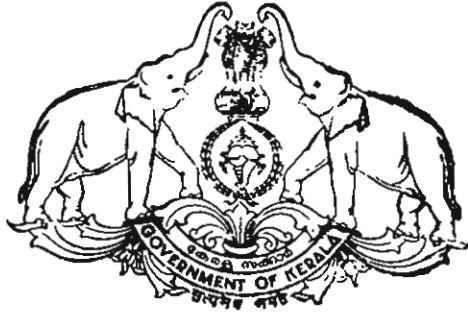


Annual Report



KERALA
1963



KERALA 1963

An Economic Review



Government of Kerala

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CONTENTS

| | | PAGE |
|---------|---------------------------------------|------|
| CHAPTER | I. DEMOGRAPHIC FEATURES | 1 |
| „ | II. AGRICULTURE AND ALLIED ACTIVITIES | 9 |
| „ | III. PLANTATIONS | 49 |
| „ | IV. MINERALS | 66 |
| „ | V. INDUSTRY | 77 |
| „ | VI. POWER | 111 |
| „ | VII. TRANSPORT | 121 |
| „ | VIII. EXPORT-IMPORT TRADE | 127 |
| „ | IX. PRICES AND COST OF LIVING | 155 |
| „ | X. SOCIAL SERVICES | 173 |
| „ | XI. EMPLOYMENT SITUATION | 201 |
| „ | XII. THE ECONOMY IN RETROSPECT | 205 |

INTRODUCTION

1. An Economic Review of the year 1963, highlighting the broad trends of development in Kerala economy is attempted in the following pages. The Review is circulated to Members of the Legislative Assembly.

2. At the present level of our statistical knowledge, there is bound to be many a gap in this picture of the working of our economy. Very often statistics relating to the current period become available only after a number of years. This makes it difficult to make any precise and objective assessment of the economic developments of the year at the end of the year itself. However, the available data have been compiled and analysed taking care to bring out, in some detail, the developments in the different sectors of our economy.

3. The Review is prepared in the Bureau of Economics and Statistics, Trivandrum.

CHAPTER I

DEMOGRAPHIC FEATURES

The ultimate objective of economic planning is to provide a high standard of living for the people. The realization of this objective depends, to a large extent, on the size of the population. Kerala suffers from a high density of population. As a consequence the per capita income in Kerala—an indicator of the level of living—is lower than that in India.

Population density

1.2 Occupying only 1.27 per cent of the total area of the Indian Union, Kerala accounts for nearly 3.85 per cent of the population. The population density in the State is 1127 persons per square mile as against 370 persons for India as a whole and is the highest in the country. The only State which comes anywhere near Kerala in this respect is West Bengal with a population density of 1032 persons per square mile (Table 1.1).

TABLE—1.1

Area, Population and density of Population 1961*

| <i>State</i> | <i>Area (Square miles)</i> | <i>Population (millions)</i> | <i>Density of population (persons per sq.mile)</i> | <i>Rank according to density</i> |
|-----------------|--------------------------------|----------------------------------|--|--|
| ALL INDIA | 1178995 | 439.23 | 370 | .. |
| Andhra Pradesh | 106286 | 35.98 | 339 | 7 |
| Assam | 47091 | 11.87 | 252 | 12 |
| Bihar | 67196 | 46.46 | 691 | 3 |
| Gujarat | 72245 | 20.63 | 286 | 11 |
| Jammu & Kashmir | N.A. | 3.56 | N.A. | N.A. |
| Kerala | 15002 | 16.90 | 1127 | 1 |
| Madhya Pradesh | 171217 | 32.37 | 189 | 13 |
| Madras | 50331 | 33.69 | 669 | 4 |
| Maharashtra | 118717 | 39.55 | 333 | 8 |
| Mysore | 74210 | 23.59 | 318 | 9 |
| Orissa | 60164 | 17.55 | 292 | 10 |
| Punjab | 47205 | 20.31 | 430 | 6 |
| Rajasthan | 132152 | 20.16 | 153 | 14 |
| Uttar Pradesh | 113654 | 73.75 | 649 | 5 |
| West Bengal | 33829 | 34.93 | 1032 | 2 |

* Source: Registrar-General of India, Final Population Totals. Census of India 1961 Paper No. 1 N. A. Not Available.

1.3. The population is not evenly distributed among the districts. The coastal districts are most densely populated. Also the districts of the erstwhile Travancore-Cochin area are, in general, having a high density of population. Malabar region is relatively less populated (Table 1.2).

TABLE—1.2

Density of population in the districts of Kerala *

| <i>Districts</i> | <i>Population (Lakhs)</i> | <i>Density (Persons per sq. mile)</i> |
|------------------|-------------------------------|---|
| Trivandrum | 17.45 | 2067 |
| Quilon | 19.41 | 1062 |
| Alleppey | 18.11 | 2558 |
| Kottayam | 17.33 | 706 |
| Ernakulam | 18.60 | 1442 |
| Trichur | 16.40 | 1442 |
| Palghat | 17.77 | 897 |
| Kozhikode | 26.17 | 1018 |
| Cannanore | 17.80 | 812 |

*Source : Bureau of Economics & Statistics, Quarterly Bulletin of Statistics, June 1962.

Rate of growth

1.4. During the decade 1951-61 the population of Kerala increased by 24.76 per cent; this rate is much higher than in India as a whole. This high trend was being experienced even from the beginning of the century. The population of Kerala has doubled itself during the past 40 years, while that of the entire Indian Union has not doubled itself even during the last 60 years. But for some fluctuations in the beginning of the century, the growth rate has been increasing rather steadily during the last two or three decades. The possibilities are that this trend will continue. But even if the same rate prevails, Kerala is faced with another doubling of population before the close of the century.

TABLE—1.3

Rate of growth of population of India and Kerala from 1901 to 1961*

| Year | India | | | Kerala | | |
|------|-----------------------|--------------------------------------|---|-----------------------|--------------------------------------|---|
| | Population (lakhs) | Decennial percentage variation | Geometric rate of growth (per cent) | Population (lakhs) | Decennial percentage variation | Geometric rate of growth (per cent) |
| 1901 | 2362.81 | 5.73 | 0.65 | 63.96 | 11.75 | 1.19 |
| 1911 | 2521.22 | —0.31 | —0.33 | 71.48 | 9.16 | 0.90 |
| 1921 | 2513.52 | 11.01 | 1.05 | 78.02 | 21.85 | 1.98 |
| 1931 | 2790.15 | 14.22 | 1.14 | 95.07 | 16.04 | 1.50 |
| 1941 | 3187.01 | 13.31 | 1.26 | 110.32 | 22.82 | 2.08 |
| 1951 | 3611.30 | 21.50 | 1.98 | 135.49 | 24.76 | 2.24 |
| 1961 | 4392.35 | .. | .. | 169.04 | .. | .. |

*Source : Registrar General of India, Final Population Totals. Census of India Paper No. 1

Birth and death rates

1.6. In the absence of migration on a large scale, fertility and mortality are the two factors which influence population growth. Data available for Kerala indicate that the birth rate has been increasing over the years and that the death rate has been falling, obviously due to the considerable advances made in the provision of medical and public health facilities. Birth and death rates given in Table 1.4 are based on registration data:

TABLE—1.4

Registered birth and death rates* (Per 1000 of population)

| <i>Year</i> | <i>Birth rate</i> | <i>Death rate</i> |
|-------------|-------------------|-------------------|
| 1956 | 23.0 | 7.4 |
| 1957 | 23.8 | 9.6 |
| 1958 | 24.6 | 7.6 |
| 1959 | 26.2 | 7.8 |
| 1960 | 23.9 | 6.9 |
| 1961 | 25.0 | 7.2 |

*Source : Bureau of Economics & Statistics, Quarterly Bulletin of Statistics, June 1962.

1.7. The above data have obvious limitations. There is known to be serious under-reporting of both births and deaths. It has been reproduced here only to indicate the trends in fertility and mortality. The Census Actuary has calculated birth and death rates for Kerala for the year 1961. His estimates are 38.9 births and 16.1 deaths per 1000 of population. (The death rate probably has to be corrected to 16.5 in order to get a growth rate 2.24 per cent). Death rate is observed to be lowest in Kerala and except for Madras State the birth rate is also lowest. (Refer Census of India, Life Table 1951-60, published by the Registrar General). There is no visible evidence of a decline in birth rate, while death rate may be expected to fall further. The indications, therefore, are that the population of Kerala will continue to grow at an increasing rate.

Sex Ratio

1.8. There are 1022 females for every 1000 males in Kerala, according to the 1961 Census. From 1901 to 1951 there was an increasing trend in the sex ratio; it was 1002 in 1901, 1005 in 1911, 1008 in 1921, 1019 in 1931, 1024 in 1941 and 1028 in 1951. In 1961 it had fallen to 1022. For India as a whole the sex ratio is only 941. This high sex ratio is perhaps in part due to the fact that a number of males of working age groups migrate to other parts of the Indian Union in search of employment.

Age composition

1.9. The age composition of a population is an important indicator of the quality of the available manpower. Also, historically it has been observed that in countries in their early stages of economic development, there is a high proportion of children. Kerala is no exception. While children of 14 years and under formed 38.48% of the State's population as per 1951 Census, they constituted 42.62% as per 1961 Census figures. There is thus an increasing trend in the growth of this section of population. They are all dependents in the economic sense and they will continue to be a heavy burden on the earners.

Occupational pattern

1.10. Under-developed economies are often characterised by a high proportion of their working force in the primary sector of production. It has also been observed, in the history of economic development of several countries, that this proportion decreases as the country achieves progress in industrialisation. The broad industrial classifications obtained from the Census of 1951 and 1961 may be examined in this context. The main features observed are (i) a slight decrease in the proportion of cultivators and agricultural labourers, (ii) household industry plus other manufacture of 1961 is almost equal to the 1951 Census proportion in manufacturing and (iii) an increase in the proportion in other services, which almost matches the decrease observed in agriculture.

This shows that the relative effect of industrial development in providing employment was very little and that people instead of overcrowding agriculture further have tried to join the tertiary sector. It may be noted here, that the procedure of classification adopted in the 1961 Census was slightly different from the one used in 1951 and that part of these changes may be ascribed to the conceptual changes.

TABLE—1.5

Percentage of persons in each industrial category*

| <i>Industrial category</i> | <i>Percentage of population in each category</i> | |
|--|--|-------|
| | 1951 | 1961 |
| 1. Cultivator | 7.5 | 7.0 |
| 2. Agricultural labourer | 8.2 | 5.8 |
| 3. Mining, Quarrying, Livestock, Forestry, Fishing, Hunting etc. | 2.4 | 2.9 |
| 4. Household industry | .. | 2.9 |
| 5. Manufacturing other than household industry | 6.1 | 3.1 |
| 6. Construction | 0.5 | 0.4 |
| 7. Trade & Commerce | 2.1 | 1.9 |
| 8. Transport, Storage and communication | 1.0 | 0.9 |
| 9. Other services | 4.5 | 8.4 |
| 10. Non workers | 67.7 | 66.7 |
| TOTAL | 100.0 | 100.0 |

* Source: Census of India, Paper No. 1 op. cit. page 404

1.11. The percentage of agricultural workers in Kerala is the lowest in India. But for the highly industrialised States of Maharashtra and West Bengal, the proportion in manufacturing industries is the highest in Kerala. This may, on the basis of historical trends experienced in other countries, give the impression that Kerala is ahead of the other Indian States in respect of industrialisation. But the fact is that agriculture in the State has been overcrowded for long and the new entrants to the labour force have been pushed into household industries whose productivity is very low.

TABLE—1.6

Percentage of Cultivators, Agricultural Labourers and Industrial Workers in the various States*—1961

| <i>State</i> | <i>Percentage of total population</i> | | |
|--------------------|---------------------------------------|------------------------------|--|
| | <i>Cultivator</i> | <i>Agricultural labourer</i> | <i>Persons employed in manufacture</i> |
| 1. Andhra Pradesh | 20.8 | 14.8 | 1.3 |
| 2. Assam | 28.0 | 1.6 | 0.9 |
| 3. Bihar | 22.3 | 9.5 | 0.9 |
| 4. Gujarat | 21.9 | 6.1 | 2.6 |
| 5. Jammu & Kashmir | 32.4 | 0.5 | 0.9 |
| 6. Kerala | 7.0 | 5.8 | 3.1 |
| 7. Madhya Pradesh | 32.8 | 8.7 | 1.0 |
| 8. Madras | 19.2 | 8.4 | 2.5 |
| 9. Maharashtra | 22.1 | 11.4 | 3.3 |
| 10. Mysore | 24.6 | 7.5 | 1.8 |
| 11. Orissa | 24.8 | 7.4 | 0.5 |
| 12. Punjab | 19.7 | 2.7 | 1.7 |
| 13. Rajasthan | 35.0 | 2.0 | 0.9 |
| 14. Uttar Pradesh | 25.0 | 4.4 | 1.1 |
| 15. West Bengal | 12.8 | 5.1 | 3.8 |

*Source : Census of India Paper No. 1 op. cit.

Economic implications of population trends

1.12. The regional income of the State during the past few years has hardly outpaced the growth of population and per capita income, therefore, has increased very little.

1.13. The efforts made in the past for the propagation of ideas relating to family planning and the popularisation of methods of birth control have not yet made any visible impact on the demographic trends.

1.14. Additions to income of workers are consumed immediately for the maintenance of the additional population; consequently very little is saved and invested.

1.15. Further, increasing numbers in the lower age groups call for increased investment of the State's scarce resources in economic and social overheads, resulting in the provision of facilities like education, housing, public health and other public utilities. While such investments are necessary they are, nevertheless, costly for the resources which would otherwise be available for relatively more productive industrial and commercial investments are being diverted for this purpose.

1.16. Progress of industrialisation of the State, depends largely on the efforts to reduce or at least check immediately the rate of growth of population. A vigorous campaign for the implementation of family planning programmes becomes essential as that alone can help in solving the pressing economic problems.

CHAPTER II

AGRICULTURE AND ALLIED ACTIVITIES

The agricultural sector of the State's economy witnessed a serious set-back during 1961-62 when the agricultural output fell below the 1959-60 level. The main factor that contributed to this decline in the total output was a fall in rice production to the extent of 6% compared to the previous year. The fall in the production of rice during 1961-62 was mainly due to the flood in 1961 which affected adversely the autumn crop of 1961. Agricultural economy of the State marked a happy recovery in 1962-63 with production rising so much as to reach above the 1960-61 level after making up the loss in output during 1961-62. Rice production during the year was 88 thousand tons more than that in the previous year. During 1963-64 the autumn crop of paddy was affected by drought owing to belated monsoon. Despite this the food situation was satisfactory during the year but for a sudden rise in rice prices in November-December 1963. This was soon curbed by timely action on the part of Government.

Rainfall

2.2. The State had less rainfall in 1962-63 than in 1961-62. The precipitation during 1962-63 was only 3125 mm. as against 3309 mm. during 1961-62 and 3734 mm. during 1960-61. As already mentioned, the late arrival of monsoon in 1963 affected the autumn crop of paddy adversely. While the State received 98 mm. and 491 mm. of rainfall in April and May 1962 the precipitation for the corresponding months in 1963 was 91 mm. and 158 mm. respectively. The monthly rainfall statistics for the different Districts is furnished in Table 2.1.

Land use

2.3. Change in the land use pattern in the last few years exhibits a very encouraging trend. The net area sown as well as the total cropped area has been

TABLE—2.1

Average monthly rainfall (in m. m.) in Kerala during 1962-63

| District | No. of stations | July 1962 | August 1962 | September 1962 | October 1962 | November 1962 | December 1962 |
|------------|--------------------|--------------|----------------|-------------------|-----------------|------------------|------------------|
| Trivandrum | 8 | 454.6 | 211.5 | 305.0 | 466.9 | 37.4 | 53.9 |
| Quilon | 10 | 646.2 | 311.9 | 384.6 | 427.5 | 53.8 | 82.2 |
| Alleppey | 9 | 920.4 | 422.9 | 634.2 | 570.1 | 50.9 | 42.9 |
| Kottayam | 15 | 961.3 | 382.2 | 435.5 | 426.2 | 44.2 | 80.7 |
| Ernakulam | 10 | 943.1 | 475.3 | 550.3 | 635.2 | 48.0 | 72.5 |
| Trichur | 4 | 918.1 | 422.2 | 359.3 | 413.5 | 36.0 | 73.6 |
| Palghat | 9 | 871.0 | 471.7 | 275.1 | 441.6 | 20.8 | 119.9 |
| Kozhikode | 8 | 1304.5 | 704.7 | 389.9 | 562.3 | 11.8 | 103.1 |
| Cannanore | 9 | 1118.2 | 825.6 | 308.8 | 407.2 | 9.3 | 45.7 |
| STATE | 82 | 904.2 | 469.7 | 404.7 | 483.4 | 34.7 | 74.9 |

TABLE—2.1. (Contd.)

| <i>District</i> | <i>No. of stations</i> | <i>January 1963</i> | <i>February 1963</i> | <i>March 1963</i> | <i>April 1963</i> | <i>May 1963</i> | <i>June 1963</i> | <i>Total 1962-63</i> |
|-----------------|----------------------------|-------------------------|--------------------------|-----------------------|-----------------------|---------------------|----------------------|--------------------------|
| Trivandrum | 8 | 42.3 | 23.5 | 61.2 | 88.9 | 161.4 | 244.9 | 2151.5 |
| Quilon | 10 | 38.3 | 27.3 | 138.2 | 115.2 | 186.0 | 303.7 | 2714.9 |
| Alleppey | 9 | 54.7 | 45.1 | 69.3 | 113.2 | 156.4 | 348.3 | 3427.9 |
| Kottayam | 15 | 50.2 | 34.0 | 58.8 | 109.5 | 119.8 | 335.2 | 3037.6 |
| Ernakulam | 10 | 37.4 | 39.4 | 73.0 | 95.5 | 210.8 | 439.0 | 3619.5 |
| Trichur | 4 | Nil. | 42.8 | 40.7 | 51.1 | 124.2 | 369.7 | 2851.2 |
| Palghat | 9 | 2.8 | 22.2 | 87.8 | 114.0 | 119.8 | 305.2 | 2851.9 |
| Kozhikode | 8 | 36.2 | Nil. | 73.3 | 59.0 | 189.1 | 449.3 | 3883.2 |
| Cannanore | 9 | 29.5 | 7.0 | 30.2 | 68.3 | 151.7 | 588.5 | 3590.0 |
| STATE | 82 | 32.4 | 26.8 | 70.3 | 90.5 | 157.7 | 375.9 | 3125.3 |

TABLE—2.2

Total area and classification of area in each District in Kerala for the year ending 30th June 1962

| <i>District</i> | <i>Total geographical area according to village papers</i> | <i>Forests</i> | <i>Land put to non agricultural uses</i> | <i>Barren and uncultivable land</i> | <i>Permanent pastures and other grazing land</i> | <i>Land under misc. tree crops not included in net area sown</i> |
|-----------------|--|----------------|--|-------------------------------------|--|--|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Trivandrum | 533983 | 110241 | 29086 | 2524 | 2462 | 1786 |
| Quilon | 1159049 | 526629 | 30347 | 40075 | 4059 | 13433 |
| Alleppey | 461568 | 1268 | 25847 | 6448 | 1108 | 11335 |
| Kottayam | 1547434 | 614690 | 33953 | 63151 | 12676 | 41565 |
| Ernakulam | 784381 | 136551 | 43777 | 27191 | 9882 | 24680 |
| Trichur | 727137 | 328483 | 34305 | 10783 | 2148 | 4033 |
| Palghat | 1261285 | 246275 | 151940 | 69422 | 15483 | 74539 |
| Kozhikode | 1634814 | 479514 | 67301 | 47443 | 8336 | 102470 |
| Cannanore | 1424960 | 166133 | 101097 | 94032 | 53904 | 225791 |
| STATE | 9534611 | 2609784 | 517653 | 361069 | 110058 | 499632 |

TABLE—2.2 (Contd.)

| <i>District</i> | <i>Cultivable waste</i> | <i>Fallow land other than current fallow</i> | <i>Current fallow</i> | <i>Net area sown</i> | <i>Area sown more than once</i> | <i>Total cropped area</i> |
|-----------------|-------------------------|--|-----------------------|----------------------|---------------------------------|---------------------------|
| (1) | (8) | (9) | (10) | (11) | (12) | (13) |
| Trivandrum | 5254 | 7656 | 5531 | 369443 | 119178 | 488621 |
| Quilon | 13407 | 5721 | 8436 | 516942 | 119813 | 636755 |
| Alleppey | 6400 | 2136 | 14666 | 392360 | 154622 | 546982 |
| Kottayam | 58485 | 4272 | 16552 | 702090 | 72805 | 774895 |
| Ernakulam | 21695 | 4609 | 17575 | 498421 | 40987 | 539408 |
| Trichur | 21580 | 2074 | 10787 | 312944 | 154307 | 467251 |
| Palghat | 56184 | 26391 | 23655 | 597396 | 189637 | 787033 |
| Kozhikode | 73277 | 24190 | 37995 | 794388 | 89437 | 883825 |
| Cannanore | 91884 | 73590 | 29003 | 589526 | 70930 | 660456 |
| STATE | 348166 | 150639 | 164100 | 4773510 | 1011716 | 5785226 |

TABLE—2.3

Total area and classification of area in each District in Kerala for the year ending 30th June 1963

| <i>District</i> | <i>Total geogra- phical are according to village papers</i> | <i>Forests</i> | <i>Land put to non-agricul- tural uses</i> | <i>Barren and uncultivable land</i> | <i>Permanent pastures and other grazing land</i> | <i>Land under misc. tree crops not included in net area sown</i> |
|-----------------|---|----------------|--|---|--|--|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Trivandrum | 533983 | 110241 | 30701 | 2524 | 1410 | 1675 |
| Quilon | 1159049 | 526629 | 31106 | 32692 | 3313 | 11673 |
| Alleppey | 461568 | 1268 | 26641 | 4707 | 831 | 19373 |
| Kottayam | 1547434 | 614690 | 34971 | 55500 | 11126 | 41565 |
| Ernakulam | 784381 | 136551 | 47636 | 24457 | 8909 | 25963 |
| Trichur | 727137 | 328472 | 34305 | 8009 | 1606 | 3710 |
| Palghat | 1261285 | 246275 | 151940 | 69422 | 15483 | 77371 |
| Kozhikode | 1634814 | 479505 | 67301 | 38948 | 6873 | 104929 |
| Cannanore | 1424960 | 166133 | 104113 | 63874 | 36557 | 229855 |
| STATE | 9534611 | 2609764 | 528714 | 300133 | 86108 | 516114 |

TABLE—2.3 (Contd.)

| <i>District</i> | <i>Cultivable waste</i> | <i>Fallow land other than current fallow</i> | <i>Current fallow</i> | <i>Net area sown</i> | <i>Area sown more than once</i> | <i>Total cropped area</i> |
|-----------------|-----------------------------|--|-----------------------|----------------------|-------------------------------------|-------------------------------|
| (1) | (8) | (9) | (10) | (11) | (12) | (13) |
| Trivandrum | 3415 | 7196 | 5531 | 371290 | 118235 | 489525 |
| Quilon | 10170 | 4405 | 5482 | 533579 | 136168 | 669747 |
| Alleppey | 6400 | 1527 | 8498 | 392323 | 154906 | 547229 |
| Kottayam | 53806 | 4272 | 14794 | 716710 | 74629 | 791339 |
| Ernakulam | 21583 | 4600 | 7942 | 506740 | 54640 | 561380 |
| Trichur | 11866 | 1490 | 6067 | 331612 | 172556 | 504168 |
| Palghat | 56002 | 14981 | 19417 | 610394 | 202875 | 813269 |
| Kozhikode | 67521 | 19747 | 31464 | 818526 | 91398 | 909924 |
| Cannanore | 82512 | 48727 | 9248 | 683941 | 75211 | 759152 |
| STATE | 313275 | 106945 | 108443 | 4965115 | 1080618 | 6045733 |

increasing steadily from 1958-59 onwards with a corresponding fall in the area of cultivable waste, fallow land and land reported as barren and uncultivable waste. Another desirable feature of the current trend in land use pattern is the progressive increase in the area sown more than once. Tables 2.2 and 2.3 give the classification of the geographical area according to mode of land use for the agricultural years, 1961-62 and 1962-63 respectively.

