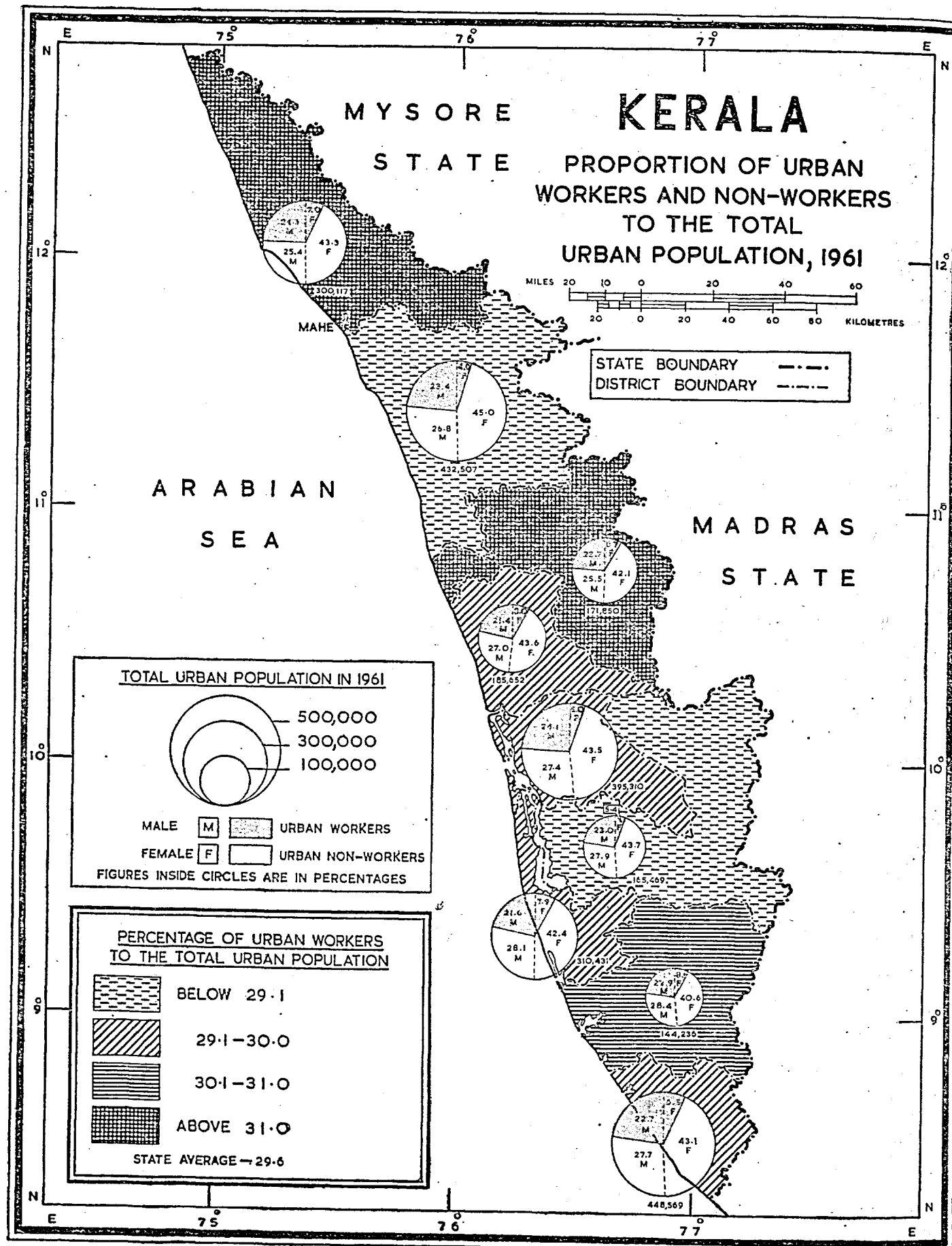
Table

PERCENTAGE DISTRIBUTION OF RURAL WORKERS AND NON-WORKERS BY SEX IN THE STATE AND DISTRICTS, 1961

State/District	Percentage of rural workers			Percentage of rural non-workers		
	Persons	Males	Females	Persons	Males	Females
1	2	3	4	5	6	7
Kerala State	34.0	23.4	10.6	66.0	25.9	40.1
Cannanore District	36.2	23.5	12.7	63.8	25.5	38.3
Kozhikode	31.1	23.4	7.7	68.9	26.2	42.7
Palghat	39.5	24.8	14.7	60.5	23.0	37.5
Trichur	33.7	21.8	11.9	66.3	25.9	40.4
Ernakulam	34.3	23.4	10.9	65.7	26.3	39.4
Kottayam	33.1	24.8	8.3	66.9	26.1	40.8
Alleppey	34.6	22.7	11.9	65.4	26.5	38.9
Quilon	32.6	22.9	9.7	67.4	27.1	40.3
Trivandrum	31.6	23.0	8.6	68.4	26.7	41.7



Source: Census of India, 1961, Kerala—Part II B (i) General Economic Tables



PROPORTION OF URBAN WORKERS AND NON-WORKERS TO THE TOTAL URBAN POPULATION, 1961

Purpose

The map shows the percentage of urban workers and non-workers to the total urban population by sex and districts in 1961.

Method

Circles are drawn proportional to the total urban population in each district. The percentages of urban male and female workers and non-workers to the total urban population of the district are marked by sectors inside the circle. The percentages of urban workers to the total urban population by districts are arranged into four groups according to value and the portions outside the circles in the districts are shaded according to these groupings from deep to light corresponding to high to low value.

Salient Features

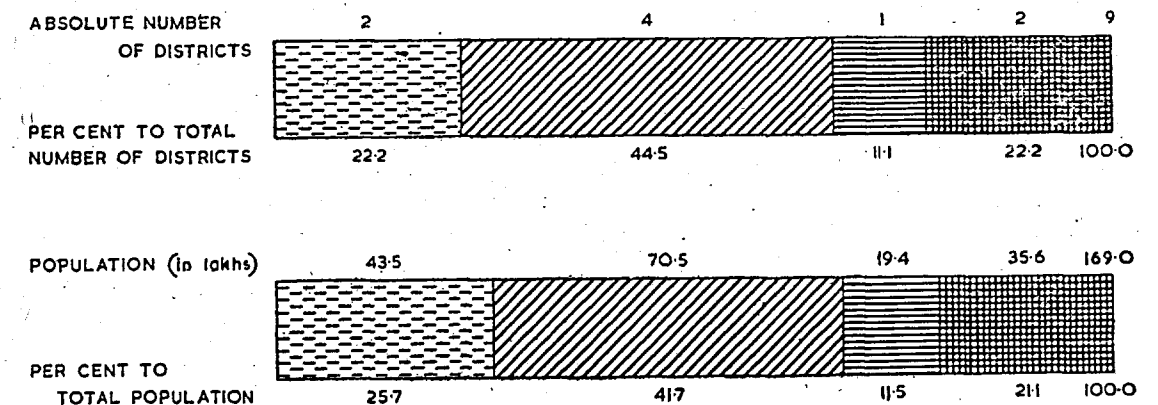
The percentage of workers in urban population is less than the percentage of workers in rural population in the State as well as in all the districts. Only 29.6 per cent of the State's urban population are workers while the percentage of workers in rural population comes to 34.0. Cannanore and Palghat districts have the percentage of urban workers above 31.0 per cent of the total urban population, Quilon district has 31.0 per cent, Trichur, Ernakulam, Alleppey and Trivandrum districts have between 29.1 and 30.0 per cent and Kozhikode and Kottayam districts below 29.1 per

cent. Palghat district has the highest percentage of urban workers and Kozhikode district the lowest. The difference in the percentages of rural workers and urban workers is more glaring in the case of females than in the case of males. Cannanore district has the highest percentage of male urban workers and Trichur district the lowest. The percentage of female urban workers is highest in Palghat district and lowest in Kozhikode district.

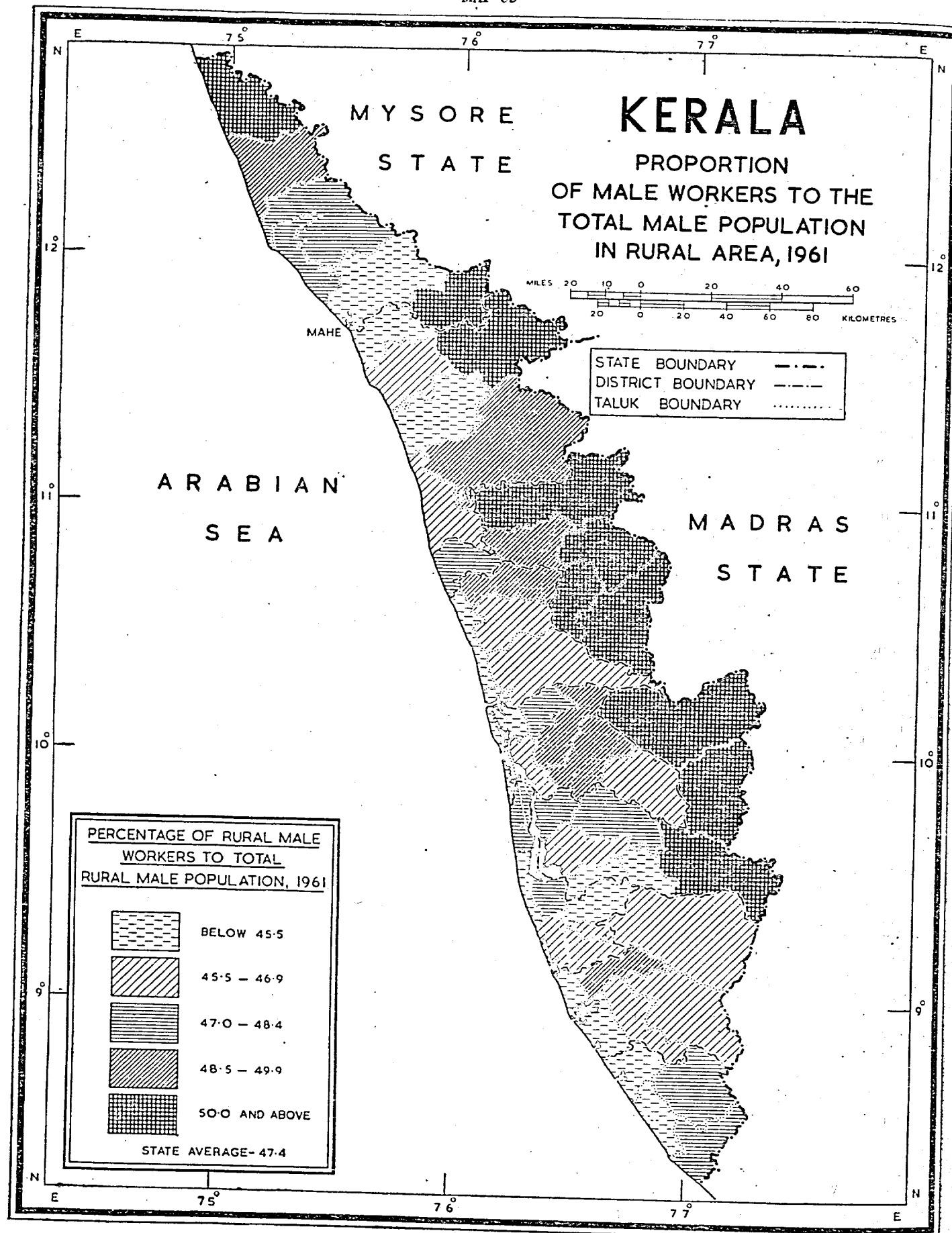
Table

PERCENTAGE DISTRIBUTION OF URBAN WORKERS AND NON-WORKERS BY SEX IN THE STATE AND DISTRICTS, 1961

State/District	Percentage of urban workers			Percentage of urban non-workers		
	Persons	Males	Females	Persons	Males	Females
1	2	3	4	5	6	7
Kerala State	29.6	23.1	6.5	70.4	27.1	43.3
Cannanore District	31.3	24.3	7.0	68.7	25.4	43.3
Kozhikode "	28.2	23.4	4.8	71.8	26.8	45.0
Palghat "	32.4	23.7	8.7	67.6	25.5	42.1
Trichur "	29.4	21.4	8.0	70.6	27.0	43.6
Ernakulam "	29.1	24.1	5.0	70.9	27.4	43.5
Kottayam "	28.4	23.0	5.4	71.6	27.9	43.7
Alleppey "	29.5	21.6	7.9	70.5	28.1	42.4
Quilon "	31.0	22.9	8.1	69.0	28.4	40.6
Trivandrum "	29.2	22.7	6.5	70.8	27.7	43.1



Source: Census of India, 1961, Kerala—Part II B (i) General Economic Tables



MAP 63
PROPORTION OF MALE WORKERS TO THE TOTAL MALE POPULATION IN RURAL AREA, 1961

Purpose

The map shows the variations in the percentage of male workers to the total male population in the rural areas of taluks of the State in 1961.

Method

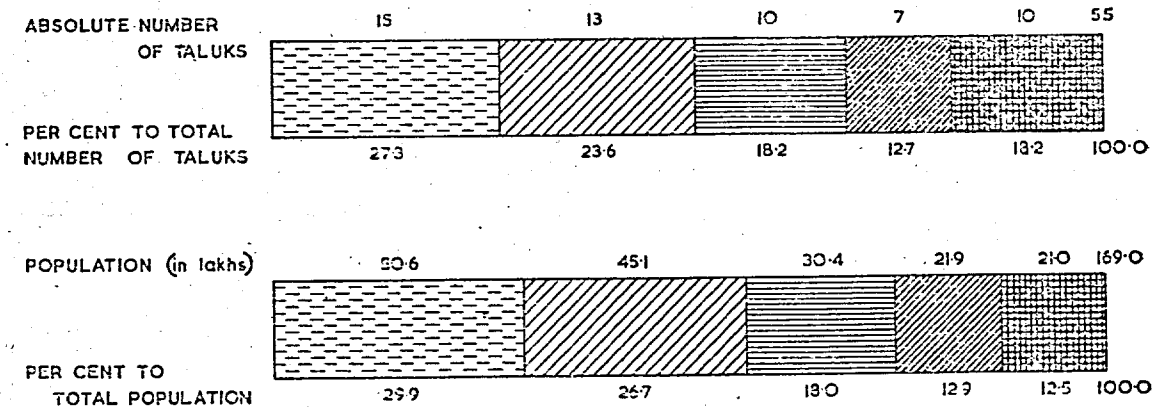
The percentages of rural male workers to the total rural male population in the taluks are classified into five groups and the taluks are shaded by five different grades of hatches from deep to light corresponding to high to low percentage value.

Salient Features

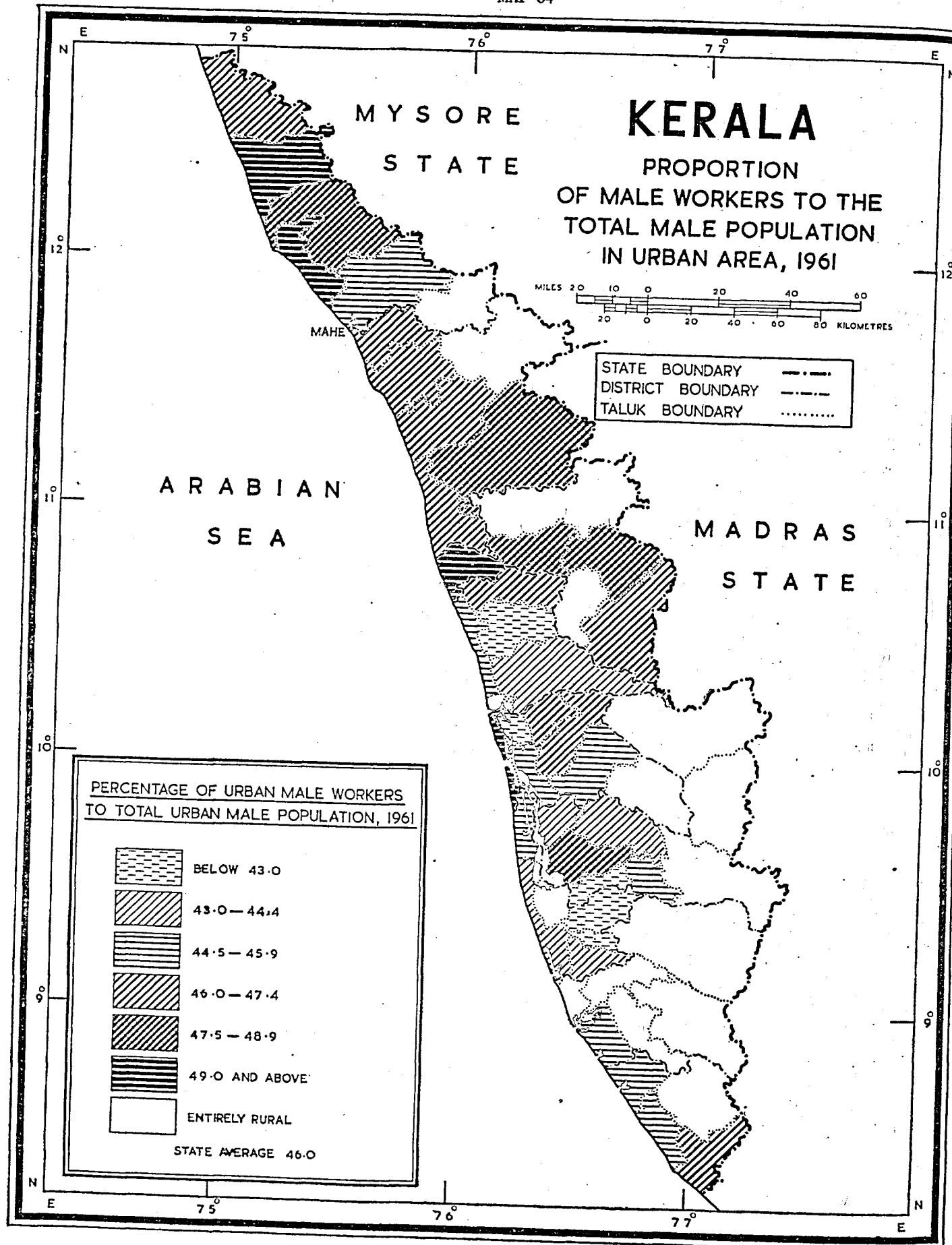
47.4 per cent of the total rural male population of the State are workers. Among the taluks Udumbanchola has the highest percentage of male workers viz., 58.5 per cent. Besides Udumbanchola there are nine other taluks with male workers falling in the range of 50.0 per cent or above. They are Kasaragod and North Wynad taluks in Cannanore district, South Wynad taluk in Kozhikode district, Perintalmanna, Palghat, Alathur and Chittur taluks in Palghat district and Devicolum and Peermade taluks in Kottayam district. All these taluks excepting Kasaragod which lies at the northernmost tip of the State lie on the eastern boundary of the State. The lowest percentage of rural male workers is in Chowghat taluk (41.6). Besides Chowghat, there are 14 taluks with male workers below 45.5 per cent most of which are situated in coastal areas.

Table
PROPORTION OF MALE WORKERS TO THE
TOTAL MALE POPULATION IN RURAL AREAS OF THE
STATE AND TALUKS, 1961

Rank	State/Taluk	Percentage of rural male workers to total rural male population
1	Kerala State	47.4
2	Udumbanchola Taluk	58.5
3	Chittur "	57.0



Source: Census of India, 1961, Kerala—Part II A General Population Tables



PROPORTION OF MALE WORKERS TO THE TOTAL MALE POPULATION IN URBAN AREA, 1961

Purpose

The map shows the variations in the percentage of male workers to the total male population in the urban areas of taluks of the State in 1961.

Method

The percentages of urban male workers to the total urban male population in the taluks are grouped into six categories and the taluks are shaded according to the grouping by six different grades of hatches from deep to light corresponding to high to low value.

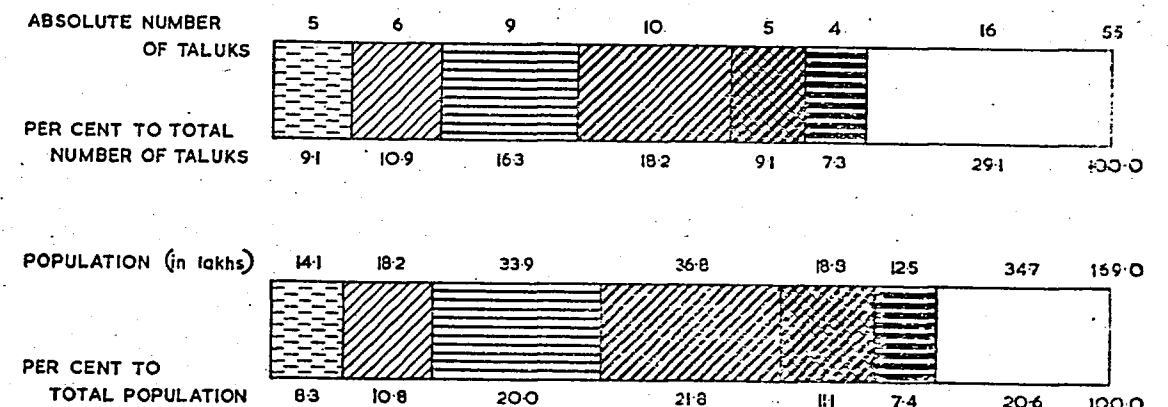
Salient Features

Of the total urban males of the State, 46.0 per cent are workers. The percentage of urban male workers is highest (52.3) in Ponnani taluk of Palghat district and lowest (41.5) in Thiruvalla taluk of Alleppey district. The percentage of urban male workers is 49.0 or above in 4 taluks, between 47.5 and 48.9 in 5 taluks, between 46.0 and 47.4 in 10 taluks, between 44.5 and 45.9 in 9 taluks, between 43.0 and 44.4 in 6 taluks and below 43.0 in 5 taluks. 16 taluks are entirely rural.

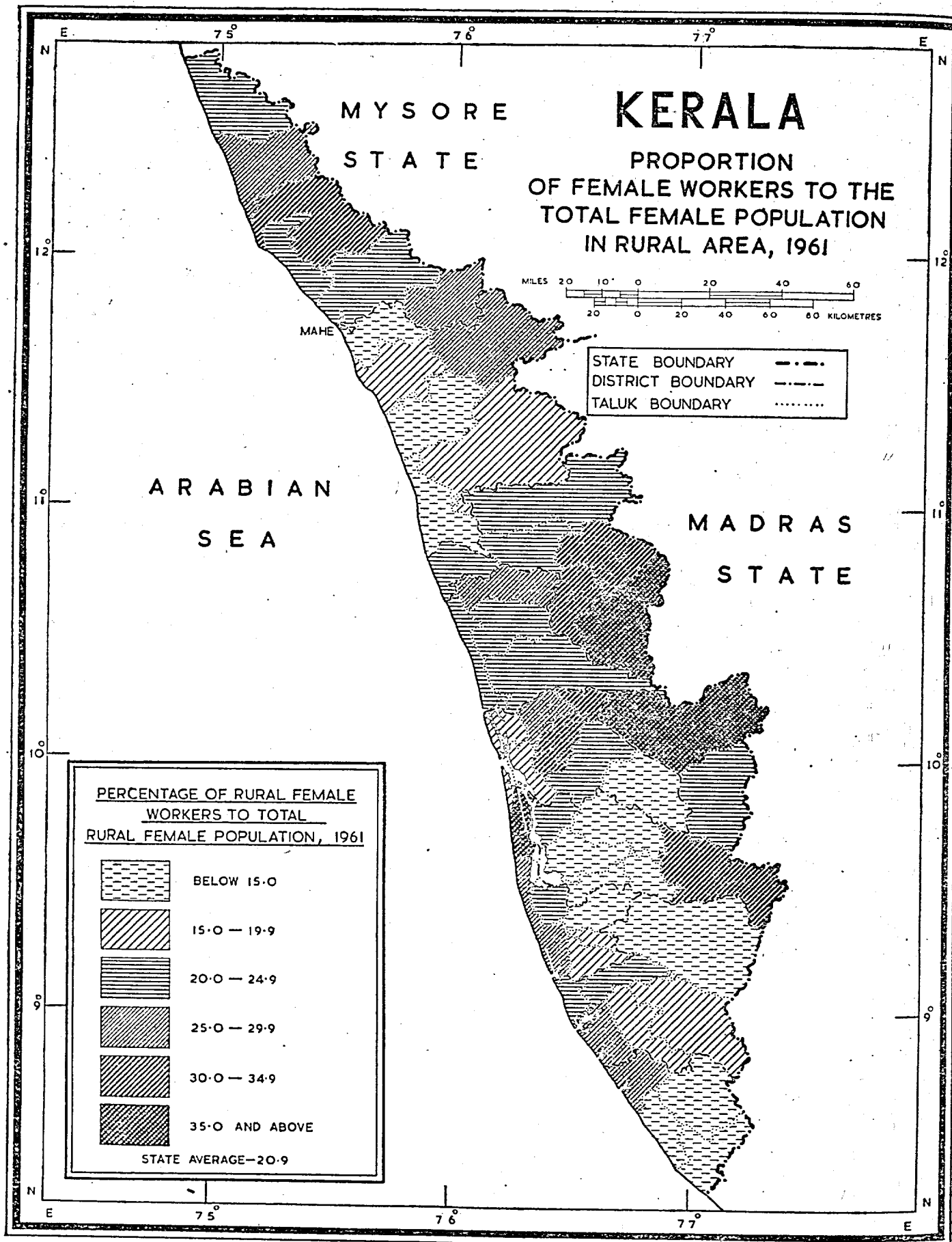
Table

PROPORTION OF MALE WORKERS TO
THE TOTAL MALE POPULATION IN URBAN AREAS
OF THE STATE AND TALUKS, 1961

Rank	State/Taluk	Percentage of urban male workers to total urban male population	1	2	3
1	Kerala State	46.0	3	Cochin Taluk	49.7
1	Ponnani Taluk	52.3	4	Hosdrug	49.4
2	Cannanore	50.1	5	Palghat	47.8
			6	Kottayam	47.7
			7	Taliparamba	47.6
			8	Ernad	47.6
			9	Ottapalam	47.6
			10	Quilandy	47.4
			11	Kasaragod	47.3
			12	Talappilly	47.3
			13	Kunnathunad	47.3
			14	Chittur	47.0
			15	Neyyattinkara	46.9
			16	Kozhikode	46.7
			17	Alwaye	46.6
			18	Tirur	46.1
			19	Badagara	46.0
			20	Muvattupuzha	45.9
			21	Kanjirappally	45.7
			22	Tellicherry	45.6
			23	Chowghat	45.6
			24	Shertalai	45.0
			25	Trivandrum	44.8
			26	Kanayannur	44.7
			27	Quilon	44.6
			28	Chirayinkil	44.6
			29	Meenachil	44.4
			30	Vaikom	44.1
			31	Karthigapally	43.8
			32	Ambalapuzha	43.6
			33	Mavelikkara	43.4
			34	Mukundapuram	43.2
			35	Trichur	42.5
			36	Parur	42.5
			37	Chengannur	42.3
			38	Changanacherry	41.7
			39	Thiruvalla	41.5



Source: Census of India, 1961, Kerala—Part II A General Population Tables



MAP 65
PROPORTION OF FEMALE WORKERS TO THE TOTAL FEMALE POPULATION
IN RURAL AREA, 1961

Purpose

The map shows the variations in the proportion of female workers in the rural areas of taluks of the State in 1961.

Method

The percentages of rural female workers to the total rural female population in the taluks are classified into six groups and the taluks are shaded according to this grouping by six different grades of hatches from deep to light corresponding to high to low percentage value.

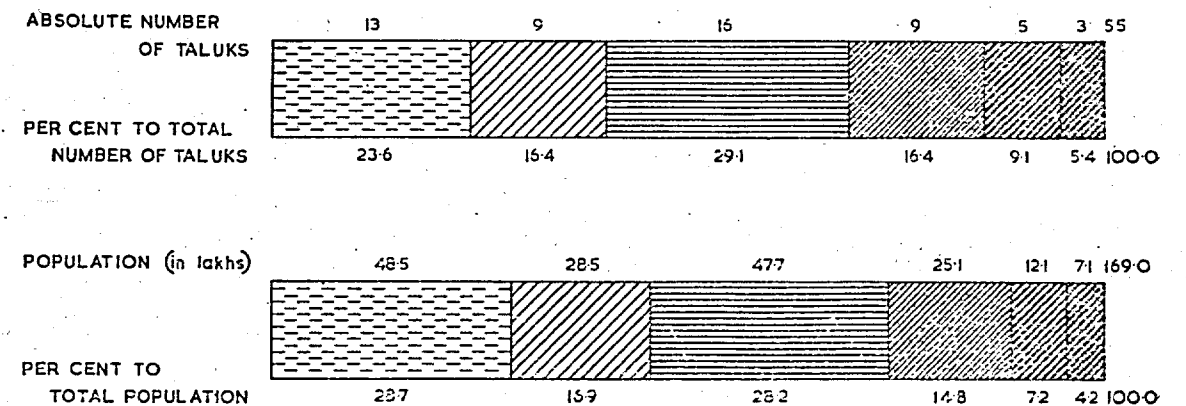
Salient Features

In the rural areas of the State 20.9 per cent of the female population are workers. The highest percentage of rural female workers viz., 40.4 is in Shertalai taluk of Alleppey district. In seven other taluks lying in Cannanore, Palghat, Ernakulam and Kottayam districts the percentage of rural female workers is 30.0 or above. The lowest proportion of rural female workers is in Kanjirappally taluk of Kottayam district with 9.5 per cent of the total female population of the taluk. There are 13 taluks with percentages of female workers below 15.0, 9 between 15.0 and 19.9, 16 between 20.0 and 24.9 and 9 between 25.0 and 29.9.

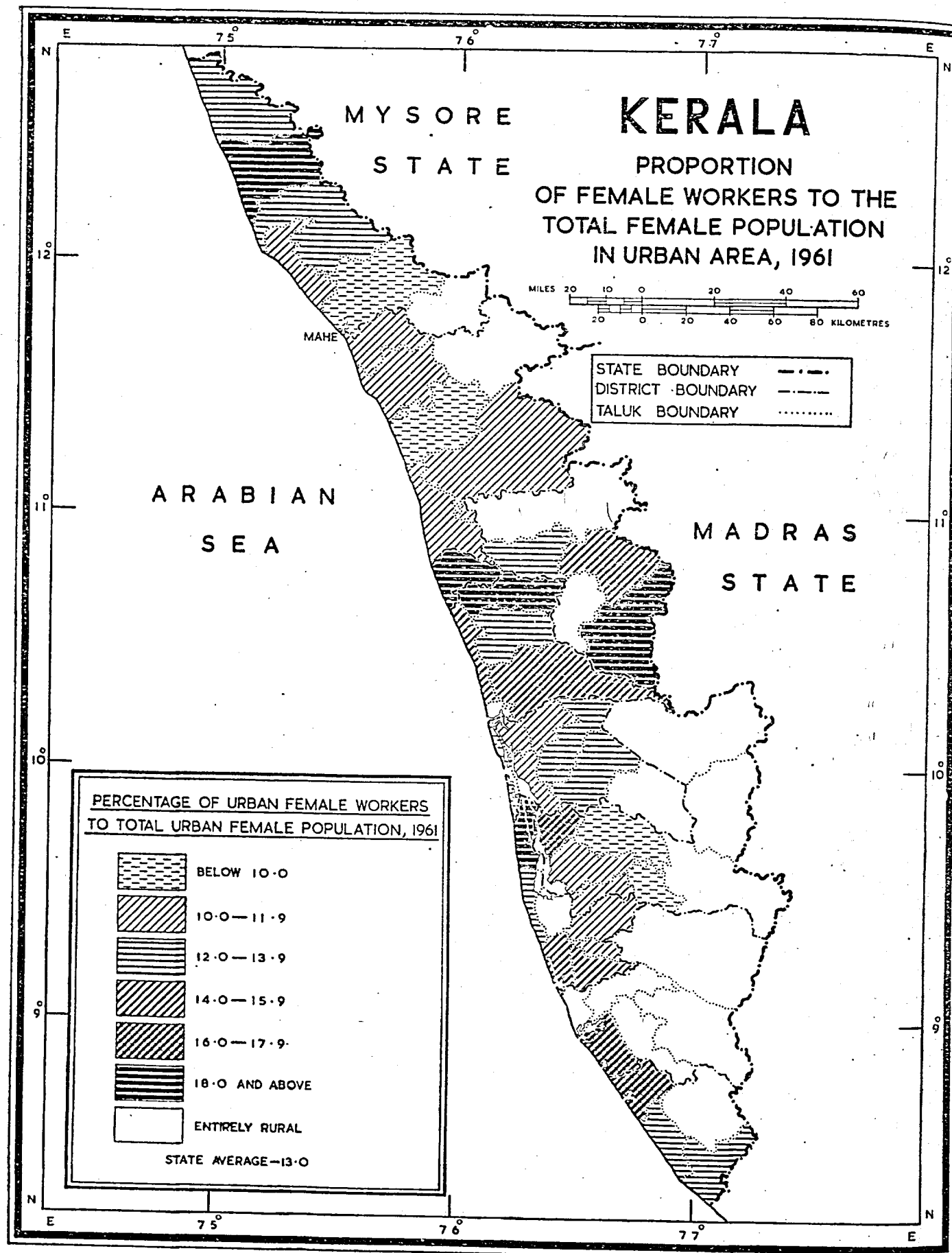
Table

PROPORTION OF FEMALE WORKERS TO
THE TOTAL FEMALE POPULATION IN RURAL AREAS
OF THE STATE AND TALUKS, 1961

Rank	State/Taluk	Percentage of rural female workers to total rural female population	
1	Kerala State	20.9	
1	Shertalai Taluk	40.4	
2	Chittur "	37.5	
3	Devicolum "	36.2	
4	Palghat "	34.1	
5	Alathur "	34.0	
6	Peermade Taluk	32.0	
7	Taliparamba "	30.8	
8	Kunnathunad "	30.0	
9	Hosdrug "	29.5	
10	Talapilly "	28.6	
11	South Wynad "	28.5	
12	Alwaye "	28.3	
13	Ambalapuzha "	27.7	
14	North Wynad "	27.2	
15	Karthigapally "	26.1	
16	Chirayinkil "	25.7	
17	Quilon "	25.4	
18	Ottapalam "	24.3	
19	Karunagapally "	24.3	
20	Perintalmanna "	23.7	
21	Muvattupuzha "	23.7	
22	Cranganore "	23.6	
23	Cannanore "	23.3	
24	Kasaragod "	22.8	
25	Kuttanad "	22.7	
26	Udumbanchola "	22.4	
27	Vaikom "	22.3	
28	Kunnathur "	22.3	
29	Trichur "	21.8	
30	Chowghat "	21.3	
31	Ponnani "	20.6	
32	Tellicherry "	20.4	
33	Mukundapuram "	20.4	
34	Kanayannur "	19.7	
35	Mavelikkara "	19.3	
36	Kottarakara "	18.6	
37	Cochin "	18.0	
38	Ernad "	17.2	
39	Parur "	16.6	
40	Pathanapuram "	16.3	
41	Quilandy "	15.8	
42	Chengannur "	15.8	
43	Badagara "	14.6	
44	Nedumangad "	14.3	
45	Neyyattinkara "	13.6	
46	Trivandrum "	13.5	
47	Thodupuzha "	12.9	
48	Tirur "	12.1	
49	Thiruvalla "	11.2	
50	Kozhikode "	10.9	
51	Meenachil "	10.9	
52	Kottayam "	10.4	
53	Changanacherry "	9.9	
54	Pathanamthitta "	9.7	
55	Kanjirappally "	9.5	



Source: Census of India, 1961, Kerala—Part II A General Population Tables



PROPORTION OF FEMALE WORKERS TO THE TOTAL FEMALE POPULATION IN URBAN AREA, 1961

Purpose

The map shows the variations in the proportion of female workers in the urban areas of the taluks of the State in 1961.

Method

The percentages of urban female workers to the total urban female population in the taluks are grouped into six categories and the taluks are shaded according to this grouping by six different grades of hatches from deep to light corresponding to high to low value.

Salient Features

Only 13.0 per cent of the total female population in urban areas of the State are workers. This is lower than the percentage of female workers in rural areas. Shertalai taluk in Alleppey district which tops the taluks in the percentage of rural female workers, stands first among the taluks in the percentage of urban female workers as well. The percentage of urban female workers is 18.0 or above in 5 taluks, between 16.0 and 17.9 in 3 taluks, between 14.0 and 15.9 in 5 taluks, between 12.0 and 13.9 in 9 taluks, between 10.0 and 11.9 in 12 taluks and below 10.0 in 5 taluks. 16 taluks are entirely rural. The lowest percentage of urban female workers viz., 8.2 is in Meenachil taluk of Kottayam district.

Table

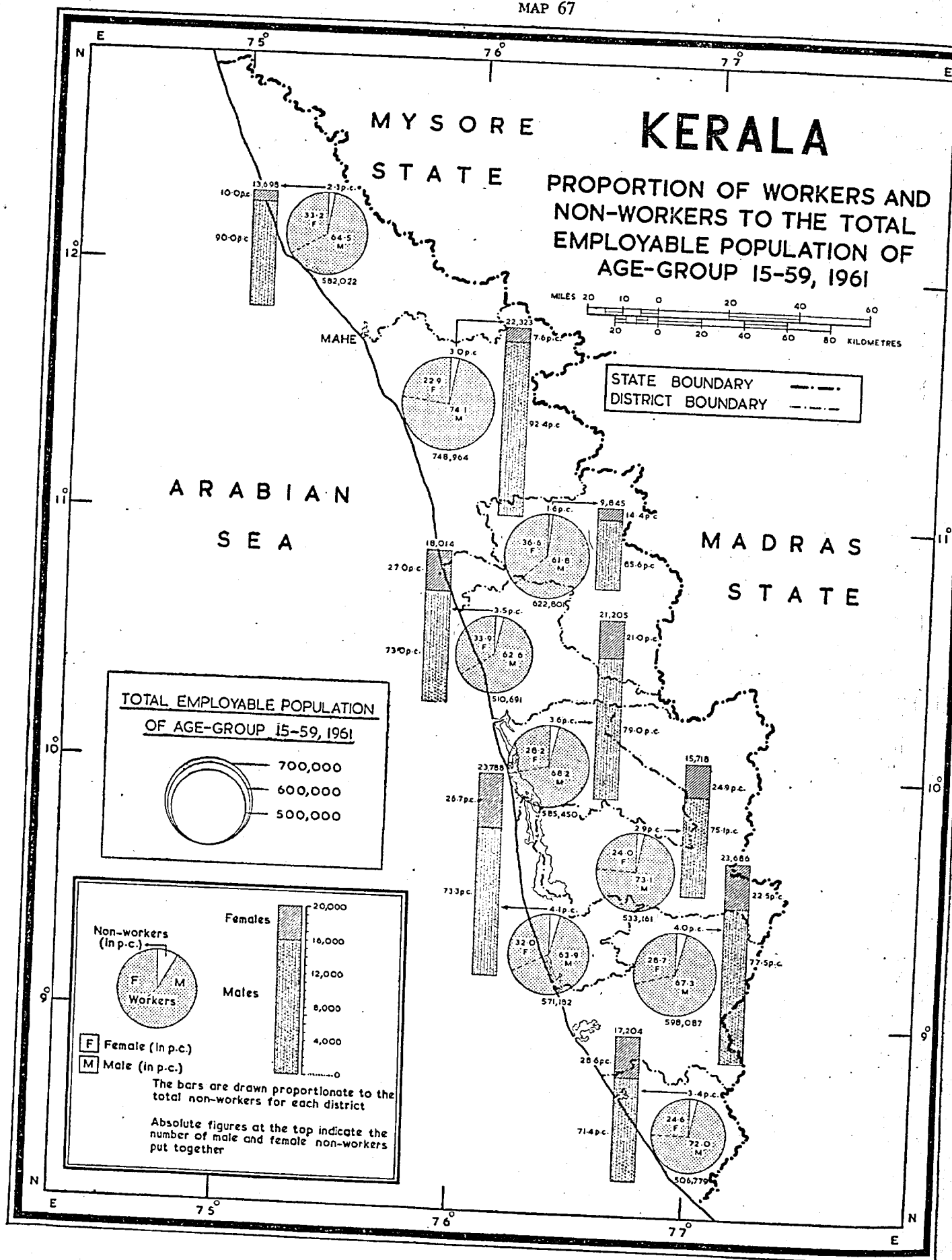
PROPORTION OF FEMALE WORKERS TO THE TOTAL
FEMALE POPULATION IN URBAN AREAS OF THE
STATE AND TALUKS, 1961

Rank	State/Taluk	Percentage of urban female workers to total urban female population
1	Kerala State	13.0
1	Shertalai Taluk	38.7

Rank	State/Taluk	Percentage of urban female workers to total urban female population
2	Hosdrug Taluk	27.2
3	Chittur	25.3
4	Talappilly	20.8
5	Ponnani	18.1
6	Chirayinkil	17.3
7	Quilon	16.7
8	Vaikom	16.5
9	Karthigapally	15.9
10	Mavelikkara	15.0
11	Chowghat	14.9
12	Palghat	14.1
13	Mukundapuram	14.1
14	Ottapalam	13.9
15	Muvattupuzha	13.4
16	Kasaragod	12.9
17	Taliparamba	12.9
18	Trichur	12.9
19	Trivandrum	12.8
20	Ambalapuzha	12.2
21	Neyyattinkara	12.2
22	Kunnathunad	12.0
23	Ernad	11.9
24	Cannanore	11.8
25	Kottayam	11.2
26	Tirur	11.1
27	Parur	11.1
28	Alwaye	11.0
29	Thiruvalla	10.9
30	Badagara	10.7
31	Changanacherry	10.6
32	Chengannur	10.4
33	Quilandy	10.1
34	Kanayannur	10.1
35	Cochin	9.4
36	Kanjirapally	9.0
37	Kozhikode	8.9
38	Tellicherry	8.4
39	Meenachil	8.2

Rank	State/Taluk	Absolute Number of Taluks	Per Cent to Total Number of Taluks	Population (in lakhs)	Per Cent to Total Population
1	Kerala State	5	91	19.1	11.3
2	Shertalai Taluk	12	21.8	41.4	24.5
3		9	15.4	32.0	18.9
4		5	9.1	16.2	9.6
5		3	5.4	11.1	6.6
6		5	9.1	14.5	8.6
7		16	29.1	34.7	20.5
8		55	100.0	169.0	100.0

Source: Census of India, 1961, Kerala—Part II A General Population Tables



PROPORTION OF WORKERS AND NON-WORKERS TO THE TOTAL EMPLOYABLE POPULATION OF AGE-GROUP 15-59, 1961

Purpose

The map shows the extent of utilisation of the employable population of age-group 15-59 in the districts of the State in 1961.

Method

Employable population consists of workers and employment seekers of both types i. e., persons seeking employment for the first time and persons who were employed before but now out of employment and seeking work.

A circle is given in each district proportional to its total employable population in the age-group 15-59. The circle is divided into two segments to show the percentages of workers and non-workers (employment seekers only). The segment of workers is further divided to show the percentages of male and female workers to the total employable population of age-group 15-59. The percentage distribution of males and females among the non-workers (employment seekers only) is shown by a separate bar given side by side with the circle.

Salient Features

96.8 per cent of the total employable population in the age-group 15-59 of the State are workers. The highest percentage of workers to the total employable population is in Palghat district and the lowest in Alleppey district. The percentage of male workers is maximum in Kozhikode district with 74.1 and minimum in Palghat district with 61.8. As regards female workers Palghat district tops the districts with 36.6 per

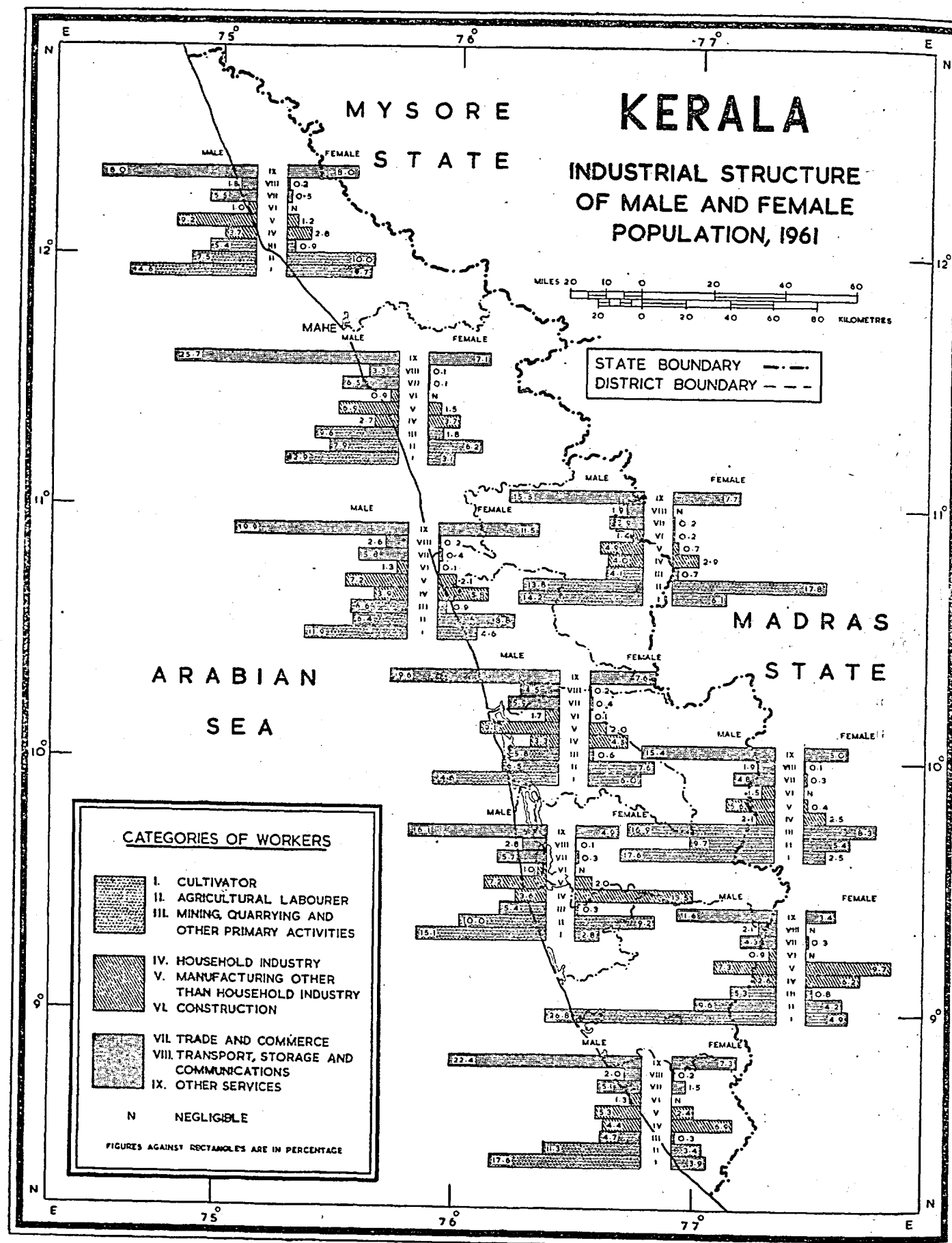
cent of the total employable population in the age-group 15-59 and Kozhikode district comes last with 22.9 per cent. Employment seekers in the employable population i. e., the unutilised available manpower in the State is 3.2 per cent and among the districts it is highest in Alleppey with 4.1 per cent and lowest in Palghat with 1.6 per cent.

Table

PROPORTION OF WORKERS AND NON-WORKERS (EMPLOYMENT SEEKERS ONLY) TO THE TOTAL EMPLOYABLE POPULATION OF AGE-GROUP 15-59 IN THE STATE AND DISTRICTS, 1961

State/District	Percentage to total employable population of age-group 15-59		
	Male workers	Female workers	Employment seekers
1	2	3	4
Kerala State	67.6	29.2	3.2
Cannanore District	64.5	33.2	2.3
Kozhikode	74.1	22.9	3.0
Palghat	61.8	36.6	1.6
Trichur	62.6	33.9	3.5
Ernakulam	68.2	28.2	3.6
Kottayam	73.1	24.0	2.9
Alleppey	63.9	32.0	4.1
Quilon	67.3	28.7	4.0
Trivandrum	72.0	24.6	3.4

Source: Census of India, 1961, Kerala—Part II B (i) & (ii)—General Economic Tables



INDUSTRIAL STRUCTURE OF MALE AND FEMALE POPULATION, 1961

Purpose

The map shows the percentages of male and female workers in each of the nine industrial categories of workers to the total workers by districts in 1961.

Method

The workers are divided into the following nine categories according to the nature of industry in which they are engaged: I as Cultivator, II as Agricultural Labourer, III in Mining, Quarrying, Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and allied activities, IV in Household Industry, V in Manufacturing other than Household Industry, VI in Construction, VII in Trade and Commerce, VIII in Transport, Storage and Communications and IX in Other Services. The percentages of males and females in each of the above categories to the total workers by districts are shown by bars on either side of a vertical column in which are indicated the categories of workers. The nine categories are grouped into three viz., categories I, II and III, categories IV, V and VI and categories VII, VIII and IX and the bars are shaded accordingly by three different shades.

Salient Features

The percentages of male and female workers to the total workers and in the nine industrial categories in the districts vary considerably. Among males in all the districts except Kottayam and Quilon category IX Other Services takes the highest percentage varying between 15.5 and 25.7, and category I cultivator takes

the second highest percentage. In the case of Kottayam and Quilon districts, the highest percentage of workers is in category I Cultivator, the percentages being 17.6 and 26.8 respectively. The second highest percentage of male workers in the case of Kottayam district comes in category III Mining, Quarrying, Livestock etc., and in the case of Quilon district, category IX Other Services. In all the districts the lowest percentage of male workers to the total workers is in category VI Construction.

The highest percentage of female workers to the total workers is in category IX Other Services in the case of Kozhikode, Trichur and Trivandrum districts, in category II Agricultural Labourer in the case of Cannanore and Palghat districts, in category III Mining, Quarrying, Livestock etc., in the case of Kottayam district, in category IV Household Industry in the case of Alleppey district in category V Manufacturing other than Household Industry in the case of Quilon district, in categories IX Other Services and II Agricultural Labourer in the case of Ernakulam district. The categories VI Construction, VII Trade and Commerce and VIII Transport, Storage and Communications have only very low percentage of female workers.

The percentages of female workers are higher than those of male workers in Cannanore, Palghat, Trichur and Ernakulam districts in the case of category II, in the State and in all districts except Cannanore and Palghat in the case of category IV and in Quilon district in the case of category V.

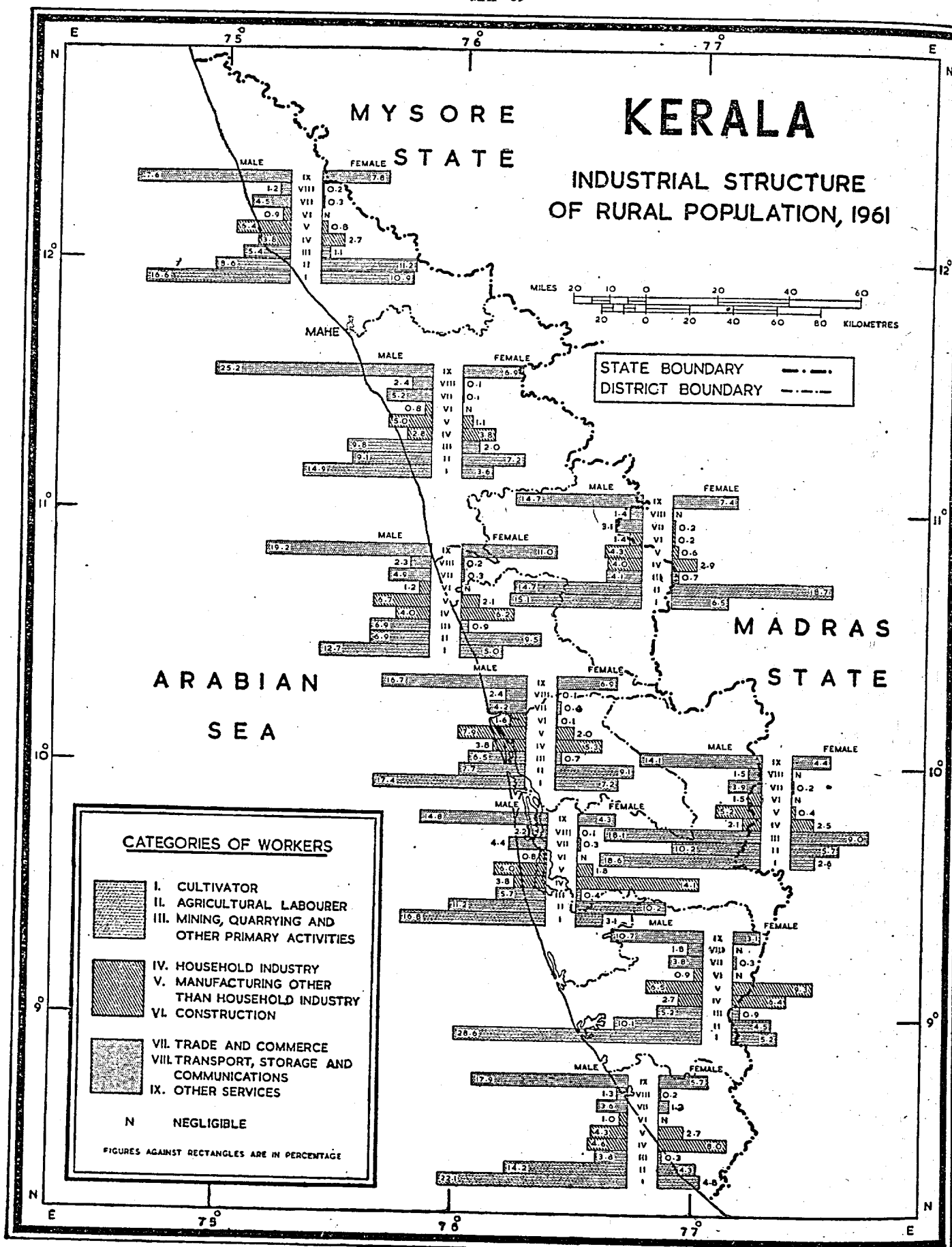
Table

PERCENTAGE DISTRIBUTION OF MALE AND FEMALE WORKERS IN EACH OF THE NINE INDUSTRIAL CATEGORIES TO THE TOTAL WORKERS BY STATE AND DISTRICTS, 1961

		Percentage of workers under each industrial category to total workers								
		I	II	III	IV	V	VI	VII	VIII	IX
State/District	Sex	Culti- vator	Agricul- tural labourer	Mining, Quarrying and other primary activities	Household Industry	Manufac- turing other than Household Industry	Cons- truction	Trade and Com- merce	Transport, Storage and Communi- cations	Other Services
1	2	3	4	5	6	7	8	9	10	11
Kerala State	Male	16.1	9.2	7.1	3.3	7.0	1.2	5.3	2.6	18.4
	Female	4.9	8.2	1.6	5.3	2.4	N	0.4	0.1	6.9
Cannanore District	Male	14.6	7.5	5.4	3.7	9.2	1.0	5.5	1.8	18.0
	Female	9.7	10.0	0.9	2.8	1.2	N	0.5	0.2	8.0
Kozhikode	Male	12.9	7.9	9.6	2.7	6.9	0.9	6.5	3.3	25.7
	Female	3.1	6.2	1.8	3.7	1.5	N	0.1	0.1	7.1
Palghat	Male	14.2	13.8	4.1	4.0	4.9	1.4	3.9	1.9	15.5
	Female	6.1	17.8	0.7	2.9	0.7	0.2	0.2	N	7.7
Trichur	Male	11.9	6.4	6.6	3.9	7.2	1.3	5.8	2.6	19.9
	Female	4.6	8.8	0.9	5.8	2.1	0.1	0.4	0.2	11.5
Ernakulam	Male	14.6	6.5	5.8	3.3	9.1	1.7	5.9	4.5	19.6
	Female	6.0	7.6	0.6	4.5	2.0	0.1	0.4	0.2	7.6
Kottayam	Male	17.6	9.7	16.9	2.1	5.6	1.5	4.8	1.9	15.4
	Female	2.5	5.4	8.3	2.5	0.4	N	0.3	0.1	5.0
Alleppey	Male	15.1	10.0	5.4	3.6	7.2	1.0	5.7	2.8	16.1
	Female	2.8	9.2	0.3	13.5	2.0	N	0.3	0.1	4.9
Quilon	Male	26.8	9.6	5.3	2.6	7.3	0.9	4.3	2.1	11.6
	Female	4.9	4.2	0.8	6.2	9.7	N	0.3	N	3.4
Trivandrum	Male	17.6	11.3	4.7	4.4	5.3	1.3	5.1	2.0	22.4
	Female	3.9	3.4	0.3	6.9	2.4	N	1.5	0.2	7.3

*N denotes negligible figure which is less than 0.1

Source: Census of India, 1961, Kerala—Part II B (i) General Economic Tables

**Purpose**

The map shows the percentages of male and female workers in each of the nine industrial categories of workers to total workers in the rural population by districts in 1961.

Method

The percentages of rural male and female workers in each of the nine industrial categories of workers to the total rural workers by district are shown by bars on either side of a vertical column in which are indicated the different industrial categories. The nine categories are grouped into three viz., categories I, II and III, categories IV, V and VI and categories VII, VIII and IX and the bars are shaded accordingly by three different shades.

Salient Features

Considerable proportion of rural male workers is in categories I, II and III which mainly relate to agricultural activities or in category IX Other Services. The proportion of male workers in the remaining categories is very low. In Cannanore, Kozhikode and Trichur districts the highest percentage of rural male workers comes under category IX Other Services. In all the other districts as well as in the State category I Cultivator has the highest percentage of rural male

workers. The second highest percentage of male workers comes in category IX in the case of the State and the districts of Palghat, Ernakulam, Alleppey, Quilon and Trivandrum, in category I in the case of Cannanore, Kozhikode and Trichur districts and in category III in the case of Kottayam district. The percentages of rural male workers in categories VI and VIII are very small.

As far as the rural female workers are concerned most of them are engaged in any of the categories I, II, IV or IX. The percentages of female workers in categories VI and VIII are almost negligible. The highest percentage of rural female workers in the State and in Cannanore, Kozhikode, Palghat and Ernakulam districts comes in category II, in Kottayam district in the case of category III, in Alleppey and Trivandrum districts in the case of category IV, in Quilon district in the case of category V and in Trichur district in the case of category IX.

The percentages of female workers exceed those of male workers in category II in the case of Cannanore, Palghat, Trichur and Ernakulam districts, in category IV in the case of the State and in all districts except Cannanore and Palghat and in category V in the case of Quilon district.

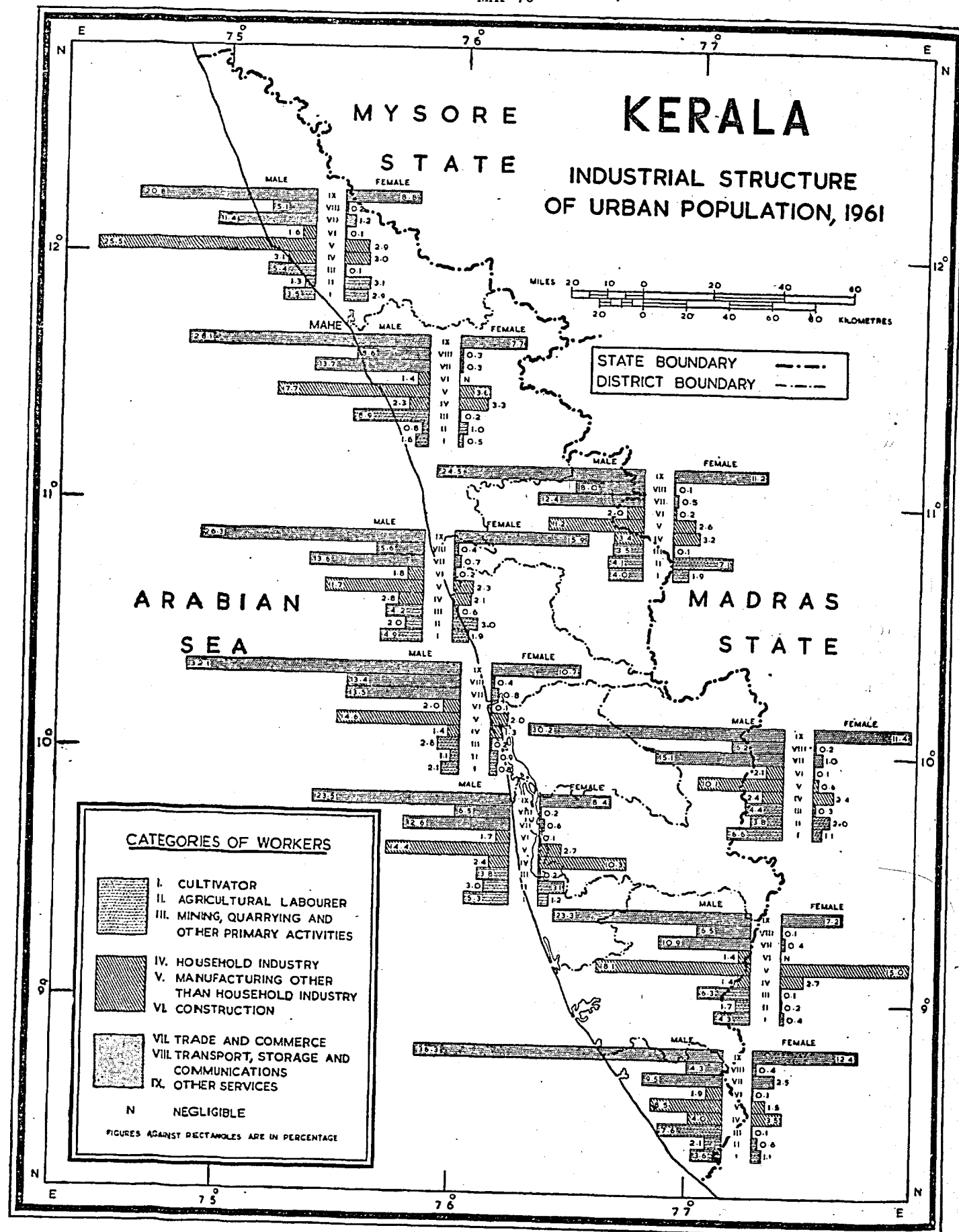
Table

PERCENTAGE DISTRIBUTION OF RURAL MALE AND FEMALE WORKERS IN EACH OF THE NINE INDUSTRIAL CATEGORIES TO THE TOTAL RURAL WORKERS BY STATE AND DISTRICTS, 1961

		Percentage of rural workers under each Industrial category to total rural workers								
State/District	Sex	I	II	III	IV	V	VI	VII	VIII	IX
		Cultivator	Agricultural labourer	Mining, Quarrying and other primary activities	Household Industry	Manufacturing other than Household Industry	Construction	Trade and Commerce	Transport, Storage and Communications	Other services
Kerala State	Male	18.0	10.3	7.3	3.5	5.8	1.1	4.2	1.8	16.9
	Female	5.4	9.2	1.8	5.6	2.3	N	0.3	0.1	6.4
Cannanore District	Male	16.6	8.6	5.4	3.8	6.4	0.9	4.5	1.2	17.6
	Female	10.9	11.2	1.1	2.7	0.8	N	0.3	0.2	7.8
Kozhikode	Male	14.9	9.1	9.8	2.8	5.0	0.8	5.2	2.4	25.2
	Female	3.6	7.2	2.0	3.8	1.1	N	0.1	0.1	6.9
Palghat	Male	15.1	14.7	4.1	4.0	4.3	1.4	3.1	1.4	14.7
	Female	6.5	18.7	0.7	2.9	0.6	0.2	0.2	N	7.4
Trichur	Male	12.7	6.9	6.9	4.0	6.7	1.2	4.9	2.3	19.2
	Female	5.0	9.5	0.9	6.2	2.1	N	0.3	0.2	11.0
Ernakulam	Male	17.4	7.7	6.5	3.8	7.9	1.6	4.2	2.4	16.7
	Female	7.2	9.1	0.7	5.3	2.0	0.1	0.4	0.1	6.9
Kottayam	Male	18.6	10.2	18.1	2.1	5.2	1.5	3.9	1.5	14.1
	Female	2.6	5.7	9.0	2.5	0.4	N	0.2	N	4.4
Alleppey	Male	16.8	11.2	5.7	3.8	6.0	0.8	4.4	2.2	14.8
	Female	3.1	10.2	0.4	14.1	1.8	N	0.3	0.1	4.3
Quilon	Male	28.6	10.1	5.2	2.7	6.5	0.9	3.8	1.8	10.7
	Female	5.2	4.5	0.9	6.4	9.3	N	0.3	N	3.1
Trivandrum	Male	22.1	14.2	3.8	4.6	4.3	1.0	3.6	1.3	17.9
	Female	4.8	4.3	0.3	8.0	2.7	N	1.2	0.2	5.7

* N* denotes negligible figure which is less than 0.1

Source: Census of India, 1961, Kerala—Part II B (i) General Economic Tables



MAP 70
INDUSTRIAL STRUCTURE OF URBAN POPULATION, 1961

Purpose

The map shows the percentages of male and female workers in each of the nine industrial categories of workers to total workers in the urban population by districts in 1961.

Method

The percentages of urban male and female workers in each of the nine industrial categories of workers to the total urban workers by district are shown by bars on either side of a vertical column in which are indicated the different categories. The bars are shaded by three different shades after grouping the categories into three viz., categories I, II and III, categories IV, V and VI and categories VII, VIII and IX.

Salient Features

In the urban areas of the State as a whole workers form 29.6 per cent of the total urban population of which 23.1 per cent are males and 6.5 per cent females. The urban male workers are mostly concentrated in industrial categories V, VII and IX. The other categories have only smaller percentage of workers. The highest percentage of urban male workers to the total urban workers in the case of the State and all districts except Cannanore is in category IX. In the case of Cannanore district category V engages the highest percentage of male workers. The second highest percentage of urban male workers is in category V in

the case of the State and Kozhikode, Ernakulam, Alleppey and Quilon districts, in category VII in the case of Palghat, Trichur, Kottayam and Trivandrum districts and in category IX in the case of Cannanore district. The lowest per cent of urban male workers is in category VII in the State and the districts of Palghat, Trichur, Kottayam, Alleppey and Trivandrum. In Cannanore, Kozhikode and Ernakulam districts the lowest percentage is in category II. The lowest percentage in Quilon district is shared by categories IV and VI.

The percentage of female workers to the total workers in urban areas is considerably less than that in rural areas. While 31.1 per cent of the rural workers are females the percentage of females among urban workers is only 22.0. The highest percentage of urban female workers is in category IX in the State and in all districts except Alleppey and Quilon. In the case of Alleppey district the highest percentage is in category IV and in the case of Quilon district in category V.

The percentage of females is higher than that of males in category II in the State and in all districts except Ernakulam, Kottayam, Quilon and Trivandrum. In the case of category IV also the percentage of females is higher than that of males in the State and in Kozhikode, Alleppey and Quilon districts while in Kottayam district the male and female percentages are equal.

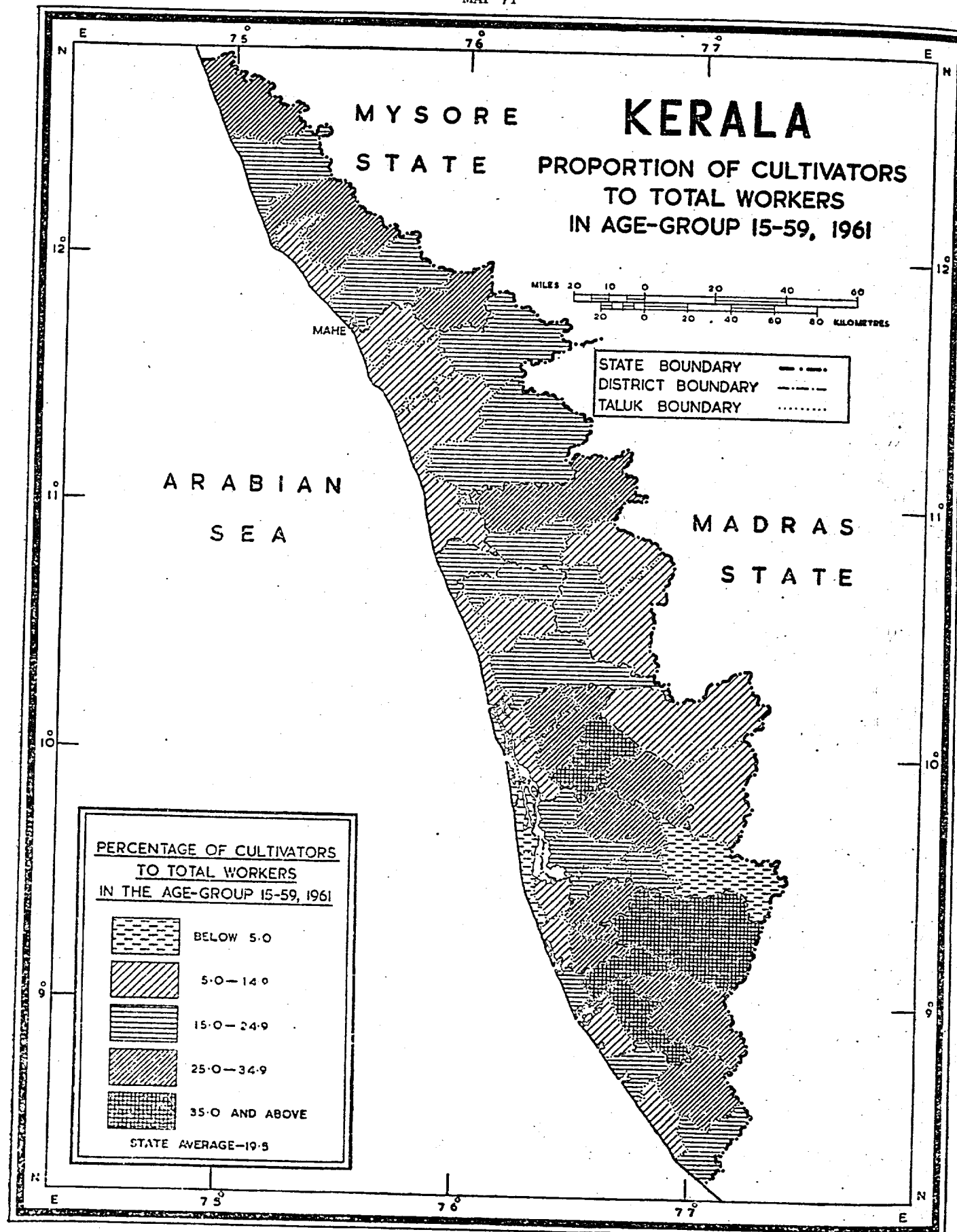
Table

PERCENTAGE DISTRIBUTION OF URBAN MALE AND FEMALE WORKERS IN EACH OF THE NINE INDUSTRIAL CATEGORIES TO THE TOTAL URBAN WORKERS BY STATE AND DISTRICTS, 1961

State/District	Sex	Percentage of urban workers under each industrial category to total urban workers								
		I	II	III	IV	V	VI	VII	VIII	IX
		Cultivator	Agri- cultural labourer	Mining, Quarrying and other primary activities	House- hold industry	Manu- facturing other than household industry	Constru- ction	Trade and Com- merce	Transport, Storage and Communi- cations	Other services
Kerala State	Male	3.6	2.0	5.5	2.6	14.8	1.7	12.3	7.4	28.1
	Female	1.3	2.1	0.2	3.7	3.1	0.1	1.0	0.3	10.2
Cannanore District	Male	3.5	1.3	5.4	3.1	25.5	1.6	11.4	5.1	20.8
	Female	2.9	3.1	0.1	3.0	2.9	0.1	1.2	0.2	8.8
Kozhikode	Male	1.6	0.8	8.9	2.3	17.7	1.4	13.7	8.6	28.1
	Female	0.5	1.0	0.2	3.3	3.6	N	0.3	0.3	7.7
Palghat	Male	4.0	4.1	3.5	2.4	11.2	2.0	12.4	8.0	24.5
	Female	1.9	7.1	0.1	3.2	2.6	0.2	0.5	0.1	11.2
Trichur	Male	4.9	2.0	4.2	2.8	11.7	1.8	13.6	5.6	26.3
	Female	1.9	3.0	0.6	2.1	2.3	0.2	0.7	0.4	15.9
Ernakulam	Male	2.1	1.1	2.6	1.4	14.6	2.0	13.5	13.4	32.1
	Female	0.8	0.9	0.2	1.3	2.0	0.1	0.8	0.4	10.7
Kottayam	Male	6.6	3.8	4.4	2.4	10.1	2.1	15.1	6.2	30.2
	Female	1.1	2.0	0.3	2.4	0.6	0.1	1.0	0.2	11.4
Alleppey	Male	5.3	3.0	3.8	2.4	14.4	1.7	12.6	6.5	23.5
	Female	1.2	3.1	0.2	10.3	2.7	0.1	0.6	0.2	8.4
Quilon	Male	4.3	1.7	6.3	1.4	18.1	1.4	10.9	6.5	23.3
	Female	0.4	0.2	0.1	2.7	15.0	N	0.4	0.1	7.2
Trivandrum	Male	3.6	2.1	7.6	4.0	8.5	1.9	9.5	4.3	36.3
	Female	1.1	0.6	0.1	3.5	1.5	0.1	2.5	0.4	12.4

* N * denotes negligible figure which is less than 0.1

Source: Census of India, 1961, Kerala—Part II B (i) General Economic Tables



MAP 71 PROPORTION OF CULTIVATORS TO TOTAL WORKERS IN AGE-GROUP 15-59, 1961

Purpose

The map shows the variations in the proportion of cultivators to the total workers in the age-group 15-59 in the taluks of the State in 1961.

Method

The percentages of cultivators (i. e. category I of the Industrial Classification of workers) in the age-group 15-59 to the total workers in that age-group by taluks are grouped into five categories in the order of values and the taluks are shaded according to this grouping by five different shades from deep to light corresponding to high to low value.

Salient Features

'Cultivator' is a person engaged either as employer, single worker or family worker in (a) cultivation of land or supervision or direction of cultivation of land owned or held from Government and (b) cultivation of land or supervision or direction of cultivation of land held from private persons or institutions for payment in money, kind or share. Cultivation involves ploughing, sowing and harvesting and does not include fruit growing or keeping orchards or groves or working for plantations like tea, coffee, rubber, cinchona and other medicinal plantations. A person who has given out his land to another person or persons for cultivation for money, kind or share of crop and who does not even supervise or direct the cultivation of land will not be treated as cultivator. Similarly, a person working in another person's land for wages in cash, kind or share such as share of the produce will not also be treated as cultivator.

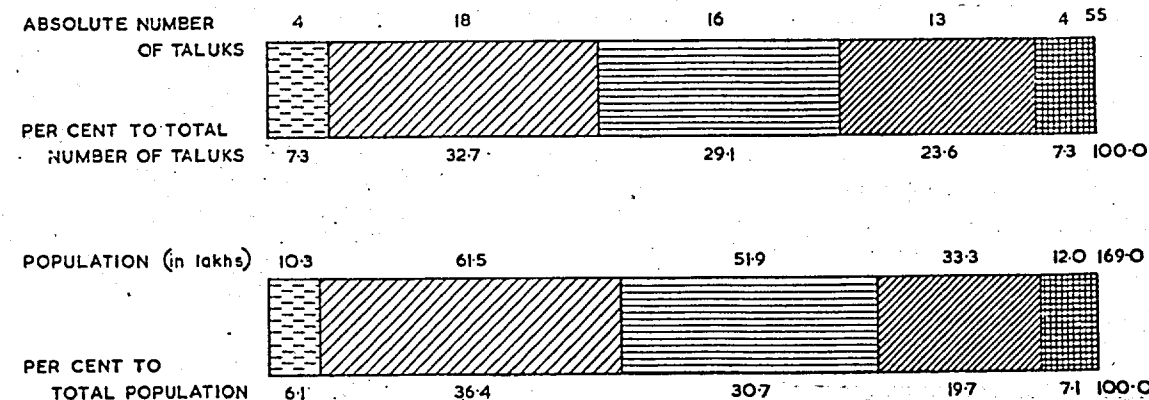
Cultivators form 19.5 per cent of the State's total workers in the age-group 15-59. Among the taluks the percentage of cultivators in the age-group 15-59 varies between 0.9 and 47.1. In the case of four taluks viz., Cochin, Peermade, Shertalai and Ambalapuzha the percentage of cultivators is below 5.0. Of these, Peermade taluk forms part of the high ranges where plantation crops dominate while the other three taluks are contiguous in the coastal region and have sandy soils. In the case of 18 taluks lying scattered in the sea-coast or in the hilly areas the percentage of cultivators is between 5.0 and 14.9. There are 16 taluks coming in districts other than Ernakulam and Alleppey with percentage of cultivators between 15.0 and 24.9. In the case of 13 taluks the percentage is moderately high and varies between 25.0 and 34.9. There are 4 taluks with

very high percentage of cultivators viz., 35.0 and above. The highest percentage of cultivators is in Kunnathur taluk of Quilon district and the lowest in Cochin taluk of Ernakulam district.

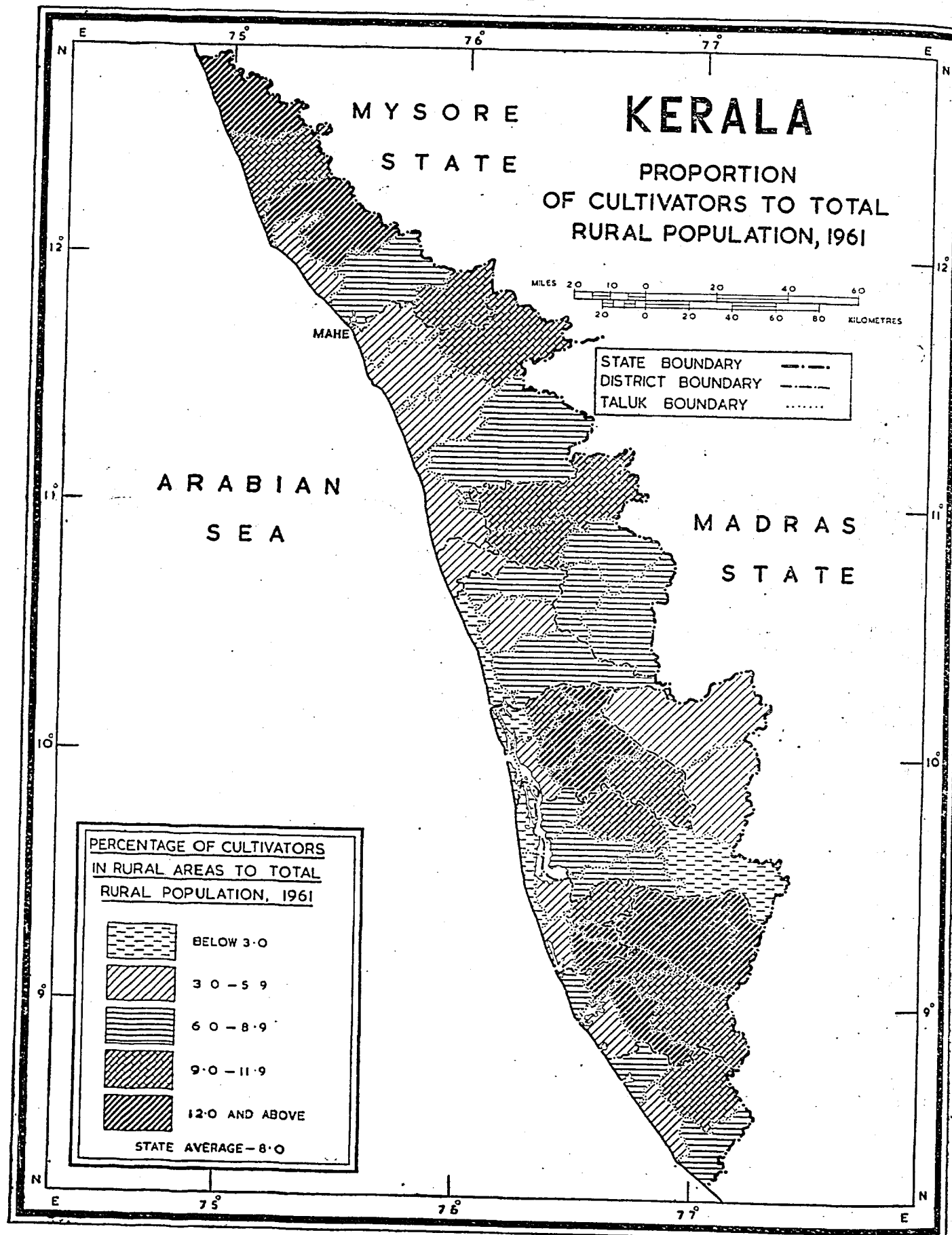
Table

PROPORTION OF CULTIVATORS TO TOTAL WORKERS IN THE AGE-GROUP 15-59 BY STATE AND TALUKS, 1961

Rank	State/Taluk	Percentage of cultivators in the age-group 15-59 to total workers in the age-group 15-59
1	Kerala State	19.5
2	Kunnathur Taluk	47.1
3	Pathanamthitta	46.5
4	Kottarakara	39.3
5	Muvattupuzha	36.9
6	Mavelikkara	34.8
7	Chengannur	34.3
8	Pathanamthitta	33.8
9	Taliparamba	33.4
10	Kunnathur	33.4
11	Meenachil	33.0
12	Nedumangad	32.9
13	Thodupuzha	30.9
14	Perintalmanna	30.8
15	Kasaragod	30.5
16	Thiruvalla	28.5
17	North Wynad	26.4
18	Alwaye	24.6
19	Neyyattinkara	24.1
20	Ottapalam	23.8
21	Hosdurg	23.4
22	Ernad	22.8
23	Changanacherry	22.4
24	South Wynad	22.4
25	Mukundapuram	22.4
26	Kanjirappally	21.9
27	Chirayinkil	21.2
28	Kottayam	19.9
29	Vaikom	19.5
30	Tellicherry	18.3
31	Talappilly	17.0
32	Alathur	15.7
33	Karunagapally	15.0
34	Ponnani	14.7
35	Palghat	14.2
36	Tirur	13.4
37	Chittur	12.9
38	Trichur	11.8
39	Quilandy	11.7
40	Quilon	10.3
41	Cannanore	9.7
42	Badagara	9.7
43	Devicollam	9.2
44	Kozhikode	8.6
45	Karthikapally	7.7
46	Kuttanad	7.4
47	Chowghat	7.4
48	Udumbanchola	6.4
49	Parur	6.3
50	Kanayanaur	5.9
51	Trivandrum	5.0
52	Cranganore	4.2
53	Shertalai	3.8
54	Peermade	2.7
55	Ambalapuzha	2.7
	Cochin	0.9



Source: Census of India, 1961; Kerala



MAP 72
PROPORTION OF CULTIVATORS TO TOTAL RURAL POPULATION, 1961

Purpose

The map shows the variations in the proportion of cultivators in rural areas to the total rural population in the taluks of the State in 1961.

Method

The percentages of cultivators in rural areas to the total rural population by taluks are grouped into five categories and the taluks are shaded according to this grouping by five different shades from deep to light corresponding to high to low value.

Salient Features

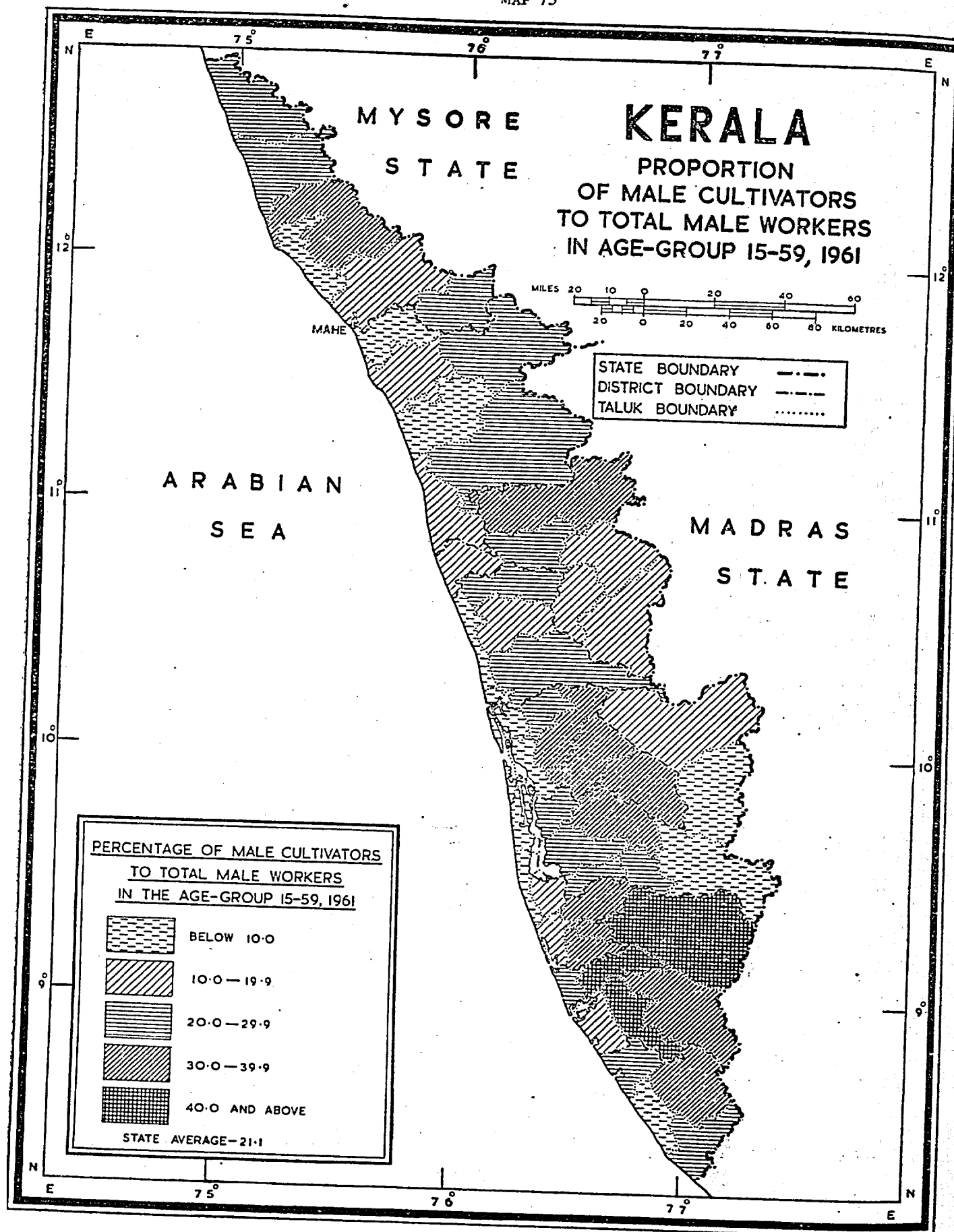
The percentage of cultivators in rural areas to the total rural population in the State as a whole comes to only 8.0 per cent while in the taluks this percentage varies between 0.6 and 17.4. The percentage of cultivators in 7 taluks is below 3.0 per cent, in 14 taluks between 3.0 and 5.9 per cent, in 14 taluks between 6.0 and 8.9 per cent, in 11 taluks between 9.0 and 11.9 per cent and in 9 taluks 12.0 per cent and above. The taluks with percentage of cultivators below 3.0 are Chowghat and Cranganore in Trichur district, Parur and Cochin in Ernakulam district, Peermade in Kottayam district and Shertalai and Ambalapuzha in Alleppey district. All these taluks except Peermade lie in the coastal or coastal backwater regions. Taluks with percentage of cultivators 12.0 and above are Kasaragod and Taliparamba in Cannanore district, Kunnathunad and Muvattupuzha in Ernakulam district, Chengannur and Mavelikkara in Alleppey district and Pathanamthitta, Kunnathur and Kottarakara in Quilon district. The highest percentage of cultivators in rural areas to rural population is in Kunnathur taluk of Quilon district and the lowest in Cochin taluk of Ernakulam district.

Table

PROPORTION OF CULTIVATORS IN RURAL AREAS TO TOTAL RURAL POPULATION IN THE STATE AND TALUKS, 1961

Rank	State/Taluk	Percentage of cultivators in rural areas to total rural population	1	2	3
1	Kerala State	8.0	1	2	3
1	Kunnathur Taluk	17.4	2	3	4
ABSOLUTE NUMBER OF TALUKS					
PER CENT TO TOTAL NUMBER OF TALUKS					
POPULATION (in lakhs)					
PER CENT TO TOTAL POPULATION					

Source: Census of India, 1961, Kerala—Part II A General Population Tables



PROPORTION OF MALE CULTIVATORS TO TOTAL MALE WORKERS IN AGE-GROUP 15-59, 1961

Purpose

The map shows the variation in the proportion of male cultivators to the total male workers in the age-group 15-59 in the taluks of the State in 1961.

Method

The percentage of male cultivators in the age-group 15-59 to the total male workers in that age-group by taluks are grouped into five categories in the order of values and the taluks are shaded according to this grouping by five different shades from deep to light corresponding to high to low value.

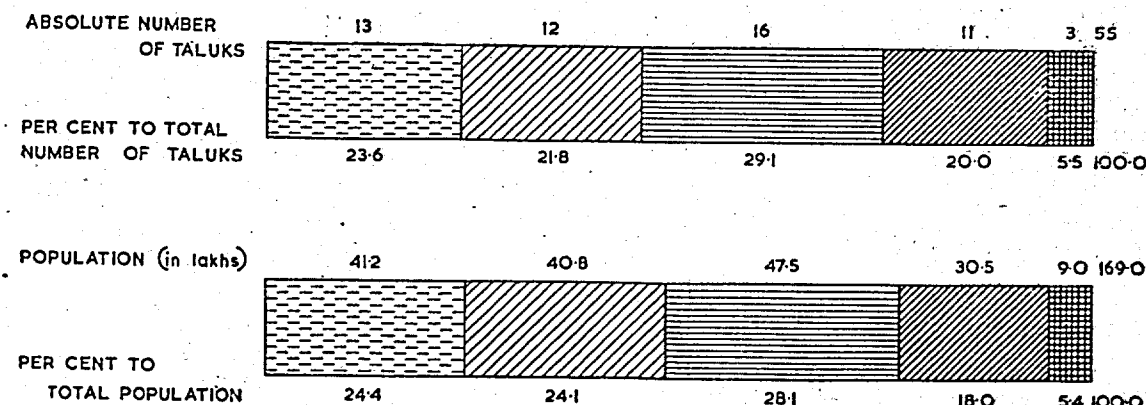
Salient Features

21.1 per cent of the total male workers in the age-group 15-59 in the State are cultivators. In the taluks the variation is between 0.9 per cent and 51.0 per cent. The variation is below 10.0 per cent in the case of 13 taluks, between 10.0 per cent and 19.9 per cent in the case of 12 taluks, between 20.0 per cent and 29.9 per cent in the case of 16 taluks, between 30.0 per cent and 39.9 per cent in the case of 11 taluks and 40.0 per cent and above in the case of 3 taluks. The taluks with very low percentage of male cultivators i. e., below 10.0 per cent, mostly lie scattered along the sea-coast. Only two of these taluks are in the hilly areas. Pathanamthitta, Kunnathur and Kottarakara taluks which have very high percentage of male cultivators, i. e., 40.0 per cent and above of the total male workers, lie contiguous in Quilon district. The highest percentage of male cultivators is in Kunnathur taluk of Quilon district and the lowest in Cochin taluk of Ernakulam district.

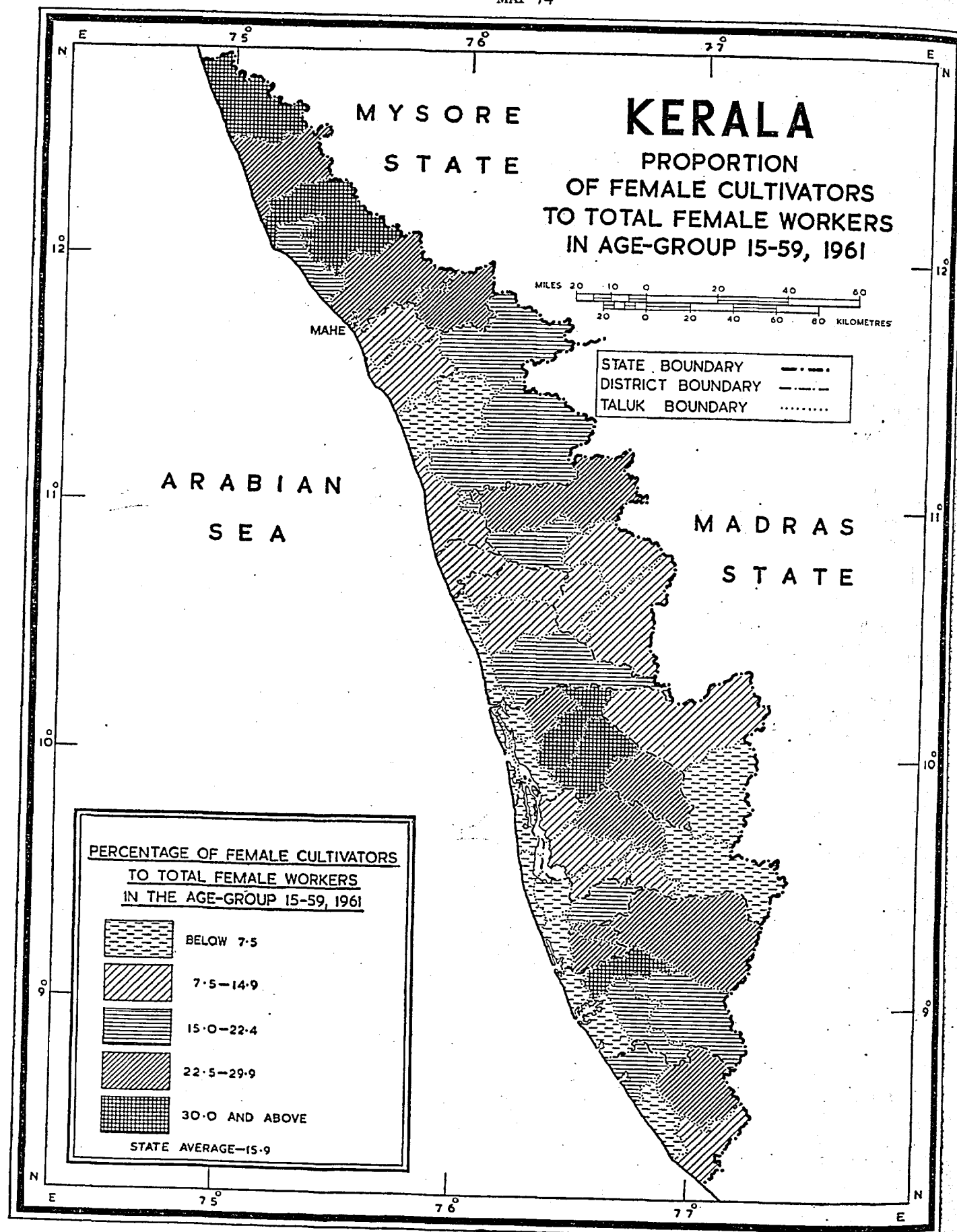
Table

PROPORTION OF MALE CULTIVATORS TO TOTAL MALE WORKERS IN THE AGE-GROUP 15-59 IN THE STATE AND TALUKS, 1961

Rank	State/Taluk	Percentage of male cultivators in the age-group 15-59 to total male workers in the age-group 15-59
1	Kerala State	21.1
1	Kunnathur Taluk	51.0
2	Pathanamthitta "	50.0
3	Kottarakara Taluk	48.6
4	Mavelikkara "	39.6
5	Muvattupuzha "	38.5
6	Pathanapuram "	38.3
7	Chengannur "	38.1
8	Nedumangad "	36.0
9	Meenachil "	34.2
10	Thiruvalla "	33.8
11	Periatalmaana "	33.3
12	Kunnathunad "	32.5
13	Thodupuzha "	32.3
14	Taliparamba "	30.4
15	North Wynad "	28.6
16	Kasaragod "	28.1
17	Neyyattinkara "	28.0
18	Alwaye "	26.7
19	Changanacherry "	26.1
20	Vai kom "	25.6
21	Ottapalam "	25.4
22	Ernad "	25.0
23	South Wynad "	24.3
24	Kanjirapally "	24.2
25	Chirayinkil "	24.0
26	Mukundapuram "	23.8
27	Kottayam "	23.1
28	Hosdruß "	22.3
29	Talappilly "	20.7
30	Karunagapally "	20.7
31	Alathur "	18.8
32	Ponnani "	17.2
33	Tellicherry "	16.8
34	Quilon "	15.9
35	Tirur "	15.6
36	Chittur "	14.8
37	Palghat "	14.6
38	Trichur "	12.8
39	Quilandy "	12.6
40	Devicolum "	11.0
41	Kuttanad "	10.8
42	Karunagapally "	10.8
43	Kozhikode "	9.7
44	Badagara "	8.7
45	Chowghat "	8.5
46	Udumbanchola "	8.5
47	Parur "	7.0
48	Cannanore "	6.7
49	Shertalai "	6.5
50	Trivandrum "	6.4
51	Kanayannur "	6.1
52	Cranganore "	5.5
53	Peermade "	5.4
54	Ambalapuzha "	3.4
55	Cochin "	0.9



Source: Census of India, 1961, Kerala



PROPORTION OF FEMALE CULTIVATORS TO TOTAL FEMALE WORKERS IN AGE-GROUP 15-59, 1961

Purpose

The map shows the variations in the proportion of female cultivators to the total female workers in the age-group 15-59 in the taluks of the State in 1961.

Method

The percentages of female cultivators in the age-group 15-59 to the total female workers in that age-group by taluks are grouped into five categories in the order of values and the taluks are shaded according to this grouping by five different shades from deep to light corresponding to high to low value.

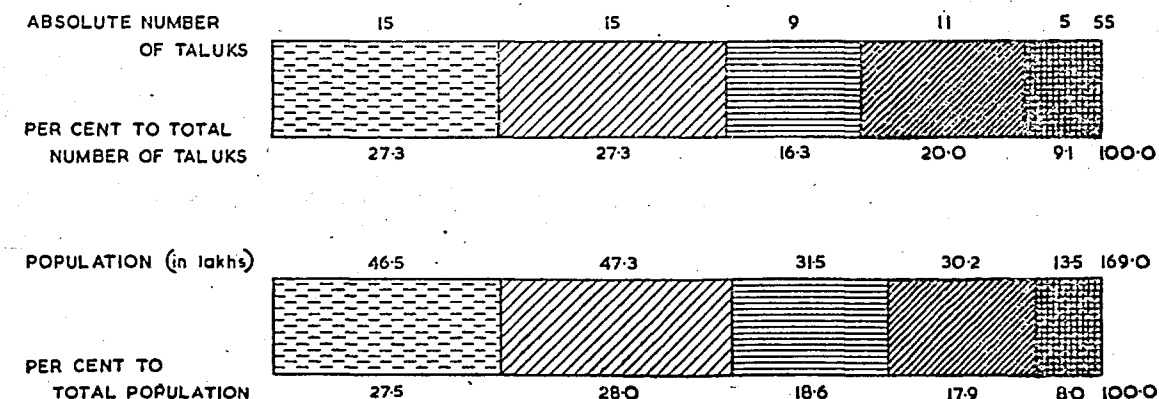
Salient Features

Of the State's total female workers in the age-group 15-59, 15.9 per cent are cultivators. In the case of 15 taluks female cultivators are below 7.5 per cent. There are 15 taluks with percentage of female cultivators between 7.5 per cent and 14.9 per cent, 9 taluks between 15.0 per cent and 22.4 per cent, 11 taluks between 22.5 per cent and 29.9 per cent and 5 taluks with 30.0 per cent and above to the total female workers in the age-group 15-59. The taluks having very high percentage of female cultivators, i. e., 30.0 per cent and above, are Kasaragod and Taliparamba in Cannanore district, Kunnathunad and Muvattupuzha in Ernakulam district and Kunnathur in Quilon district. Kunnathur taluk has the highest percentage of female cultivators to the total female workers in age-group 15-59 and Cochin taluk of Ernakulam district the lowest.

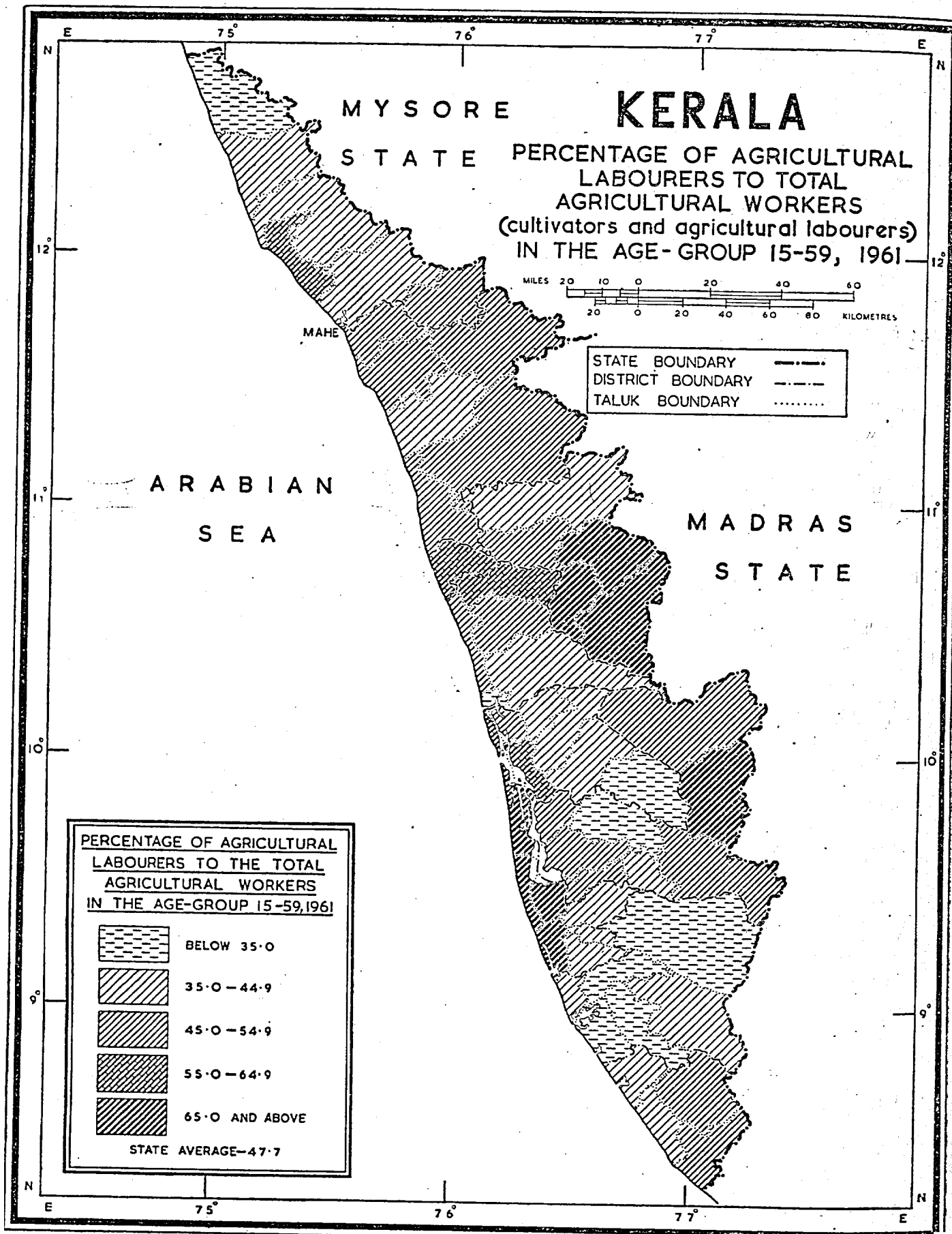
Table

PROPORTION OF FEMALE CULTIVATORS TO TOTAL FEMALE WORKERS IN AGE-GROUP 15-59 IN THE STATE AND TALUKS, 1961

Rank	State/Taluk	Percentage of female cultivators in the age-group 15-59 to female workers in the age-group 15-59
1	Kerala State	15.9
1	Kunnathur Taluk	39.0
2	Taliparamba "	38.0
3	Kasaragod "	35.7
4	Kunnathunad "	34.9
5	Muvattupuzha Taluk	33.5
6	Patbanamthitta "	29.8
7	North Wynad "	28.1
8	Meenachil "	27.7
9	Hosdrug "	26.0
10	Thodupuzha "	26.0
11	Alwaye "	25.9
12	Perintalmanna "	25.8
13	Tellicherry "	25.1
14	Mavelikkara "	23.9
15	Chengannur "	23.7
16	Nedumangad "	22.8
17	Ottapalam "	21.6
18	Pathanapuram "	21.2
19	Mukundapuram "	19.5
20	Cannanore "	19.1
21	Ernad "	18.9
22	Thiruvalla "	18.4
23	South Wynad "	18.3
24	Chirayinkil "	18.2
25	Kottarakara "	17.2
26	Palghat "	14.9
27	Alathur "	14.8
28	Talapilly "	14.4
29	Trichur "	13.2
30	Badagara "	13.0
31	Kottayam "	13.0
32	Kanjirappally "	12.9
33	Neyyattinkara "	12.3
34	Chittur "	11.4
35	Ponnani "	10.5
36	Quilandy "	9.6
37	Timur "	9.3
38	Changanacherry "	8.5
39	Vaikom "	8.1
40	Devicolum "	7.6
41	Kozhikode "	6.7
42	Kanayannur "	6.7
43	Karunagapally "	6.4
44	Chowghat "	5.6
45	Parur "	5.0
46	Karthigapally "	4.7
47	Cranganore "	4.2
48	Trivandrum "	4.0
49	Quilon "	3.8
50	Udumbanchola "	3.7
51	Kuttanad "	1.6
52	Sheritalai "	1.4
53	Peermade "	1.0
54	Ambalapuzha "	1.0
55	Cochin "	0.9



Source: Census of India, 1961, Kerala



MAP 75
PERCENTAGE OF AGRICULTURAL LABOURERS TO TOTAL AGRICULTURAL WORKERS
(CULTIVATORS AND AGRICULTURAL LABOURERS) IN THE AGE-GROUP 15-59, 1961

Purpose

The map shows the variations in the proportion of agricultural labourers to the total agricultural workers in the age-group 15-59 in the taluks of the State in 1961.

Method

The percentages of agricultural labourers in the age-group 15-59 to the total agricultural workers (cultivators and agricultural labourers) in the age-group 15-59 by taluks are grouped into five categories according to values and the taluks are shaded according to this grouping by five different shades from deep to light corresponding to high to low value.

Salient Features

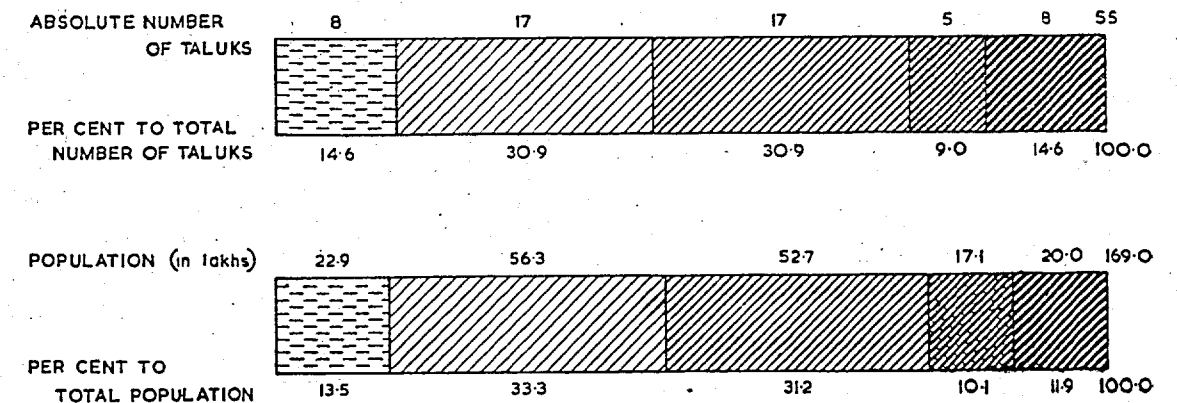
An 'Agricultural labourer' is a person who works in another person's land only as a labourer without exercising any supervision or direction in cultivation for wages in cash, kind or share, such as share of produce. The labourer should have no right or lease or contract on land on which he works, nor he is responsible for taking decision as to which crops to grow and when, or taking the risks of cultivation. Agricultural workers include both cultivators and agricultural labourers.

Nearly half of the total agricultural workers in the age-group 15-59 of the State are agricultural labourers. The proportion of agricultural labourers to the agricultural workers in the working age-group 15-59 in taluks varies from 23.7 per cent to 85.6 per cent. In 8 taluks the percentage of agricultural labourers is below 35.0, in 17 taluks between 35.0 and 44.9, in 17 taluks between 45.0 and 54.9, in 5 taluks between 55.0 and 64.9 and in 8 taluks 65.0 and above of the total agricultural workers in the age-group 15-59. The taluks coming in the last category (i. e., agricultural labourers with 65.0 per cent and above) lie with the exception of Udumbanchola taluk in two contiguous areas, the first consisting of Palghat, Alathur and Chittur taluks in Palghat district and the second consisting of Shertalai, Ambalapuzha, Kuttanad and Karthigapally taluks in Alleppey district. The highest percentage of agricultural labourers is in Kuttanad taluk of Alleppey district and the lowest in Pathanamthitta taluk of Quilon district.

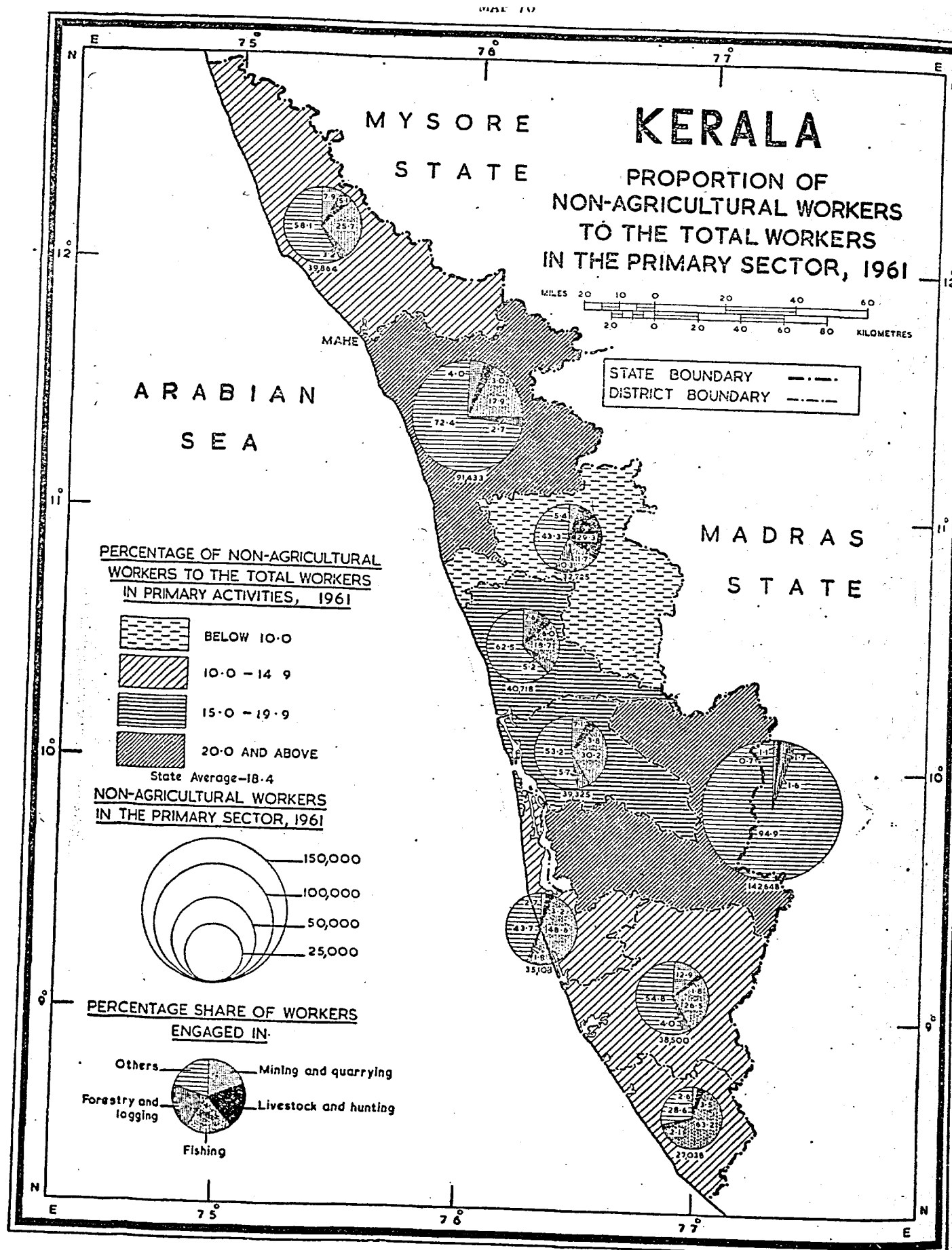
Table

PROPORTION OF AGRICULTURAL LABOURERS TO TOTAL AGRICULTURAL WORKERS IN AGE-GROUP 15-59 IN THE STATE AND TALUKS, 1961

Rank	State/Taluk	Percentage of agricultural labourers in the age-group 15-59 to the total agricultural workers (cultivators and agricultural labourers) in the age-group 15-59
1	Kerala State	47.7
2	Kuttanad Taluk	85.6
3	Chittur	77.3
4	Ambalapuzha	73.5
5	Alathur	72.5
6	Udumbanchola	71.7
7	Palghat	70.6
8	Karthigapally	67.2
9	Shertalai	66.3
10	Cochin	63.2
11	Kanayannur	62.0
12	Talappilly	61.6
13	Cannanore	59.3
14	Ponnani	58.3
15	Vaikom	53.5
16	South Wynad	52.9
17	Peermade	51.0
18	Changanacherry	51.0
19	Trichur	50.8
20	Quilandy	50.6
21	Tirur	50.5
22	Ottapalam	50.5
23	Parur	50.4
24	Devicolum	48.6
25	Ernad	47.8
26	North Wynad	47.8
27	Badagara	47.7
28	Chowghat	46.9
29	Neyyattinkara	45.6
30	Nedumangad	45.5
31	Kottayam	45.3
32	Hosdrug	44.7
33	Tellicherry	44.7
34	Thiruvalla	44.4
35	Alwaye	44.3
36	Chengannur	44.2
37	Perinthalmanna	43.7
38	Mavelikkara	42.8
39	Kozhikode	42.6
40	Kunnathunad	42.2
41	Trivandrum	42.2
42	Mukundapuram	41.1
43	Taliparamba	40.5
44	Pathanamthitta	40.1
45	Karunagapally	38.8
46	Muvattupuzha	37.6
47	Kanjirappally	37.6
48	Chirayinkil	37.2
49	Kasaragod	33.9
50	Quilon	33.7
51	Kottarakara	32.4
52	Cranganore	31.8
53	Kunnathur	31.8
54	Thodupuzha	30.0
55	Meenachil	25.3
	Pathanamthitta	23.7



Source: Census of India, 1961, Kerala



Purpose

The map shows the proportion of non-agricultural workers to the total workers in the primary sector of economic activity as well as the percentage share of workers in the sub-categories viz., Mining and Quarrying, Livestock and Hunting etc. etc. to the total non-agricultural workers in the primary sector by districts in 1961.

Method

The total non-agricultural workers in the primary sector in the districts are shown by proportionate circles. The non-agricultural workers in the primary sector are classified into five groups viz., (i) mining and quarrying (ii) livestock and hunting, (iii) fishing (iv) forestry and logging and (v) others, and the percentage share of each group to the total non-agricultural workers in the primary sector is shown inside the circles by shaded sectors.

The percentages of non-agricultural workers in the primary sector to the total workers in the primary sector by districts are arranged into four groups and the districts are shaded according to the above grouping by four different grades of hatches from deep to light corresponding to high to low value.

Salient Features

Primary sector of economic activity consists of categories I. Cultivation, II. Agricultural Labour and III. Mining, Quarrying, Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and allied activities of the Indian Standard Industrial Classi-

fication, and 'non-agricultural workers' in the primary sector here mean workers engaged in category III.

Of the total workers of the State in the primary sector, 18.4 per cent are non-agricultural workers. The percentage of non-agricultural workers is below 10.0 in Palghat district, between 10.0 and 14.9 in Cannanore, Alleppey, Quilon and Trivandrum districts, between 15.0 and 19.9 in Trichur and Ernakulam districts and 20.0 or above in Kozhikode and Kottayam districts. The reason for the highest percentage of non-agricultural workers in Kottayam district should be attributed to the presence of a large number of workers in plantations.

On examining the percentage share of the various groups of workers to the total non-agricultural workers in the primary sector, it will be found that the largest percentage of workers comes under the group 'others' which includes workers in plantations, orchards and allied activities in the case of the State as well as all the districts except Alleppey and Trivandrum. In the case of Alleppey and Trivandrum districts fishing engages the highest percentage of workers among the total non-agricultural workers in the primary sector and the group 'others' has only the second predominance. Fishing engages a good number of workers in all districts except Kottayam. Percentages of workers in the remaining groups viz., Mining and quarrying, livestock and hunting, and forestry and logging are very low except in Palghat district which has a sizable proportion of workers in livestock and hunting.

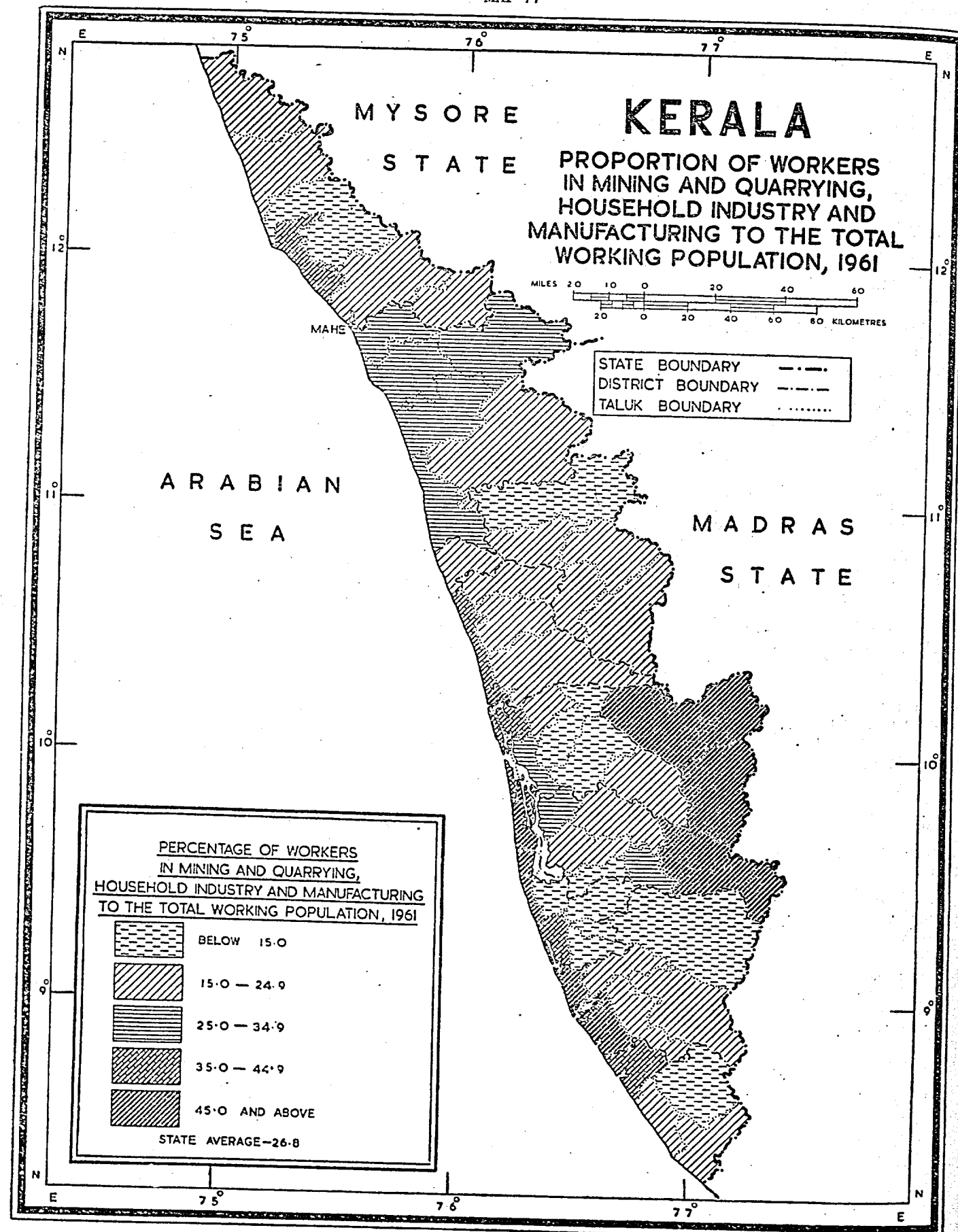
Table

PROPORTION OF NON-AGRICULTURAL WORKERS TO THE TOTAL WORKERS IN THE PRIMARY SECTOR IN THE STATE AND DISTRICTS, 1961

State/District	Total Non-agricultural workers in the Primary sector	Percentage of non-agricultural workers in the primary sector to the total workers in the primary sector	Percentage share of workers in different groups to the total non-agricultural workers in the primary sector				
			Mining and quarrying	Livestock and hunting	Fishing	Forestry and logging	Others
Kerala State	487,359	18.4	4.7	4.5	19.8	3.4	67.6
Cannanore District	39,864	13.2	7.9	3.1	25.7	3.2	58.1
Kozhikode "	91,433	27.5	4.0	3.0	17.9	2.7	72.4
Palghat "	32,725	8.4	5.4	29.3	11.7	10.3	43.3
Trichur "	40,718	19.0	7.6	6.0	18.7	5.2	62.5
Ernakulam "	39,325	15.6	7.1	3.8	30.2	5.7	53.2
Kottayam "	142,648	41.8	1.1	0.7	1.7	1.6	94.9
Alleppey "	35,108	13.4	2.7	3.2	48.6	1.8	43.7
Quilon "	38,500	11.8	12.9	1.8	26.5	4.0	54.8
Trivandrum "	27,038	12.1	2.6	3.5	63.2	2.1	23.6

ABSOLUTE NUMBER OF DISTRICTS	1	4	2	2	9
PER CENT TO TOTAL NUMBER OF DISTRICTS	11.1	44.5	22.2	22.2	100.0
POPULATION (in lakhs)	17.7	72.8	35.0	43.5	169.0
PER CENT TO TOTAL POPULATION	10.5	43.1	20.7	25.7	100.0

Source: Census of India, 1961, Kerala—Part II B (i) General Economic Tables



MAP 77 PROPORTION OF WORKERS IN MINING AND QUARRYING, HOUSEHOLD INDUSTRY AND MANUFACTURING TO THE TOTAL WORKING POPULATION, 1961

Purpose

The map shows the variations in the proportion of workers in Mining, Quarrying, Livestock, Fishing, Hunting, Forestry etc., Household Industry and Manufacturing other than Household Industry i. e., categories III, IV and V respectively, to the total workers in the taluks of the State in 1961.

Method

The percentages of workers in the three industrial categories viz., category III—Mining, Quarrying, Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and allied activities, category IV—Household Industry and category V—Manufacturing other than Household Industry to the total workers by taluks are arranged into five groups according to value and the taluks are shaded according to this grouping by five different shades from deep to light corresponding to high to low value.

Salient Features

Industries coming under divisions 0 and 1 (excluding those conducted in the scale of household industry) of the Indian Standard Industrial Classification (I. S. I. C.) constitute category III.

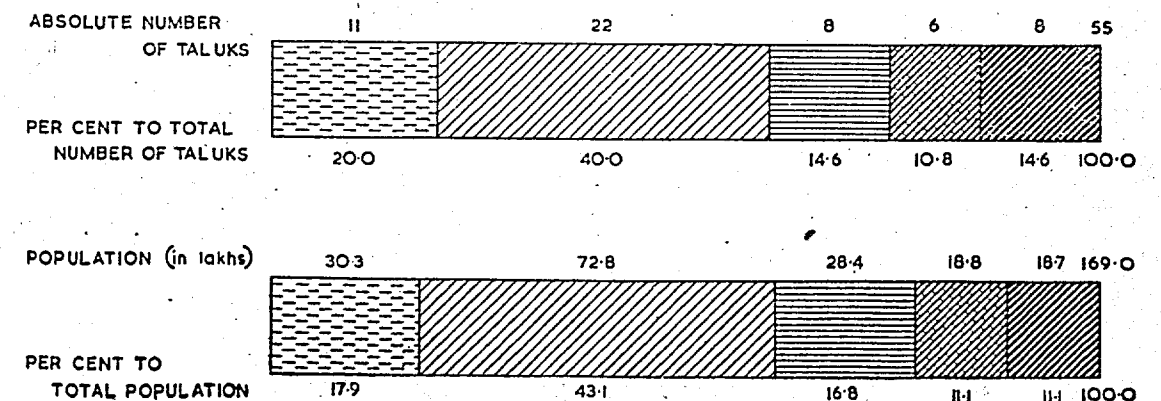
A household industry (category IV) is one coming under any of the divisions 0, 1, 2 and 3 of the I. S. I. C. and conducted by the head of the household himself and/or mainly by members of the household at home or within the village in rural areas and only at home in urban areas. The industry should be below the scale of a registered factory. It should relate to the production, processing, servicing, repairing or making and selling of goods. Industries in divisions 2 and 3 excluding those conducted in the scale of household industry constitute category V—Manufacturing and include major industries like textile industry, paper industry, rubber industry, machinery industry etc.

The percentage of workers in categories I, II and III to the total workers of the State is 26.8 per cent. In the taluks the percentage of workers in the three categories varies considerably. There are 11 taluks with the percentage below 15.0, 22 taluks with the percentage between 15.0 and 24.9, 8 taluks with the percentage between 25.0 and 34.9, 6 taluks with the percentage between 35.0 and 44.9 and 8 taluks with percentage 45.0 or above. Peermade taluk of Kottayam district has the highest percentage (72.7) and Chengannur taluk of Alleppey district the lowest (9.5).

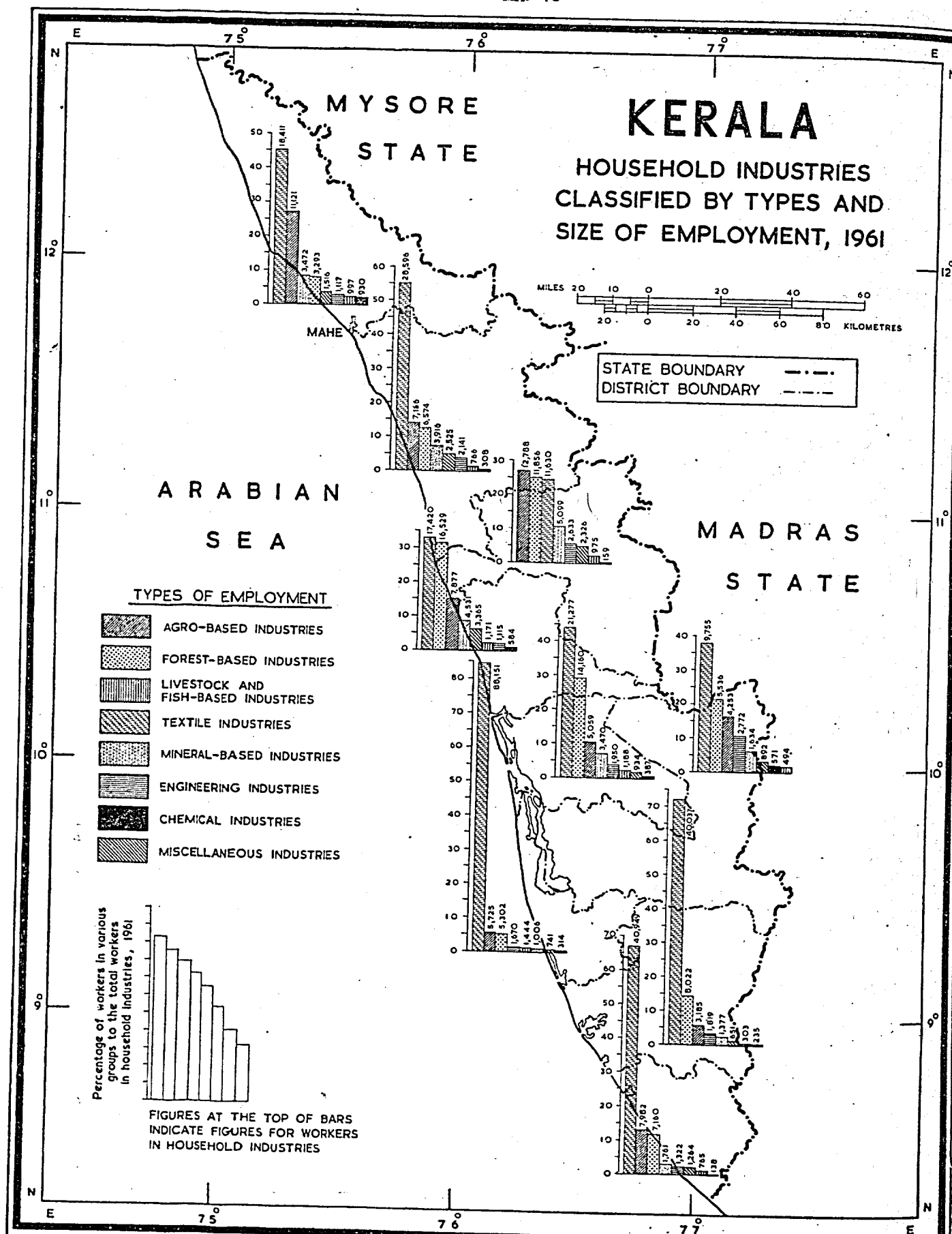
Table

PROPORTION OF WORKERS IN MINING, QUARRYING ETC., HOUSEHOLD INDUSTRY AND MANUFACTURING OTHER THAN HOUSEHOLD INDUSTRY TO THE TOTAL WORKERS IN THE STATE AND TALUKS, 1961

Rank	State/Taluk	Percentage of workers in Mining, Quarrying etc., Household Industry and manufacturing other than household industry to the total workers
1	Kerala State	26.8
2	Peermade Taluk	72.7
3	Shertalai	62.2
4	Devicollam	61.9
5	Udumbanchola	58.6
6	Cranganore	53.7
7	Quilon	51.3
8	Ambalapuzha	49.4
9	Karunagapally	46.7
10	Parur	42.4
11	Cannanore	40.9
12	Chowghat	39.7
13	Cochin	38.6
14	Chirayinkil	37.5
15	Karthikapally	36.6
16	Quilandy	33.5
17	South Wynaad	31.3
18	Kanjirapally	30.0
19	Vaikom	28.7
20	Kanayannur	28.5
21	Kozhikode	28.4
22	Tirur	27.8
23	Badagara	27.3
24	Trichur	24.5
25	Meenachil	24.0
26	Mukundapuram	23.3
27	Trivandrum	23.1
28	Kottarakara	23.0
29	Alwaye	22.8
30	Thodupuzha	22.7
31	Pathanapuram	22.5
32	Ponnani	22.3
33	Neyyattinkara	22.3
34	Tellicherry	21.9
35	Kasaragod	20.0
36	North Wynaad	19.9
37	Kottayam	19.8
38	Alathur	19.1
39	Palghat	17.3
40	Chittur	17.3
41	Hosdurg	16.9
42	Talappilly	15.9
43	Ottapalam	15.8
44	Kunnathur	15.7
45	Ernad	15.0
46	Changanacherry	14.9
47	Kunnathunad	14.7
48	Taliparamba	14.1
49	Pathanamthitta	13.3
50	Mavelikkara	12.9
51	Perinthalmanna	12.8
52	Nedumangad	11.9
53	Kuttanad	11.7
54	Muvattupuzha	11.5
55	Thiruvalla	10.1
	Chengannur	9.5



Source: Census of India, 1961, Kerala—Part II A. General Population Tables



MAP 78
HOUSEHOLD INDUSTRIES CLASSIFIED BY TYPES AND SIZE OF EMPLOYMENT, 1961

Purpose

The map shows the percentage of workers in the different types of household industries like agro-based industries, forest-based industries etc., to the total workers in household industries in the districts of the State in 1961.

Method

Household industries are grouped into the following eight types.

- Agro-based industries
- Forest-based industries
- Livestock and fish-based industries
- Textile industries
- Mineral-based industries
- Engineering industries
- Chemical industries
- Miscellaneous industries

The percentages of workers in each of the above groups to the total workers in household industries in the districts are shown by bar charts. The bars are shaded by different types of shades. The absolute number of workers in each type of industry is indicated at the top of the bars.

Salient Features

A household industry is one conducted by the

head of the household himself and/or mainly by members of the household at home or within the village in rural areas and only at home in urban areas. The industry should be below the scale of a registered factory.

In Kerala 56.5 per cent of the total workers in household industries are employed in textile industries, 16.1 per cent in forest-based industries, 13.3 per cent in agro-based industries and below 15.0 per cent in the remaining types of industries put together.

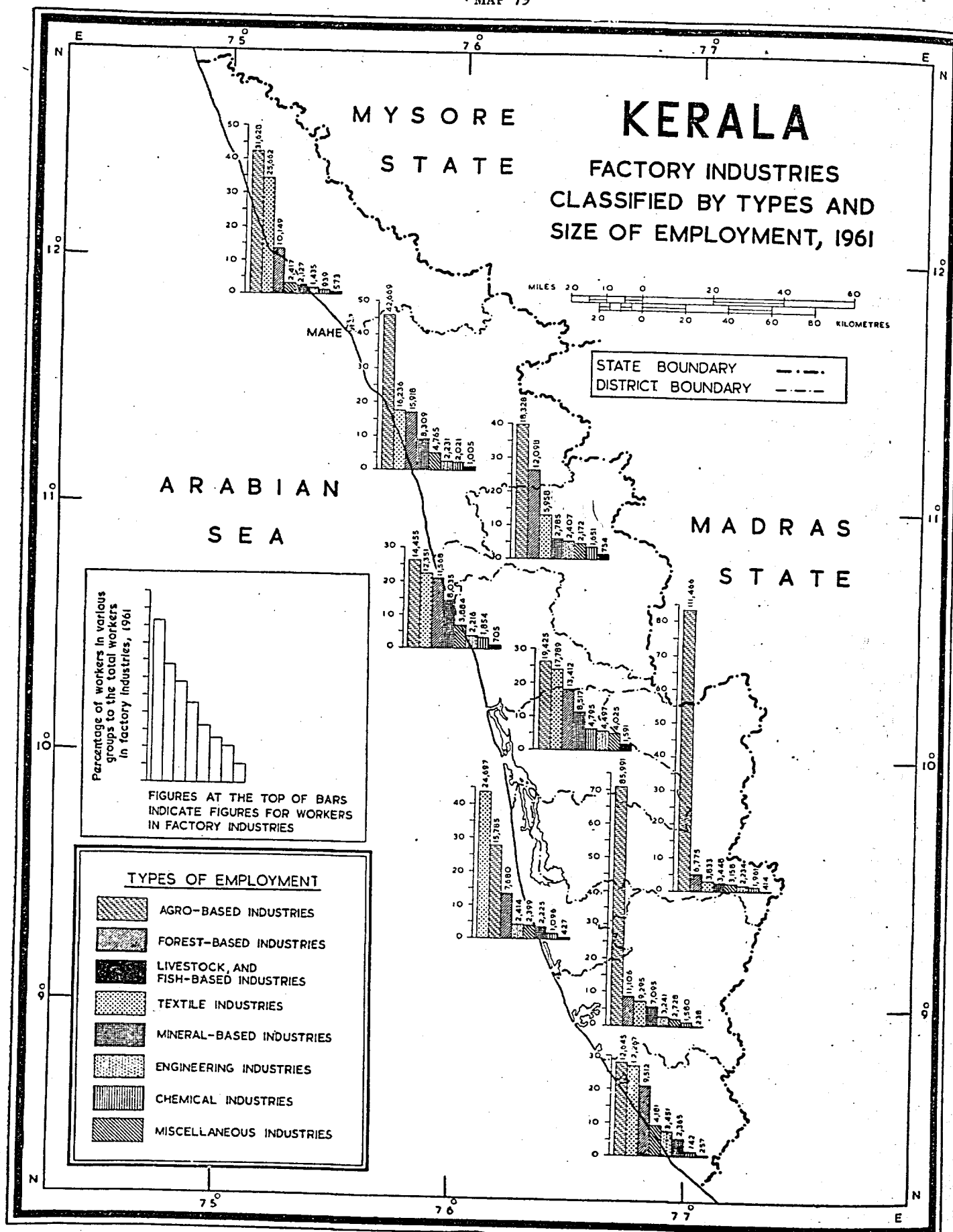
In the districts textile industry engages the highest percentage of workers in household industry in all districts except Palghat where the highest percentage of workers is engaged in agro-based industries followed closely by forest-based industries and textile industries. The percentage of workers in textile industry in the districts except Palghat varies between 33.1 and 84.5. The second highest percentage of workers is in forest-based industries in the case of Palghat, Trichur, Ernakulam, Kottayam and Quilon districts where the percentage varies between 14.4 and 31.5, and in agro-based industries in the case of Cannanore, Kozhikode, Alleppey and Trivandrum districts where the percentage varies between 5.5 and 27.2.

Table

PERCENTAGE OF WORKERS IN DIFFERENT TYPES OF HOUSEHOLD INDUSTRIES TO TOTAL WORKERS IN HOUSEHOLD INDUSTRY IN THE STATE AND DISTRICTS, 1961

State/District	Percentage of workers in different types of household industries to total workers in household industry							
	Agro-based industries	Forest-based industries	Livestock and fish-based industries	Textile industries	Mineral-based industries	Engineering industries	Chemical industries	Miscellaneous industries
1	2	3	4	5	6	7	8	9
Kerala State	13.3	16.1	1.7	56.5	5.4	3.4	0.7	2.9
Cannanore District	27.2	8.1	2.4	45.1	8.5	2.7	2.3	3.7
Kozhikode "	13.8	12.6	1.5	55.0	7.5	4.1	0.6	4.9
Palghat "	26.9	25.0	2.1	24.5	10.7	5.6	0.3	4.9
Trichur "	15.0	31.5	2.2	33.1	8.6	2.1	1.1	6.4
Ernakulam "	10.5	29.2	2.5	43.9	7.2	4.0	0.8	1.9
Kottayam "	16.4	21.4	1.9	37.7	6.3	10.7	2.2	3.4
Alleppey "	5.5	5.1	1.4	84.5	0.9	1.6	0.3	0.7
Quilon "	5.7	14.4	0.5	72.0	2.5	3.3	0.4	1.2
Trivandrum "	13.0	11.7	1.2	66.8	2.9	2.1	0.2	2.1

Source: Census of India, 1961, Kerala—Part II B (i) General Economic Tables



FACTORY INDUSTRIES CLASSIFIED BY TYPES AND SIZE OF EMPLOYMENT, -1961

Purpose

The map shows the percentage of workers in the different types of factory industries like agro-based industries, textile industries etc., to the total workers in factory industries in the districts of the State in 1961.

Method

Factory industries are grouped into the following eight types.

- Agro-based industries
- Forest-based industries
- Livestock and fish-based industries
- Textile industries
- Mineral-based industries
- Engineering industries
- Chemical industries
- Miscellaneous industries

The percentage of workers in each of the above groups to the total workers in factory industries in the districts are shown by bar charts and the bars are shaded by different types of shades. The absolute number of workers in each type of industry is indicated at the top of the bars.

Salient Features

Factories run above the scale of household industry

only are taken into account here. In Kerala agro-based industry engages the highest percentage of workers viz., 50.3 per cent of the total workers in factory industries. Textile industry engages the next highest percentage of workers with 18.3 per cent.

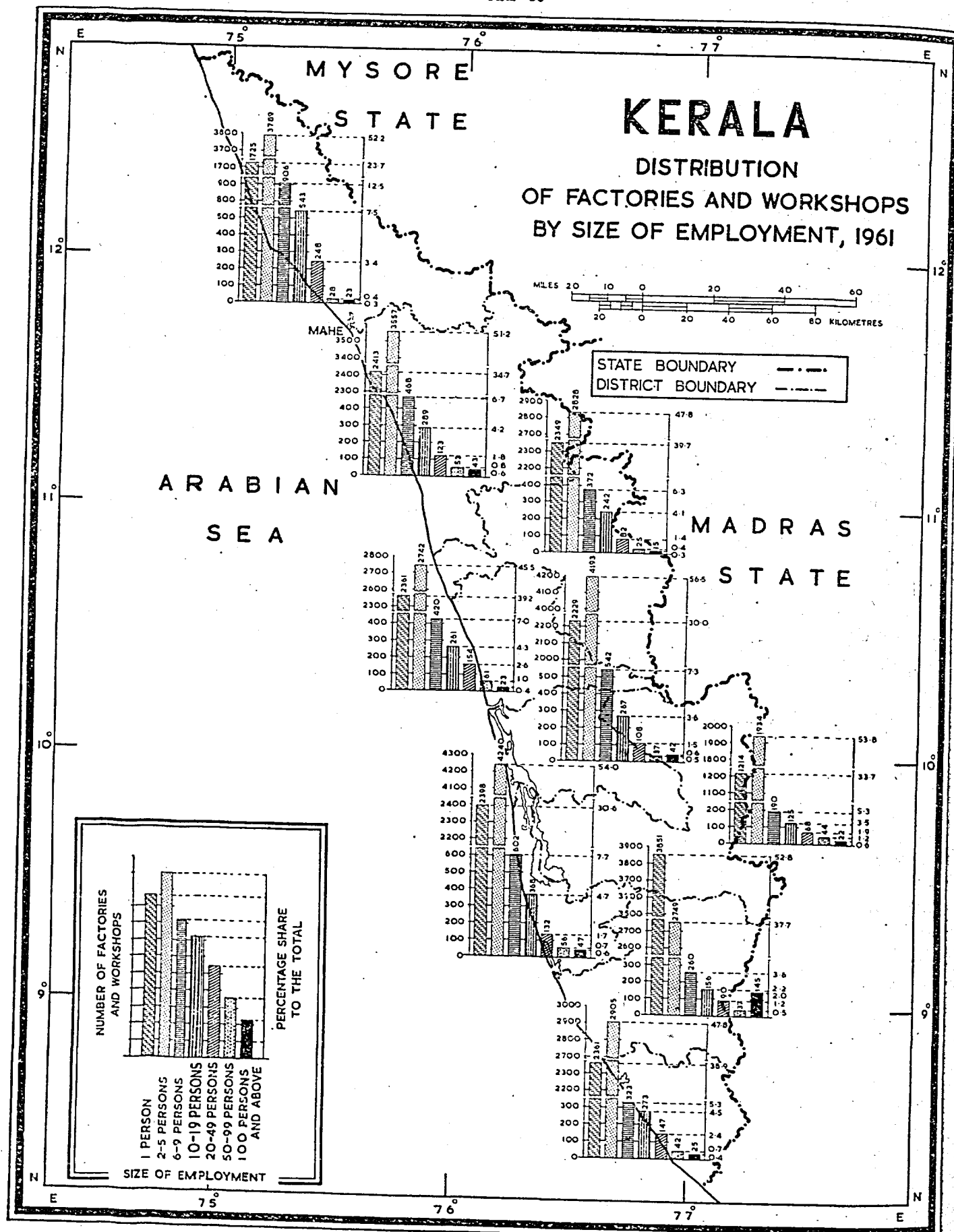
In the districts agro-based industries form the major type of factory industry, engaging the highest percentage of workers, in all the districts except Alleppey, the percentages varying between 26.2 and 83.6. In the case of Alleppey district textile industry, which engages 43.5 per cent of the total workers in factory industries, is the major type. The second major type of industry in point of percentage of factory workers in the case of Alleppey district is agro-based industries. In all the districts except Palghat, Kottayam, Alleppey and Quilon the second predominant type of factory industry is textile industry. In Palghat, Kottayam and Quilon districts the second predominant type of industry is forest-based. In the case of Kozhikode, Trichur and Ernakulam districts industries based on minerals are also important. In all the districts, the percentage of workers is lowest in the case of livestock and fish-based industries.

Table

PERCENTAGE OF WORKERS IN DIFFERENT TYPES OF FACTORY INDUSTRIES TO TOTAL WORKERS IN FACTORY INDUSTRY IN THE STATE AND DISTRICTS, 1961

State/District	Percentage of workers in different types of factory industries to total workers in factory industry							
	Agro-based industries	Forest-based industries	Livestock and fish-based industries	Textile industries	Mineral-based industries	Engineering industries	Chemical industries	Miscellaneous industries
1	2	3	4	5	6	7	8	9
Kerala State	50.3	14.0	0.9	18.3	6.4	3.4	2.4	4.3
Cannanore District	42.2	13.5	0.8	34.3	2.8	1.9	1.3	3.2
Kozhikode "	45.8	17.1	1.1	17.4	8.9	2.4	2.2	5.1
Palghat "	39.7	26.2	1.6	12.9	6.1	5.2	3.5	4.7
Trichur "	26.2	21.0	1.3	22.4	14.6	4.0	3.4	7.1
Ernakulam "	25.2	18.1	2.2	24.0	11.5	6.1	6.5	5.4
Kottayam "	83.6	5.1	0.3	2.9	2.6	1.7	1.5	2.3
Alleppey "	27.8	13.5	0.8	43.6	3.9	4.3	1.9	4.2
Quilon "	70.9	9.2	0.2	7.7	5.8	2.7	1.3	2.2
Trivandrum "	27.8	21.0	0.6	27.0	5.2	7.6	1.6	9.2

Source: Census of India, 1961, Kerala—Part II B (i) General Economic Tables



DISTRIBUTION OF FACTORIES AND WORKSHOPS BY SIZE OF EMPLOYMENT, 1961

Purpose

The map shows the distribution of industrial establishments (factories and workshops) according to size of employment in the districts of the State in 1961.

Method

The total number of factories and workshops in each district is classified into seven groups according to the number of persons employed therein viz., (i) 1 person, (ii) 2-5 persons, (iii) 6-9 persons, (iv) 10-19 persons, (v) 20-49 persons, (vi) 50-99 persons and (vii) 100 persons and above. The number of factories and workshops coming in each of the groups by districts is then represented by bar charts. The absolute number of industrial establishments in each group and its percentage to the total industrial establishments of the districts are also indicated. Some of the bars which are unduly long are cut at suitable stages to make them presentable in the map. The data for these are taken from the houselist prepared for the 1961 Census.

Salient Features

A great majority of the industrial establishments in the State and districts have small employment capacity i. e., more than 88 per cent of the factories and workshops in the State and in all districts employ

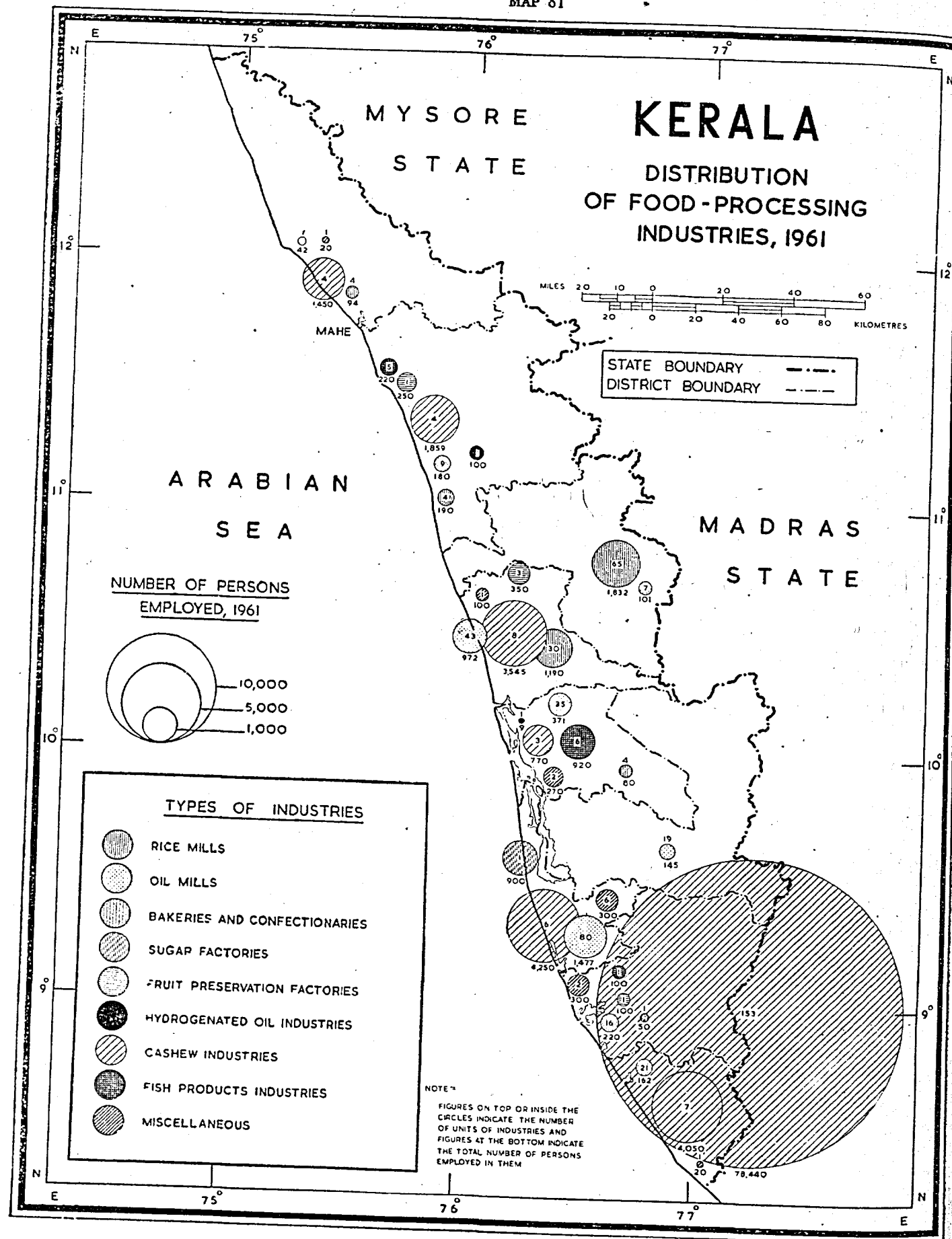
only less than 10 persons each. The largest number of industrial establishments in all the districts except Quilon is in group (ii), i. e. with employment strength between 2 and 5 persons each and their percentage to the total number of establishments in the districts varies between 45.5 and 56.5. In the case of Quilon district the highest number of industrial establishments (52.8 per cent of the total industrial establishments) is in group (i) employing only one person each. While the second largest number of industrial establishments in all the districts except Quilon employ one person each, in Quilon district the industrial establishments employing 2 to 5 persons each command the second rank. Industrial establishments employing 10 to 19 persons each vary between 2.2 per cent and 7.5 per cent, those employing 20 to 49 persons between 1.2 per cent and 3.4 per cent, those employing 50 to 99 persons between 0.4 per cent and 1.2 per cent and those employing 100 persons and above between 0.3 per cent and 2.0 per cent in the districts. Industrial establishments employing 100 persons and above have the largest number in Quilon district with 145, and the smallest number in Palghat district with but 15.

Table

PERCENTAGE DISTRIBUTION OF FACTORIES AND WORKSHOPS BY SIZE OF EMPLOYMENT IN THE
STATE AND DISTRICTS, 1961

		Percentage of factories and workshops employing						
State/District		1 person	2-5 persons	6-9 persons	10-19 persons	20-49 persons	50-99 persons	100 persons and above
" 1		2	3	4	5	6	7	8
Kerala State		35.8	49.6	7.0	4.3	2.0	0.6	0.7
Cannanore	District	23.7	53.2	12.5	7.5	3.4	0.4	0.3
Kozhikode	"	34.7	51.2	6.7	4.2	1.8	0.8	0.6
Paighat	"	39.7	47.8	6.3	4.1	1.4	0.4	0.3
Trichur	"	39.2	45.5	7.0	4.3	2.6	1.0	0.4
Ernakulam	"	30.0	56.5	7.3	3.6	1.5	0.5	0.6
Kottayam	"	33.7	53.8	5.3	3.5	1.9	1.2	0.6
Alleppey	"	30.6	54.0	7.7	4.7	1.7	0.7	0.6
Quilon	"	52.8	37.7	3.6	2.2	1.2	0.5	2.0
Trivandrum	"	38.9	47.8	5.3	4.5	2.4	0.7	0.4

Source: Census of India, 1961, Kerala—Part IV A & B Report on Housing and Establishments and Housing and Establishment Tables



DISTRIBUTION OF FOOD-PROCESSING INDUSTRIES, 1961

Purpose

The map shows the districtwise distribution of industries relating to food-processing in the State in 1961.

Method

The various food-processing industries are grouped into the following types viz., (a) rice mills, (b) oil mills, (c) bakeries and confectionaries, (d) sugar factories, (e) fruit preservation factories, (f) hydrogenated oil industries, (g) cashew industries, (h) fish products industries and (i) miscellaneous industries. Industries registered as factories as on 30th June 1961 alone are taken into account for the purpose of this map. The number of persons employed in the different units of each of the above types is added up and circles are given in the districts proportional to the total number of persons employed in each type in the district. The circles are shaded suitably to distinguish the different types of food processing industries. The actual locations of the various industries within a district are not taken into consideration while plotting the circles.

Salient Features

There are 563 industries relating to food processing in the State employing a total number of 105,429 persons. Among food-processing industries cashew industry engages the largest number of workers viz., 94,364 persons. Cashew industry is mainly concentrated in Quilon district where 153 out of the total of 185 cashew industries in the State are located. There

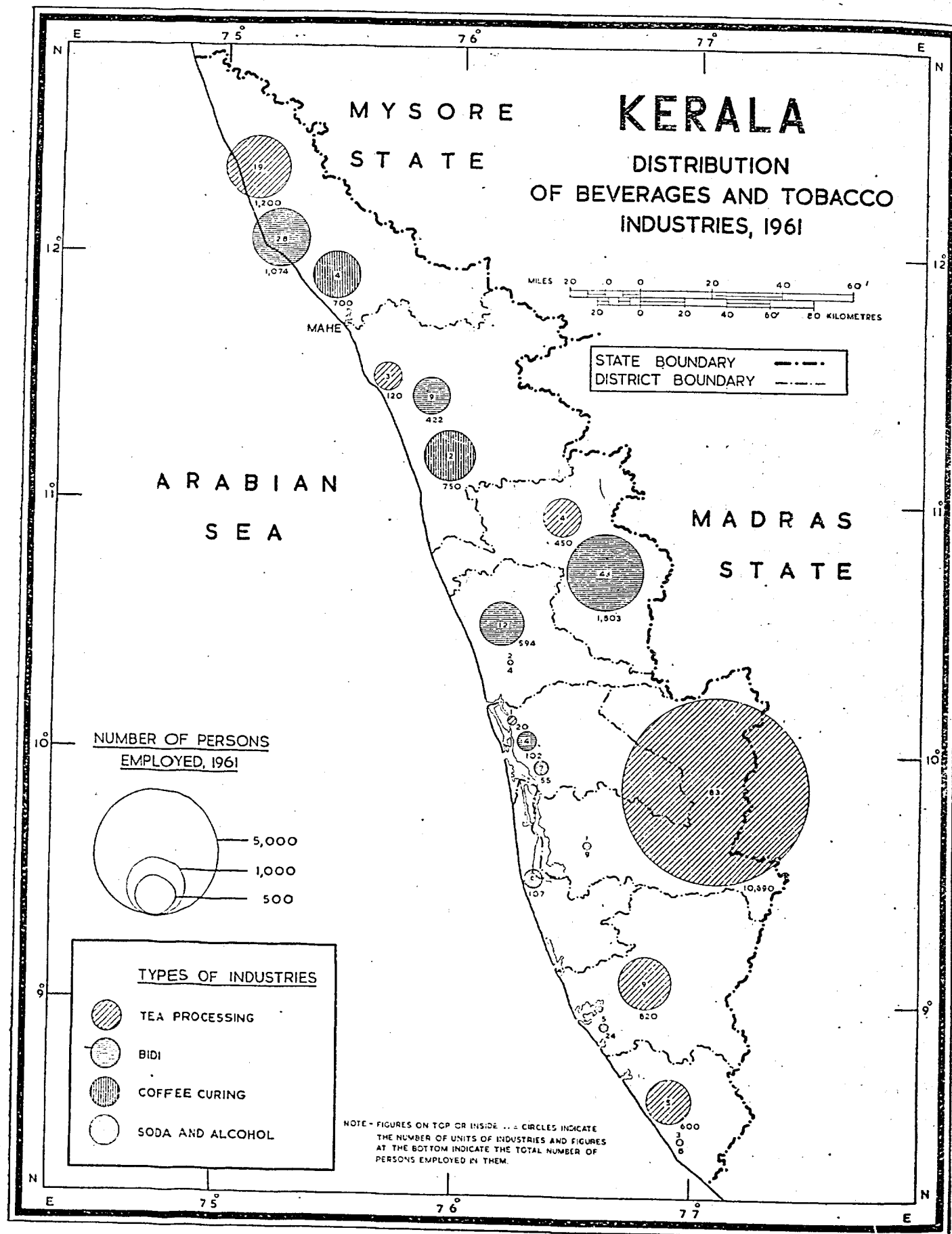
are 107 rice mills and 237 oil mills in the State. Rice mills are found in large numbers in Palghat and Trichur districts and oil mills in Trichur, Ernakulam and Alleppey districts. Fish products industries are located in Kozhikode, Ernakulam and Quilon districts. The only sugar factory in the State is located at Thiruvalla in Alleppey district which employs 900 persons. The miscellaneous industries shown in the map include those engaged in the manufacture of starch, drying and packing of copra, pepper, turmeric, betel nuts and forest produce, pepper garbling etc.