2.4. The above tables reveal that the net area sown has recorded an increase of 4.0% compared to 1961-62. The percentage increase in the total cropped area over the year has been higher at 4.5% which implies an increase in the area sown more than once as well. The increases in absolute terms are 1.91 lakh acres in the net area sown, 2.61 lakh acres in the total cropped area and 0.69 lakh acres in the area sown more than once. Other items which have registered an increase during the year are land put to non-agricultural uses and land under miscellaneous tree crops. The above increases are made up by decreases in the area of current fallows and other fallows, cultivable waste and barren and uncultivable land.

Agricultural Production

2.5. Area under cultivation and production of the different crops in Kerala for the years 1961-62 and 1962-63 are given in table 2.4. An outstanding achievement in the field of agriculture during 1962-63 is the expansion of the area under and production of rice and coconut which are the most important crops of the State. The area under rice increased by 1.27 lakh acres (7%) and production by 88 thousand tons (9%) during the year. In the case of coconut the area increased by 0.87 lakh acres (7%) and production by 58 million nuts (2%). Coconut being a crop with a maturity period of several years the above increase in production cannot naturally be related to the increase in area. The other crops which registered some increase in the area as well as production are bananas, sugarcane, tea, coffee and rubber. In the case of bananas the increase in area was hardly 2% but the production was almost 40% higher in

TABLE—2.4

Area and production of the various crops (Kerala) 1961-62 and 1962-63
(Year ending June)

| Sl. No. | Crop | 1961-62 | | 1962-63 | |
|------------|-------------------------------|-----------------|----------------------|-----------------|----------------------|
| | | Area (acres) | Production (tons) | Area (acres) | Production (tons) |
| Food Crops | | | | | |
| 1 | Rice | 1859932 | 988150 | 1983414 | 1075994 |
| 2 | Jowar | 3510 | 610 | 3510 | 610 |
| 3 | Ragi | 12860 | 7504 | 12875 | 7495 |
| 4 | Other cereals and millets | 16660 | 3302 | 16625 | 3298 |
| 5 | Pulses | 107559 | 16889 | 108680 | 16992 |
| 6 | Sugarcane (gur) | 35671 | 37110 | 35764 | 41044 |
| 7 | Pepper | 246720 | 26550 | 245226 | 24076 |
| 8 | Chillies | 8210 | N.A. | 8210 | N.A. |
| 9 | Ginger | 29764 | 11185 | 29820 | 11250 |
| 10 | Turmeric | 11971 | 4267 | 11940 | 4245 |
| 11 | Cardamom | 70877 | 1263 | 70877 | 1263 |
| 12 | Arecanut | 140207 | 8091 | 136648 | 8312 |
| | | | (million nuts) | | (million nuts) |
| 13 | Mangoes | 151185 | N.A. | 154757 | N.A. |
| 14 | Citrus fruits | 4841 | N.A. | 4841 | N.A. |
| 15 | Bananas and other plantations | 105452 | 312343 | 107126 | 322175 |
| 16 | Cashewnut | 135976 | 84449 | 202941 | 90592 |

TABLE—2.4 (Contd.)

| Sl. No. | Crop | 1961-62 | | 1962-63 | |
|---------|----------------------|-----------------|--------------------------------------|-----------------|-------------------------------------|
| | | Area (acres) | Production (tons) | Area (acres) | Production (tons) |
| 17 | Tapioca | 584837 | 1618713 | 547626 | 1515719 |
| 18 | Sweet potato | 19975 | N.A. | 20656 | N.A. |
| 19 | Other vegetables | 65389 | N.A. | 64092 | N.A. |
| 20 | Other food crops | 192663 | N.A. | 192617 | N.A. |
| | Total Food Crops | 3804259 | .. | 3958245 | .. |
| | Non-Food Crops | | | | |
| 1 | Groundnut | 39502 | 13533 | 39610 | 13320 |
| 2 | Castor | 686 | N.A. | 962 | N.A. |
| 3 | Sesamum | 29523 | 2539 | 29438 | 2536 |
| 4 | Coconut | 1247436 | 3247 (million nuts) | 1332535 | 3305 (million nuts) |
| 5 | Cotton | 23680 | 10300 (Bales of 392 lbs. each) | 19100 | 7534 (Bales of 392 lbs. each) |
| 6 | Tobacco | 1738 | 915 | 1738 | 904 |
| 7 | Tea | 92441 | 37428 | 95265 | 38162 |
| 8 | Coffee | 46453 | 8145 | 47372 | 8347 |
| 9 | Rubber | 328838 | 24589 | 340780 | 28598 |
| 10 | Other non-food crops | 170670 | N.A. | 180688 | N.A. |
| | Total non-food crops | 1980967 | .. | 2087488 | .. |

1962-63 than in 1961-62. This large increase in the production of bananas is of special significance in view of the rapidly expanding foreign market for the commodity.

2.6. The rather abnormal increase in the area under cashewnut is due to adoption of the result of land utilisation survey in place of Revenue Department figures for the first time in the Malabar area. The land utilisation surveys conducted in the area from 1959-60 onwards have brought to light serious under-estimate of the area under the crop in the revenue records. The recorded increase in the area in 1962-63 is therefore not real but, for the most part, the result of rectification of past error in estimation. But the increase in the production of cashewnuts from 84.4 thousand tons in 1961-62 to 90.1 thousand tons in 1962-63 as shown in Table 2.4 denotes real increase. The fall in the area under arecanut between the two years is also due to revision of the area figures consequent on the adoption of land utilisation survey figures in 1962-63 in Malabar area. It may be pointed out here that though the area under the crop in 1962-63 showed a fall compared to 1961-62 as a result of the revision of area figures in Malabar region, the total number of palms in the State has actually increased from 109.93 millions in 1961-62 to 116.11 million in 1962-63. Hence the increase in the production of arecanut by 221 million nuts is not totally attributable to increase in the average yield per acre.

2.7. Set against the expanding tendency of some important crops is the rather discouraging picture of a few other crops, some of them the State's export staples like pepper, ginger, turmeric, cardamom etc. showing a static or even receding trend in production. Pepper which enjoyed for centuries a unique place among the State's export products seems to be losing ground in the foreign markets ridden with competition from recent entrants like Sumatra, Sarawak and Singapore. Faced with an unattractive and uncertain market the production of pepper has been continuing static for the last several years in spite of all

the development efforts in the past. The dullness of the market has given rise to a similar tendency in the case of ginger, cardamom and turmeric also.

2.8. The index number of agricultural production (base 1956-57=100) increased from 110.2 in the last year of the Second Plan to 111.0 in 1962-63 according to provisional estimates. This works out to an average annual increase in output of only 0.37%. But the performance of the agricultural sector during 1962-63 was good in so far as it brought about an increase in overall output of 2.4% compared to the previous year and pushed up the production level slightly above that of 1960-61 after making up the fall it had suffered during 1961-62. However, it needs no special mention that in an economy predominated by agriculture a particular rate of increase in the total output would require a similar, if not greater, growth rate in the agricultural sector. This, we have not so far been able to achieve.

2.9. It has to be noted in this connection that Kerala's agricultural economy has certain special features inhibiting a fast pace of progress. One is the limited supply of cultivable waste lands available for reclamation. Secondly, agricultural productivity in Kerala being comparatively high, the effort necessary for further increasing, it is much more than is the case with the rest of India.

2.10. So far as Kerala is concerned the strategy of development in the Fourth Plan should be to concentrate efforts and resources on a few important crops whose development can make a considerable impact on the State's income without at the same time neglecting the less important crops. The development efforts may be organised on the lines of the 'Package Programme' with shift of emphasis from areas to crops that count. Table 2.5 shows the percentage share of the different crops in the gross agricultural output of the State.

2.11. Two crops viz. coconut and paddy alone account for as much as 52.4% of the gross agricultural output of the State. With the addition of half

TABLE—2.5

**Contribution of the Different Crops to the Gross Value of
Agricultural Crops (1960-1961)**

| <i>Sl. No.</i> | <i>Crop</i> | <i>Percentage share in the gross value of crops (current prices)</i> |
|----------------|--|--|
| 1 | Paddy | 25.57 |
| 2 | Ragi | 0.22 |
| 3 | Pulses | 0.33 |
| 4 | Ground nut | 0.36 |
| 5 | Sesamum | 0.10 |
| 6 | Coconut | 26.86 |
| 7 | Tea | 3.14 |
| 8 | Coffee | 1.01 |
| 9 | Cardamom | 0.96 |
| 10 | Rubber | 2.15 |
| 11 | Arecanut | 8.11 |
| 12 | Ginger | 0.53 |
| 13 | Turmeric | 0.16 |
| 14 | Pepper | 4.19 |
| 15 | Sugarcane | 0.57 |
| 16 | Banana | 0.95 |
| 17 | Other plantains | 2.84 |
| 18 | Cashew nut | 2.40 |
| 19 | Tapioca | 5.17 |
| 20 | Cotton | 0.26 |
| 21 | Lemongrass oil | 0.90 |
| 22 | Tobacco | 0.13 |
| 23 | Other miscellaneous crops and subsidiary products | 13.09 |
| Total | | 100.00 |

a dozen crops like arecanut, tea, tapioca, rubber, pepper and bananas and other plantains to the above two, the total contribution would amount to 79.0% of the gross agricultural output. As agricultural production accounts for 40% of the State's income (net output) the above crops contribute one third of the regional income of the State. A 50% increase in the production of these crops would therefore bring about 16.5% increase in the regional income. These crops merit special treatment for economic considerations other than regional income growth as well.

Food situation

2.12. The food supply position during 1963 was, on the whole, satisfactory. According to estimates based on pre-harvest survey the production of rice in the State in 1962-63 was 11.3 metric tons. According to the final estimates based on crop-cutting survey the production was 10.93 lakh metric tons (10.76 lakh tons). The production in 1962-63 was higher by 0.88 lakh tons as compared to 1961-62. The details of import of rice into Kerala and Central allotment of rice to the State are given in Table 2.6 and Table 2.7 respectively. The import of rice into the State by rail and road during the first eleven months of 1963 was 7.21 lakh tons. Besides, there was import of paddy amounting to 0.90 lakh tons (which in terms of rice is about 0.60 lakh tons) during the same period. Estimating the import for December 1963 at the average rate for the preceding eleven months the total imports for 1963 can be put at about 8.52 lakh tons. The Central allotment of rice to the State was, however, about 0.50 lakh tons less in 1963 than in 1962, it was 2.50 lakh tons in 1962 and 2.01 lakh tons in 1963. Thus the total supply of rice in 1963 was 21.29 lakh tons against 19.57 lakh tons in 1962. These figures, by the way, indicate the widening gap between internal demand and production of foodgrains as well as the actual consumption requirements.

2.13. Allowing for seed requirements, wastage etc., the quantity of rice available for consumption in the State out of the total production of 10.76 lakh tons is 9.67 lakh tons. This quantity combined with the imports and central allotment for 1963 gives the total consumption for the year as 20.20 lakh tons which works out to about 14 oz. per adult per day for the estimated population of 1963. If the growth rate of population continues to be the same as that for the decade ending 1961 the annual addition to population in absolute terms would be 4.14 lakhs on an average. This would mean an increase of about 0.47 lakh tons in the requirement of cereals every year.

TABLE—2.6
Arrival of Rice into the State by Rail & Road during 1963
(In Metric Tons)

| Sl. No. | Month | Arrival by rail | | | Arrival by Road | Total | Arrival of paddy by Road |
|-----------------------|-----------|---------------------|-------------|---------------|-----------------|--------|--------------------------|
| | | From Andhra Pradesh | From Madras | Other Sources | | | |
| 1 | January | .. | 21788 | 1736 | 18088 | 64784 | 464 |
| 2 | February | .. | 31619 | 1237 | 21848 | 74310 | 26628 |
| 3 | March | .. | 31407 | 1350 | 15944 | 76329 | 5646 |
| 4 | April | .. | 19707 | 936 | 14991 | 61167 | 5460 |
| 5 | May | .. | 23968 | 304 | 25492 | 81800 | 6706 |
| 6 | June | .. | 19182 | 212 | 11570 | 57729 | 5652 |
| 7 | July | .. | 20073 | .. | 27264 | 66438 | 4269 |
| 8 | August | .. | 26264 | 375 | 21287 | 70201 | 6509 |
| 9 | September | .. | 15566 | 96 | 25168 | 57050 | 6944 |
| 10 | October | .. | 21150 | 590 | 24779 | 60984 | 10882 |
| 11 | November | .. | 22642 | 1030 | 23879 | 62087 | 12290 |
| Total | | .. | 253366 | 7866 | 230310 | 732879 | 91450 |
| (January to November) | | | | | | | |

Note: Data for December not available.

TABLE—2.7

Central allotment of Rice to the State (1963)

| <i>Sl. No.</i> | <i>Months</i> | <i>Quantity (in M. Tons)</i> |
|----------------|---------------|----------------------------------|
| 1 | January | 12936 |
| 2 | February | 12936 |
| 3 | March | 13036 |
| 4 | April | 15848 |
| 5 | May | 12686 |
| 6 | June | 25372 |
| 7 | July | 31715 |
| 8 | August | 25372 |
| 9 | September | 12686 |
| 10 | October | 12686 |
| 11 | November | 12686 |
| 12 | December | 15858 |
| TOTAL | | 203817 |

ANIMAL HUSBANDRY

2.14. Animal husbandry is one of the least developed sectors in the economy of Kerala. The State is backward in this respect compared to other parts of India excepting for some progress made in the field of poultry keeping. The milk yield of cows in the State is among the lowest in the country. The number of cows and she-buffaloes in milk per thousand population in the State is only 29 as against 76 for India as a whole. The per capita availability of milk in the State is less than 2 oz., per day as against the all India average of about 5 oz. The share of animal husbandry products expressed as percentage of the total agricultural production is about 16% and 6% for all India and Kerala respectively.

TABLE—2.8

**Live Stock population as per 1961 census (India and Kerala)
(in lakhs)**

| <i>Category</i> | <i>*India</i> | <i>Kerala</i> | <i>Percentage</i> |
|--------------------------|---------------|---------------|-------------------|
| 1. Cattle | 1756.72 | 27.53 | 1.57 |
| (a) Males over 3 years | 724.77 | 5.66 | 0.78 |
| (b) Females over 3 years | 543.24 | 11.62 | 2.14 |
| (c) Young stock | 488.71 | 10.25 | 2.10 |
| 2. Buffaloes | 511.37 | 4.85 | 0.95 |
| (a) Males over 3 years | 76.58 | 2.85 | 3.72 |
| (b) Females over 3 years | 250.27 | 1.35 | 0.54 |
| (c) Young stock | 184.52 | 0.65 | 0.36 |
| 3. Sheep | 402.63 | 0.24 | 0.06 |
| 4. Goats | 608.13 | 13.12 | 2.16 |
| 5. Other Livestock | 86.42 | 1.24 | 1.43 |
| Total livestock | 3365.27 | 46.98 | 1.40 |
| Poultry | 1169.14 | 91.06 | 7.79 |

*Figures are provisional.

2.15. The number of bovines per thousand persons is 190 in Kerala as against 517 in India as a whole. The comparatively small cattle-man ratio in Kerala is due to high density of population in the State. The density of bovine population per square mile is 211 in Kerala, against 200 in the country as a whole. Table 2.9 shows the number of livestock per thousand population district-wise according to 1961 census.

Low yield rate

2.16. The annual milk yield per cow in Kerala as per 1956 Livestock Census data is only about 350 lbs. which compares very unfavourably with most other States in India; the same for Bihar is 552 lbs., for Madras 401 lbs., for U.P. 625 lbs., and for West Bengal 405 lbs. According to 1961 Livestock Census the average milk yield of a cow (over 3 years) in Kerala is 459 lbs. per annum. The average annual milk yield per she-buffalo (over 3 years) in 1956 was 619 lbs. in the State as against 970 lbs. in India as a whole; the corresponding figure for the State in 1961 is 964 lbs. The low productivity of cattle in the State is partly due to the inherent breed characteristics and partly due to the less favourable conditions under which they are reared.

TABLE—2.9
Number of Livestock per Thousand Population—State and Districts (1961 Livestock Census)

| Sl. No. | State and Districts | Total breeding cows | Cows in milk | Total breeding she-buffaloes | She-buffaloes in milk | Goats above 1 year (females) | Hens | | Ducks (Females) |
|---------|---------------------|---------------------|--------------|------------------------------|-----------------------|------------------------------|--------|----------|-----------------|
| | | | | | | | Desi | Improved | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| KERALA | | | | | | | | | |
| 1 | Trivandrum | 67.45 | 25.37 | 7.45 | 3.53 | 42.92 | 237.86 | 10.01 | 16.63 |
| 2 | Quilon | 32.60 | 13.18 | 9.48 | 4.46 | 56.19 | 204.35 | 15.62 | 1.67 |
| 3 | Alleppey | 71.17 | 24.48 | 4.63 | 1.98 | 42.83 | 235.52 | 8.40 | 1.97 |
| 4 | Kottayam | 32.97 | 28.93 | 2.84 | 1.28 | 29.23 | 280.33 | 16.93 | 73.51 |
| 5 | Ernakulam | 96.22 | 36.64 | 3.59 | 1.60 | 46.01 | 296.98 | 18.15 | 31.79 |
| 6 | Trichur | 56.27 | 22.18 | 3.35 | 1.94 | 43.32 | 280.99 | 8.83 | 18.40 |
| 7 | Palghat | 44.53 | 19.04 | 11.62 | 6.46 | 42.08 | 262.57 | 9.50 | 21.00 |
| 8 | Kozhikode | 69.79 | 29.05 | 13.88 | 7.03 | 53.20 | 208.98 | 4.39 | 1.76 |
| 9 | Cannanore | 63.88 | 22.74 | 8.37 | 3.53 | 46.58 | 217.45 | 5.58 | 1.78 |
| | | 89.43 | 33.04 | 9.66 | 3.92 | 25.68 | 163.63 | 5.19 | 0.28 |

Milk Production and Consumption

2.17. The per capita production of milk in the State in 1956 was only 1.3 oz. per day which was the lowest for any State in India excepting Assam. The daily per capita availability of milk for the whole of India was about 4.8 oz. Kerala's annual requirement of milk on the basis of a minimum standard of 10 oz. per head per day for the 1961 population is 468 lakh mds. Milk production in the State in 1961 is estimated as follows:

| | (lakh litres) |
|----------------|-------------------|
| Cow's milk | 2349.72 |
| Buffalo's milk | 572.97 |
| Goat's milk | 272.31 |
| Total | 3195.00 |
| | (89.36 lakh mds.) |

The estimated production of milk in the State, viz. 89 lakh mds., works out to a per capita availability of about 1.88 oz. per day. Even to reach the present all India level of consumption almost a three fold increase in production is necessary. Table 2.10 indicates the estimated production of milk during 1961.

2.18. The main animal products are milk, meat, hides and eggs. Due to very poor milk yield, and due to the traditional bias against slaughter of cattle, income from animal husbandry is very low and this has an adverse effect on the rural economy of the State. In other countries male cattle are mostly used for meat production and for breeding whereas in our State a large number of uneconomic and useless cattle are maintained for breeding purpose and for agricultural labour. Only a small percentage is used for meat production. Table 2.11 shows the number of animals slaughtered in licensed slaughter houses of the State for a period of 6 months from 1-1-1963 to 30-6-1963.

TABLE—2.10
Estimated production of Milk in Kerala during 1961

| Sl. No. | State and Districts | Cows' milk | | Buffaloes' milk | | Goats' milk | |
|---------|---------------------|---|-------------------------------------|---|-------------------------------------|------------------------------------|--|
| | | Average production per day for a cow (litres) | Estimated production (lakhs litres) | Average production per buffalo (litres) | Estimated production (lakhs litres) | Estimated production (lakh litres) | Estimated total production (lakh litres) |
| | KERALA | 1.50 | 2349.72 | 2.64 | 572.97 | 272.31 | 3195.00 |
| 1 | Trivandrum | 1.99 | 166.21 | 2.63 | 74.47 | 61.86 | 302.54 |
| 2 | Quilon | 1.47 | 253.21 | 2.88 | 40.15 | 10.63 | 303.99 |
| 3 | Alleppey | 1.39 | 264.87 | 2.76 | 23.39 | 20.66 | 308.92 |
| 4 | Kottayam | 1.73 | 401.18 | 2.21 | 22.37 | 12.02 | 435.57 |
| 5 | Ernakulam | 1.42 | 213.74 | 3.21 | 42.21 | 29.63 | 285.58 |
| 6 | Trichur | 1.62 | 183.52 | 2.45 | 94.46 | 23.91 | 301.89 |
| 7 | Palghat | 1.71 | 321.20 | 3.14 | 143.06 | 6.36 | 470.62 |
| 8 | Kozhikode | 1.22 | 265.78 | 2.39 | 80.63 | 65.57 | 411.98 |
| 9 | Cannanore | 1.30 | 280.01 | 2.05 | 52.23 | 41.67 | 373.91 |

TABLE—2.11

Statement showing the number of animals slaughtered in the State from 1-1-1963 to 30-6-1963

| Sl. No. | Name of District | Cows | Bulls & bullocks | Calves | Buffa-loes male | Buffa-loes Female | Calves | Sheep | Goats | Pigs | Other animals | Total |
|---------|------------------|-------|------------------|--------|-----------------|-------------------|--------|-------|--------|------|---------------|--------|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| 1 | Trivandrum | 173 | 3380 | .. | .. | .. | .. | 1668 | 12256 | 32 | .. | 17509 |
| 2 | Quilon | 1870 | 1821 | 345 | 288 | 163 | 60 | 3372 | 12386 | .. | .. | 20305 |
| 3 | Alleppey | 1416 | 2243 | 151 | 237 | 122 | 9 | 1970 | 8066 | 51 | .. | 14245 |
| 4 | Kottayam | 2897 | 6823 | 752 | 2403 | 1274 | 656 | 3618 | 11572 | 1543 | .. | 31538 |
| 5 | Ernakulam | 4268 | 5077 | 621 | 1348 | 683 | 7 | 1966 | 29951 | 382 | .. | 36303 |
| 6 | Trichur | 2783 | 3352 | 244 | 1380 | 421 | .. | 4306 | 15911 | 878 | 15 | 29290 |
| 7 | Palghat | 234 | 894 | 32 | 1168 | 417 | 18 | 8449 | 13474 | .. | 161 | 24748 |
| 8 | Kozhikode | 1944 | 786 | 451 | 845 | 44 | 14 | 6534 | 7987 | .. | .. | 18605 |
| 9 | Cannanore | 2307 | 2216 | 71 | 878 | 182 | 117 | 1090 | 15535 | 7 | .. | 22403 |
| Total | | 17892 | 26492 | 2667 | 8547 | 3306 | 881 | 32973 | 119119 | 2893 | 176 | 214946 |

Draught power

2.19. The State seems to have an excess of draught power. There are about 8 lakh working bullocks and he-buffaloes. The total cultivated area (net) in the State is about 48 lakh acres of which only about 25 lakh acres are under field crops which alone require annual ploughing. Thus there is a pair of working animals for every 6.25 acres of area under field crops in the State. The actual requirement is estimated to be one pair of working animals for every 10 acres. On the basis of this standard, the State has an excess of about 3 lakh working animals.

2.20. The prospects for achieving self sufficiency in milk are bleak so far the State is concerned. If self sufficiency is to be attained even at the minimum per capita requirement of 10 oz. of milk per day, production will have to be increased more than five times. This would mean a five to six fold increase in the productivity of milch animals which is beyond practicability. The cattle-man ratio is considerably less in Kerala than that in India as a whole. Raising of this ratio is also not feasible in view of the paucity of fodder resources and the increasing pressure of human population on land. Under these circumstances all that can be done is to raise the productivity of milch animals to the maximum possible level.

2.21. The crux of the problem of increasing milk production is upgrading of the animals which can be achieved through the key village scheme, artificial insemination programme, stationing of more pedigree bulls for breeding, and castration of scrub bulls on a wider scale. Upgrading can only improve the milk yielding capacity of the animals. In order to utilise the increased capacity it would be essential to feed the cattle properly and to protect them from disease. A three-pronged programme of upgrading, fodder development and disease control is, therefore, what is called for.

Goat development

2.22. Goat development can play a useful role in augmenting milk and meat production. The average

milk yield of goats is very low. The average annual yield of a goat in milk is only about 40 pounds of milk. But there are Indian breeds of goat like 'Jamnapari' which yield upto 600 lbs. per lactation period of 150 days. If such improved breeds are used for upgrading the local goats, the production of goat's milk can be increased considerably.

Poultry Development

2.23. Kerala produced 137 million eggs in 1951 and ranked fifth among the States in egg production. Production of eggs is now much higher and is estimated to be about 286 millions. The present production works out to an annual per capita availability of only 17 eggs as against the optimum per capita requirement of 1 egg per day or 365 eggs per year. But the effective demand for eggs in the State is so low that even with the present low level of availability there is a large exportable surplus. An increase in the production of eggs is desirable since there is ready market for the commodity outside the State. Table 2.12 shows the estimated production of eggs in Kerala during 1961.

TABLE—2.12

Estimated production of eggs in Kerala during 1961

| <i>Item</i> | <i>Average No. of eggs produced by a bird in a year</i> | <i>Estimated pro- duction in 1961 (in lakhs)</i> |
|------------------|---|--|
| 1. Hens Desi | 60 | 2402.83 |
| 2. Hens Improved | 97 | 163.65 |
| 3. Ducks | 104 | 291.62 |
| 4. Others | .. | 5.71 |
| Total | .. | 2863.81 |

(Estimates based on the 1961 Livestock census and a sample survey conducted along with it).

2.24. Poultry keeping presents greater scope for development in the State than cattle rearing. Large co-operative farms if organised in rural areas will augment the meagre income of the underemployed sections of the rural population such as agricultural labourer.

Piggery development

2.25. Pigs, if properly developed, can play an effective role in solving the food problem of the State. The problem has a qualitative as well as a quantitative side. On the qualitative side the average diet is highly deficient in animal protein content. This can be corrected by including more meat in the diet. As pigs are prolific breeders and capable of quick growth, pork production can be increased rapidly and used for making up the protein deficiency of the diet. Pig breeding is popular in some parts of the State especially in the districts of Kottayam and Ernakulam.

FISHERIES

2.26. In the field of fish production India ranks sixth in the world. Kerala with its 300 square miles of backwaters, 1900 miles of rivers, 21,000 acres of fresh water pounds, tanks and reservoirs and a coastline extending to 330 miles provide excellent facilities for the development of her marine and inland fisheries. She is perhaps the leading fish producing State of the Union, accounting for a quarter of the total fish produced in the country. The industry's prominent place in the economy arises from the fact that it not only helps to minimise the growing food deficit of the State but also supplements the protein deficient cereal diet of a large majority of her people. Kerala produces certain varieties of fish like prawns and shrimps which have good export value. About four-fifths of the fish landings in Kerala are from the sea and the remaining one-fifth from the inland fisheries.

2.27. About 50% of the fish caught in the State is consumed locally. The industry's contribution to the regional income of Kerala is significant. The percentage contribution of this sector to the regional income during the last few years at 1955-56 prices are provisionally estimated as given below:—

| | |
|---------|------|
| 1955-56 | 1.09 |
| 1956-57 | 1.85 |
| 1957-58 | 3.59 |
| 1958-59 | 2.54 |
| 1959-60 | 1.61 |
| 1960-61 | 3.57 |

About 80% of the State's population consumes fish. The annual per capita consumption of fish in Kerala is estimated to be about 15 kgs. It is greater than the all India average of 3 kgs. but is much lower than the consumption rates in other major fish producing countries like Japan (77 kgs.), Norway (52 kgs.) etc. The fishing industry provides employment to a large section of the people in the State. There are about 264 fishing villages in Kerala and more than a lakh of persons are actively engaged in operations related to fishing.

2.28. Kerala contributes about 40% of the total marine fish landings. Nearly 55% of the total catch is obtained during the last quarter of the year. The production of fish in the State during 1960-61 is estimated to be about 4.0 lakh metric tonnes. Table 2.13 gives the estimated commercial fish landings in Kerala for the last few years.

TABLE—2.13
Commercial Fish landings in Kerala

| <i>Sl. No.</i> | <i>Year</i> | <i>Quantity</i> <i>(lakh tonnes)</i> | <i>Value at 1955-56</i> <i>prices</i> <i>(Rs. lakhs)</i> |
|----------------|-------------|---|--|
| 1 | 1955-56 | 1.01 | 312.0 |
| 2 | 1956-57 | 1.82 | 555.8 |
| 3 | 1957-58 | 3.73 | 1130.8 |
| 4 | 1958-59 | 2.66 | 808.7 |
| 5 | 1959-60 | 1.70 | 519.7 |
| 6 | 1960-61 | 4.05 | 1226.7 |

The production of marine fish for the years 1960-61, 1961-62 and 1962-63 are estimated to be 3.99 lakh tonnes, 2.57 lakh tonnes and 2.11 lakh tonnes respectively. The important marine fisheries of Kerala coast are sardines, mackerels, prawns, ribbon fish, white bait, sharks, silver bellies, cat fish etc. Mackerels, oil sardines and prawns are mainly found in the region north of Quilon and the other varieties in the South. Table 2.14 shows the relative importance of some of these varieties of fish.

TABLE—2.14

Share of the major varieties of fish in the total fish landings.

| <i>Name of fish</i> | <i>Percentage of catch to total fish landings (1962-63)</i> |
|---------------------------------|---|
| Oil Sardines and other Sardines | .. 50.0 |
| Mackerels | .. 3.5 |
| Prawns | .. 11.6 |
| Cat fish | .. 1.0 |
| Silver bellies | .. 2.3 |
| Pomfret | .. 1.0 |
| Soles | .. 1.4 |
| Sharks and Dog fish | .. 2.3 |
| Ribbon fish | .. 0.5 |

2.29. 50% of the total fish catch in Kerala is exported—about 25% as fresh fish and another 25% as processed fish. About 67 fish curing yards are located in Kerala. There are some ice plants and cold storages and freezing storage units both in the public and private sectors. The quality of fish has improved during the last few years due to the improved facilities for storage and freezing of fish. Details relating to the production capacity of ice and cold storage factories as at the end of 1961-62 are given below:—

(Metric tonnes)

| <i>Type of factory</i> | <i>No. of factories</i> | <i>Ice production capacity in 24 hours</i> | <i>Ice storage capacity</i> | <i>Fresh fish storage capacity</i> | <i>Freezing capacity in 24 hours</i> | <i>Frozen fish storage capacity</i> |
|------------------------|-------------------------|--|-----------------------------|------------------------------------|--------------------------------------|-------------------------------------|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| (a) Government | 6 | .60 | 230 | 200 | 32 | 775 |
| (b) Private | 17 | 69 | 64 | 138 | 13 | 485 |

Fish meal is exported to Holland and the United Kingdom, and fish oil to the countries of the Middle East. A comparative statement showing the export of the major fishery products from Cochin Port for the last few years is furnished in Table 2.15.

TABLE—2.15

Export of Fish Products from the Port of Cochin*(Export in metric tonnes)*

| Sl. No. | Name of products | 1957-58 | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 | |
|---------|--|---------|---------|---------|---------|---------|---------|------|
| 1 | Frozen products (Shrimps, lobster tails and frog legs) | .. | 638 | 810 | 997 | 1250 | 1459 | 2991 |
| 2 | Dried prawn pulp | .. | 4117 | 1191 | 630 | 3999 | 4731 | 2516 |
| 3 | Prawn powder and fish meal | .. | 1325 | 859 | 1369 | 536 | .. | .. |
| 4 | Canned prawns and shrimps | .. | .. | 115 | 325 | 328 | 699 | 1220 |
| Total | | .. | 6080 | 2975 | 3321 | 6113 ✓ | 6889 | 6727 |

The total exports of fish products were valued at Rs. 330 lakhs in 1962-63 as against Rs. 240 lakhs in 1961-62.

2.30. Our aim should be to achieve the two fold objectives of progressively increasing the per capita consumption of fish in the State and also stimulating our exports so as to earn valuable foreign exchange. The development of fisheries on modern lines achieved so far in Kerala is to a great extent the result of foreign technical and material aid received under the different aid programmes of the United Nations and Indo-Norwegian Project in particular. Sri F. A. Nicolson has stated that "in India an acre of water will, with proper care, produce as great a weight of food as an acre of average land while its money value will be greater". It is in this context that efforts should be made to intensify the existing programmes and introduce new programmes wherever necessary.

SOCIO-ECONOMIC CONDITIONS OF FISHERMEN

2.31. The economic condition of the fishermen presents a gloomy picture. The average annual income of the fishing household was found to be of the order of Rs. 542 and the average debt Rs. 322. The per capita income of the fishing population is less than half of the per capita income for the State. Many of the fishermen follow coir spinning as subsidiary occupation to supplement the family income and the income from this source does not exceed 10% of the total income. The backwardness of the fisher-folk economy is succinctly pointed out in "A Study of the Fisherfolk in Kerala", conducted by the Economic Research Council, Kerala. The fishing industry is one with immense potentialities but it stands in need of a thorough reorganisation in respect of techniques of production and marketing to enable it to contribute its due share to the wealth of the community. The economic condition of the producer fishermen has forced them to be at the tender mercies of middlemen financiers. The fishermen community is educationally backward. There are 6 fishery High Schools, 21 U. P. Schools and 28 L. P. Schools in the State which are under the administration of the

Fishery Department. The housing condition of the fisherfolk is also unsatisfactory.

2.32. A sum of Rs. 67 lakhs was invested on fishery schemes during the first decade of planning in Kerala. The outlay set apart for these schemes in the Third Plan is Rs. 450 lakhs. During the Second Plan period 88 new primary producer co-operative societies were organised and loans amounting to Rs. 7.35 lakhs were issued to fishermen through these societies. 76 primary societies and two regional marketing societies have been organised during the first half of the Third Plan. At present there are three boat building yards, at Neendakara, Beypore and Vizhinjam. Another one is under construction at Azhikode. There are four training centres one each at Ernakulam, Beypore, Vizhinjam and Cannanore. 159 scholarships have already been given till 1962-63 and five officers from the Department have been sent for training to the Government of India Institute, Bombay. Three research stations, one each at Vizhinjam, Thiruvalla and Ernakulam are located in the State and a statistical wing has already been formed in the Department of Fisheries.

2.33. The results of our developmental efforts achieved so far are only the beginnings and more concerted efforts are needed to exploit the resources to an optimum level. The development of the fisheries sector in Kerala needs considerable attention not only with a view to meeting the increased domestic demand but also to earn foreign exchange through exports. Technological improvement is an important factor in determining the availability of fish both for consumption and export. A price policy has to be formulated which would assure an incentive to the producer to increase his production. Fishing should be treated as an important industry and its basic ancillary industries pushed forward. As Theo Tonche says "fisheries are essential to the national economy both for defence and nation building purposes and should therefore be given high priority in national Planning"

FORESTS

2.34. Forests have a key place in the Kerala economy. The forest area in the State is estimated at 26.1 lakh acres occupying nearly 27% of the geographical area of the State. The proportion of forest area in Kerala is greater than that for all India, where they form only 18% of the geographical area. But due to the high density of population in Kerala the per capita forest area in Kerala is only 18.4 cents whereas it is 30 cents for all India.

2.35. Out of the 26.1 lakh acres under forests, nearly 22.2 lakh acres are directly under the forest department and the remaining 3.9 lakh acres are owned by private individuals. The private forests are mainly in Palghat, Kozhikode and Cannanore districts. Out of the 22.2 lakh acres owned by Government 21.9 lakh acres are reserve forests and the remaining area are unreserved forests and a few village reserves. Districtwise distribution of forest area in the State is given in Table 2.16

TABLE—2.16

Districtwise distribution of Forest area

| <i>District</i> | <i>Geographical area (acres)</i> | <i>Area under forests (acres)</i> | <i>Forest area as percentage of the geographical area</i> |
|-----------------|----------------------------------|-----------------------------------|---|
| Trivandrum | 533983 | 110241 | 20.6 |
| Quilon | 1159049 | 526629 | 45.4 |
| Alleppey | 461568 | 1268 | 2.7 |
| Kottayam | 1547434 | 614690 | 39.7 |
| Ernakulam | 784381 | 136551 | 17.4 |
| Trichur | 737137 | 328483 | 45.2 |
| Palghat | 1261285 | 246275 | 19.5 |
| Kozhikode | 1634814 | 479514 | 29.3 |
| Cannanore | 1424960 | 166133 | 11.7 |
| STATE | 9534611 | 2609784 | 27.4 |

TABLE—2.17

Out-turn of Timber and Firewood

| <i>Item</i> | <i>Unit</i> | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
|-----------------------------|-------------|---------|---------|---------|---------|---------|
| 1. A. Round logs | | | | | | |
| (i) Teak | .. C.ft. | 1186772 | 897685 | 1186833 | 1329453 | 934844 |
| (ii) Others | .. C.ft. | 3269874 | 3448706 | 6698623 | 7075757 | 6612590 |
| 2. B. Sawn & Squared Timber | | | | | | |
| (i) Teak | .. C.ft. | 377 | 216 | 1622 | 138 | 2145 |
| (ii) Others | .. C.ft. | 144425 | 9656 | 3725 | 187 | 2306 |
| 3. Rough poles | .. Nos. | 411290 | 200930 | 252340 | 376650 | 194761 |
| 4. Fire-wood | .. Tons. | 52293 | 165866 | 179383 | 193934 | 119775 |
| 5. Sandal wood | .. lbs. | 132489 | 89853 | 16270 | 50891 | 75424 |
| 6. Outer slabs | .. Nos. | 1626 | 892 | 112 | 1092 | 102 |
| 7. Teak kappukals | .. Nos. | 9367 | 337 | Nil | 2260 | 458 |
| 8. Ivory | .. lbs. | 1566 | 593 | 1565 | 84 | 1533 |

2.36. Kerala's forest are rich in high quality wood like teak, rose wood, ebony, anjili, vengai, thembavu venteak. There are also a number of varieties of soft-wood, which are used as raw materials for various thriving industries like plywood, saw mills, paper, matches etc. Besides wood and timber they yield several minor produce like resin, gums, medicinal herbs, cane, sandal wood etc. and also animal products such as honey, wax, ivory, hides and horns etc. Out-turn of timber and other forest produce is given in Table 2.17.

2.37. The forests of Kerala are high yielding compared to other States in India. The reason for this higher yield is the existence of some of the rare species of wood in our forests and the comparatively better method of extraction and utilization of forest resources. The contribution of forests to the revenue in the State for the past few years is given in Table 2.18

TABLE—2.18

Revenue from Forests*(Rs. in lakhs)*

| Year | <i>Receipts from the sale of</i> | | | <i>Other receipts</i> | <i>Gross receipts</i> | <i>Refunds</i> | <i>Gross revenue</i> |
|---------|----------------------------------|-------------|----------------------|-----------------------|-----------------------|----------------|----------------------|
| | <i>Timber</i> | <i>Fuel</i> | <i>Minor produce</i> | | | | |
| 1958-59 | 295.7 | 6.8 | 5.7 | 6.4 | 314.6 | 2.9 | 311.6 |
| 1959-60 | 306.3 | 9.1 | 6.9 | 10.2 | 332.5 | 2.6 | 239.9 |
| 1960-61 | 406.1 | 5.1 | 15.1 | 12.0 | 438.3 | 6.3 | 432.0 |
| 1961-62 | 359.9 | 10.9 | 11.6 | 14.4 | 396.8 | 4.3 | 392.5 |
| 1962-63 | 452.4 | 4.3 | 17.0 | 9.6 | 483.3 | 3.2 | 480.1 |

2.38. Apart from the revenue aspects, forests are a valuable asset to the economy of the State. Their economic value increases as science and technology find new ways to utilise forest resources. Our forests support some of the major industries like plywood, saw mills, paper and matches; the forest-based factory industries in the State provide employment to nearly 13000 persons. In addition to this there are a wide range of small scale and cottage industries like basket making, rattan works, reed works etc. which depend upon forests for their raw materials.

The forests provide timber and wood for construction and fuel purposes, and serve as grazing ground for cattle and provide green manure and fodder.

2.39. Besides the productive functions of the forests their protective functions in retarding the water run-off, ensuring rainfall, in preventing soil erosion, and in safeguarding water supplies are also valuable.

2.40. During the First Plan there was no scheme for the development of forests and it was during this period that some forest areas were cleared for various purposes. Government realised that if such destruction of forests is not balanced by proper reafforestation and other suitable measures, the future of the industry and agriculture of the State would be affected. As a result, in subsequent plans, due weight was given to the schemes for forest development. During the Second plan out of the total outlay of Rs. 138.24 lakhs provided for development of forests, only about half the amount was spent during the period. The main reason for the shortfall in the expenditure was the non-implementation of the scheme 'acquisition and improvement of private forests in Malabar area'. The total plan provision for the Third Plan is Rs. 229.00 lakhs, out of which Rs. 100 lakhs is for the acquisition of private forests. As in the Second Plan the acquisition of private forests is the largest scheme included under forests in the Third plan. But so far the scheme has not been implemented for the simple reason that necessary legislation was not completed.

IRRIGATION

2.41. There is a misconception in some quarters that Kerala does not need any artificial irrigation as the State is gifted with heavy rains. But the uneven distribution and undependability of the rains coupled with the urge for intensive cultivation render the issue high priority in the Five Year Plans of Kerala.

Major schemes

2.42. In the First Five Year Plan a sum of Rs. 5.8 crores (19% of the total outlay) was allotted for irrigation. Seven major irrigation schemes were started during the Plan period and they benefited an area of 1.51 lakh acres (gross) at a cost of Rs. 4.8 crores.

2.43. Apart from the spillover schemes of the First Five Year Plan, six new schemes were also initiated during the Second Plan. As against the total allotment of Rs. 8.63 crores on major schemes, a sum of Rs. 8.92 crores was actually expended during the five year period. The total area benefited by major schemes reached 3.50 lakh acres (gross) at the end of the Second Plan (vide Table 2.19).

2.44. The Third Plan envisages an outlay of Rs. 11.42 crores on major irrigation schemes. This includes an allotment of Rs. 3.78 crores on the spillover schemes viz. Malampuzha, Pothundy, Meenkara, Cheerakuzhi, Chalakudy II Stage, Periyar Valley, Neyyar I and II Stages, Mangalam, Peechi, Vazhani and Walayar. An amount of Rs. 3.11 crores (30% of the allotment) was actually spent till the end of March 1963. The spillover schemes are estimated to irrigate an area of 1.40 lakh acres.

Minor works

2.45. Medium and minor irrigation works are assigned high priority in Kerala's agricultural development. Minor works include a variety of schemes some of which stabilise existing irrigation facilities and some others, as in the case of drainage schemes and embankments, improve the existing irrigation facilities without necessarily increasing the area irrigated.

TABLE—2.19
Major schemes—Area Irrigated

(In 000's acres)

| Sl. No. | Scheme | Up to 31-3-1956 (I Plan) | | Up to 31-3-1957 | | Up to 31-3-1958 | |
|---------|-----------------|--------------------------|-------|-----------------|-------|-----------------|--------|
| | | Net | Gross | Net | Gross | Net | Gross |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 1 | Malampuzha | .. | 35.00 | 70.00 | 37.00 | 74.00 | 39.60 |
| 2 | Meenkara | .. | .. | .. | .. | .. | 79.20 |
| 3 | Chalakudy I | .. | 21.90 | 43.80 | 26.50 | 53.00 | .. |
| 4 | Chalakudy II | .. | .. | .. | .. | .. | 28.40 |
| 5 | Neyyar Stage I | .. | .. | .. | .. | .. | 56.80 |
| 6 | Neyyar Stage II | .. | .. | .. | .. | .. | .. |
| 7 | Mangalam | .. | .. | .. | 2.20 | 4.40 | .. |
| 8 | Peechi | .. | 18.39 | 36.78 | 30.00 | 56.00 | 10.00 |
| 9 | Walayar | .. | .. | .. | 1.01 | 2.02 | 62.00 |
| 10 | Vazhani | .. | .. | .. | .. | 1.17 | 2.34 |
| Total | | .. | 75.29 | 150.58 | 96.71 | 189.42 | 210.34 |

TABLE—2.19 (Contd.)
(In 000's acres)

| Sl. No. | Scheme | Up to 31-3-1959 | | Up to 31-3-1960 | | Up to 31-3-1961 | |
|---------|-----------------|-----------------|--------|-----------------|--------|-----------------|--------|
| | | Net | Gross | Net | Gross | Net | Gross |
| (1) | (2) | (9) | (10) | (11) | (12) | (13) | (14) |
| 1 | Malampuzha | .. | 79.20 | 42.60 | 85.20 | 47.60 | 95.20 |
| 2 | Meenkara | .. | .. | 3.00 | 6.00 | 6.50 | 13.00 |
| 3 | Chalakudy I | .. | 56.80 | 28.40 | 56.80 | 28.40 | 56.80 |
| 4 | Chalakudy II | .. | 9.20 | 10.20 | 20.40 | 20.25 | 40.50 |
| 5 | Neyyar Stage I | .. | .. | 5.00 | 5.00 | 10.00 | 20.00 |
| 6 | Neyyar Stage II | .. | .. | .. | .. | 2.50 | 5.00 |
| 7 | Mangalam | .. | 11.60 | 7.00 | 14.00 | 8.00 | 16.00 |
| 8 | Peechi | .. | 69.38 | 43.38 | 69.38 | 43.38 | 69.38 |
| 9 | Walayar | .. | 13.40 | 8.00 | 16.00 | 8.00 | 16.00 |
| 10 | Vazhani | .. | 17.62 | 8.81 | 17.62 | 8.81 | 17.62 |
| Total | | .. | 257.20 | 156.39 | 290.40 | 183.44 | 349.50 |

TABLE—2.20

Minor irrigation schemes—Area irrigated

(In '000 acres)

| Scheme | Up to 1955-56 , (1st Plan) | | Up to 31-3-1957 | | Up to 31-3-1958 | | Up to 31-3-1959 | | |
|----------------------------------|-------------------------------|--------|--------------------|--------|--------------------|--------|--------------------|--------|--------|
| | Net | Gross | Net | Gross | Net | Gross | Net | Gross | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | |
| 1 Medium and Minor irrigation | .. | 156.77 | 313.54 | 162.77 | 319.54 | 169.29 | 328.17 | 189.28 | 354.51 |
| 2 Special Minor irrigation | .. | 1.08 | 2.16 | 2.30 | 3.99 | 3.13 | 5.23 | 7.60 | 11.94 |
| 3 Lift irrigation | .. | 14.70 | 29.40 | 14.70 | 29.40 | 15.18 | 30.12 | 19.35 | 36.37 |
| Total | .. | 172.55 | 345.10 | 179.77 | 352.93 | 187.60 | 363.52 | 216.23 | 402.82 |
| Scheme | Up to 31-3-1960 | | Up to 31-3-1961 | | Up to 31-3-1962 | | Up to 31-31-963 | | |
| | Net | Gross | Net | Gross | Net | Gross | Net | Gross | |
| (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | | |
| 1 Medium and Minor irrigation | .. | 214.61 | 387.38 | 241.89 | 416.66 | 269.45 | 447.49 | 296.33 | 477.17 |
| 2 Special Minor irrigation | .. | 8.63 | 13.48 | 8.69 | 13.57 | 8.69 | 13.57 | 8.69 | 13.57 |
| 3 Lift irrigation | .. | 22.69 | 41.38 | 27.84 | 49.12 | 28.84 | 50.60 | 31.19 | 54.13 |
| Total | .. | 245.93 | 442.24 | 278.42 | 479.35 | 306.98 | 511.66 | 336.21 | 544.87 |

2.46. During the First Five Year Plan 1713 items of minor irrigation works have been executed in the State at a total expenditure of Rs. 3.28 crores. The net and gross areas benefited by minor schemes at the end of the Plan period were 1.73 lakh acres and 3.45 lakh acres respectively. Out of this medium and minor works alone accounted for 1.57 lakh acres and 3.14 lakh acres respectively. Lift and special minor irrigation schemes have not recorded any appreciable progress during this period. Kerala's Second Plan laid greater emphasis on medium, minor and lift irrigation schemes. The total expenditure on these schemes amounted to Rs. 2.26 crores as against the plan outlay of Rs. 2.37 crores. By the end of 1960-61, medium, minor, lift and special minor irrigation schemes benefited an area of 4.79 lakh acres (gross) of which 4.17 lakh acres were irrigated by schemes under medium and minor works.