Table

DISTRIBUTION OF FOOD PROCESSING INDUSTRIES IN THE STATE, 1961

Sl. No.	Types of Industries	Number of Industries	Total number of persons employed
1	Rice mills	107	3,386
2	Oil mills	237	3,670
3	Bakeries and confectionaries	1	50
4	Sugar factories	1	900
5	Fruit preservation factories	5	700
6	Hydrogenated oil industries	2	109
7	Cashew industries	185	94,364
8	Fish products industries	12	1,240
9	Miscellaneous industries	13	1,010

Source : The Chief Inspector of Factories and Boilers, Kerala



DISTRIBUTION OF BEVERAGES AND TOBACCO INDUSTRIES, 1961

Purpose

The map shows the districtwise distribution of beverages and tobacco industries in the State in 1961.

Method

The beverages and tobacco industries are grouped into four types viz., (a) tea processing industries, (b) bidi factories, (c) coffee curing industries and (d) soda and alcohol manufacturing industries. Circles are given in each district proportional to the total number of persons employed in each of the above types of industries. The circles are shaded suitably to distinguish the different types of beverages and tobacco industries.

Salient Features

There are 250 factories in the State employing a total of 19,552 workers engaged in the beverages and tobacco industries. Tea processing industries and bidi factories are the predominant industries in this field. There are 124 tea processing industries in the State which provide employment for a total of 13,900 persons. 83 of them are concentrated in Kottayam district, Cannanore district having the next highest concentration with 19 units. The reason for the concentration of these industries in Kottayam district is the presence of a considerable number of tea plantations in

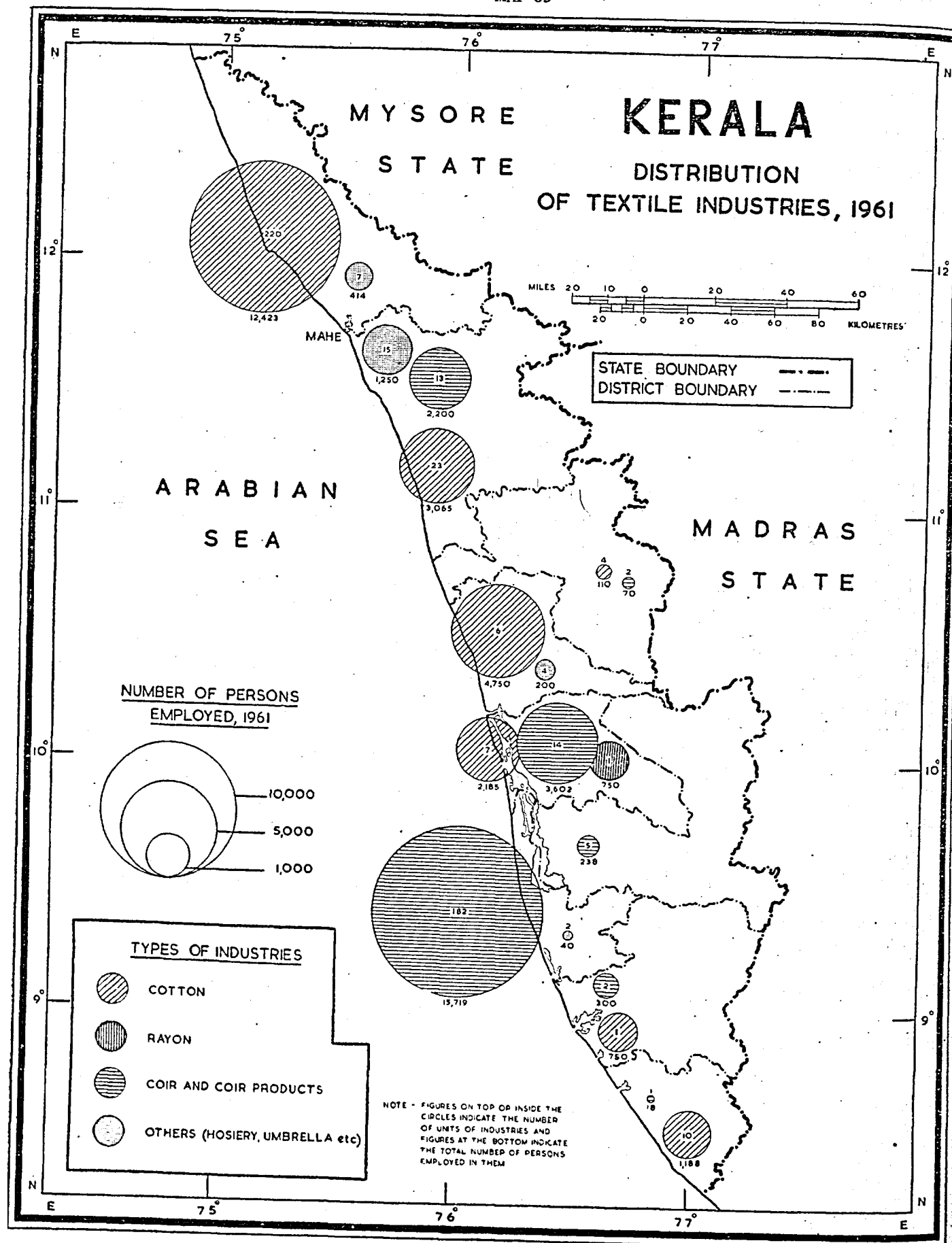
the district. There are 96 bidi factories (including cigar factories) in the State distributed in Cannanore, Kozhikode, Palghat, Trichur and Ernakulam districts. The highest concentration of bidi factories is in Palghat district where 43 out of the total 96 factories are located. Cannanore district which has 28 bidi factories has the next highest concentration. Coffee curing industries in the State number only 6, four of which are in Cannanore district and the rest in Kozhikode district. There are 24 factories manufacturing soda and alcohol in the State. Since most of these units are very small the total employment strength in them is only 237 persons.

Table

DISTRIBUTION OF BEVERAGES AND TOBACCO INDUSTRIES IN THE STATE, 1961

Sl. No.	Types of Industries	No. of units	No. of persons employed
1	2	3	4
1	Tea processing	124	13,900
2	Bidi	96	3,995
3	Coffee curing	6	1,450
4	Soda and alcohol	24	207

Source: The Chief Inspector of Factories and Boilers, Kerala



DISTRIBUTION OF TEXTILE INDUSTRIES, 1961

Purpose

The map shows the districtwise distribution of textile industries in the State in 1961.

Method

The textile industries are grouped into four types viz., (a) Cotton industry (b) Rayon industry (c) Coir and Coir Products industry and (d) Other industries (hosiery, umbrella etc.). Circles are given in each district proportional to the total number of persons employed in each of the above types. The circles are shaded differently to distinguish the different types of industries.

Salient Features

According to the 1961 list of registered factories, there are 519 units in the various textile industries in the State which provide employment for a total of 49,272 persons.

There are 271 units employing 24,471 workers engaged in cotton industry in the State. 220 of these units are situated in Cannanore district alone. Since most of these units are comparatively small scale power or handlooms the total number of workers in them is only 12,423. There is only one rayon factory in the State. This is located in Ernakulam district and

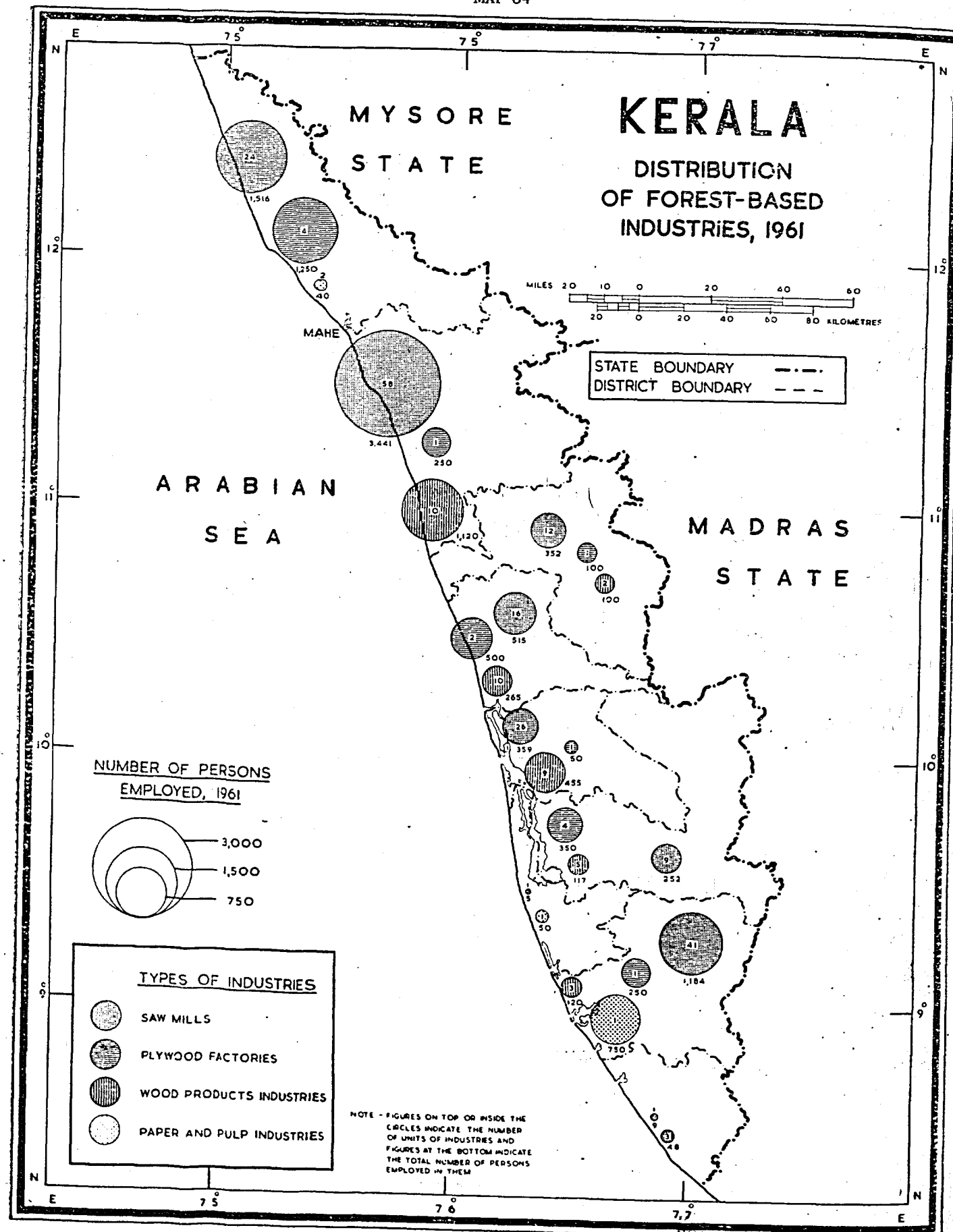
provides employment for 750 persons. Coir and coir products industries are largely concentrated in Alleppey district with 182 out of the total of 219 units in the State. Coir and coir products industries employment for 22,147 persons in the State of which 15,719 are in Alleppey district. Ernakulam and Kozhikode districts also have a sizable number of units and workers engaged in industries of this type. Manufacturing of umbrellas, hosiery articles etc. are grouped as other industries to form a fourth type of industry under textile industries. 15 out of the total 28 units under this type are located in Kozhikode district.

Table

DISTRIBUTION OF TEXTILE INDUSTRIES IN THE STATE, 1961

Sl. No.	Types of Industries	Number of Industries	Number of persons employed
1	2	3	4
1	Cotton	271	24,471
2	Rayon	1	750
3	Coir and Coir Products	219	22,147
4	Others (Hosiery, umbrella etc.)	28	1,904

Source: The Chief Inspector of Factories and Boilers, Kerala



DISTRIBUTION OF FOREST-BASED INDUSTRIES, 1961

Purpose

The map shows the districtwise pattern of distribution of forest-based industries, i. e., industries using wood as raw material, in the State in 1961.

Method

The forest-based industries are grouped into four types viz., (i) Saw mills (ii) Plywood factories (iii) Wood products industries and (iv) Paper and pulp industries. Circles are given in each district proportional to the employment strength in each type. The circles are shaded differently to distinguish the different types.

Salient Features

The various units of industries using wood as the raw material number 248 in the State and provide employment for a total of 13,448 persons. Among these industries saw mills form the most important type of industry. There are 188 saw mills in the State giving employment for a total of 7,633 persons. 58 of these saw mills are located in Kozhikode district. There are 14 plywood factories in the State engaging a total of 2,750 workers. They are distributed as 4 each in Cannanore and Kottayam districts, 2 in Trichur district and 1 each in Kozhikode, Palghat, Ernakulam and Quilon districts. The wood products industries comprise mainly units engaged in the manufacture of furniture, toys etc. There are 42 units under wood products

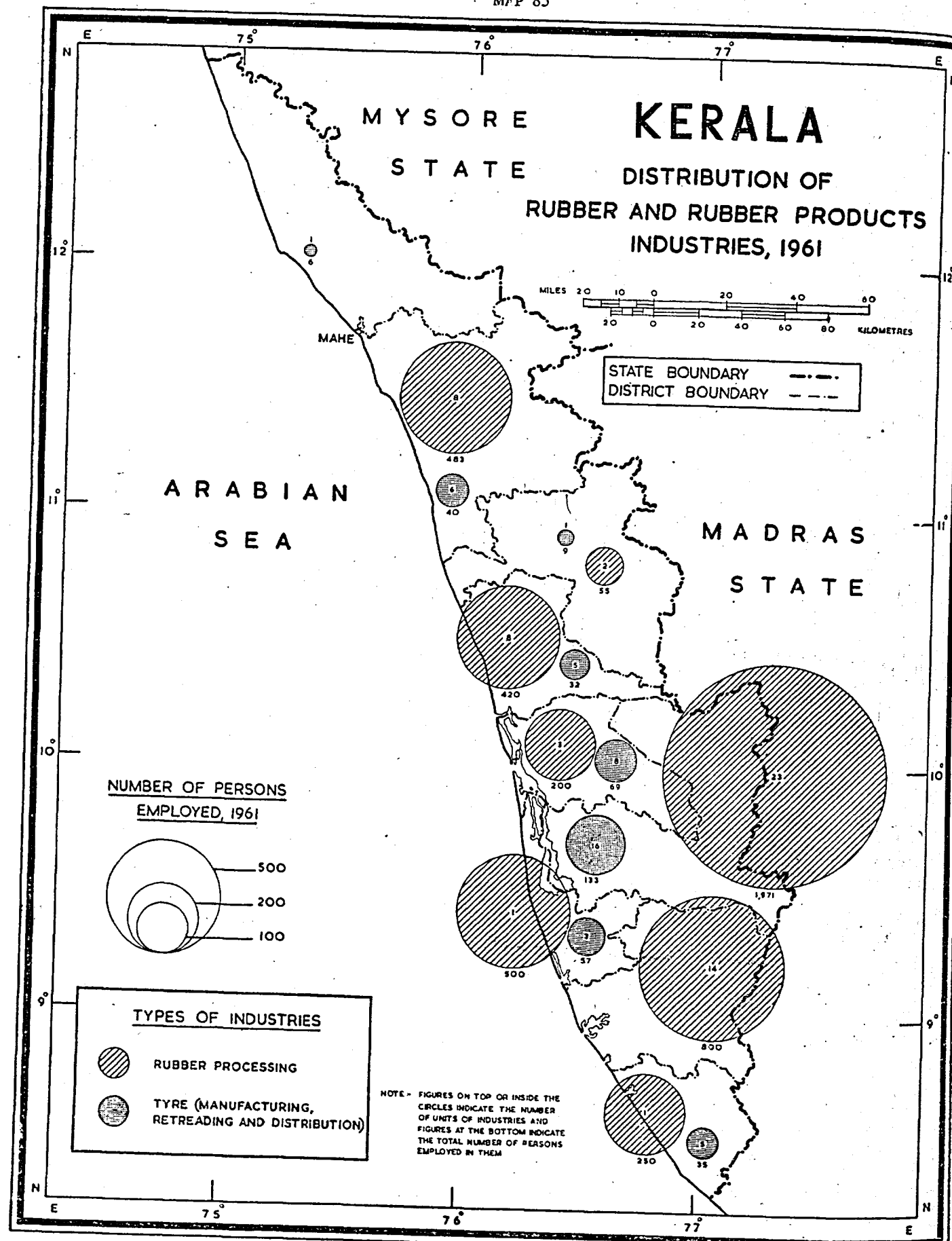
industries in the State. The total employment strength in them is 2,225 persons. They are distributed in the districts as 10 each in Kozhikode and Trichur districts, 9 in Ernakulam district, 5 in Kottayam district, 3 each in Quilon and Trivandrum districts and 2 in Palghat district. The largest number of workers in the industry is in Kozhikode district with 1,120. The paper and pulp industries cover manufacturing of paper and pulp boards. Of the total 4 units under paper and pulp industries in the State only one viz., the Punalur Paper Mills situated at Punalur in Quilon district is run on a large scale. This mill employs 750 persons. The remaining three units situated in Cannanore and Alleppey districts are small and are engaged in the manufacture of paper boards.

Table

DISTRIBUTION OF FOREST-BASED INDUSTRIES IN THE STATE, 1961

Sl. No.	Types of Industries	No. of factories	No. of persons employed
1	2	3	4
1	Saw Mills	188	7,633
2	Plywood factories	14	2,750
3	Wood products industries	42	2,225
4	Paper and pulp industries	4	840

Source: The Chief Inspector of Factories and Boilers, Kerala



DISTRIBUTION OF RUBBER AND RUBBER PRODUCTS INDUSTRIES, 1961

Purpose

The map shows the districtwise pattern of distribution of rubber and rubber products industries in the State in 1961.

Method

The rubber and rubber products industries are divided into two types viz., (1) rubber processing industries and (2) tyre (manufacturing, retreading and distribution) industries. Circles are given in each district proportional to the number of persons employed in each type. The circles are then shaded to distinguish the two types of industries.

Salient Features

There are 105 factories and 5,060 workers engaged in the rubber and rubber products industries in the State in 1961.

60 of the above units are rubber processing factories mainly engaged in the primary processing of natural rubber. There is concentration of these factories in Kottayam district where 23 out of the 60 units are

situated. Some of the rubber processing factories also manufacture rubber products.

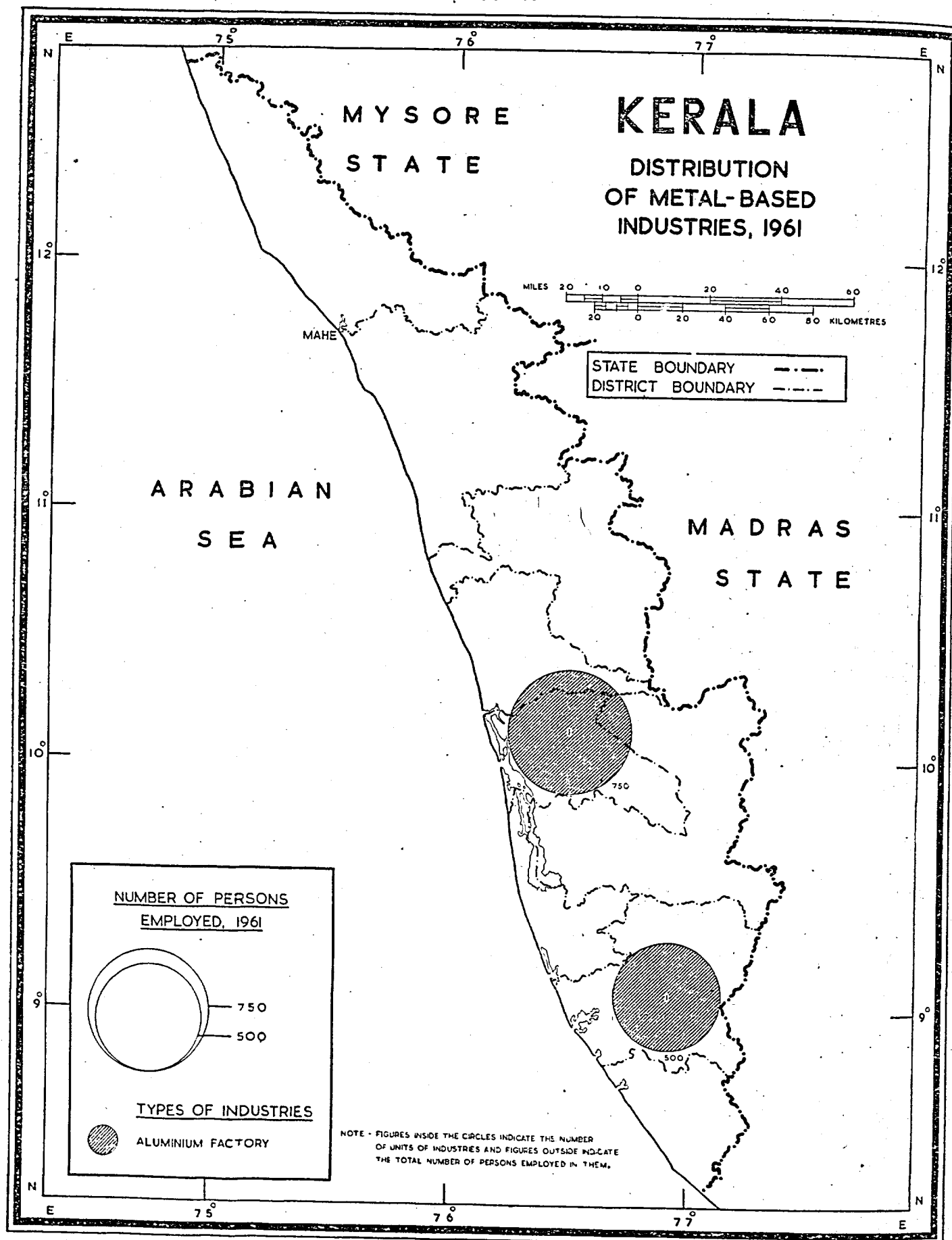
There are 45 units employing a total of 381 persons engaged in the manufacturing, retreading, vulcanizing or distribution of rubber tyres. These units are distributed in all the districts except Quilon. There is, however, concentration of the units in Kottayam district where 16 out of the 45 units are located.

Table

DISTRIBUTION OF RUBBER AND RUBBER PRODUCTS INDUSTRIES IN THE STATE, 1961

Sl. No.	Types of Industries	No. of factories	No. of persons employed
1	2	3	4
1	Rubber processing	60	4,679
2	Tyre (manufacturing, retreading and distribution)	45	381

Source: The Chief Inspector of Factories and Boilers, Kerala



DISTRIBUTION OF METAL-BASED INDUSTRIES, 1961

Purpose

The map shows the districtwise pattern of distribution of metal-based industries in the State in 1961.

Method

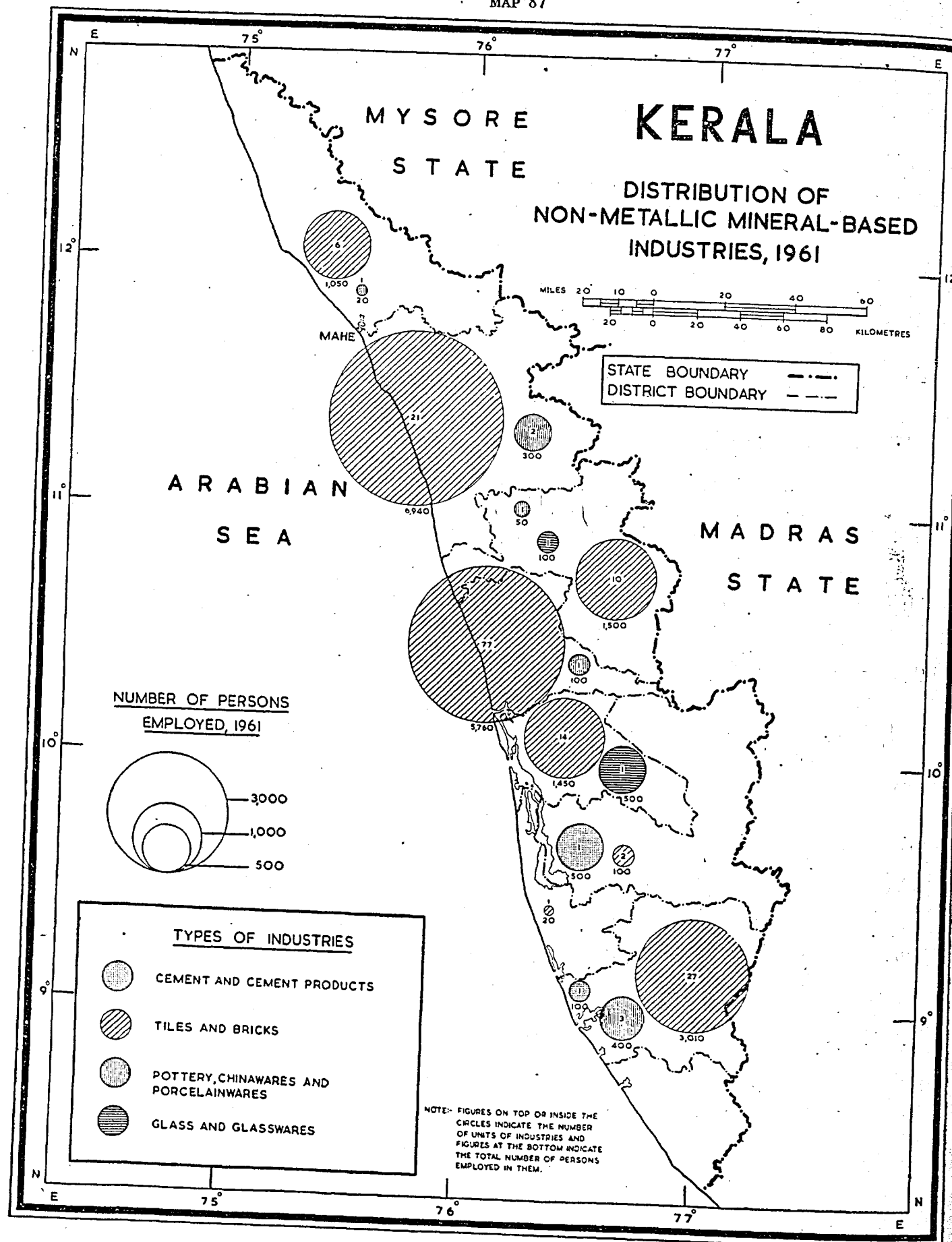
Circles are given in the districts proportional to the employment strength of the metal-based industries.

Salient Features

The Indian Aluminium Company Ltd., at Alwaye

in Ernakulam district and the Aluminium Industries Ltd., at Kundara in Quilon district are the only two metal-based industries in the State. The former is engaged in the production of aluminium metal and provides employment for 750 persons. The latter chiefly manufactures aluminium conductors, cables and rods and absorbs 500 workers.

Source: The Chief Inspector of Factories and Boilers, Kerala



DISTRIBUTION OF NON-METALLIC MINERAL-BASED INDUSTRIES, 1961

Purpose

The map shows the districtwise pattern of distribution of non-metallic mineral-based industries in the State in 1961.

Method

The non-metallic mineral-based industries are classified into four types viz., (1) Cement and cement products industries, (2) tiles and bricks industries, (3) pottery, chinaware and porcelainware industries and (4) glass and glassware industries. Circles are given in each district proportional to the total employment strength in the factories coming under each of the above types of industries. The circles are shaded to distinguish the different types.

Salient Features

The tiles and bricks industry is the most prominent non-metallic mineral-based industry in the State. There are 158 tiles and bricks factories in the State absorbing a total of 19,830 workers in 1961. Tiles and bricks factories are found in all the districts except Trivandrum. The largest number of factories are in Trichur district viz., 77 followed by Quilon district with 27 factories. There are only two factories in the State manufacturing cement or cement products. One located at Nattakom in Kottayam district manufactures cement

and the other located at Chavara in Quilon district manufactures reinforced concrete pipes.

Factories manufacturing pottery, chinaware and porcelainware occur in Cannanore, Kozhikode, Palghat, Trichur and Quilon districts. The Kerala Ceramics at Feroke in Kozhikode district and the Kerala Government Ceramics at Kundara in Quilon district, engaging 250 workers each, are the largest units in this type of industry.

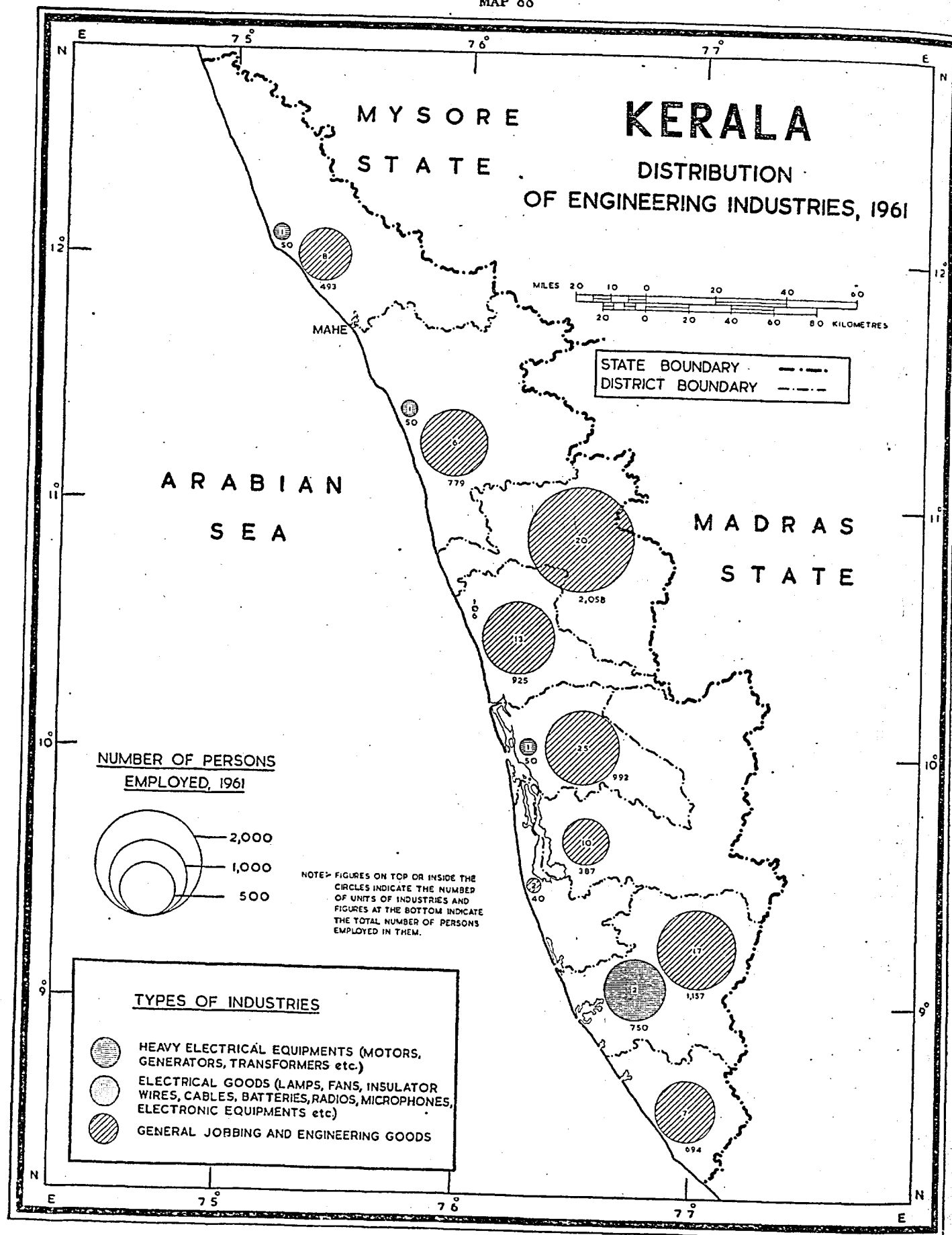
There are only two glass factories in the State of which one is situated at Alwaye in Ernakulam district and the other at Olavakkot in Palghat district.

Table

DISTRIBUTION OF NON-METALLIC MINERAL-BASED INDUSTRIES IN THE STATE, 1961

Sl. No.	Types of Industries	No. of factories	No. of persons employed
1	2	3	4
1	Cement and cement products	2	600
2	Tiles and bricks	158	19,830
3	Pottery, chinaware and porcelainware	8	870
4	Glass and glassware	2	600

Source: The Chief Inspector of Factories and Boilers, Kerala



DISTRIBUTION OF ENGINEERING INDUSTRIES, 1961

Purpose

The map shows the districtwise distribution of engineering industries in the State in 1961.

Method

The different engineering industries are grouped into three types viz., (1) industries manufacturing heavy electrical equipments (motors, generators, transformers etc.), (2) industries manufacturing electrical goods (lamps, fans, insulator wires, cables, batteries, radios, microphones, electronic equipments etc.) and (3) general jobbing and engineering goods industries. Circles are given in each district proportional to the employment strength in each of the above three types of engineering industries and the circles shaded suitably to distinguish the different types.

Salient Features

There are two units under type (1) in the State and are located in Cannanore and Ernakulam districts. They manufacture electric motors and transformers. There are 4 units in the State employing a total of 806 workers manufacturing electrical goods like electric metres and metre parts, wiring accessories, fuse units etc. The units situated at Quilon and Kundara are the biggest in this type of industries and employ 500 and 250 persons respectively. The third type viz., general jobbing and engineering goods industries, covers the

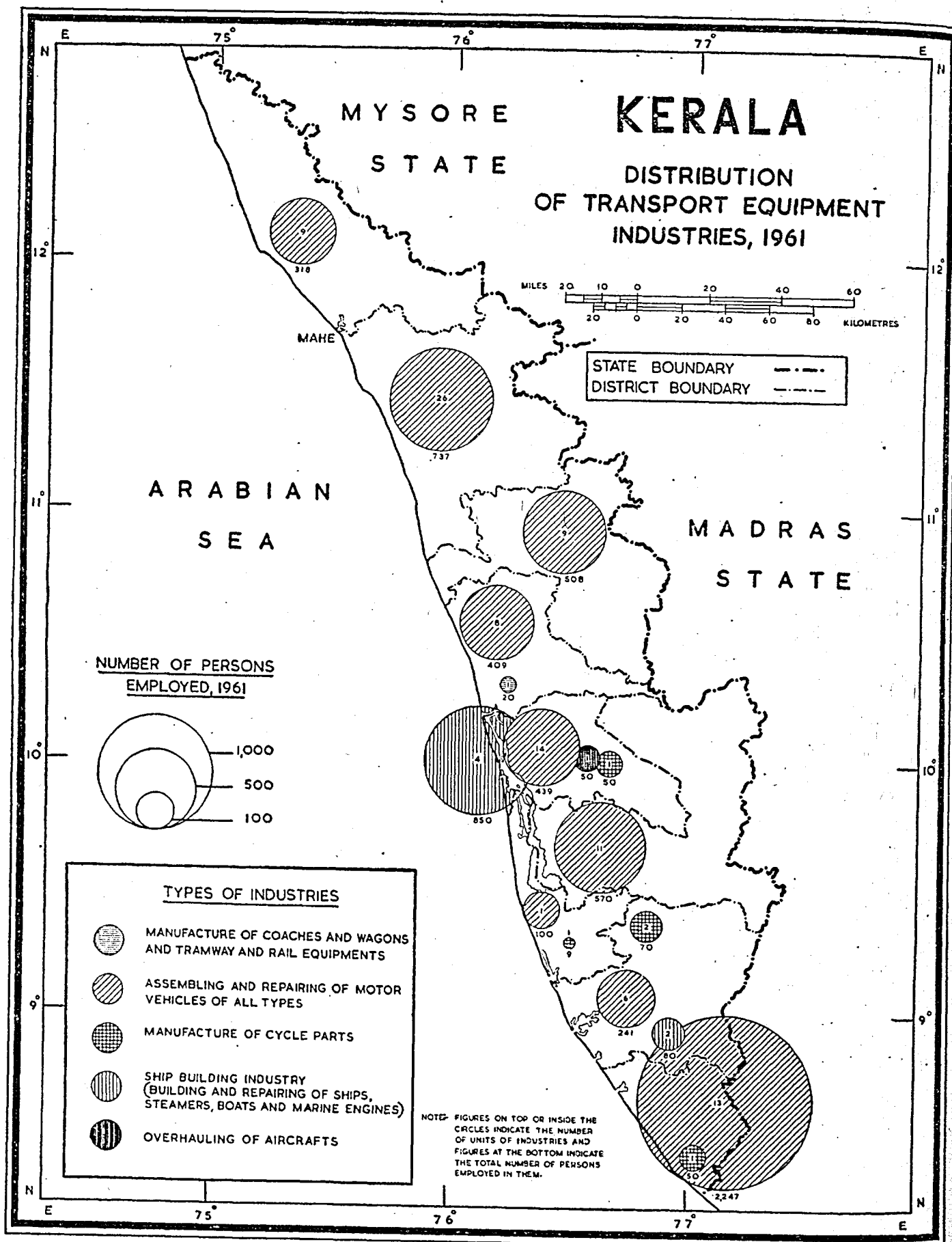
Source: The Chief Inspector of Factories and Boilers, Kerala

various small engineering workshops and repair workshops and units manufacturing miscellaneous goods like brass, copper, aluminium, bell-metal and stainless steel vessels, agricultural implements, cutlery, tin cans, hinges, sewing machines, tea chest fittings, iron gates etc., and is found in all the districts. The total number of units in the State under this type is 108 and they provide employment for a total of 7,525 workers. Ernakulam district has the largest number with 25 units.

Table

DISTRIBUTION OF ENGINEERING INDUSTRIES IN THE STATE, 1961

Sl. No.	Types of industries	No. of units	No. of persons employed
1	2	3	4
1	Heavy electrical equipments (motors, generators, transformers, etc.)	2	100
2	Electrical goods (lamps, fans, insulator wires, cables, batteries, radios, microphones, electronic equipments, etc.)	4	806
3	General jobbing and engineering goods	108	7,525



DISTRIBUTION OF TRANSPORT EQUIPMENT INDUSTRIES, 1961

Purpose

The map shows the districtwise distribution of industries manufacturing transport equipments in the State in 1961.

Method

The transport equipment industries are grouped into five types viz., (i) manufacture of coaches, wagons, tramways and rail equipments, (ii) assembling and repairing of motor vehicles of all types, (iii) manufacture of cycle parts, (iv) ship building industry (building and repairing of ships, steamers, boats and marine engines) and (v) overhauling of aircrafts. Circles are given in each district proportional to the employment strength in each of the above types of industries, and the circles are shaded suitably to distinguish the different types of industries.

Salient Features

In point of number of units and employment strength, industries engaged in assembling and repairing of motor vehicles form the major type among the transport equipment industries, as 97 out of the total 110 units and 5,569 workers out of the total 6,748 workers come in this particular type. The units under this type are found in all the districts of the State, the largest number of units (26) being located in Kozhikode district. The largest number of workers in this type of industry is, however, in Trivandrum district where the main workshops of the road transport services owned by the State Government are located which alone provide employment for 2,000 workers. There are 6 units under shipbuilding industry in the

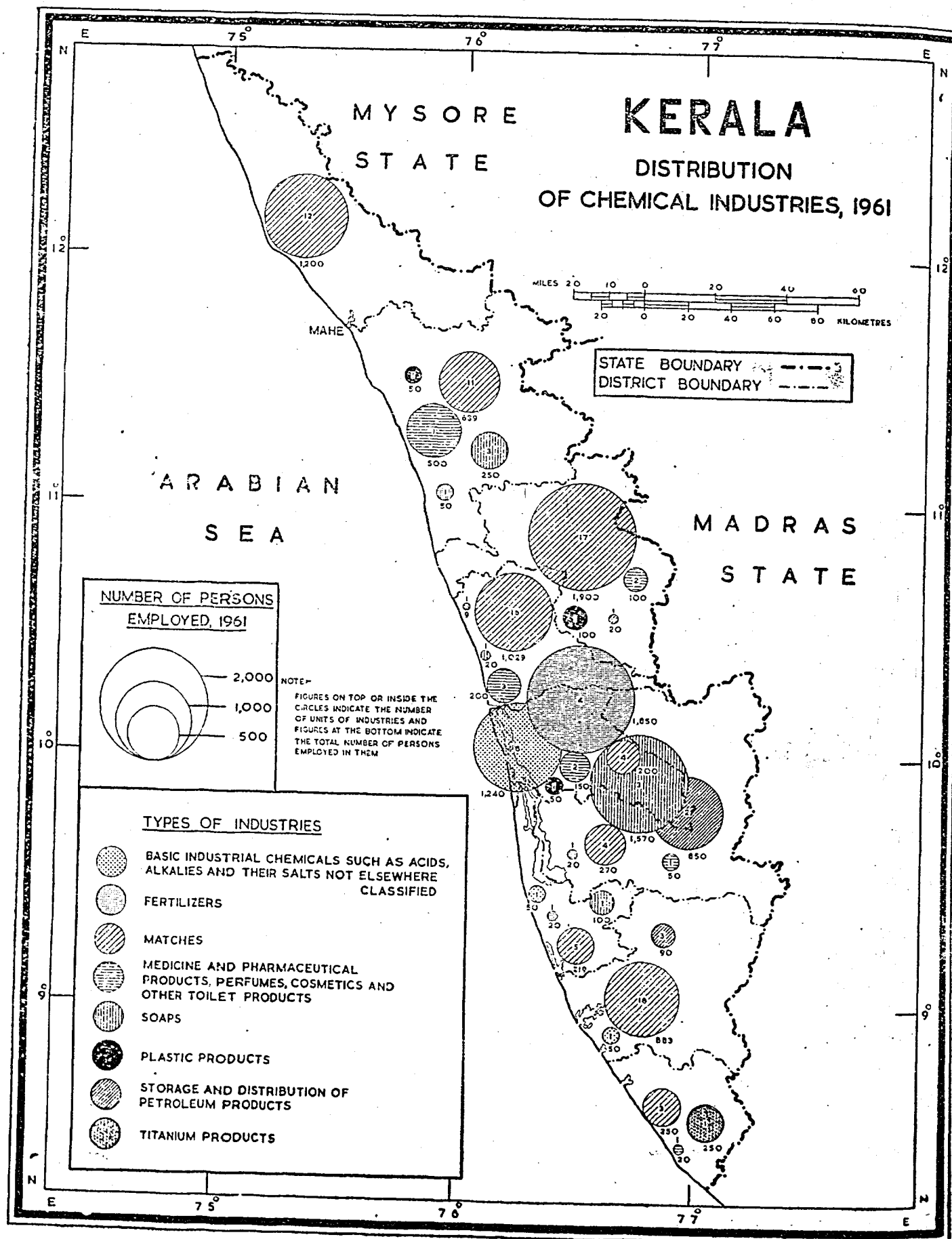
State which are located in Ernakulam and Quilon districts. These units are mostly engaged in the construction and repair of boats, tugs, barges etc., and employ a total of 930 workers in the State. Industries manufacturing cycle parts viz., rims, gear cases, chain covers etc., are found in Ernakulam, Alleppey, Quilon and Trivandrum districts. All these units are small-sized and their total employment strength is 179 persons. There is one unit in the State engaged in the overhauling of aircrafts which is located at Cochin in Ernakulam district. Similarly there is another single unit located in Trichur district which manufactures machine parts for the tramways.

Table

DISTRIBUTION OF TRANSPORT EQUIPMENT INDUSTRIES IN THE STATE, 1961

Sl. No.	Types of Industries	No. of factories	No. of persons employed
1	2	3	4
1	Manufacture of coaches, wagons, tramways and rail equipments	1	20
2	Assembling and repairing of motor vehicles of all types	97	5,569
3	Manufacture of cycle parts	5	179
4	Ship building industry (building and repairing of ships, steamers, boats and marine engines)	6	930
5	Overhauling of aircrafts	1	50

Source: The Chief Inspector of Factories and Boilers, Kerala



DISTRIBUTION OF CHEMICAL INDUSTRIES, 1961

Purpose

The map shows the districtwise distribution of chemical industries in the State in 1961.

Method

The chemical industries are divided into the following 8 types based on the products manufactured. (1) Basic industrial chemicals such as acids, alkalies and their salts not elsewhere classified, (2) Fertilisers, (3) Matches, (4) Medicine and pharmaceutical products, perfumes, cosmetics and other toilet products (excluding soaps), (5) Soaps, (6) Plastic products and (7) Storage and distribution of petroleum products and (8) Titanium products. Circles are given in each district proportional to the employment strength in each of the above types and the circles are shaded suitably to distinguish the different types of chemical industries.

Salient Features

In Kerala chemical industries absorb 14,249 workers distributed among 136 units.

Match industry forms the chief item employing nearly half of the total workers in chemical industries. There are 90 units under match industry in the State employing a total of 6,590 persons and are found in all the districts.

There are 10 factories absorbing 1,340 workers in the State manufacturing different basic industrial chemicals such as acids, alkalies and their salts of which 8 are concentrated in Ernakulam district. The units located in Alleppey and Quilon districts are small in size and employ only 50 workers each.

Artificial manure is produced in the State in 8 units absorbing 1,949 workers, half of the units being concentrated in Ernakulam district. The biggest fertilizer unit is the one located at Alwaye in Ernakulam district which employs 1,600 workers (This unit produces certain chemicals also in addition to fertilizers).

The pharmaceuticals, perfumes, cosmetics and other toilet products industries (excluding soaps) in the State cover 10 units absorbing 1,020 workers, the biggest unit being the one located at Kottakkal in Kozhikode district which employs 500 persons and produces different ayurvedic medicines.

Source: The Chief Inspector of Factories and Boilers, Kerala

There are 8 soap factories in the State distributed in Kozhikode, Trichur, Ernakulam and Alleppey districts employing 1,940 workers. The unit located at Tata-puram in Ernakulam district employs 1,500 workers and is the largest unit in this category. This unit is, however, engaged in seed crushing, oil refining and hydrogenation also in addition to manufacturing soaps.

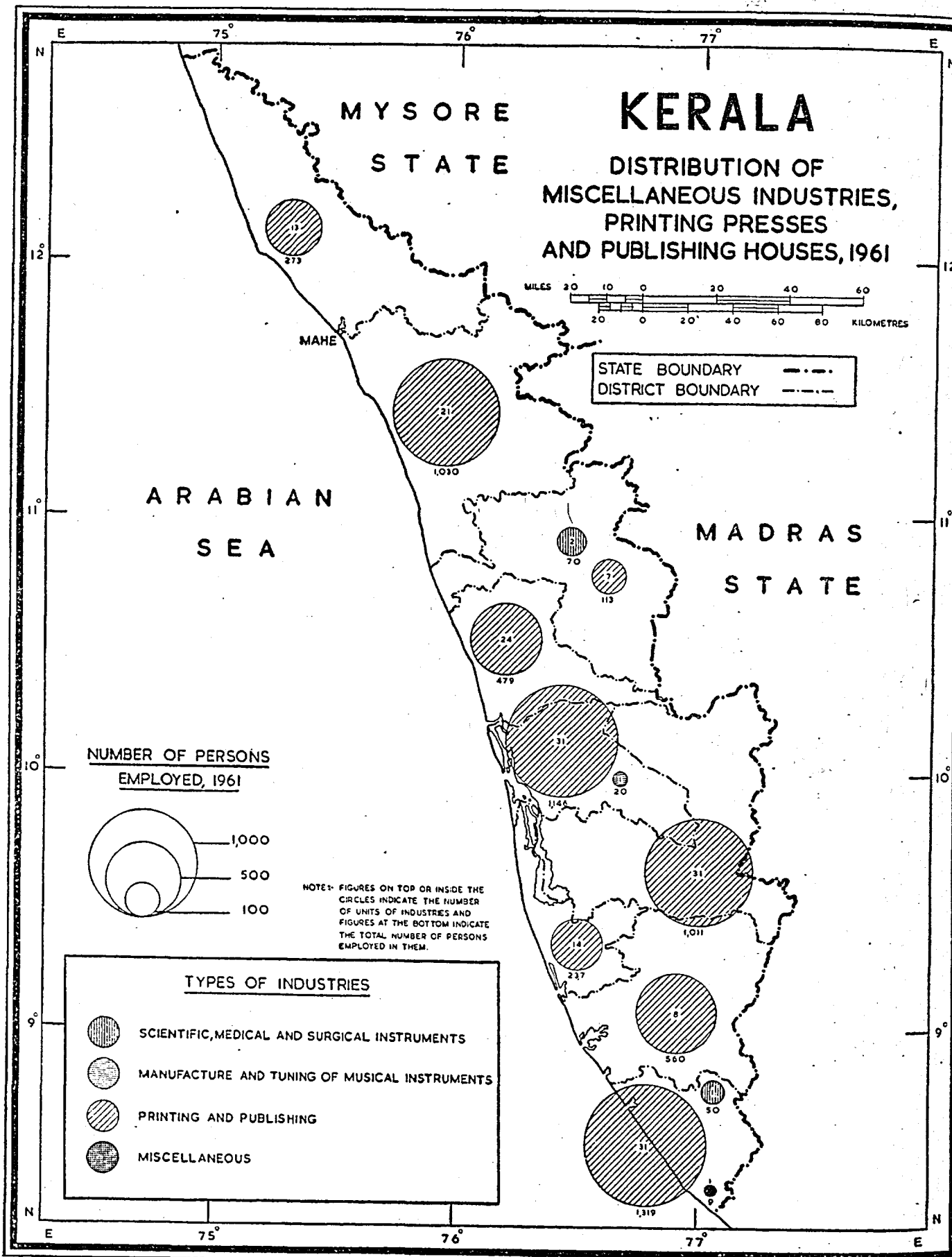
The Titanium Factory located at Trivandrum manufacturing titanium dioxide pigments is the only one of its kind in the State. The factory absorbs 250 workers.

There are three units in the State manufacturing different plastic products. The biggest unit of this category is located near Olavakkot in Palghat district which employs 100 persons.

Storing and distributing petroleum products are done by three companies having 6 units engaging a total of 960 workers in the State. The unit of the Burmah-Shell located at Ernakulam is the biggest in the category and provides employment for 750 workers.

Table
DISTRIBUTION OF CHEMICAL INDUSTRIES
IN THE STATE IN 1961

Sl. No.	Types of Industries	No. of units	No. of persons employed
1	2	3	4
1	Basic industrial chemicals such as acids, alkalies and their salts not elsewhere classified	10	1,340
2	Fertilizers	8	1,949
3	Matches	90	6,590
4	Medicine and pharmaceutical products, perfumes, cosmetics and other toilet products	10	1,020
5	Soaps	8	1,940
6	Plastic products	3	200
7	Storage and distribution of petroleum products	6	960
8	Titanium products	1	250



DISTRIBUTION OF MISCELLANEOUS INDUSTRIES, PRINTING PRESSES AND PUBLISHING HOUSES, 1961

Purpose

The map shows the districtwise distribution of miscellaneous industries, printing presses and publishing houses in the State in 1961.

Method

The industries taken into account for this map are grouped into the following four types.

1. Manufacture of scientific, medical and surgical instruments
2. Manufacture and tuning of musical instruments
3. Printing and publishing
4. Miscellaneous

In each district circles are given proportional to the employment strength in each of the above types of industries. The circles are shaded to differentiate the different types.

Salient Features

In Kerala the above four industries consist of 185 units and employ a total of 6,317 workers. The printing and publishing industry is the most important among the four types as it has 180 out of the 185 units providing employment for 6,168 workers in the State. Printing presses and publishing houses are found in all the districts. Many of these are small sized. The number of printing presses and publishing houses in the State employing 100 workers or above is only 13. These are distributed 4 each in Kozhikode and Kottayam districts, 2 each in Quilon and Trivandrum districts and 1 in Ernakulam district. The biggest printing press in the State is the one located at Trivandrum owned by the

Source : The Chief Inspector of Factories and Boilers, Kerala

State Government which provides employment for 750 workers.

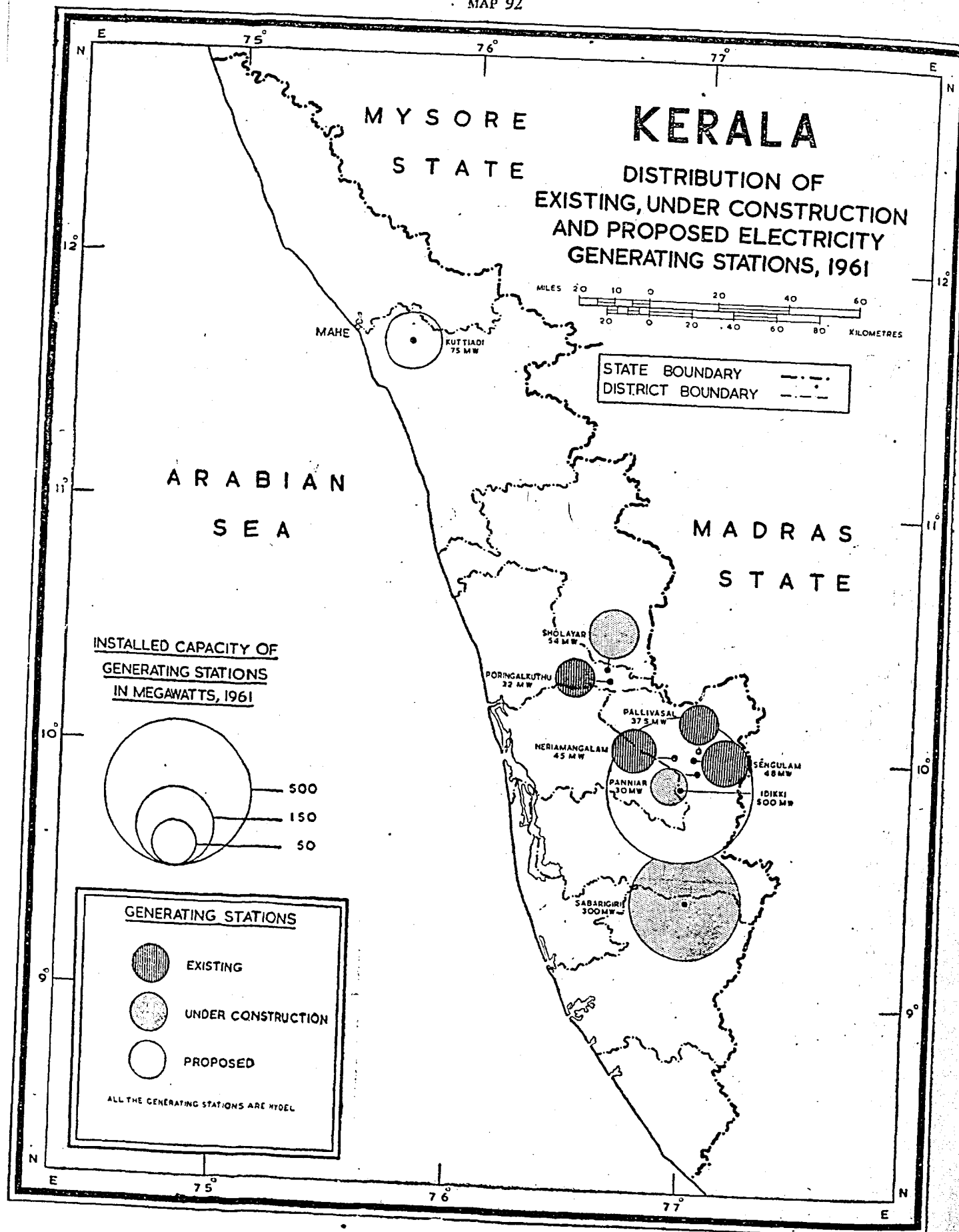
There are 3 units engaged in the manufacture and repair of scientific, medical and surgical instruments in the State employing a total of 120 persons. Two of these units are in Palghat district and one in Trivandrum district. The units in Palghat district manufacture surgical instruments and other hospital equipments and the unit in Trivandrum district repairs and manufactures survey and scientific instruments.

There is only a small unit in the State engaged in the manufacture and tuning of musical instruments which is located in Ernakulam district.

Table

DISTRIBUTION OF MISCELLANEOUS INDUSTRIES, PRINTING PRESSES AND PUBLISHING HOUSES IN THE STATE, 1961

Sl. No.	Types of Industries	No. of units	No. of persons employed
1	2	3	4
1	Manufacture of scientific, medical and surgical instruments	3	120
2	Manufacture and tuning of musical instruments	1	20
3	Printing and publishing	180	6,168
4	Miscellaneous industries (Manufacture of laboratory apparatus, oil chucks etc.)	1	9



DISTRIBUTION OF EXISTING, UNDER CONSTRUCTION AND PROPOSED ELECTRICITY GENERATING STATIONS, 1961

Purpose

The map shows the distribution of electricity generating stations existing, under construction and proposed in the State in 1961.

Method

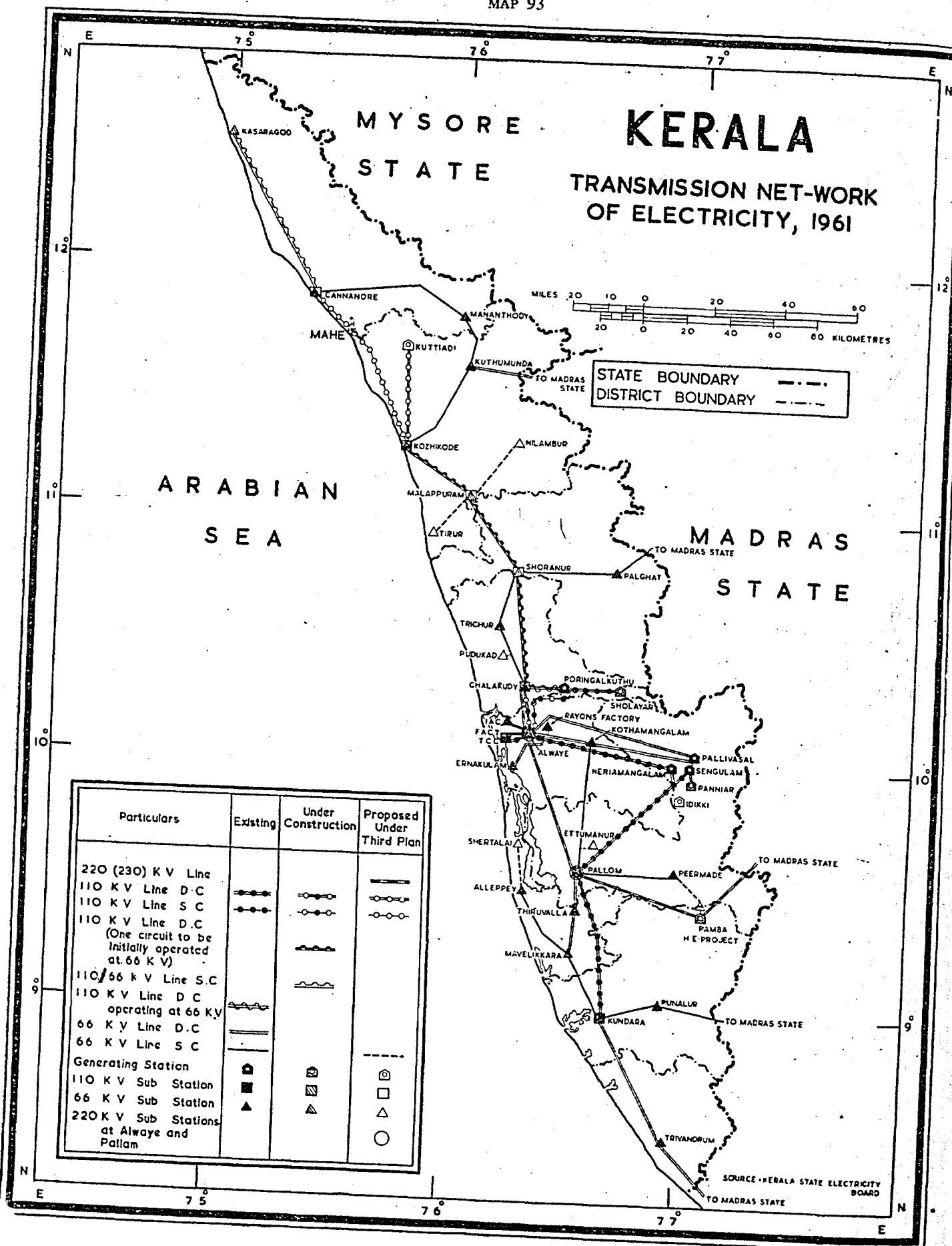
The various electricity generating stations in the State are shown by circles proportionate to the installed capacity of each power system. Generating stations are classified as existing, under construction and proposed for construction and are differentiated by giving different shades to the circles.

Salient Features

The electricity generating stations in the State are under the control of the Kerala State Electricity Board. All the nine generating stations of the State shown in the map are hydel. The four existing power generating

systems are Poringalkuthu in Trichur district and Pallivasal, Sengulam and Neriamaangalam in Kottayam district. The total installed capacity of these four power systems is 162.5 mw., Sengulam power system having the highest installed capacity viz., 48 mw. Among the three generating stations under construction viz., Sabarigiri in Quilon district, Sholayar in Trichur district and Panniyar in Kottayam district, Sabarigiri power system is the biggest having an installed capacity of 300 mw. The two generating stations proposed for construction in the State are Kuttiyadi in Kozhikode district and Idikki in Ernakulam district. When the construction of these power stations are completed Idikki will be the biggest power station in the State which has a proposed installed capacity of 500 mw.

Source : Kerala State Electricity Board



TRANSMISSION NETWORK OF ELECTRICITY, 1961

Purpose

The map shows the power stations, sub-stations and transmission lines that are in existence, under construction or proposed for construction in the State as in 1961.

Method

The power stations and sub-stations and transmission lines of different voltages existing, under construction and proposed for construction under the Third Five Year Plan are shown by different symbols. Transmission lines below 66 kv. denomination i.e., 33 kv., 22 kv. or 11 kv. are not shown in the map. The map is adapted from a similar map obtained from the Kerala State Electricity Board.

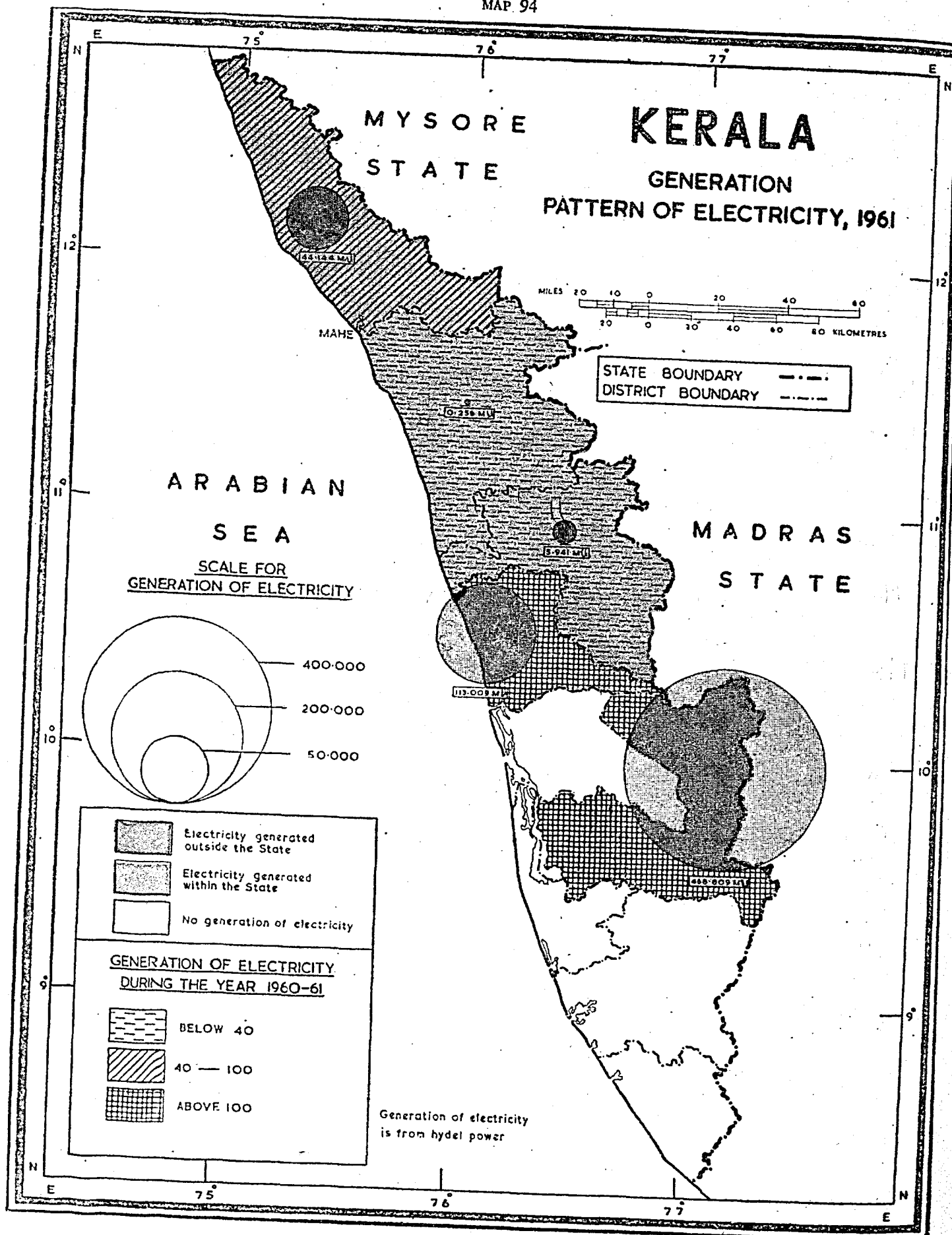
Salient Features

The State Electricity Grid comprises four

Source: Kerala State Electricity Board

existing hydel power stations viz., Poringalkuthu, Pallivasal, Sengulam and Neriamangalam and a network of 110 kv., 65 kv., 33 kv., 22 kv. and 11 kv. transmission lines.

The map reveals that the transmission lines are largely concentrated in the south-central region of the State. However, the completion of the extension of 110 kv. lines under construction or proposed for construction under the Third Five Year Plan between Chalakudy and Kasaragod will connect the entire length of the State by transmission lines. The total length of 110 kv. lines on 31st March 1961 stood at 552.75 circuit kilometres and that of 66 kv. lines at 1,373.08 circuit kilometres.



GENERATION PATTERN OF ELECTRICITY, 1961

Purpose

This map shows the pattern of generation of electricity in the State and also the variations in the power generated in the districts during the year 1960-61. The map takes into account not only the electric power generated within the State but also that obtained from outside the State for consumption in the State.

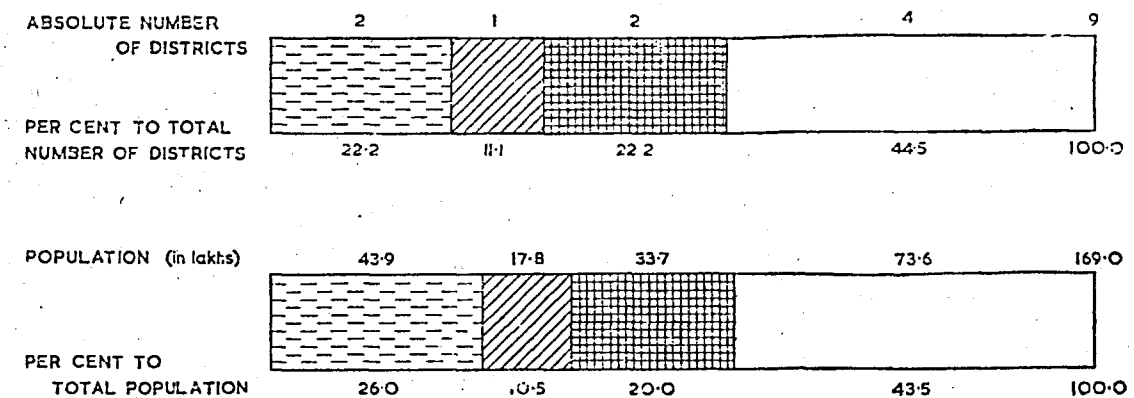
Method

Electricity is generated in the State only in two districts viz., Trichur and Kottayam. In the districts of Cannanore, Kozhikode and Palghat electricity is obtained from the Madras State. These two categories are distinguished by different colours. The districts where electricity is neither generated nor obtained from outside the State are left without any shade.

The generation of electricity (including the power obtained from outside) in each district during 1960-61 is shown by proportionate circles and also by the chloropleth method i.e. by grouping the districtwise generation of power into three and by shading the districts accordingly by deep to light hatches corresponding to high to low power generation.

Salient Features

The generation of electricity in the State is from



Source: Kerala State Electricity Board

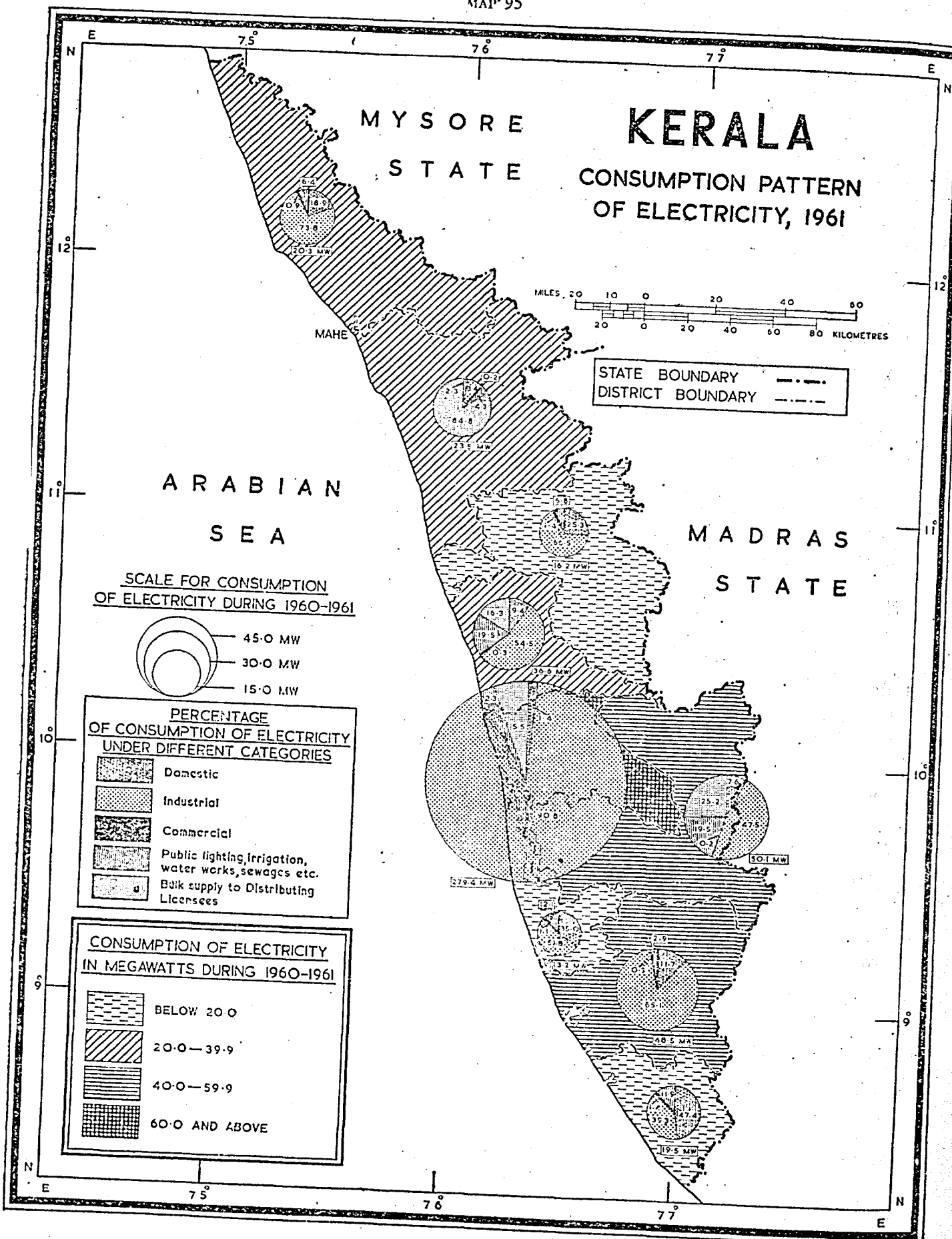
hydel power. The total power available in the State (inclusive of the power obtained from outside the State) during the year 1960-61 is 632.159 million units. 92.0 per cent of this power is generated within the State in Trichur and Kottayam districts and only the remaining 8.0% represents the power obtained from Madras State. The generation of power in Kottayam district alone, where three out of the four power-generating stations in the State are located, accounts for 74.2 per cent of total power in the State.

Table

GENERATION PATTERN OF ELECTRICITY, 1960-61

Rank	State/District	Generation of electricity (million units)
1	Kerala State	632.159
1	Kottayam District	468.809
2	Trichur	113.009
3	Cannanore	44.144*
4	Palghat	5.941*
5	Kozhikode	0.256*

* Electricity is generated outside the State



MAP 95
CONSUMPTION PATTERN OF ELECTRICITY, 1961

Purpose

The map shows the pattern of consumption of electricity in the various districts of the State and also the variations in the total consumption of electricity in the districts in 1960-61.

Method

The consumption of electric power by districts is grouped into four and the districts are shaded according to this grouping by different grades of hatches from deep to light corresponding to high to low consumption.

The total consumption in each district is further shown by proportional circles. The percentages of power consumed for different purposes, viz., (1) domestic uses, (2) industrial purposes, (3) commercial purposes, (4) public lighting, irrigation, water works, sewages etc. and (5) bulk supply to distributing licensees, to the total consumption in each district are shown within the circles by different shades.

Salient Features

Distribution of electric power for consumption in the State is done by the Kerala State Electricity Board. The Board distributes the power to the consumers either

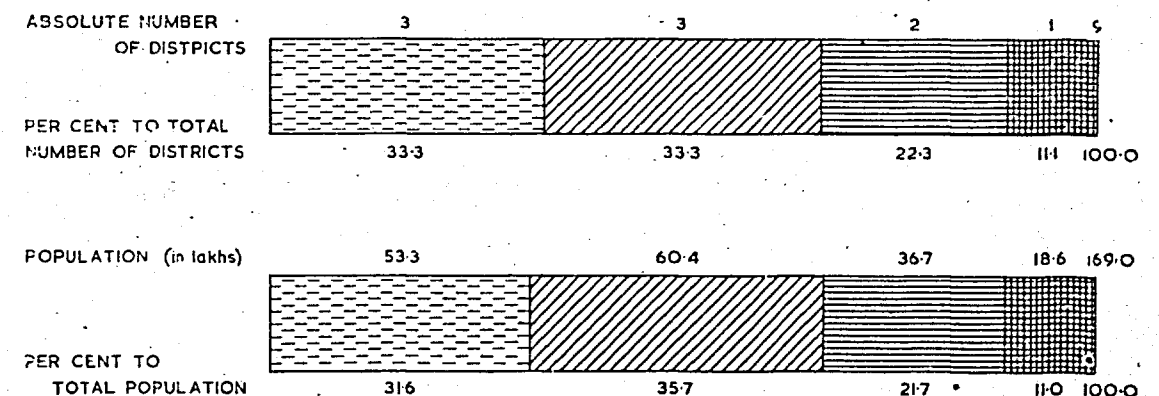
direct or through private distributing licensees. Since the Revenue Billing Units of the Kerala State Electricity Board for accounting the consumption of power are not exactly co-terminus with the revenue districts of the State, the consumption figures shown in the map by revenue districts are those obtained by a readjustment of the data and are therefore only approximate. The pattern of consumption of power distributed through the distributing licensees is not shown in the map due to the non-availability of data. 11.6 million units of electricity sold out by the Kerala State Electricity Board to the neighbouring Madras State Electricity Board during the year 1960-61 also do not picture in the map.

During the year 1960-61 the total consumption of electricity in the State amounts to 507.3 million units. More than half of this power, i. e. 279.4 million units, is consumed in Ernakulam district alone. The least consumption is in Alleppey district viz., 13.2 million units. The pattern of power consumption in the State and most of the districts shows that a good proportion of the consumption is for industrial purposes.

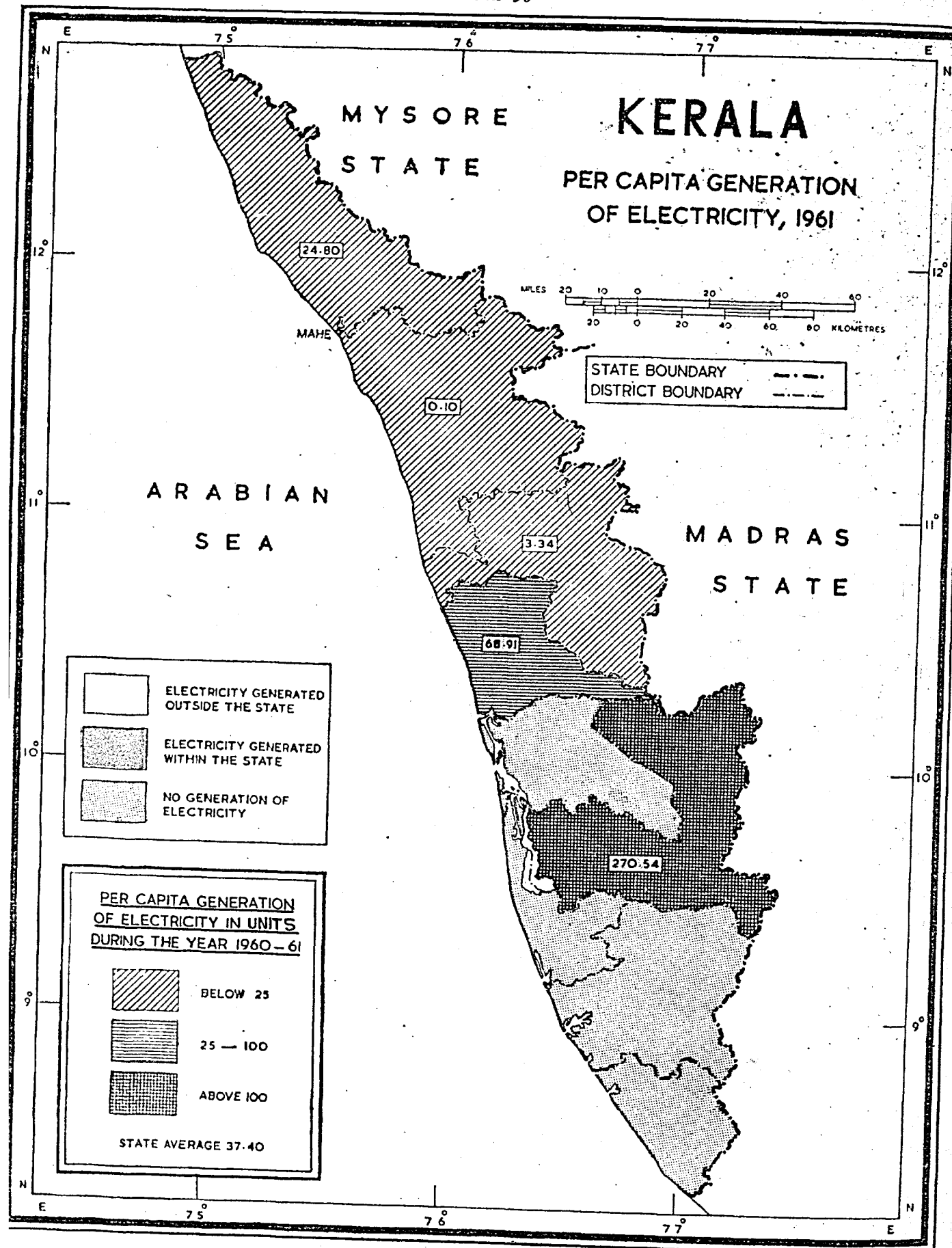
Table
CONSUMPTION PATTERN OF ELECTRICITY IN THE STATE AND DISTRICTS DURING 1960-61
Percentage to total consumption for

State/District	Total consumption of electricity (million units)	Domestic uses	Industrial purposes	Commercial purposes	Public lighting, irrigation, water works, sewages etc.	Bulk supply to distributing licensees
1	2	3	4	5	6	7
Kerala State	507.3	7.7	75.1	0.3	6.3	10.6
Cannanore District	20.3	18.9	73.8	0.9	6.4	...
Kozhikode "	23.5	2.3	8.4	0.2	4.3	84.8
Palghat "	16.2	25.3	66.5	1.4	6.8	...
Trichur "	36.6	9.4	54.5	0.3	19.5	16.3
Ernakulam "	279.4	1.4	70.8	N	2.3	5.5
Kottayam "	50.1	7.6	47.5	0.2	19.5	25.2
Alleppey "	13.2	35.0	51.8	1.1	12.1	...
Quilon "	48.5	11.7	85.1	0.3	2.9	...
Thiruvandrum "	19.5	47.4	39.3	1.4	11.9	...