2.47. A sum of Rs. 5.72 crores has been allotted for minor irrigation schemes in the Third Plan with a view to irrigating an area of 1.92 lakh acres. Provision has also been made for irrigating cocoanut, arecanut and sugarcane. A sum of Rs. 1.76 crores (30.8% of the allotment) was expended till March 1963. By this time gross irrigated area rose to 5.15 lakh acres, the progress being mainly recorded by medium and minor schemes. In the case of medium and minor schemes physical achievement far exceeded target during 1961-63. In Table 2.20 is furnished the year-wise progress of minor irrigation schemes in Kerala from 1955-56 to 1962-63.

2.48. The figures in Tables 2.19 & 2.20 are estimates based on the ayacut area of the different schemes. During 1962-63 the Bureau of Economics & Statistics conducted a survey on wet lands in Kerala to estimate the area under irrigation in wet lands in the State through the different sources. The results of the survey showed that the area actually irrigated through the different major and minor schemes was, in most cases, less than the ayacut area. In 1962-63 the Panchayat Department conducted a survey on minor irrigation in all the Panchayats. The results of this survey also confirmed the findings of the above

survey. On the basis of these two surveys the figures of irrigated area seem to need revision as shown in Table 2.21

2.49. In addition to Government sources of irrigation there are also private sources of irrigation. The figures for private sources of irrigation are estimated from the departmental land utilisation surveys. The net and gross area under irrigation in the State during 1961-62 is given in Table 2.21. Other sources referred to in the Table are those sources which are not meant merely for irrigation purposes, ie. area irrigated by rivers, lakes, wells etc.

TABLE—2.21

Area irrigated during 1961-62 (in lakh acres)

| <i>Source</i> | | <i>Net area irrigated</i> | <i>Gross area irrigated</i> |
|----------------------|----|---------------------------|-----------------------------|
| (1) Government: | | | |
| (a) Major | .. | 1.44 | 2.68 |
| (b) Minor | .. | 2.39 | 3.92 |
| Total | .. | 3.83 | 6.60 |
| (2) Private Sources: | | | |
| (a) Private Canals | .. | 0.14 | 0.22 |
| (b) Tanks | .. | 0.83 | 0.89 |
| (c) Wells | .. | 0.05 | 0.07 |
| Total | .. | 1.02 | 1.18 |
| (3) Other sources | .. | 3.24 | 3.73 |
| Grand Total | .. | 8.09 | 11.51 |

2.50. In Kerala, minor irrigation works assume high priority and feasibility as the State is having a large number of isolated plots which cannot be irrigated by means of major projects. Minor works, in addition to yielding quick benefits, are more economic than major projects. In the case of major projects all the investment cost has to be met from public funds whereas minor works can utilise localised investible resources available with the farmers. In other words, minor works can be undertaken at the initiative of individuals and groups and they offer

scope for participation by the community. Moreover, there are a large number of streams in Kerala which are suited for minor irrigation development. Hence minor schemes are to be preferred in the State.

2.51. According to the "Techno-Economic Survey of Kerala" conducted by the National Council of Applied Economic Research the extent of possibilities of expanding irrigation facilities by means of minor works is around 3 lakh acres. The Council has suggested that 2 lakh acres should be developed from minor sources and of this about half may be from lift irrigation and ground water sources. For this the Council has advocated an investment of Rs. 20 crores of which Rs. 10 crores would be in the public sector and the rest to be provided by individual agriculturists. It is estimated that by 1970-71 the increase in rice production on account of minor irrigation works would be about 50,000 tons.

CHAPTER III

PLANTATIONS

The three major plantation crops of Kerala are tea, coffee and rubber. While tea and coffee have to face increasing competition in the international market, rubber, with a rapidly expanding internal market, finds itself in a very advantageous position. Consequently the expansion of plantations has been most marked in the case of rubber. All the three crops maintained a more or less steady rise in acreage as well as production. The increase in area was, however, most spectacular in the case of rubber which more than doubled its acreage in the last ten years.

Tea

3.2. Kerala ranks third among the Indian States producing tea. In 1962 the State shared 11.97% of the area under and 11.8% of the production of tea in India.

3.3. Table 3.1 shows the State-wise area under cultivation, total production and average yield per hectare of tea for the years 1951, 1956, 1961 and 1962. At the all India level total production of tea fell by 2.8% in 1962 compared to the previous year, the only reason being the sudden fall in the productivity per hectare. It can be seen that the fall was a common phenomenon in all the main tea producing States except Kerala. In Kerala production increased by 2.8% which was at once the result of increase in the area under cultivation and better yield per hectare. An attempt is made in Table 3.1 to study the progress of cultivation and production of tea through the Plans in India. Comparison can be made of the position at the beginning of the first three Five Year Plans. For India as a whole area under tea cultivation increased by 0.84% during the First Five Year Plan and by 3.3% during the Second (4.2% during the decade). Increase in production was more than proportionate (24.6%) to the increase in the area,

TABLE—3.1

Area under cultivation, total production and average yield per hectare of tea in each State of India

| Sl. No. | State | Area in '000 hectares | | | | Production in '000 Kg. | | | |
|---------|------------------|-----------------------|--------|--------|--------|------------------------|--------|--------|--------|
| | | 1951 | 1956 | 1961 | 1962* | 1951 | 1956 | 1961 | 1962* |
| (0) | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| 1 | Assam | 155.80 | 156.75 | 162.41 | 163.70 | 150370 | 167725 | 182311 | 173756 |
| 2 | West Bengal | 79.58 | 79.23 | 82.71 | 82.92 | 78158 | 76361 | 86258 | 84231 |
| 3 | Bihar | 1.64 | 1.69 | 0.53 | 0.53 | 1098 | 119 | 55 | 51 |
| 4 | Tripura | 4.75 | 4.88 | 5.06 | 5.17 | 1873 | 2145 | 2689 | 2262 |
| 5 | Uttar Pradesh | 2.60 | 2.55 | 2.08 | 2.07 | 901 | 846 | 804 | 797 |
| 6 | Punjab (Kangara) | 3.88 | 3.89 | 3.76 | 3.76 | 1011 | 1100 | 1074 | 1074 |
| 7 | Himachal Pradesh | 0.43 | 0.42 | 0.42 | 0.42 | 114 | 108 | 114 | 114 |
| 8 | Madras | 33.97 | 35.26 | 32.72 | 32.74 | 25225 | 28197 | 39768 | 39676 |
| 9 | Mysore | 1.70 | 1.88 | 1.79 | 1.78 | 874 | 1382 | 1779 | 1835 |
| 10 | Kerala | 33.54 | 34.04 | 39.78 | 39.86 | 25775 | 30736 | 39545 | 40649 |
| | Total | 317.89 | 320.59 | 331.28 | 332.96 | 284399 | 308719 | 354397 | 344445 |

TABLE—3.1—(Contd.)

| Sl. No. | State | Average yield per hectare in Kg. | | | |
|------------|------------------|----------------------------------|------|------|-------|
| | | 1951 | 1956 | 1961 | 1962* |
| | | (10) | (11) | (12) | (13) |
| 1 | Assam .. | 965 | 1070 | 1123 | 1061 |
| 2 | West Bengal .. | 982 | 864 | 1043 | 1016 |
| 3 | Bihar .. | 669 | 70 | 103 | 96 |
| 4 | Tripura .. | 394 | 440 | 532 | 437 |
| 5 | Uttar Pradesh .. | 346 | 332 | 386 | 384 |
| 6 | Punjab (Kangara) | 260 | 283 | 285 | 285 |
| 7 | Himachal Pradesh | 265 | 257 | 271 | 271 |
| 8 | Madras .. | 742 | 800 | 1215 | 1212 |
| 9 | Mysore .. | 514 | 735 | 992 | 1033 |
| 10 | Kerala .. | 768 | 903 | 994 | 1020 |
| Total .. | | 894 | 963 | 1070 | 1034 |

* Provisional

TABLE—3.2

Area and production of tea according to the sizes of estates in Kerala 1961-62

| Sl. No. | Size of estate (Hectares) | Number of estates | Area (Hectares) | Production (Kg.) | Average yield per hectare (Kg.) |
|---------|-----------------------------|-------------------|---------------------|------------------|---------------------------------|
| (0) | (1) | (2) | (3) | (4) | (5) |
| 1 | Upto 5 | .. | 1246.83 (3.1) | N.A. | N.A. |
| 2 | Above 5 and below 50 | .. | 1528.22 (3.9) | 426092 | 278.8 |
| 3 | 50 and above but below 100 | .. | 2183.36 (5.5) | 1278454 | 585.6 |
| 4 | 100 and above but below 200 | .. | 4839.63 (12.2) | 4843654 | 1000.9 |
| 5 | 200 and above but below 400 | .. | 18845.02 (47.4) | 20433194 | 1084.2 |
| 6 | 400 and above | .. | 11101.64 (27.9) | 10801795 | 973.0 |
| | Total | .. | 39744.70 (100.0) | 37783189 | 950.6 |

Note: Figures in brackets indicates percentages.

TABLE—3.3
Distribution of production of and area under tea among the States—1962

| Sl. No. | State | Production (’000 Kilograms) | Percentage | Area (’000 Hectares) | Percentage |
|---------|------------------|--------------------------------|------------|-------------------------|------------|
| (0) | (1) | (2) | (3) | (4) | (5) |
| 1 | Assam | .. | 50.45 | 163.70 | 49.17 |
| 2 | West Bengal | .. | 24.46 | 82.92 | 24.91 |
| 3 | Bihar | .. | 0.01 | 0.53 | 0.16 |
| 4 | Tripura | .. | 0.66 | 5.17 | 1.55 |
| 5 | Uttar Pradesh | .. | 0.23 | 2.07 | 0.62 |
| 6 | Punjab (Kangara) | .. | 0.31 | 3.76 | 1.13 |
| 7 | Himachal Pradesh | .. | 0.03 | 0.42 | 0.13 |
| 8 | Madras | .. | 11.56 | 32.74 | 9.83 |
| 9 | Mysore | .. | 0.53 | 1.78 | 0.53 |
| 10 | Kerala | .. | 11.80 | 39.86 | 11.97 |
| | Total | .. | 100.00 | 332.95 | 100.00 |

which indicates a steady improvement in the average yield per hectare. As regards Kerala the expansion in the area under tea cultivation was quite small in the First Plan (1.4%) while much addition was made in the Second Plan (16.8%). As a result tea production in the State rose by 53.4% during the decade. Average yield per hectare went up steadily both in the case of all India and Kerala. But productivity in the State all along remained much below the all India level.

3.4. Area and production of tea according to the sizes of estates in Kerala is given in Table 3.2. In 1961-62 the number of estates in the smallest size group was about 87.6% of the total. But this size group shared only 3.1% of the total area under tea cultivation. Number of estates and area in the smallest size group increased slightly during the year under consideration. Units of area upto 100 hectares constitute about 94% of the total number of estates and about 12.2% of the total area. Estates of size 200 hectares and above, though they constitute only 4.2% of the total number, comprise about 75% of the total area. The average yield per hectare is comparatively higher in the larger size group. As in the preceding year in 1961-62 also the size group 200 to 400 hectares continued to be the most productive. The maximum yield obtained per hectare in the State is four times higher than the minimum.

3.5. Table 3.3 shows the State-wise area under cultivation and production of tea in the year 1962. All India production of tea in 1962 was slightly lower than in 1961. The only main tea producing State which witnessed a rise in production was Kerala. As a result the State's share of all India output rose from 11.1% in 1961 to 11.8% in 1962. The area under tea cultivation increased during the year under review in all tea cultivating States in India.

3.6. The disposal of India's tea output for the last few years is given in Table 3.4. Production which fluctuated around 325 million kilograms from 1958-59 onwards registered an unprecedented rise in 1961-62. Rise in output is not fully reflected in the volume of export which, though transcended the previous year's record, (by 4.5%) still remained lower than the level

TABLE—3.4

Disposal of Indian Tea during 1955-56 to 1961-62 (Figures in thousand K. gms.)

| <i>Year</i> | <i>Opening stock at the beginning of the financial year</i> | <i>Production during the year</i> | <i>Import during the calendar year</i> | <i>Export during the financial year</i> | <i>Closing stock at the end of the financial year</i> | <i>Estimated internal consumption (2+3+4) (5+6)</i> |
|-------------|---|-----------------------------------|--|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 1955-56 | 39652 | 307704 | 221.71 | 183769 | 63367 | 100441.71 |
| 1956-57 | 63367 | 308719 | 463.61 | 233088 | 51554 | 87007.61 |
| 1957-58 | 51554 | 310802 | 240.81 | 191755 | 58104 | 112737.81 |
| 1958-59 | 58104 | 325225 | 11.65 | 217322 | 57132 | 108876.65 |
| 1959-60 | 63933 | 328011 | 1.50 | 215459 | 60559 | 114555.50 |
| 1960-61 | 60559 | 322429 | 0.36 | 196473 | 59709 | 126806.36 |
| 1961-62 | 59709 | 353859 | 4.04 | 205329 | 70363 | 137880.04 |

TABLE—3.5
Labour employed (daily average) in Tea Industry in India

| Sl. No. | State | .. | 1956 | 1957 | 1958 | 1959 | 1960* |
|---------|------------------|----|---------|--------|--------|--------|--------|
| (0) | (1) | | (2) | (3) | (4) | (5) | (6) |
| 1 | Assam | .. | 529528 | 535503 | 522738 | 501267 | 453761 |
| 2 | Bihar | .. | 1063 | 902 | 792 | 519 | 527 |
| 3 | Punjab | .. | 6766 | 6764 | 6696 | 5000 | 6775 |
| 4 | Uttar Pradesh | .. | 3596 | 3846 | 4171 | 3391 | 3112 |
| 5 | West Bengal | .. | 268671 | 261384 | 251145 | 236674 | 197165 |
| 6 | Mysore | .. | 5242 | 5951 | 5396 | 3661 | 3539 |
| 7 | Kerala | .. | 97880 | 97519 | 97519 | 86337 | 93762 |
| 8 | Madras | .. | 83651 | 84340 | 83412 | 73581 | 78342 |
| 9 | Himachal Pradesh | .. | 133 | 130 | 376 | 279 | 413 |
| 10 | Tripura | .. | 8153 | 7918 | 7993 | 8696 | 7770 |
| | Total | .. | 1004683 | 104257 | 980238 | 919405 | 845166 |
| | Provisional | | | | | | |

reached in 1958-59 and 1959-60. Tea import which dwindled to an insignificant volume of 360 kilograms in 1960-61 rose to 4040 kilograms in 1961-62. As compared to the previous year the increase in tea consumption in 1961-62 was 11 million kilograms or 8.7%.

3.7. Labour employed in tea industry in India which was keeping a trend of steady fall in numbers from 1956 onwards declined further in 1960. The drop in numbers was mainly felt in the two main tea producing States of Assam and West Bengal. Table 3.5 illustrates the labour situation in the industry in India during the five years ending 1960. In the two southern tea producing States of Madras and Kerala there was a rise in the number of labourers during the year 1961. But for India as a whole the general trend for the last many years has been one of decline. In this respect Kerala's position is also not much better.

Coffee

3.8. Coffee production in India touched a record level of 68 thousand tons in 1960-61. This bumper crop was followed by an exceptionally bad one of 45 thousand tonnes in the 1961-62 season. The production rose upto 55 thousand tonnes in 1962-63 and it is expected to be higher at 60 thousand tonnes in the current season.

3.9. Kerala is maintaining an increasing trend in the area under cultivation as well as production of coffee. The area increased from 41508 acres in 1960-61 to 46453 acres in 1961-62 and 47372 acres in 1962-63. The figures of coffee production in the State during the above three years were 7292 tons, 8145 tons and 8347 tons respectively. Thus the area increased by 5864 acres (14%) and the production by 1172 tons (16%) during the first two years of the Third Plan period. The area under cultivation and production of coffee in the six coffee growing districts of the State for the last two years are given in Table 3.6.

TABLE—3.6

| S. No. | District | Area (Acres) | | Production (Tons) | |
|----------|--------------|--------------|---------|-------------------|---------|
| | | 1961-62 | 1962-63 | 1961-62 | 1962-63 |
| 1 | Quilon .. | 586 | 478 | 6 | 6 |
| 2 | Kottayam .. | 4443 | 4626 | 480 | 506 |
| 3 | Ernakulam .. | 198 | 395 | 38 | 39 |
| 4 | Palghat .. | 5028 | 4994 | 1696 | 1706 |
| 5 | Kozhikode .. | 31880 | 32494 | 5087 | 5249 |
| 6 | Cannanore .. | 4318 | 4285 | 833 | 841 |
| Total .. | | 46453 | 47372 | 8145 | 8347 |

Rubber

3.10. Out of the 3.61 lakh acres of area under rubber in India, as much as 3.40 lakh acres or 94% is in Kerala. The State's share in the all India output of natural rubber is less at 90%. In 1962-63 the total production of natural rubber in the country was 32,239 metric tons and that in Kerala was 29,057 metric tons. The gap between total rubber consumption and natural rubber production in India continues to get wider every year as is evident from Table 3.7. While Kerala has the privilege of having a virtual monopoly in the country in natural rubber it adds to the responsibility of the State in developing the crop and leading the country to self sufficiency in rubber. The large scale development taking place in this field shows that the State is meeting the challenge with courage and determination.

3.11. Table 3.8 gives the State-wise area under the crop and production of rubber for the years 1955-56, 1960-61 and 1962-63. Between 1955-56 and 1960-61, i.e. during the Second Plan period, the area under rubber increased by more than 1 lakh acres, the percentage increase being 56%. In Madras the area increased by 46% over the period though the increase in absolute terms was only 4 thousand acres. As for production, it increased only by 7% in Kerala and 27% in Madras between 1955-56 and 1960-61. This is but natural since the area added during the

TABLE—3.8

State-wise Acreage and Production of Rubber

| Sl. No. | State | 1955-56 | | 1960-61 | | 1962-63 | |
|---------|---------------------|---------------|---------------------------|---------------|---------------------------|---------------|---------------------------|
| | | Area in Acres | Production in Metric tons | Area in Acres | Production in Metric tons | Area in Acres | Production in Metric tons |
| (0) | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 1 | Kerala | 193872 | 21680 | 303021 | 23175 | 340296 | 29057 |
| 2 | Madras | 9323 | 1606 | 13610 | 2040 | 16250 | 2695 |
| 3 | Mysore | 3713 | 406 | 3949 | 452 | 4174 | 447 |
| 4 | Andamans and others | 331 | 38 | 422 | 30 | 422 | 40 |
| Total | | 207239 | 14060 | 321002 | 27446 | 361142 | 32239 |

TABLE—3.9

State-wise details of tappable area, production and average yield of rubber

| 1955-56 | | | | | | |
|----------------|-------------------|---------------------------|------------------------------|--|---------------------------------|--|
| <i>Sl. No.</i> | <i>State</i> | <i>Total area (acres)</i> | <i>Tappable area (acres)</i> | <i>Percentage of tappable area to total area</i> | <i>Production (Metric Tons)</i> | <i>Average yield per acre (kg.) of tappable area</i> |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 1 | Kerala | 193872 | 154191 | 79.5 | 21680 | 141 |
| 2 | Madras | 9323 | 7917 | 84.9 | 1606 | 203 |
| 3 | Mysore | 3713 | 3569 | 96.1 | 406 | 114 |
| 4 | Andamans & others | 331 | 331 | 100.0 | 38 | 115 |
| TOTAL | | 207239 | 166008 | 80.1 | 23730 | 143 |

| 1960-61 | | | | | | |
|----------------|-------------------|---------------------------|------------------------------|--|---------------------------------|--|
| <i>Sl. No.</i> | <i>State</i> | <i>Total area (acres)</i> | <i>Tappable area (acres)</i> | <i>Percentage of tappable area to total area</i> | <i>Production (Metric Tons)</i> | <i>Average yield per acre (kg.) of tappable area</i> |
| (1) | (2) | (8) | (9) | (10) | (11) | (12) |
| 1 | Kerala | 303021 | 161496 | 53.3 | 23175 | 143 |
| 2 | Madras | 13610 | 8167 | 60.0 | 2040 | 250 |
| 3 | Mysore | 3949 | 3665 | 92.8 | 452 | 123 |
| 4 | Andamans & others | 422 | 272 | 64.4 | 30 | 110 |
| TOTAL | | 321002 | 173600 | 54.1 | 25697 | 148 |

| 1962-63 | | | | | | |
|----------------|-------------------|---------------------------|------------------------------|--|---------------------------------|--|
| <i>Sl. No.</i> | <i>State</i> | <i>Total area (acres)</i> | <i>Tappable area (acres)</i> | <i>Percentage of tappable area to total area</i> | <i>Production (Metric Tons)</i> | <i>Average yield per acre (kg.) of tappable area</i> |
| (1) | (2) | (13) | (14) | (15) | (16) | (17) |
| 1 | Kerala | 340296 | 194016 | 57.1 | 29057 | 150 |
| 2 | Madras | 16250 | 9639 | 59.3 | 2695 | 280 |
| 3 | Mysore | 4174 | 3773 | 90.4 | 447 | 119 |
| 4 | Andamans & others | 422 | 272 | 64.4 | 40 | 147 |
| TOTAL | | 361142 | 207700 | 57.5 | 32239 | 155 |

TABLE—3.10

State-wise distribution of rubber holdings and estates at the end of 1962-63 (Area in acres)

| Sl. No. | States | Small growers (holdings) | | | | Large growers (estates) | | | | Total | |
|---------|----------|--------------------------|--------|------------------------|-----------------|-------------------------|------------------------|-----------------|--------|------------------------|--|
| | | Number of units | Area | Average area of a unit | Number of units | Area | Average area of a unit | Number of units | Area | Average area of a unit | |
| (0) | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | |
| 1 | Kerala | 65658 | 215085 | 3.28 | 548 | 125211 | 228.48 | 66206 | 340296 | 5.14 | |
| 2 | Madras | 683 | 5305 | 7.77 | 41 | 10945 | 266.95 | 724 | 16250 | 22.44 | |
| 3 | Mysore | 21 | 347 | 16.52 | 10 | 3827 | 382.70 | 31 | 4174 | 134.64 | |
| 4. | Andamans | .. | .. | .. | 1 | 422 | 422.00 | 1 | 422 | 422.00 | |
| Total | | 66362 | 220737 | 3.33 | 600 | 140405 | 234.00 | 66962 | 361142 | 5.39 | |

five year period would not start yielding during the period, as is evident from the very small increase in the tappable area over the period. In Kerala the tappable area increased from 1.54 lakh acres to 1.61 lakh acres only and in Madras from 7,917 acres to 8,167 acres. During the first two years of the Third Plan period the area under rubber in Kerala increased by 37,275 acres.

3.12. From the above facts it can be seen that a real picture of per acre productivity can be obtained only by calculating the average yield per acre with reference to the tappable area rather than the total area under rubber. The State-wise details of total area and tappable area under rubber and production and average yield per acre of the crop are furnished in Table 3.9. It can be seen from the Table that the present average yield per acre in Kerala is only a little more than half that in the Madras State. This indicates that there is considerable scope for increasing the State's production of rubber by intensive cultivation, especially since the natural conditions in the State are most suited for the cultivation of rubber. The trend in the per acre yield in the past few years, though a rising one, is quite discouraging compared to that in the neighbouring State of Madras. The average yield per acre in Kerala increased from 141 kg. to 143 kg. during the Second Plan period whereas in Madras it increased from 203 kilograms to 250 kilograms during the same period. During the first two years of the current plan period the progress in this respect was even faster in Madras where the yield per acre rose upto 280 kg. by 1962-63. Kerala's performance also was better during this period compared to that during the previous quinquennium. While the production per acre increased only from 141 kg. to 143 kg. in the five year period it rose upto 150 kg. over the two subsequent years ending 1962-63. The slow pace of development in the case of Kerala is attributable in some measure to the higher proportion of small and uneconomic holdings in this State.

3.13. Table 3.10 gives the classification of area under rubber in the different States into holdings and

estates, holding being defined as plantation of size upto and including 50 acres and estates as those of size above 40 acres. The average size of a holding in Kerala is less than half that in Madras. The average area of a holding in Kerala is only 3.28 acres while the minimum size for a unit to be economic is 5 acres. About two thirds of the area under rubber in Kerala are in holdings of size 50 acres or less whereas in Madras only one third of the area is in this size group. Kerala's position is not so bad in respect of the average size of an estate. Since the number of units in the case of estates is less than 1 per cent of the total number of units the average size of a unit, holdings and estates put together, is only 5.14 acres in Kerala as against 22.44 acres in Madras and 134.64 acres in Mysore.

3.14. However, the existence of a large number of small holdings in the natural rubber industry is not an unmixed bane. It has its own advantages, provided the units are not too small, say below 5 acres in size. In the first place the overhead costs being negligible, the cost of production for small plantations will be much smaller than that for big estates. Secondly, since most of the small holders are peasant proprietors cultivating other crops also, a regular flow of money income into their hands ensured by rubber cultivation will bring about increased investment on agricultural development in general and thereby lead to a rise in agricultural productivity. Lastly, serving as a steady source of income to a large number of middle class families, it will contribute to general economic welfare and will, to some extent, be instrumental to a more equitable distribution of wealth.

3.15. In contrast to the above advantages, the main objection raised against the system of small holdings is that it will hinder capital accumulation and re-investment. This is true. But it is doubtful whether the big plantations have any impressive record of savings and re-investment. In the case of plantation companies the profits, being distributed as dividends to a large number of share-holders, may not be re-invested to any large extent. So far as

the profits earned by individual holders of estates are concerned, the general tendency seems to be to fritter away a large part of it for conspicuous consumption.

3.16. The natural rubber industry in India has recently entered a new phase in its history with the starting of synthetic rubber production in the country. One unit has gone into production and one or two more are expected to be set up in the near future. The decision to manufacture synthetic rubber in the country caused much anxiety to the natural rubber interests. Though the starting of production in one unit is not going to affect natural rubber in any way, the industry cannot remain unconcerned if two more are to be set up soon.

CHAPTER IV

MINERALS

Kerala is lacking in the basic minerals such as iron, coal and petroleum which are of vital importance in industrial development. But in respect of certain other minerals which are of no less commercial importance, like titanium ores, refractory minerals etc., the State has abundant resources. However, the percentage contribution of Kerala to the total mineral output of India is indeed very meagre especially when compared to that of some other States such as Bihar, West Bengal and Madhya Pradesh. The mineral wealth of Kerala merits a closer study in regard to its development. Regular geological survey and mapping of the whole State, which has already been launched by the Central Government, will pave the way towards enhanced exploitation of its mineral potential.

4.2. The important minerals that occur in workable quantities in the State are the beach-minerals comprising of ilmenite rutile, monazite, zircon, sillimanite, clays including refractory clays, high grade quartz sand and lime stone including limeshell of almost cent per cent calcium carbonate content. Other minerals such as mica, graphite, iron ore, lignite and soapstone occur in the State though not very extensively. Gold has also been known to occur from very early times in certain tracts of Wynad taluk. So also certain semi-precious stones such as cat's-eye and amethyst occur in the hilly tracts of Trivandrum district.

Beach minerals—Ilmenite

4.3. Foremost among the mineral resources of the State is the beach sand deposits in the Quilon district which contain large concentrations of ilmenite, rutile, monazite, sillimanite and zircon. The

Quilon beach extending from Neendakara to Kayamkulam is in fact the principal reserve of these minerals in Kerala and probably it is the largest deposit of high grade ilmenite in the world. The total length of the workable beach is 16 miles. The form of the beach in these areas is called "barrier-beach". This consists of a beach where the sea waves break with a dune area behind, followed by a low mud covered flat comprising paddy fields and back water system. The bulk of the mineral reserves is in the dunes behind the beach front. The raw sands of the beach consist of 60 to 70% of ilmenite. Mining consists of the collection of the crude sand a large stock of which is maintained at the concentrating plant and only dry sand is brought in for concentration. The sand is first treated in magnetic separators which remove ilmenite as a final clean product. Some of the tailings from the magnetic separators are treated further to concentrate some of the byproducts. In composition ilmenite is a double oxide of iron and titanium (FeO , TiO_2). It is a much sought-after mineral on account of its wide use in the paint industry.

4.4. The past one or two decades have witnessed almost a revolution in the development and use of titanium for which ilmenite is the raw material. The rate of production of titanium and its products has been steadily going up especially in U.S.A., U.K. and Japan. The annual production of ilmenite in the State rose from 2 lakh tonnes in 1950 to about 3 lakh tonnes in 1956. Since then the production has been fairly steady till about 1959. The production and export figures of ilmenite in the State are given in Table—4.1

TABLE—4.1
Production and export of ilmenite

| <i>Year</i> | | <i>Production (Tonnes)</i> | <i>Export (Tonnes)</i> |
|-------------|----|--------------------------------|----------------------------|
| 1958 | .. | 290334 | 278558 |
| 1959 | .. | 289257 | 283513 |
| 1960 | .. | 138856 | 228697 |
| 1961 | .. | 169878 | 131621 |
| 1962 | .. | 138006 | 104486 |
| 1963 | .. | 23650 | 77747 |

4.5. Only a very small fraction of the ilmenite produced is consumed within the State. The Travancore Titanium Products (Ltd.), Trivandrum, at the present rate of output of 18 tonnes of titanium dioxide a day consumes about 14,000 tonnes of ilmenite in an year. The bulk of the mineral produced was being exported mostly to U.S.A. and U.K. Since the latter half of 1958, a sharp slackening in demand for Kerala ilmenite had set in with consequent fall in production. (vide Table 4.1).

4.6. The ilmenite processed in the State is having a higher titanium dioxide content, the percentage varying from 55 to 60 when compared to the Malayan ilmenite, the titanium dioxide content of which is only 45%. In spite of this inherent advantage the export market of ilmenite dwindled considerably because of competition in the world market from centres such as Norway, Canada, Malaya and Australia. To save the industry, the internal consumption of the mineral will have to be stepped up. Also the possibility of finding export markets in other countries has to be fully explored.

Titanium metal

4.7. Titanium metal is as strong as stainless steel even though 40% lighter. The metal is 60% heavier than aluminium but has more than twice its strength. It is unaffected by sea water and is resistant to heat and corrosion. It has got varied uses in the manufacture of aircraft, textile machinery, automatic pistons, spring balances, sport goods, gas turbine parts, electrical resistances etc. The metal as such is not produced in the country even though there is abundant ilmenite reserves. The possibility of starting a unit for the production of titanium metal using the ilmenite produced in the State has to be investigated fully.

Rutile

4.8. Rutile is titanium dioxide (TiO_2) with 60% titanium. Rutile production in India is the monopoly of Kerala State. It is mainly used in the metallurgical industry for production of titanium, the ceramic

industry and in the manufacture of arc welding electrodes. At present rutile is being imported, as the internal production is not sufficient to meet the requirements in the country. Whole of the mineral produced in the State goes to Bombay and Calcutta where it finds a ready market. After the extraction of ilmenite from the mineral sands, rutile is recovered from the non-magnetic tailings using electrostatic separators. The tailings contain about 80% of the original rutile and all the sillimanite and zircon. The Travancore Minerals Ltd. and F. X. Periera Ltd. are engaged in the production of rutile. For lack of equipment only one fifth of the rutile content of the raw sand is now recovered. The rest is allowed to go into the tailings and is wasted. The Travancore Titanium Products Ltd. has included the enhancement of production of rutile pigment in their development schemes. The factory successfully produced for the first time the rutile pigment in 1962. The production and export (coastal) of rutile in the State is given in Table 4.2.

TABLE—4.2

| <i>Year</i> | <i>Production (Tonnes)</i> | <i>Export (Tonnes) —</i> |
|-------------|--------------------------------|------------------------------|
| 1958 | 457 | 368 |
| 1959 | 389 | 503 |
| 1960 | 982 | 1053 |
| 1961 | 807 | 775 |
| 1962 | 1603 | 2753 |
| 1963 | 1767 | 1722 |

Monazite

4.9. Monazite is also an important mineral which constitutes about 1 to 2% of the beach sands of the Quilon area. This mineral is a phosphate of thorium and cerium and other rare earth elements and has a small percentage of uranium. It constitutes a source of the radio active elements, thorium and uranium, required for the production of atomic energy. Previously, thorium was widely used in the form of nitrate for the manufacture of gas mantles. The recent advances in the production and use of atomic energy

and also the application of the rare earths in various fields of industry offer wider scope for increased production and utilization of monazite. The Rare Earths Factory at Alwaye processes about 1500 tons of monazite per annum for the manufacture of thorium oxide, rare earth salts and tri-sodium phosphates. At present this factory is getting its requirements of monazite from Manavalakurichi in Madras State. Monazite can also be obtained as a byproduct in the production of ilmenite. Adopting this process will enable the production of monazite at a cheaper rate. Attention has to be paid to the extraction of ilmenite and the subsequent recovery of monazite from the sand tailings of ilmenite. The production and export of monazite which is showing a decreasing trend is given in Table 4.3.

TABLE—4.3

Production and Export of Monazite

| <i>Year</i> | | <i>Production (Tonnes)</i> | <i>Export (Tonnes)</i> |
|-------------|----|--------------------------------|----------------------------|
| 1958 | .. | 372 | 457 |
| 1959 | .. | 193 | 194 |
| 1960 | .. | 76 | 25 |
| 1961 | .. | 151 | 56 |
| 1962 | .. | 88 | 137 |

Zircon and Sillimanite

4.10. The beach sands contain about 5 to 10% each of sillimanite and zircon along with other heavy minerals like ilmenite. Sillimanite and zircon can be recovered from the sand tailings of ilmenite and rutile. The total reserves of these minerals in the Neendakara sand bar is estimated to be 19,16,260 tons of sillimanite and 7,99,350 tons of zircon, in addition to those found in the beach washings. Sillimanite averages about 5.9% and zircon about 4.2% of the beach washings. Only experimental production of sillimanite and zircon has been taken up in the State so far. More attention has to be paid to the economic exploitation of these minerals in the State for internal consumption mainly in the refractories.

China Clay

4.11. Pure china-clay or kaolin contains 46.5% silica, 39.5% alumina and 14% moisture. The commercial variety of china-clay is not pure and contains small amounts of impurities like quartz, oxides of iron and titanium and minerals containing magnesium and calcium together with the alkalies, soda and potash. The distinguishing features of china-clay are its plasticity, softness, white colour and ease of dispersion in water.

4.12. Deposits of good quality china-clay are found in the States of Bihar, Orissa, Madhya Pradesh, Kerala, Maharashtra, Gujarat, Mysore, Andhra Pradesh, Delhi, Jammu and Kashmir, Rajasthan, West Bengal, Punjab and Uttar Pradesh (vide Table 4.4). The most important deposits of china clay however are those obtaining in Bihar and Kerala.

TABLE—4.4
State-wise production of China Clay 1956-1961

| State | (In tonnes) | | | | | |
|-----------------|-------------|--------|--------|--------|--------|--------|
| | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 |
| Andhra Pradesh | 964 | 4290 | 5899 | 7929 | 2715 | 6748 |
| Bihar | 92278 | 95891 | 99530 | 140086 | 145945 | 132682 |
| Delhi | 11100 | 20719 | 20786 | 38427 | 39803 | 30012 |
| Maharashtra | .. | .. | .. | .. | .. | 1933 |
| Gujarat | 21375 | 24240 | 23495 | 38471 | 40018 | 47655 |
| Jammu & Kashmir | .. | .. | .. | 11 | 19 | 40 |
| Kerala | 15398 | 15875 | 9123 | 12394 | 24999 | 33697 |
| Madhya Pradesh | 1490 | 1405 | 46 | 1769 | 4101 | 5293 |
| Madras | .. | .. | .. | .. | 203 | 301 |
| Mysore | 2756 | 2909 | 3877 | 9127 | 14147 | 28904 |
| Orissa | 11356 | 17752 | 21889 | 26484 | 39752 | 28705 |
| Rajasthan | 342 | 226 | 414 | 446 | 1244 | 2040 |
| West Bengal | .. | 102 | .. | 1961 | 39836 | 47218 |
| TOTAL | 157059 | 183409 | 185059 | 277105 | 35782 | 365228 |

4.13. The china clay produced at Kundara in the State is the finest among the Indian clays. It compares very favourably with the standard English and American clays. The special feature of the Kundara clay is that it is white, fine grade highly plastic,

refractory having a greater moisture content. The clay also contains small percentages of titanium. These special qualities have made the clay an excellent material to be used in textile, paper and rubber industries as filler. It is excellent for the manufacture of all kinds of vitrious, semi-vitrious and porous bodies. It can also be used in the manufacture of ultra-marine blue, linolium, distempers, paints, cosmetics and many other industries.

4.14. The most extensive deposits of china clay in the State are in Cannanore, Quilon and Trivandrum districts according to the Geological survey of India. Besides these, good variety clay is found in Ernakulam and Kozhikode districts. It has been estimated that one square mile in the Kundara region will yield about 22 million tons of china clay. Nevertheless, it has to be admitted that no accurate estimate of the total china clay reserve in the different deposits of the State has so far been made.

4.15. The production of china clay in the State is steadily increasing. However in 1963 there is a fall in production. The quantity of china-clay produced in the State and its value from the year 1956 is given in Table 4.5.

TABLE—4.5

Production and value of china clay

| <i>Year</i> | | <i>Quantity (Tonnes)</i> | <i>Value (Rs.)</i> |
|-------------|----|------------------------------|------------------------|
| 1956 | .. | 15401 | 355000 |
| 1957 | .. | 15578 | 319000 |
| 1958 | .. | 17047 | 486000 |
| 1959 | .. | 21454 | 603000 |
| 1960 | .. | 24999 | 341000 |
| 1961 | .. | 33697 | 320000 |
| 1962 | .. | 43222 | N.A. |
| 1963 | .. | 37177 | N.A. |

4.16. It may be noted that textile grade China clay is being imported to India. Kerala could very easily fill the gap between production and domestic consumption, particularly in view of the excellent quality of the mineral occurring in several parts of the State.

Recently a license has been issued to English China Clays Ltd., U.K. to establish a clay washing unit at Trivandrum.

4.17. The State's resources in certain other refractory clays such as fire clay etc. are also considerable. All these are found in abundance in the neighbourhood of Kundara as also in several localities in Kozhikode and Cannanore districts. Systematic and large scale mining of these deposits are economically feasible especially in view of the growing demand for higher grade refractory clays, which at present is met from imports from foreign countries at very high cost.

Tile clay

4.18. Tile industry with more than 190 factories is a well developed one in the State. Local earths, silts and clays from the alluvial flats of most of the rivers are being used in the manufacture of tiles. Tiles produced in the State are sent to other parts of India as well as to Far Eastern countries. Tile export is mainly from the Feroke area. Of late, the foreign markets have declined, and the tile production is showing a falling trend. There is not much scope for further expansion of tile industry in the State as it has reached a near saturation point, production in the important centres like Quilon and Trichur having declined.

Mica

4.19. Mica occurs both in charnockites and leptinites, the two chief systems of crystalline rocks in the State. Though the species muscovite and biotite are known to occur in the State, phlogopite is the more predominant variety. In the State there is only one mica mine located at Punalur. Formerly mica used to be exported from this mine in large quantities. Because of the inferior grade of the mica and the development of cheaper substitutes, the market for the mica produced in the State is becoming slowly extinct. The mining operations have closed from the year 1960. The production figures since 1957 are given in Table 4.6.

TABLE—4.6.

| <i>Year</i> | | <i>Quantity (Tonnes)</i> | <i>Value (in Rs.)</i> |
|-------------|----|------------------------------|---------------------------|
| 1957 | .. | 72 | 40000 |
| 1958 | .. | 72 | 40000 |
| 1959 | .. | 45 | 23000 |
| 1960 | .. | 95 | N.A. |

Muscovite is reported to occur in Mannarghat in Palghat district where the exploration of the resources is under way. A revival of the market for mica is being awaited.

Quartz sand

4.20. Quartz sand is mainly used in the manufacture of glass articles, white cement etc. Extensive deposits of the quartz sand of the order of 80 million tons occur along the Shertallai-Pattanakad-Pallipuram-Panavally area. At present it is collected only from Panavally and Pallipuram and about 3000 tons of sand are produced annually. A major portion of the output is used by the Ogale Glass Factory at Alwaye. The Pallathra Bricks and Tiles Ltd., a sand lime brick factory in the Public Sector, with an installed capacity of 44,000 bricks a day, has been established with its registered office at Kottayam. The sand requirements of this factory would be about 33750 tons a year.

Lime shell and lime stone

4.21. Lime shell is found in the back waters of the State and the estuaries of the rivers. The most extensive reserve is in the Vembanad lake. There are large deposits in the estuaries of Kadalundi and Korapuzha rivers in the Kozhikode district and in the Cranganore lake. The Travancore Cement Co., after a survey had estimated a reserve of 3.4 million tons in the Vembanad lake. About 4 to 5 lakh tons of limeshell are estimated in the estuary of Kadalundi river and another 10 lakh tons in the lower reaches of Pullut and Thathanpally rivers. Now, the bulk of the production is consumed within the State. The cement company uses about 70,000 tons of shells

a year. Recently an extensive lime-stone deposit in the Kozhinjampara-Chittur region has been found out by the State Geological Department. According to their estimate the deposit consists of 3.5 to 4 million tonnes of kankar limestone and 0.7 million tonnes of crystalline limestone. The industrial possibility of these reserves has to be examined.

Oil

4.22. The Oil and Natural Gas Commission of the Government of India has undertaken an investigation of oil along the Cochin coast. If their efforts prove fruitful the pace of industrialisation in the State will be accelerated to a great extent.

Minerals of Minor Economic Importance

4.23. Besides the minerals discussed above, deposits of gold, lignite, graphite, iron ore and semi-precious stones also occur in the State. These deposits are apparently of little economic value to the State at present.

4.24. Gold deposits occur in the Wynad-Nilambur area. These deposits were known from the nineteenth century. All the surface deposits have been worked out and 600 ozs. of the metal has been won. It is necessary to make a thorough geological search of the area in order to locate hidden lodes.

4.25. Graphite deposits occur in several places in Nedumangad and Neyyattinkara taluks. Also it occurs in several other isolated localities in Trivandrum district. Between 1898 and 1911, the Morgan Crucible Co. won about 35000 tons of graphite from the State. With the discovery of graphite in Madagascar, the company closed its operations in Kerala. The most productive mine was at Vellanad in Nedumangad taluk. Further prospecting of graphite deposits in the State is called for together with efforts for its economic exploitation.

4.26. A lignite formation, two to eight feet thick, is known to occur in the Varkala region. The Varkala formation extends with local variations from Varkala to Kottayam. Excavation and drilling at

several places (Thiruvalla & Chenganacherry) of the Varkalai formation have shown that the lignite of this region is of inferior quality. The commercial importance of lignite depends mainly on its value as a fuel.

4.27. The top of the quartz-magnetite bodies reported from various localities in the State is rich in iron. The iron content decreases rapidly within a few feet. The largest occurrence is probably in the Nanminda area. It is to be investigated in detail whether economic exploitation of the iron deposits is possible.

4.28. Several varieties of semiprecious stones have been reported from different places in the State but no workable deposits have so far been located.

CHAPTER V

INDUSTRY

5.1. Kerala's industrial sector employs 19.3% of the total working force as against 11.7% in India as a whole. It accounts for 16.9% of the State income. In India as a whole the share of industrial sector to the national income is 18.3%. Even with a smaller percentage of working force a higher share of the national income is accounted for by the industrial sector in India. The average output per worker in Kerala is only about Rs. 700 as against Rs. 1200 for all India. These figures are indicative of the industrial backwardness of the State. Of the total working force of 10.88 lakh persons in the secondary sector, nearly 83% is engaged in small scale and cottage units which are mostly run self employed persons. Even the factory units in the State are dominated by food processing units like cashew which absorb nearly 50% of the factory employment. The industries which dominate the cottage and small scale sector are the traditional industries like coir and handloom. These industries still employ age old techniques of production and as a consequence, the capital outfit employed by them is very poor.

Factory sector

5.2. According to the Techno-Economic Survey of Kerala conducted by the National Council of Applied Economic Research the capital investment per worker in Kerala is only Rs. 2737 as against the all India average of Rs. 5830. Non-power-using factories form 30% of the total number of factories in the State employing nearly 50% of the factory workforce. Another notable characteristic of the industrial backwardness of the State is the prevalence of small sized industrial units. The average number of workers per unit in 1961 was 67 in Kerala as against 173 in West Bengal, 121 in Uttar Pradesh, 98

in Maharashtra, 97 in Gujarat and 81 in Madhya Pradesh.

5.3. Table 5.1 shows the average daily employment in factories in the different States in India. Maharashtra and West Bengal together account for two fifths of the total factory employment in India. Five States viz., Maharashtra, West Bengal, Gujarat, Uttar Pradesh and Madras account for two thirds of the total factory employment. Employment in the factories of Kerala account for only 4.3% of the total factory employment in India.

TABLE—5.1
Daily Employment in Factories (1962)

| <i>Sl. No.</i> | <i>State</i> | | <i>Employment (in '000s)</i> | <i>Percentage</i> |
|----------------|------------------------------|----|----------------------------------|-------------------|
| 1 | Andhra Pradesh | .. | 231 | 5.77 |
| 2 | Assam | .. | 68 | 1.69 |
| 3 | Bihar | .. | 195 | 4.87 |
| 4 | Maharashtra | .. | 835 | 20.86 |
| 5 | Gujarat | .. | 371 | 9.28 |
| 6 | Kerala | .. | 171 | 4.28 |
| 7 | Madhya Pradesh | .. | 173 | 4.32 |
| 8 | Madras | .. | 333 | 8.32 |
| 9 | Mysore | .. | 185 | 4.62 |
| 10 | Orissa | .. | 40 | 1.00 |
| 11 | Punjab | .. | 147 | 3.67 |
| 12 | Rajasthan | .. | 57 | 1.43 |
| 13 | Uttar Pradesh | .. | 351 | 8.77 |
| 14 | West Bengal | .. | 767 | 19.16 |
| 15 | Andamans and Nicobar Islands | | 2 | 0.05 |
| 16 | Delhi | .. | 72 | 1.80 |
| 17 | Himachal Pradesh | .. | 2 | 0.05 |
| 18 | Manipur | .. | 1 | 0.03 |
| 19 | Tripura | .. | 1 | 0.03 |
| | All India | .. | 4003 | 100.00 |

5.4. Table 5.2 shows the distribution of factory workers among various types of industries. As large a proportion as 50% of the factory workers is engaged in food processing industries in Kerala as against 14% in India as a whole. In the industrially advanced States like Maharashtra, Gujarat and West Bengal food processing industries absorb only 7% of the industrial workforce. Basic metal industries account for less than 1% of the factory workers in Kerala as against nearly 5% in India as a whole. In

Maharashtra the corresponding figure is more than 10%. Textile industry which accounts for nearly 30% of the all India industrial workforce provides work to only about 17% of the factory workers in Kerala.