'N' denotes negligible figure which is less than 0.1



Source: Kerala State Electricity Board



PER CAPITA GENERATION OF ELECTRICITY, 1961

Purpose

The map shows the per capita generation of electricity in the districts of the State in 1961. This electrical energy includes not only the energy generated within the State but also that obtained from outside the State for consumption in the State.

Method

Per capita generation of electricity is obtained by dividing the total electricity generated during 1960-61 by the 1961 Census population. The per capita generation of electricity by districts is grouped into three ranges and the districts are shaded accordingly by three different grades of hatches from deep to light corresponding to high to low value. The districts in which electricity is generated and the districts in which electricity is obtained from outside the State are shown by two different colours.

Salient Features

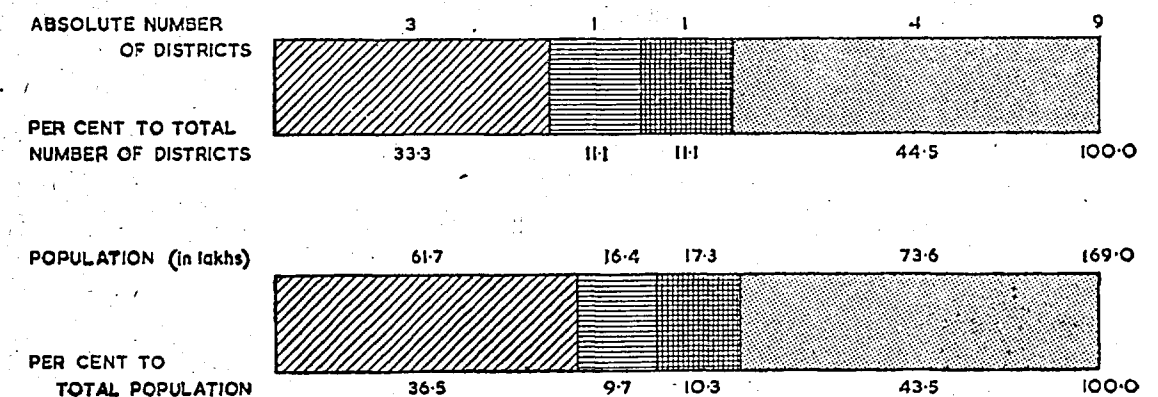
The average per capita generation of electricity in

the State is 37.40 units (Kilowatt hours). Electricity is generated within the State only in two districts viz., Trichur and Kottayam. In Cannanore, Kozhikode and Palghat districts electricity is obtained from the Madras State Electricity Board.

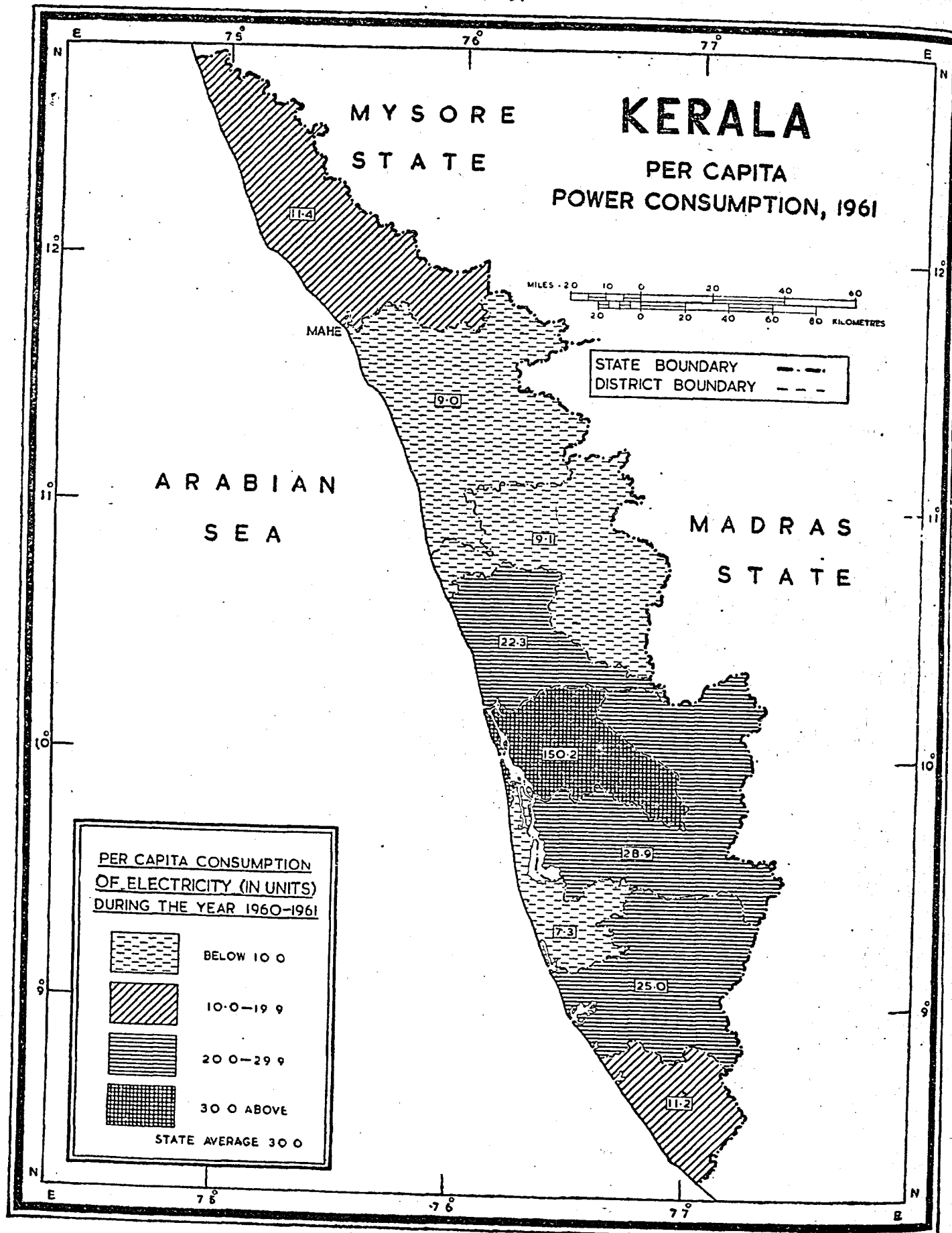
Table

GENERATION OF ELECTRICITY PER CAPITA IN THE STATE AND DISTRICTS DURING THE YEAR 1960-61

Rank	State/District	Generation of electricity per capita (in units)
1	Kerala State	37.40
2	Kottayam District	270.54
3	Trichur	68.91
4	Cannanore	24.80
5	Palghat	3.34
6	Kozhikode	0.10



Source: (i) Kerala State Electricity Board
(ii) Census of India, 1961—Kerala, Part II A—General Population Tables



PER CAPITA POWER CONSUMPTION, 1961

Purpose

The map shows the variation in the per capita consumption of electricity in the districts of the State in the year 1960-61.

Method

The per capita consumption of electricity is obtained by dividing the total consumption during 1960-61 by the 1961 Census population. The per capita consumption of electricity during the year 1960-61 by districts is grouped into four and the districts are shaded according to this grouping by deep to light hatches corresponding to high to low value.

Salient Features

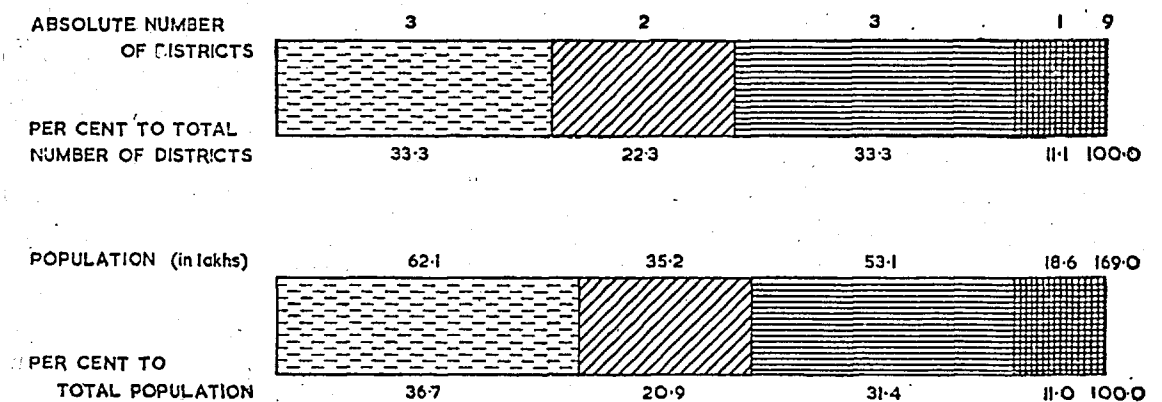
The average per capita consumption of electricity during the year 1960-61 in the State is 30.0 units (Kilowatt hours). The difference between the per capita generation (37.40 units) and the per capita consumption (30.0 units) is due to the fact that in working out the latter the electrical energy sold by the Kerala State Electricity Board to the Madras State Electricity Board during the year has not been taken into account. Further all the power generated will not be available for consumption as there will be loss of energy due to transmission and distribution which is about 20 per cent. When compared to other districts the per capita

consumption is exceptionally high in Ernakulam district (150.2 units). Kottayam, Quilon and Trichur districts which rank the second, third and fourth among the districts have the per capita consumption between 20.0 and 29.9 units. The lowest per capita power consumption during the year is in Alleppey district (7.3 units).

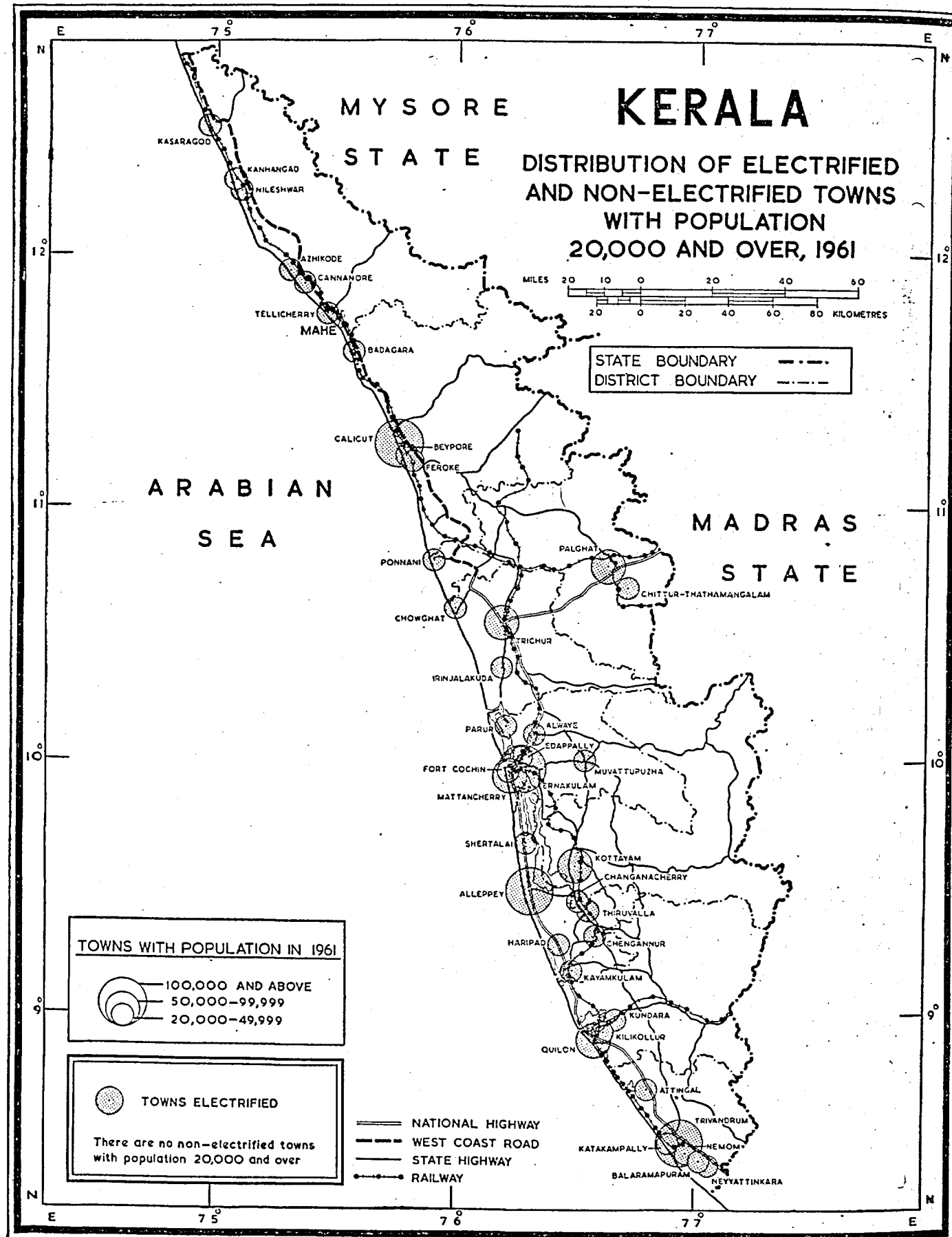
Table

CONSUMPTION OF ELECTRICITY PER CAPITA IN THE STATE AND DISTRICTS DURING 1960-61

Rank	State/District	Consumption of electricity per capita (in units)
1	Kerala State	30.0
1	Ernakulam District	150.2
2	Kottayam	28.9
3	Quilon	25.0
4	Trichur	22.3
5	Cannanore	11.4
6	Trivandrum	11.2
7	Palghat	9.1
8	Kozhikode	9.0
9	Alleppey	7.3



Source: (i) Kerala State Electricity Board
(ii) Census of India, 1961—Kerala, Part II A—General Population Tables



DISTRIBUTION OF ELECTRIFIED AND NON-ELECTRIFIED TOWNS WITH POPULATION 20,000 AND OVER, 1961

pose

The map shows the extent of electrification of towns with population 20,000 and over in the State in 1961.

Method

The three classes of towns with population 20,000 and over viz., Class I (population 100,000 and above), Class II (population 50,000-99,999) and Class III (population 20,000-49,999) are shown by circles of

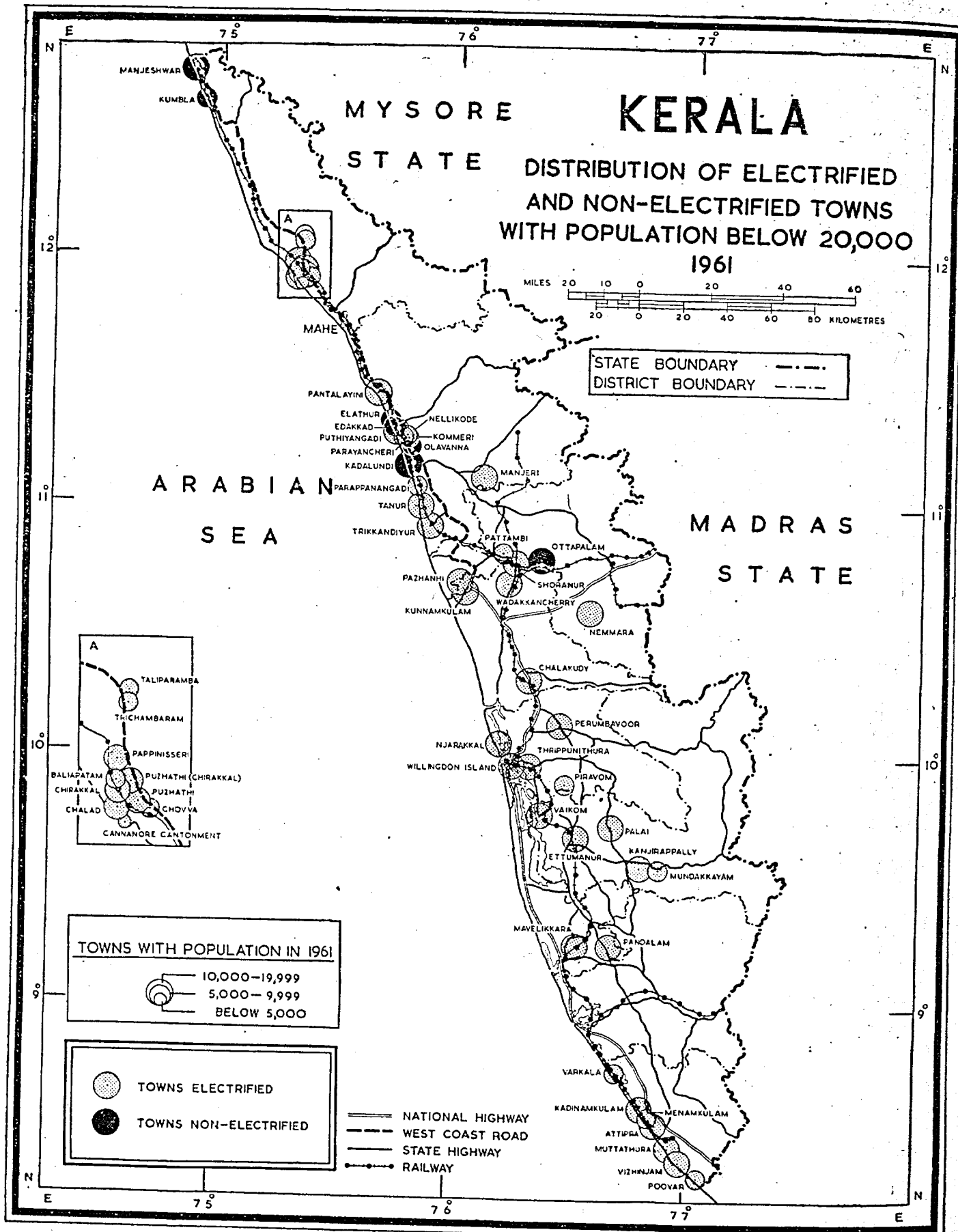
three different sizes and the circles are shaded according to whether the towns are electrified or not. Railways and important roads are also shown in the map.

Salient Features

Kerala has 40 towns with population 20,000 and over of which 4 are Class I towns, 5 Class II towns and the remaining 31 Class III towns. All these 40 towns are electrified.

Source: (i) Kerala State Electricity Board

(ii) Census of India, 1961, Kerala—Part II A General Population Tables



DISTRIBUTION OF ELECTRIFIED AND NON-ELECTRIFIED TOWNS WITH POPULATION BELOW 20,000, 1961

Purpose

The extent of electrification of towns with population below 20,000 in the State in 1961 is shown in the map.

Method

The three classes of towns with population below 20,000 viz., Class IV (Population 10,000-19,999), Class V (Population 5,000-9,999) and Class VI (Population below 5,000) are shown by circles of three different sizes. The circles are then shaded according

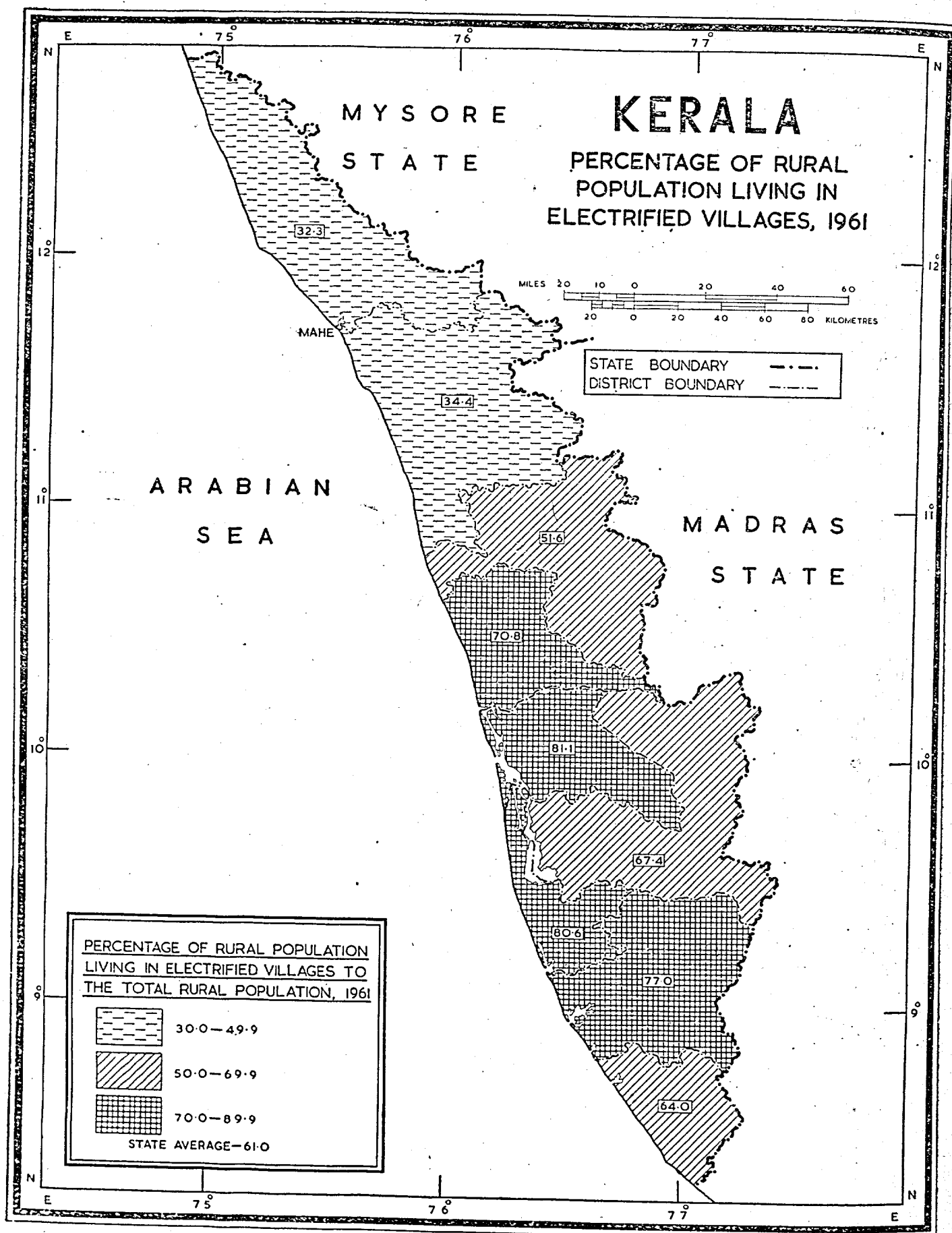
as the towns are electrified or not. Railways and important roads are also shown in the map.

Salient Features

There are 52 towns in the State with population below 20,000 of which 45 are electrified and 7 non-electrified in 1961. The non-electrified towns are Manjeshwar (Class IV) and Kumbla (Class V) in Cannanore district, Elathur, Edakkad, Olavanna (all Class V) and Kadalundi (Class IV) in Kozhikode district and Ottapalam (Class IV) in Palghat district.

Source: (1) Kerala State Electricity Board

(2) Census of India, 1961, Kerala—Part II A General Population Tables



PERCENTAGE OF RURAL POPULATION LIVING IN ELECTRIFIED VILLAGES, 1961

Purpose

The variation in the proportion of rural population living in electrified villages in the districts of the State in 1961 is shown in the map.

Method

The percentages of rural population living in electrified villages to the total rural population by districts are grouped into three and the districts are shaded accordingly by three grades of hatches from deep to light corresponding to high to low values. For the purpose of this map a village is treated as completely electrified if any portion of the village is electrified.

Salient Features

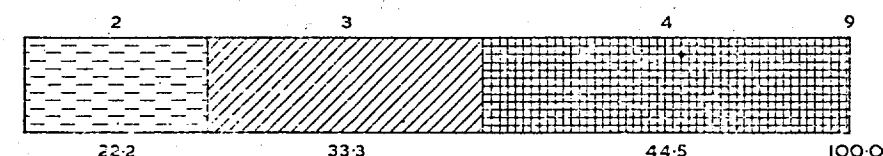
Of the total rural population of the State, 61.0 per cent live in electrified villages. In the districts of Trichur, Ernakulam, Alleppey and Quilon lying adjacent to one another the proportion of rural population living in electrified villages is comparatively high. The highest percentage of rural population living in electrified villages is in Ernakulam district (81.1) and the lowest in Cannanore district (32.3).

Table

PERCENTAGE OF RURAL POPULATION LIVING IN ELECTRIFIED VILLAGES IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Percentage of rural population living in electrified villages
1	Kerala State	61.0
1	Ernakulam District	81.1
2	Alleppey "	80.6
3	Quilon "	77.0
4	Trichur "	70.8
5	Kottayam "	67.4
6	Trivandrum "	64.0
7	Palghat "	51.6
8	Kozhikode "	34.4
9	Cannanore "	32.3

ABSOLUTE NUMBER OF DISTRICTS



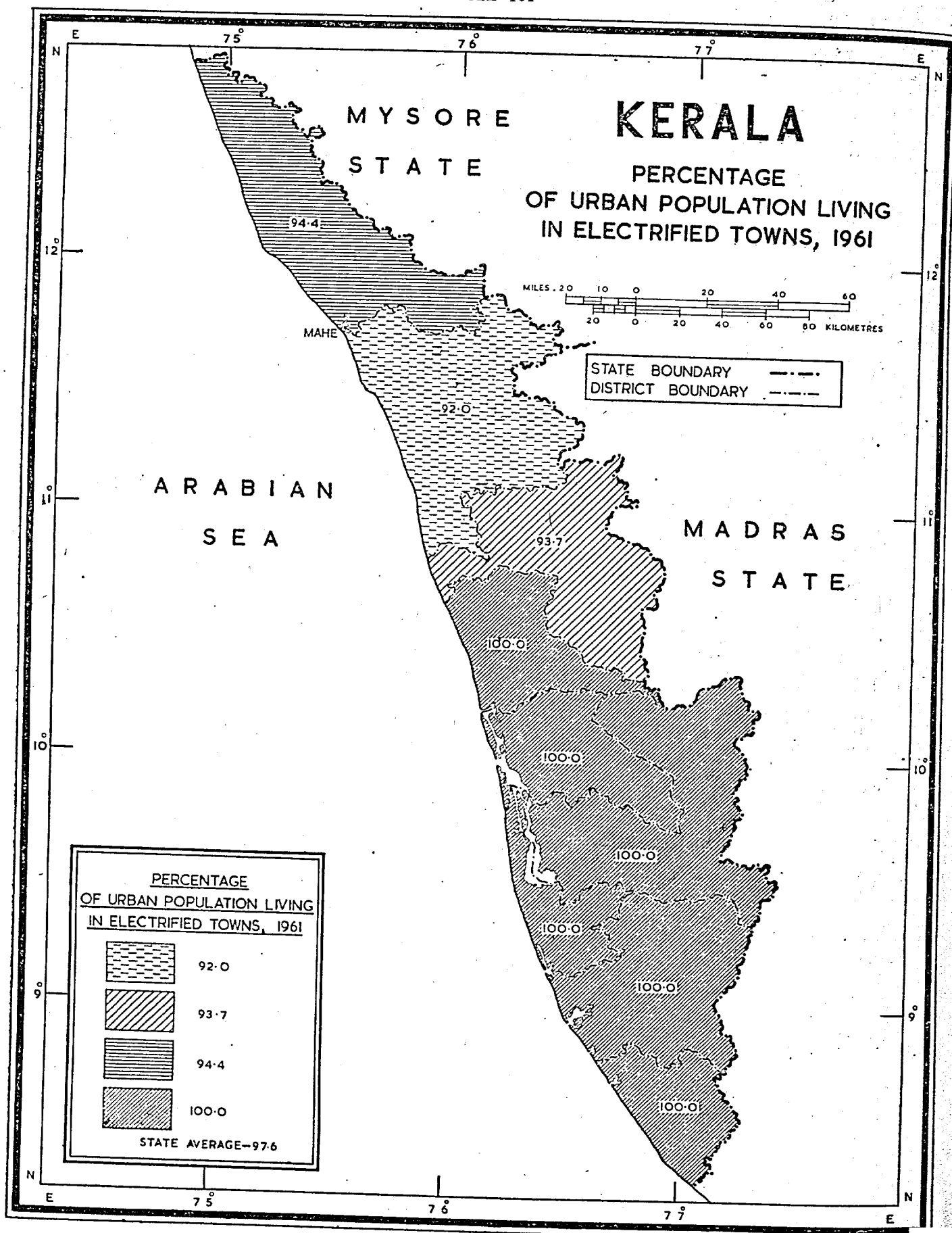
PER CENT TO TOTAL NUMBER OF DISTRICTS

POPULATION (in lakhs)

PER CENT TO TOTAL POPULATION



Source : District Census Handbooks (Kerala), 1961



PERCENTAGE OF URBAN POPULATION LIVING IN ELECTRIFIED TOWNS, 1961

Purpose

The percentage of urban population living in electrified towns in the districts of the State in 1961 is shown in the map.

Method

The percentage of urban population living in electrified towns to the total urban population by districts is arranged into four categories and the districts are shaded accordingly by four different grades of hatches from deep to light corresponding to high to low value.

Salient Features

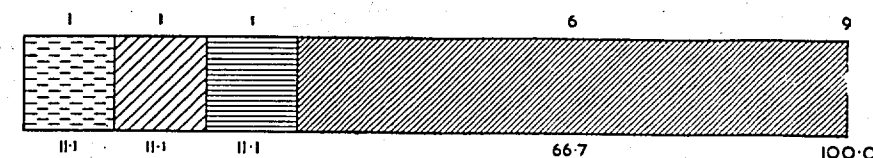
In the State as a whole 97.6 per cent of the total urban population live in electrified towns. Non-electrified towns exist only in the three northern districts viz., Cannanore, Kozhikode and Palghat. In Kozhikode district which has the lowest percentage, 92.0 per cent of the urban population of the district live in electrified towns. In Palghat and Cannanore districts the percentages are 93.7 and 94.4 respectively.

Table

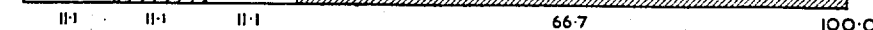
PROPORTION OF URBAN POPULATION LIVING IN ELECTRIFIED TOWNS IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Percentage of urban population living in electrified towns
1	Kerala State	97.6
1	Trichur District	100.0
2	Ernakulam "	100.0
3	Kottayam "	100.0
4	Alleppey "	100.0
5	Quilon "	100.0
6	Trivandrum "	100.0
7	Cannanore "	94.4
8	Palghat "	93.7
9	Kozhikode "	92.0

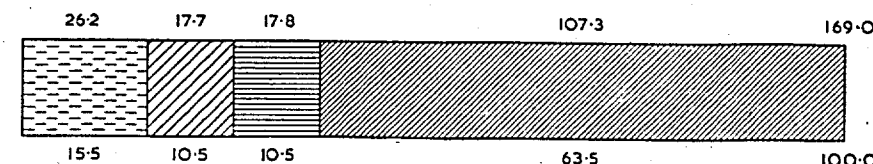
ABSOLUTE NUMBER OF DISTRICTS



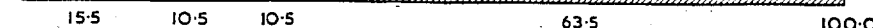
PER CENT TO TOTAL NUMBER OF DISTRICTS



POPULATION (in lakhs)

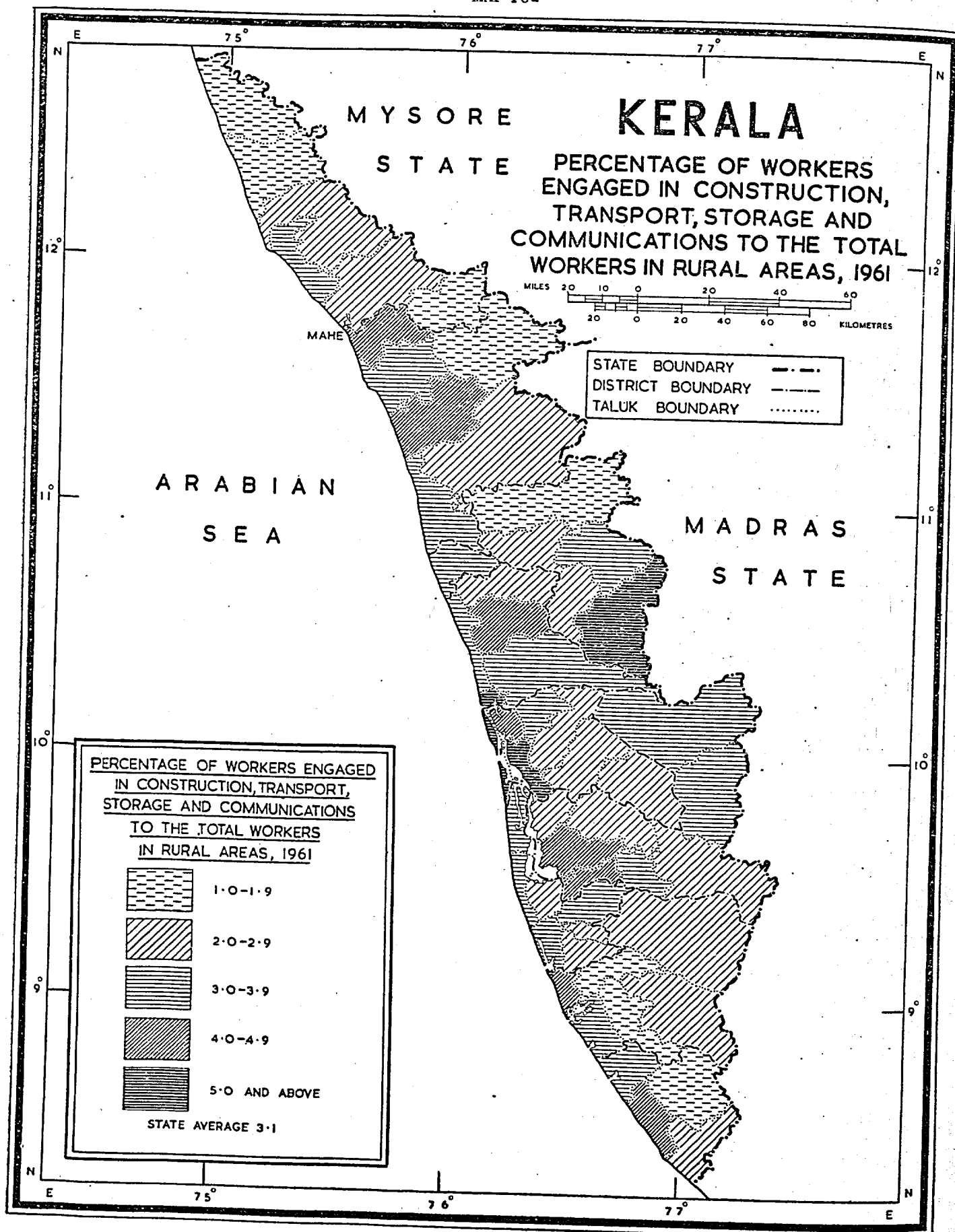


PER CENT TO TOTAL POPULATION



Source: (i) Kerala State Electricity Board

(ii) Census of India, 1961, Kerala—Part II A General Population Tables



MAP. 102

PERCENTAGE OF WORKERS ENGAGED IN CONSTRUCTION, TRANSPORT, STORAGE
AND COMMUNICATIONS TO THE TOTAL WORKERS IN RURAL AREAS, 1961

Purpose*

The map shows the variations in the proportion of workers engaged in Construction, Transport, Storage and Communications to the total workers in the rural areas of the taluks of the State in 1961.

Method

The percentages of rural workers in Construction, Transport, Storage and Communications i. e., in Industrial Categories VI and VIII (divisions 4 and 7 of the Indian Standard Industrial Classification) to the total rural workers by taluks are arranged into five categories and the taluks are shaded according to this grouping from deep to light corresponding to high to low value.

Salient Features

In Kerala State only 3.1 per cent of the total rural workers are engaged in Construction, Transport, Storage and Communications. The percentage of workers in this group to total rural workers in the different taluks varies between 1.1 per cent and 9.8 per cent. Cochin taluk in Ernakulam district has the highest proportion of rural workers engaged in Construction, Transport, Storage and Communications and South Wynad taluk in Kozhikode district the lowest.

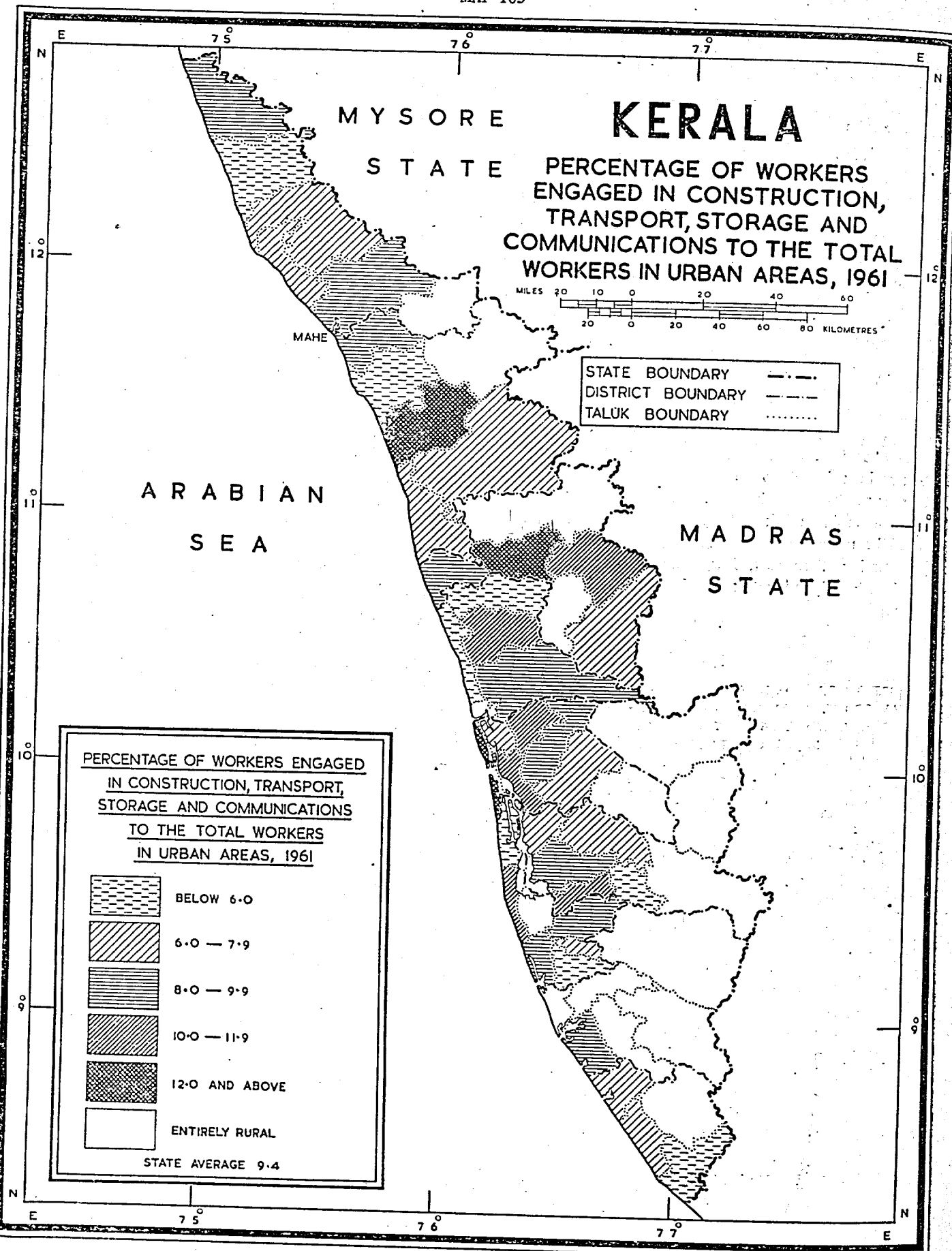
Table

PROPORTION OF WORKERS ENGAGED IN CONSTRUCTION,
TRANSPORT, STORAGE AND COMMUNICATIONS TO
THE TOTAL WORKERS IN THE RURAL AREAS OF THE
STATE AND TALUKS, 1961

Rank	State/Taluk	Percentage of workers engaged in construction, transport, storage and communications to the total workers in the rural areas	Percentage of workers engaged in construction, transport, storage and communications to the total workers in the rural areas	Percentage of workers engaged in construction, transport, storage and communications to the total workers in the rural areas	Percentage of workers engaged in construction, transport, storage and communications to the total workers in the rural areas	Percentage of workers engaged in construction, transport, storage and communications to the total workers in the rural areas	Percentage of workers engaged in construction, transport, storage and communications to the total workers in the rural areas	Percentage of workers engaged in construction, transport, storage and communications to the total workers in the rural areas	Percentage of workers engaged in construction, transport, storage and communications to the total workers in the rural areas
1	Kerala State	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
1	Cochin Taluk	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
2	Cranganore "	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
47	Peermade	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
48	Kottarakara	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
49	Perintalmanna	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
50	Nedumangad	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
51	Kasaragod	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
52	Hosdurg	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
53	Kunnathur	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
54	North Wynad	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
55	S outh Wynad	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1

ABSOLUTE NUMBER OF TALUKS	PER CENT TO TOTAL NUMBER OF TALUKS	POPULATION (in lakhs)	PER CENT TO TOTAL POPULATION
8	14.5	20.4	12.1
18	32.8	52.5	31.1
17	30.9	54.1	32.0
8	14.5	31.5	18.6
4	7.3	10.5	6.2
55	100.0	169.0	100.0

Source: Census of India, 1961, Kerala—Part II A General Population Tables



PERCENTAGE OF WORKERS ENGAGED IN CONSTRUCTION, TRANSPORT, STORAGE AND COMMUNICATIONS TO THE TOTAL WORKERS IN URBAN AREAS, 1961

Purpose

The map shows the variations in the proportion of workers engaged in Construction, Transport, Storage and Communications in the urban areas of the taluks of the State in 1961.

Method

The percentages of urban workers in Construction, Transport, Storage and Communications i. e., in Industrial Categories VI and VIII (divisions 4 and 7 of the Indian Standard Industrial Classification) to the total urban workers by taluks are arranged into five groups and the taluks are shaded according to this grouping from deep to light corresponding to high to low value.

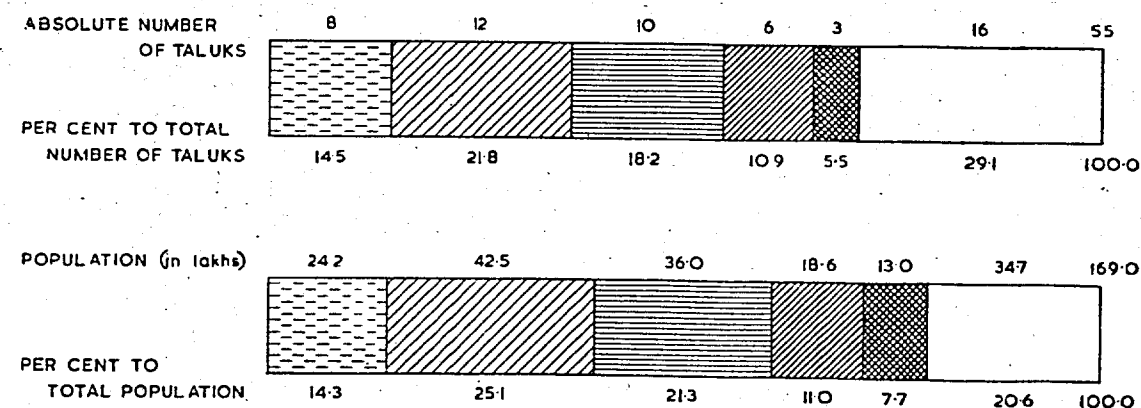
Salient Features

The proportion of workers engaged in Construction, Transport, Storage and Communications is higher in urban areas than in rural areas. 9.4 per cent of the total urban workers in the State are engaged in Construction, Transport, Storage and Communication sectors. In the taluks (excluding entirely rural taluks) the percentage varies between 3.5 and 25.2. Out of the total 39 taluks which have urban areas in them, 8 have the above percentage below 6.0, 12 between 6.0 and 7.9, 10 between 8.0 and 9.9, 6 between 10.0 and 11.9 and 3 12.0 and above. The taluks coming in the last category are Kozhikode, Ottapalam and Cochin. The Cochin taluk where the Cochin Port is located has more than one fourth of the total urban workers engaged in Construction, Transport, Storage and Communications.

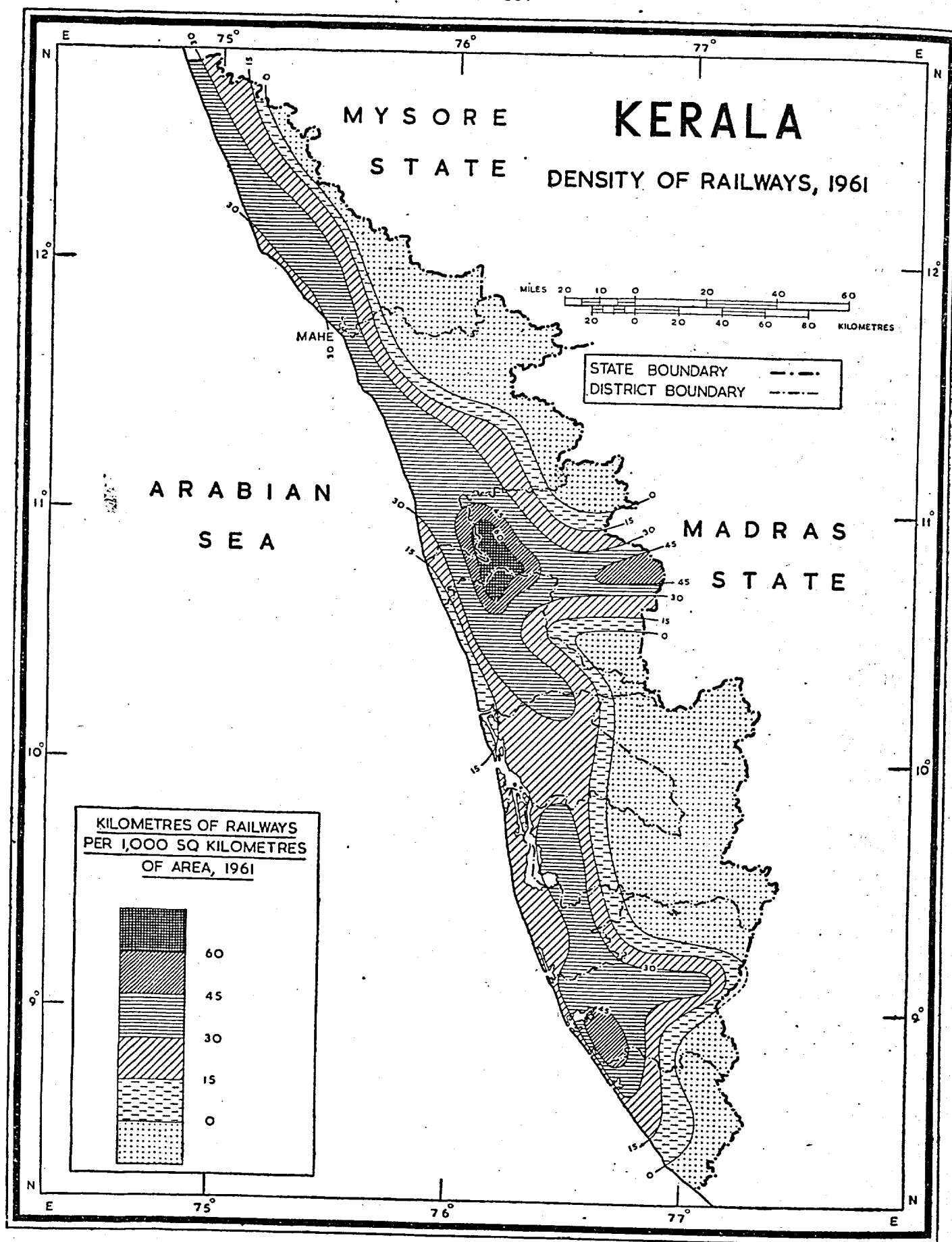
Table

PROPORTION OF WORKERS ENGAGED IN CONSTRUCTION, TRANSPORT, STORAGE AND COMMUNICATIONS TO THE TOTAL WORKERS IN THE URBAN AREAS OF THE STATE AND TALUKS, 1961

Rank	State/Taluk	Percentage of workers engaged in Construction, Transport, Storage and Communication to the total workers in the urban areas
1	Kerala State	9.4
2	Cochin Taluk	25.2
3	Ottapalam	16.7
4	Kozhikode	12.0
5	Kanayannur	11.0
6	Alwaye	10.8
7	Ambalapuzha	10.8
8	Trichur	10.7
9	Palghat	10.3
10	Changanacherry	10.1
11	Tellicherry	9.7
12	Badagara	9.3
13	Kottayam	9.2
14	Mukundapuram	8.8
15	Ponnani	8.6
16	Kasaragod	8.3
17	Tiruvalla	8.3
18	Kunnathunad	8.1
19	Karthigapally	8.1
20	Quilon	8.0
21	Muvattupuzha	7.8
22	Chirayinkil	7.8
23	Meenachil	7.5
24	Ernad	7.3
25	Cannanore	7.2
26	Vaikom	7.2
27	Trivandrum	6.9
28	Chengannur	6.7
29	Parur	6.5
30	Tirur	6.4
31	Chittur	6.2
32	Taliparamba	6.1
33	Kanjirappally	5.9
34	Mavelikkara	5.6
35	Talappilly	5.2
36	Chowghat	4.8
37	Shertalai	4.5
38	Neyyattinkara	4.2
39	Quilandy	4.1
	Hosdrug	3.5



Source: Census of India, 1961, Kerala—Part II A General Population Tables



DENSITY OF RAILWAYS, 1961

Purpose

The map shows the density of railways per 1,000 square kilometres of area in the State in 1961.

Method

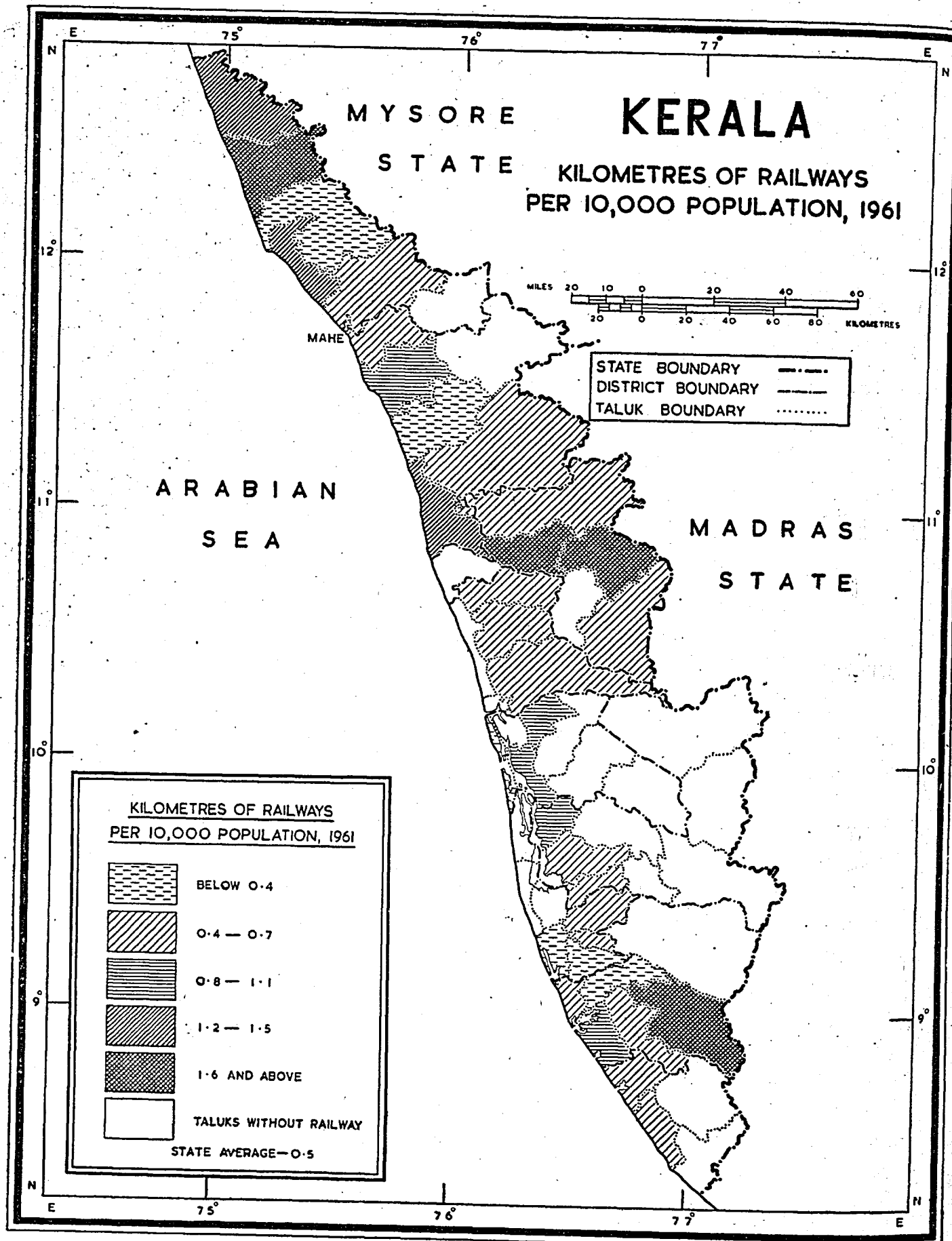
The State map with railways is divided into squares, each square equivalent to 1,000 square kilometres. The length of the railway in each of these squares is measured. A similar grid is prepared in the base map of the State and the figures for length of railways are plotted in the centre of each square. Isopleths are drawn for lengths 0, 15, 30, 45 and 60 kms. The intervening spaces between isopleths are

shaded by different grades of hatches corresponding high to low value.

Salient Features

Only in one region i.e., Shoranur of Palghat district, the density of railways is above 60 kms. p 1,000 square kms. In Palghat and Olavakkot region of Palghat district and Quilon region of Quilon district the density is between 45 and 60 kms. In most of the areas of Kottayam district and in considerable areas of the eastern regions of all the districts except of Palghat, Alleppey and Quilon there are no railways at all.

Source: Road and rail map of the Department of Public Works, Kerala.



MAP 105
KILOMETRES OF RAILWAYS PER 10,000 POPULATION, 1961

Purpose:

The map shows the variations in the availability of length of railways per 10,000 population in the taluks of the State in 1961.

Method

The length of railways is worked out by superimposing a railway map over a map showing the administrative divisions and then measuring the length in each taluk. From the approximate length of railways thus obtained is calculated the length of railways for 10,000 population by taluks. These values are grouped into five and the taluks are shaded according to this grouping from deep to light corresponding to high to low value.

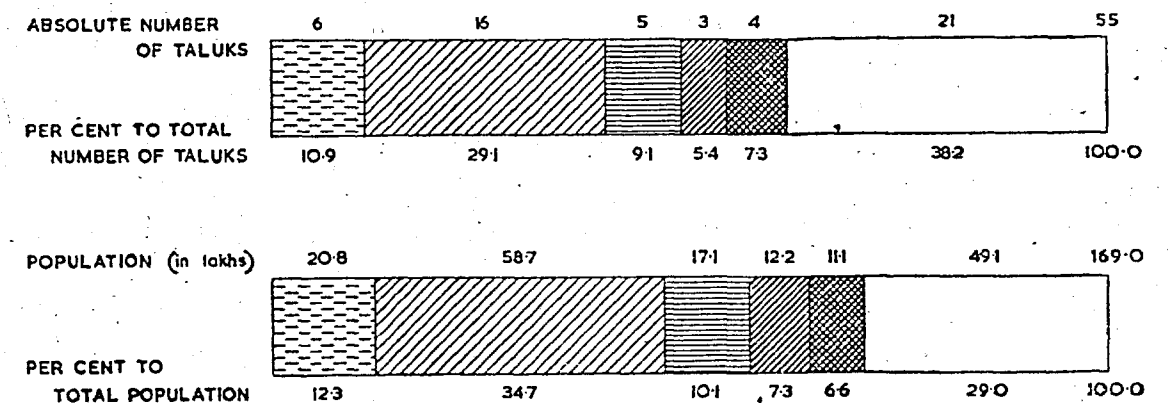
Salient Features

The average length of railways per 10,000 population in the State is 0.5 km. There are 21 taluks in the State without any railway at all. Of the remaining 34 taluks 6 have length of railways per 10,000 population below 0.4 km., 16 taluks between 0.4 and 0.7 km., 5 taluks between 0.8 and 1.1 km., 3 taluks between 1.2 and 1.5 km. and 4 taluks above 1.5 km. Palghat taluk of Palghat district and Cochin taluk of Ernakulam district have the maximum and minimum lengths respectively of railways per 10,000 population.

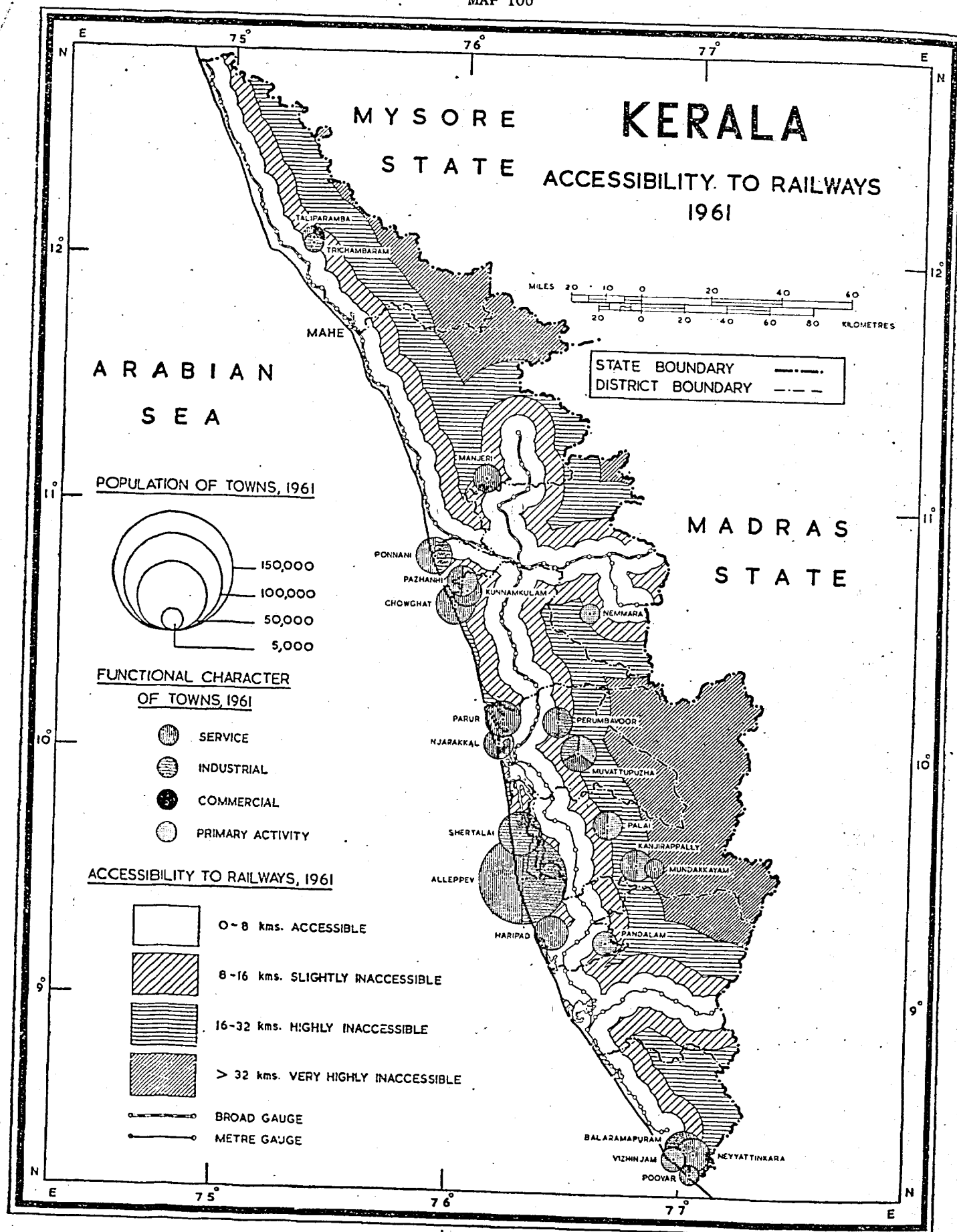
Table

LENGTH OF RAILWAYS PER 10,000 POPULATION
IN THE STATE AND TALUKS, 1961

Rank	State/Taluk	Length of railways in (km.) per 10,000 population
1	2	3
	Kerala State	0.5
1	Palghat Taluk	2.1
2	Pathanapuram "	2.0
3	Hosdrug "	1.6
4	Ottapalam "	1.6
5	Kasaragod "	1.4
6	Cannanore "	1.2
7	Tirur "	1.2
8	Kanayannur "	1.1
9	Alwaye "	0.9
10	Vaikom "	0.9
11	Quilon "	0.9
12	Quilandy "	0.8
13	Chittur "	0.7
14	Kottayam "	0.7
15	Chirayinkil "	0.7
16	Perintalmanna "	0.6
17	Talappilly "	0.6
18	Mulundapuram "	0.6
19	Karunagapally "	0.6
20	Ernad "	0.5
21	Trichur "	0.5
22	Thiruvalla "	0.5
23	Kottarakara "	0.5
24	Tellicherry "	0.4
25	Badagara "	0.4
26	Changanacherry "	0.4
27	Chengannur "	0.4
28	Trivandrum "	0.4
29	Taliparamba "	0.3
30	Kozhikode "	0.3
31	Karthigapally "	0.3
32	Mavelikkara "	0.3
33	Kunnathur "	0.2
34	Cochin "	0.1



Source: 1. Road and rail map of the Department of Public Works, Kerala
2. Census of India, 1961, Kerala—Part II A General Population Tables



ACCESSIBILITY TO RAILWAYS, 1961

Purpose

The map shows the accessibility of regions to railways in the State in 1961. It also focuses attention on the towns lying in areas with varying degree of inaccessibility to railways and the need for extending railway transport facilities to them.

Method

Places within a distance of 8 km. from railway stations are considered as accessible to railways, and places beyond as inaccessible. The latter are divided into three regions viz., places at a distance of 8 to 16 km. (slightly inaccessible), 16 to 32 km. (highly inaccessible) and above 32 km. (very highly inaccessible) from the railway stations, and shaded by three different shades from light to deep corresponding to low to high inaccessibility to railways. The towns situated in the inaccessible areas are marked by circles proportional to their population and the functional character, decided

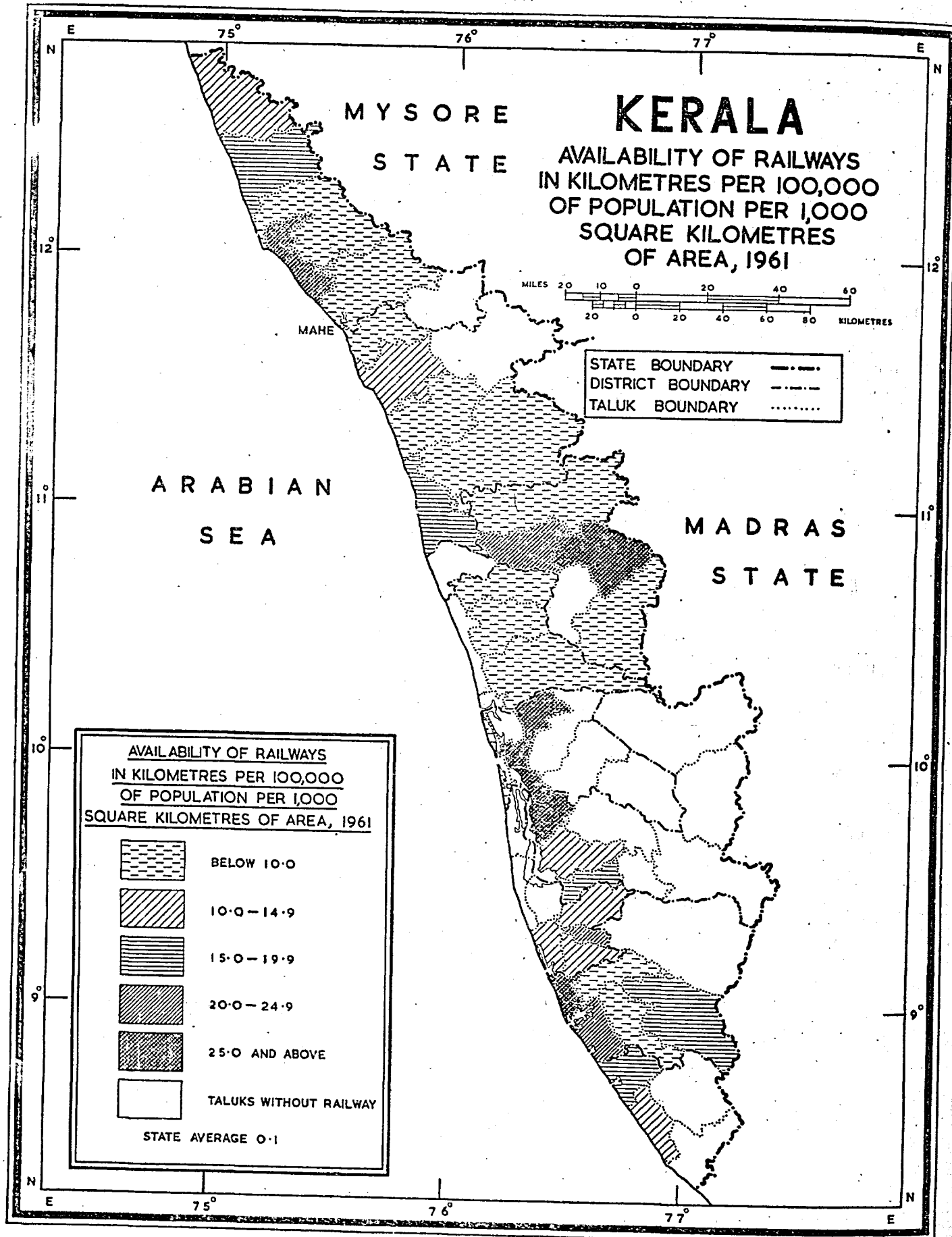
as in the case of maps 42 to 44 shown by shades inside the circles.

Salient Features

It will be seen from the map that the coastal areas except those in Trichur, Alleppey and to a certain extent Ernakulam districts are accessible to railways. The plains or the highlands are slightly or highly inaccessible. Very highly inaccessible areas occur in Cannanore, Kozhikode, Ernakulam, Kottayam and Quilon districts.

23 out of the total 92 towns in the State lie in slightly, highly or very highly inaccessible areas to railways. These consist of 1 class I town viz., Alleppey (Municipal), 8 class III towns, 10 class IV towns and 4 class V towns. The distribution of these 23 towns according to the functional character is 2 industrial, 3 primary activity, 7 service, 1 service-cum-commercial, 4 service-cum-industrial, 5 service-cum-primary activity and 1 service-cum-industrial-cum-primary activity.

Source: 1. Road and rail map of the Department of Public Works, Kerala
2. Census of India, 1961, Kerala—Part II A General Population Tables



AVAILABILITY OF RAILWAYS IN KILOMETRES PER 100,000 OF POPULATION PER 1,000 SQUARE KILOMETRES OF AREA, 1961

Purpose

The map shows the variations in the extent of availability of railways per 100,000 of population per 1,000 square kilometres of area in the taluks of the State in 1961.

Method

The index for this map i.e. the availability of railways per 100,000 of population per 1,000 sq. km. of area in each taluk is worked out as follows:

$\text{Kilometres of railways} \times 100,000 \times 1,000$

$\text{Area in square kilometres} \times \text{Population}$

The above availability figures by taluks are grouped into five and the taluks are shaded according to this grouping from deep to light corresponding to high to low value. The taluks without railways are not shaded. Since the lengths of railways by taluks are obtained as indicated in map 105, the figures are only approximate.

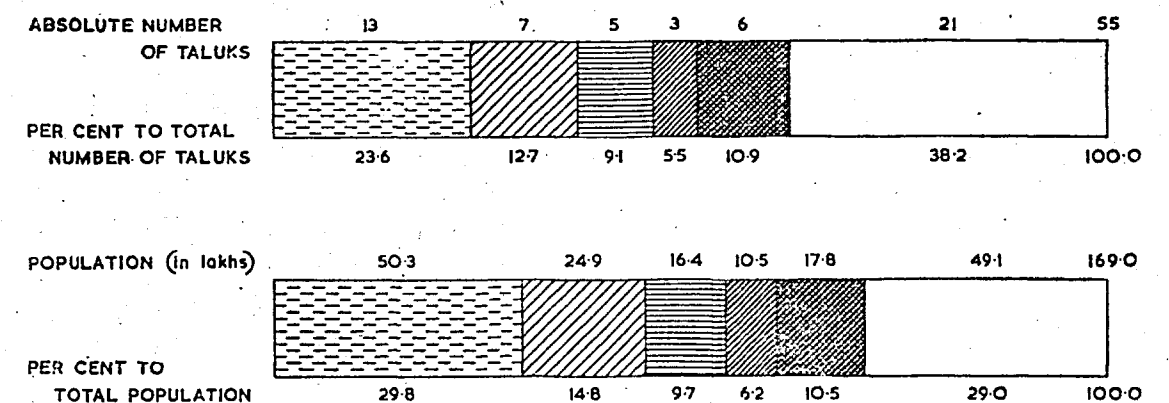
Salient Features

The availability of railways per 100,000 of population per 1,000 square kilometres of area in the State as a whole is only 0.1 km. There are 21 taluks without railways. Of the remaining taluks the availability is highest (34.3 km.) in Kanayannur taluk of Ernakulam district and lowest (2.1 km.) in Ernad taluk of Kozhikode district.

Table

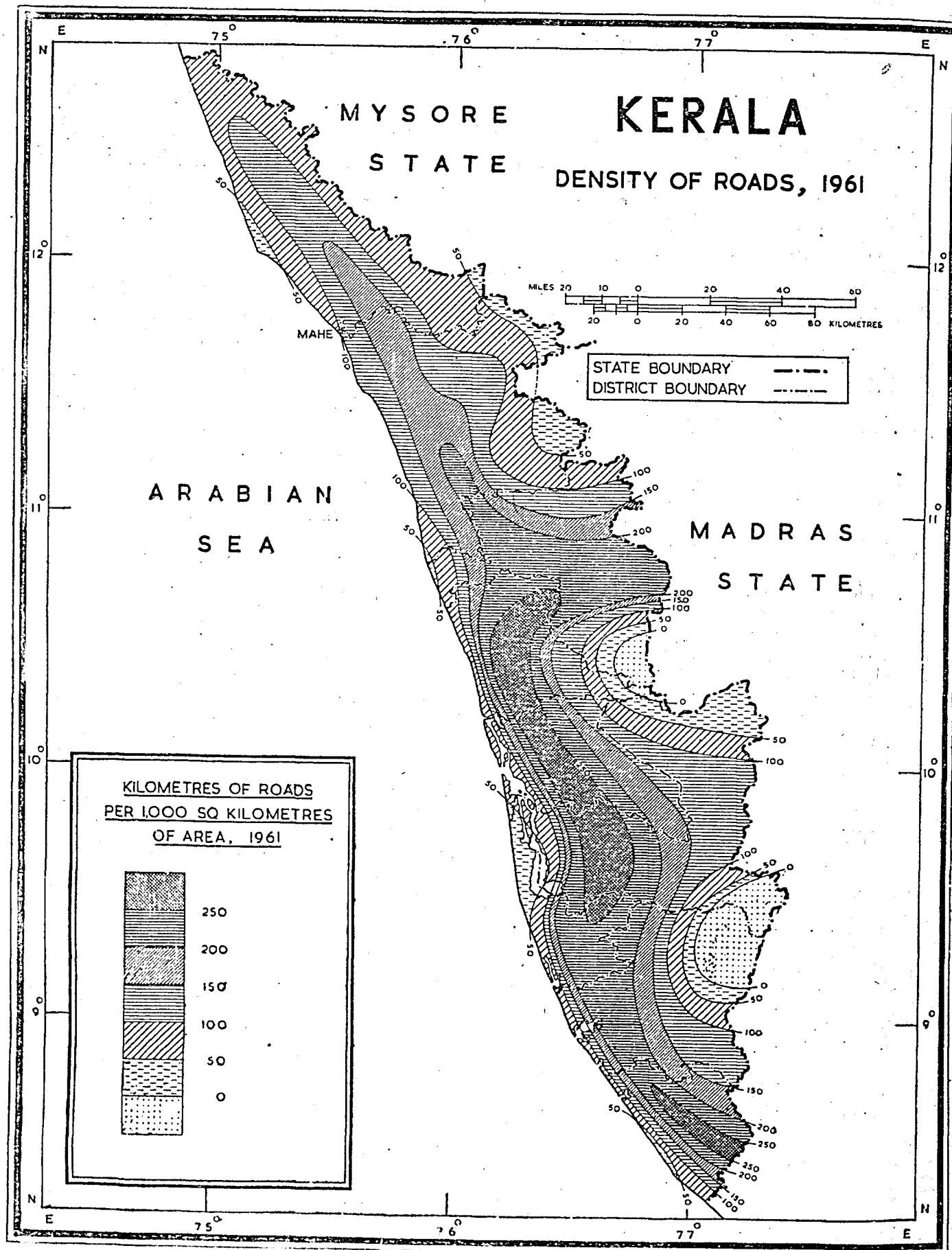
AVAILABILITY OF RAILWAYS PER 100,000 OF POPULATION PER 1,000 SQUARE KILOMETRES OF AREA IN THE STATE AND TALUKS, 1961

Rank	State/Taluk	Availability of railways in kilometres per 100,000 of population per 1,000 sq. km. of area
1	2	3
1	Kerala State	0.1
2	Kanayannur Taluk	34.3
3	Karunagapally	31.8
4	Palghat	28.7
5	Vaikom	28.1
6	Cannanore	27.5
7	Alwaye	27.1
8	Ottapalam	24.1
9	Quilon	23.5
10	Chengannur	20.0
11	Chirayinkil	18.4
12	Changanacherry	17.0
13	Pathanapuram	16.4
14	Hosdurg	16.3
15	Tirur	16.1
16	Kasaragod	14.8
17	Thiruvalla	13.3
18	Trivandrum	12.9
19	Kottayam	12.7
20	Karthigapally	12.0
21	Mavelikkara	11.5
22	Quilandy	10.7
23	Talappilly	9.4
24	Cochin	9.0
25	Kottarakara	8.2
26	Badagara	8.0
27	Trichur	7.8
28	Chittur	6.4
29	Mukundapuram	4.9
30	Kunnathur	4.3
31	Perintalmanna	3.7
32	Kozhikode	3.4
33	Tellicherry	3.1
34	Taliparamba	2.2
	Ernad	2.1



Source: 1. Road and rail map of the Department of Public Works, Kerala
2. Census of India, 1961, Kerala—Part II A General Population Tables

DENSITY OF ROADS, 1961

**Purpose**

The map shows the density of roads per 1,000 square kilometres of area in the State in 1961

Method

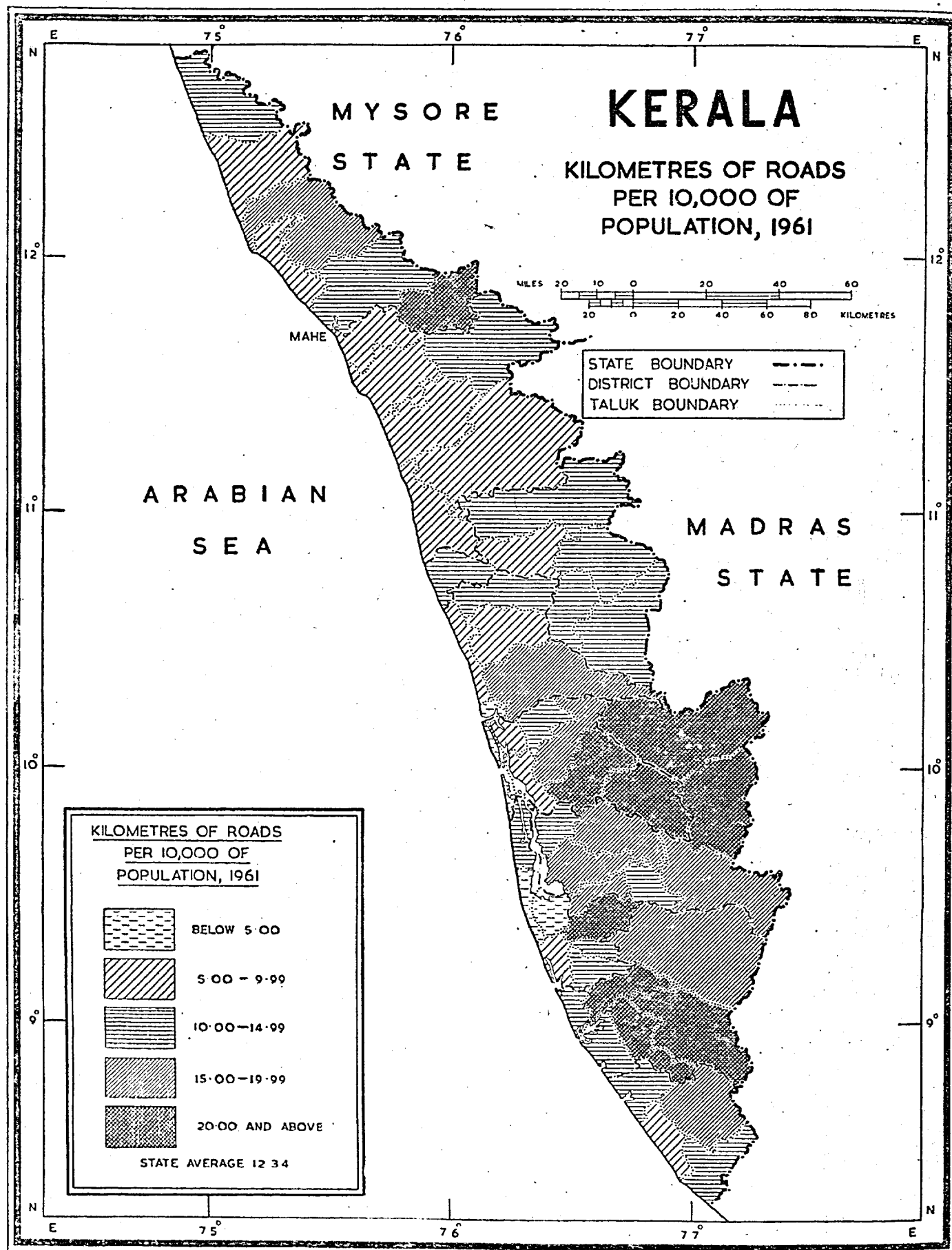
The road map of the State is divided into squares, each square equivalent to 1,000 square kilometres and the length of roads in each square is measured. A similar grid is prepared in the base map of the State and the figures for lengths of roads are plotted in the centre of each square. Isopleths are drawn for lengths 0, 50, 100, 150, 200 and 250 kilometres. The intervening spaces between isopleths are shaded by different grades of hatches corresponding to high to low value.