5.5. The predominance of small units employing only less than 60 workers in the State is clearly brought out in Table 5.3. Out of the total 2559 working factories at the end of 1962, as much as 75% employed less than 50 workers each. The proportion of

TABLE—5.2

(30th June 1962)

| Sl. No. | Name of Industries | Kerala | | Madras | | Maharashtra | |
|---------|--------------------------------|-------------------|--------|-------------------|--------|-------------------|--------|
| | | Number of workers | % | Number of workers | % | Number of workers | % |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 1 | Food & Beverages | 85785 | 50.19 | 38914 | 11.67 | 56620 | 6.78 |
| 2 | Textiles | 28338 | 16.58 | 116562 | 34.96 | 324044 | 38.82 |
| 3 | Chemical and chemical products | 6078 | 3.56 | 21448 | 6.43 | 44339 | 5.32 |
| 4 | Non-metallic Mineral Products | 14157 | 8.28 | 8455 | 2.54 | 29485 | 3.53 |
| 5 | Basic Metal Industries | 1560 | 0.91 | 2784 | 0.84 | 17830 | 2.14 |
| 6 | Metal Products & Machinery | 5419 | 3.17 | 34976 | 10.49 | 101518 | 12.16 |
| 7 | Transport equipments | 4576 | 2.68 | 49013 | 14.70 | 69885 | 8.37 |
| 8 | Others | 25007 | 14.63 | 61228 | 18.37 | 190929 | 22.88 |
| TOTAL | | 170920 | 100.00 | 333380 | 100.00 | 834650 | 100.00 |

| Sl. No. | Name of Industries | Gujarat | | West Bengal | | All India | |
|---------|--------------------------------|-------------------|--------|-------------------|--------|-------------------|--------|
| | | Number of workers | % | Number of workers | % | Number of workers | % |
| (1) | (2) | (9) | (10) | (11) | (12) | (13) | (14) |
| 1 | Food & Beverages | 25507 | 6.88 | 59608 | 7.77 | 557956 | 13.94 |
| 2 | Textiles | 201013 | 54.18 | 277996 | 36.25 | 1224397 | 30.58 |
| 3 | Chemical and chemical products | 13565 | 3.66 | 24061 | 3.14 | 148415 | 3.71 |
| 4 | Non-metallic mineral Products | 21556 | 5.81 | 20864 | 2.72 | 196897 | 4.92 |
| 5 | Basic Metal Industries | 3144 | 0.85 | 78674 | 10.26 | 182186 | 4.55 |
| 6 | Metal Products & Machinery | 18563 | 5.00 | 126677 | 15.99 | 464500 | 11.61 |
| 7 | Transport equipments | 12451 | 3.36 | 76339 | 9.96 | 373139 | 9.32 |
| 8 | Others | 75200 | 20.26 | 106661 | 13.91 | 855404 | 21.37 |
| TOTAL | | 370999 | 100.00 | 766880 | 100.00 | 4002894 | 100.00 |

TABLE—5.3

Distribution of factories in Kerala according to employment as on 31st December 1962

| Sl. No. | Industry | Employment | | | | | | | | | | | | All |
|------------|--|------------|------|--------|------|---------|-------|----------|-------|----------------|------|-----|-------|-----|
| | | Below 50 | | 50—100 | | 100—500 | | 500—1000 | | 1000 and above | | A. | B. | |
| | | A. | B. | A. | B. | A. | B. | A. | B. | A. | B. | | | |
| 1 | Canning and preservation of fruits and vegetables | 1 | 37 | 3 | 208 | 1 | 109 | .. | .. | .. | .. | 5 | 354 | |
| 2 | Do. of fish and other sea foods | 7 | 129 | 2 | 139 | 2 | 348 | .. | .. | .. | .. | 11 | 616 | |
| 3 | Rice and flour mills | 107 | 1260 | 5 | 286 | 1 | 122 | .. | .. | .. | .. | 113 | 1668 | |
| 4 | Sugar | .. | .. | .. | .. | .. | .. | 1 | 555 | .. | .. | 1 | 555 | |
| 5 | Oil mills | 262 | 1951 | 1 | 50 | .. | .. | .. | .. | .. | .. | 263 | 2001 | |
| 6 | Tea factories | 66 | 1880 | 49 | 3241 | 8 | 1007 | 1 | 668 | .. | .. | 124 | 6796 | |
| 7 | Cashew factories | 20 | 397 | 8 | 501 | 99 | 33650 | 56 | 35242 | 5 | 7060 | 188 | 76850 | |
| 8 | Starch and other food articles | 17 | 318 | 6 | 355 | 10 | 2119 | .. | .. | .. | .. | 33 | 2792 | |
| 9 | Beedi and cigar | 67 | 1264 | 14 | 793 | 1 | 250 | .. | .. | .. | .. | 82 | 2307 | |
| 10 | Cotton textiles (mill cloth) | 5 | 129 | 4 | 267 | 10 | 2411 | 7 | 4575 | 1 | 1382 | 27 | 8764 | |
| 11 | Cotton textiles (handloom) | 204 | 4260 | 12 | 821 | 10 | 1275 | .. | .. | .. | : | 226 | 6356 | |
| 12 | Knitting | 12 | 223 | 1 | 66 | 2 | 258 | .. | .. | .. | .. | 15 | 547 | |
| 13 | Coir | 152 | 2781 | 24 | 1578 | 26 | 4919 | 1 | 521 | .. | .. | 203 | 9799 | |
| 14 | Other textiles | .. | .. | .. | .. | .. | .. | 1 | 907 | 1 | 1145 | 2 | 2052 | |
| 15 | Umbrellas | 13 | 333 | 4 | 209 | 1 | 105 | .. | .. | .. | .. | 18 | 647 | |

| | | | | | | | | | | | | |
|----|---|-----|------|----|------|----|------|----|------|----|------|-------|
| 16 | Saw mills | 145 | 2344 | 14 | 846 | 5 | 587 | .. | .. | .. | 164 | 3777 |
| 17 | Plywood | 3 | 73 | 5 | 397 | 6 | 1053 | .. | .. | .. | 14 | 1523 |
| 18 | Other timber industries including splints and veneers | 139 | 3069 | 23 | 1424 | 9 | 1416 | .. | .. | .. | 171 | 5909 |
| 19 | Paper mills | 1 | 17 | .. | .. | .. | .. | 1 | 646 | .. | 2 | 663 |
| 20 | Paper board, straw board and other paper products | 2 | 44 | .. | .. | 1 | 152 | .. | .. | .. | 3 | 196 |
| 21 | Printing and binding | 174 | 2192 | 10 | 694 | 4 | 610 | 1 | 655 | .. | 189 | 4151 |
| 22 | Rubber products including tyre retreading | 99 | 1441 | 6 | 416 | 3 | 653 | 1 | 500 | .. | 109 | 3010 |
| 23 | Artificial manures | 6 | 109 | 2 | 146 | 1 | 100 | .. | .. | 1 | 2035 | 10 |
| 24 | Pharmaceuticals | 9 | 214 | 2 | 102 | 1 | 210 | .. | .. | .. | 12 | 525 |
| 25 | Soap | 3 | 73 | 1 | 88 | 1 | 113 | 1 | 996 | .. | 6 | 1270 |
| 26 | Other chemicals including matches | 25 | 465 | 3 | 188 | 5 | 1102 | .. | .. | .. | 33 | 1755 |
| 27 | Bricks and tiles | 88 | 2596 | 63 | 3920 | 23 | 4749 | 4 | 2256 | .. | 178 | 13521 |
| 28 | Glass | .. | .. | .. | .. | 2 | 426 | .. | .. | .. | 2 | 426 |
| 29 | Pottery, China and earthen ware | 5 | 146 | 2 | 121 | 2 | 425 | .. | .. | .. | 9 | 692 |
| 30 | Cement | .. | .. | .. | .. | 1 | 383 | .. | .. | .. | 1 | 383 |
| 31 | Cutlery | 8 | 170 | 1 | 50 | 2 | 258 | .. | .. | .. | 11 | 478 |
| 32 | Bolts, nuts, nails etc. | 2 | 16 | .. | .. | .. | .. | .. | .. | .. | 2 | 16 |
| 33 | Other metal products including basic metal industries | 52 | 1004 | 6 | 379 | 5 | 991 | 1 | 666 | .. | 64 | 3040 |
| 34 | Agricultural implements | 2 | 24 | 1 | 50 | 1 | 116 | .. | .. | .. | 4 | 190 |

TABLE—5.3 (Concl'd.)

| Sl. No. | Industry | Employment | | | | | | | | | | | |
|---------|---|------------|-------|--------|-------|---------|-------|----------|-------|----------------|-------|------|--------|
| | | Below 50 | | 50—100 | | 100—500 | | 500—1000 | | 1000 and above | | All | |
| | | A. | B. | A. | B. | A. | B. | A. | B. | A. | B. | A. | B. |
| 35 | General and jobbing engineering | 35 | 603 | 3 | 198 | 6 | 1215 | .. | .. | .. | .. | 44 | 2016 |
| 36 | Other machinery except electrical machinery | 12 | 205 | 1 | 58 | .. | .. | .. | .. | .. | .. | 13 | 263 |
| 37 | Electrical machinery | 11 | 165 | 2 | 100 | 2 | 342 | .. | .. | .. | .. | 15 | 607 |
| 38 | Marine engine—building and repairing | 3 | 58 | 2 | 117 | 1 | 441 | .. | .. | .. | .. | 6 | 616 |
| 39 | Repair of motor vehicles | 93 | 1387 | 11 | 706 | 4 | 802 | .. | .. | .. | .. | 108 | 2895 |
| 40 | Manufacture of bicycles | 3 | 62 | .. | .. | .. | .. | .. | .. | .. | .. | 3 | 62 |
| 41 | Other industries not classified above | 55 | 632 | 15 | 815 | 5 | 1297 | .. | .. | .. | .. | 75 | 2744 |
| TOTAL | | 1908 | 32071 | 306 | 19328 | 261 | 64014 | 76 | 48187 | 8 | 11622 | 2559 | 175222 |

A—Number of factories

B—Total employment

Note :— The following 14 registered factories are not working and hence not included in the above statement—
 rice and flour mill (1), oil mill (1), cashew (3), coir (3), bricks and tiles (3), pottery, china and earthenware (1), general engineering (1), repair of motor vehicles (1).

factories in the size groups 50-100, 100-500 and 500-1000 was about 12%, 10% and 3% respectively. There were only 8 factories in the State giving employment to 1000 and more workers. Even among them cashew factories with their primitive methods of production accounted for five in number. The three other industrial establishments employing more than 1000 workers are M/s Fertilisers and Chemicals, Travancore Ltd., Alwaye, J & P Coats Ltd., Koratti and Alagappa Textiles, Alagappanagar. In respect of large industrial units using modern methods of production, Kerala is lagging behind the industrially advanced States in the country.

Regional Disparity

5.6. The district-wise distribution of factories in Kerala as on 31st December 1962 is given in Table 5.4. Fortytwo percent of the workers are employed in factories in Quilon district. This high figure is due to the concentration of cashew factories in and around Quilon and is in no way a correct indicator of the industrial development of the district. Kozhikode is next to Quilon in regard to total employment. Bricks and tiles, coir and saw mills and tea factories are the main employment generating industries in the district. Ernakulam stands third when the districts are ranked according to employment. Many of the industries in the district are employing advanced technological methods. Though the employment figures do not adequately reflect industrial development, a general idea of industrial progress can, however, be obtained from the employment figures. Table 5.5 gives the 'location factors' for household industries, factory units and manufacturing other than household industries. Location factor is the ratio of workers in the district to the aggregate number for the whole State divided by the ratio of the population of the district to the aggregate of the whole State.

5.7. As regards manufacturing other than household industry and factory establishments Quilon occupies the first place. But in respect of household industry, Alleppey ranks first. This is evidently

TABLE—5.4

District-wise Distribution of Factories in Kerala (as on 31st December 1962)

| Sl. No. | Industry | Trivandrum | | Quilon | | Alleppey | | Kottayam | | Ernakulam | |
|---------|---|------------|------|--------|-------|----------|------|----------|------|-----------|------|
| | | A. | B. | A. | B. | A. | B. | A. | B. | A. | B. |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
| 1 | Canning & preservation of fruits and vegetables | .. | .. | 1 | 86 | .. | .. | .. | .. | .. | .. |
| 2 | Do. fish & other sea foods | .. | .. | 1 | 12 | 1 | 16 | .. | .. | 6 | 470 |
| 3 | Rice and flour mills | .. | .. | .. | .. | .. | .. | .. | .. | 4 | 67 |
| 4 | Sugar | .. | .. | .. | .. | 1 | 555 | .. | .. | .. | .. |
| 5 | Oil mills | 21 | 105 | 20 | 179 | 92 | 747 | 17 | 67 | 44 | 325 |
| 6 | Tea Factories | 5 | 289 | 9 | 305 | .. | .. | 83 | 4441 | 1 | 10 |
| 7 | Cashew Factories | 5 | 2235 | 162 | 64360 | 6 | 5749 | .. | .. | 3 | 756 |
| 8 | Starch and other food articles | 2 | 32 | 4 | 236 | 6 | 165 | 1 | 50 | 2 | 84 |
| 9 | Beedi and cigar | .. | .. | .. | .. | .. | .. | .. | .. | 4 | 98 |
| 10 | Cotton Textiles (mill cloth) | 4 | 629 | 1 | 979 | .. | .. | .. | .. | 4 | 1488 |
| 11 | Cotton Textiles (Handloom) | 5 | 198 | .. | .. | .. | .. | .. | .. | 3 | 33 |
| 12 | Knitting | 1 | 9 | .. | .. | .. | .. | .. | .. | .. | .. |
| 13 | Coir | 1 | 14 | 1 | 20 | 168 | 6580 | 5 | 157 | 14 | 1991 |
| 14 | Other textiles | .. | .. | .. | .. | .. | .. | .. | .. | 1 | 907 |
| 15 | Umbrellas | .. | .. | .. | .. | 3 | 44 | .. | .. | 1 | 17 |
| 16 | Saw mills | 1 | 9 | 18 | 462 | 1 | 5 | 6 | 157 | 22 | 245 |
| 17 | Plywood | .. | .. | 1 | 108 | .. | .. | 5 | 296 | 1 | 28 |
| 18 | Other timber industries including splints and veneers | 6 | 206 | 39 | 889 | 6 | 199 | 9 | 264 | 19 | 618 |

| Sl. No. | Industry | Trichur | | Palghat | | Kozhikode | | Cannanore | | State | |
|---------|---|---------|------|---------|------|-----------|------|-----------|------|-------|-------|
| | | A. | B. | A. | B. | A. | B. | A. | B. | A. | B. |
| (1) | (2) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (10) | (21) | (22) |
| 1 | Canning & preservation of fruits and vegetables | 3 | 218 | .. | .. | 1 | 50 | .. | .. | 5 | 354 |
| 2 | Do. fish & other sea foods | 1 | 10 | .. | .. | 2 | 108 | .. | .. | 11 | 616 |
| 3 | Rice and flour mills | 33 | 664 | 66 | 829 | 6 | 72 | 4 | 36 | 113 | 1668 |
| 4 | Sugar | .. | .. | .. | .. | .. | .. | .. | .. | 1 | 555 |
| 5 | Oil mills | 48 | 450 | 5 | 26 | 8 | 53 | 8 | 49 | 263 | 2001 |
| 6 | Tea Factories | .. | .. | 4 | 232 | 15 | 1342 | 7 | 177 | 124 | 6796 |
| 7 | Cashew Factories | 8 | 1980 | .. | .. | 2 | 955 | 2 | 815 | 188 | 76850 |
| 8 | Starch and other food articles | 1 | 10 | .. | .. | 12 | 1183 | 5 | 1032 | 33 | 2792 |
| 9 | Beedi and cigar | 9 | 317 | 37 | 1081 | 8 | 200 | 24 | 611 | 82 | 2307 |
| 10 | Cotton Textiles (mill cloth) | 5 | 2359 | .. | .. | 2 | 1049 | 11 | 2260 | 27 | 8764 |
| 11 | Cotton Textiles (Handloom) | .. | .. | .. | .. | 19 | 943 | 199 | 5182 | 226 | 6356 |
| 12 | Knitting | 2 | 187 | 1 | 9 | 3 | 120 | 8 | 222 | 15 | 547 |
| 13 | Coir | .. | .. | .. | .. | 14 | 1037 | .. | .. | 203 | 9799 |
| 14 | Other textiles | 1 | 1145 | .. | .. | .. | .. | .. | .. | 2 | 2052 |
| 15 | Umbrellas | 3 | 130 | .. | .. | 11 | 456 | .. | .. | 18 | 647 |
| 16 | Saw mills | 21 | 315 | 11 | 122 | 61 | 1870 | 23 | 592 | 164 | 3777 |
| 17 | Plywood | 2 | 257 | 1 | 58 | .. | .. | 4 | 776 | 14 | 1523 |
| 18 | Other timber industries including splints and veneers | 27 | 733 | 27 | 1436 | 23 | 900 | 15 | 664 | 171 | 5909 |

| Sl. No. | Industry | Trivandrum | | | | | | Alleppey | | | Kottayam | | | Ernakulam | | |
|---------|--|------------|------|-----|------|-----|-----|----------|------|------|----------|------|------|-----------|------|------|
| | | A. | B. | A. | B. | A. | B. | A. | B. | A. | A. | B. | A. | B. | A. | B. |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) |
| 19 | Paper mills | .. | .. | 1 | 646 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 20 | Paper board, straw board and other paper products | .. | .. | .. | .. | 1 | 27 | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 21 | Printing and binding | 32 | 1025 | 10 | 387 | 16 | 161 | 30 | 586 | 38 | 728 | .. | .. | .. | .. | .. |
| 22 | Rubber products including tyre retreading | 6 | 244 | 17 | 483 | 6 | 222 | 35 | 939 | 11 | 604 | .. | .. | .. | .. | .. |
| 23 | Artificial manures | .. | .. | .. | .. | 1 | 15 | 2 | 93 | 5 | 2248 | .. | .. | .. | .. | .. |
| 24 | Pharmaceuticals | 1 | 9 | .. | .. | .. | .. | 1 | 15 | 2 | 84 | .. | .. | .. | .. | .. |
| 25 | Soap | .. | .. | .. | .. | .. | .. | .. | .. | 3 | 1045 | .. | .. | .. | .. | .. |
| 26 | Other Chemicals including matches | 1 | 203 | 9 | 190 | 4 | 61 | .. | .. | 8 | 998 | .. | .. | .. | .. | .. |
| 27 | Bricks and Tiles | .. | .. | 31 | 2051 | 2 | 33 | 3 | 76 | 15 | 930 | .. | .. | .. | .. | .. |
| 28 | Glass | .. | .. | .. | .. | .. | .. | .. | .. | 1 | 326 | .. | .. | .. | .. | .. |
| 29 | Pottery, China & Earthenware | .. | .. | 2 | 249 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 30 | Cement | .. | .. | .. | .. | .. | .. | 1 | 383 | .. | .. | .. | .. | .. | .. | .. |
| 31 | Cutlery | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 32 | Bolts, nuts, nails etc. | .. | .. | .. | .. | .. | .. | .. | .. | 1 | 13 | .. | .. | .. | .. | .. |
| 33 | Other metal products, including basic metal industries | 5 | 223 | 18 | 937 | 1 | 25 | 5 | 38 | 18 | 1027 | .. | .. | .. | .. | .. |

| Sl. No. | Industry | Trichur | | Palghat | | Kozhikode | | Cannanore | | State | |
|---------|--|---------|------|---------|------|-----------|------|-----------|------|-------|-------|
| | | A. | B. | A. | B. | A. | B. | A. | B. | A. | B. |
| (1) | (2) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) | (21) | (22) |
| 19 | Paper mills | .. | .. | .. | .. | .. | .. | 1 | 17 | 2 | 663 |
| 20 | Paper board, straw board and other paper products | .. | .. | .. | .. | .. | .. | 2 | 169 | 3 | 196 |
| 21 | Printing and binding | 23 | 336 | 6 | 70 | 21 | 717 | 13 | 141 | 189 | 4151 |
| 22 | Rubber products including tyre retreading | 14 | 197 | 4 | 59 | 14 | 252 | 2 | 10 | 109 | 3010 |
| 23 | Artificial manures | 1 | 9 | .. | .. | 1 | 25 | .. | .. | 10 | 2390 |
| 24 | Pharmaceuticals | 4 | 97 | 3 | 110 | 1 | 210 | .. | .. | 12 | 525 |
| 25 | Soap | .. | .. | .. | .. | 3 | 225 | .. | .. | 6 | 1270 |
| 26 | Other Chemicals including matches | 9 | 277 | .. | .. | 1 | 9 | 1 | 17 | 33 | 1755 |
| 27 | Bricks and Tiles | 91 | 4406 | 10 | 800 | 20 | 4700 | 6 | 525 | 178 | 13521 |
| 28 | Glass | .. | .. | 1 | 100 | .. | .. | .. | .. | 2 | 426 |
| 29 | Pottery, China & Earthenware | 2 | 115 | 1 | 20 | 3 | 292 | 1 | 16 | 9 | 692 |
| 30 | Cement | .. | .. | .. | .. | .. | .. | .. | .. | 1 | 383 |
| 31 | Cutlery | 1 | 4 | 10 | 474 | .. | .. | .. | .. | 11 | 478 |
| 32 | Bolts, nuts, nails etc. | 1 | 3 | .. | .. | .. | .. | .. | .. | 2 | 16 |
| 33 | Other metal products, including basic metal industries | 4 | 136 | 10 | 605 | 1 | 11 | 2 | 38 | 64 | 3040 |

| Sl. No. | Industry | Trivandrum | | Quilon | | Alleppey | | Kottayam | | Ernakulam | |
|---------|---|------------|------|--------|-------|----------|-------|----------|------|-----------|-------|
| | | A. | B. | A. | B. | A. | B. | A. | B. | A. | B. |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
| 34 | Agricultural implements | 1 | 9 | .. | .. | .. | .. | .. | .. | .. | .. |
| 35 | General and jobbing engineering | 2 | 344 | 4 | 318 | 2 | 34 | 5 | 279 | 11 | 206 |
| 36 | Other Machinery except Electrical Machinery | 2 | 12 | .. | .. | .. | .. | 1 | 7 | .. | .. |
| 37 | Electrical Machinery | 1 | 9 | 2 | 342 | 1 | 50 | 1 | 8 | 3 | 41 |
| 38 | Marine Engines, building and repairing | .. | .. | 2 | 64 | .. | .. | .. | .. | 4 | 552 |
| 39 | Repair of motor vehicles | 12 | 845 | 6 | 161 | 1 | 69 | 16 | 419 | 15 | 332 |
| 40 | Manufacture of bicycles | 1 | 40 | 2 | 22 | .. | .. | .. | .. | .. | .. |
| 41 | Other industries not classified above | 10 | 515 | 11 | 97 | 7 | 86 | 4 | 113 | 22 | 1330 |
| TOTAL | | 125 | 7204 | 372 | 73583 | 326 | 14843 | 230 | 8388 | 286 | 17601 |

| Sl. No. | Industry | Trichur | | Palghat | | Kozhikode | | Cannanore | | State | |
|---------|---|---------|-------|---------|------|-----------|-------|-----------|-------|-------|--------|
| | | A. | B. | A. | B. | A. | B. | A. | B. | A. | B. |
| (1) | (2) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) | (21) | (22) |
| 34 | Agricultural implements | .. | .. | 3 | 181 | .. | .. | .. | .. | 4 | 190 |
| 35 | General and jobbing engineering | 12 | 529 | .. | .. | 5 | 252 | 3 | 54 | 44 | 2016 |
| 36 | Other Machinery except Electrical Machinery | 3 | 82 | 3 | 23 | 2 | 96 | 2 | 43 | 13 | 263 |
| 37 | Electrical Machinery | 2 | 30 | 3 | 65 | 1 | 12 | 1 | 50 | 15 | 607 |
| 38 | Marine Engines, building and repairing | .. | .. | .. | .. | .. | .. | .. | .. | 6 | 616 |
| 39 | Repair of Motor vehicles | 10 | 166 | 13 | 257 | 26 | 489 | 9 | 157 | 108 | 2895 |
| 40 | Manufacture of bicycles | .. | .. | .. | .. | .. | .. | .. | .. | 3 | 62 |
| 41 | Other industries not classified above | 4 | 74 | 6 | 311 | 4 | 60 | 7 | 158 | 75 | 2744 |
| TOTAL | | 345 | 15236 | 225 | 6868 | 290 | 17688 | 360 | 13811 | 2559 | 175222 |

A—Number of factories

B—Total employment

Note :— The following 14 registered factories are not working and hence not included in the Statement:

3 Cashew factories and 1 Pottery, china and earthenware factory in Quilon, 2 Coir factories in Alleppey, 1 Coir factory and 1 General Engineering Concern in Kottayam, 1 Rice and flour mill, 2 Tile factories and 1 Automobile (repair) unit in Trichur and 1 Oil mill and 1 Tile factory in Kozhikode.

TABLE—5.5

Location Factors for the Districts

| <i>Sl. No.</i> | <i>District</i> | <i>Location factor</i> | | | |
|----------------|-----------------|------------------------|---------------------------|--|------------|
| | | <i>Factory units</i> | <i>Household industry</i> | <i>Manufacturing other than household industry</i> | <i>All</i> |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | Trivandrum .. | 0.40 | 1.22 | 0.76 | 0.97 |
| 2 | Quilon .. | 3.65 | 0.99 | 1.76 | 1.39 |
| 3 | Alleppey .. | 0.79 | 1.99 | 0.98 | 1.47 |
| 4 | Kottayam .. | 0.47 | 0.52 | 0.63 | 0.57 |
| 5 | Ernakulam .. | 0.91 | 0.90 | 1.18 | 1.05 |
| 6 | Trichur .. | 0.89 | 1.11 | 0.98 | 1.04 |
| 7 | Palghat .. | 0.37 | 0.92 | 0.70 | 0.80 |
| 8 | Kozhikode .. | 0.65 | 0.69 | 0.82 | 0.75 |
| 9 | Cannanore .. | 0.75 | 0.79 | 1.17 | 0.99 |

the result of the high degree of concentration of the coir industry in the district. When the manufacturing sector as a whole is considered Kottayam is the least industrialised district. Table 5.6 gives the ranking of the districts in respect of location factors.

5.8. As most of the units employ low technology the productivity of the industrial units is very low. Typical examples are industries like cashew, coir and tile which give employment to a large number of persons and in which most of the operations are done manually. This low level of productivity has resulted in low wage rates for the factory workers in the State. The wage rate of workers in Kerala is one of the lowest in India. A comparative statement of industrial wage rates in the different States for the years 1960 and 1961, separately for workers earning less than Rs. 200 and Rs. 400 per month, is provided in Table 5.7.

5.9. The average daily earnings of factory workers covered by the Payment of Wages Act for the year 1962 is given in Table 5.8. The average daily earnings of workers in industries like Marine Engines (Rs. 8.26), Soap (Rs. 8.64), Sugar (Rs. 7.21,) artificial manures (Rs. 6.67) and Starch (Rs. 6.00) which employ high level of technology are much higher than those industries with low level of technology like cashew (Rs. 1.43), coir (Rs. 3.13) and bricks and tiles (Rs. 3.18).

5.10. The level of technology has a great bearing on economic development. It is the prime mover of productivity. Kerala's industrial structure is by and large characterised by a poor level of technology. Low income yielding techniques of production adopted in most of the traditional industries leads to low productivity of labour and low per capita income, thus limiting the scope for capital formation. The capital outfit in Kerala must be made to increase sufficiently so as to make possible full employment with a value corresponding to modern techniques of production.

TABLE—5.6

Ranks of the Districts in respect of location factor

| <i>District</i> | <i>Rank</i> | | | |
|-----------------|----------------------|---------------------------|--|-----------------------|
| | <i>Factory units</i> | <i>Household industry</i> | <i>Manufacturing other than household industry</i> | <i>All industries</i> |
| Quilon .. | 1 | 3 | 1 | 2 |
| Ernakulam .. | 2 | 6 | 2 | 3 |
| Trichur .. | 3 | 4 | 6 | 4 |
| Alleppey .. | 4 | 1 | 5 | 1 |
| Cannanore .. | 5 | 8 | 4 | 5 |
| Kozhikode .. | 6 | 5 | 3 | 8 |
| Kottayam .. | 7 | 9 | 9 | 9 |
| Trivandrum .. | 8 | 2 | 7 | 6 |
| Palghat .. | 9 | 7 | 8 | 7 |

TABLE—5.7
Earnings of Factory Employees

| <i>Sl. No.</i> | <i>State</i> | <i>Less than Rs. 200</i> | | <i>Less than Rs. 400</i> | |
|----------------|-------------------|--|------|--|------|
| | | <i>Average per capita daily earnings</i> | | <i>Average per capita daily earnings</i> | |
| | | 1960 | 1961 | 1960 | 1961 |
| 1 | Andhra Pradesh .. | 2.90 | 3.96 | 3.19 | 4.18 |
| 2 | Assam .. | 2.94 | 2.96 | 3.27 | 3.41 |
| 3 | Bihar .. | 4.31 | 4.48 | 5.35 | 5.51 |
| 4 | Gujarat .. | 5.03 | 5.11 | 5.24 | 5.37 |
| 5 | Kerala .. | 2.65 | 2.43 | 2.69 | 2.50 |
| 6 | Madhya Pradesh .. | .. | .. | 3.80 | 4.33 |
| 7 | Madras .. | .. | 6.72 | 4.15 | 6.84 |
| 8 | Maharashtra .. | 5.06 | 4.92 | 5.60 | 5.41 |
| 9 | Mysore .. | 2.60 | 3.89 | .. | 4.19 |
| 10 | Orissa .. | 3.15 | 3.46 | 3.18 | 3.49 |
| 11 | Punjab .. | .. | 3.93 | .. | 4.14 |
| 12 | Rajasthan .. | .. | .. | .. | .. |
| 13 | Uttar Pradesh .. | 3.83 | 4.06 | 4.01 | 4.26 |
| 14 | West Bengal .. | 4.16 | 4.35 | 4.43 | 4.69 |
| 15 | Delhi .. | 4.80 | 5.06 | 5.14 | 5.47 |

TABLE—5.8
Average Daily Earnings of Factory Workers

| <i>Industry</i> | <i>Earning per worker (Rs.)</i> |
|--|---------------------------------|
| Rice and Flour Mills .. | 1.79 |
| Oil Mills .. | 2.88 |
| Tea factories .. | 3.15 |
| Cashew factories .. | 1.43 |
| Beedi and Cigar .. | 3.29 |
| Cotton textiles using power .. | 4.36 |
| Knitting .. | 2.16 |
| Coir .. | 3.13 |
| Starch .. | 6.00 |
| Saw Mills .. | 3.92 |
| Paper Mills .. | 5.24 |
| Rubber and Rubber products .. | 3.19 |
| Soap .. | 8.64 |
| Bricks and Tiles .. | 3.18 |
| Glass .. | 3.99 |
| General engineering .. | 5.52 |
| Electrical machinery .. | 3.50 |
| Repair of Motor vehicles .. | 4.44 |
| Printing and Binding .. | 3.91 |
| Marine Engines (Building and Repairing) .. | 8.26 |
| Artificial Manures .. | 6.67 |

It is held by many that the introduction of modern techniques might create unemployment. This is to some extent true especially in a State like Kerala with abundant labour potential. But it should be remembered that it is not the idea of modernisation to throw large numbers of people out of employment. It is in achieving a balance between capital intensive techniques and labour intensive techniques the success of judicious planning lies. Small scale industries which are largely employment oriented have to play an important role in the economy of Kerala. The new industries which are coming up in the private sector since the inception of the Third Five Year Plan are by and large technically oriented. The big units that are being established can absorb vast numbers of the labour force through the establishment of ancillary units and undertakings. New ventures like shipbuilding yard, oil refinery etc. hold great possibilities in the creation of ancillary units which can absorb a considerable number of workers.

Production Indicators

5.11. Production of some of the important industrial products like sugar, coffee, salt and cement has registered an increase in the year under review over the previous year. There is a marked increase in the case of salt. A noticeable fall is seen in the production of yarn and cloth (vide Table 5.9). Table 5.10 gives production figures in selected industries in 1962.

5.12. A number of institutions catering to the promotion of industries have come up in the State in the recent past. First and foremost among these is the Kerala State Industrial Development Corporation which was set up in July 1961. The main object of the Corporation is to organise, stimulate and assist industrial ventures in the State through its financial and technical services. The financial assistance of the Corporation will be in the form of participation in the share capital of industrial concerns, granting of medium and long term loans, underwriting issues of share capital, furnishing of guarantees etc. From the inception till 31-12-1963, the Corporation has sanctioned financial assistance, under the different

TABLE—5.9
Indices of Industrial Production

| Year | Sugar | | | Coffee | | | Tea | | | Salt | | |
|------|------------------------|---------------------------------------|------------------------|---------------------------------------|------------------------|---------------------------------------|------------------------|---------------------------------------|------------------------|---------------------------------------|------------------------|---------------------------------------|
| | Index of production | % change over the previous year | Index of production | % change over the previous year | Index of production | % change over the previous year | Index of production | % change over the previous year | Index of production | % change over the previous year | Index of production | % change over the previous year |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | | | | |
| 1957 | 100 | .. | .. | .. | 100 | .. | .. | .. | .. | .. | .. | .. |
| 1958 | 85 | -15 | 100 | .. | 102 | +2 | 100 | .. | 100 | .. | 100 | .. |
| 1959 | 83 | -3 | 126 | +26 | 98 | -4 | 142 | +42 | 142 | +42 | 142 | +42 |
| 1960 | 104 | +26 | 123 | -2 | 106 | +7 | 99 | -31 | 99 | -31 | 99 | -31 |
| 1961 | 86 | -18 | 166 | +35 | 110 | +4 | 155 | +57 | 155 | +57 | 155 | +57 |
| 1962 | 81 | -6 | 96 | -42 | 108 | -2 | 42 | -73 | 42 | -73 | 42 | -73 |
| 1963 | 101 | +25 | 124 | +29 | 107 | -1 | 85 | +102 | 85 | +102 | 85 | +102 |

TABLE—5.9—(Contd.)

| Year | Vegetable Oil | | | Yarn | | | Cloth | | | Cement | | |
|------|------------------------|---------------------------------------|------------------------|---------------------------------------|------------------------|---------------------------------------|------------------------|---------------------------------------|------------------------|---------------------------------------|------------------------|---------------------------------------|
| | Index of production | % change over the previous year | Index of production | % change over the previous year | Index of production | % change over the previous year | Index of production | % change over the previous year | Index of production | % change over the previous year | Index of production | % change over the previous year |
| (1) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | | | | |
| 1957 | .. | .. | 100 | .. | 100 | .. | 100 | .. | 100 | .. | | |
| 1958 | 100 | .. | 95 | -5 | 102 | +2 | 110 | +10 | | | | |
| 1959 | 177 | +77 | 106 | +11 | 121 | +19 | 64 | -42 | | | | |
| 1960 | 274 | +55 | 95 | -11 | 79 | -35 | 136 | +113 | | | | |
| 1961 | 365 | +33 | 107 | +13 | 92 | +17 | 108 | -21 | | | | |
| 1962 | 327 | -10 | 104 | -3 | 245 | +166 | 111 | +3 | | | | |
| 1963 | 328 | +3 | 75 | -28 | 164 | -33 | 115 | +4 | | | | |

TABLE 5.10

Production of Selected Industries in Kerala 1962

| <i>Sl. No.</i> | <i>Articles</i> | <i>Unit</i> | <i>Quantity</i> | <i>Percentage share in all India production</i> |
|----------------|--|-----------------|-----------------|---|
| 1 | Sugar | Metric ton | 9798 | 0.36 |
| 2 | Coffee | do. | 7395 | 15.59 |
| 3 | Tea | do. | 38056 | 11.41 |
| 4 | Salt | do. | 300 | 0.01 |
| 5 | Vegetable oil products (Vanaspathi) | do. | 1836 | 0.50 |
| 6 | Yarn | do. | 9925 | 1.15 |
| 7 | Cloth | Thousand metres | 15327 | 0.34 |
| 8 | Plywood | Sq. metres | 1904193 | 25.70 |
| 9 | Dipped rubber goods | Doz. numbers | 725772 | 2.83 |
| 10 | Cement | Metric ton | 54655 | 0.64 |
| 11 | White wares (crookery) | do. | 568 | 2.68 |
| 12 | Sanitary wares | do. | 595 | 7.82 |
| 13 | Stoneware pipes | do. | 1789 | 2.62 |

items of financing, to the extent of Rs. 265.26 lakhs. The amount actually disbursed during this period was Rs. 61.81 lakhs. Industrial units which have obtained financial assistance from the Corporation include West India Steel Company, Calicut, United Electrical Industries, Quilon, Travancore Electro Chemical Industries, Ltd., Chingavanam, Anand Water Meter Manufacturing Company, Cochin, Cominco Binani Zinc Ltd., Alwaye and Seshasayee Wire Ropes Ltd., Alwaye. Underwriting of shares formed the major item of financing by the Corporation and under this item an amount of Rs. 110 lakhs was sanctioned. Besides being a financial institution the Corporation has been rendering valuable services for the industrial progress of the State through its other varied activities comprising technical investigations, preparation of project reports, negotiations for technical and financial collaboration with foreign or Indian agencies etc.

5.13. Another institution which is prominent in the field of industry is the Kerala Financial Corporation. The function of the Corporation is to grant loans and advances to industrial concerns and thereby accelerate the pace of industrial development in

the State. The Corporation will stand guarantee for loans and deferred payments and also transact business such as issue of stocks, shares, bonds, debentures etc. At present the activities of the Corporation are confined to granting of loans and advances to industries on a first mortgage of their entire assets. From the inception of the Corporation till 31-3-1963 192 applications for loans totalling to Rs. 4.90 crores were received and of these 143 applications were admitted and loans to the tune of Rs. 2.82 crores were sanctioned. Only an amount of Rs. 2.30 crores was however disbursed till 31-3-1963.

5.14. In 1962 the Labour and Industrial Bureau was set up in the State for the purpose of collection, classification, and supply of information relating to existing industries. The Bureau is envisaged as a clearing house of comprehensive data pertaining to both the spheres of industry and labour.

Recent Trends in Industrialisation

5.15. Since the inception of the Third Five Year Plan the hitherto stagnant industrial sphere has been spurred on. Both in the public sector and in the private sector a number of units are being started. The State Plan has provided for an outlay of Rs. 17.2 crores during the Third Five Year Plan period while the Centre would sponsor schemes to the tune of about Rs. 40-45 crores. Work has already been started in Central enterprises envisaged for the State like the Cochin Shipyard, the Hindustan Machine Tools Project at Thrikkakara, the Precision Instruments factory at Palghat and the Forms Press at Koratti. In the Fourth Oil Refinery at Cochin a major experiment in the field of mixed economy will be initiated. Work on this project has already been started. Plans are being finalised by the Jayanthi Shipping Company with Japanese collaboration to establish a ship repair-yard also at Cochin. The Rs. 8 crore Hindustan Machine Tools Project is expected to go into production within a year. This unit will confine itself to the production of lathes of various types. A residential colony to house 3000 workers is planned. Orders for plant

and machinery have been placed with Italy, France, Poland and Czechoslovakia. The production target aimed at in the first stage of development of the factory is worth Rs. 3.5 crores.

5.16. Expansion of existing units is given equal emphasis along with the establishment of new units in the public sector. The eleven units which were owned by the Government have been recently regrouped into five joint stock companies. Under this programme fifty per cent of the capital investment of the Government in the concern will be treated as loan to the companies to be repaid in annual instalments while the balance will be treated as equity contribution to the share capital of the new companies. The expansion schemes include the raising of production of china clay in the Government Ceramic Concerns, Kundara, enhancement of production of rubber goods and cycle tyres and tubes in the Travancore Rubber Works, Trivandrum and expansion of production of soap in the Kerala Soap Institute, Calicut. The Fertilizers and Chemicals, Travancore Ltd., whose expansion programme is an important feature of the Third Plan period, envisage the establishment of additional fertilizer plants during the Fourth Plan. The expansion programmes also include modernisation of the Government Oil Factory at Calicut, expansion of production capacity at the Government Cycle Rim Factory, Trivandrum, and expansion of the Trivandrum Spinning Mill by another 12,000 spindles. Expansion of Government-managed and Government-sponsored units like the Travancore Titanium Products, Trivandrum, United Electrical Industries, Quilon, Electrical and Allied Industries, Kundara, and Malabar Spinning and Weaving Company, Calicut, is also envisaged. Under the third stage expansion programme of the Travancore Cochin Chemicals, the plant will produce 4.2 tonnes of 62% iron free sodium sulphide per day. A new electrolytic caustic chlorine plant designed to produce 10 tons of rayon grade caustic soda per day has already been commissioned.

5.17. There is a spurt of activity in private enterprise in recent years. The end of the Third Plan would find a number of modern industrial units in the

TABLE—5.11

Growth of Industries in Kerala

| Sl. No. | Name of Industry | Number of factories at the end of the year | | | | | No. of units opened during 1963 | No. of units cancelled during 1963 | No. of factories as on 31-12-1963 |
|---------|--|--|------|------|------|------|---------------------------------|------------------------------------|-----------------------------------|
| | | 1958 | 1959 | 1960 | 1961 | 1962 | | | |
| | ALL INDUSTRIES | 2146 | 2293 | 2400 | 2474 | 2573 | 230 | 203 | 2600 |
| 1 | Canning, and Preservation of fruits and vegetables | 6 | 8 | 5 | 4 | 5 | .. | .. | 5 |
| 2 | Do. of fish & other sea foods | 4 | 8 | 11 | 10 | 11 | .. | 2 | 9 |
| 3 | Rice and flour mills | 147 | 150 | 114 | 113 | 114 | 5 | 6 | 113 |
| 4 | Sugar factories and refineries | 1 | 1 | 1 | 1 | 1 | .. | .. | 1 |
| 5 | Edible oil mills (other than hydrogenated oils) | 200 | 218 | 236 | 234 | 264 | 25 | 23 | 266 |
| 6 | Tea factories | 122 | 121 | 124 | 124 | 124 | 2 | 1 | 125 |
| 7 | Cashew nut factories | 174 | 173 | 181 | 186 | 191 | 7 | 1 | 197 |
| 8 | Starch and other food articles | 18 | 20 | 20 | 30 | 33 | .. | .. | 33 |
| 9 | Soft drinks and carbonated water industries | 6 | 15 | 21 | 22 | 24 | 4 | 2 | 26 |
| 10 | Beedi and cigar | 95 | 93 | 98 | 96 | 82 | 2 | 11 | 73 |
| 11 | Cotton textiles | 232 | 268 | 267 | 269 | 253 | 31 | 34 | 250 |

TABLE—5.11 (Contd.)

| Sl. No. | Name of Industry | Number of factories at the end of the year | | | | | No. of units opened during 1963 | No. of units cancelled during 1963 | No. of factories as on 31-12-1963 |
|---------|--|--|------|------|------|------|---------------------------------|------------------------------------|-----------------------------------|
| | | 1958 | 1959 | 1960 | 1961 | 1962 | | | |
| 12 | Knitting mills | 12 | 14 | 15 | 16 | 16 | .. | 2 | 14 |
| 13 | Coir factories | 153 | 162 | 180 | 211 | 206 | 6 | 57 | 155 |
| 14 | Rayons | 1 | 1 | 1 | 1 | 1 | .. | .. | 1 |
| 15 | Umbrellas | 18 | 17 | 18 | 18 | 18 | 1 | 1 | 18 |
| 16 | Saw mills | 123 | 146 | 161 | 159 | 164 | 24 | 10 | 178 |
| 17 | Plywood | 15 | 14 | 13 | 12 | 14 | .. | .. | 14 |
| 18 | Splints and veneers | 75 | 71 | 76 | 81 | 93 | 19 | 2 | 110 |
| 19 | Other wood industries | 53 | 58 | 61 | 64 | 78 | 6 | 5 | 79 |
| 20 | Paper, paper board, straw board and other paper products | 1 | 1 | 4 | 5 | 5 | .. | .. | 5 |
| 21 | Printing and binding | 161 | 176 | 185 | 188 | 189 | 16 | 17 | 188 |
| 22 | Rubber products including tyre retreading | 86 | 97 | 109 | 107 | 109 | 10 | 5 | 114 |
| 23 | Artificial manures | 3 | 4 | 7 | 9 | 10 | .. | 1 | 9 |
| 24 | Vegetable and animal oils & fats (except edible oils) | 1 | 1 | 1 | 1 | 1 | .. | .. | 1 |
| 25 | Pharmaceuticals | 4 | 4 | 10 | 11 | 12 | 4 | .. | 16 |
| 26 | Matches | 21 | 20 | 22 | 20 | 21 | 4 | .. | 25 |

| | | | | | | | | | | |
|----|---|-----|-----|-----|-----|-----|----|----|----|-----|
| 27 | Soap | 6 | 6 | 7 | 7 | 7 | 6 | .. | .. | 6 |
| 28 | Other chemicals | 11 | 12 | 12 | 13 | 12 | 12 | .. | .. | 12 |
| 29 | Petroleum pumping, storage and distribution | 8 | 7 | 7 | 8 | 7 | 7 | .. | .. | 7 |
| 30 | Bricks and tiles | 155 | 152 | 159 | 162 | 181 | 17 | .. | .. | 198 |
| 31 | Glass and glass products | 2 | 2 | 2 | 2 | 2 | .. | 1 | 1 | 1 |
| 32 | Pottery, china and earthen-ware | 4 | 5 | 8 | 8 | 10 | .. | .. | .. | 10 |
| 33 | Cement | 1 | 1 | 1 | 1 | 1 | .. | .. | .. | 1 |
| 34 | Aluminium factories | 2 | 2 | 2 | 3 | 4 | .. | .. | .. | 4 |
| 35 | Cutlery, locks etc. | 7 | 10 | 13 | 12 | 11 | 2 | 1 | 1 | 12 |
| 36 | Bolts, nuts, nails etc. | 1 | 1 | 1 | 3 | 2 | .. | .. | .. | 2 |
| 37 | Other metal products including basic metal industries | 31 | 36 | 40 | 47 | 68 | 11 | 2 | 2 | 77 |
| 38 | General and jobbing engineering | 43 | 43 | 42 | 43 | 44 | 2 | 5 | 5 | 41 |
| 39 | Other machinery (except electrical machinery) | 3 | 4 | 8 | 14 | 13 | 5 | 1 | 1 | 17 |
| 40 | Electrical machinery | 5 | 5 | 12 | 10 | 15 | 3 | .. | .. | 18 |
| 41 | Marine engines (building and repairing) | 7 | 7 | 7 | 7 | 6 | .. | .. | .. | 6 |
| 42 | Repair of motor vehicles | 92 | 100 | 100 | 101 | 109 | 21 | 8 | 8 | 122 |
| 43 | Manufacture of bicycles | 1 | 4 | 3 | 3 | 3 | 1 | .. | .. | 4 |
| 44 | Other industries not classified above | 35 | 35 | 35 | 38 | 40 | 2 | 5 | 5 | 37 |

State. Two Co-operative sugar Mills, one at Pandalam and the other at Chittur are being set up. The unit at Pandalam has already started production. The Centre has granted licences for the establishment of 11 spinning mills each with an investment of over Rs. 40 lakhs and a spindleage of 12,000, in addition to a Model Spinning and Weaving Factory with 25,000 spindles and 500 looms in Trivandrum having an investment of Rs. 3 crores. A cable factory with an investment of Rs. 1 crore is proposed to be established by Messers Premier Cables Ltd., at Ernakulam. Licence has been issued to Messers Binny and Company Ltd., for the setting up of a penstock factory at Palluruthi. The Tracco Cable Company Ltd., is expected to go into production in July 1964. A unit for the manufacture of fused aluminium oxide with an investment of Rs. 2 crores is being set up at Edapally near Ernakulam by Messers Carborundum Universal Ltd., Madras. Steps are being taken for the setting up of a heavy transformer factory at Ankamali in collaboration with Messers Hitachi Ltd., Japan. Messers Cominco Binani of Calcutta proposes to establish a Zinc Smelter Plant at Alwaye in collaboration with a Canadian firm at a cost of over Rs. 5 crores. The annual installed capacity of this unit will be 20,000 tonnes of electrolytic zinc.

5.18. A steel rerolling mill is proposed to be established at Kozhikode by the West India Steel Company (Private) Ltd. The Satya Sheel Gupta Company has taken steps to start a tin plate manufacturing unit at Ernakulam. The Packaging Paper Corporation Ltd., is taking steps to set up a paper factory. A wire rope unit has been set up at Alwaye by Messers Seshasayee Brothers Ltd. Anand Wire and Allied Industries has started the manufacture of water meters at Palluruthy. The British Physical Laboratories is setting up a factory in Palghat District to manufacture electric and electronic meters. A licence has been issued to Messers Rallis India Private Ltd., for the establishment of a Gelatin and Ossein Plant at Alwaye. The Kerala Government has accorded sanction to the Gwalior Rayon Silk Manufacturing Company at Mavoor to purchase 25,000 acres of forest

lands for utilisation of produces therein for their present industry and for additional wood-based industries to be started by them.