The roads taken into account for this map include National Highways, West Coast Road, State Highways, District Roads and Village Roads (excluding village roads maintained by the Panchayats).

Salient Features

The middle and southern regions of the State have comparatively better developed network of roads. The roads are more concentrated in the midland regions. There is a vast stretch of area with high density of roads, from the southern end of the State reaching beyond Palghat district which then extends out towards the east through the Palghat Gap in the Western Ghats. The density of roads in this area is above 200 km. per 1,000 square kilometres. The density of roads is higher viz. above 250 at two regions in the southern half of the State, one stretching between Trichur taluk of Trichur district and Thiruvalla taluk of Alleppey district and the other commencing from Chirayinkil taluk of Trivandrum district and extending out southward. The density of roads is low in a narrow stretch of land all along the seacoast and also in the hilly tracts on the eastern border.

Source: Road and rail map of the Department of Public Works, Kerala



KILOMETRES OF ROADS PER 10,000 OF POPULATION, 1961

Purpose

The map shows the variations in the lengths of roads per 10,000 of population in the taluks of the State in 1961.

Method

The lengths of roads per 10,000 of population by taluks are grouped into five and the taluks are shaded according to this grouping from deep to light corresponding to high to low value. The roads taken into account are National Highways, West Coast Road, State Highways, District Roads, and Village Roads (including village roads of more than local importance maintained by the Panchayats). Municipal Roads are not taken into account.

Salient Features

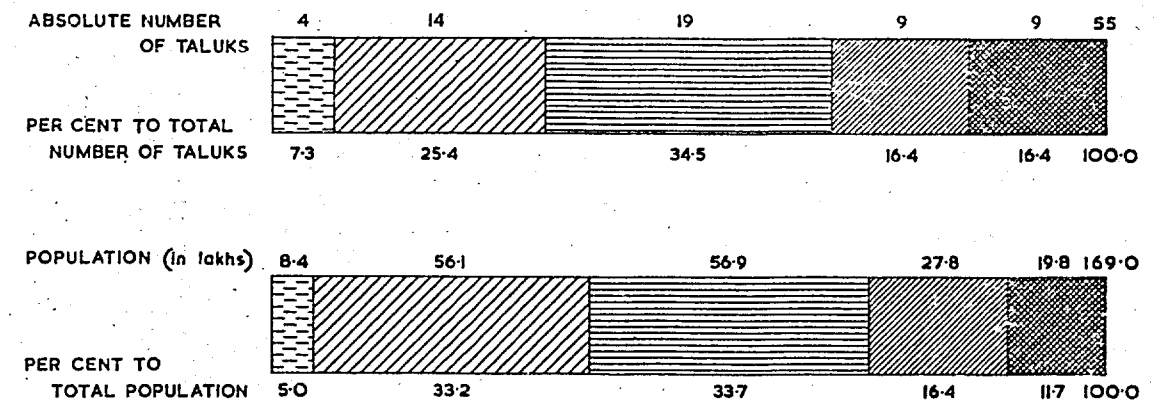
The average length of road per 10,000 of population in the State is 12.34 kilometres. Kuttanad taluk of Alleppey district has the lowest (2.02 km.) and Udumbanchola taluk of Kottayam district the highest (38.95 km.) length of roads per 10,000 population. The length of roads per 10,000 population is generally greater in the eastern hilly taluks than in the coastal taluks.

Table

KILOMETRES OF ROADS PER 10,000 OF POPULATION IN THE STATE AND TALUK, 1961

Rank	State/Taluk	Kilometres of roads per 10,000 of population
1	2	3
	Kerala State	12.34
1	Udumbanchola Taluk	38.95
2	North Wynad	27.33
3	Muvattupuzha	25.63
4	Thodupuzha	23.15
5	Devicolum	21.67
6	Kunnathur	21.20

1	2	3
7	Thiruvalla	Taluk 20.90
8	Pathanapuram	" 20.58
9	Kottarakara	" 20.26
10	Pathanamthitta	" 19.85
11	Nedumangad	" 19.67
12	Kunnathunad	" 19.64
13	Peermade	" 18.84
14	Meenachil	" 17.80
15	Mukundapuram	" 15.77
16	Taliparamba	" 15.60
17	Kottayam	" 15.56
18	Changanacherry	" 15.11
19	Chittur	" 14.75
20	Alwaye	" 14.65
21	Talappilly	" 14.64
22	Chengannur	" 14.54
23	Mavelikkara	" 13.67
24	Karunagapally	" 13.51
25	Chirayinkil	" 13.43
26	South Wynad	" 12.83
27	Tellicherry	" 12.63
28	Neyyattinkara	" 12.56
29	Kanjirappally	" 12.20
30	Palghat	" 12.16
31	Vaikom	" 11.70
32	Perintalmanna	" 11.47
33	Kasaragod	" 11.44
34	Sherthala	" 11.03
35	Alathur	" 10.49
36	Quilon	" 10.07
37	Ponnani	" 10.05
38	Parur	" 9.79
39	Hosdrug	" 8.68
40	Trichur	" 8.66
41	Ottapalam	" 8.49
42	Trivandrum	" 8.11
43	Karthigapally	" 7.70
44	Kozhikode	" 7.28
45	Quilandy	" 7.25
46	Kanayannur	" 7.18
47	Ernad	" 7.05
48	Badagara	" 6.54
49	Tirur	" 5.58
50	Chowghat	" 5.42
51	Cannanore	" 5.18
52	Cranganore	" 4.61
53	Ambalapuzha	" 4.05
54	Cochin	" 3.12
55	Kuttanad	" 2.02



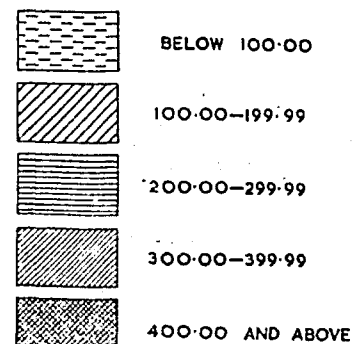
Source:— 1. Departments of Public Works and Panchayats, Kerala.
2. Census of India, 1961, Kerala-Part II A-General Population Tables

KERALA STATE AVAILABILITY OF ROADS PER 100,000 OF POPULATION PER 1,000 SQUARE KILOMETRES OF AREA, 1961



STATE BOUNDARY ———
DISTRICT BOUNDARY - - - - -
TALUK BOUNDARY

AVAILABILITY OF ROADS IN KILOMETRES PER 100,000 OF POPULATION PER 1,000 SQUARE KILOMETRES OF AREA, 1961



STATE AVERAGE—3.18

AVAILABILITY OF ROADS PER 100,000 OF POPULATION PER 1,000 SQUARE KILOMETRES OF AREA, 1961

Purpose

The map shows the variations in the availability of roads per 100,000 of population per 1,000 square kilometres of area in the taluks of the State in 1961.

Method

The index for this map i.e., the availability of roads per 100,000 of population per 1,000 sq. km. of area in each taluk is worked out as follows:

Kilometres of roads x 100,000 x 1,000

Area in square kilometres x Population

The above availability figures by taluks are grouped into five and the taluks are shaded according to this grouping from deep to light corresponding to high to low value. The roads taken for this map are the same as those for map 109.

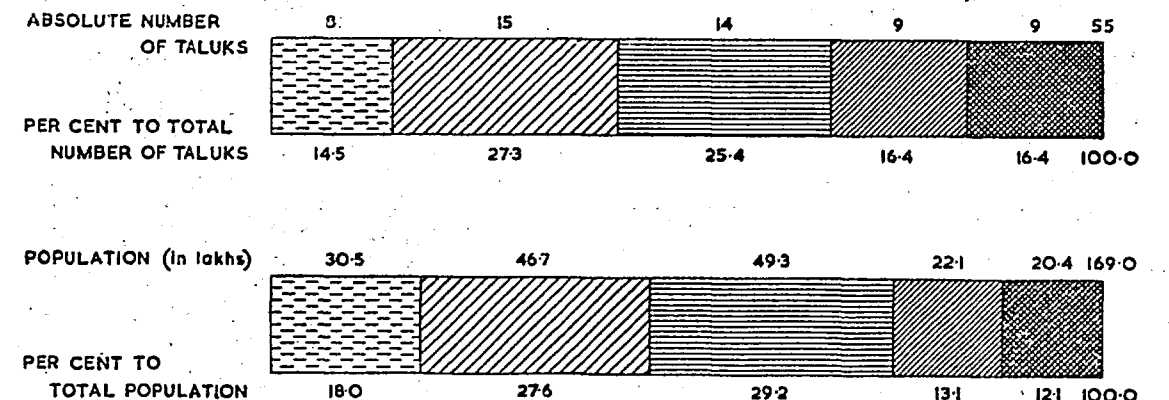
Salient Features

The availability of roads per 100,000 of population per 1,000 square kilometres of area in the State as a whole is 3.18 km. There are 8 taluks with the availability below 100.00 km., 15 taluks between 100.00 and 199.99 km., 14 taluks between 200.00 and 299.99 km., 9 taluks between 300.00 and 399.99 km., and another 9 taluks with the availability 400.00 km. and above. Chengannur taluk has the highest (722.56 km.) and Ernad taluk the lowest (31.17 km.) availability of roads per 100,000 of population per 1,000 square kilometres of area.

Table

AVAILABILITY OF ROADS PER 100,000 OF POPULATION
PER 1,000 SQUARE KILOMETRES OF AREA IN THE
STATE AND TALUKS, 1961

Rank	State/Taluk	Availability of roads per 100,000 of popu- lation per 1,000 square kilometres of area	Rank	State/Taluk	Availability of roads per 100,000 of popu- lation per 1,000 square kilometres of area
1	Kerala State	3.18	51	Tirur	77.41
2	Chengannur	722.56	52	Kuttanad	75.92
3	Karunagapally	669.46	53	Kozhikode	74.12
4	Cranganore	631.58	54	Perintalmanna	71.33
	Thiruvalla	607.16	55	Ernad	31.17



Source: 1. Departments of Survey and Land Records, Public Works, and Panchayats, Kerala
2. Census of India, 1961, Kerala—Part II A General Population Tables

ACCESSIBILITY TO ROADS, 1961

Purpose

The map shows the accessibility of regions to roads in the State in 1961.

Method

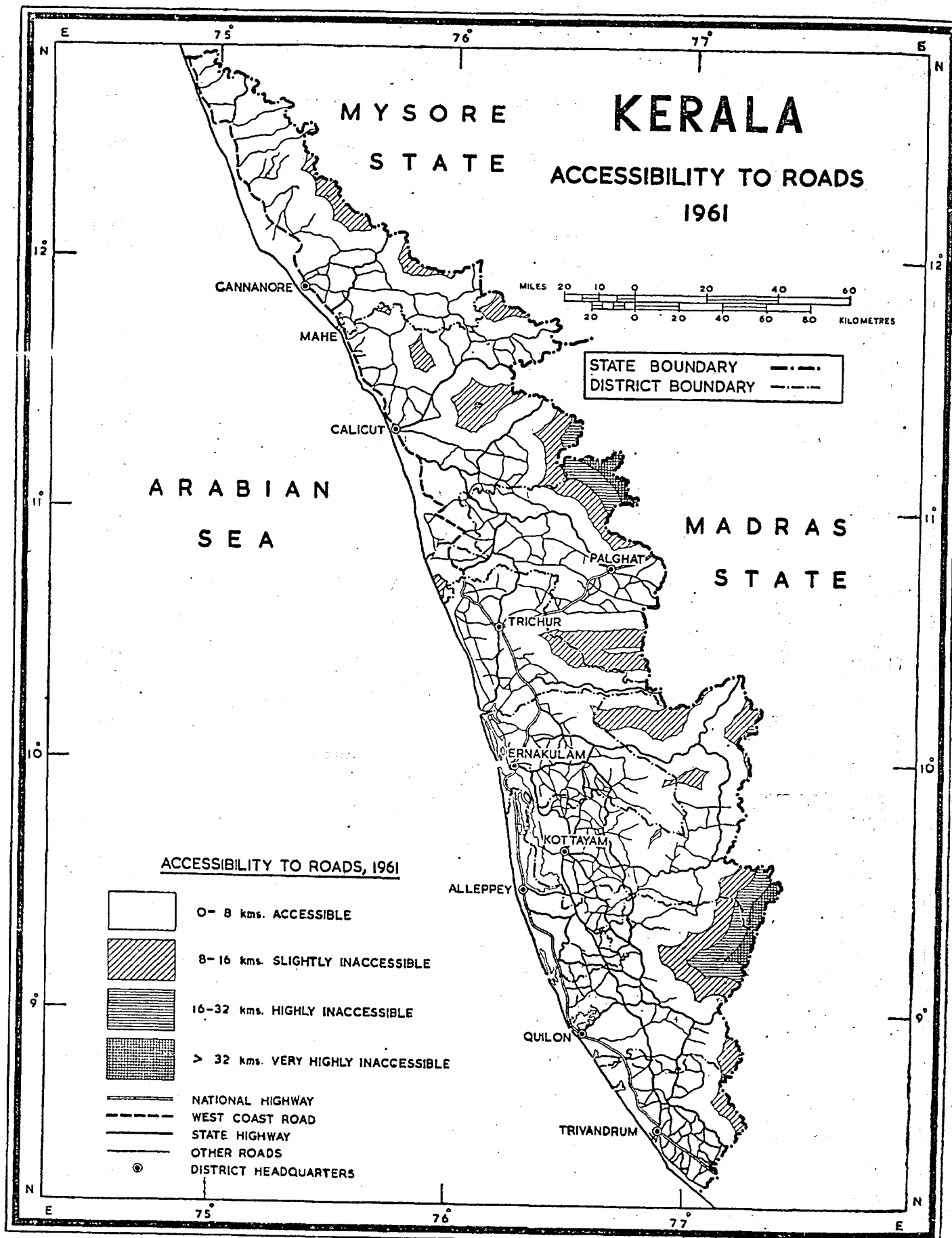
Places within a distance of 8 km. from roads are considered as accessible and places beyond as inaccessible. The latter are divided into three regions viz., places at a distance of 8 to 16 km. (slightly inaccessible), 16 to 32 km. (highly inaccessible) and above 32 km. (very highly inaccessible) from the roads and shaded by three different

grades of hatches from light to deep corresponding to low to high inaccessibility. The roads marked in the map include National Highways, West Coast Road, State Highways, district roads and village roads.

Salient Features

It will be seen from the map that only very few areas in the State are inaccessible by roads. Most of these inaccessible areas lie on the eastern borders of the State and are covered by forests. There are no towns situated in inaccessible areas.

Source: Road and rail map of the Department of Public Works, Kerala



NUMBER OF PASSENGERS ORIGINATING PER ROUTE KILOMETRE PER DAY ON RAILWAYS, 1961

Purpose

The map shows the number of passengers originating per route kilometre per day by railway divisions in 1961.

Method

The railways in Kerala are under two railway divisions, viz., the Olavakkot division and the Madurai division. The division-wise figures of number of passengers booked from stations for the year 1960-61 and the open kilometrage have been supplied by the railway authorities. On the basis of the above data an index is worked out for each of the two divisions separately according to the following formula:

$$\text{Number of passengers originating per route kilometre per day} = \frac{\text{number of passengers originating in the division}}{\text{kilometrage} \times 365}$$

Hatches proportionate to the values of the index are marked along the railway lines in the State.

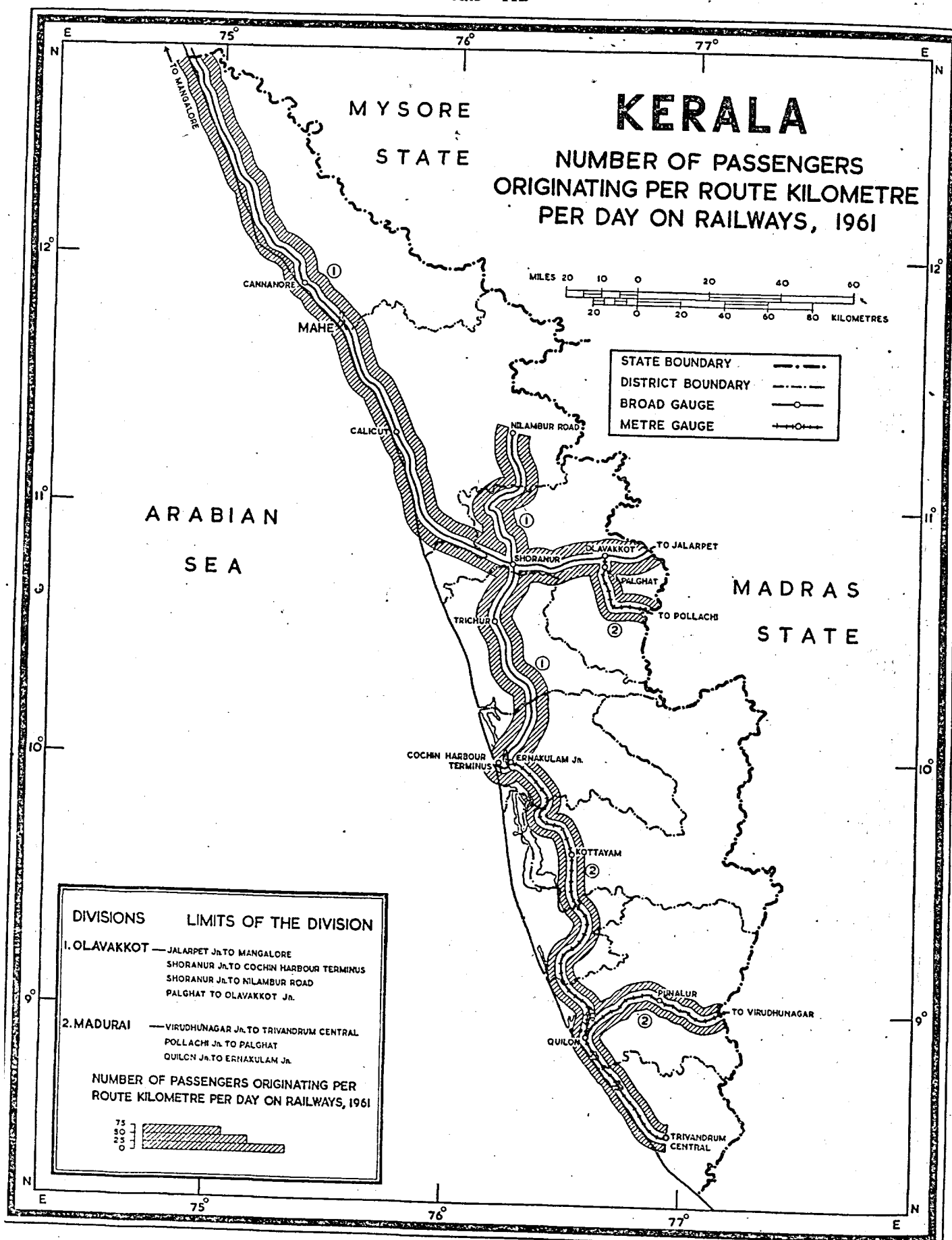
Salient Features

The jurisdiction of the railway divisions of Olavakkot and Madurai is not confined to the railway lines in Kerala, but extends beyond the

State to the neighbouring States. The railway administration does not keep districtwise or even Statewise data of passenger traffic, but only divisionwise. The divisionwise data presented in this map do not, therefore, fully reflect the density of passenger traffic in the State, as the flow of traffic need not necessarily be uniform throughout the division and as there may be regional variations within the same division. Subject to this limitation the map gives a rough idea of the number of passengers originating per route kilometre per day on railways in the State.

The number of passengers originating per route kilometre per day on railways in 1960-61 comes to 69 in the Olavakkot division and 50 in the Madurai division. Railway lines north of Cochin and Ernakulam except the Palghat-Pollachi line are under the Olavakkot division, and the Palghat-Pollachi line and the lines south of Ernakulam are under the Madurai division. The railway lines in the State covered by the Olavakkot division are all broad gauge except for a small bit from Olavakkot to Palghat which is metre gauge, and the railway lines under the Madurai division are entirely metre gauge.

Source: General Manager, Southern Railway



NUMBER OF MOTOR VEHICLES REGISTERED PER 1,000 OF POPULATION, 1961

Purpose

The map shows the variations in the number of motor vehicles registered per 1,000 of population and the percentage of different types of motor vehicles registered in the districts of the State in 1961.

Method

The number of motor vehicles registered per 1,000 of population by districts is grouped into four and the districts are shaded according to this grouping by deep to light shades corresponding to high to low values. In each district circles proportional to the total number of motor vehicles registered are given and the percentage share of different types of motor vehicles marked in them by shaded sectors. The figures of total number

of motor vehicles registered in the districts and the percentage share are also given in the map. **Salient Features**

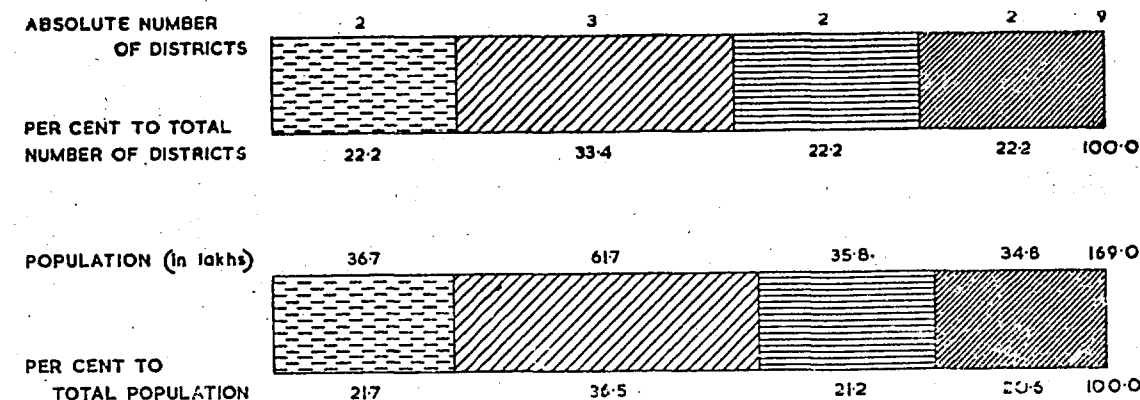
24,480 motor vehicles were registered in the different districts of the State as on 31st March 1961. The maximum number (4,698) of motor vehicles were registered in Trivandrum district and the minimum (1,096) in Ernakulam district. 47.4 per cent of the motor vehicles registered in the State were motor cars. Quilon district has the highest percentage of motor cars and Cannanore district the lowest.

In Kerala State the number of registered motor vehicles for every 1,000 population is only 1.4. Among the districts this is highest in Trivandrum with 2.7 and lowest in Ernakulam with only 0.6.

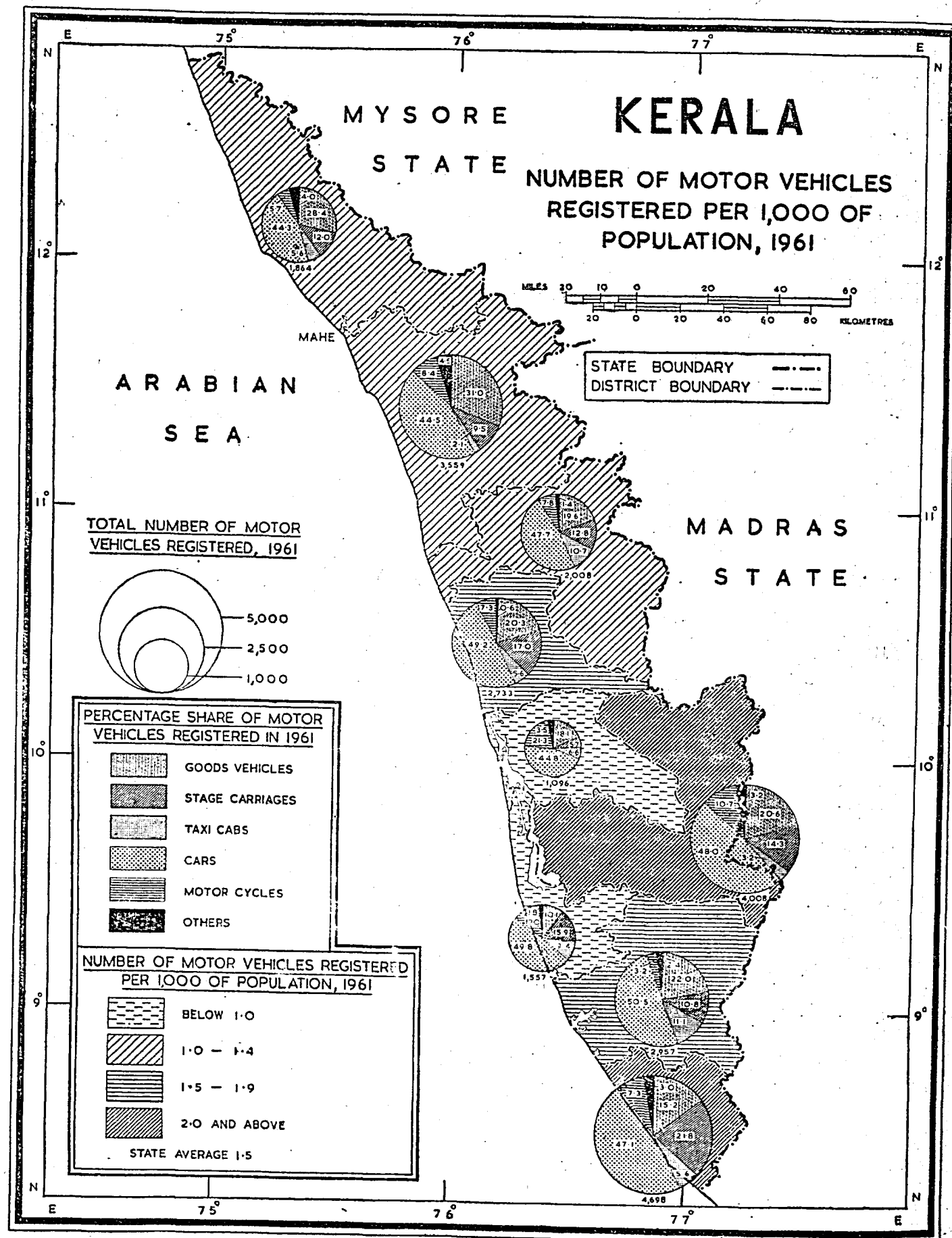
Table

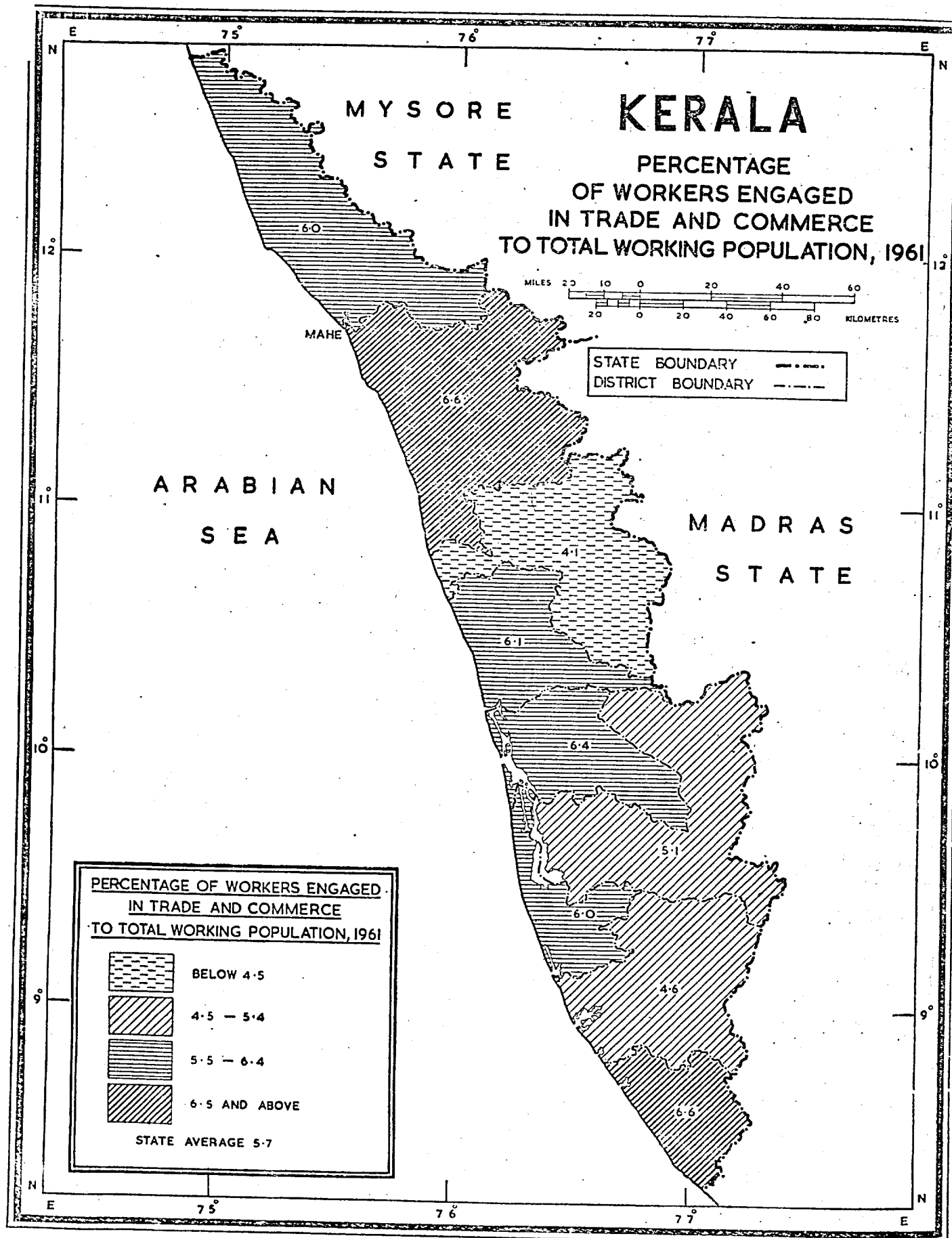
MOTOR VEHICLES REGISTRATION IN THE STATE AND DISTRICTS, 1961

State/ District	Number of motor vehi- cles registe- red as on 31-3-61	Number of motor vehicles registered per 1,000 population	Percentage share to the total number of motor vehicles registered					
			Goods vehicles	Stage carriages	Taxi cabs	Motor cars	Motor cycles	Others
1	2	3	4	5	6	7	8	9
Kerala State	24,480	1.4	21.0	14.3	6.1	47.4	8.4	2.8
Cannanore District	1,864	1.0	28.4	12.0	5.6	44.3	5.7	4.0
Kozhikode "	3,559	1.4	31.0	9.5	2.1	44.5	8.4	4.5
Palghat "	2,008	1.1	19.6	12.8	10.7	47.7	7.8	1.4
Trichur "	2,733	1.7	20.3	17.0	5.6	49.2	7.3	0.6
Ernakulam "	1,096	0.6	18.1	5.7	6.6	44.8	21.3	3.5
Kottayam "	4,008	2.3	20.6	14.3	3.2	48.0	10.7	3.2
Alleppey "	1,557	0.9	10.1	15.9	9.4	49.8	13.0	1.8
Quilon "	2,957	1.5	22.0	10.8	11.1	50.5	3.2	2.4
Trivandrum "	4,698	2.7	15.2	21.8	5.6	47.1	7.3	3.0



Source: 1. Transport Commissioner, Kerala
2. Census of India, 1961, Kerala—Part II A General Population Tables





PERCENTAGE OF WORKERS ENGAGED IN TRADE AND COMMERCE TO TOTAL WORKING POPULATION, 1961

Purpose

The map shows the variations in the proportion of workers engaged in Trade and Commerce to the total workers in the districts of the State in 1961.

Method

The percentage of workers engaged in Trade and Commerce, i.e., in industrial category VII (division 6 of the Indian Standard Industrial classification), to the total workers by districts is grouped into four and the districts are shaded according to this grouping from deep to light corresponding to high to low value.

Salient Features

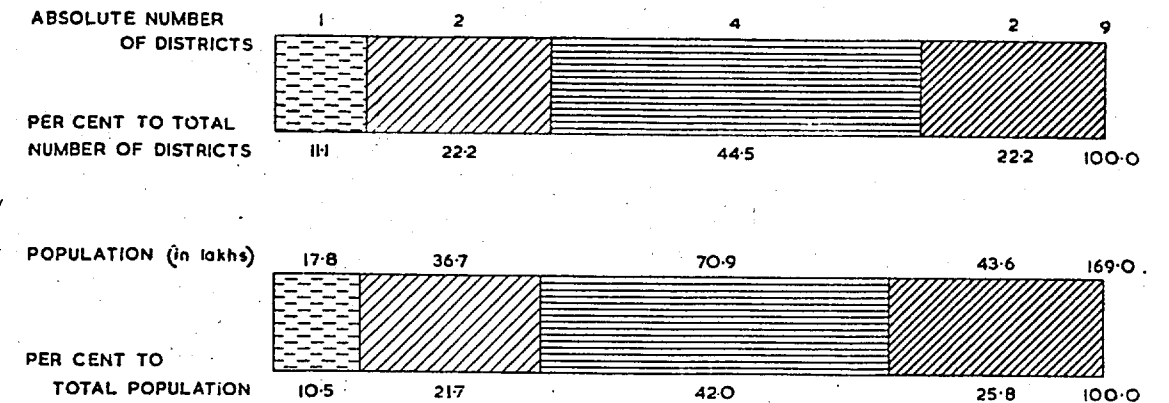
Workers in Trade and Commerce which include wholesale trade, retail trade and miscellaneous trade from only 5.7 per cent of the total workers of the State. In three districts viz., Palghat, Kottayam and Quilon the percentage of workers in Trade and Commerce is below that of the State. Considering the proportion of workers engaged in Trade and Commerce to the total workers in the districts, the highest percentage is shared by the

districts of Kozhikode and Trivandrum with 6.6 per cent each while the Palghat district has the lowest percentage with but 4.1.

Table

PROPORTION OF WORKERS ENGAGED IN TRADE AND COMMERCE TO THE TOTAL WORKERS IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Percentage of workers engaged in Trade and Commerce to the total workers
1	Kerala State	5.7
2	Kozhikode District	6.6
3	Trivandrum	6.6
4	Ernakulam	6.4
5	Trichur	6.1
6	Cannanore	6.0
7	Alleppey	6.0
8	Kottayam	5.1
9	Quilon	4.6
10	Palghat	4.1



Source: Census of India, 1961, Kerala—Part II B (i) General Economic Tables

PERCENTAGE SHARE OF WORKERS ENGAGED IN WHOLESALE TRADE, RETAIL TRADE AND MISCELLANEOUS TRADE TO TOTAL WORKERS IN TRADE AND COMMERCE, 1961

Purpose

The map shows the total number of workers in Trade and Commerce and the percentage share of workers in wholesale trade, retail trade and miscellaneous trade to the total workers in Trade and Commerce in the districts of the State in 1961.

Method

The 'total workers in Trade and Commerce' in each district is shown by proportionate circle. The percentage share of workers in wholesale trade, retail trade and miscellaneous trade is shown inside the circle by shaded sectors. Wholesale trade is covered by major groups 60 to 63, retail trade by major groups 64 to 68 and miscellaneous trade by major group 69 of the Indian Standard Industrial Classification.

Salient Features

In Kerala there are 321,933 workers engaged in Trade and Commerce of which 89.6 per cent are engaged in retail trade. The percentages of workers engaged in wholesale trade and miscellaneous trade in the State are 4.4 and 6.0 respectively.

In all the districts retail trade engages 83.0 per cent or more of the workers in Trade and Commerce. The highest percentage of workers in retail trade is in Cannanore district (93.5) and the lowest in Ernakulam district (83.0).

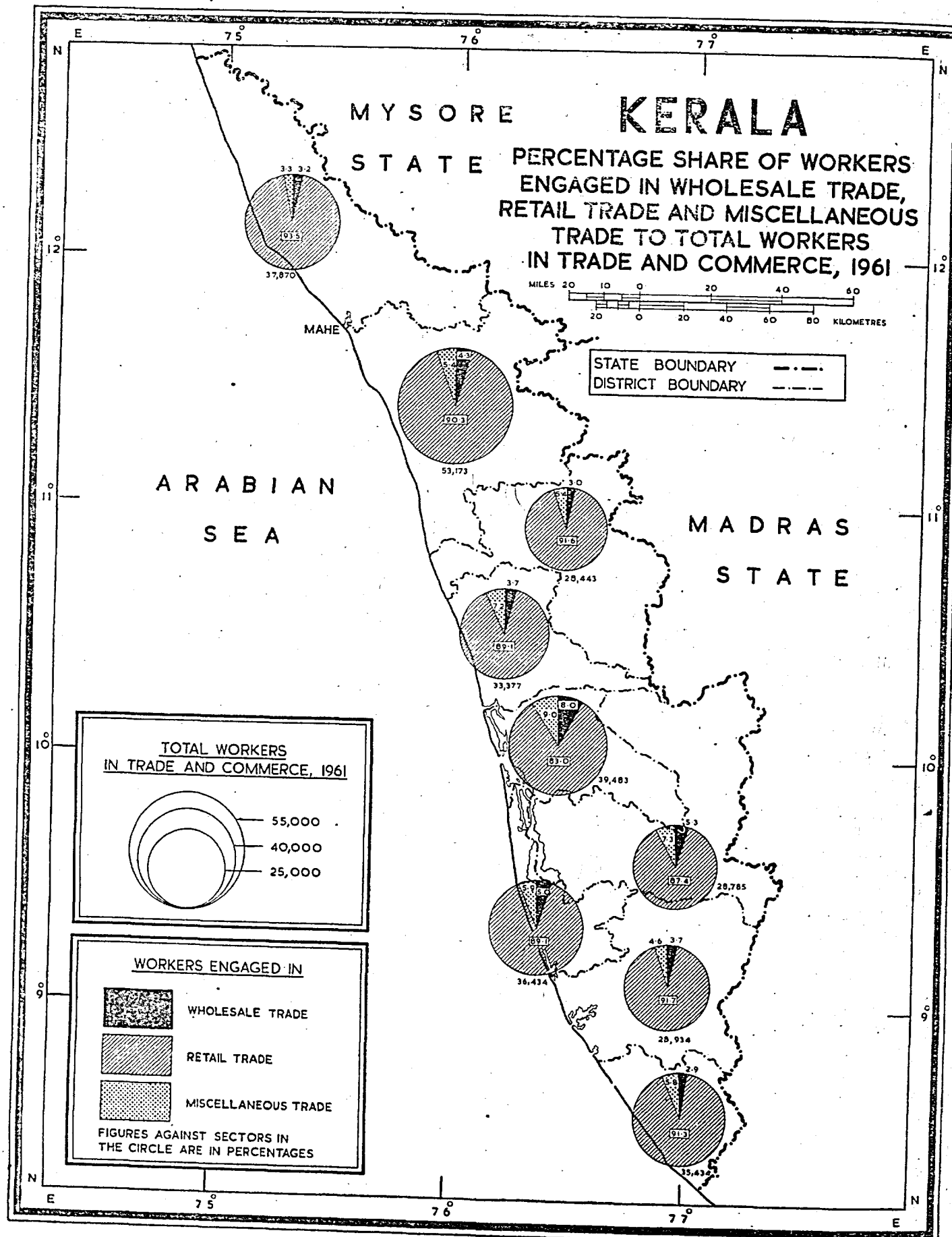
Wholesale trade and miscellaneous trade are prominent in the case of Ernakulam district which stands first among the districts in these two categories and engage 8.0 per cent and 9.0 per cent respectively of the total workers in Trade and Commerce in the district. The percentages of workers engaged in wholesale trade and miscellaneous trade are lowest in Trivandrum and Cannanore districts respectively.

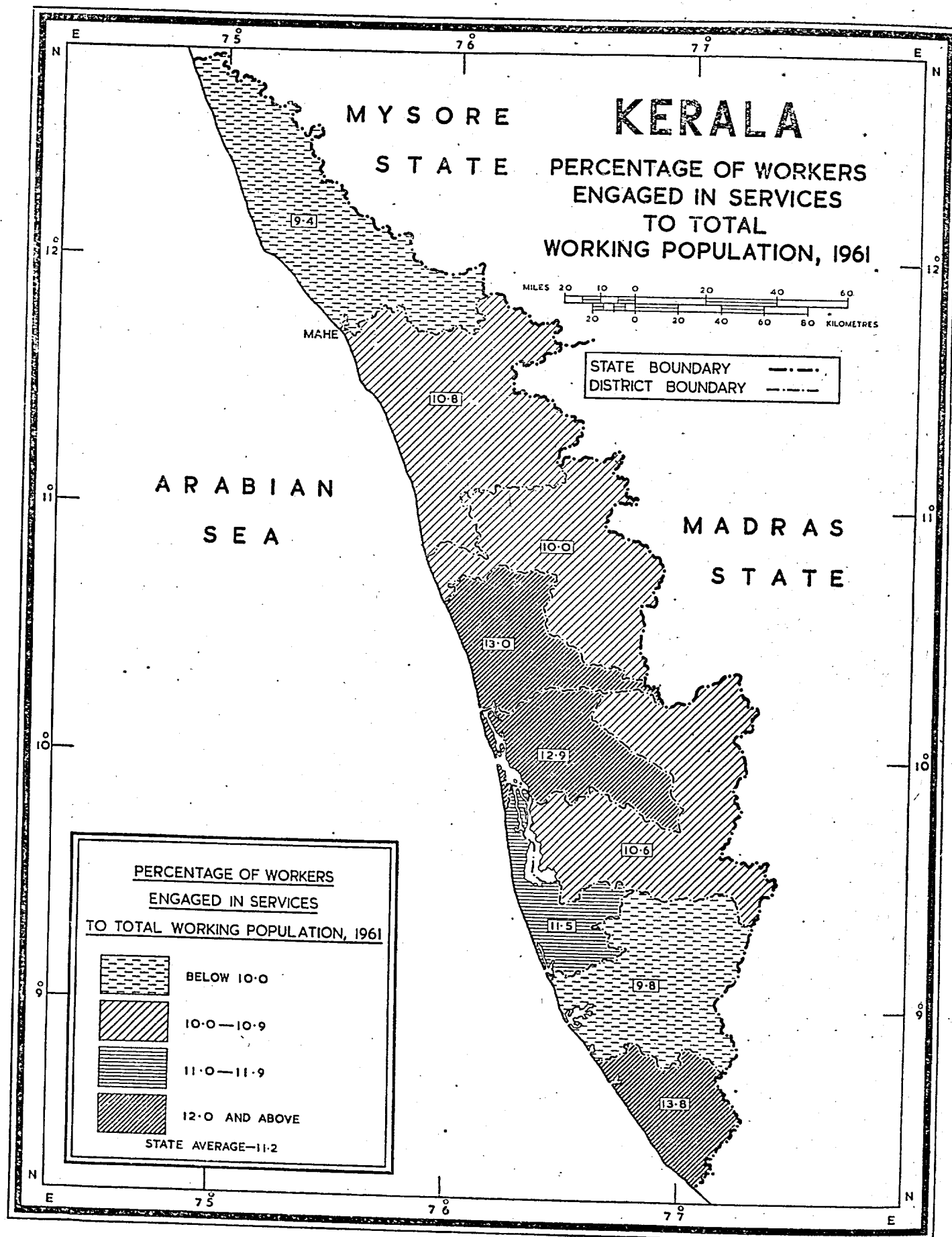
Table

PERCENTAGE OF WORKERS ENGAGED IN WHOLESALE TRADE, RETAIL TRADE AND MISCELLANEOUS TRADE TO TOTAL WORKERS IN TRADE AND COMMERCE IN THE STATE AND DISTRICTS, 1961

State/District	Total workers in Trade and Commerce	Percentage to total workers in Trade and Commerce of those engaged in		
		Whole sale trade	Retail trade	Miscellaneous trade
1	2	3	4	5
Kerala State	321,933	4.4	89.6	6.0
Cannanore District	37,870	3.2	93.5	3.3
Kozhikode "	53,173	4.3	90.3	5.4
Palghat "	28,443	3.0	91.6	5.4
Trichur "	33,377	3.7	89.1	7.2
Ernakulam "	39,483	8.0	83.0	9.0
Kottayam "	28,785	5.3	87.4	7.3
Alleppey "	36,434	5.0	89.1	5.9
Quilon "	28,934	3.7	91.7	4.6
Trivandrum "	35,434	2.9	91.3	5.8

Source: Census of India, 1961, Kerala—Part II B (i) General Economic Tables





PERCENTAGE OF WORKERS ENGAGED IN SERVICES TO TOTAL WORKING POPULATION, 1961

Purpose

The map shows the variations in the proportion of workers engaged in services to total workers in the districts of the State in 1961.

Method

“Services” here means only division 8 of the Indian Standard Industrial Classification which forms only part of industrial category IX—Other Services. The percentages of workers in services to total workers in the districts are grouped into four and the districts are shaded according to this grouping by deep to light hatches corresponding to high to low value.

Salient Features

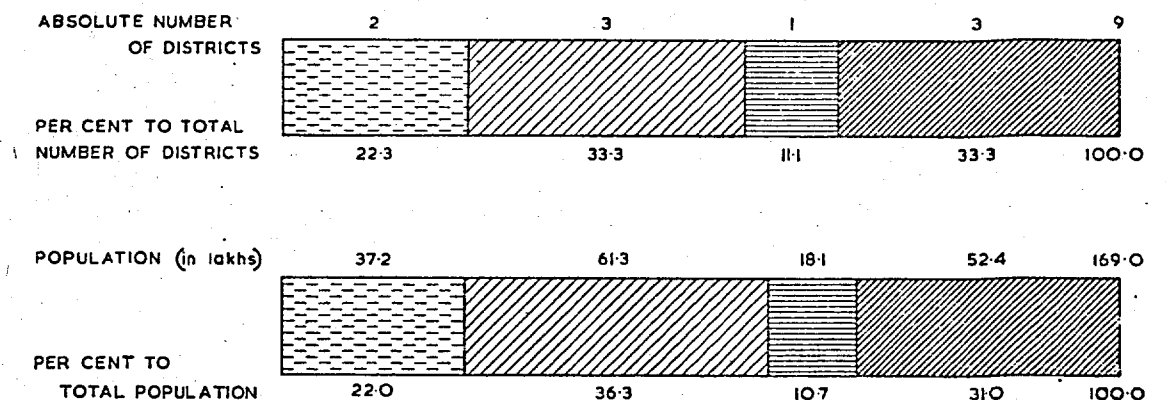
The services mentioned above include services like public services, educational and scientific services, business services, personal services etc. Workers in services account for 11.2 per cent of the total workers in the State. Among the districts the percentage of workers in services to the total workers is highest in Trivandrum district (13.8) and lowest in Cannanore district (9.4). The

district of Trichur and Ernakulam also have high percentage of workers in services viz., above 12.0.

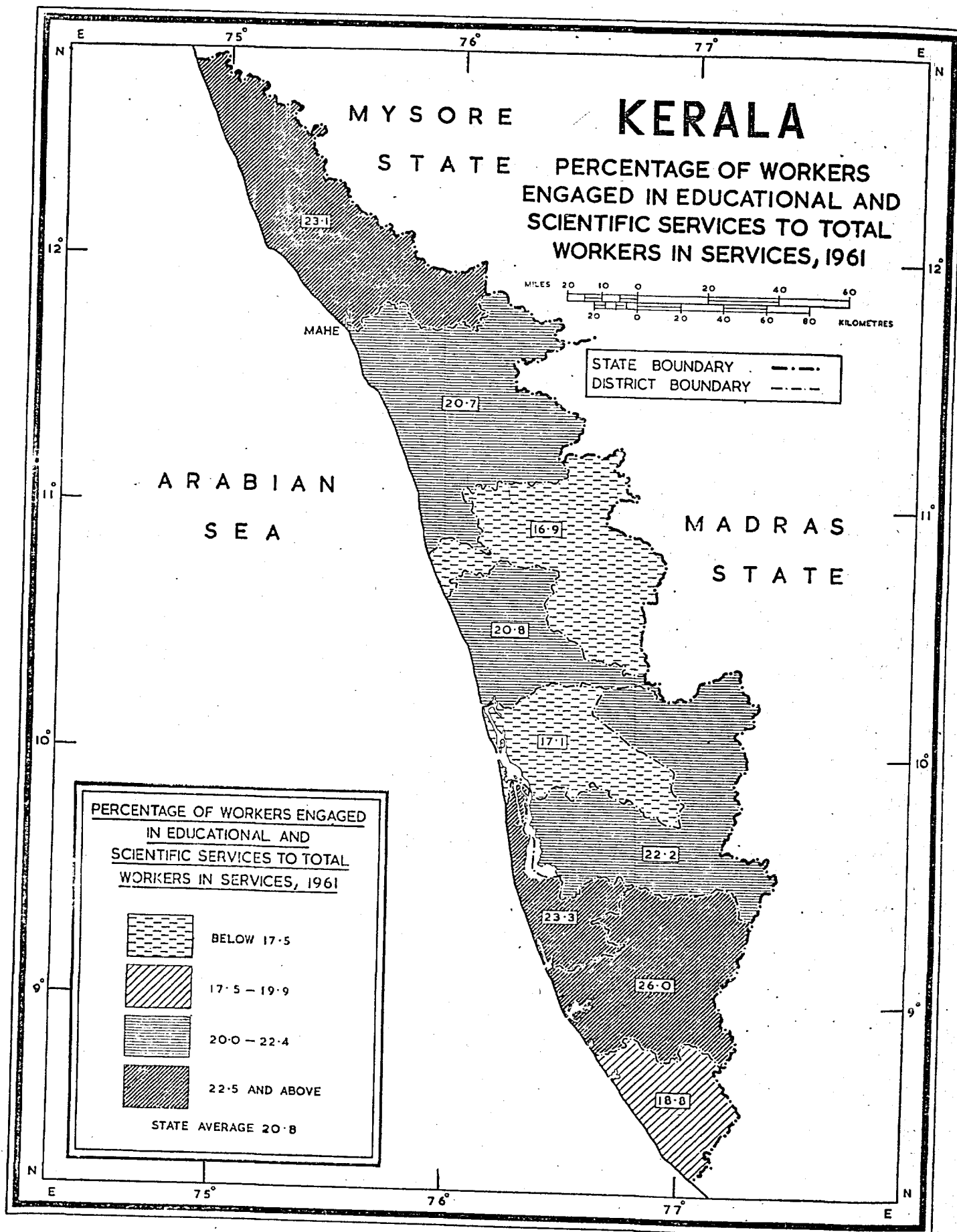
Table

PROPORTION OF WORKERS ENGAGED IN SERVICES TO TOTAL WORKERS IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Percentage of workers engaged in services to the total working population
1	Kerala State	11.2
2	Trivandrum District	13.8
3	Trichur	13.0
4	Ernakulam	12.9
5	Alleppey	11.5
6	Kozhikode	10.8
7	Kottayam	10.6
8	Palghat	10.0
9	Quilon	9.8
10	Cannanore	9.4



Source: Census of India, 1961, Kerala—Part II B (i) General Economic Tables



PERCENTAGE OF WORKERS ENGAGED IN EDUCATIONAL AND SCIENTIFIC SERVICES TO TOTAL WORKERS IN SERVICES, 1961

Purpose

The map shows the variations in the proportion of workers engaged in educational and scientific services to total workers in services in the districts of the State in 1961.

Method

The percentages of workers in educational and scientific services to the total workers in services by districts are grouped into four and the districts are shaded according to this grouping by four different grades of hatches from deep to light corresponding to high to low percentage value.

Salient Features

Educational and scientific services are covered by major group 81 of the Indian Standard Industrial Classification and consist of persons engaged in colleges, schools and similar other institutions of both technical and non-technical types and scientific and research institutions.

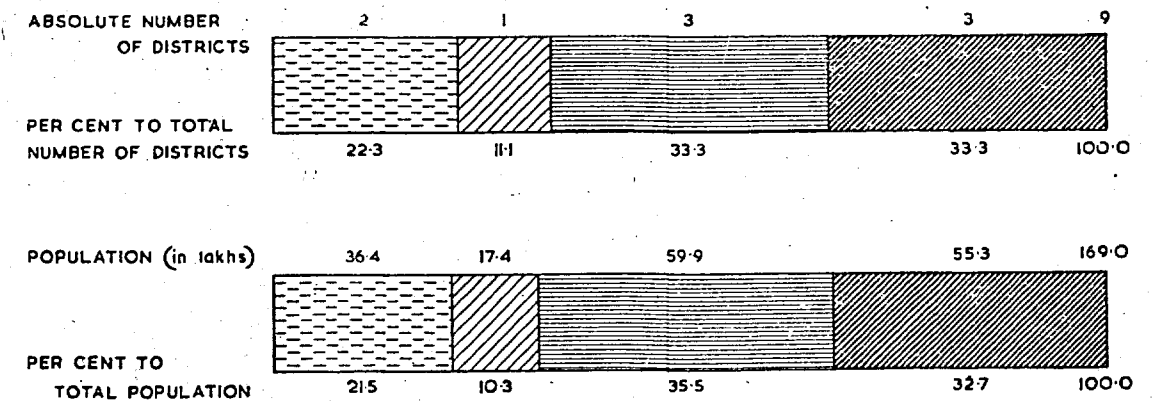
In the State 20.8 per cent of the total workers in services are engaged in educational and scientific services. Among the districts Quilon district has the highest percentage (26.0) of workers in educational and scientific services. In Cannanore and Alleppey districts also the percentage of workers in

the group is very high falling in the range of 22.5 per cent and above. Palghat district has the lowest percentage (16.9) of workers in educational and scientific services.

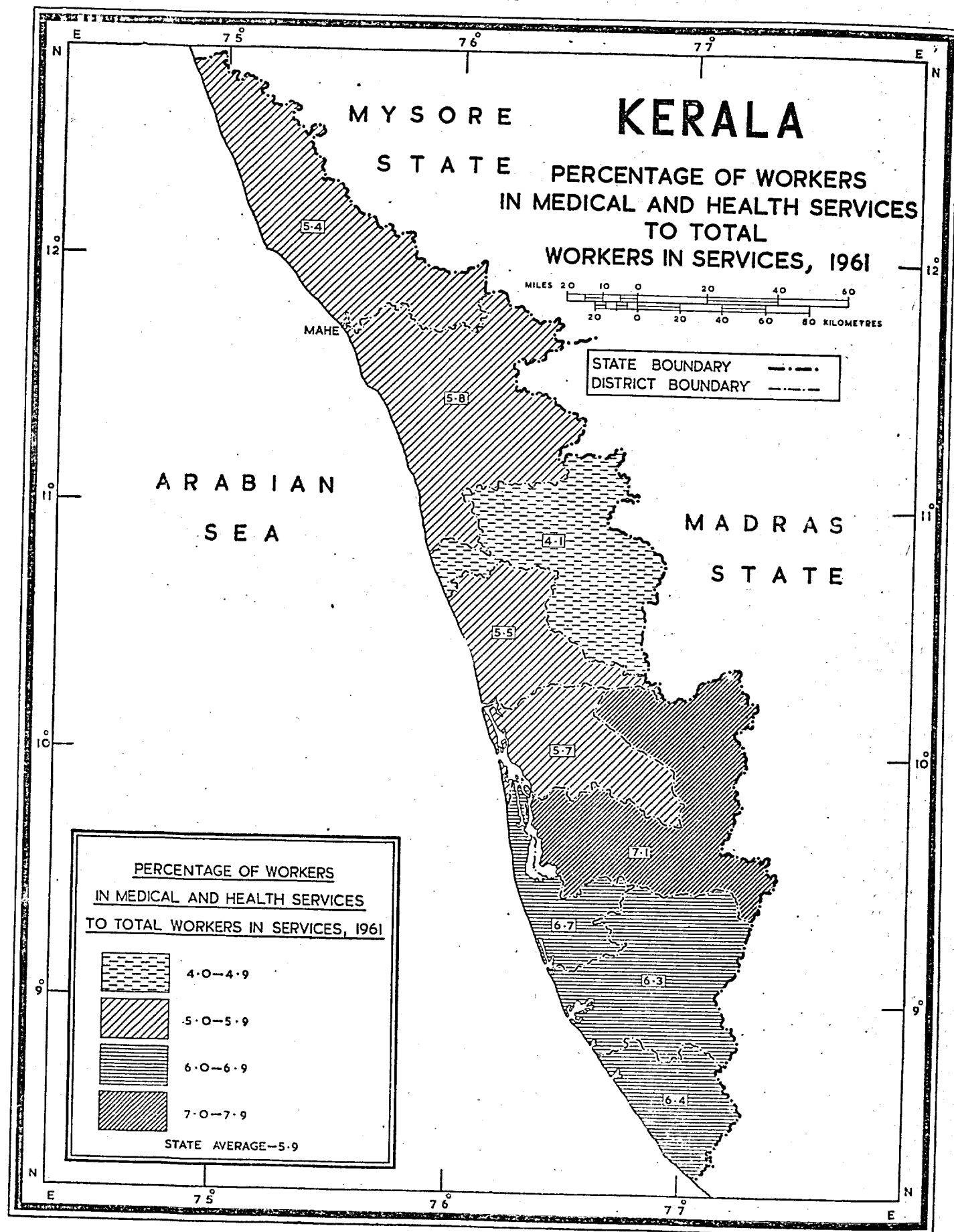
Table

PROPORTION OF WORKERS ENGAGED IN EDUCATIONAL AND SCIENTIFIC SERVICES TO TOTAL WORKERS IN SERVICES IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Percentage of workers engaged in educational and scientific services to the total workers in services
1	Kerala State	20.8
1	Quilon District	26.0
2	Alleppey „	23.3
3	Cannanore „	23.1
4	Kottayam „	22.2
5	Trichur „	20.8
6	Kozhikode „	20.7
7	Trivandrum „	18.1
8	Ernakulam „	17.1
9	Palghat „	16.9



Source: Census of India, 1961, Kerala—Part II B (i) General Economic Tables



PERCENTAGE OF WORKERS IN MEDICAL AND HEALTH SERVICES TO TOTAL WORKERS IN SERVICES, 1961

Purpose

The map shows the variations in the proportion of workers engaged in medical and health services to total workers in services in the districts of the State in 1961.

Method

The percentages of workers in medical and health services to the total workers in services by districts are grouped into four and the districts are shaded according to this grouping by different grades of hatches from deep to light corresponding to high to low percentage value.

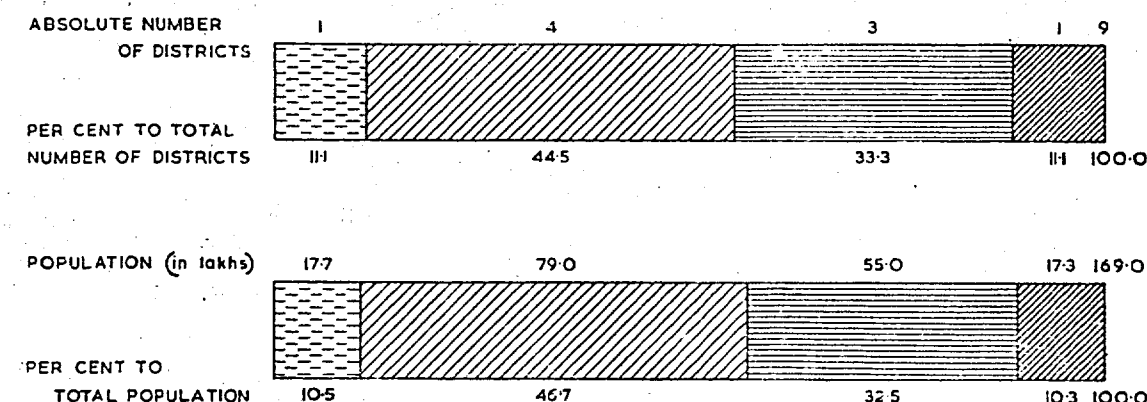
Salient Features

In the State as a whole, workers in medical and health services, i. e., major group 82 of the Indian Standard Industrial Classification, form 5.9 per cent of the total workers engaged in services. Among the districts Kottayam has the highest (7.1 per cent) and Palghat the lowest (4.1 per cent) proportion of workers in medical and health services.

Table

PROPORTION OF WORKERS ENGAGED IN MEDICAL AND HEALTH SERVICES TO TOTAL WORKERS IN SERVICES IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Percentage of workers in medical and health services to the total workers in service
1	Kerala State	5.9
2	Kottayam District	7.1
3	Alleppey	6.7
4	Trivandrum	6.4
5	Quilon	6.3
6	Kozhikode	5.8
7	Ernakulam	5.7
8	Trichur	5.5
9	Cannanore	5.4
10	Palghat	4.1



Source: Census of India, 1961, Kerala—Part II B (i) General Economic Tables

PERCENTAGE OF WORKERS IN PERSONAL AND OTHER MISCELLANEOUS SERVICES TO TOTAL WORKERS IN SERVICES, 1961

Purpose

The map shows the variations in the proportion of workers engaged in personal and other miscellaneous services to total workers in services in the districts of the State in 1961.

Method

The percentages of workers in personal and other miscellaneous services to the total workers in services by districts are grouped into four and the districts are shaded accordingly by different grades of hatches from deep to light corresponding to high to low value.

Salient Features

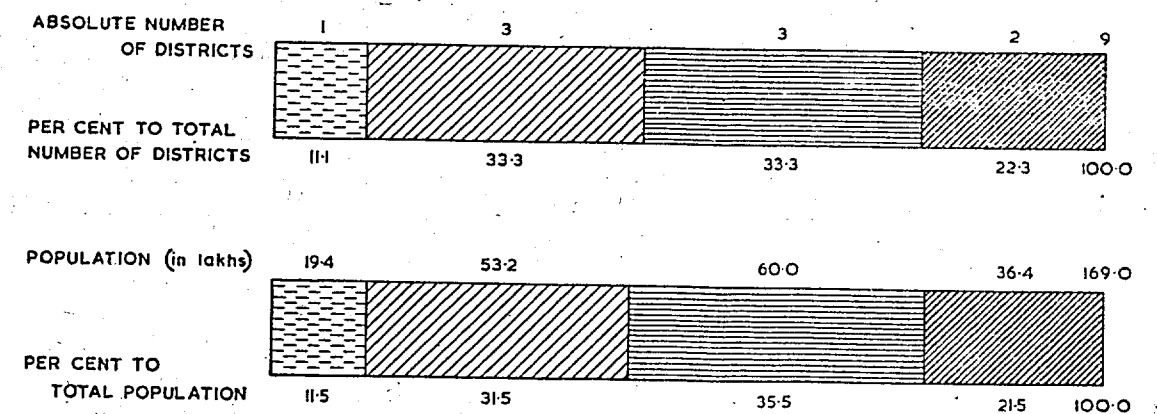
Personal services are covered by major group 88 and miscellaneous services by major groups 80, 83 to 87 and 89 of the Indian Standard Industrial Classification.

In the State as a whole, the workers in personal and other miscellaneous services form 73.3 per cent of the total workers engaged in services. Among the districts the percentage varies between 67.7 per cent and 79.0 per cent. Palghat district has the highest and Quilon the lowest percentage of workers engaged in personal and other miscellaneous services to total workers in services.

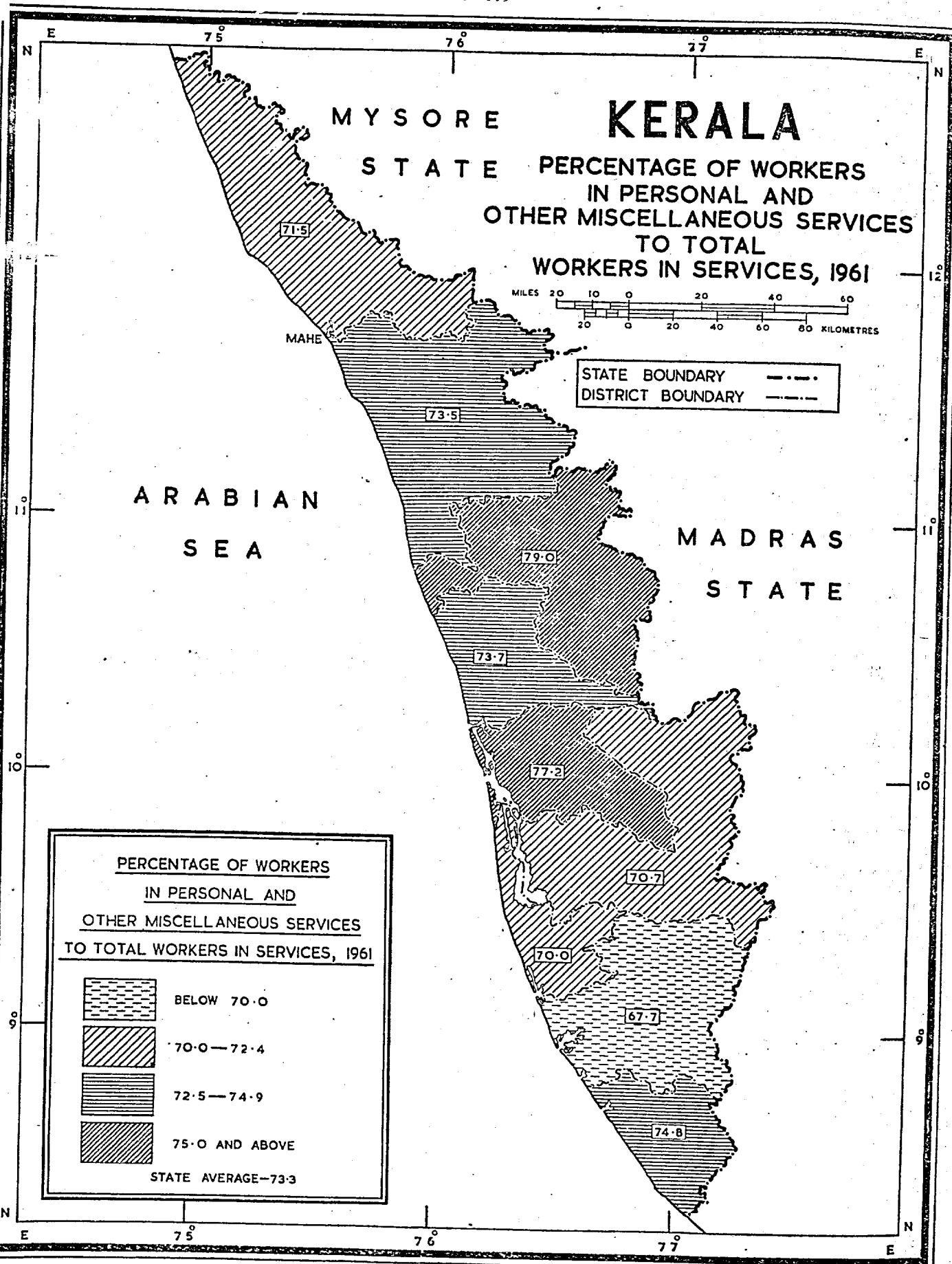
Table

PROPORTION OF WORKERS ENGAGED IN PERSONAL AND OTHER MISCELLANEOUS SERVICES TO TOTAL WORKERS IN SERVICES IN THE STATE AND DISTRICTS, 1961

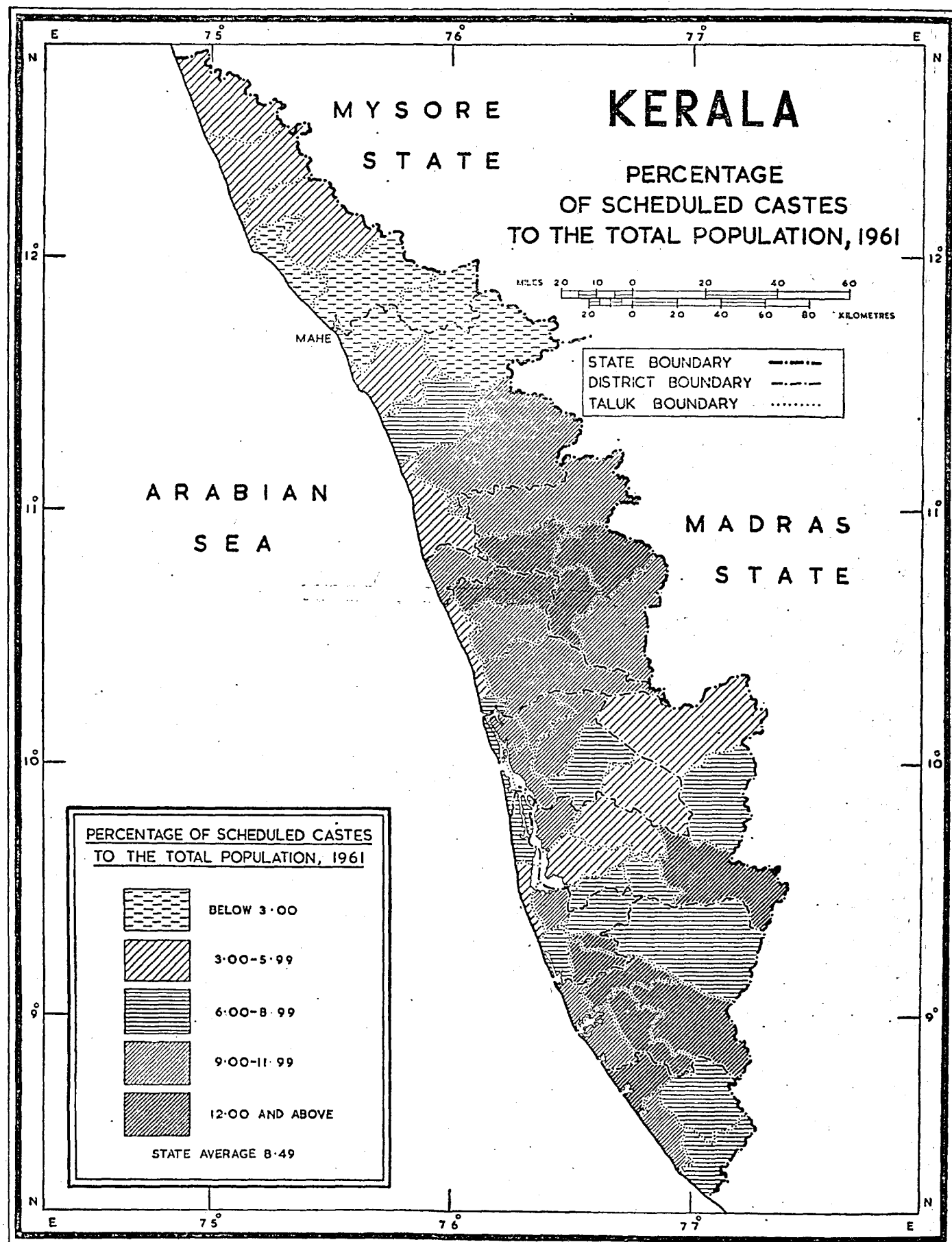
Rank	State/District	Percentage of workers in personal and other miscellaneous services to the total workers in services
1	Kerala State	73.3
2	Palghat District	79.0
3	Ernakulam "	77.2
4	Trivandrum "	74.8
5	Trichur "	73.7
6	Kozhikode "	73.5
7	Cannanore "	71.5
8	Kottayam "	70.7
9	Alleppey "	70.0
10	Quilon "	67.7



Source: Census of India, 1961, Kerala—Part II B (i) General Economic Tables



V SOCIO-CULTURAL ASPECTS



PERCENTAGE OF SCHEDULED CASTES TO THE TOTAL POPULATION, 1961

Purpose

The map shows the variations in the proportion of Scheduled Castes to total population in the taluks of the State in 1961.

Method

The percentages of Scheduled Castes to the total population by taluks are grouped into five and the taluks are shaded according to this grouping by different grades of hatches from deep to light corresponding to high to low percentage value.

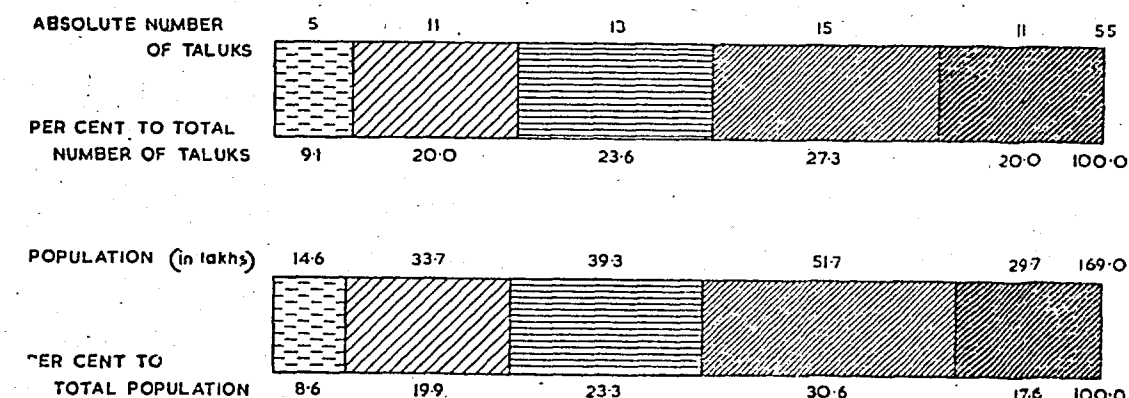
Salient Features

Scheduled Castes form only 8.49 per cent of the total population of the State. In the taluks the percentage varies between 0.28 and 25.69. There are 5 taluks with the percentage of Scheduled Castes below 3.00, 11 taluks between 3.00 and 5.99, 13 taluks between 6.00 and 8.99, 15 taluks between 9.00 and 11.99 and 11 taluks with 12.00 or above. Barring Peermade, the taluks having high percentage viz., 12.00 and above lie in two contiguous areas one in central Kerala in the districts of Palghat and Trichur and the other in the southern districts of Alleppey, Quilon and Trivandrum. Peermade taluk of Kottayam district has the highest and Badagara taluk of Kozhikode district the lowest percentage of Scheduled Castes.

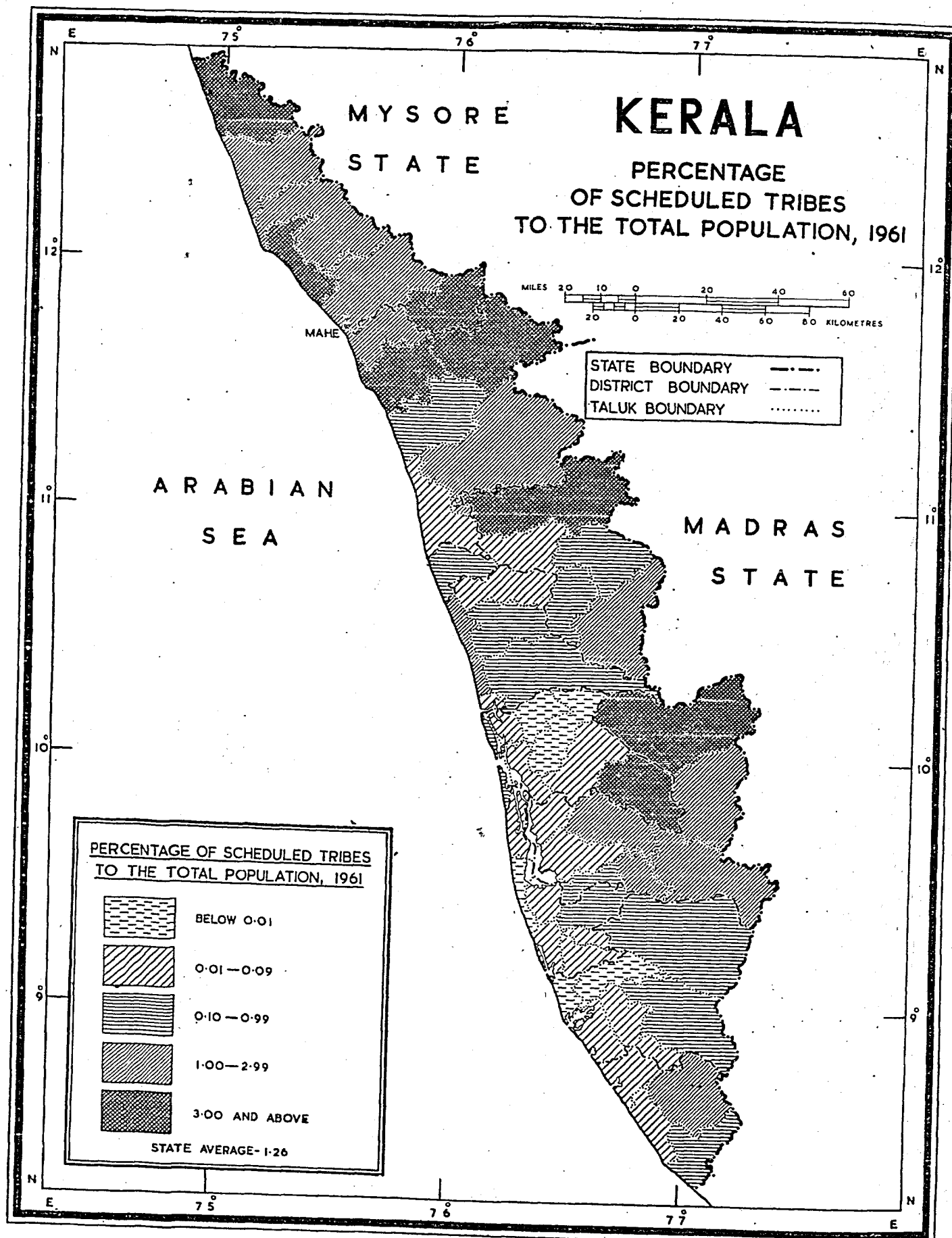
Table

PROPORTION OF SCHEDULED CASTES TO THE TOTAL POPULATION IN THE STATE AND TALUKS, 1961

Rank	State/Taluk	Percentage of Scheduled Castes to the total population
1	2	3
1	Kerala State	8.49
2	Peermade Taluk	25.69
3	Kunnathur "	16.05
4	Talappilly "	15.20
5	Mavelikkara "	14.50
	Alathur "	13.79



Source: Census of India, 1961, Kerala—Part V A Special Tables for Scheduled Castes and Scheduled Tribes



PERCENTAGE OF SCHEDULED TRIBES TO THE TOTAL POPULATION, 1961

Purpose

The map shows the variation in the percentage of Scheduled Tribes to the total population in the taluks of the State in 1961.

Method

The percentages of Scheduled Tribes to the total population by taluks are grouped into five and the taluks shaded according to this grouping by grades of hatches from deep to light corresponding to high to low value.

Salient Features

The Scheduled Tribes form only 1.26 per cent of the total population of the State. 37 taluks have the percentage of Scheduled Tribes below that of the State and 18 taluks above. Five taluks have percentages below 0.01, 18 taluks between 0.01 and 0.09, 12 taluks between 0.10 and 0.99, 12 taluks between 1.00 and 2.99 and 8 taluks 3.00 or above. North Wynad and South Wynad taluks are exceptional in having 23.67 per cent and 20.32 per cent respectively of their total population belonging to various Scheduled Tribes.

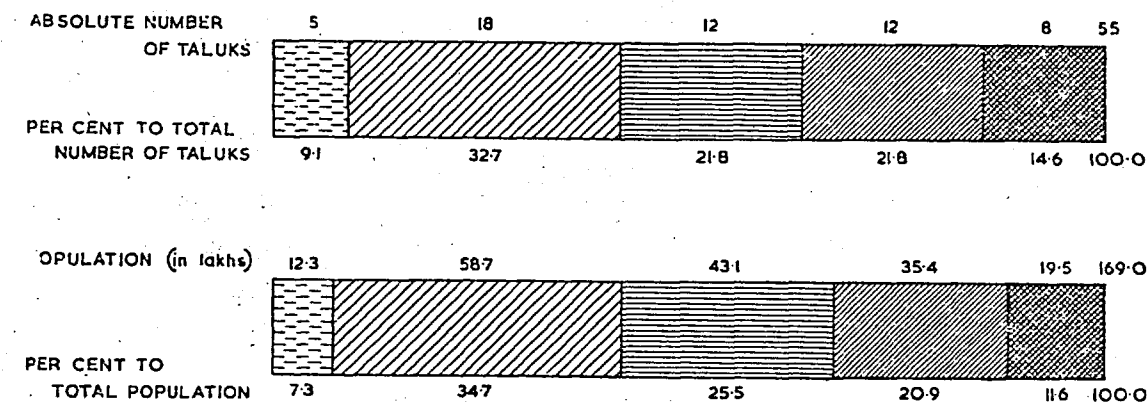
Table

PERCENTAGE OF SCHEDULED TRIBES TO THE TOTAL POPULATION IN THE STATE AND TALUKS, 1961

Rank	State/Taluk	Percentage of Scheduled Tribes to the total population
1	Kerala State	1.26
2	North Wynad Taluk	23.67
3	South Wynad Taluk	20.32
4	Quilandy Taluk	5.70
5	Kasaragod Taluk	5.21
6	Thodupuzha Taluk	4.96
7	Devicolum Taluk	4.57
8	Perintalmanna Taluk	3.84
9	Cannanore Taluk	3.00
10	Taliparamba Taluk	2.62

1	2	3
10	Hosdrug Taluk	2.51
11	Kanjirappally Taluk	2.36
12	Nedumangad Taluk	2.18
13	Meenachil Taluk	2.01
14	Tellicherry Taluk	2.00
15	Udumbanchola Taluk	2.00
16	Peermade Taluk	1.41
17	Chowghat Taluk	1.40
18	Chittur Taluk	1.35
19	Ernad Taluk	1.07
20	Badagara Taluk	1.02
21	Pathanamthitta Taluk	0.71
22	Ponnani Taluk	0.68
23	Pathanapuram Taluk	0.44
24	Neyyattinkara Taluk	0.39
25	Changanacherry Taluk	0.35
26	Kozhikode Taluk	0.32
27	Alathur Taluk	0.31
28	Palghat Taluk	0.26
29	Mukundapuram Taluk	0.19
30	Trichur Taluk	0.14
31	Cochin Taluk	0.14
32	Thiruvalla Taluk	0.10
33	Tirur Taluk	0.08
34	Vaikom Taluk	0.07
35	Kottarakara Taluk	0.07
36	Trivandrum Taluk	0.07
37	Shertalai Taluk	0.06
38	Ottapalam Taluk	0.05
39	Muvattupuzha Taluk	0.05
40	Talappilly Taluk	0.04
41	Chirayinkil Taluk	0.03
42	Kanayannur Taluk	0.02
43	Kottayam Taluk	0.02
44	Quilon Taluk	0.02
45	Cranganore Taluk	0.01
46	Parur Taluk	0.01
47	Kuttanad Taluk	0.01
48	Chengannur Taluk	0.01
49	Karthigapally Taluk	0.01
50	Mavelikkara Taluk	0.01
51	Alwaye Taluk	N
52	Kunnathunad Taluk	N
53	Ambalapuzha Taluk	N
54	Kunnathur Taluk	N
55	Karunagapally Taluk	N

'N' denotes negligible figure which is less than 0.01



Source: Census of India, 1961, Kerala—Part II A General Population Tables

DISTRIBUTION OF NUMERICALLY IMPORTANT SCHEDULED CASTES, 1961

Purpose

The map shows the district-wise distribution of numerically important Scheduled Castes of the State in 1961.

Method

All Scheduled Castes whose numerical strength exceeds 20,000 persons in the State are considered as numerically important. The distribution of population of these Scheduled Castes in the districts is shown by different symbols, each symbol representing 1,000 persons. (Population of 500 and above is treated as 1,000 and that below 500 omitted for convenience of marking the symbols.) The symbols within a district are not put with any bearing on the locations of these castes.

Salient Features

The population of each of 10 out of the 65 Scheduled Castes of the State exceeds 20,000. 86.8 per cent of the total Scheduled Caste population of the State is covered by these 10 Scheduled Castes.

Of the above important Scheduled Castes, Pulayan or Cheramar has the maximum numerical strength in the State viz., 466,170 persons. This caste is found distributed in all the districts of the State except Cannanore and Kozhikode with Ernakulam district having the highest concentration, viz., 115,110 persons.

The second numerically important Scheduled Caste is Cheruman which has a total population of 215,396 persons in the State distributed in the four northern districts of Cannanore, Kozhikode, Palghat and Trichur. More than half of the total population of this caste is concentrated in Palghat district.

Kuravan or Sidhanar having a total population of 144,442 in the State forms the third numerically important Scheduled Caste. This caste is mainly concentrated in Quilon and Trivandrum districts.

The fourth numerically important Scheduled Caste of the State is Paraiyan or Parayan (Sambavar) with 130,165 persons. Population belonging to this caste is found in all the districts, Kottayam district having the highest concentration viz., 44,621 persons.

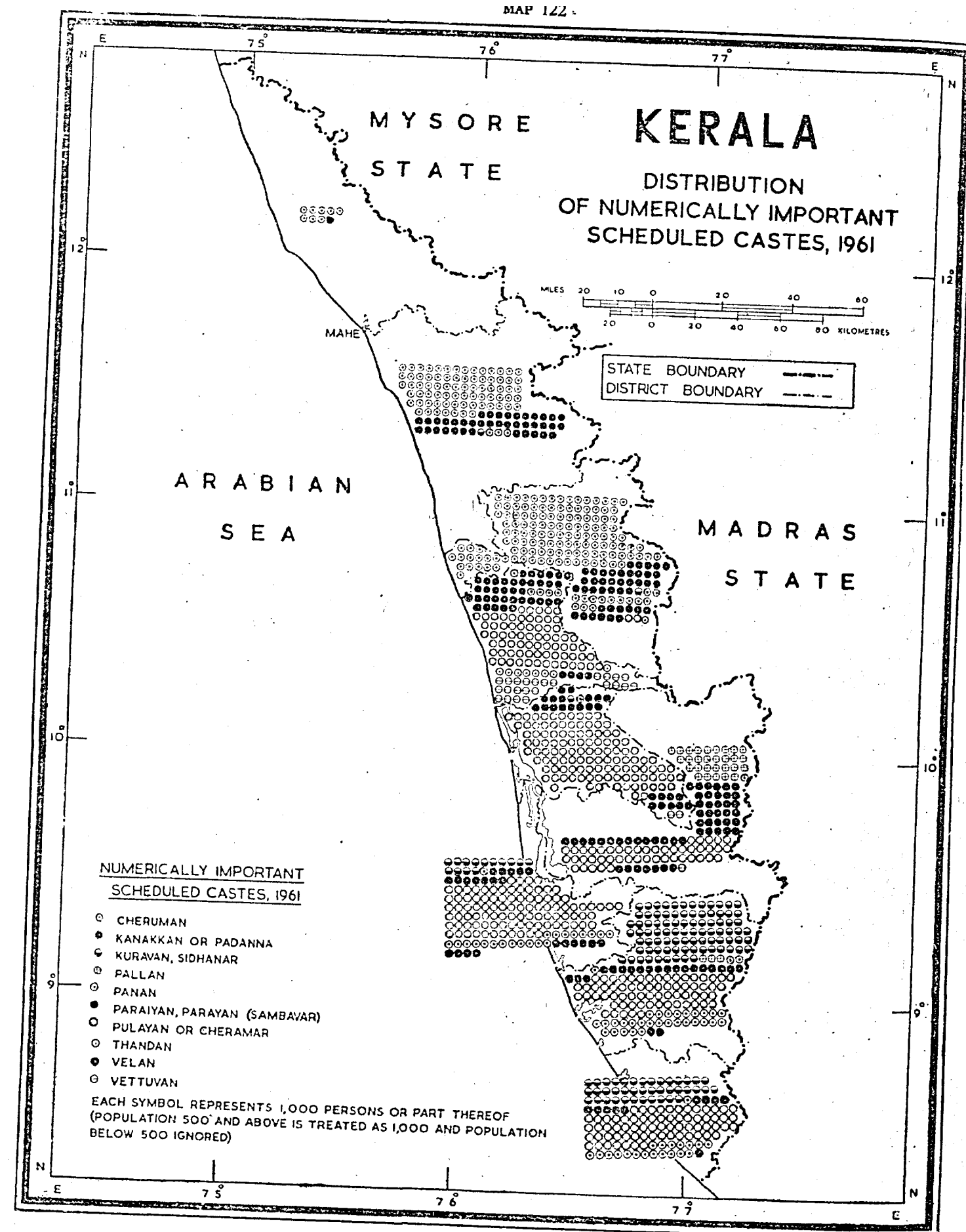
The other numerically important Scheduled Castes in the State in the order of their numerical strength are Kanakkan or Padanna, Thandan, Velan, Pallan, Vettuvan and Panan. The numerical strength of each of these castes in the State is less than 100,000. Kanakkan or Padanna is mainly found in Kozhikode, Palghat and Trichur districts, Thandan in Alleppey, Quilon and Trivandrum districts, Velan in Ernakulam, Kottayam and Alleppey districts, Pallan in Kottayam district, Vettuvan in Trichur district and Panan in Palghat district.

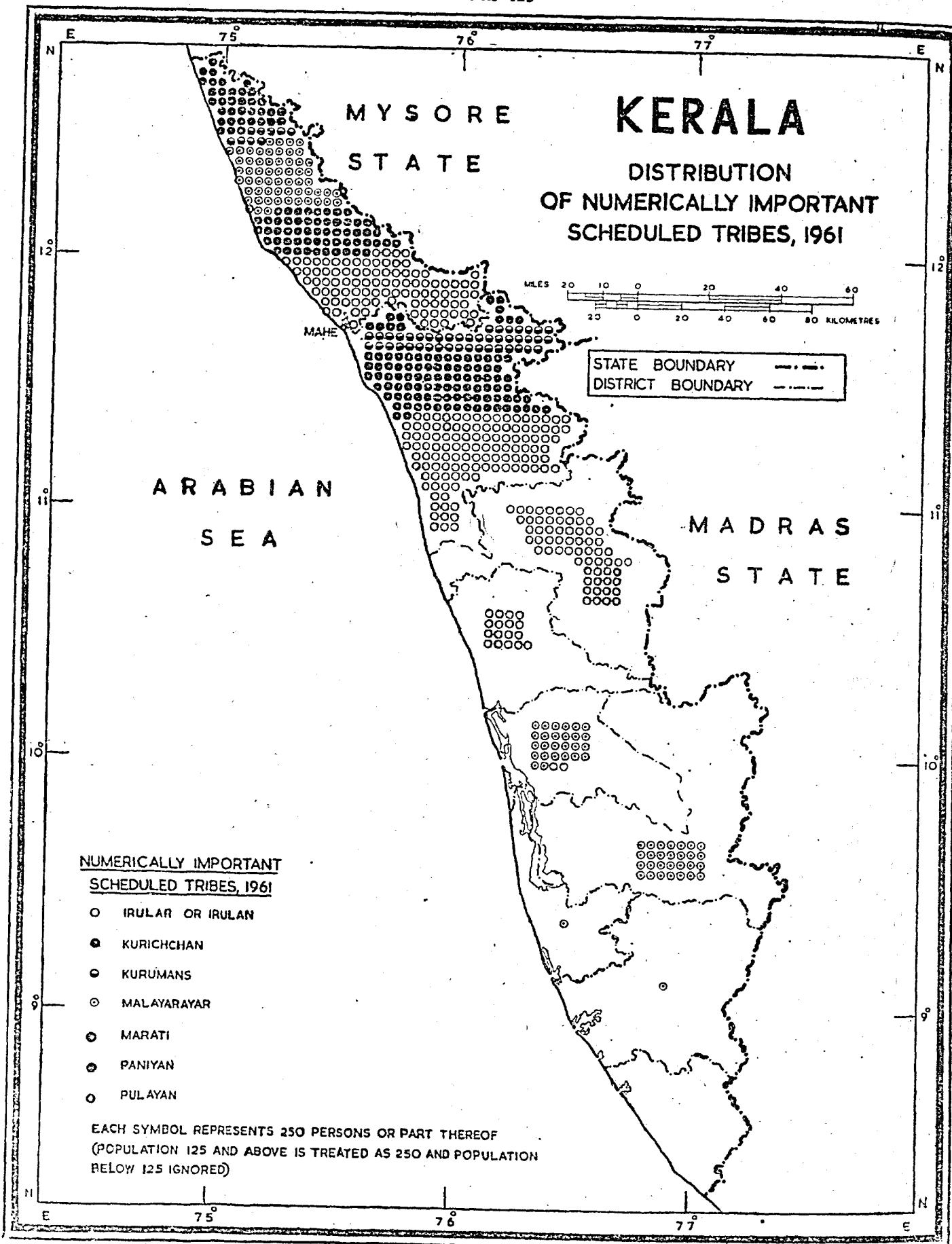
Table

DISTRIBUTION OF POPULATION OF NUMERICALLY IMPORTANT SCHEDULED CASTES OF KERALA IN THE STATE AND DISTRICTS, 1961

Sl. No.	Name of Scheduled Caste	Population in									
		Kerala State	Cannanore district	Kozhikode district	Palghat district	Trichur district	Ernakulam district	Kottayam district	Alleppey district	Quilon district	Trivandrum district
1	2	3	4	5	6	7	8	9	10	11	12
1	Pulayan or Cheramar	466,170	..	..	2,293	71,052	115,110	47,363	96,272	65,852	68,228
2	Cheruman	215,396	7,839	74,681	132,198	678	..	..	..	..	..
3	Kuravan, Sidhanar	144,442	250	745	1,217	454	775	490	14,432	86,200	37,879
4	Paraiyan, Parayan (Sambavar)	130,165	709	4,896	12,188	16,153	11,391	44,621	11,920	19,355	8,932
5	Kanakkan or Padanna	91,589	82	34,031	29,687	22,397	5,282	41	..	51	18
6	Thandan	77,382	..	..	606	7,832	234	40	20,389	28,922	19,359
7	Velan	33,581	..	..	6	4,263	8,955	7,341	10,076	2,247	693
8	Pallan	32,503	..	26	118	34	152	29,041	22	2,973	137
9	Vettuvan	28,095	..	..	5	24,031	2,386	1,175	130	357	11
10	Panan	26,781	33	2,590	13,861	4,242	521	704	724	2,891	1,215

Source: Census of India, 1961, Kerala—Part V A Special Tables for Scheduled Castes and Scheduled Tribes





DISTRIBUTION OF NUMERICALLY IMPORTANT SCHEDULED TRIBES, 1961

Purpose

The map shows the districtwise distribution of numerically important Scheduled Tribes of the State in 1961.

Method

All Scheduled Tribes with population over 10,000 in the State are treated as numerically important Scheduled Tribes. The distribution of population of these Scheduled Tribes in the districts is shown by different symbols, each symbol representing 250 persons. (Population of 125 and above is treated as 250 and that below 125 omitted for convenience of marking the symbols.) The plotting of the different symbols does not show the locational pattern of the tribes.

Salient Features

The population of each of 7 out of the total 34 Scheduled Tribes of the State exceeds 10,000. The total population of these 7 tribes viz., 163,756 persons, represent 77.0 per cent of the total Scheduled Tribe population of the State.

Among the tribes, the tribe Pulayan leads in respect of population with 61,097 persons in the State. This tribe is mainly distributed in Cannanore and Kozhikode districts the latter having the maximum number of persons viz., 28,494.

Paniyan, the second important Scheduled Tribe, has a population of 37,068 persons in the State distributed mainly in Cannanore and Kozhikode districts.

The third important Scheduled Tribe is Marati whose population of 14,829 persons is confined within Cannanore district.

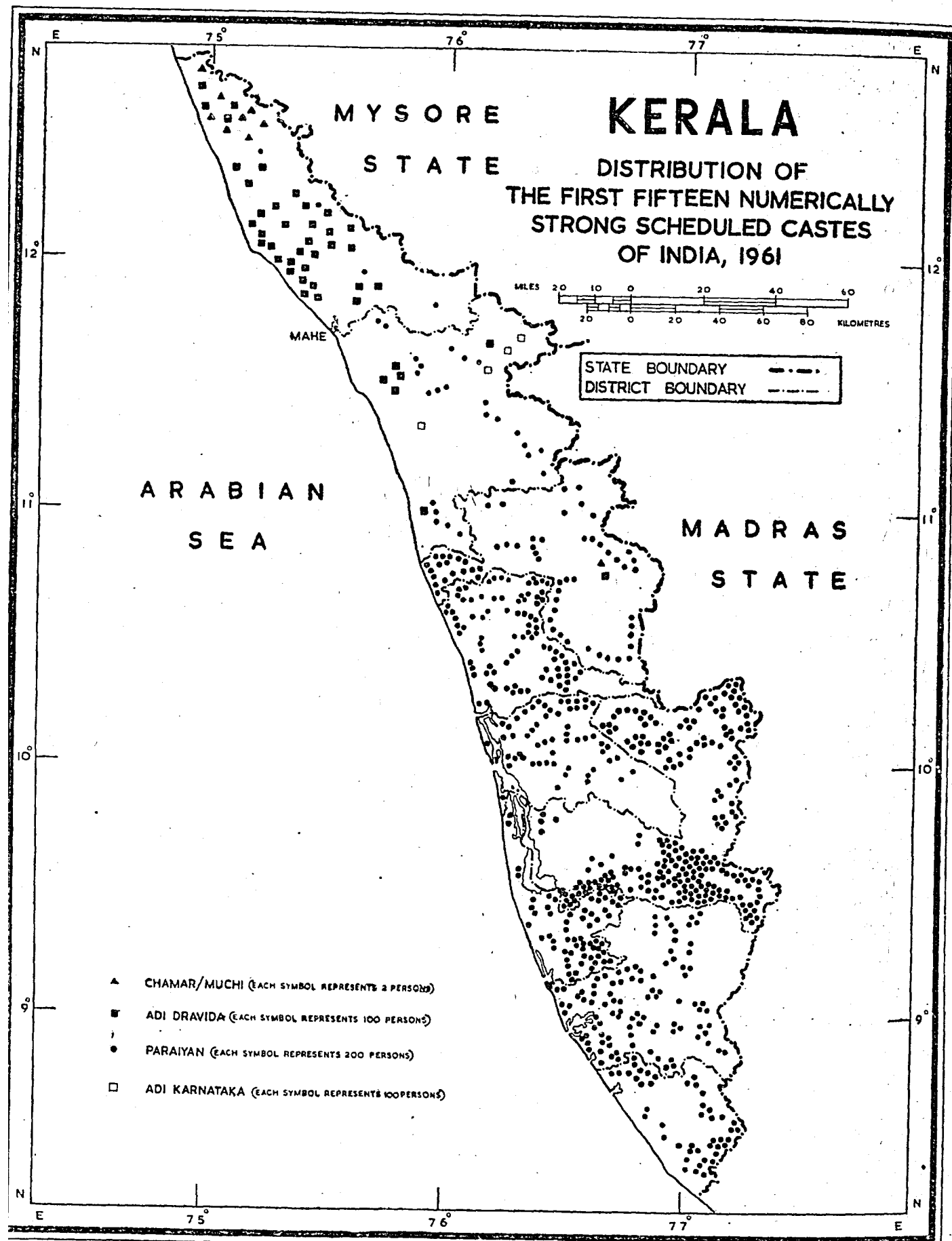
The other numerically important Scheduled Tribes in the order of their numerical strength in the State are Malayarayar, Kurumans, Kurichchan and Irular or Irulan. Malayarayars are mainly found in Ernakulam and Kottayam districts, Kurumans mainly in Kozhikode district, Kurichchans exclusively in Cannanore and Kozhikode districts and Irulars or Irulans exclusively in Palghat district.

Table

DISTRIBUTION OF POPULATION OF NUMERICALLY IMPORTANT SCHEDULED TRIBES OF KERALA IN THE STATE AND DISTRICTS, 1961

Rank	Name of Scheduled Tribe	Population in									
		Kerala State	Cannanore district	Kozhikode district	Palghat district	Trichur district	Ernakulam district	Kottayam district	Alleppey district	Quilon district	Trivandrum district
1	2	3	4	5	6	7	8	9	10	11	12
1	Pulayan	61,097	23,934	28,494	4,045	4,203	421	..	..	..	..
2	Paniyan	37,068	14,309	22,703	40	14	2	..	..	..	..
3	Marati	14,829	14,829	..	..	..	..	..	..	..	..
4	Malayarayar	14,082	..	..	..	7	6,474	7,046	232	254	69
5	Kurumans	13,377	2,307	11,068	2	..	..	..	..	..	..
6	Kurichchan	11,849	8,811	3,038	..	..	..	..	..	..	..
7	Irular or Irulan	11,454	..	..	11,454	..	..	..	..	..	..

Source: Census of India, 1961, Kerala—Part VA Special Tables for Scheduled Castes and Scheduled Tribes



DISTRIBUTION OF THE FIRST FIFTEEN NUMERICALLY STRONG SCHEDULED CASTES OF INDIA, 1961

Purpose

The map shows the distribution in Kerala of four out of the first fifteen numerically strong scheduled castes of India, in 1961.

Method

The distribution of the four Scheduled Castes is shown by different symbols such as squares, circles and triangles for different castes, the symbols being plotted on the basis of the talukwise distribution of the caste.

Salient Features

The first fifteen numerically strong Scheduled Castes of India according to the 1961 Census are given below in the order of their strength:

1. Chamar/Muchi including castes/subcastes grouped under Chamar/Muchi
2. Pasi
3. Madiga including castes/subcastes grouped under Madiga
4. Adi-Dravida
5. Mala including castes/subcastes grouped under Mala
6. Dosadh including castes/subcastes grouped under Dosadh
7. Dhobi including castes/subcastes grouped under Dhobi
8. Paraiyan including castes/subcastes grouped under Paraiyan
9. Bhangi / Mehtar including castes / subscates grouped under Bhangi/Mehtar
10. Koli including castes/subcastes grouped under Koli
11. Adi Karnataka
12. Rajbanshi
13. Bagdi including castes/subcastes grouped under Bagdi
14. Musahar
15. Namasudra

Out of the above fifteen Scheduled Castes only four viz., Chamar/Muchi, Adi Dravida, Paraiyan and Adi Karnataka holding the first, fourth, eighth and eleventh rank respectively are found in Kerala. The total population of these four Scheduled Castes in the State is 134,851 comprising 130,165 Paraiyans, 4,289 Adi Dravidas, 379 Adi Karnatakas and 18 Chamar/Muchi.

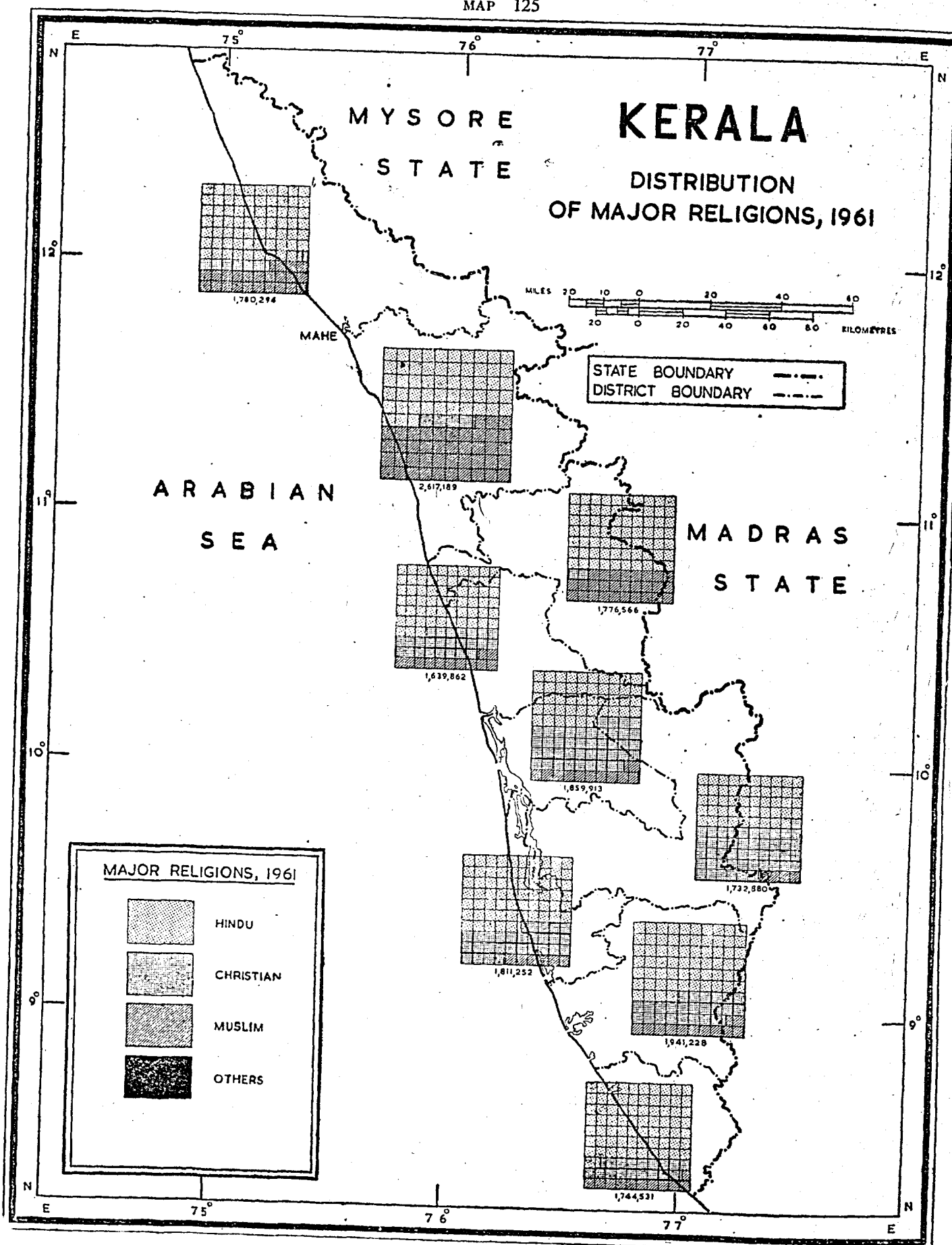
Paraiyans are found in all the nine districts of the State; but they are concentrated more in the Southern districts, especially in Kottayam. Adi Dravidas are found only in three districts, viz., Cannanore, Kozhikode and Palghat, 3,544 persons out of the total of 4,289 persons being found in Cannanore district alone. Almost all the Adi Karnatakas of the State are in Kozhikode district and Chamar/Muchi in Cannanore district.

Table

DISTRIBUTION OF POPULATION OF THE NUMERICALLY STRONG SCHEDULED CASTES OF INDIA IN THE STATE AND DISTRICTS, 1961

State/District	Number of persons belonging to the Scheduled Castes			
	Chamar/ Muchi	Adi Dravida	Paraiyan	Adi Karnataka
1	2	3	4	5
Kerala State	18	4,289	130,165	379
Cannanore District	16	3,544	709	8
Kozhikode	..	613	4,896	371
Palghat	2	132	12,188	..
Trichur	..	..	16,153	..
Ernakulam	..	..	11,391	..
Kottayam	..	..	44,621	..
Alleppey	..	..	11,920	..
Quilon	..	..	19,355	..
Trivandrum	..	..	8,932	..

Source: Census of India, 1961, Kerala-Part V A Special Tables for Scheduled Castes and Scheduled Tribes



DISTRIBUTION OF MAJOR RELIGIONS, 1961

Purpose

The map shows the religious composition of the population of the districts of the State in 1961.

Method

A square is given in each district proportional to its total population. The square is divided into 100 small equal squares each one representing one per cent. The percentages of population of Hindus, Christians, Muslims and Others to the total population are then marked inside the squares by different shades. The Total population figures represented by the squares are also given under each square.

Salient Features

Hinduism, Christianity and Islam are the three numerically important religions in Kerala. Members of these three religions alone constitute 99.96 per cent of the State's population in 1961, and only a very small proportion of the population follows other faiths.

60.83 per cent of the State's population are Hindus. Christians form 21.22 per cent and Muslims 17.91 per cent of the State's total population.

In all the districts of the State the predominant section of population according to religion is Hindus. Christians form the second major section

in the population of all districts except Cannanore Kozhikode and Palghat where Muslims form the second major section. The highest percentage of Hindus is in Trivandrum district (71.48), Christians in Kottayam district (47.20) and Muslims in Kozhikode district (42.75). The lowest percentage of Hindus, Christians and Muslims are in Ernakulam (45.97), Palghat (1.90) and Kottayam (3.83) districts respectively.

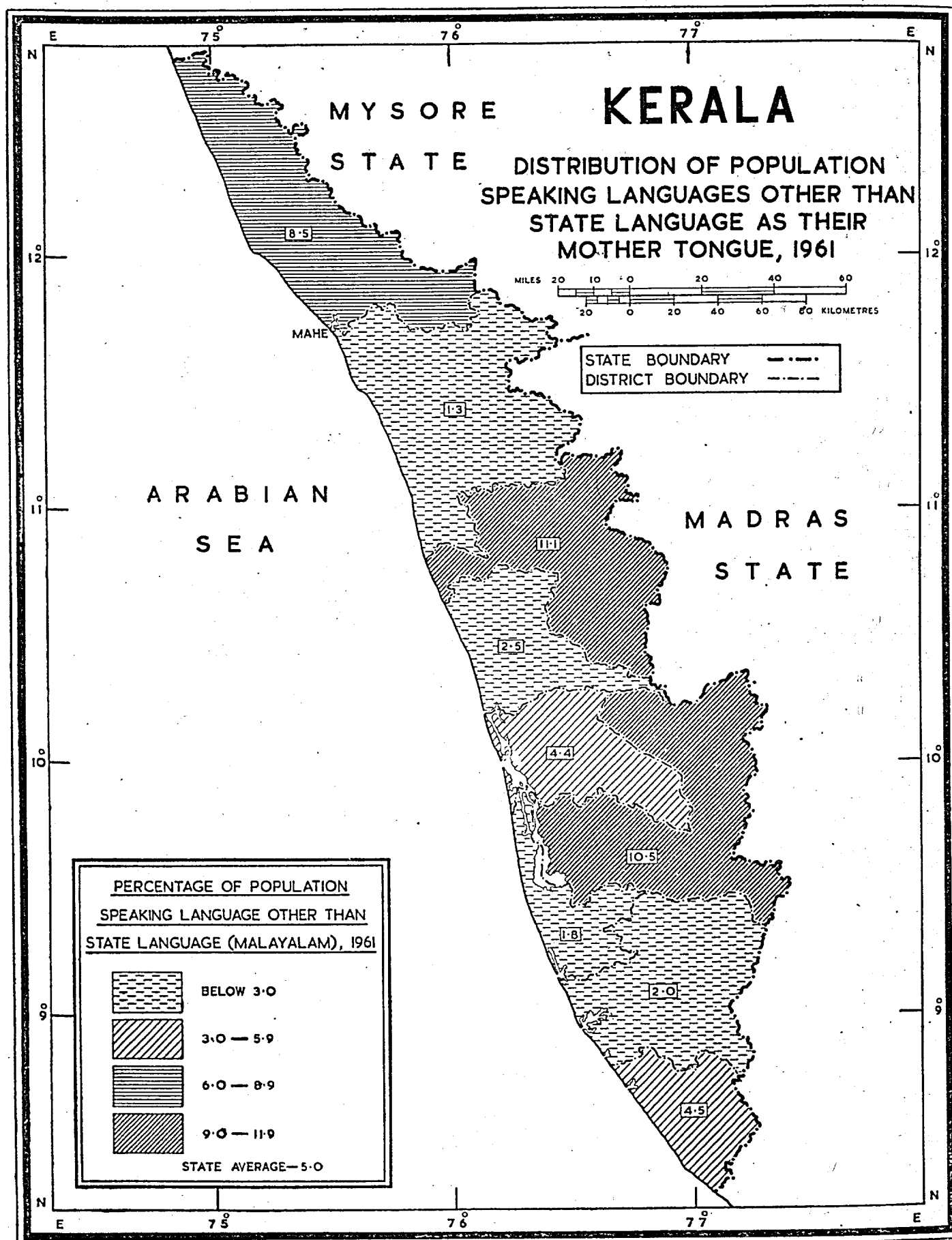
Table

DISTRIBUTION OF MAJOR RELIGIONS IN THE STATE AND DISTRICTS, 1961

State/District	Percentage share of religion to total population			
	Hindu	Christian	Muslim	Others
1	2	3	4	5
Kerala State	60.83	21.22	17.91	0.04
Cannanore District	69.50	6.94	23.53	0.03
Kozhikode "	52.96	4.24	42.75	0.05
Palghat "	70.08	1.90	28.02	N
Trichur "	63.13	25.13	11.74	N
Ernakulam "	45.97	42.61	11.29	0.13
Kottayam "	48.95	47.20	3.83	0.02
Alleppey "	65.42	28.45	6.09	0.04
Quilon "	64.08	24.32	11.58	0.02
Trivandrum "	71.48	17.73	10.79	N

'N'—denotes negligible figure which is less than 0.01

Source:—Census of India, 1961, Kerala—Part II C Cultural and Migration Tables



DISTRIBUTION OF POPULATION SPEAKING LANGUAGES OTHER THAN STATE LANGUAGE AS THEIR MOTHER TONGUE, 1961

Purpose

The map shows the variations in the percentage of population speaking languages other than the State language viz., Malayalam as their mother tongue in the districts of the State in 1961.

Method

The percentages of population speaking languages other than Malayalam as their mother tongue by districts are grouped into four and the districts are shaded according to this grouping by four different grades of hatching from deep to light corresponding to high to low percentage value.

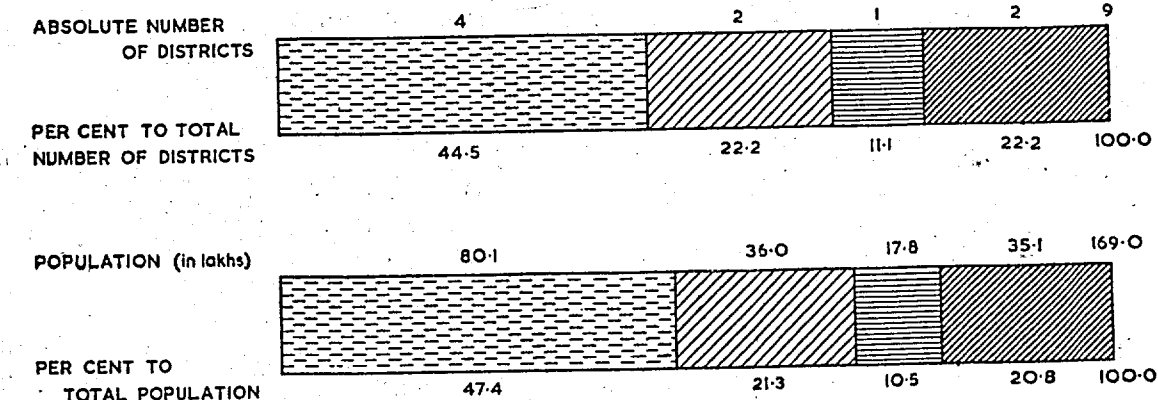
Salient Features

The population speaking languages other than Malayalam as mother tongue form 5.0 per cent of the total population of the State. Among the districts the percentage is comparatively high in Palghat and Kottayam districts and low in Kozhikode, Trichur, Alleppey and Quilon districts. Palghat district has the highest and Kozhikode district the lowest percentage of population speaking languages other than Malayalam as mother tongue.

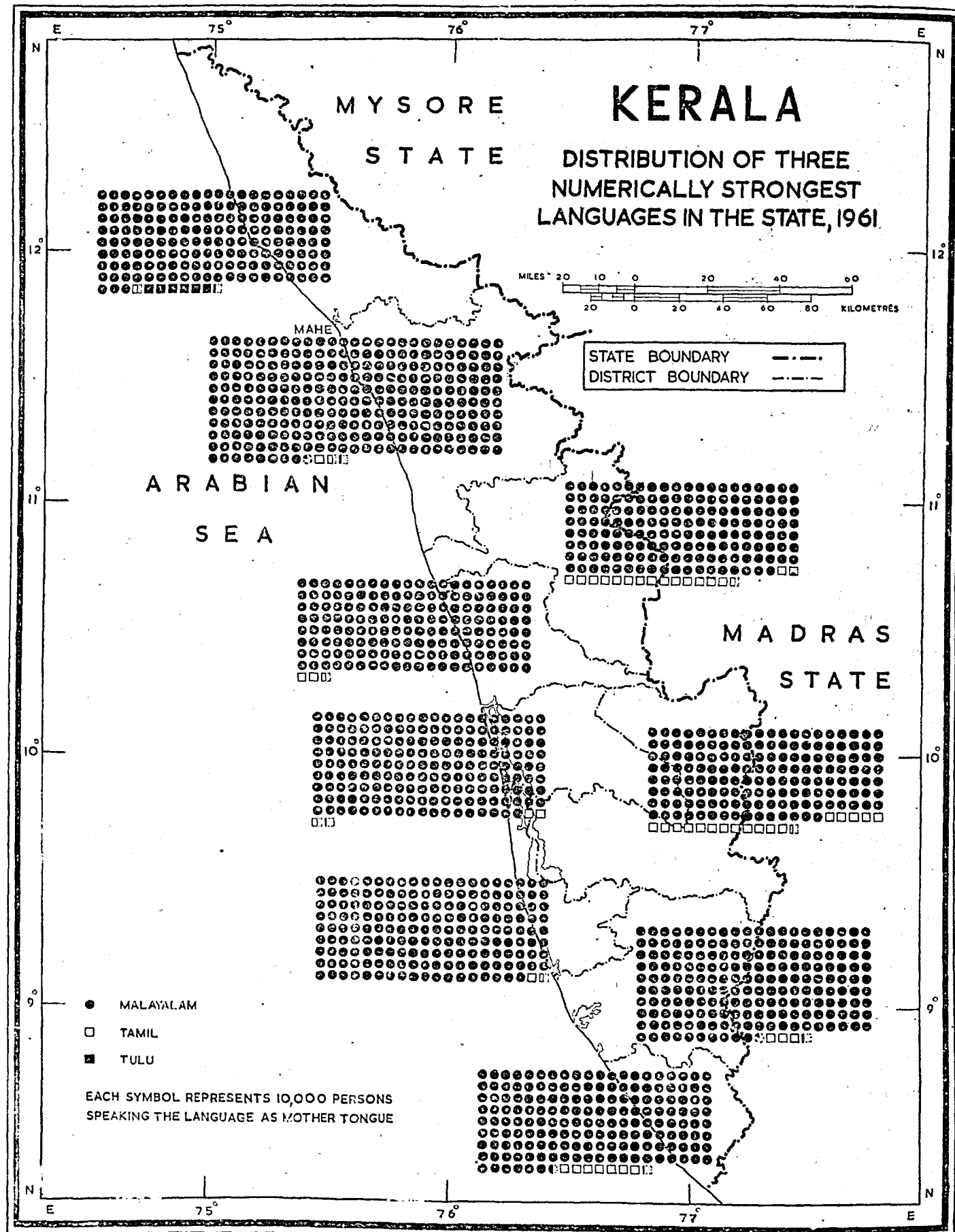
Table

PROPORTION OF POPULATION SPEAKING LANGUAGES OTHER THAN MALAYALAM AS MOTHER TONGUE IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Percentage of population speaking languages other than Malayalam as their mother tongue
1	Kerala State	5.0
2	Palghat District	11.1
3	Kottayam "	10.5
4	Cannanore "	8.5
5	Trivandrum "	4.5
6	Ernakulam "	4.4
7	Trichur "	2.5
8	Quilon "	2.0
9	Alleppey "	1.8
10	Kozhikode "	1.3



Source:—Census of India, 1961, Kerala—Part II C Cultural and Migration Tables



DISTRIBUTION OF THREE NUMERICALLY STRONGEST LANGUAGES IN THE STATE, 1961

Purpose

The map shows the distribution of population of the three numerically strongest languages of the State in the districts in 1961.

Method

Languages spoken as mother tongue alone are taken into account for this map and not the subsidiary languages. The ranks of numerically strongest languages are decided according to the number of persons who speak a language as mother tongue. The distribution of population of three numerically strongest languages is shown by three different symbols, each symbol representing 10,000 persons or part thereof speaking that language as mother tongue. Fractions of population below 1,000 are ignored.

Salient Features

The three numerically strongest languages of the State are Malayalam, Tamil and Tulu. Malayalam is the most predominant language of the State, that language being spoken as mother tongue by 95.0 per cent of the State's total population. The number of persons speaking Tamil as mother tongue in the State is 527,613 and Tulu 68,190 coming to 3.1 per cent and 0.4 per cent respectively of the total population of the State. Only 1.5 per cent of the State's total population speak languages other than Malayalam, Tamil and Tulu as mother tongue.

The numerically strongest language in all the districts is Malayalam, the percentage of persons speaking Malayalam as mother tongue to the total population of the districts varying between 98.7 in Kozhikode district and 88.9 in Palghat district. In respect of people speaking Tamil as mother tongue, Kottayam district leads with 10.0 per cent of the total population of the district and Cannanore district comes last with but 0.3 per cent of the total district population. Of the total number of 68,190 persons in the

State speaking Tulu as mother tongue, 62,216 persons are in Cannanore district which is 3.5 per cent of the population of the district. In the districts of Kozhikode, Ernakulam and Trivandrum the number of persons speaking Tulu as mother tongue is very small being 0.1 per cent of the total district population. In the remaining 5 districts the number of persons speaking Tulu as mother tongue is negligible being less than 0.1 per cent of the total district population.

Table

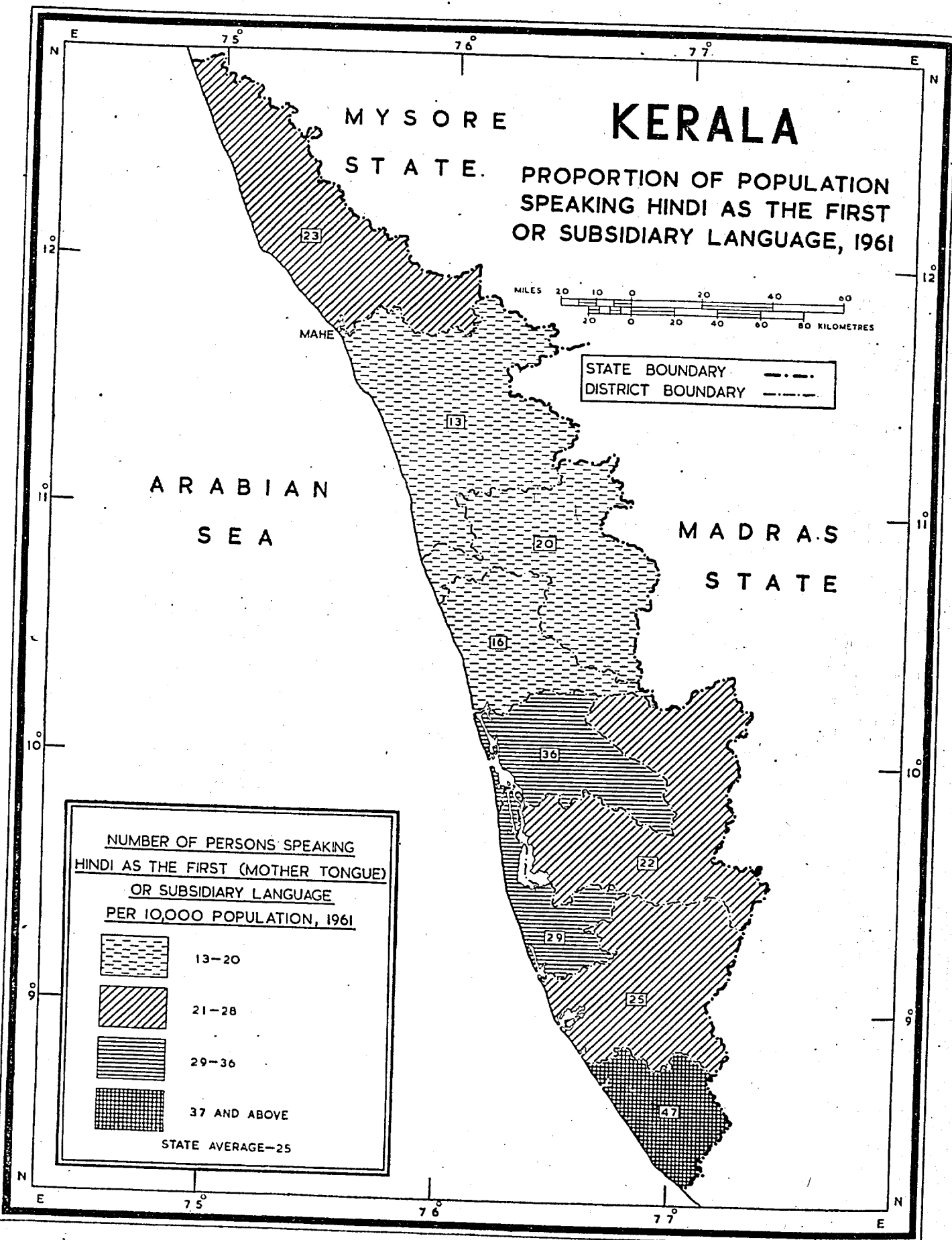
DISTRIBUTION OF THREE NUMERICALLY STRONGEST LANGUAGES OF THE STATE BY DISTRICTS, 1961

State/District	Number of persons speaking Malayalam, Tamil and Tulu as mother tongue		
	Malayalam	Tamil	Tulu
1	2	3	4
Kerala State	16,065,468 (95.0)	527,613 (3.1)	68,190 (0.4)
Cannanore District	1,628,965 (91.5)	6,022 (0.3)	62,216 (3.5)
Kozhikode	2,581,955 (98.7)	15,296 (0.6)	1,833 (0.1)
Palghat	1,579,427 (88.9)	166,075 (9.3)	119 (N)
Trichur	1,599,234 (97.5)	24,003 (1.5)	282 (N)
Ernakulam	1,778,414 (95.6)	25,804 (1.4)	1,276 (0.1)
Kottayam	1,550,336 (89.5)	174,088 (10.0)	396 (N)
Alleppey	1,779,531 (98.2)	14,415 (0.8)	423 (N)
Quilon	1,902,335 (98.0)	31,718 (1.6)	390 (N)
Trivandrum	1,665,271 (95.5)	70,192 (4.0)	1,255 (0.1)

Figures in brackets indicate the percentage to the total population of the State/district.

'N' denotes negligible figure which is less than 0.1

Source: Census of India, 1961, Kerala—Part II C Cultural and Migration Tables



PROPORTION OF POPULATION SPEAKING HINDI AS THE FIRST OR SUBSIDIARY LANGUAGE, 1961

Purpose

The variation in the proportion of Hindi speaking persons in the districts of the State in 1961 is shown in the map.

Method

The number of persons speaking Hindi as the first language (mother tongue) or subsidiary language per 10,000 population by districts is grouped into four and the districts are shaded accordingly by different grades of hatches. Persons speaking Hindustani are not taken into account here.

Salient Features

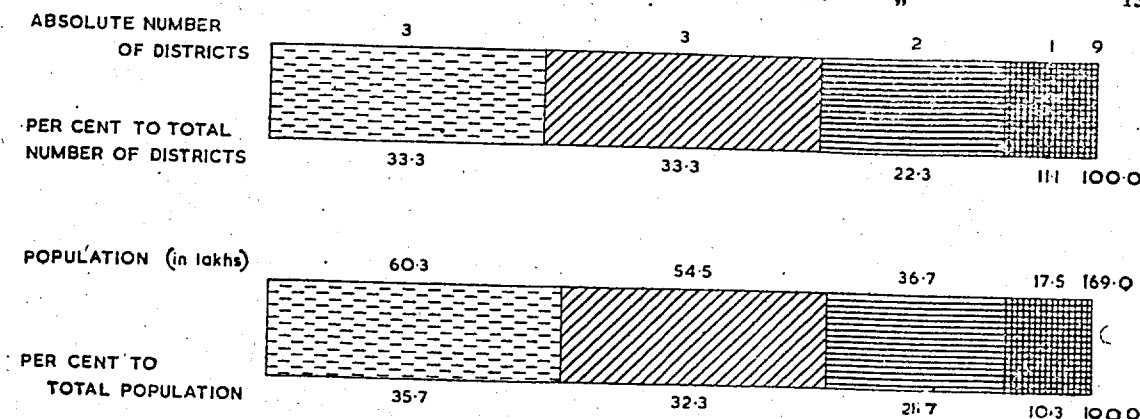
Only 25 out of 10,000 persons speak Hindi as mother tongue or subsidiary language in the State. The number of persons speaking Hindi as subsidiary language far exceed the number of persons speaking Hindi as mother tongue in the State as well as in all the districts. Of the 0.25 per cent of Hindi speakers 0.04 per cent have Hindi as mother tongue and 0.21 per cent have it as subsidiary language. The number of persons speaking Hindi as mother tongue or subsidiary language per 10,000 population in the districts

is highest in Trivandrum with 47 and lowest is Kozhikode with only 13.

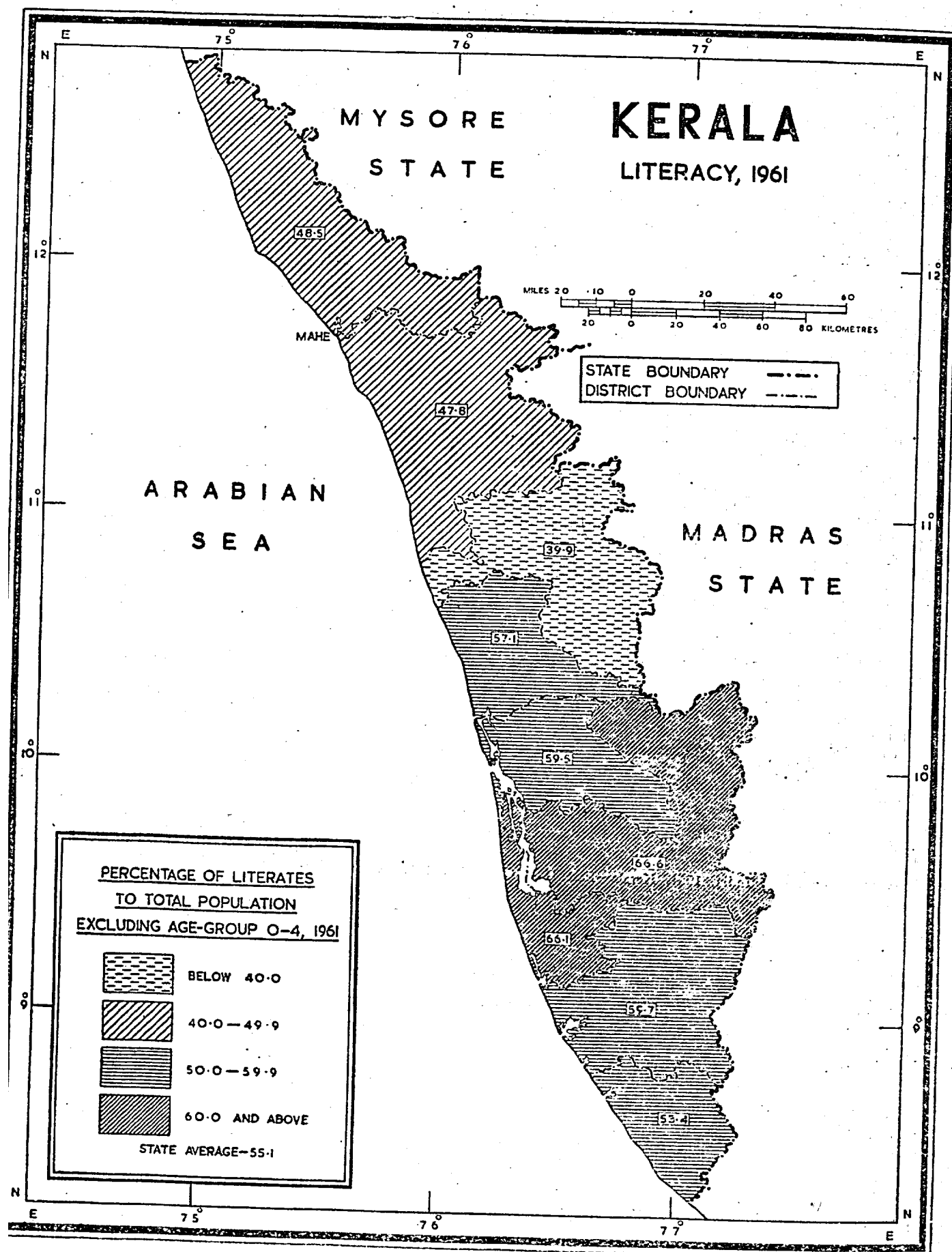
Table

PROPORTION OF POPULATION SPEAKING HINDI AS THE FIRST OR SUBSIDIARY LANGUAGE IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Number of persons speaking Hindi as the first (mother tongue) or subsidiary language per 10,000 population
1	2	3
	Kerala State	25
1	Trivandrum District	47
2	Ernakulam "	36
3	Alleppey "	29
4	Quilon "	25
5	Cannanore "	23
6	Kottayam "	22
7	Palghat "	20
8	Trichur "	16
9	Kozhikode "	13



Source: Census of India, 1961, Kerala—Part II C Cultural and Migration Tables

**Purpose**

The map shows the variations in the percentage of literates among the districts of the State.

Method

The percentages of literates to total population excluding those aged 4 years and below by districts are arranged into 4 groups and according to these groups the districts are shaded from deep to light corresponding to high to low values.

Salient Features

Literacy is defined as the ability to read and write with understanding in any language. Only effective literacy rate by excluding the population of the age group 0-4 is taken into account for the map.

The average rate of literacy of Kerala is 55.1 per cent while that of India is only 28.3 per cent*. Kerala leads the States in India (excluding Union Territories) in point of literacy.

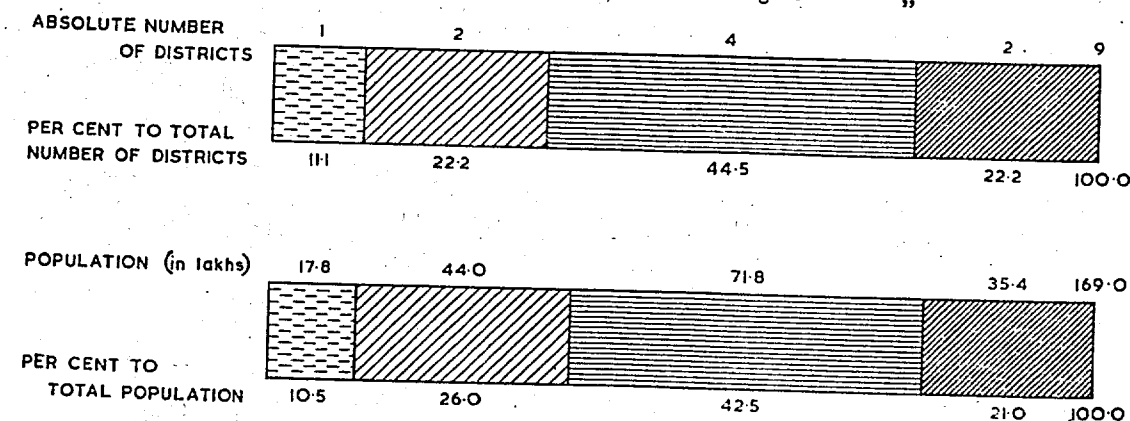
Among the districts the percentages of literates vary from 39.9 in the case of Palghat district to 66.6 in the case of Kottayam district. The

* Excludes population (297,853 persons, 147,100 males and 150,753 females) of that portion of N.E.F.A. where all-India census schedule was not canvassed.

districts of Trichur, Ernakulam, Kottayam, Alleppey and Quilon which lie contiguous have literacy rates above that of the State. The districts of Cannanore, Kozhikode and Palghat which also lie contiguous and Trivandrum district have only a lower proportion of literates in them than that of the State. In all districts of the State the percentage of male literates exceed that of female literates.

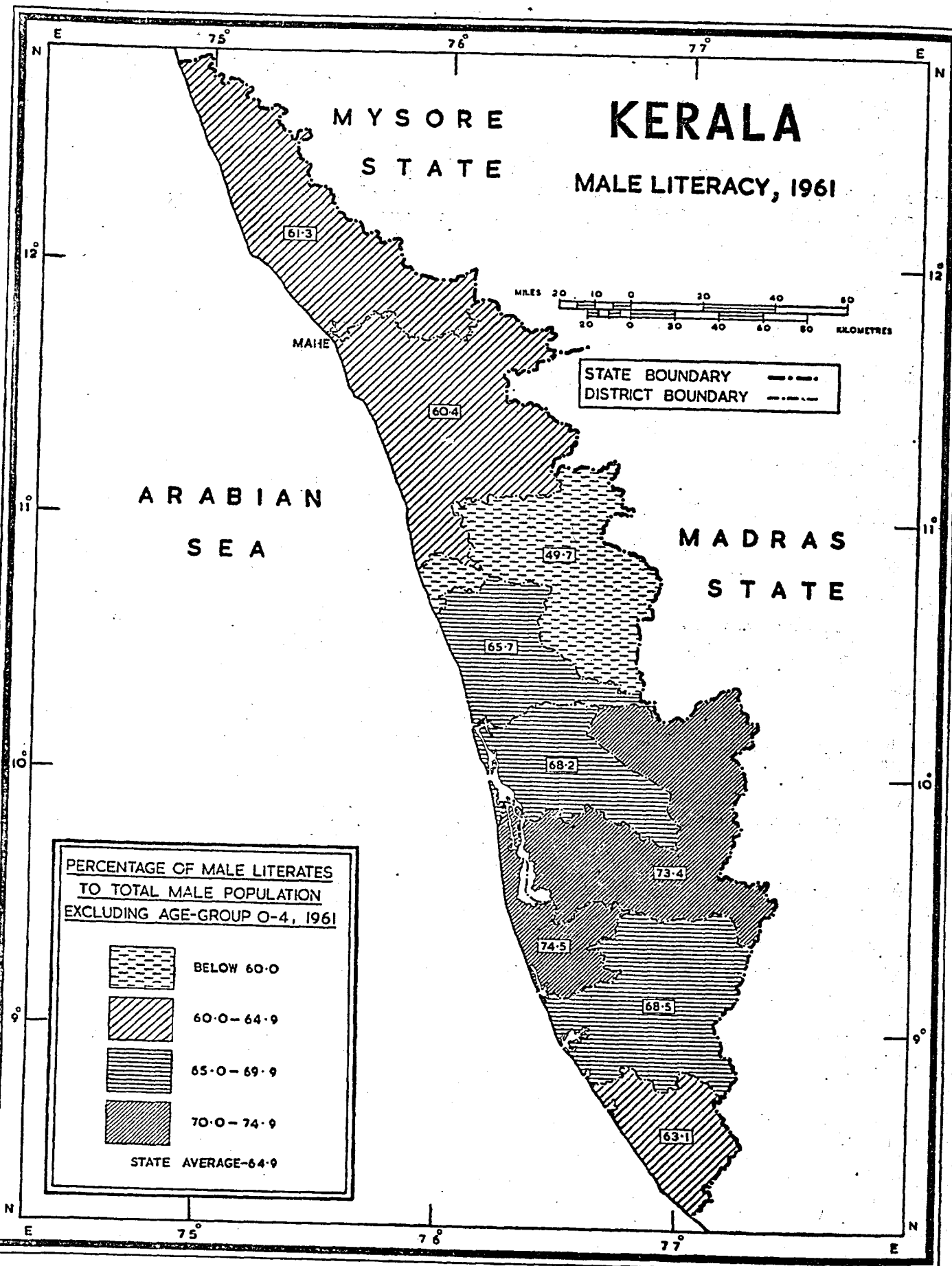
Table**EFFECTIVE LITERACY RATES IN THE STATE AND DISTRICTS, 1961**

Rank	State/District	Literacy (Percentage of literates to total population excluding population in the age group 0-4),
1	Kerala State	55.1
2	Kottayam District	66.6
3	Alleppey "	66.1
4	Quilon "	59.7
5	Ernakulam "	59.5
6	Trichur "	57.1
7	Trivandrum "	53.4
8	Cannanore "	48.5
9	Kozhikode "	47.8
10	Palghat "	39.9



Source: Census of India, 1961, Kerala—Part II B General Economic Tables

MALE LITERACY, 1961



Purpose

The map shows the variation in the percentage of male literates among the districts of the State in 1961.

Method

The percentages of male literates to the total male population (excluding those of ages 4 years and below) by districts are arranged into 4 groups according to their value and the districts are shaded according to these groups from deep to light corresponding to high to low value. The percentage figures of male literacy are also given inside the districts.

Salient Features

The average rate of male literacy of the State is 64.9 per cent as against the all-India rate of 40.4 per cent*. The rate of male literacy of Kerala is the highest among the States in India (excluding the Union Territories).

Among the districts of the State the percentage of male literates varies from 49.7 to 74.5. The districts of Trichur, Ernakulam, Kottayam, Alleppey and Quilon lying contiguous have the percentage

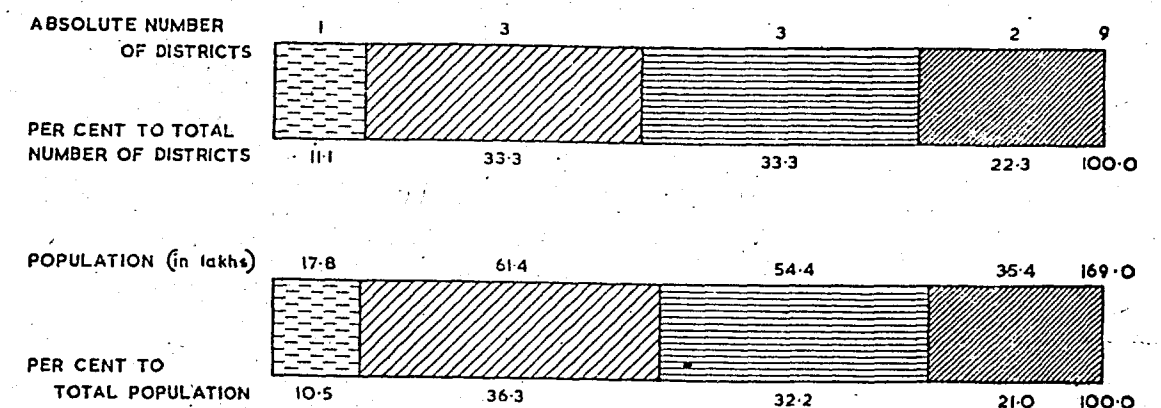
* Excludes population (297,853 persons, 147,100 males and 150,753 females) of that portion of N.E.F.A. where all-India census schedule was not canvassed.

of male literates above that of the State. Male literacy is lower than that of the State in the case of Cannanore, Kozhikode and Palghat districts lying in the north and Trivandrum district lying in the south. Alleppey district has the highest percentage of male literates while Palghat district has the lowest. Kottayam district which stands first in point of total literacy comes second in point of male literacy.

Table

MALE LITERACY IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Male literacy (percentage of male literates to total male population excluding population in the age-group 0-4)
1	2	3
	Kerala State	64.9
1	Alleppey District	74.5
2	Kottayam "	73.4
3	Quilon "	68.5
4	Ernakulam "	68.2
5	Trichur "	65.7
6	Trivandrum "	63.1
7	Cannanore "	61.3
8	Kozhikode "	60.4
9	Palghat "	49.7



Source:—Census of India, 1961, Kerala—Part II C Cultural and Migration Tables

FEMALE LITERACY, 1961

Purpose

The map shows the variation in the percentage of female literates among the districts of the State in 1961.

Method

The percentages of female literates to the total female population (excluding those of ages 4 years and below) by districts are arranged into 4 groups according to their value and the districts are shaded according to these groups from deep to light corresponding to high to low value. The percentage figure of female literacy is also given inside each district.

Salient Features

The percentage of female literates of the State is 45.6 against 15.3* for all-India. Kerala has the highest percentage of female literates among the States of India (excluding Union Territories).

The districts of Trichur, Ernakulam, Kottayam, Alleppey and Quilon have percentage of female literates above that of the State while those of the districts of Cannanore, Kozhikode, Palghat and

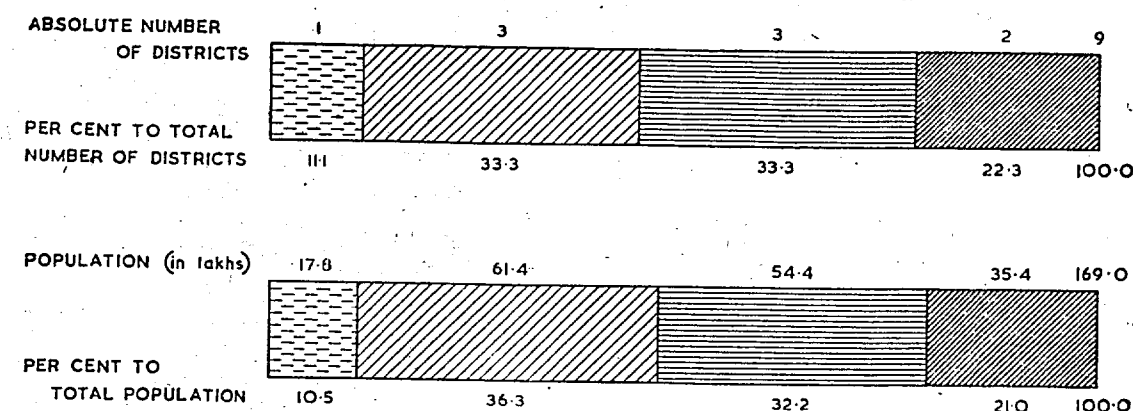
* Excludes population (297,853 persons, 147,100 males and 150,753 females) of that portion of N.E.F.A. where all-India census schedule was not canvassed.

Trivandrum are below that of the State. Kottayam district stands first among the districts of the State with 59.6 per cent of the female population being literates while Palghat district stands as the last with only 31.0 per cent.

Table

FEMALE LITERACY IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Female literacy (percentage of female literates to the total female population excluding population in the age-group 0-4)
1	2	3
	Kerala State	45.6
1	Kottayam District	59.6
2	Alleppey "	57.9
3	Quilon "	51.0
4	Ernakulam "	50.9
5	Trichur "	49.4
6	Trivandrum "	43.9
7	Cannanore "	36.2
8	Kozhikode "	35.5
9	Palghat "	31.0



Source: Census of India, 1961, Kerala—Part II C Cultural and Migration Tables

KERALA FEMALE LITERACY, 1961

MYSORE
STATE

MAHE

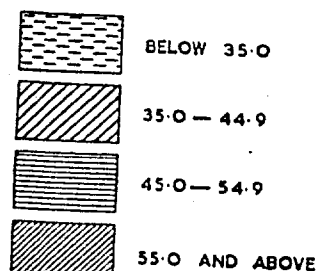
MILES 20 10 0 20 40 60
KILOMETRES

STATE BOUNDARY
DISTRICT BOUNDARY

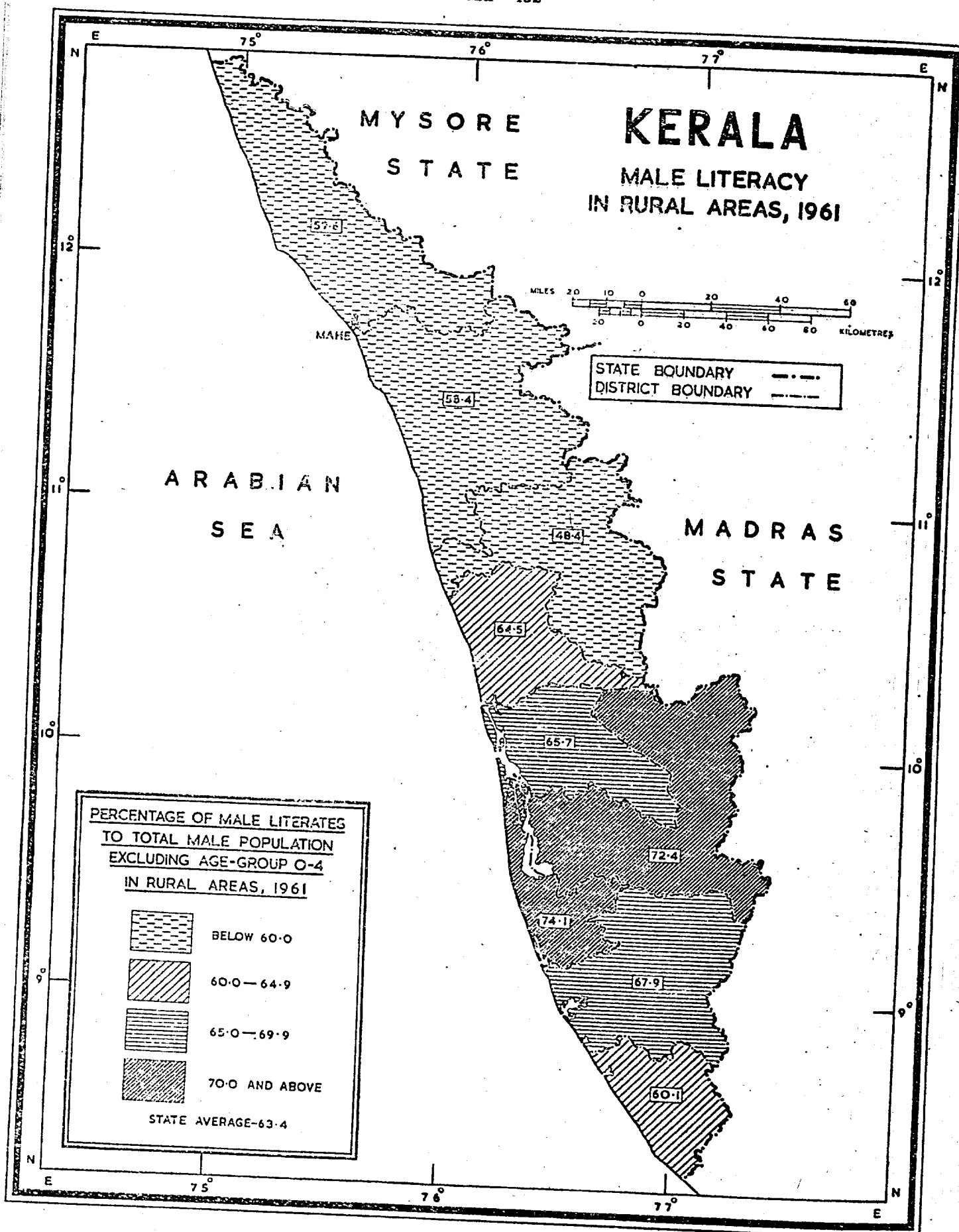
ARABIAN
SEA

MADRAS
STATE

PERCENTAGE OF FEMALE LITERATES TO TOTAL FEMALE POPULATION EXCLUDING AGE-GROUP 0-4, 1961



STATE AVERAGE—45.6



MALE LITERACY IN RURAL AREAS, 1961

Purpose

The map shows the districtwise variation in the percentage of male literates in rural areas of the State in 1961.

Method

The percentages of male literates in rural areas to the total rural male population excluding those in age-group 0-4 by districts are grouped into four grades and the districts coming in these groups are shaded from deep to light corresponding to high to low values. The percentage figures are also given inside each district.

Salient Features

The average rate of male literacy in rural areas of the State is 63.4 per cent which is the highest among States and Union Territories of India. The all-India average in this respect is only 34.3 per cent*.

The districts of Trichur, Ernakulam, Kottayam, Alleppey, and Quilon have percentages of rural male literates above that of the State while those of the districts of Cannanore, Kozhikode, Palghat and

* Excludes population (297,853 persons, 147,100 males and 150,753 females) of that portion of N.E.F.A. where all-India census schedule was not canvassed.

Trivandrum are below that of the State. Alleppey district has the highest percentage of male literates in rural areas (74.1 per cent) and Palghat district the lowest (48.4 per cent)

Table

MALE LITERACY IN RURAL AREAS OF THE STATE AND DISTRICTS, 1961

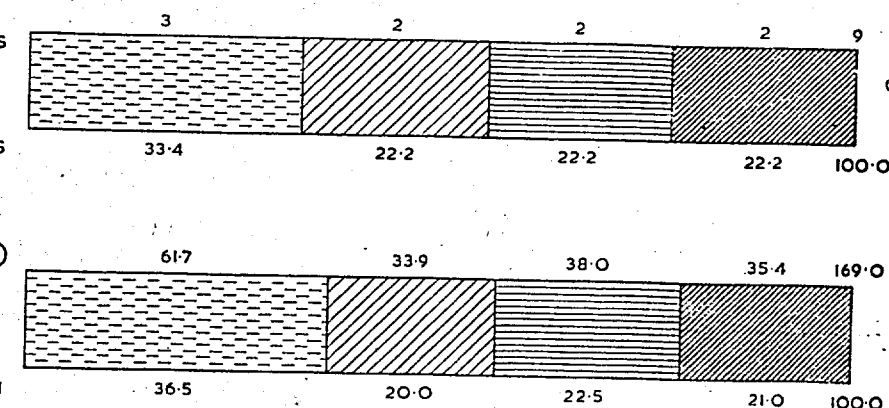
Rank	State/District	Male literacy in rural areas (percentage of male literates to the total rural male population excluding population in the age-group 0-4)
1	2	3
	Kerala State	63.4
1	Alleppey District	74.1
2	Kottayam	72.4
3	Quilon	67.9
4	Ernakulam	65.7
5	Trichur	64.5
6	Trivandrum	60.1
7	Cannanore	59.6
8	Kozhikode	58.4
9	Palghat	48.4

ABSOLUTE NUMBER
OF DISTRICTS

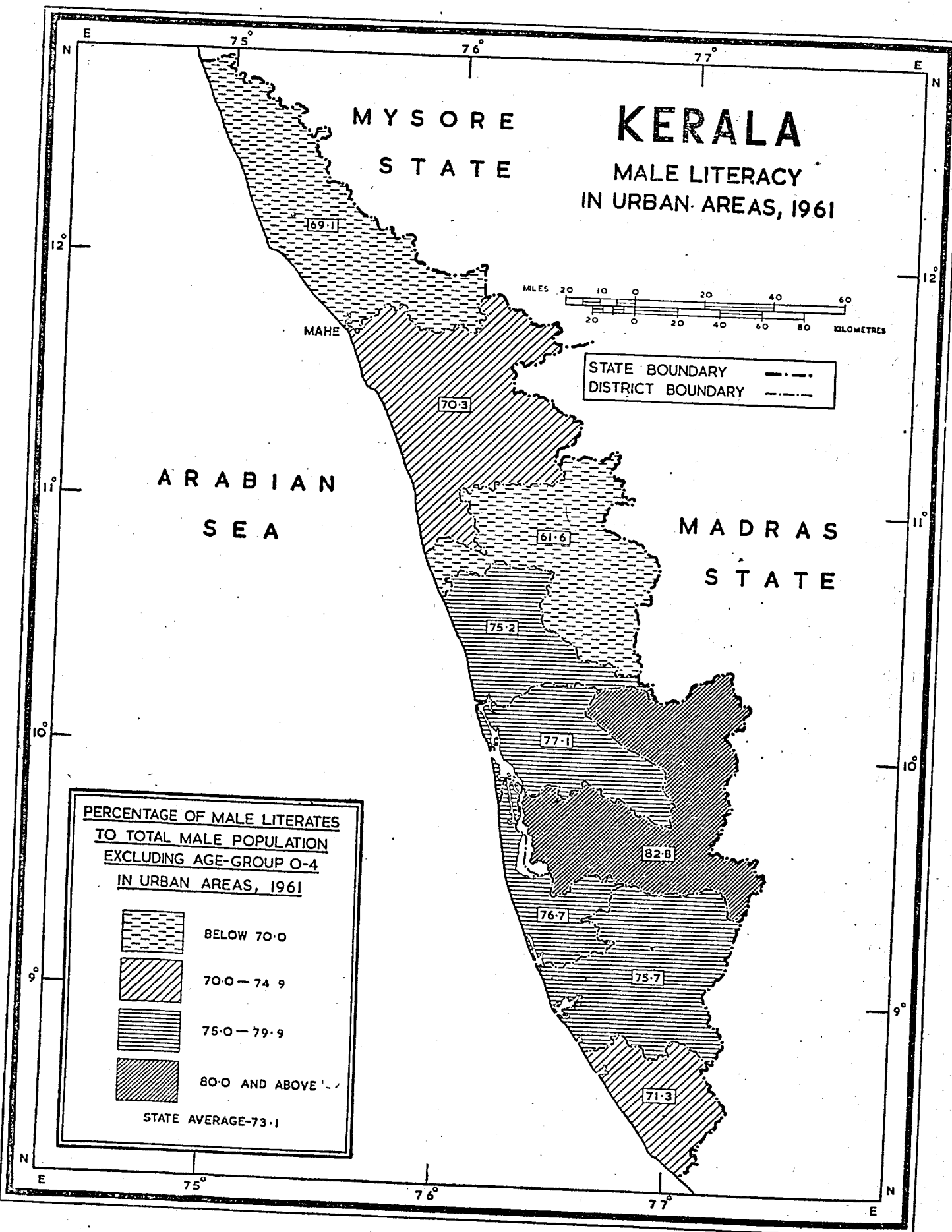
PER CENT TO TOTAL
NUMBER OF DISTRICTS

POPULATION (in lakhs)

PER CENT TO
TOTAL POPULATION



Source: Census of India, 1961, Kerala—Part II C Cultural and Migration Tables



MALE LITERACY IN URBAN AREAS, 1961

Purpose

The map shows the districtwise variation in the percentage of male literates in the urban areas of the State, in 1961.

Method

The percentages of male literates in urban areas to the total urban male population excluding those in age-group 0-4 by districts are arranged into four groups and the districts are shaded according to these groupings from deep to light corresponding to high to low value. The percentage figure of each district is also given inside the district.

Salient Features

The percentage of male literates in urban areas of the State as a whole is 73.1 while that of all-India is only 66.0. Kerala has the highest percentage of male literates in urban areas among the States of India (excluding Union Territories).

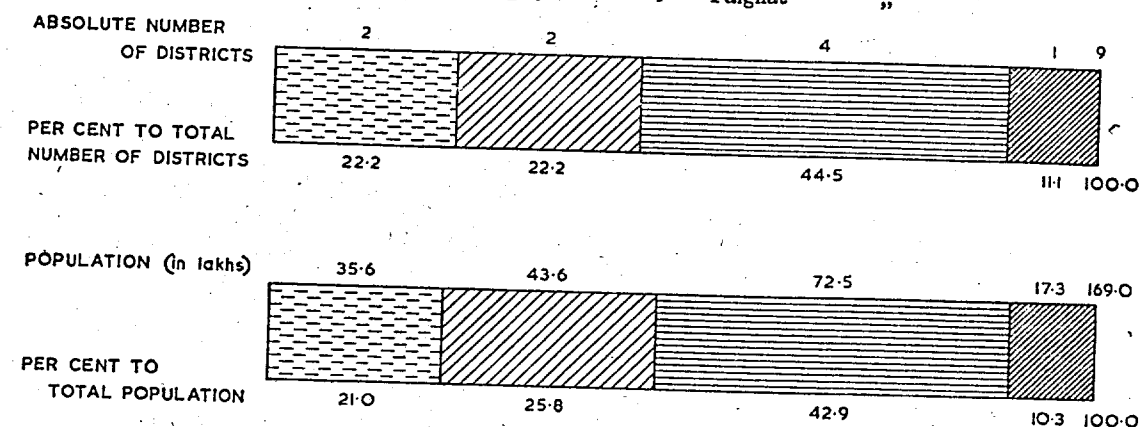
In the districts the percentage of urban male literates varies from 61.6 to 82.8. As in the case of male literates in rural areas, the districts of Trichur, Ernakulam, Kottayam, Alleppey and Quilon have percentage of male literates in urban areas above that of the State. While in the case of rural male literacy Alleppey

ranks first among the districts of the State, in respect of urban male literacy Kottayam leads the districts with Ernakulam district coming in the second place and Alleppey district in the third place. Palghat district has the lowest percentage of urban male literates.

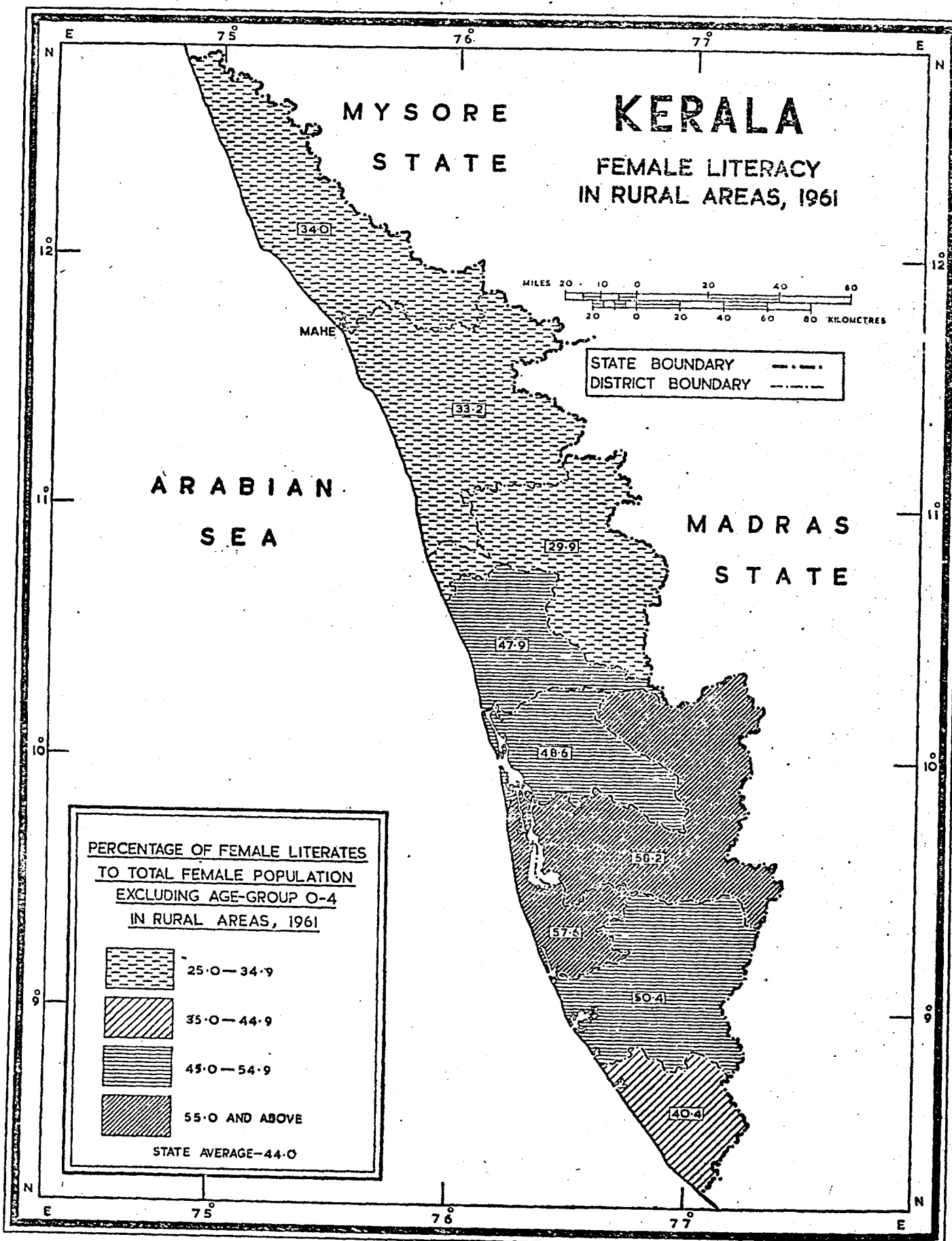
Table

MALE LITERACY IN URBAN AREAS OF THE STATE AND DISTRICTS, 1961

Rank	State/District	Male literacy in urban areas (percentage of male literates to the total urban male population excluding population in the age-group 0-4)
1	2	3
	Kerala State	73.1
1	Kottayam District	82.8
2	Ernakulam "	77.1
3	Alleppey "	76.7
4	Quilon "	75.7
5	Trichur "	75.2
6	Trivandrum "	71.3
7	Kozhikode "	70.3
8	Cannanore "	69.1
9	Palghat "	61.6



Source: Census of India, 1961, Kerala—Part II C Cultural and Migration Tables



FEMALE LITERACY IN RURAL AREAS, 1961

Purpose

The map shows the districtwise variation in the percentage of female literates in rural areas of the state in 1961.

Method

The percentages of female literates in rural areas to the total rural female population excluding those in the age-group 0-4 by districts are arranged into four groups and the districts are shaded according to these grouping from deep to light corresponding to high to low value. The percentage figures are also given inside each district.

Salient Features

44.0 per cent of female population of the rural areas of the State are literates while the corresponding figure of all-India is only 10.1* per cent. Kerala ranks first in this respect among the States and Union Territories of India.

The rural female literacy rates vary from 29.9 per cent to 58.2 per cent among the districts. Kottayam district has the highest percentage of rural female literates and Palghat district the lowest. As in the case of male literacy in rural areas, Cannanore, Kozhikode, Palghat and Trivandrum

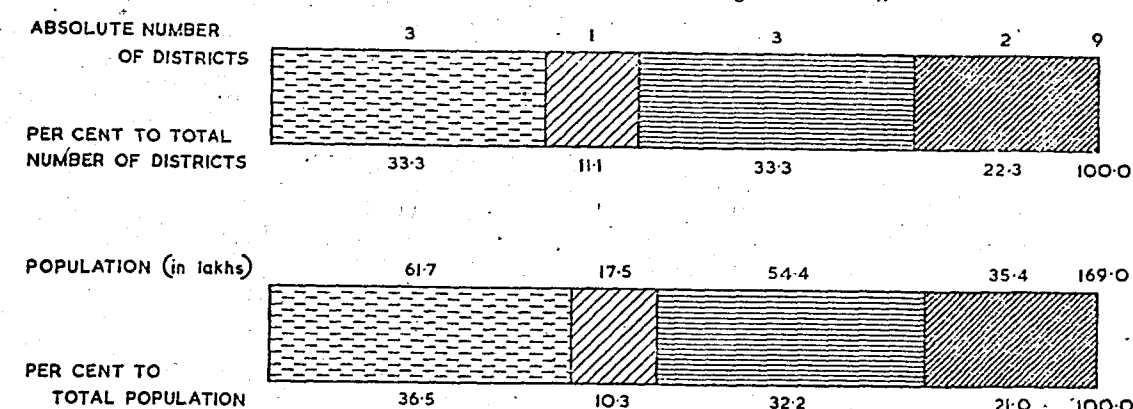
* Excludes population (297,853 persons, 147,100 males and 150,753 females) of that portion of N.E.F.A. where all-India Census Schedule was not canvassed.

districts have female literacy rates in rural areas below that of the State and those of Trichur, Ernakulam, Kottayam, Alleppey and Quilon districts above that of the State. A feature to be noted here is that while Kottayam leads the districts in the case of female literacy in rural areas, it ranks only second in respect of male literacy in rural areas, Alleppey district being the first.

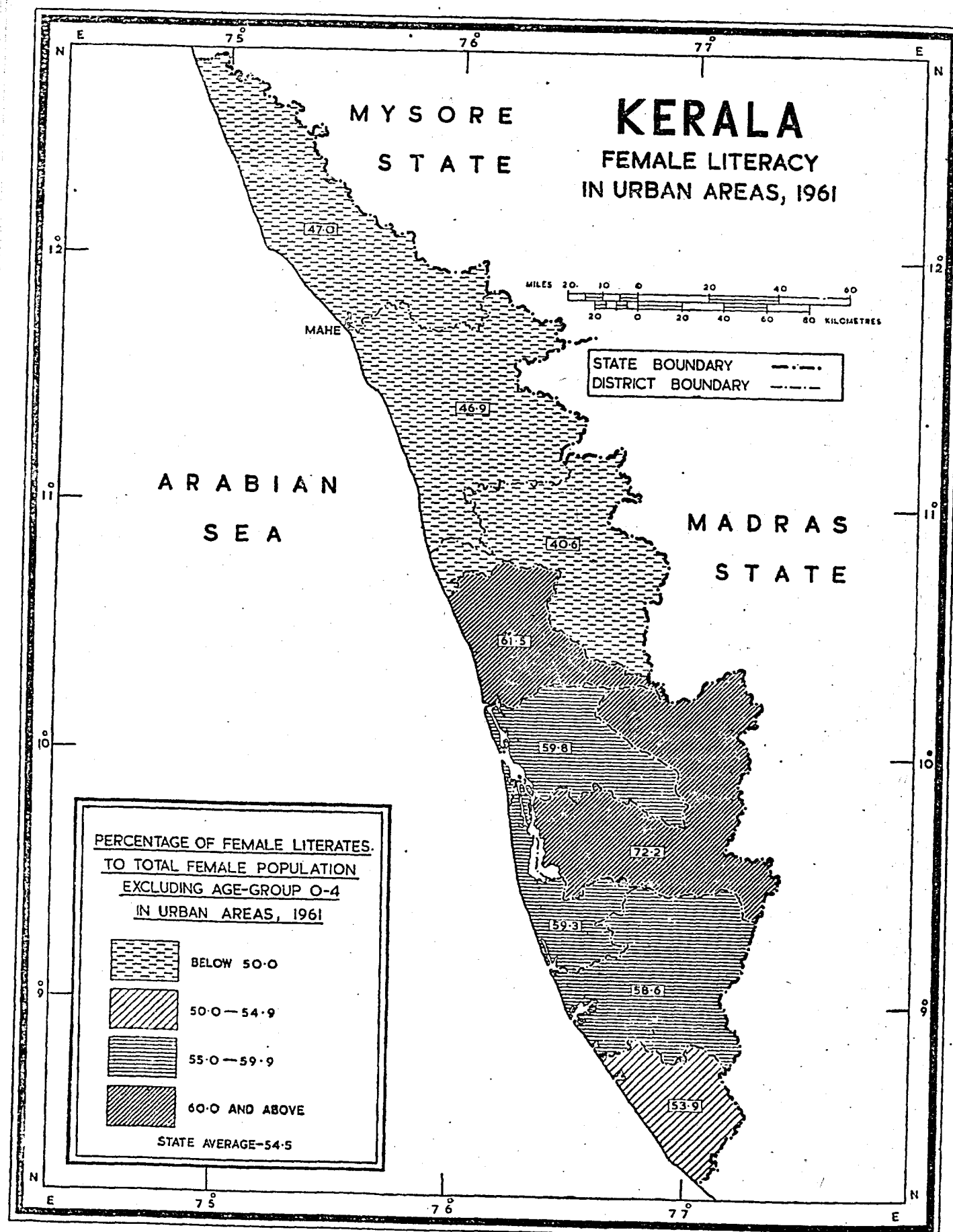
Table

FEMALE LITERACY IN RURAL AREAS OF THE STATE AND DISTRICTS, 1961

Rank	State/District	Female literacy in rural areas (percentage of female literates to the total rural female population excluding population in the age-group 0-4)
1	2	3
	Kerala State	44.0
1	Kottayam District	58.2
2	Alleppey "	57.6
3	Quilon "	50.4
4	Ernakulam "	48.6
5	Trichur "	47.9
6	Trivandrum "	40.4
7	Cannanore "	34.0
8	Kozhikode "	33.2
9	Palghat "	29.9



Source: Census of India, 1961, Kerala—Part II C Cultural and Migration Tables



FEMALE LITERACY IN URBAN AREAS, 1961

Purpose

The map shows the districtwise variation in the percentage of female literates in urban areas of the State in 1961.

Method

The percentages of female literates in urban areas to the total urban female population excluding population in the age-group 0-4 by districts are arranged into four groups and the districts are shaded according to these groupings from deep to light corresponding to high to low value. The percentage figures are also given inside each district.

Salient Features

The average rate of female literacy in urban areas of the State is 54.5 per cent while that of all-India is 40.5 per cent. In urban female literacy Assam leads the States of India (including Union Territories) and Kerala has only the third rank.

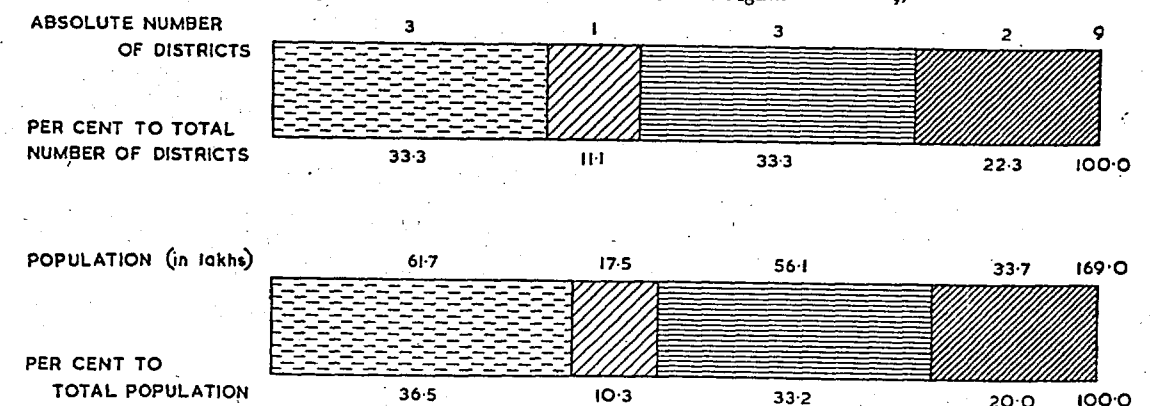
In the districts the urban female literacy rate varies from 40.6 per cent to 72.2 per cent. Trichur, Ernakulam, Kottayam, Alleppey and Quilon districts have urban female literacy rates above that of the State while Cannanore, Kozhikode, Palghat and Trivandrum districts have the rates below that of the State. Kottayam district has the

highest percentage of female literates in urban areas and Palghat district the lowest. A feature to be noted here is the comparatively higher rate of urban female literacy in the case of Trichur district. Trichur district ranks second in female literacy in urban areas while in respect of male literacy Trichur district has only the fifth rank among the districts.

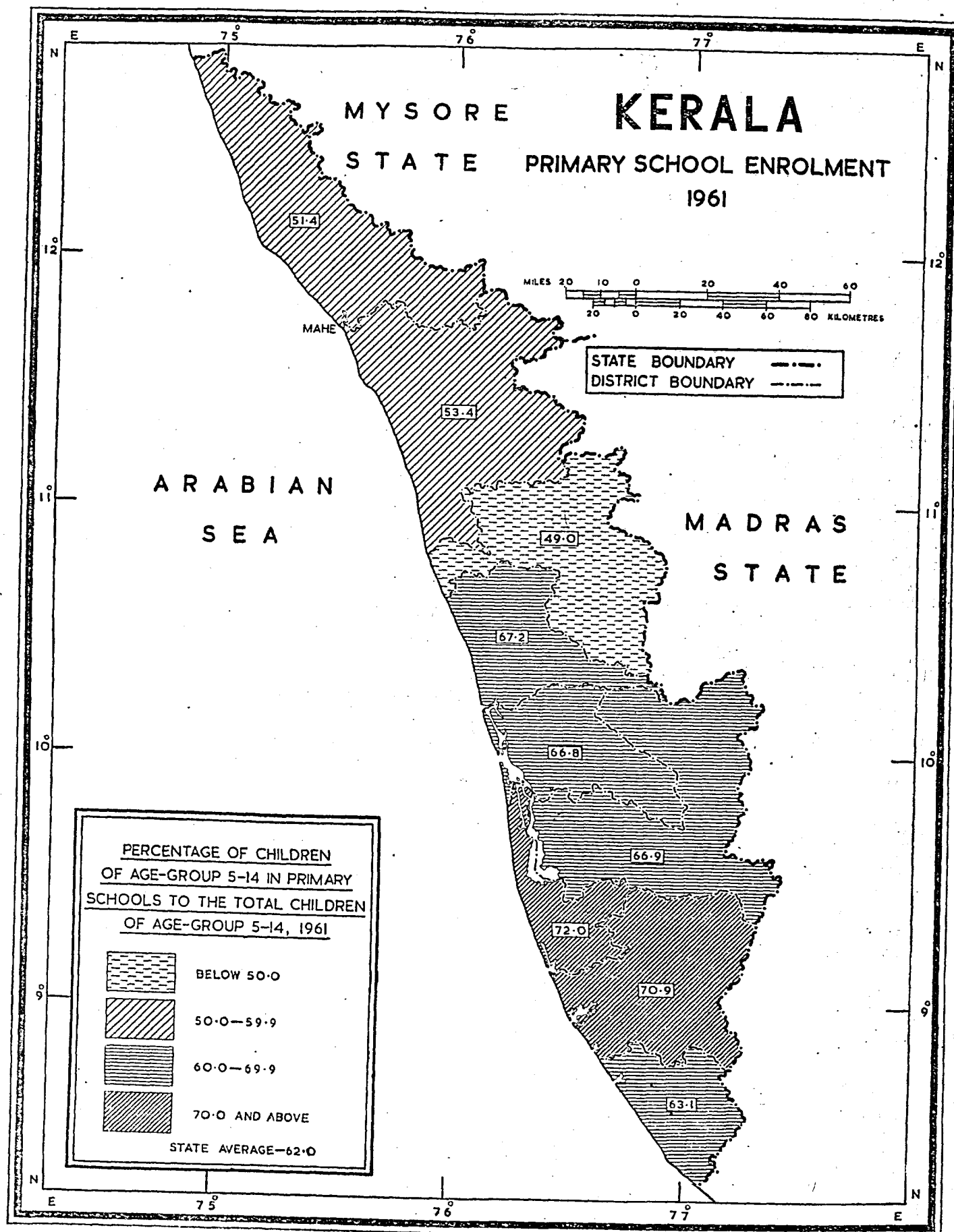
Table

FEMALE LITERACY IN URBAN AREAS OF THE STATE AND DISTRICTS, 1961

Rank	State/District	Female literacy in urban areas (percentage of female literates to the total urban female population excluding population in the age-group 0-4), 1961.
1	Kerala State	54.5
2	Kottayam District	72.2
3	Trichur	61.5
4	Ernakulam	59.8
5	Alleppey	59.3
6	Quilon	58.6
7	Trivandrum	53.9
8	Cannanore	47.0
9	Kozhikode	46.9
10	Palghat	40.6



Source: Census of India, 1961, Kerala—Part II C Cultural and Migration Tables



PRIMARY SCHOOL ENROLMENT, 1961

Purpose

The map shows the proportion of primary school going children in the age-group 5-14 to the total children of age-group 5-14 in the districts of the State in 1961.

Method

Since precise data on the number of children of age-group 5-14 in primary schools are not available, the data compiled from the 1961 Census Tables on the subject are used for this map. General Economic Table B-IX gives information on the number of full-time students in the age-group 0-14. As there will hardly be any full-time student below 5 years of age the number of full-time students in the age-group 0-14 is taken as the number of children in age-group 5-14 in primary schools.

The percentages of children in the age-group 5-14 in primary schools obtained as above to the total children in the age-group 5-14 by districts are arranged into four groups and the districts are shaded accordingly by different grades of hatches from deep to light corresponding to high to low value.

Salient Features

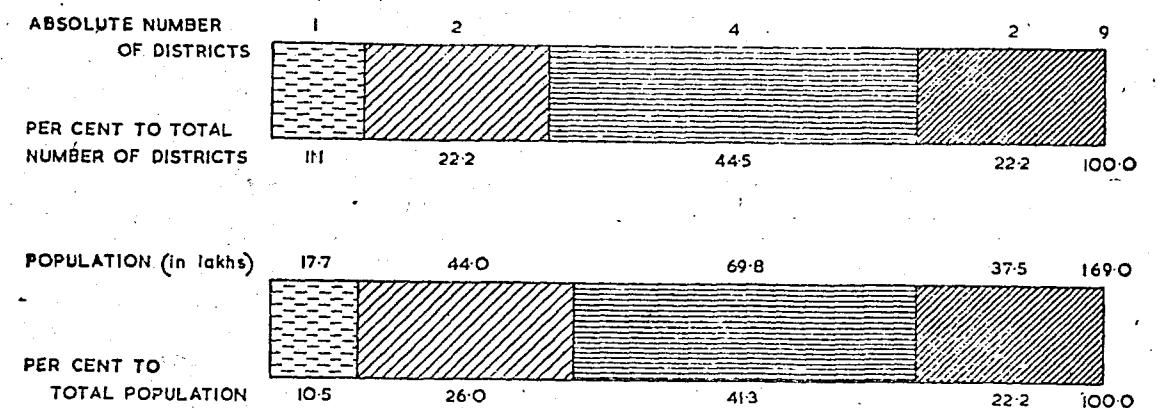
62.0 per cent of the total children of age-group 5-14 in the State go to primary schools. The

percentage of primary school going children is smaller in the three northern districts of Cannanore, Kozhikode and Palghat than in the other districts. Alleppey district has the highest percentage coming to 72.0 and Palghat district the lowest with but 49.0.

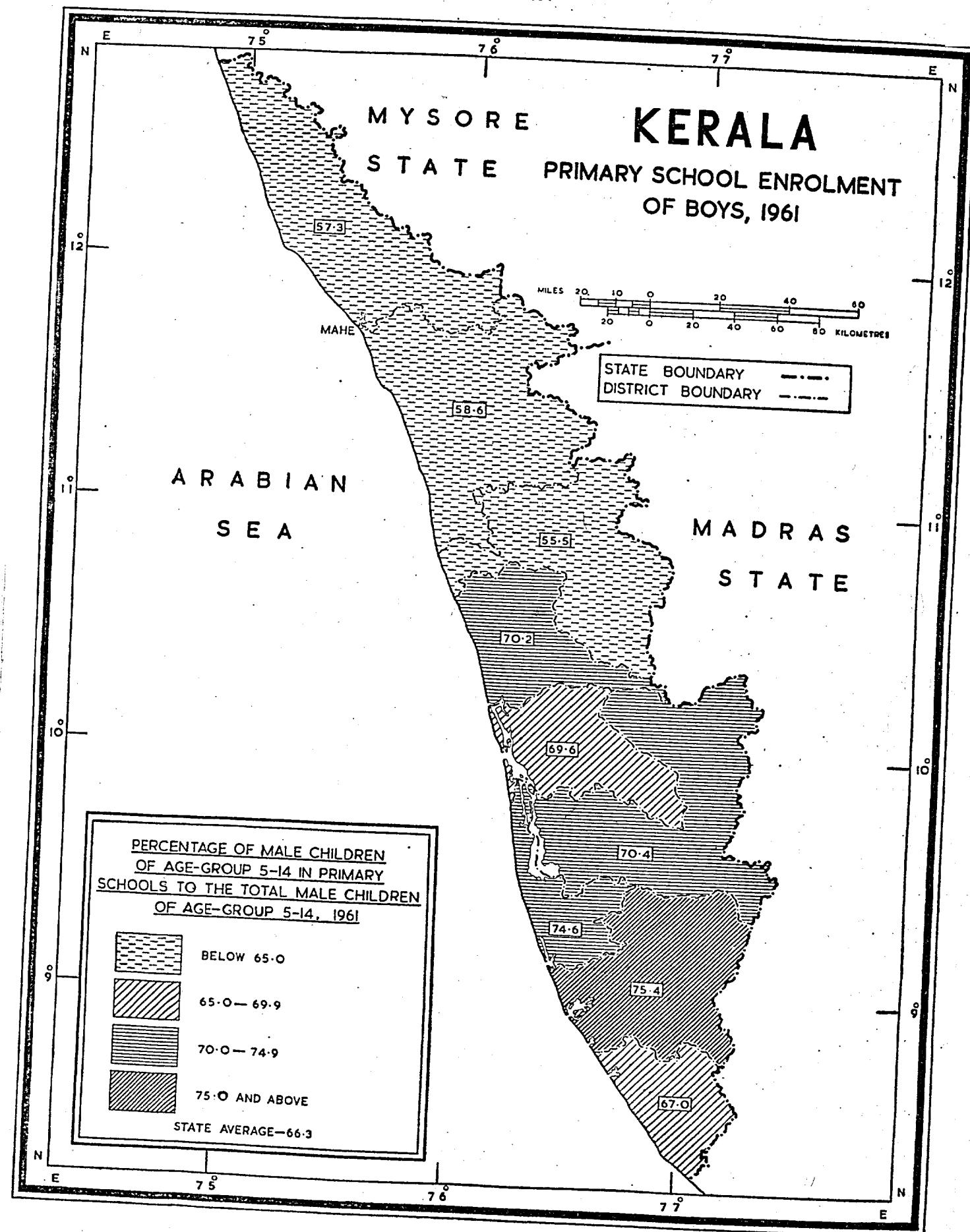
Table

PROPORTION OF CHILDREN OF AGE-GROUP 5-14 AT THE LEVEL OF PRIMARY EDUCATION TO THE TOTAL CHILDREN OF AGE-GROUP 5-14 IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Percentage of children of age-group 5-14 in primary schools to the total children of age-group 5-14
1	Kerala State	62.0
1	Alleppey District	72.0
2	Quilon "	70.9
3	Trichur "	67.2
4	Kottayam "	66.9
5	Ernakulam "	66.8
6	Trivandrum "	63.1
7	Kozhikode "	53.4
8	Cannanore "	51.4
9	Palghat "	49.0



Source: Census of India, 1961, Kerala—Part II B (ii) General Economic Tables, and Part II C Cultural and Migration Tables



PRIMARY SCHOOL ENROLMENT OF BOYS, 1961

Purpose

The map shows the variation in the proportion of primary school going male children in the age-group 5-14 to the total male children of age-group 5-14 in the districts of the State in 1961.

Method

As explained in the case of map 136, the number of full-time male students in the age-group 0-14 available in the General Economic Table B-IX is taken as the total number of male children in the age-group 5-14 in primary schools.

The percentages of male children of age-group 5-14 in primary schools to the total male children of age-group 5-14 by districts are grouped into four and the districts are shaded according to this grouping.

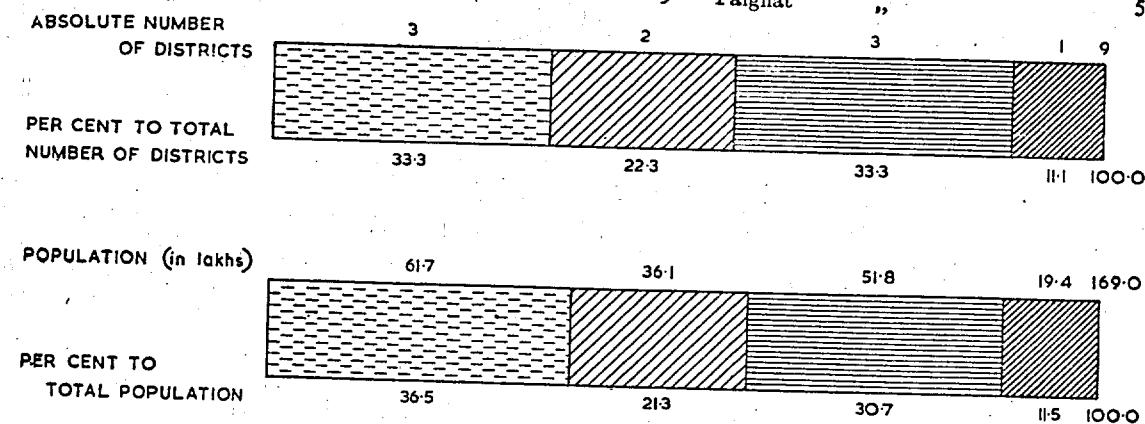
Salient Features

In the State 66.3 per cent of the total male children in the age-group 5-14 attend primary schools. Quilon district has the highest proportion with 75.4 per cent and Palghat district the lowest with 55.5 per cent.

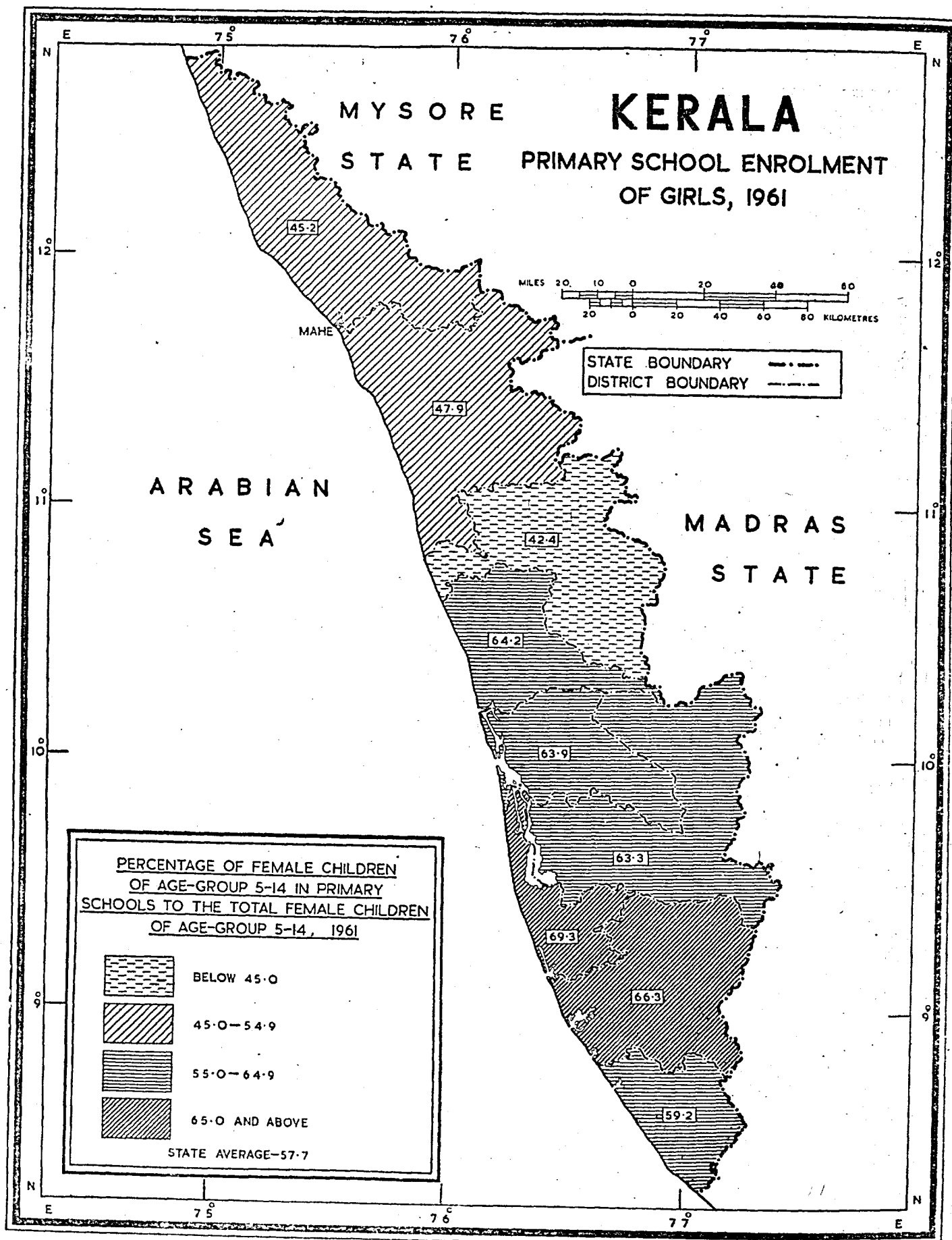
Table

PROPORTION OF MALE CHILDREN OF AGE-GROUP 5-14 AT THE LEVEL OF PRIMARY EDUCATION TO THE TOTAL MALE CHILDREN OF AGE-GROUP 5-14 IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Percentage of male children of age-group 5-14 in primary schools to the total male children of age-group 5-14
1	Kerala State	66.3
2	Quilon District	75.4
3	Alleppey "	74.6
4	Kottayam "	70.4
5	Trichur "	70.2
6	Ernakulam "	69.6
7	Trivandrum "	67.0
8	Kozhikode "	58.6
9	Cannanore "	57.3
10	Palghat "	55.5



Source: Census of India, 1961, Kerala—Part II B (ii) General Economic Tables, and Part II C Cultural and Migration Tables



PRIMARY SCHOOL ENROLMENT OF GIRLS, 1961

Purpose.

The map shows the variation in the proportion of female children in the age-group 5-14 going to primary schools to the total female children in the age-group 5-14 in the districts of the State in 1961.

Method

As in the case of map 136 the number of full-time female students in the age-group 0-14 available in table B-IX is taken as the total number of female children in the age-group 5-14 in primary schools.

The percentages of female children of age-group 5-14 in primary schools to the total female children of age-group 5-14 by districts are grouped into four and the districts are shaded accordingly.

Salient Features

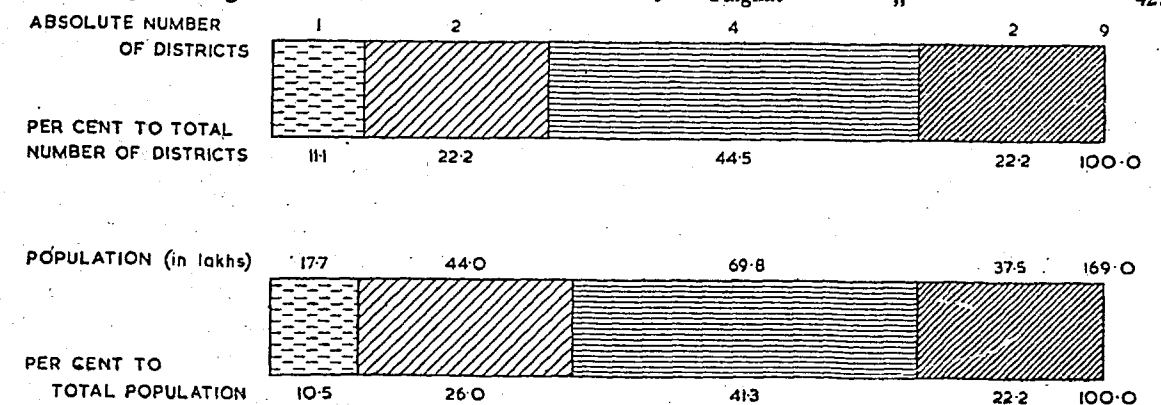
57.7 per cent of the total female children in the age-group 5-14 of Kerala are primary school going. The percentage is above that of the State in all the six southern districts. Alleppey district has the highest percentage of female children in

the age-group 5-14 going to primary schools coming to 69.3 and Palghat district the lowest with 42.4.

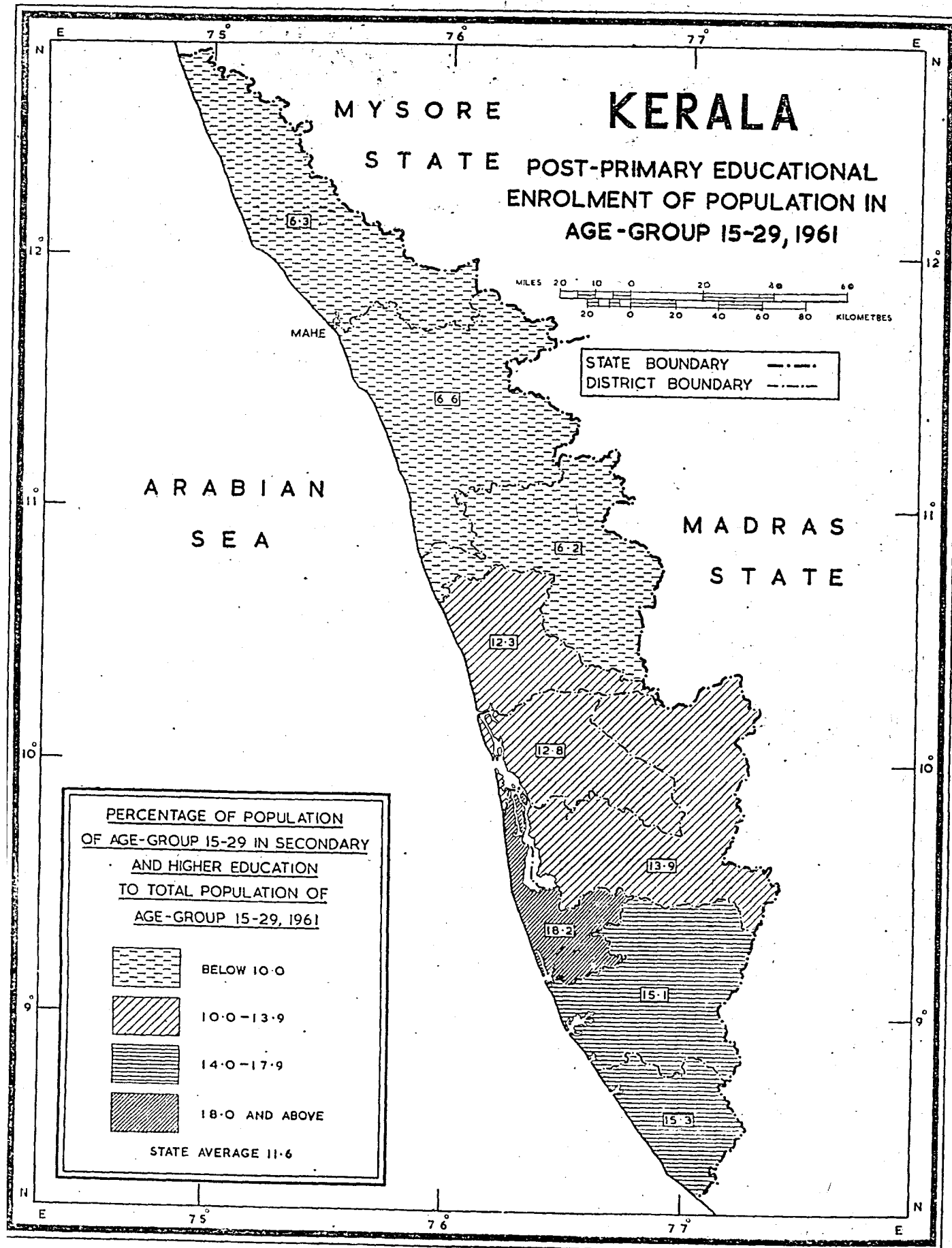
Table

PROPORTION OF FEMALE CHILDREN OF AGE-GROUP 5-14 AT THE LEVEL OF PRIMARY EDUCATION TO THE TOTAL FEMALE CHILDREN IN THE AGE-GROUP 5-14 IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Percentage of female children of age-group 5-14 in primary schools to the total female children of age-group 5-14
1	Kerala State	57.7
1	Alleppey District	69.3
2	Quilon	66.3
3	Trichur	64.2
4	Ernakulam	63.9
5	Kottayam	63.3
6	Trivandrum	59.2
7	Kozhikode	47.9
8	Cannanore	45.2
9	Palghat	42.4



Source: Census of India, 1961, Kerala—Part II B (ii) General Economic Tables, and Part II C Cultural and Migration Tables



POST-PRIMARY EDUCATIONAL ENROLMENT OF POPULATION IN AGE-GROUP 15-29, 1961

Purpose

The map shows the variation in the percentage of population in age-group 15-29 at the post-primary, i. e. at the level of secondary and higher education to total population of age-group 15-29 in the districts of the State in 1961.

Method

Table B-IX gives information on the number of full-time students in the age-group 15-34. Considering that there will hardly be any student at the level of secondary or higher education above 29 years of age, the number of full-time students in the age-group 15-34 according to the above table is taken as the number of persons in the age-group 15-29 at the post-primary level of education.

The percentages of population of age-group 15-29 in post-primary education to the total population in the age-group 15-29 by districts are grouped into four and the districts are shaded according to this grouping by different grades of hatches from deep to light corresponding to high to low value.

Salient Features

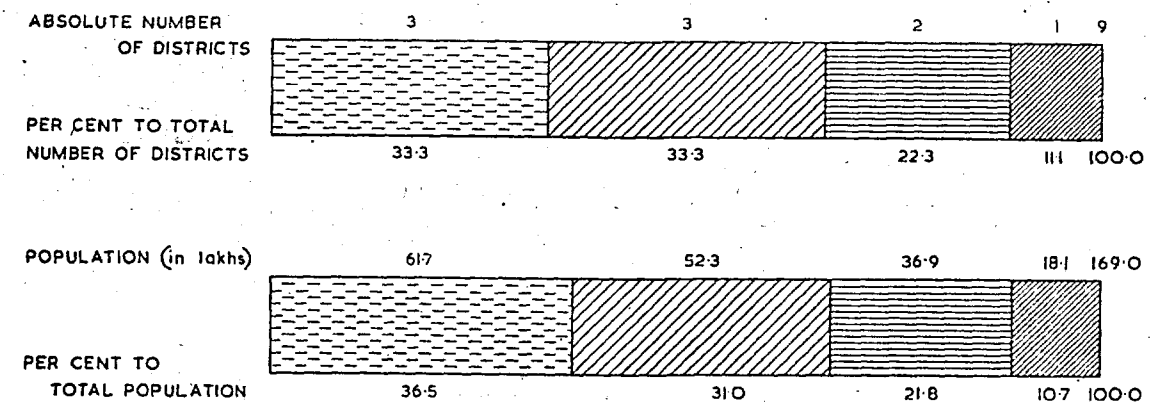
The percentage of population in the age-group 15-29 at the level of secondary and higher education in the State is 11.6. In all districts except

Cannanore, Kozhikode and Palghat the percentage is higher than that of the State. Alleppey district has the highest proportion of population of age-group 15-29 in the level of secondary and higher education coming to 18.2 per cent and Palghat district the lowest with 6.2 per cent.

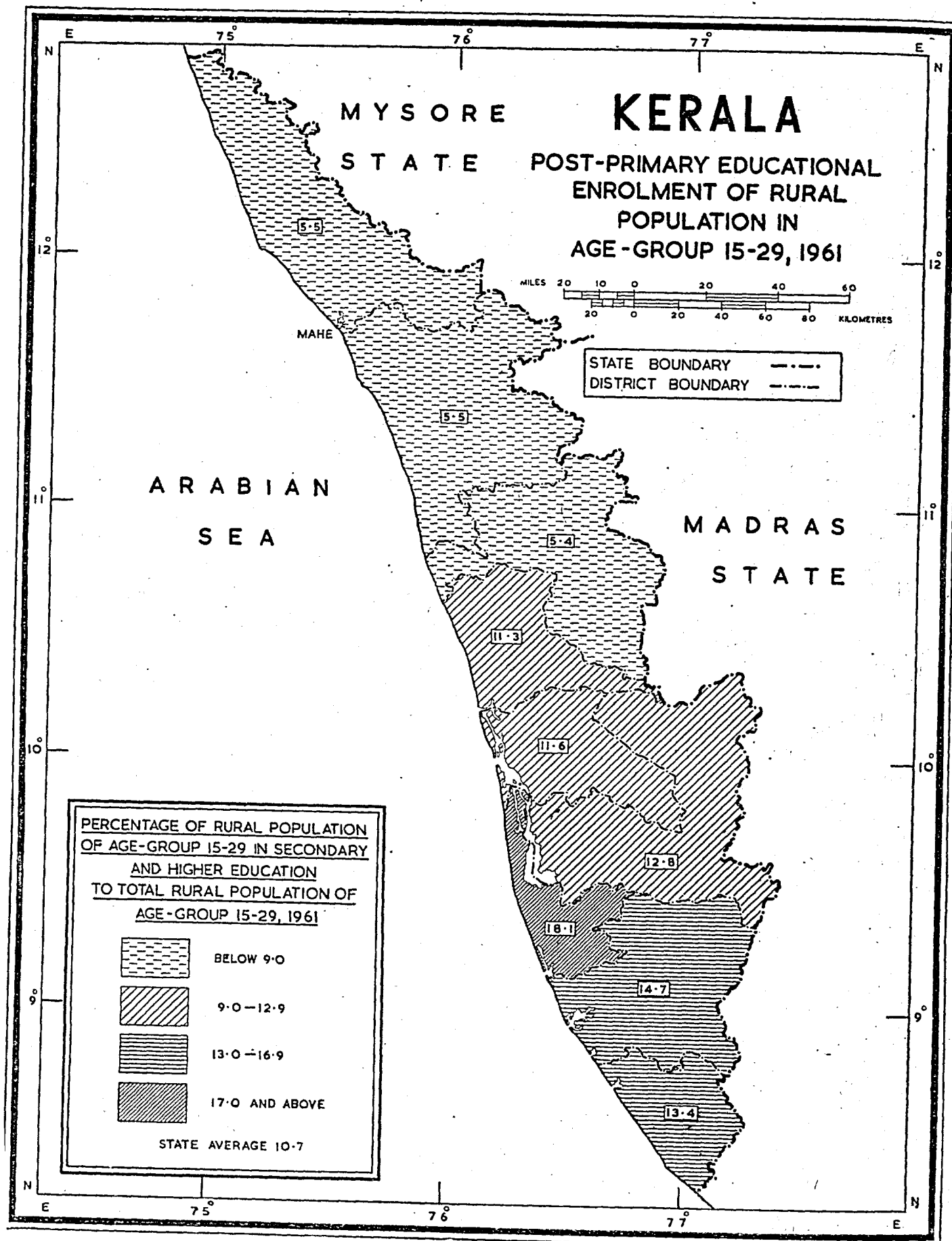
Table

PROPORTION OF POPULATION IN THE AGE-GROUP 15-29 AT THE LEVEL OF SECONDARY AND HIGHER EDUCATION TO THE TOTAL POPULATION OF AGE-GROUP 15-29 IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Percentage of population of age-group 15-29 at the level of secondary and higher education to the total population in the age-group 15-29
1	Kerala State	11.6
1	Alleppey District	18.2
2	Trivandrum "	15.3
3	Quilon "	15.1
4	Kottayam "	13.9
5	Ernakulam "	12.8
6	Trichur "	12.3
7	Kozhikode "	6.6
8	Cannanore "	6.3
9	Palghat "	6.2



Source: Census of India, 1961, Kerala—Part II B (ii) General Economic Tables, and Part II C Cultural and Migration Tables



POST PRIMARY EDUCATIONAL ENROLMENT OF RURAL POPULATION IN AGE-GROUP 15-29, 1961

Purpose

The map shows the variation in the proportion of rural population in age-group 15-29 at the post-primary level of education to the total rural population in the age-group 15-29 in the districts of the State in 1961.

Method

The number of full-time students in the age-group 15-34 among the rural population available from the General Economic Table B-IX is taken as the number of persons in the age-group 15-29 among rural population in post-primary, i.e. at the level of secondary and higher education for the purpose of this map.

The percentages of rural population in age-group 15-29 at the level of post-primary education to the total rural population in the age-group 15-29 by districts are grouped into four and the districts are shaded according to this grouping by different grades of hatches.

Salient Features

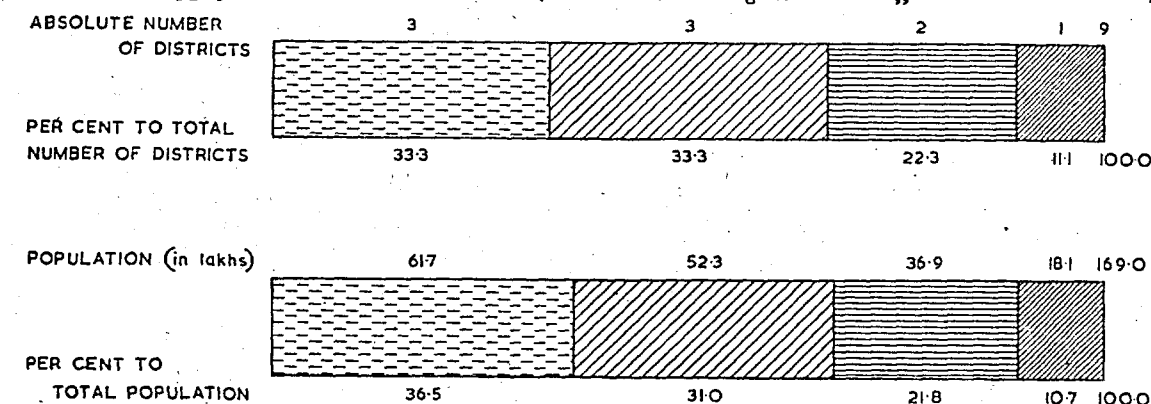
In Kerala 10.7 per cent of the total rural population in the age-group 15-29 are students at the level of secondary or higher education. As in the case of total population this percentage is highest (18.1) in Alleppey district. In Cannanore,

Kozhikode and Palghat districts the percentage is far below the State average. Palghat district has the lowest percentage (5.4) of the total rural population in the age-group 15-29 at the post-primary level of education.

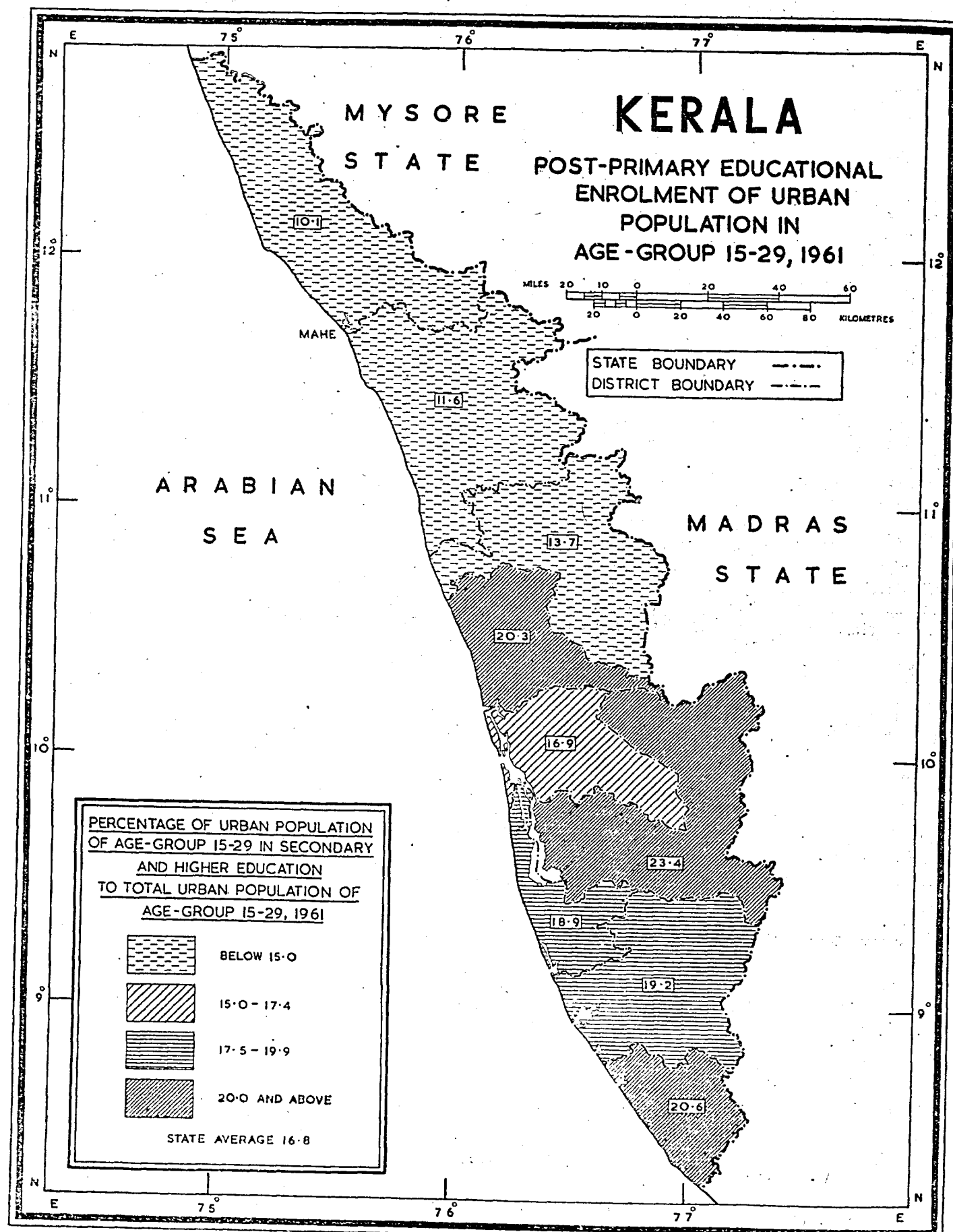
Table

PROPORTION OF RURAL POPULATION IN THE AGE-GROUP 15-29 AT THE LEVEL OF SECONDARY AND HIGHER EDUCATION TO THE TOTAL RURAL POPULATION IN THE AGE-GROUP 15-29 IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Percentage of rural population in the age-group 15-29 at the level of secondary and higher education to the total rural population in the age-group 15-29
1	Kerala State	10.7
1	Alleppey District	18.1
2	Quilon "	14.7
3	Trivandrum "	13.4
4	Kottayam "	12.8
5	Ernakulam "	11.6
6	Trichur "	11.3
7	Cannanore "	5.5
8	Kozhikode "	5.5
9	Palghat "	5.4



Source: Census of India, 1961, Kerala—Part II B (ii) General Economic Tables, and Part II C Cultural and Migration Tables



POST-PRIMARY EDUCATIONAL ENROLMENT OF URBAN POPULATION IN AGE-GROUP 15-29, 1961

Purpose

The map shows the variation in the proportion of urban population in age-group 15-29 to the total urban population in the age-group 15-29 at the post-primary level of education in the districts of the State in 1961.

Method

As in the case of map 140 the number of full-time students in the age-group 15-34 among the urban population available from Table B-IX is taken as the number of persons in the age-group 15-29 among urban population in the post-primary level of education.

The percentages of urban population in age-group 15-29 at the post-primary level of education to the total urban population in the same age-group by districts are grouped into four and the districts are shaded according to this grouping by different grades of hatches.

Salient Features

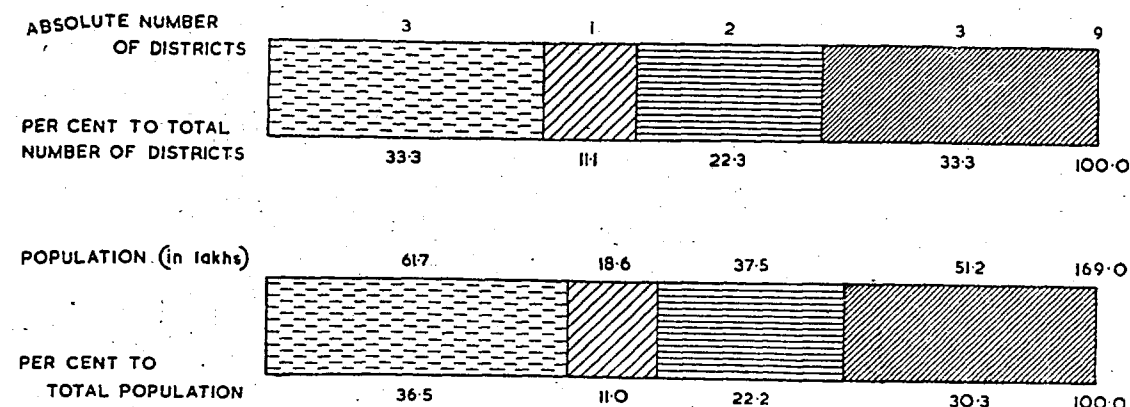
16.8 per cent of the total urban population of Kerala in the age-group 15-29 are students at the level of secondary or higher education. This proportion is greater than the corresponding proportion among the rural population in the State. The highest percentage of urban population of age-group 15-29 at the level of secondary and higher education is in Kottayam district. In

Trichur and Trivandrum districts also the percentage is comparatively high falling in the range 20.0 and above. Only in Cannanore, Kozhikode and Palghat districts the percentage is below that of the State. Cannanore district has the lowest percentage coming to 10.1.

Table

PROPORTION OF URBAN POPULATION IN THE AGE-GROUP 15-29 AT THE LEVEL OF SECONDARY AND HIGHER EDUCATION TO THE TOTAL URBAN POPULATION IN THE AGE-GROUP 15-29 IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Percentage of urban population in the age-group 15-29 at the level of secondary and higher education to the total urban population in the age-group 15-29
1	Kerala State	16.8
2	Kottayam District	23.4
3	Trivandrum	20.6
4	Trichur	20.3
5	Quilon	19.2
6	Alleppey	18.9
7	Ernakulam	16.9
8	Palghat	13.7
9	Kozhikode	11.6
10	Cannanore	10.1



Source: Census of India, 1961, Kerala—Part II B (ii) General Economic Tables, and Part II C Cultural and Migration Tables

POST-PRIMARY EDUCATIONAL ENROLMENT OF MALE POPULATION IN AGE-GROUP 15-29, 1961

Purpose

The variation in the proportion of male population in age-group 15-29 at the post-primary level of education to the total male population in the age-group 15-29 in the districts of the State in 1961 is shown in the map.

Method

The number of full-time male students in the age-group 15-34 available from the General Economic Table B-IX is taken as the number of males in age-group 15-29 at the level of post-primary education.

The percentages of males in the age-group 15-29 at the level of post-primary education to the total males in the age-group 15-29 by districts are grouped into four and the districts are shaded by different shades of hatches according to this grouping.

Salient Features

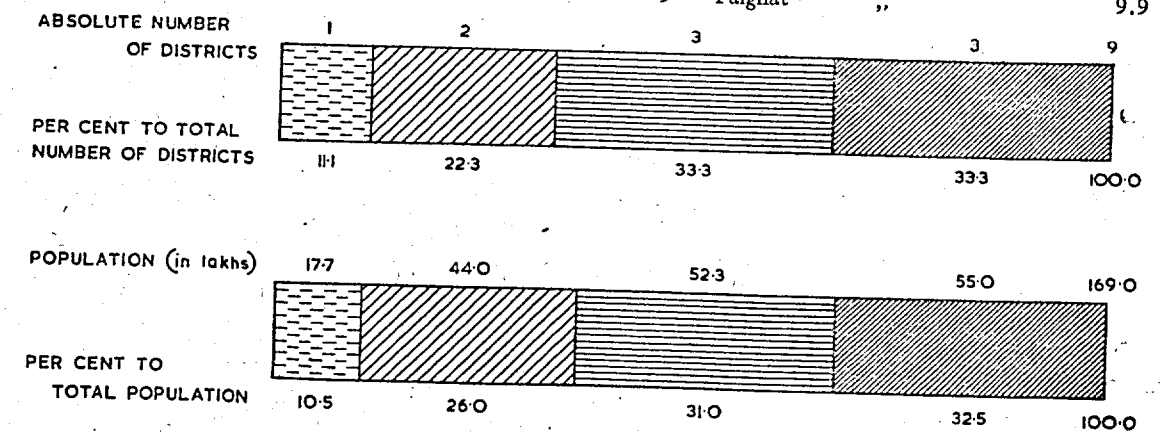
Among the males of age-group 15-29 in the State, 15.9 per cent study at the post-primary level of education. Only the three northern districts viz., Cannanore, Kozhikode and Palghat have the percentage below that of the State. The highest percentage of males in the age-group 15-29 at post-primary level of education

is in Alleppey district with 23.6 and the lowest in Palghat district with only 9.9.

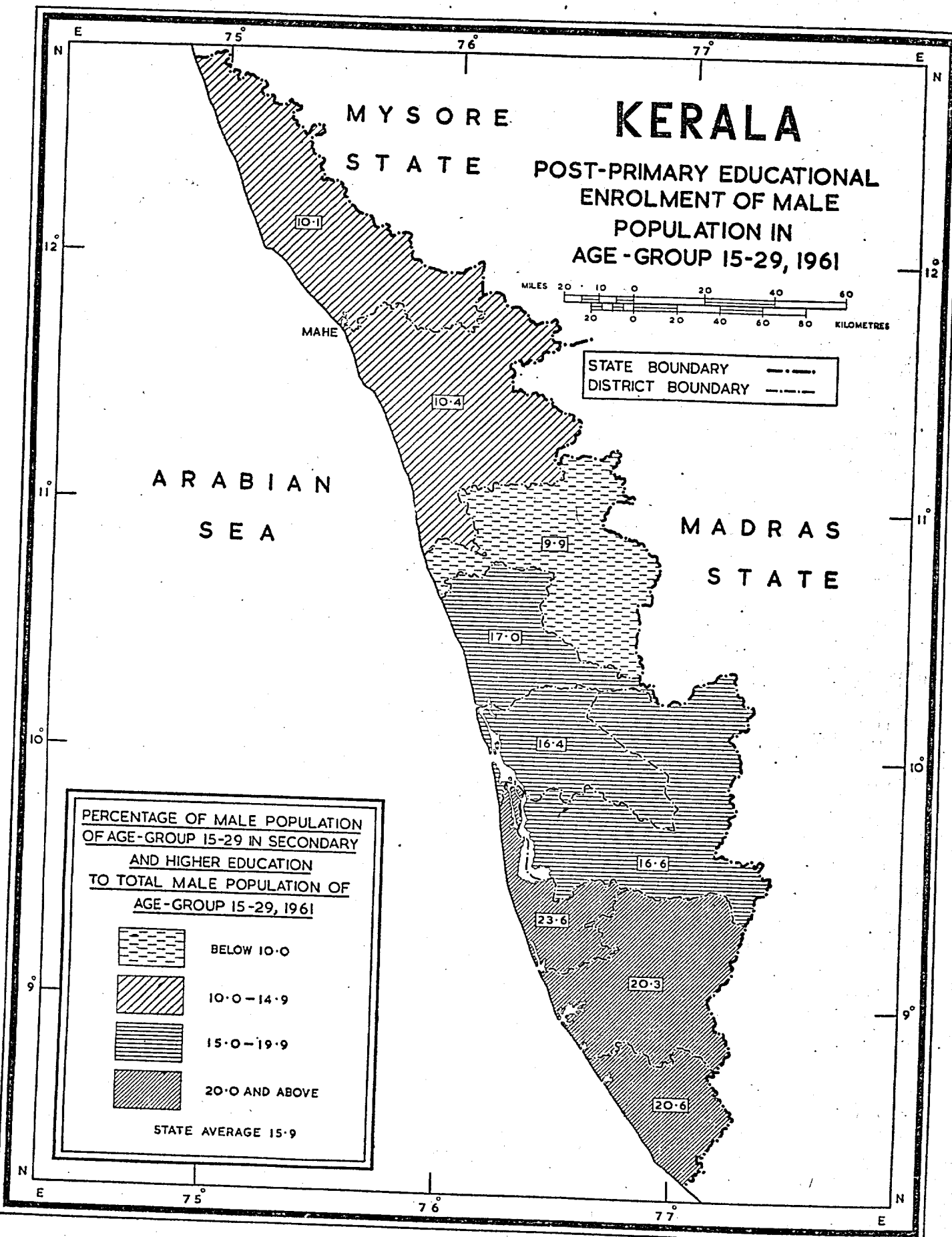
Table

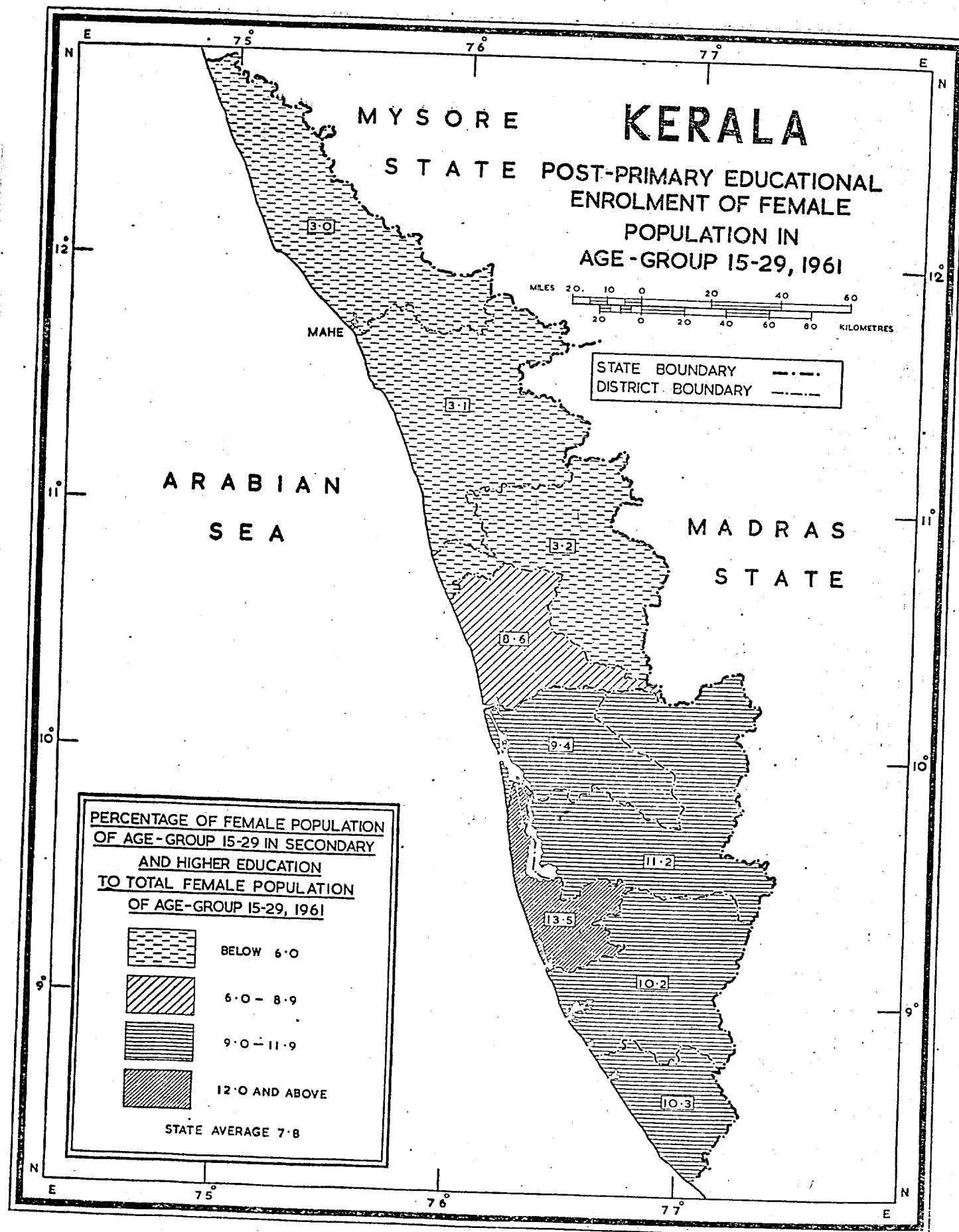
PROPORTION OF MALE POPULATION IN THE AGE-GROUP 15-29 AT THE LEVEL OF SECONDARY AND HIGHER EDUCATION TO THE TOTAL MALE POPULATION IN THE AGE-GROUP 15-29 IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Percentage of males in the age-group 15-29 at the level of secondary and higher education to the total male population in the age-group 15-29
1	Kerala State	15.9
2	Alleppey District	23.6
3	Trivandrum "	20.6
4	Quilon "	20.3
5	Trichur "	17.0
6	Kottayam "	16.6
7	Ernakulam "	16.4
8	Kozhikode "	10.4
9	Cannanore "	10.1
	Palghat "	9.9



Source: Census of India, 1961, Kerala—Part II B (ii) General Economic Tables, and Part II C Cultural and Migration Tables





MAP 143

POST-PRIMARY EDUCATIONAL ENROLMENT OF FEMALE POPULATION IN AGE-GROUP 15-29, 1961

Purpose

The variation in the proportion of female population in age-group 15-29 at the post-primary level of education to the total female population in the age-group 15-29 in the districts of the State in 1961 is shown in the map.

Method

The number of full-time female students in the age-group 15-34 available from the General Economic Table B-IX is taken as the number of females in age-group 15-29 at the level of post-primary education.

The percentages of females in the age-group 15-29 at post-primary level of education to the total females in the age-group 15-29 by districts are grouped into four and the districts are shaded according to this grouping by four different grades of hatches.

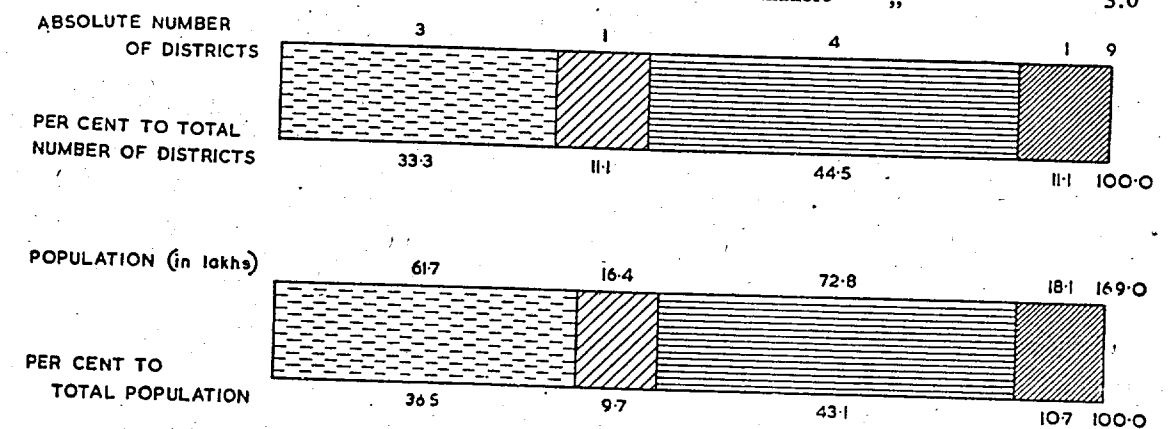
Salient Features

The percentage of females in the age-group 15-29 at post-primary level of education is lower than that of males in the State as well as in all districts. Of the total females in the age-group 15-29 in the State, only 8 per cent are students in post-primary education. Among the districts, Alleppey district has the highest percentage with 13.5 in this respect and Cannanore district the lowest with but 3.0.

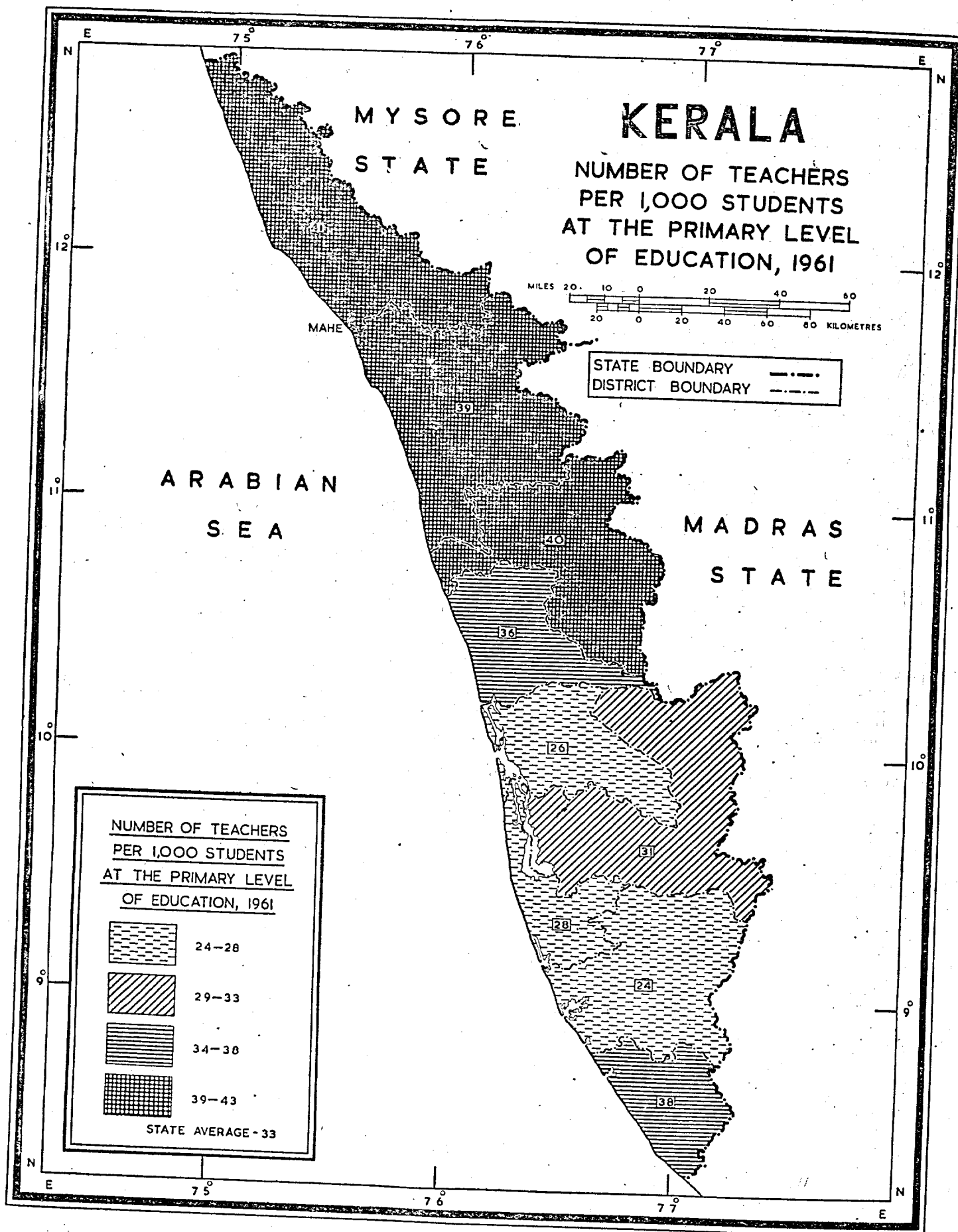
Table

PROPORTION OF FEMALE POPULATION IN THE AGE-GROUP 15-29 AT THE LEVEL OF SECONDARY AND HIGHER EDUCATION TO THE TOTAL FEMALE POPULATION IN THE AGE-GROUP 15-29 IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Percentage of females in the age-group 15-29 at the level of Secondary and higher education to the total female population in the age-group 15-29
1	Kerala State	7.8
1	Alleppey District	13.5
2	Kottayam "	11.2
3	Trivandrum "	10.3
4	Quilon "	10.2
5	Ernakulam "	9.4
6	Trichur "	8.6
7	Palghat "	3.2
8	Kozhikode "	3.1
9	Cannanore "	3.0



Source: Census of India, 1961, Kerala—Part II B (ii) General Economic Tables, and Part II C Cultural and Migration Tables



NUMBER OF TEACHERS PER 1,000 STUDENTS AT THE PRIMARY LEVEL OF EDUCATION, 1961

Purpose

This map shows the variation in the teacher-student ratio at the primary level of education in the districts of the State in the academic year 1960-61.

Method

The number of teachers per 1,000 students at the level of primary education in the different districts is grouped into four and the districts are shaded by different grades of hatches according to this grouping.

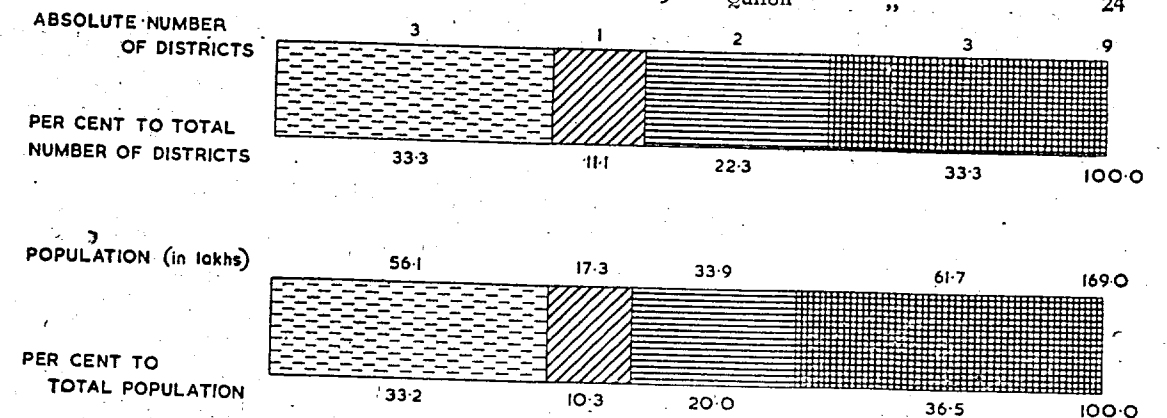
Salient Features

For every 1,000 students at the primary level of education there are 33 teachers in Kerala. In four districts of the State viz., Ernakulam, Kottayam, Alleppey and Quilon lying contiguously the number of teachers per 1,000 students is lower than that of the State while in the remaining five districts it is higher than the state figure. Cannanore district has the highest number of teachers per 1,000 students at the level of primary education viz., 41 and Quilon district the lowest viz., 24 teachers per 1,000 students.

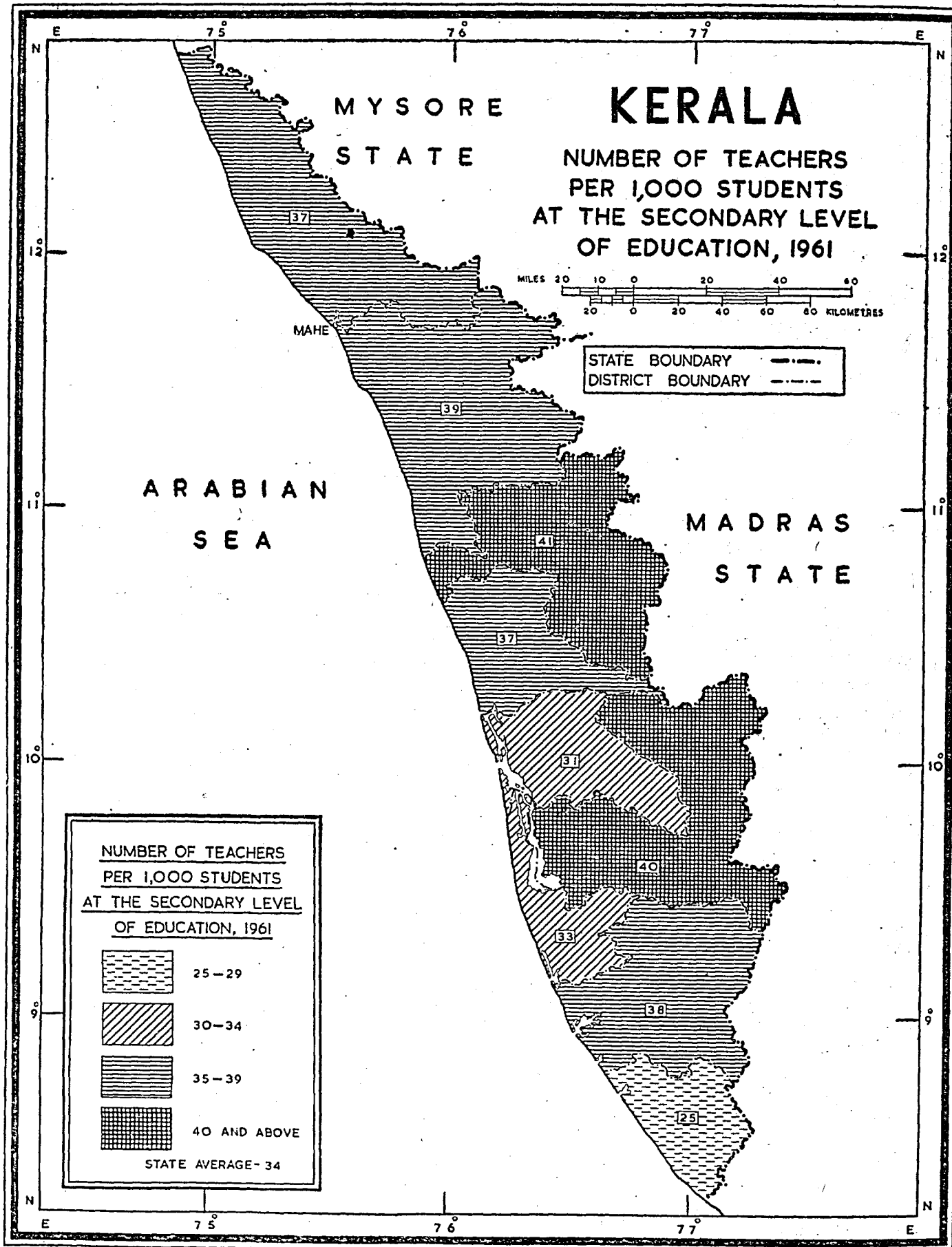
Table

NUMBER OF TEACHERS PER 1,000 STUDENTS AT THE PRIMARY LEVEL OF EDUCATION IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Number of teachers per 1,000 students at the primary level of education
1	Kerala State	33
2	Cannanore District	41
3	Palghat	40
4	Kozhikode	39
5	Trivandrum	38
6	Trichur	36
7	Kottayam	31
8	Alleppey	28
9	Ernakulam	26
10	Quilon	24



Source: Department of Public Instruction, Kerala



**NUMBER OF TEACHERS PER 1,000 STUDENTS AT THE SECONDARY LEVEL OF
EDUCATION, 1961**

Purpose

The variation in the teacher-student ratio at the secondary level of education in the districts of the State in the academic year 1960-61 is shown in this map.

Method

The proportions of teachers per 1,000 students at the secondary level of education by districts are grouped into four and the districts are shaded according to this grouping by different grades of hatches.

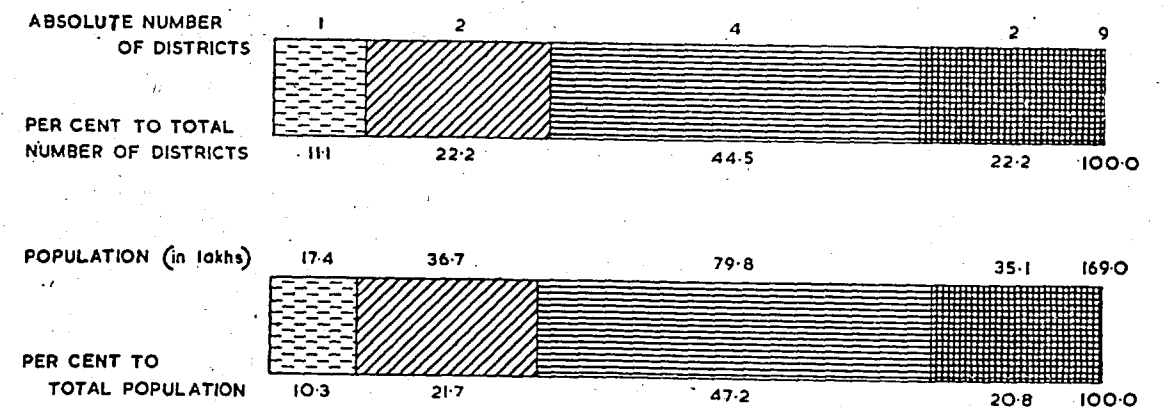
Sallent Features

In Kerala there are 34 teachers for every 1,000 students at the secondary level of education. The proportion of teachers is slightly higher in the secondary level of education than in the primary level. Palghat district has the highest number coming to 41 teachers per 1,000 students at the secondary level and Trivandrum district the lowest with 25 teachers per 1,000 students.

Table

NUMBER OF TEACHERS PER 1,000 STUDENTS AT THE
SECONDARY LEVEL OF EDUCATION IN THE STATE
AND DISTRICTS, 1961

Rank	State/District	Number of teachers per 1,000 students at the secondary level of education
1	2	3
	Kerala State	34
1	Palghat District	41
2	Kottayam "	40
3	Kozhikode "	39
4	Quilon "	38
5	Cannanore "	37
6	Trichur "	37
7	Alleppey "	33
8	Ernakulam "	31
9	Trivandrum "	25



Source: Department of Public Instructions, Kerala

NUMBER OF TEACHERS PER 1,000 STUDENTS AT THE UNIVERSITY LEVEL OF EDUCATION, 1961

Purpose

The variation in the teacher-student ratio at the University level of education in the districts of the State in the academic year 1960-61 is shown in the map.

Method

The proportions of teachers per 1,000 students at the University level of education in the districts are grouped into four and the districts are shaded accordingly by four different grades of hatches.

Salient Features

The teacher-student ratio at the University level of education in the State is 62 teachers per 1,000 students. This ratio is much higher than the ratio at primary or secondary level of education. Among the districts the number of teachers per 1,000 students is highest in Palghat with 79 teachers per 1,000 students and lowest in Kottayam with only 51 teachers per 1,000 students.

Table

NUMBER OF TEACHERS PER 1,000 STUDENTS AT THE UNIVERSITY LEVEL OF EDUCATION IN THE STATE AND DISTRICTS, 1961

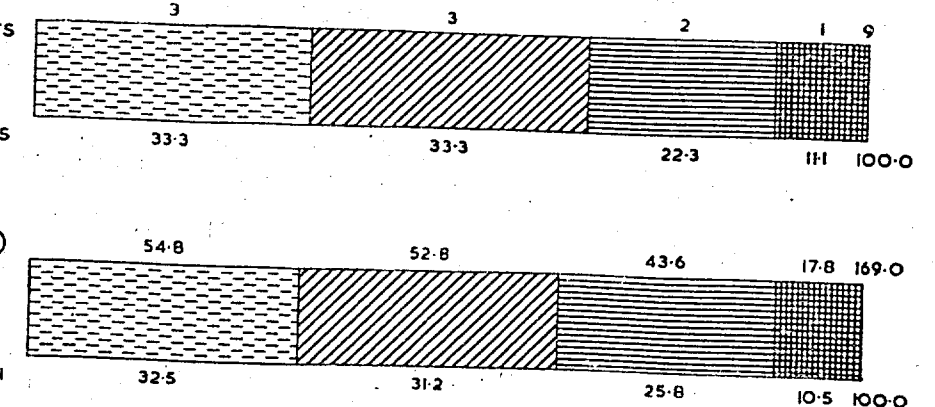
Rank	State/District	Number of teachers per 1,000 students at the university level of education
1	Kerala State	62
2	Palghat District	79
3	Trivandrum "	73
4	Kozhikode "	71
5	Cannanore "	60
6	Ernakulam "	60
7	Trichur "	59
8	Alleppey "	55
9	Quilon "	53
9	Kottayam "	51

ABSOLUTE NUMBER OF DISTRICTS

PER CENT TO TOTAL NUMBER OF DISTRICTS

POPULATION (in lakhs)

PER CENT TO TOTAL POPULATION



Source: University of Kerala

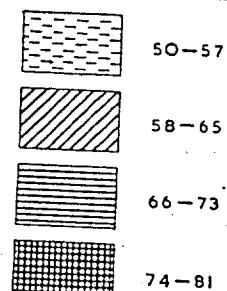
KERALA

NUMBER OF TEACHERS PER 1,000 STUDENTS AT THE UNIVERSITY LEVEL OF EDUCATION, 1961

MILES 20 10 0 20 40 60
KILOMETRES 20 0 20 40 60

STATE BOUNDARY ———
DISTRICT BOUNDARY - - - -

NUMBER OF TEACHERS PER 1,000 STUDENTS AT THE UNIVERSITY LEVEL OF EDUCATION, 1961

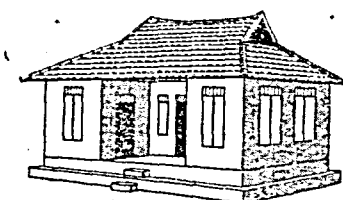


STATE AVERAGE - 62

KERALA HOUSE TYPES



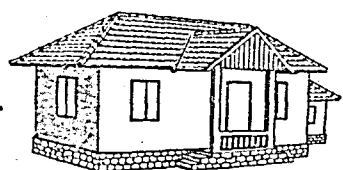
MODERN HIGH CLASS HOUSE



MIDDLE CLASS HOUSE
WITH VERANDAH IN FRONT



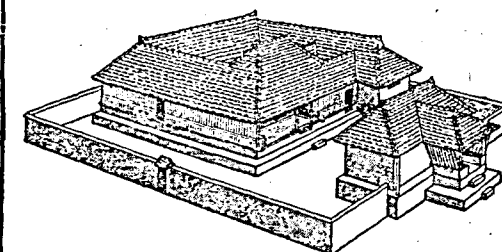
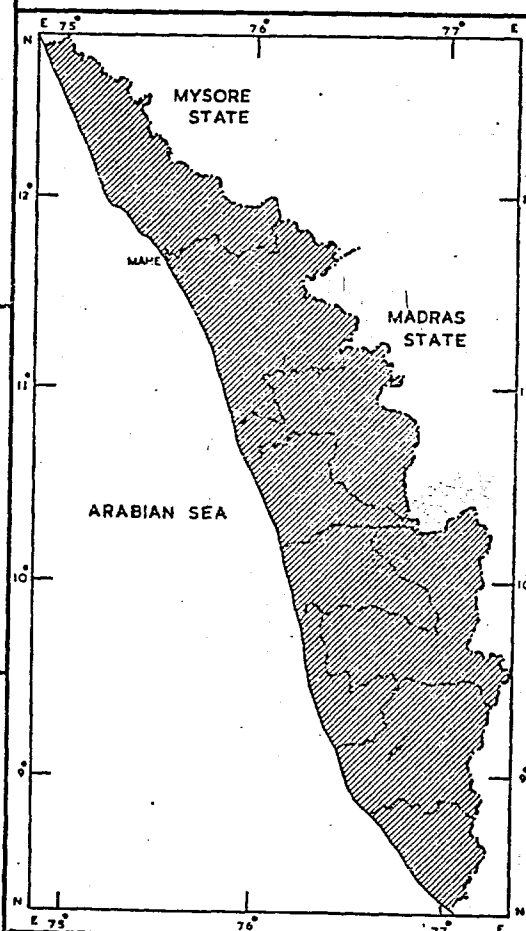
MIDDLE CLASS HOUSE
WITH PORTICO IN FRONT



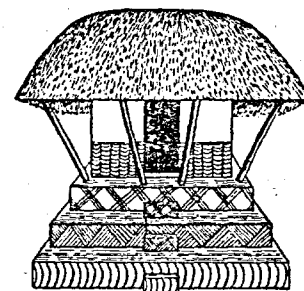
BUILT UNDER THE GOVERNMENT
HOUSE CONSTRUCTION SCHEME



HUT OF CADJAN LEAVES



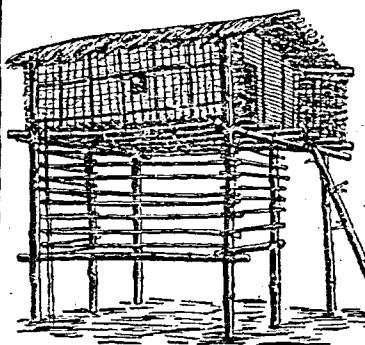
THE TRADITIONAL NALUKET



HUT OF A HILL TRIBE



TREE HOUSE IN FOREST AREAS



HUT ON STILTS IN FOREST AREAS



HUT WITH HAY ROOFING

urpose

The map shows some of the common types of houses among the high class, middle class and poor class and certain special types of houses of hill tribes and in the hilly areas.

ient Features

The different types of houses shown in the map generally found uniformly in all the areas of the State and no specific house type could be fixed to any particular area or district. The only exception to this is some of the special types of houses of hill tribes and in certain hilly areas.

The houses of the State can be broadly classified into five types, viz., *nalukettu*, high class house, middle class house, poor class house and special types of houses of hill tribes.

(a) *Nalukettu*

This is the ancient type of high class house, typical of Kerala, surviving through the centuries. An inner courtyard surrounded by four wings of the house is typical of a *nalukettu*. Sometimes, instead of one inner courtyard there will be two inner courtyards, each surrounded by four wings. This is called 'Ettukettu' or an extended *nalukettu*. The wall is of wood or laterite and the roof thatched with cadjan or tile. There will be a number of appurtenances. An outer house at the entrance to the compound of the building is a peculiarity of these types of houses. There will be outhouses for worship, rice pounding, etc., and shed within the compound. Nowadays, however, houses are not constructed on the *nalukettu* model.

(b) *Modern High Class House*

This type consists of a drawing room, followed by living-room, bedrooms with attached bathrooms, kitchen and storeroom. Majority of these houses are built on a plot of land and in several cases they have two or more plots. The roof may be of reinforced concrete or tile.

The walls are usually plastered with lime or cement and whitewashed and the floor done in cement or mosaic.

(c) *Middle Class House*

This usually has a rectangular ground plan with a plinth area varying from 300 to 800 sq. ft. The walls may be of laterite stone or unburnt bricks often plastered and whitewashed. The floor is coated with cow-dung mixed with charcoal in the majority of cases. There will be verandah, sitting-room, dining-room, bedroom and kitchen. The roof may be tiled or thatched with cadjan leaves. In certain cases the ends of the superior ridgepole of the roof are slightly turned upwards.

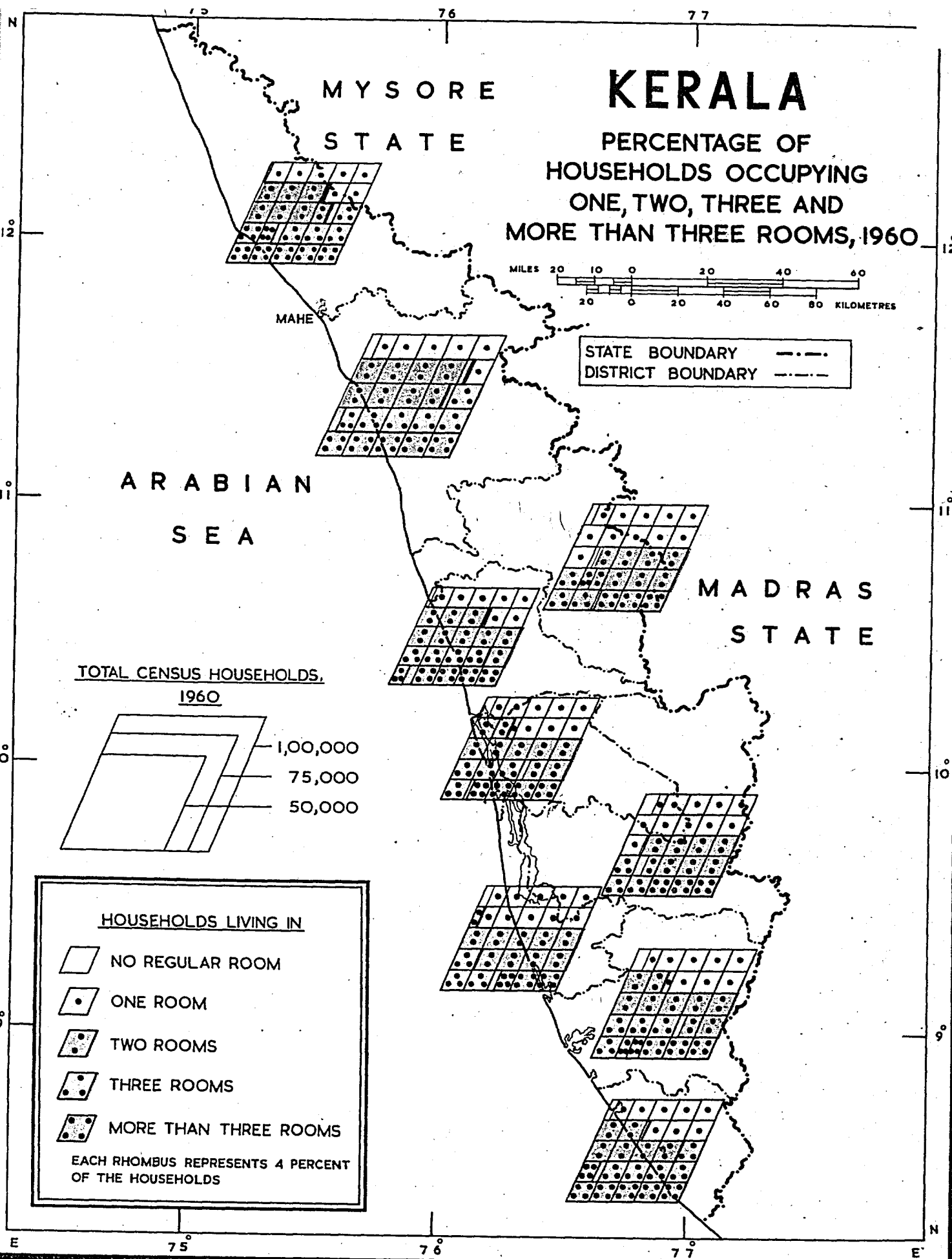
(d) *Poor Class House*

The worst of the poor class house is cadjan leaf-roofed and cadjan leaf-walled which is found in almost all parts of Kerala. In some cases the walls may be of unburnt bricks, clay or mud and the roof thatched with palm leaves or hay. There may not be any separation into rooms. In certain houses there may be a verandah.

(e) *Houses of Hill Tribes*

The hut shown at the top on the right side of the map is that of Kurumans, a hill tribe. The house is constructed on a rectangular earthen basement of two or three steps with a total height of 3 to 5 ft. The walls are of clay or unburnt bricks and the roof thatched with straw. The low roof is supported by slanting pillars. The tree house and hut on stilts shown in the map are the dwellings of Uralis, a hill tribe in the forest areas. The tree houses are built at a considerable height on bamboo or tree tops to get protection from the attacks of elephants or other wild animals. Bamboo beaten into flat mat-like pieces form a convenient material for the wall. The floor may also be of bamboo and roof thatched with leaves. The entire structure is very light.

Source: Census of India, 1961, Kerala—Part IV A and B Report and Tables on Housing and Establishments



MAP 148

PERCENTAGE OF HOUSEHOLDS OCCUPYING ONE, TWO, THREE AND MORE THAN THREE ROOMS, 1960

Purpose

The map shows the distribution of Census households in the districts of the State by number of rooms occupied.

Method

In each district a rhombus is drawn proportionate to the total number of Census households in the district. The rhombus is divided into 25 equal parts each representing 4 per cent of the households. The percentages of households occupying no regular room, one room, two rooms, three rooms and more than three rooms are indicated by different colours. The data are based on a 20% sample of households and relate to the period March-June, 1960 and are gathered from the houselists prepared for the 1961 Census.

Salient Features

A 'Census household' means an entire group of persons who commonly live together in the same Census house and take their meals from a common mess unless exigencies of work prevent them from doing so. The highest percentage of households in Cannanore, Palghat, Kottayam and Trivandrum districts occupy one room and that in Kozhikode, Trichur, Ernakulam, Alleppey and Quilon districts occupy two rooms. The percentage of households having no regular room is highest in the case of Kottayam district (2.6%) and lowest in the case of Cannanore district (0.2%). Cannanore district has the highest percentage of households (26.6%) having more than three rooms

and Alleppey district has the lowest (10.6%). More than 53 per cent of the households in all the districts occupy either one room or two rooms. Alleppey district has the highest percentage of households (74.5%) occupying one or two rooms and Kozhikode district the lowest (53.5%). The following table gives the percentage distribution of households according to the number of rooms occupied.

Table

PERCENTAGE OF HOUSEHOLDS OCCUPYING ONE ROOM, TWO ROOMS, THREE ROOMS AND MORE THAN THREE ROOMS, 1960*

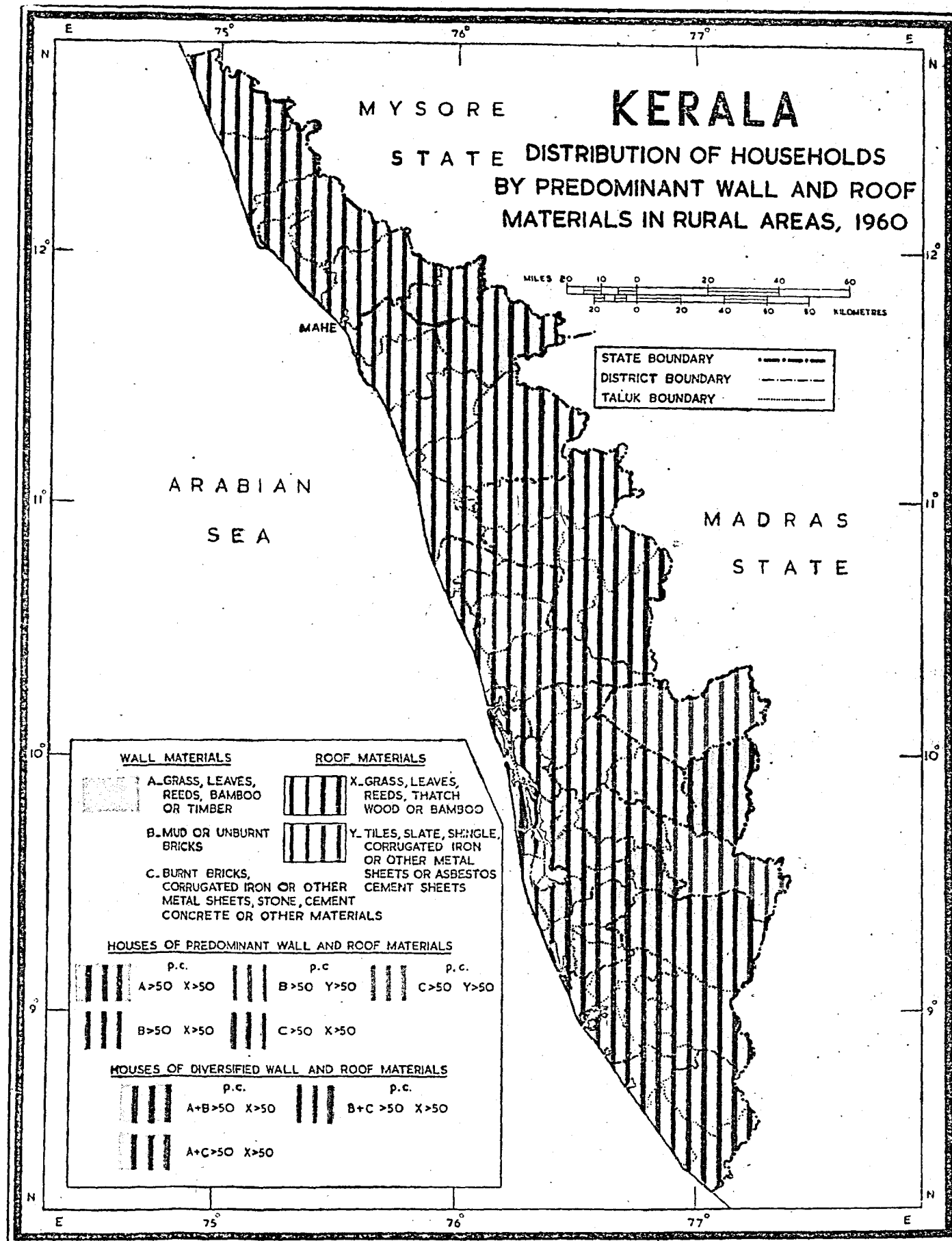
(Based on 20% sample)

Percentage of households occupying

State/District	No regular room	One room	Two rooms	Three rooms	More than three rooms
1	2	3	4	5	6
Kerala State	1.4	32.0	31.6	18.0	17.0
Cannanore District	0.2	27.7	26.3	19.2	26.6
Kozhikode "	1.5	21.7	31.8	23.7	21.3
Palghat "	1.3	43.5	29.4	14.2	11.6
Trichur "	0.7	26.7	36.9	18.0	17.7
Ernakulam "	1.8	31.5	33.7	17.6	15.4
Kottayam "	2.6	41.2	30.7	13.5	12.0
Alleppey "	1.4	37.2	37.3	13.5	10.6
Quilon "	1.9	31.3	33.6	19.0	14.2
Trivandrum "	1.2	30.3	24.5	21.3	22.7

*Based on the data collected at the time of houselisting (March-June, 1960)

Source: Census of India, 1961, Kerala—Part IV A and B Report and Tables on Housing and Establishments



DISTRIBUTION OF HOUSEHOLDS BY PREDOMINANT WALL AND ROOF MATERIALS IN RURAL AREAS, 1960

Purpose

The map shows the distribution of households living in Census houses used wholly or partly as dwellings according to predominant types of wall and roof materials for rural areas of the taluks of the State in 1960.

Method

The wall materials are grouped into 3 types represented by the symbols A, B and C, A for grass, leaves, reeds, bamboo or timber, B for mud or unburnt bricks and C for burnt bricks, corrugated iron or other metal sheets, stone, cement concrete or other materials. Similarly the roof materials also are grouped into 3 types represented by the symbols X, Y and Z, X for grass, leaves, reeds, thatch, wood or bamboo, Y for tiles, slate, shingle, corrugated iron or other metal sheets, or asbestos cement sheets and Z for brick, lime, concrete, stone or other materials. The wall material is presented in flat colours and the roof material by thin solid coloured bars. A taluk is classified as predominant in respect of a particular type of wall material or roof material, if 50% or more of the households in the taluk, live in census houses used wholly or partly as dwellings the walls and roofs of which are constructed mainly of that type of wall material or roof material respectively. In the case of taluks where none of the single types A, B or C of wall material or X, Y or Z of the roof material has 50% or more, two types with highest percentages are taken into account and the taluk classified as predominant in respect of a combination of the two types. The combined predominance of wall and roof materials in rural areas of taluks decided as above is presented in the map by a combination of flat colours for wall material and solid bars for roof material.

Salient Features

Single types of wall materials are predominant in

41 out of the 55 taluks. Type A viz., grass, leaves, reeds, bamboo or timber is the predominant type of wall material in the taluks of Udumbanchola and Kanjirappally of Kottayam district and Shertalai, Ambalapuzha, Kuttanad and Karthigapally of Alleppey district. The taluks of Kasaragod, Hosdrug, Taliparamba and Cannanore of Cannanore district, Tirur and Ernad of Kozhikode district, all the taluks of Palghat district, Talappilly and Trichur of Trichur district, Kunnathur, Quilon, Kottarakara and Pathanapuram of Quilon district and all the taluks of Trivandrum district have type B viz., mud or unburnt bricks as the predominant wall material, while Badagara, taluk of Kozhikode district, Cranganore and Mukundapuram taluks of Trichur district, all the 7 taluks of Ernakulam district and Devicolam, Vaikom and Peermade taluks of Kottayam district have type C viz., burnt bricks, corrugated iron or other metal sheets, stone, cement concrete or other materials as the predominant wall material. The remaining 14 taluks have a combination of two types as the predominant wall material, types A and B in the taluks of North Wynad in Cannanore District, South Wynad in Kozhikode district and Pathanamthitta and Karunagapally in Quilon district, types A and C in the taluks of Chowghat in Trichur district, Meenachil, Kottayam and Changanacherry in Kottayam district and Thiruvalla in Alleppey district and types B and C in the taluks of Tellicherry in Cannanore district, Quilandy and Kozhikode in Kozhikode district and Chengannur and Mavelikkara in Alleppey district.

As regards roof material in rural areas, 52 taluks have type X as the predominant roof material and only 3 taluks viz., Trichur, Devicolam and Peermade have type Y as the predominant roof material. Type Z is not predominant in any taluk.

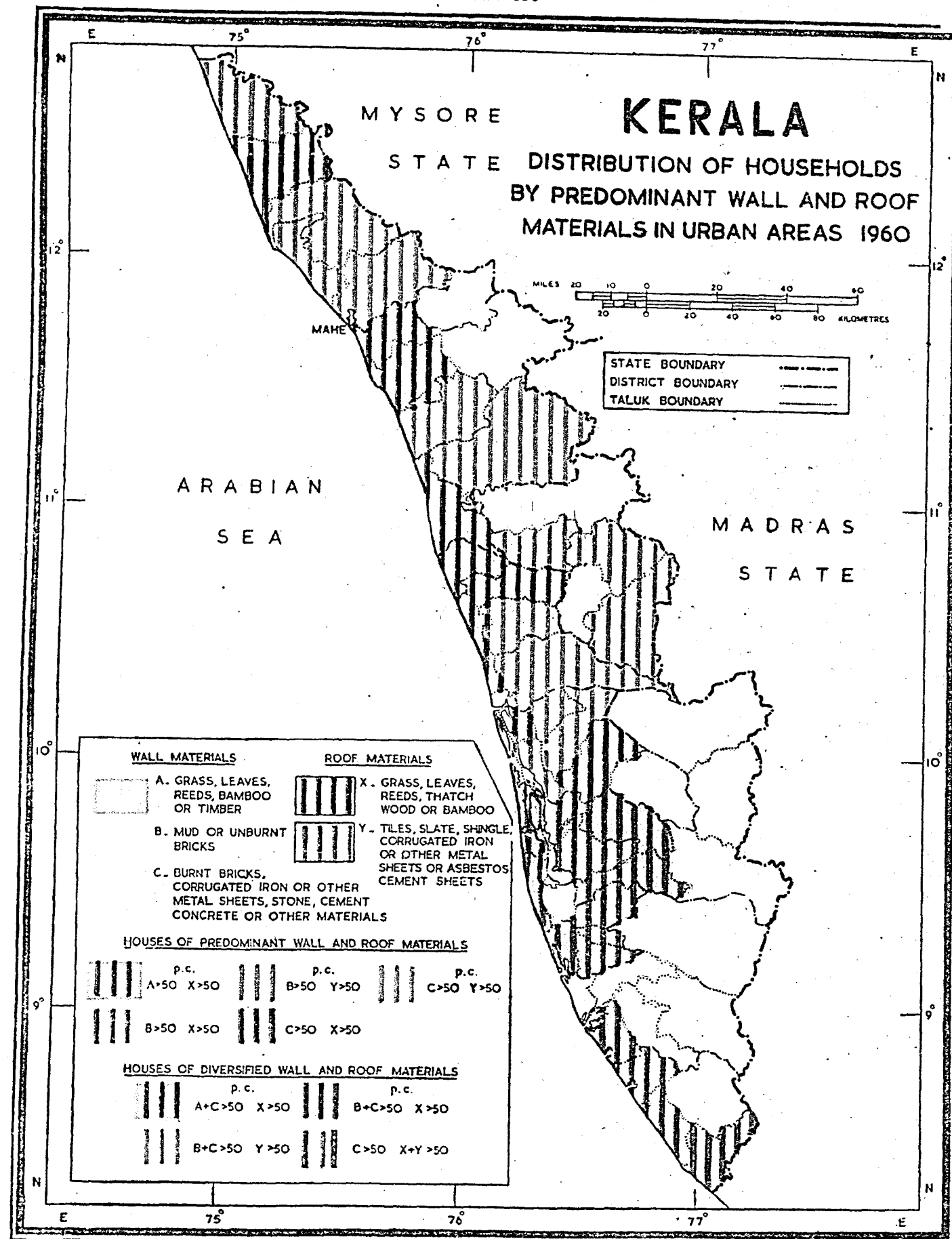
Table
PERCENTAGE DISTRIBUTION OF HOUSEHOLDS LIVING IN CENSUS HOUSES USED WHOLLY OR PARTLY AS DWELLINGS
BY PREDOMINANT WALL AND ROOF MATERIALS IN RURAL AREAS OF THE STATE AND TALUKS, 1960

Percentage of households living in census houses used wholly or partly as dwelling						
State/Taluk	Predominant material of wall			Predominant material of roof		
	Grass, leaves, reeds, bamboo or timber	Mud or unburnt bricks	Burnt bricks, C. I. or other metal sheets, stone, cement concrete or other materials	Grass, leaves, reeds, thatch, wood or bamboo	Tiles, slate, shingle, C. I. or other metal sheets, or asbestos cement sheets	Brick, lime, concrete, stone or other materials
	A	B	C	X	Y	Z
1	2	3	4	5	6	7
Kerala State	20.0	46.0	34.0	77.0	23.0	N
Kasaragod Taluk	4.5	86.9	8.6	81.1	18.9	N
Hosdrug "	17.3	64.5	18.2	70.3	29.7	...
Taliparamba "	11.7	62.4	25.9	57.2	42.7	0.1
Cannanore "	0.9	72.1	27.0	55.6	44.4	...
Tellicherry "	8.1	45.1	46.8	79.8	20.2	N
North Wynad "	36.5	48.7	14.8	78.9	21.0	0.1
Badagara "	10.8	31.8	57.4	92.1	7.9	N
Quilandy "	21.4	29.5	49.1	90.8	9.2	N
Kozhikode "	14.6	42.5	42.9	81.8	18.2	N
Tirur "	5.4	64.0	30.6	76.8	23.2	N
Ernad "	9.2	60.4	30.4	75.7	24.3	N
South Wynad "	48.2	31.7	20.1	73.6	26.4	N
Perinthalmanna "	10.4	62.6	27.0	76.3	23.7	N
Ponnani "	7.3	71.2	21.5	87.4	12.6	N
Ottapalam "	2.9	81.8	15.3	66.2	33.8	...
Palghat "	2.1	87.1	10.8	50.3	49.6	0.1
Alathur "	1.7	86.0	12.3	53.0	47.0	...
Chittur "	7.5	70.6	21.9	60.9	39.1	N
Talapilly "	2.3	77.0	20.7	65.3	34.7	N
Trichur "	3.5	59.2	37.3	45.1	54.8	0.1
Chowghat "	37.4	30.0	32.6	90.5	9.5	N
Cranganore "	45.9	3.3	50.8	89.3	10.6	0.1
Mukundapuram "	7.1	40.0	52.9	60.4	39.6	N
Parur "	31.8	8.2	60.0	82.7	17.2	0.1
Alwaye "	7.1	5.2	87.7	62.5	37.5	N
Kunnathunad "	7.6	13.5	78.9	69.4	30.6	...
Kanayannur "	28.4	10.0	61.6	74.2	25.7	0.1
Cochin "	44.0	0.9	55.1	82.7	17.2	0.1
Muvattupuzha "	14.4	14.6	71.0	72.0	28.0	N
Thodupuzha "	32.9	16.2	50.9	74.8	25.2	N
Devicolam "	20.8	10.8	68.4	32.1	67.9	...
Udumbanchola "	55.2	11.3	33.5	84.7	15.3	N
Meenachil "	48.3	17.0	34.7	73.8	26.2	N
Vaikom "	41.0	9.0	50.0	82.2	17.8	...

1	2	3	4	5	6	7
Kottayam Taluk	38.7	12.6	48.7	75.4	24.6	N
Changanacherry "	29.6	21.2	49.2	85.1	14.9	...
Kanjirappally "	54.7	9.2	36.1	77.0	23.0	...
Peermade "	13.7	14.0	72.3	39.6	60.4	N
Shertalai "	74.7	...	25.3	92.0	8.0	N
Ambalapuzha "	79.8	1.0	19.2	92.6	7.4	...
Kuttanad "	62.3	2.7	35.0	89.5	10.5	...
Thiruvalla "	36.8	17.3	45.9	83.8	16.2	N
Chengannur "	29.0	34.1	36.9	85.1	14.9	...
Karthigapally "	68.4	5.6	26.0	93.4	6.6	N
Mavelikkara "	23.3	47.0	29.7	88.9	11.1	N
Pathanamthitta "	33.4	34.0	32.6	81.5	18.5	N
Kunnathur "	9.2	59.6	31.2	84.2	15.8	...
Karunagappally "	38.8	34.4	26.8	89.4	10.6	N
Quilon "	11.6	54.9	33.5	79.1	20.8	0.1
Kottarakara "	4.7	71.4	23.9	88.2	11.7	0.1
Pathanapuram "	7.1	65.4	27.5	77.2	22.8	...
Chirayinkil "	6.4	81.5	12.1	93.2	6.8	N
Trivandrum "	3.9	92.7	3.4	92.8	7.0	0.2
Neyyattinkara "	6.3	91.6	2.1	94.0	6.0	...
Nedumangad "	6.1	88.4	5.5	91.3	8.7	N

N—Negligible

Source : Census of India, 1961, Kerala—Part IV A & B Report and Tables on Housing and Establishments



DISTRIBUTION OF HOUSEHOLDS BY PREDOMINANT WALL AND ROOF MATERIALS IN URBAN AREAS, 1960

Purpose

The map shows the distribution of households living in Census houses used wholly or partly as dwellings according to the predominant types of wall and roof materials in urban areas of the taluks of the State in 1960.

Method

The predominant types of wall and roof materials are decided and presented in the same way as in the case of Map 149 on rural areas. Entirely rural taluks are left blank without any shade.

Salient Features

North Wynad taluk in Cannanore district, South Wynad taluk in Kozhikode district, Perintalmanna and Alathur taluks in Palghat district, Cranganore taluk in Trichur district, Thodupuzha taluk in Ernakulam district, the taluks of Devicolum, Udumbanchola and Peermade in Kottayam district, Kuttanad taluk in Alleppey district, the taluks of Pathanamthitta, Kunnathur, Karunagapally, Kottarakara and Pathanapuram in Quilon district and Nedumangad taluk in Trivandrum district are entirely rural. The pattern of predominance in respect of wall materials in the remaining 39 taluks which have urban areas in them is different from that in rural areas. 23 taluks have type C i.e.

burnt bricks, corrugated iron or other metal sheets, stone, cement concrete or other materials as the predominant wall material. While in the taluks of Meenachil and Kanjirappally of Kottayam district and Shertalai, Ambalapuzha and Karthigapally of Alleppey district the predominant wall material is type A i.e. grass, leaves, reeds, bamboo or timber, in the taluks of Kasaragod in Cannanore district, Ottapalam, Palghat and Chittur in Palghat district, Chowghat in Trichur district and Chirayinkil, Trivandrum and Neyyattinkara in Trivandrum district the predominant wall material is type B i.e. mud or unburnt bricks. 3 taluks attain predominance in respect of wall material by a combination of two types, Quilon taluk having types A and C and Cannanore and Ponnani taluks types B and C as the predominant type of wall materials.

24 taluks have type X i.e. grass, leaves, reeds, thatch, wood or bamboo as the predominant type of roof materials and 14 taluks type Y i.e. tiles, slate, shingle, corrugated iron or other metal sheets or asbestos cement sheets as the predominant type of roof materials. Cochin taluk in Ernakulam district has a combination of types X and Y as the predominant type of roof material.

Table

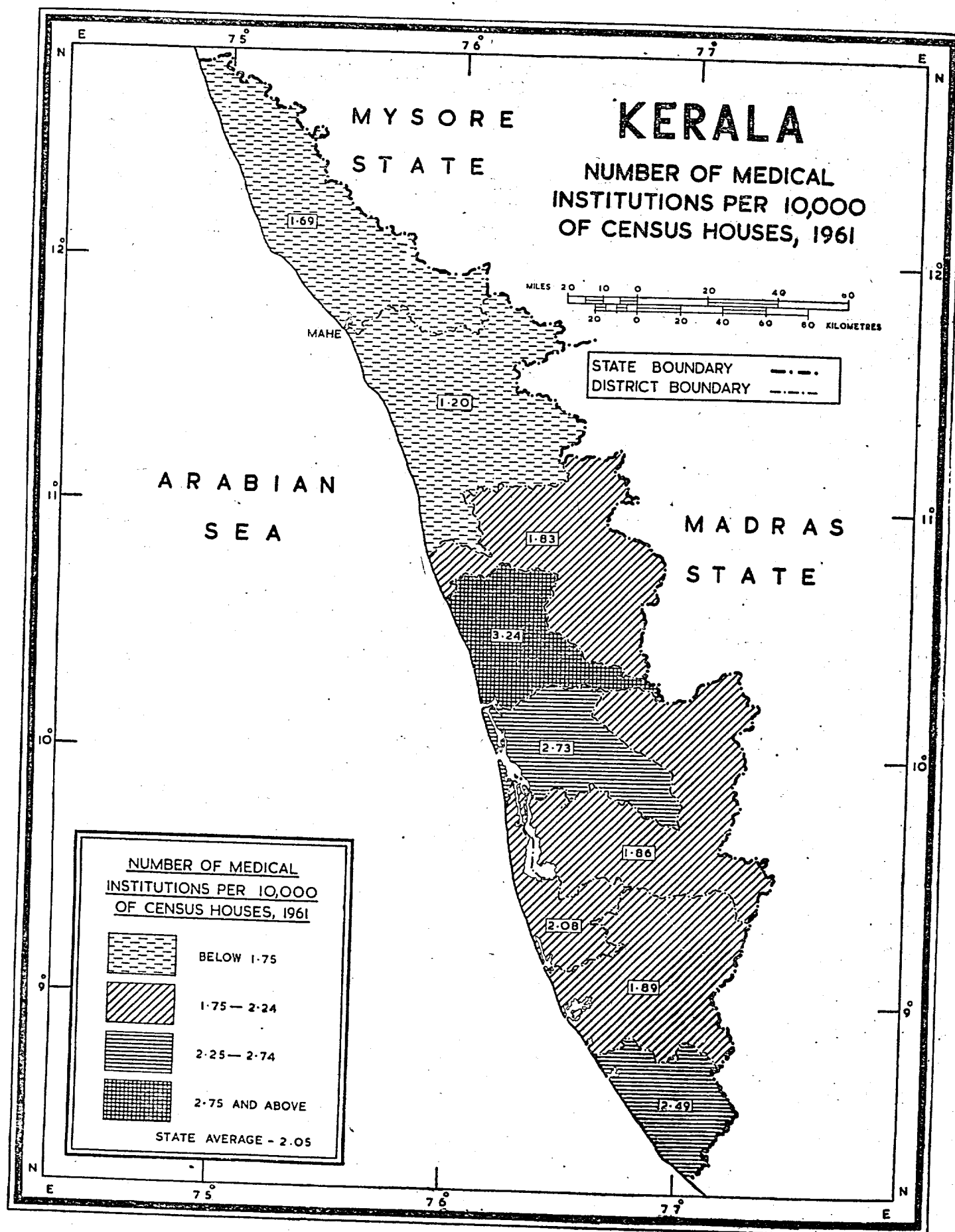
PERCENTAGE DISTRIBUTION OF HOUSEHOLDS LIVING IN CENSUS HOUSES USED WHOLLY
OR PARTLY AS DWELLINGS BY PREDOMINANT WALL AND ROOF MATERIALS
IN URBAN AREAS OF THE STATE AND TALUKS, 1960

State/Taluk		Percentage of households living in Census houses used wholly or partly as dwellings by					
		Predominant material of wall			Predominant material of roof		
		Grass, leaves, reeds, bam- boo or timber	Mud or un- burnt bricks	Burnt bricks C.I. or other metal sheets, stone, cement concrete or other mater- ials	Grass, leaves, reeds, thatch, wood or bamboo	Tiles, slate, shingle, C.I. or other metal sheets or asbestos cement sheets	Brick, lime, concrete, stone or other materials
		A	B	C	X	Y	Z
1		2	3	4	5	6	7
Kerala	State	20.0	29.7	50.3	56.7	42.8	0.5
Kasaragod	Taluk	2.3	56.2	41.5	38.1	61.8	0.1
Hosdrug	"	11.9	23.3	64.8	55.3	44.6	0.1
Taliaparamba	"	0	32.8	67.2	30.6	69.4	0
Cannanore	"	1.7	49.4	48.9	40.1	59.9	N
Tellicherry	"	3.9	31.7	64.4	42.1	57.8	0.1
Badagara	"	17.1	13.9	69.0	78.3	21.7	0
Quilandy	"	21.5	6.0	72.5	63.7	36.3	0
Kozhikode	"	20.2	6.0	73.8	43.3	56.7	N
Tirur	"	15.7	32.6	51.7	61.1	38.8	0.1
Ernad	"	0	31.8	68.2	32.3	67.7	0
Ponnani	"	22.9	30.1	47.0	74.4	25.4	0.2
Ottapalam	"	1.1	63.4	35.5	34.5	65.4	0.1
Palghat	"	1.1	54.4	44.5	20.2	79.5	0.3
Chittur	"	2.3	61.3	36.4	40.0	60.0	0
Talappilly	"	0.9	44.6	54.5	65.8	34.2	0
Trichur	"	0.4	24.3	75.3	10.7	89.1	0.2
Chowghat	"	27.5	52.6	19.9	81.0	18.5	0.5
Mukundapuram	"	3.5	24.7	71.8	44.6	55.1	0.3
Parur	"	29.6	9.7	60.7	74.0	25.4	0.6
Alwaye	"	14.4	3.4	82.2	37.5	60.5	2.0
Kunnathunad	"	6.9	7.2	85.9	37.6	62.0	0.4
Kanayannur	"	29.5	0.8	69.7	46.5	52.5	1.0
Cochin	"	35.8	N	64.2	49.8	49.8	0.4
Muvattupuzha	"	11.0	0.5	88.5	50.9	49.0	0.1
Meenachil	"	53.6	4.1	42.3	62.3	37.7	0
Vaikom	"	42.6	0.7	56.7	78.9	20.8	0.3
Kottayam	"	18.7	15.9	65.4	50.2	49.6	0.2
Changanacherry	"	11.3	24.4	64.3	63.3	36.3	0.4
Kanjirappally	"	58.2	7.9	33.9	72.3	27.7	0
Shertalai	"	67.7	0	32.3	87.3	12.7	0
Ambalapuzha	"	68.1	N	31.9	77.1	22.7	0.2

1	2	3	4	5	6	7
Thiruvalla Taluk	11.7	8.6	79.7	55.6	44.4	0
Chengannur "	22.6	21.6	55.8	64.0	36.0	0
Karthigapally "	62.2	10.6	27.2	87.1	12.9	N
Mavelikkara "	20.5	25.7	53.8	71.6	28.2	0.2
Quilon "	26.2	25.8	48.0	60.8	38.3	0.9
Chirayinkil "	1.8	75.5	22.7	83.8	15.8	0.4
Trivandrum "	7.4	66.7	25.9	71.6	26.9	1.5
Neyyattinkara "	5.4	88.2	6.4	87.4	12.6	N

N—Negligible

Source: Census of India, 1961, Kerala—Parts IV A and B Report and Tables on Housing and Establishments



NUMBER OF MEDICAL INSTITUTIONS PER 10,000 OF CENSUS HOUSES, 1961

Purpose.

The district-wise variations in the proportion of medical institutions per 10,000 Census houses in the State in 1961 is shown in the map.

Method

The number of medical institutions per 10,000 Census houses in the districts is grouped into four and the districts are shaded according to this grouping by four different grades of hatches.

The medical institutions mentioned above include all hospitals, secondary health centres, dispensaries, T. B. sanatoria, leprosy clinics, primary health units and primary health centres in Allopathy, Ayurveda and Homeopathy under the Government. Private medical institutions are not taken into account for purposes of this map.

Salient Features

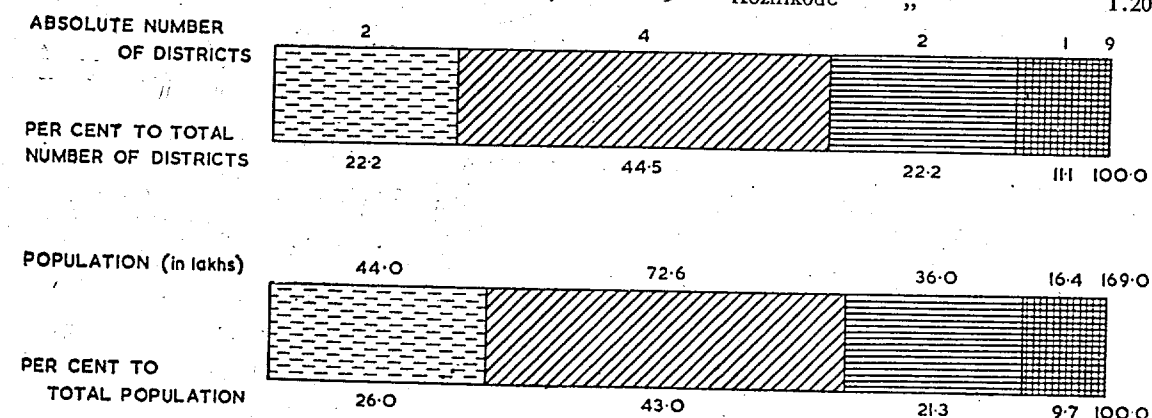
There are 576 Government medical institutions in the State in 1961 which work out to 2.05 institutions for every 10,000 Census houses. The proportion of medical institutions is lower than that of the State in the case of five districts viz., Cannanore, Kozhikode,

Palghat, Kottayam and Quilon. The highest number of medical institutions per 10,000 Census houses is in Trichur district coming to 3.24 per 10,000 Census houses and the lowest in Kozhikode district with 1.20 per 10,000 Census houses.

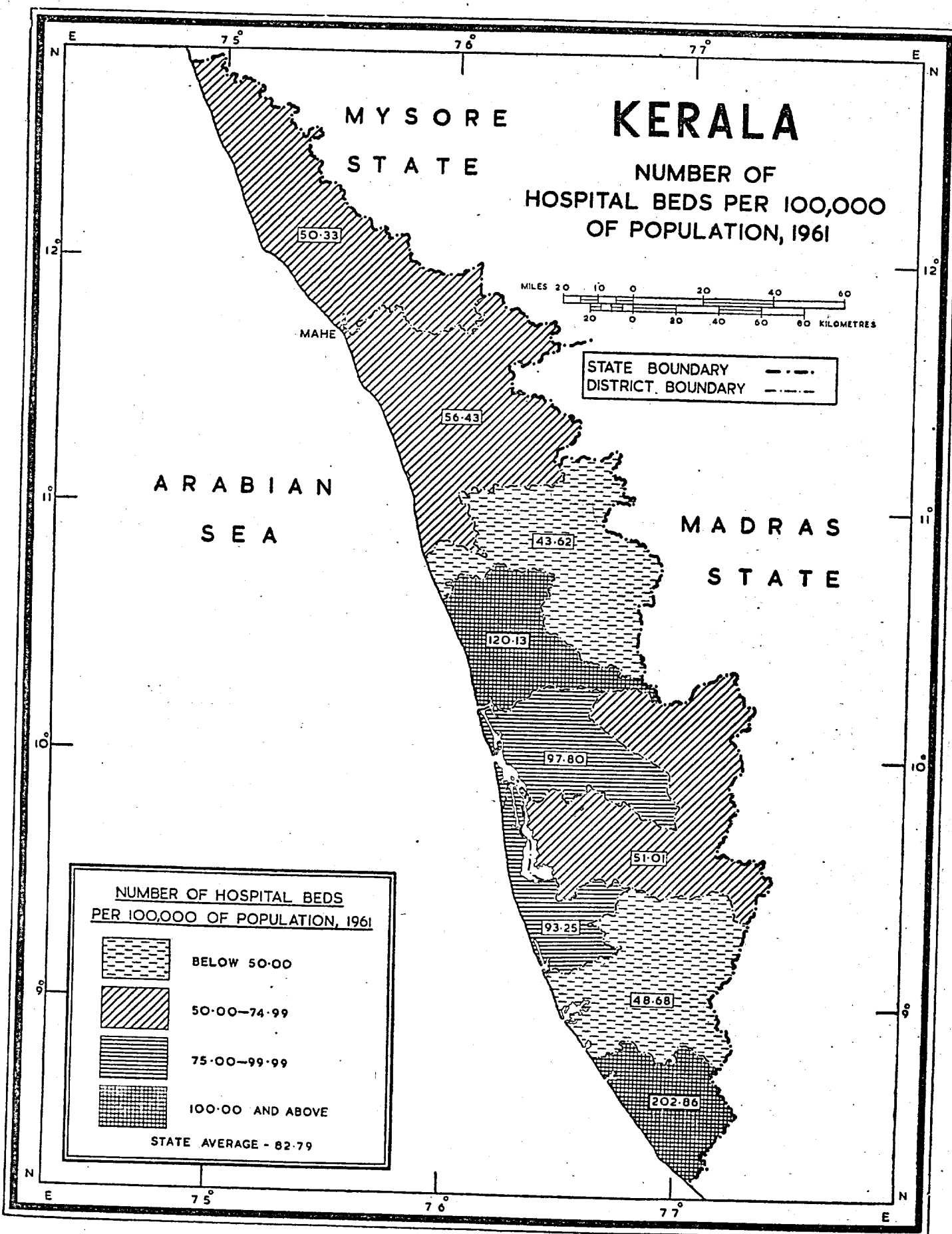
Table

NUMBER OF MEDICAL INSTITUTIONS PER 10,000 CENSUS HOUSES IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Number of medical institutions per 10,000 Census houses
1	2	3
	Kerala State	2.05
1	Trichur District	3.24
2	Ernakulam "	2.73
3	Trivandrum "	2.49
4	Alleppey "	2.08
5	Quilon "	1.89
6	Kottayam "	1.86
7	Palghat "	1.83
8	Cannanore "	1.69
9	Kozhikode "	1.20



Source: Department of Health Services, Kerala



NUMBER OF HOSPITAL BEDS PER 100,000 OF POPULATION, 1961

Purpose

The number of hospital beds available per 100,000 population in the districts of the State in 1961 is presented in the map.

Method

The districts are arranged into four groups according to the number of hospital beds per 100,000 population and shaded according to this grouping by four different grades of hatches.

The hospital beds mentioned above include all sanctioned beds in hospitals, secondary health centres, dispensaries, T. B. sanatoria, leprosy clinics, primary health units and primary health centres in Allopathy, Ayurveda and Homeopathy under Government.

Salient Features

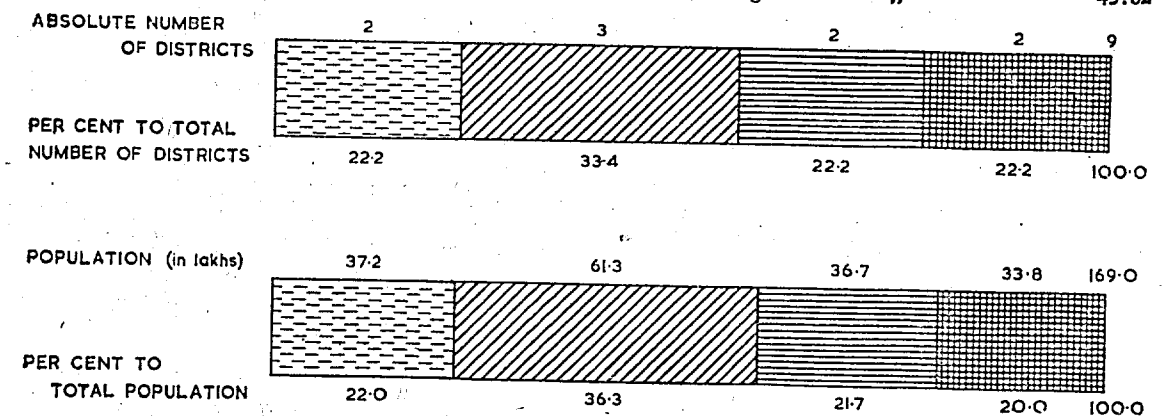
In Kerala there are 82.79 beds for every 100,000 population. There are four districts viz., Trichur, Ernakulam, Alleppey and Trivandrum where the proportion is above that of the State. Trivandrum district

has the highest number with 202.86 beds per 100,000 population and Palghat district the lowest with 42.62 beds per 100,000 population.

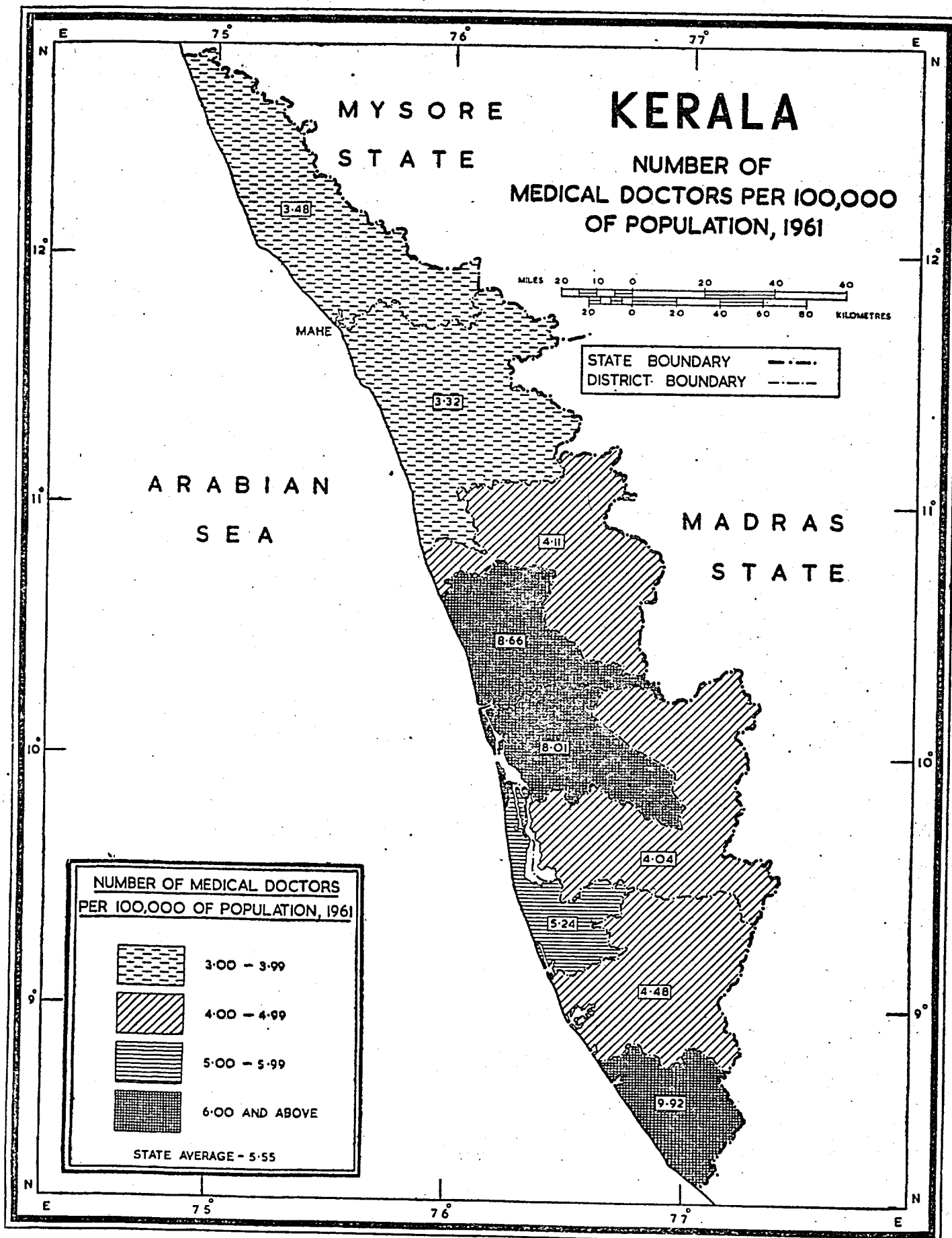
Table

NUMBER OF HOSPITAL BEDS PER 100,000 POPULATION IN THE STATE AND DISTRICTS, 1961

Rank	State/District	Number of hospital beds per 100,000 population
1	2	3
	Kerala State	82.79
1	Trivandrum District	202.86
2	Trichur "	120.13
3	Ernakulam "	97.80
4	Alleppey "	93.25
5	Kozhikode "	56.43
6	Kottayam "	51.01
7	Cannanore "	50.33
8	Quilon "	48.68
9	Palghat "	43.62



Source: Department of Health Services, Kerala



NUMBER OF MEDICAL DOCTORS PER 100,000 OF POPULATION, 1961

Purpose

The map shows the variations in the number of doctors per 100,000 population in the districts of the State in 1961.

Method

The proportion of doctors per 100,000 population in the districts is grouped into four and the districts are shaded accordingly by four different grades of hatches.

The doctors mentioned above include all doctors in hospitals, secondary health centres, dispensaries, T. B. sanatoria, leprosy clinics, primary health units and primary health centres in Allopathy, Ayurveda and Homeopathy under Government.

Salient Features

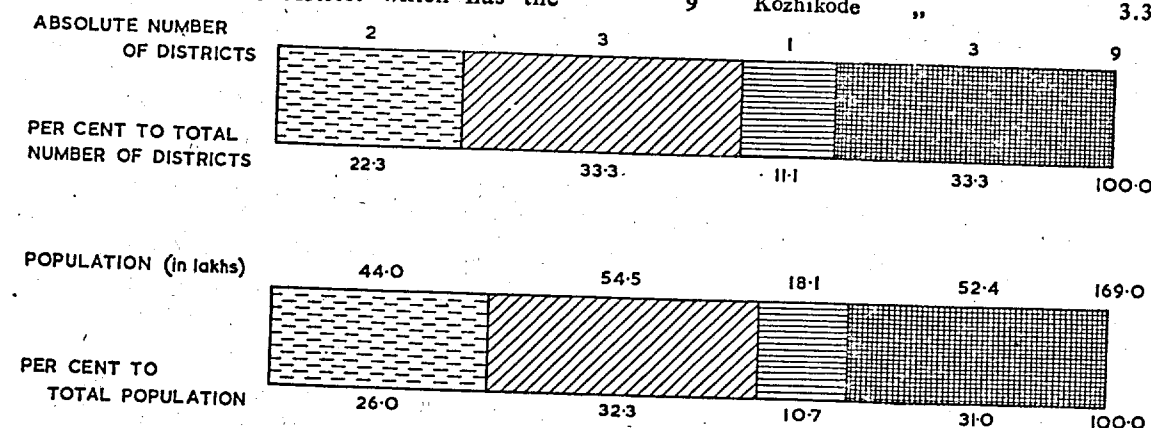
For every 100,000 population there are only 5.55 doctors in the State which means each doctor has to attend to about 18,021 persons. Only in three districts viz., Trichur, Ernakulam and Trivandrum the ratio of doctors to population is higher than that of the State. In Trivandrum district which has the

highest number of doctors with 9.92 per 100,000 population each doctor has to care for 10,084 persons. Kozhikode district has the lowest number with but 3.32 doctors per 100,000 population.

Table

NUMBER OF MEDICAL DOCTORS PER 100,000 POPULATION IN THE STATE AND DISTRICTS, 1961

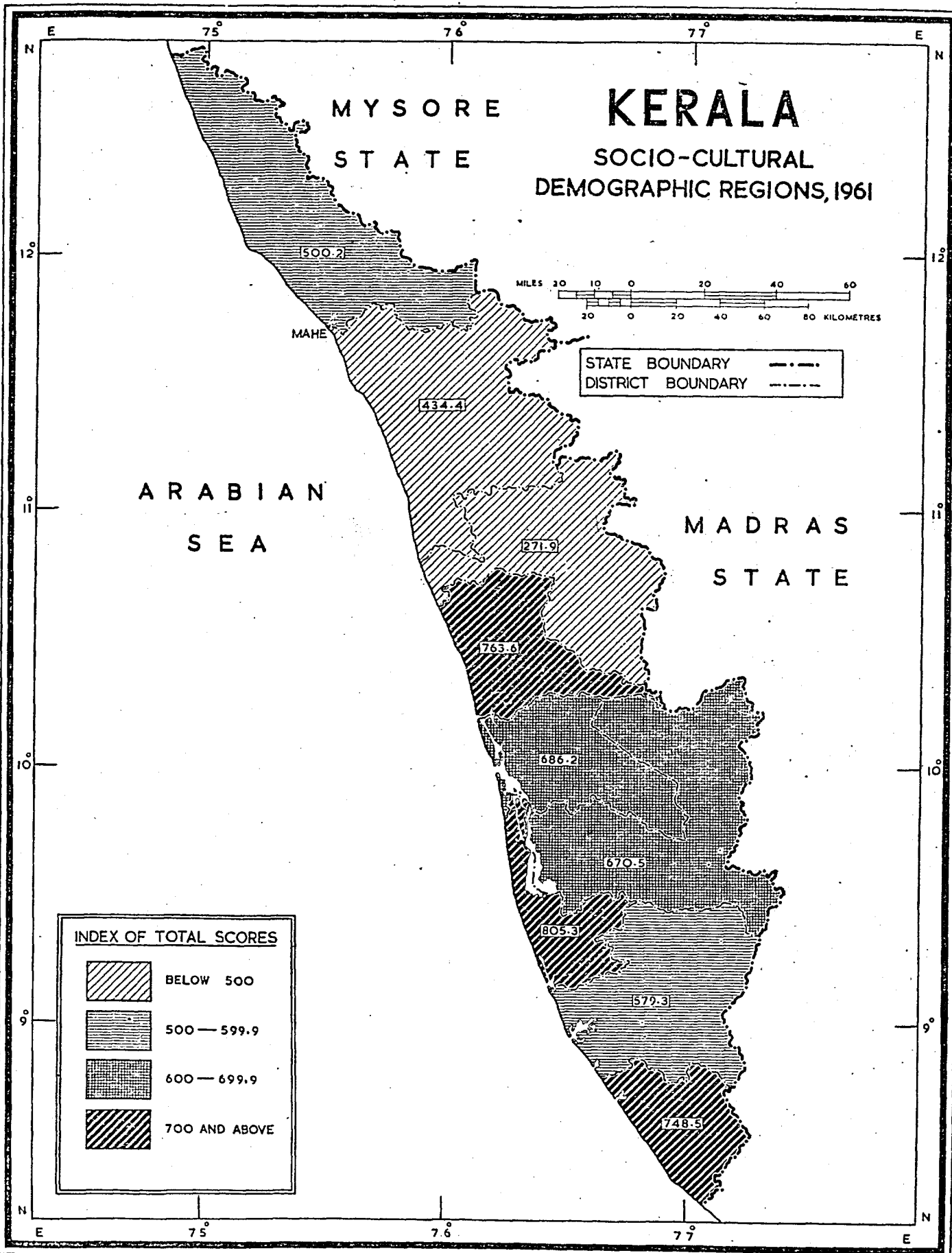
Rank	State/District	Number of medical doctors per 100,000 population
1	2	3
	Kerala State	5.55
1	Trivandrum District	9.92
2	Trichur	8.66
3	Ernakulam	8.01
4	Alleppey	5.24
5	Quilon	4.48
6	Palghat	4.11
7	Kottayam	4.04
8	Cannanore	3.48
9	Kozhikode	3.32



Source: Department of Health Services, Kerala

VI DEMOGRAPHIC REGIONS

SOCIO-CULTURAL DEMOGRAPHIC REGIONS, 1961



Purpose

This is a synthetic map showing regions delineated by synthetic index of socio-cultural development in the State.

Method

The following twelve indicators are selected for deducing synthetic index of socio-cultural development in the State.

- 1 Percentage of urban population to total population
- * 2 Percentage of Scheduled Castes and Tribes to total population
- 3 Percentage of literates to total population excluding age-group 0-4
- 4 Percentage of female literates to total female population excluding age-group 0-4
- 5 Percentage of school-going female children of age-group 5-14 to total female children of age-group 5-14
- 6 Percentage of population in the age-group 15-29 at the level of secondary and higher education to total population in the age-group 15-29
- 7 Number of teachers per 1,000 students at the primary level of education
- 8 Number of teachers per 1,000 students at the secondary level of education
- 9 Percentage of workers engaged in educational and scientific services to total workers in services
- 10 Number of medical institutions per 10,000 Census houses
- 11 Number of hospital beds per 100,000 of population
- 12 Number of medical doctors per 100,000 of population

Each of the above twelve indicators earns a score on the basis of a graph which is constructed as follows.

The indicators are represented along the Y-axis and the scores for values of the indicators on the X-axis. The State average score is assumed to be 50. The score of the district which has the lowest value is assumed to be zero and that of the district which has the highest value 100. The above three points are plotted on a graph paper and a smoothed curve is drawn joining these three points. From the graph so obtained the score of a particular district is decided thus. The value for the district is plotted on the Y-axis and a straight line parallel to the X-axis is

drawn to meet the curve at a point, the co-ordinate of which gives the score for that particular district. In this way scores are obtained for all the nine districts. The procedure is repeated for all the twelve indicators so that twelve scores are obtained for each district. The twelve scores obtained for a particular district are added up to get the synthetic index of socio-cultural development of the district.

The districts are then arranged into four groups based on synthetic indices and hatched by deep to light shades corresponding to high to low values.

Salient Features

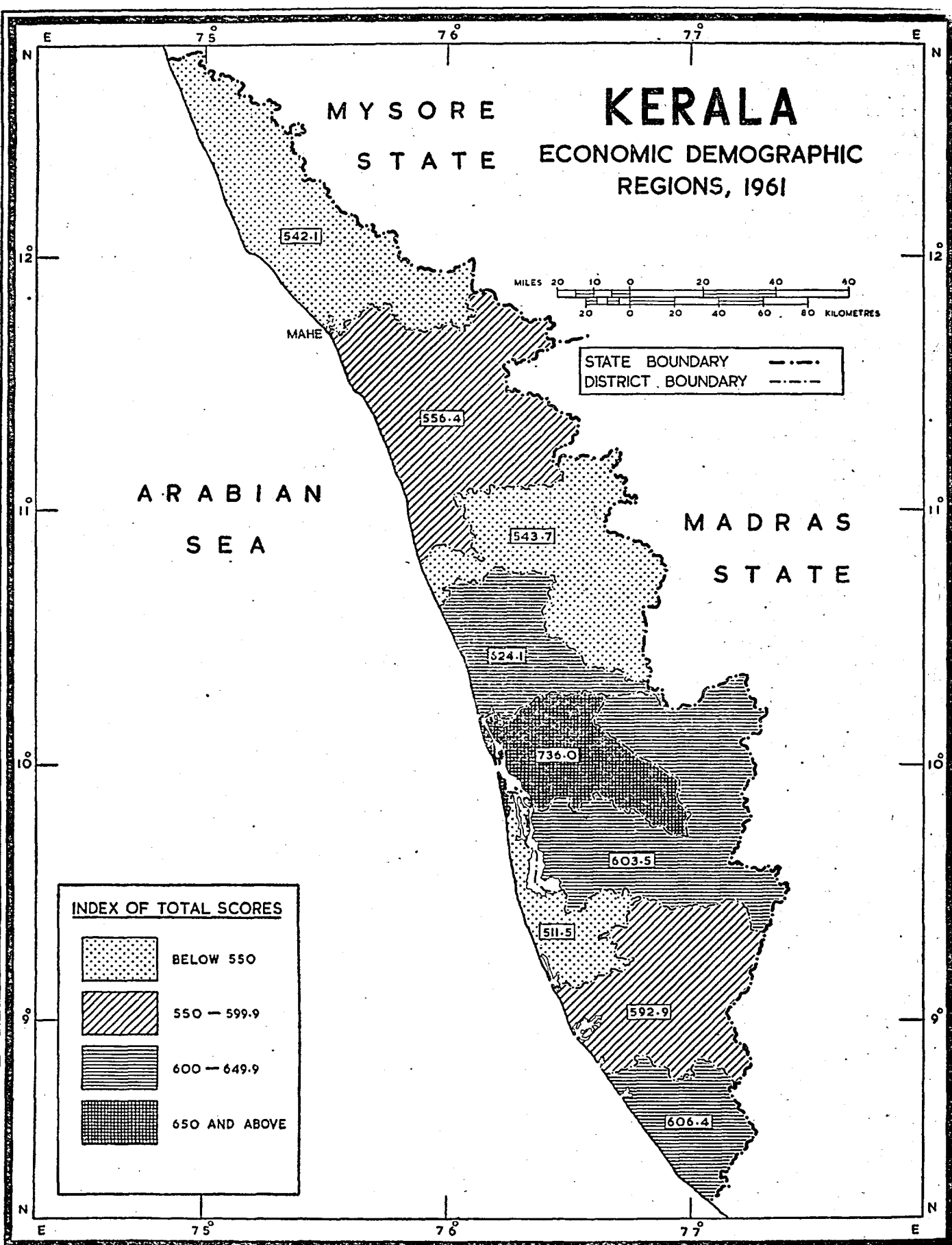
Out of the total score of 1,200, the indices of the districts show a wide range of variation extending from 271.9 to 805.3. The lowest index is taken by Palghat district and the highest by Alleppey district. The map also brings to light the following regional pattern with regard to socio-cultural levels of population living in them. The region comprising the districts of Kozhikode and Palghat is poorest in regard to the attainment of socio-cultural development, the synthetic index falling below 500. The Cannanore district in the northernmost extreme and the Quilon district in the south fall in the next higher range of socio-cultural development with synthetic indices between 500 and 599.9 out of 1,200. Ernakulam and Kottayam districts forming a contiguous area have attained a moderately high level, the synthetic indices falling in the range 600-699.9 out of a total of 1,200. Trichur, Alleppey and Trivandrum districts lying separately emerge as areas of highest socio-cultural development with synthetic indices of 700 and above out of a total score of 1,200.

Table

SYNTHETIC INDEX OF SOCIO-CULTURAL DEVELOPMENT (TOTAL SCORE OUT OF 1,200) FOR EACH DISTRICT, 1961

Rank	District	Synthetic Index (Total score out of 1,200)
1	2	3
1	Alleppey District	805.3
2	Trichur	763.6
3	Trivandrum	748.5
4	Ernakulam	686.2
5	Kottayam	670.5
6	Quilon	579.3
7	Cannanore	500.2
8	Kozhikode	434.4
9	Palghat	271.9

* For this indicator the maximum and minimum scores have been reversed. The higher the proportion of Scheduled Castes and Tribes the lower will be the scoring.



ECONOMIC DEMOGRAPHIC REGIONS, 1961

Purpose

This is a synthetic map showing regions delineated by synthetic index of economic development in the State.

Method

The method adopted for preparing this map is the same as that described in connection with map 154. The indicators chosen to measure the level of economic development are the following.

- 1 Percentage of urban population to total population
- 2 Percentage of population living in cities with population 50,000 and above
- 3 Gross value of agricultural output per cultivating household
- 4 Per capita net production of staple food crops
- 5 Percentage of industrial workers in mining, quarrying etc., household industry and manufacturing to total working population
- 6 Percentage of workers engaged in factory industries to total industrial workers
- 7 Per capita consumption of electricity
- 8 Percentage of rural population living in electrified villages
- 9 Percentage of workers to the total employable population of age-group 15-59
- 10 Percentage of households occupying three rooms and more to total households
- 11 Kilometres of railways per 10,000 sq. km. of area
- 12 Kilometres of road per 10,000 sq. km. of area

Salient Features

The synthetic index of economic development viz., total score out of 1,200 among the districts varies from 511.5 in the case of Alleppey to 736.0 in the case of Ernakulam. The districts of Cannanore, Palghat and Alleppey fall in the lowest range, the synthetic indices falling below 550 out of a total of 1,200. The districts of Kozhikode and Quilon fall in the next higher range of synthetic index viz., 550-599.9 out of 1,200. The three districts of Trichur, Kottayam and Trivandrum have attained moderately high level of economic development with synthetic indices falling in the range 600-649.9 out of 1,200. The only district falling in the highest range viz., 650 and above out of a total score of 1,200 is Ernakulam.

Table

**SYNTHETIC INDEX OF ECONOMIC DEVELOPMENT
(TOTAL SCORE OUT OF 1,200) FOR
EACH DISTRICT, 1961**

Rank	District	Synthetic Index (Total score out of 1,200)
1	2	3
1	Ernakulam District	736.0
2	Trichur	624.1
3	Trivandrum	606.4
4	Kottayam	603.5
5	Quilon	592.9
6	Kozhikode	556.4
7	Palghat	543.7
8	Cannanore	542.1
9	Alleppey	511.5

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CENSUS OF INDIA, 1961 VOLUME VII — KERALA IS BEING PUBLISHED IN THE
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1. Part	I A (i)	:	General Report	
	I A (ii)	:	General Report—Appendices	
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3. Part	I C	:	Subsidiary Tables	
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5. Part	II B (i)	:	General Economic Tables (Tables B I to B IV)	
	II B (ii)	:	General Economic Tables (Tables B V to B IX)	
6. Part	II C	:	Cultural and Migration Tables	
7. Part	III	:	Household Economic Tables	
8. Part	IV A & B	:	Report on Housing and Establishments and Housing and Establishment Tables	
9. Part	V A	:	Special Tables for Scheduled Castes and Scheduled Tribes	
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14. Part	VI D	:	Village Survey Monographs of the Alleppey district consisting of the monographs on Bharanikavu, Kadapra, Muttar and Prakkad	
15. Part	VI E	:	Village Survey Monographs of the Quilon district consisting of the monographs on Edamon, Eravipuram, Thankasseri and Thazhava	
16. Part	VI F	:	Village Survey Monographs of the Trivandrum district consisting of the monographs on Amaravila, Kadakkavoor, Kottukal and Parassala	
17. Part	VI G	:	Village Survey Monographs of the tribal areas consisting of the monographs on Attappadi, Champakad, Chingeri and Kadukkamkunnam	
18. Part	VI H	:	Village Survey Monographs of the tribal areas consisting of the monograph on Nilambur, Palode, Periyar, Tirunelly and Udumbannoor	
19. Part	VI J	:	General Report of Village Surveys	
20. Part	VII A	:	Selected Crafts of Kerala	
21. Part	VII B (i)	:	Fairs and Festivals of Kerala	
	VII B (ii)	:	Fairs and Festivals of Kerala—Statements	
22. Part	VIII A	:	Administration Report—Enumeration	} Not for sale
23. Part	VIII B	:	Administration Report—Tabulation	
* 24. Part	IX	:	Census Atlas of Kerala	
25. Part	XI	:	Monograph on Chavittunatakam	

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* Present volume

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