5.19. The number of factory units in the State has increased from 2,146 in 1958 to 2,600 in 1963. The expansion was mainly observed in industries such as bricks and tiles, wood works and packing cases and match splints while moderate growth was witnessed in metal and metal-based industries. Besides this addition to the total number of factories, many of the units were able to effect considerable expansion of their productive capacity during the period 1958-62. Factory employment rose from 1.65 lakhs to 1.75 lakhs during this period. Table 5.11 gives the distribution of the factories relating to the period 1958 to 1963.

Small Scale Sector

5.20. The secondary sector in the State employs, as mentioned earlier, about 19.3% of the total working force of 56.30 lakhs. The small scale sector alone accounts for 83% (8.47 lakhs) of the industrial workforce. Table 5.12 shows the district-wise distribution of employment in the small scale sector.

TABLE 5.12

Employment in Small Enterprises — Kerala 1961

| <i>District</i> | <i>Workers in small enterprises (lakh Nos.)</i> | <i>Workers in household industries as percentage to total workers in small enterprises</i> | <i>Workers in small enterprises as percentage to total industrial employment</i> |
|-----------------|---|--|--|
| Trivandrum | 0.96 (11.3) | 63.8 | 93.0 |
| Quilon | 0.93 (11.0) | 60.1 | 57.0 |
| Alleppey | 1.45 (17.2) | 71.8 | 90.6 |
| Kottayam | 0.51 (6.0) | 50.8 | 85.3 |
| Ernakulam | 0.99 (11.7) | 48.8 | 84.7 |
| Trichur | 0.89 (10.5) | 59.0 | 86.7 |
| Palghat | 0.79 (10.9) | 60.4 | 91.2 |
| Kozhikode | 1.02 (12.1) | 50.9 | 85.8 |
| Cannanore | 0.93 (9.3) | 44.2 | 87.1 |
| TOTAL | 8.47 (100.0) | 57.7 | 83.1 |

State. Two Co-operative sugar Mills, one at Pandalam and the other at Chittur are being set up. The unit at Pandalam has already started production. The Centre has granted licences for the establishment of 11 spinning mills each with an investment of over Rs. 40 lakhs and a spindleage of 12,000, in addition to a Model Spinning and Weaving Factory with 25,000 spindles and 500 looms in Trivandrum having an investment of Rs. 3 crores. A cable factory with an investment of Rs. 1 crore is proposed to be established by Messers Premier Cables Ltd., at Ernakulam. Licence has been issued to Messers Binny and Company Ltd., for the setting up of a penstock factory at Palluruthi. The Tracco Cable Company Ltd., is expected to go into production in July 1964. A unit for the manufacture of fused aluminium oxide with an investment of Rs. 2 crores is being set up at Edapally near Ernakulam by Messers Carborundum Universal Ltd., Madras. Steps are being taken for the setting up of a heavy transformer factory at Ankamali in collaboration with Messers Hitachi Ltd., Japan. Messers Cominco Binani of Calcutta proposes to establish a Zinc Smelter Plant at Alwaye in collaboration with a Canadian firm at a cost of over Rs. 5 crores. The annual installed capacity of this unit will be 20,000 tonnes of electrolytic zinc.

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| Cannanore | 0.93 (9.3) | 44.2 | 87.1 |
| TOTAL | 8.47 (100.0) | 57.7 | 83.1 |

5.21. The small units, as already mentioned, have no healthy growth and are characterised by low technology and hence low productivity. Even after 13 years of planning there is not much of a visible change in the industrial structure of the State's economy. It continues to be in a state of backwardness even though spurts of activity were visible in the recent past. One of the important institutions which have come forward to assist development of industries in the State is the Kerala State Small Industries Corporation which started functioning with effect from 21-7-1961. It has been registered as a private limited company under the Companies Act, 1956. The main activities of the Corporation are at present confined to (1) organisation of raw material depots for the supply of materials to the Small Scale Industries Units throughout the State (2) running of sales emporia for marketing the products of small scale units (3) setting up and management of industrial estates and (4) running of common facility service centres.

5.22. In July 1962 the Corporation has took over the management of all the existing industrial estates in Kerala. It is proposed to construct additional sheds in all the estates. A construction wing has been established separately under the Chief Administrative Officer to expedite this programme. A raw material depot has been opened in Quilon and steps are being taken for opening similar depots in the other districts also. The Holdall Manufacturing Centre, Mannorkonam was brought under the control of the Corporation in December 1962 and the unit has been shifted to a suitable building in the Industrial Estate, Pappanamcode. The Corporation will be shortly taking over from the Department of Industries and Commerce the two common service centres viz. service workshop in Industrial Estate, Ollur and wood workshop, Kallai. The Corporation has supplied raw materials such as zinc, copper, lead and aluminium to the Small Scale Industrial Units. The Corporation has been empowered by the Government of India to act as the registered stock holder for iron and steel materials in all the districts of the

State and as controlled stockists in the districts of Kozhikode and Trivandrum. A brief account of the progress achieved under the programme of industrial estates is given below:

5.23. A significant role is played by the industrial estates in the State in the programme of industrial growth. The policy adopted by the State is the establishment of industrial estates in every revenue district. During the Second Plan period industrial estates were established at Pappanamcode in Trivandrum district, Kollakadavu in Alleppey district, Ettumanur in Kottayam district, Ollur in Trichur district, Olavakkot in Palghat district, Palayad in Cannanore district, Palluruthy in Ernakulam district and West Hill in Kozhikode district. The total expenditure on the industrial estate scheme under the Second Plan was Rs. 65.47 lakhs against the original provision of Rs. 66.77 lakhs. 220 factory sheds constructed in all the industrial estates together are distributed as follows:

| <i>Industrial Estate</i> | <i>No. of sheds</i> | | | | <i>Total</i> |
|--------------------------|---------------------|---------------|---------------|---------------|--------------|
| | <i>Special</i> | <i>A Type</i> | <i>B Type</i> | <i>C Type</i> | |
| Pappanamcode | 2 | 2 | 8 | 20 | 30 |
| Kollakadavu | .. | 4 | 6 | 32 | 42 |
| Ettumanoor | .. | 3 | 8 | 20 | 31 |
| Ollur | .. | 4 | 6 | 32 | 42 |
| Olavakkot | .. | 2 | 12 | 20 | 34 |
| Palayad | .. | 1 | 2 | 8 | 11 |
| Palluruthy | .. | 3 | 3 | .. | 6 |
| West Hill | .. | .. | 4 | 18 | 22 |
| Total | 2 | 19 | 49 | 150 | 220 |

5.24. The Third Plan envisages an investment of Rs. 125 lakhs for the setting up of industrial estates proper (of the urban, semi-urban or rural category), functional industrial estates, private industrial estates, development plots in cities and rural worksheds. The estates in the Second Plan period are located in places near the district headquarters and hence they are of the semi-urban type. Small estates situated in rural areas may create additional

employment opportunities to unemployed and under employed rural folk. It is proposed to establish a major estate in the Quilon district costing Rs. 15 lakhs. Smaller estates costing Rs. 5 lakhs each will be located at Karakulam in Trivandrum district; Changanacherry in Kottayam district, Ankamaly in Ernakulam district, Irrinjalakuda in Trichur district, Karakkad in Palghat district and Manjeri in Kozhikode district. Two estates of the similar type will also be set up in Quilon and Alleppey districts but their sites have not been fixed.

5.25. A marine industrial estate of the functional type is being located at Thrikkakara in Ernakulam district. Manufacture of marine diesel engines, refrigeration equipments, mechanical and hydraulic winches, ship gears and propellers, fish nets, trawls, buoys, plastic floats, packing materials and paints and varnishes for marine use will be undertaken in the units located in this estate. Norwegian collaboration will also be available for the manufacturing processes intended to be undertaken in this estate whose estimated cost is Rs. 65 lakhs.

5.26. The Small Scale Industries Board has suggested a scheme for the establishment of private industrial estates. The private sector will get the benefit of assistance from the State Government as well as the Life Insurance Corporation of India in this venture. The L.I.C. will be advancing loans to the tune of 60% of the total cost of the estate. The remaining 40% will have to be met by private industrialists.

5.27. In the Third Plan, a scheme for the setting up of three development plots at Ernakulam, Kozhikode and Cannanore districts is included. These plots are to be located near urban centres. Under this scheme, land would be acquired and the necessary 'infrastructure' for industrialisation developed by the State Government and then the land would be leased out to entrepreneurs so that they themselves could construct sheds suitable for them. In order to bring the benefits of industrialisation to the rural areas construction of rural worksheds and training

to rural artisans are envisaged under the Plan. Altogether 25 such work sheds costing Rs. 2.50 lakhs each will be constructed in the State. Palghat district will have seven such sheds while Kozhikode and Cannanore four each, Quilon, Alleppey, Ernakulam and Trichur two each and Trivandrum and Kottayam one each.

Company Enterprises

5.28. The number of new companies registered in India recorded a fall in 1962-63 as compared to 1961-62. There were 1497 new registrations in 1962-63 with a total authorised capital of Rs. 25756 lakhs as against 1614 new registrations in 1961-62 with a total authorised capital of Rs. 32487 lakhs. The average authorised capital per new company which stood at Rs. 20.1 lakhs in 1961-62 fell to Rs. 17.2 lakhs in 1962-63. In Kerala the total authorised capital of new companies registered recorded an increase of Rs. 451 lakhs in 1962-63 over the previous year while the number declined by a margin of 6 companies. This indicates the tendency towards the formation of large sized companies in the State. During 1962-63, forty-five new companies were registered in Kerala with a total authorised capital of Rs. 1422 lakhs. The average authorised capital per new company in 1962-63 worked out to Rs. 31.6 lakhs in Kerala as against Rs. 17.2 lakhs for the whole of India. State-wise distribution of new companies registered during the years 1961-62 and 1962-63 is given in Table 5.13. The states of Madras, Maharashtra, West Bengal and Delhi accounted for 74% of the total new registrations and 69% of the total authorised capital of the new companies registered in India during 1962-63. The State of West Bengal has the largest number (327) of new registrations in 1962-63. The State of Maharashtra stood second with 293 while Madras and Delhi closely followed with 252 and 239 respectively.

TABLE—5.13
Registrations and Failures of Joint Stock Companies

| | New Registrations | | | Failures | | |
|-----------------------------------|-------------------|--------------------------------|------|--------------------------------|---------|-----------------------------|
| | 1961-62 | 1962-63 | | 1961-62 | 1962-63 | |
| | No. | Authorised Capital (Rs. lakhs) | No. | Authorised Capital (Rs. lakhs) | No. | Paid up Capital (Rs. lakhs) |
| | No. | Authorised Capital (Rs. lakhs) | No. | Authorised Capital (Rs. lakhs) | No. | Paid up Capital (Rs. lakhs) |
| Andhra | 28 | 289 | 55 | 1071 | 29 | 28 |
| Assam | 15 | 534 | 19 | 188 | 4 | 7 |
| Bihar | 9 | 131 | 26 | 622 | 33 | 15 |
| Gujarat | 73 | 2953 | 66 | 2000 | 27 | 27 |
| Kerala | 51 | 971 | 45 | 1422 | 59 | 31 |
| Madhya Pradesh | 23 | 583 | 11 | 100 | 16 | 16 |
| Madras | 284 | 2135 | 252 | 3241 | 65 | 19 |
| Maharashtra | 318 | 7217 | 293 | 7265 | 169 | 96 |
| Mysore | 28 | 2205 | 43 | 346 | 39 | 25 |
| Orissa | 12 | 5175 | 16 | 589 | 6 | 5 |
| Punjab | 58 | 198 | 38 | 340 | 14 | 5 |
| Rajasthan | 30 | 427 | 14 | 804 | 31 | 39 |
| Uttar Pradesh | 39 | 923 | 53 | 617 | 57 | 17 |
| West Bengal | 392 | 5392 | 327 | 4544 | 2304 | 332 |
| Delhi and other Union territories | 254 | 3354 | 239 | 2607 | 58 | 34 |
| INDIA | 1614 | 32487 | 1497 | 25756 | 2911 | 696 |
| | | | | | 825 | 675 |

TABLE—5.14
Joint Stock Companies at work as on 31-3-1963.

| Sl. No. | Industrial Group | Number of companies | | | Paid-up capital (Rs. lakhs) | | |
|---------|--|---------------------|---------|-------|-----------------------------|---------|-------|
| | | Public | Private | Total | Public | Private | Total |
| (0) | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 1 | Agriculture and allied activities | 91 | 74 | 165 | 703 | 73 | 776 |
| 2 | Mining and quarrying | .. | 5 | 5 | .. | 58 | 58 |
| 3 | Processing and manufacture of food-stuffs | 35 | 58 | 93 | 377 | 106 | 483 |
| 4 | Processing and manufacture of Metals and chemicals | 48 | 57 | 105 | 1075 | 41 | 1116 |
| 5 | Other processing and manufacture | 65 | 82 | 147 | 211 | 87 | 298 |
| 6 | Construction and utilities | 1 | 3 | 4 | 10 | 4 | 14 |
| 7 | Commerce, Trade and Finance | 157 | 276 | 433 | 394 | 306 | 700 |
| 8 | Transport, Communication & storage | 7 | 37 | 44 | 20 | 79 | 99 |
| 9 | Community and Business services | 3 | 5 | 8 | 1 | 1 | 2 |
| 10 | Personal and other services | 6 | 23 | 29 | 4 | 16 | 20 |
| Total | | 413 | 620 | 1033 | 2795 | 771 | 3566 |

5.29. During 1962-63, 825 companies with a total paid up capital of Rs. 675 lakhs have ceased functioning in India as against 2,911 companies with a total paid up capital of Rs. 696 lakhs in 1961-62. This sharp decline in the number of company failures in India was the result of a considerable reduction in the number of company failures in West Bengal (see Table 5.13). In Kerala there were 31 company failures in 1962-63 as against 59 in 1961-62; the total paid up capital of the companies failed in Kerala amounted to Rs. 51 lakhs in 1962-63 and 31 lakhs in 1961-62. Thus in terms of paid up capital the average size of companies failed in Kerala during 1962-63 was larger than that during 1961-62. Statewise distribution of company failures is given in Table 5.13. As in the case of new registrations, the States of West Bengal, Maharashtra, Madras and Delhi accounted for a major share, viz., 54% of the total company failure in India.

5.30. At the end of 1962-63, there were 1033 registered companies in Kerala with a total paid up capital of Rs. 3,566 lakhs. This number comprised of 413 public companies with a total authorised capital of Rs. 7,843 lakhs and 620 private companies with a total authorised capital of Rs. 3,440 lakhs. In the public company sector 36% of the authorised capital is paid up while in the private company sector only 22% of the authorised capital is paid up. The industrial pattern of the companies shows that the sector commerce and trade accounts for 42% of the total companies but its share in the total paid up capital is only 20%. The next important industrial sector is processing and manufacturing which accounts for 33% of the total number of companies and 53% of the total paid up capital of all companies. The third important sector is agriculture and allied activities; this group accounts for 16% of the total number of companies and 22% of the total paid up capital of all the companies in the State. Table 5.14 shows the distribution of companies according to industrial group.

CHAPTER VI

POWER

Kerala State has abundant potential for power. Harnessing the available water resources is a vital factor in bringing about economic development in the industrially backward State of Kerala. The hydro-electric potential of the State is 2.1 million K.W. at 60 per cent load factor as against the potential of 40 million K.W. for India as a whole.

6.2. The present power system consists of five hydel stations having an installed capacity of 1,77,500 K.W. and 20 EHT sub-stations served by 2,433 circuit kilometers of EHT transmission lines. Altogether 2.26 lakh consumers in about 2,040 centres are connected to the system. The peak demand met by the Hydro-electric stations is 1,34,600 K.W. while the daily generation is of the order of 2.0 million units at present. Besides the power generated about 13,000 K.W. of power at 66 K.V. and 22 K. V. is being purchased from the Madras State for distribution in the Malabar area. With the progress of work on transmission lines the Malabar area will also be connected to the grid in the rest of the State. The Kerala system also supplies about 4,000 K.W. to the Madras State for distribution in the Kanyakumari district. The connected load of the State Electricity Power system at the end of March 1963 is shown category-wise in Table 6.1.

TABLE—6.1

Number of Consumers and Connected Load as on 31-3-1963

| <i>Sl. No.</i> | <i>Category</i> | <i>Number of consumers</i> | <i>Connected load K.W.</i> |
|----------------|---|----------------------------|----------------------------|
| 1 | Light and Fans .. | 209282 | 110,385 |
| 2 | Domestic heat and Small Power (Commercial) .. | 5932 | 10,014 |
| 3 | Industrial power L. T. .. | 6642 | 79,224 |
| 4 | Industrial power H. T. .. | 142 | 118,161 |
| 5 | Public lighting .. | 860 | 3,285 |
| 6 | Irrigation and Agriculture .. | 3425 | 22,084 |
| 7 | Water works and sewage pumping .. | 144 | 3,105 |
| 8 | Bulk supplies to licensees and Export .. | 7 | 34,313 |
| | .. | 226434 | 380,571 |

TABLE—6.2

Pattern of Consumption of Electrical Energy by Various Classes of Consumers

| Sl. No. | Category | 1958-59 | | 1959-60 | | 1960-61 | | 1961-62 | | 1962-63 | |
|---------|--|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|
| | | M.Units | % | M.Units | % | M.Units | % | M.Units | % | M.Units | % |
| 1 | Domestic consumers, commercial lights and fans and small power | 29.97 | 7.0 | 35.16 | 8.4 | 40.57 | 8.0 | 47.88 | 7.8 | 54.43 | 8.8 |
| 2 | Public lighting | 4.43 | 1.0 | 5.66 | 1.3 | 6.62 | 1.1 | 6.88 | 1.1 | 7.00 | 1.1 |
| 3 | Agricultural operations and water works .. | 18.78 | 4.4 | 19.75 | 4.7 | 25.62 | 5.1 | 24.78 | 4.1 | 25.76 | 4.2 |
| 4 | Small and medium industries (low tension supply) | 30.30 | 7.1 | 34.13 | 8.0 | 40.40 | 8.0 | 47.01 | 7.7 | 48.35 | 7.8 |
| 5 | Large and heavy industries (high tension supply) | 297.42 | 70.0 | 269.04 | 63.5 | 340.38 | 67.5 | 434.44 | 70.8 | 430.68 | 69.7 |
| 6 | Bulk supplies to licensees neighbouring States | 42.05 | 10.5 | 59.59 | 14.1 | 52.03 | 10.3 | 52.30 | 8.5 | 52.19 | 8.4 |
| Total | | 422.95 | 100.0 | 423.33 | 100.0 | 505.62 | 100.0 | 613.29 | 100.0 | 618.41 | 100.0 |

112

Generation of Electrical Energy and Purchase from Madras State (in M. Units)

| Sl. No. | 1958-59 | | 1959-60 | | 1960-61 | | 1961-62 | | 1962-63 | |
|---------------------------------------|---------|--------|---------|--------|---------|--------|---------|--|---------|--|
| A. Electricity Generated in the State | .. | 504.58 | 488.00 | 581.82 | 694.38 | 715.55 | | | | |
| B. Purchased from Madras | .. | 35.43 | 45.00 | 50.34 | 56.76 | 59.56 | | | | |

The pattern of consumption of electrical energy during the period 1958-59 to 1962-63 is given in Table 6.2.

Power Projects in the State

6.3. The Hydro-electric power resources of the State are concentrated in the river basins of Periyar, Chalakudy, Pamba, Kuttiadi, Chaliyar and Bhara-thapuzha. Table 6.3 gives the power capacity of the various projects which are under different stages of execution.

TABLE—6.3

A. Projects in operation

| <i>Project</i> | | <i>Basin</i> | <i>Power capacity K.W.</i> |
|----------------|---------------------------|--------------|----------------------------|
| 1 | Pallivasal | .. Periyar | 37,500 |
| 2 | Sengulam | .. do. | 48,000 |
| 3 | Neriamangalam | .. do. | 45,000 |
| 4 | Poringalkuthu (left bank) | .. Chalakudy | 32,000 |
| 5 | Panniar | .. Periyar | 15,000 |
| Total | | .. | 1,77,500 |

B. Projects under execution

| <i>Project</i> | | <i>Basin</i> | <i>Power Capacity K.W.</i> |
|----------------|------------|--------------|----------------------------|
| 6 | Sabarigiri | .. Pamba | 3,00,000 |
| 7 | Panniar | .. Periyar | 15,000 |
| 8 | Sholayar | .. Chalakudy | 54,000 |
| 9 | Kuttiyadi | .. Kuttiyadi | 75,000 |
| 10 | Idikki | .. Periyar | 5,00,000 |
| Total | | | 9,44,000 |

6.4. The commissioning of the first stage of the Pallivasal project with an installed capacity of 9,000 K.W. was the beginning of the generation of hydro-electric power in the State. At the beginning of the First Plan the installed capacity of this station had been raised to 28,500 K.W. At that time a 66 K. V. transmission system covered the State and electric

power was distributed to about 28,000 consumers in 158 centres. By the end of the First Plan the installed capacity of this project was raised to 37,500 K.W. A second project, viz., Sengulam Hydel Station, was commissioned in 1954 in the Muthirapuzha river with an installed capacity of 48,000 K.W. During the last year of the Plan period, the maximum demand of the system increased to 62,900 K.W. and the two generating stations at Pallivasal and Sengulam together produced 349.78 million K.W.H. 744 villages were newly electrified during the Plan period and 51,456 consumers were connected to the power system. The per capita consumption of electricity rose from 13 units in 1951 to 18.5 units in 1955. Out of the total outlay of Rs. 30.03 crores in the First Plan, an amount of Rs. 10.40 crores was allotted for power development. The actual investment during the First Plan period was Rs. 11.05 crores, which exceeded the plan outlay by Rs. 0.65 crore.

6.5. In the Second Plan also due emphasis was given to the development of power schemes. Out of the total outlay of Rs. 87 crores for the Plan, an amount of Rs. 23.45 crores was allotted for power development. This outlay was made up of Rs. 11.30 crores for hydro-electric projects, Rs. 4.82 crores for transmission schemes and Rs. 7.23 crores for rural electrification and distribution schemes. The amount actually spent under the plan was Rs. 22.4 crores. The additional generating capacity targeted in the Second Plan period was 1,61,000 K.W. against which only 77,000 K.W. capacity could be installed. The Peringalkuthu Project was completed during the Plan period. As regards Neriamangalam Project only two of the three generators having a capacity of 30,000 K.W. were functioning at the end of the plan period as the third generator having a capacity of 15,000 K.W. had fallen under repair. The projects left unfinished, viz., Panniar (30,000 K.W.) Sholayar (54,000 K.W.) and Sabarigiri (300,000 K.W.) were carried over to the Third Plan. Thus against the expected total capacity of 2,46,500 K.W. the State had only 147,500 K.W. at the end of the Second Plan period.

TABLE—6.4

Statistics Relating to Kerala Power System

| Description of work | Travancore, Cochin | | Kerala State | | | | |
|--------------------------------------|----------------------------------|----------------------------------|----------------------------------|--|--------------------------------|-------------------------------------|--------|
| | At the beginning of the 1st Plan | At the beginning of the 2nd Plan | At the beginning of the 3rd Plan | Programme Achievement for the Third Plan '63 during 3rd Plan | Total at the end of March 1963 | Expected at the end of the 3rd Plan | |
| Centres Electrified | .. | 158 | 902 | 1849 | 190 | 2039 | 2599 |
| Consumers | .. | 28119 | 79575 | 174993 | 51441 | 226434 | 274993 |
| Street lights | | 7905 | 25489 | 82645 | 8663 | 91308 | 129645 |
| Installed generation Capacity (KW) | | 28500 | 85500 | 147500* | .. | 147500 | 346500 |
| Maximum Demand | .. | 24400 | 62900 | 126300 | .. | 134600 | 365000 |
| | | | | (at the end of the 3rd Plan) | .. | (During April '62 to March '63) | |
| 220 KV. Lines (circuit KM) | .. | .. | .. | .. | .. | .. | .. |
| 110 KV. Lines (do.) | .. | .. | .. | 552.75 | 454.75 | 958 | .. |
| 66 KV Lines (do.) | 910.70 | 1070.02 | 1373.08 | .. | 101.92 | 1475 | .. |
| 11 KV Lines (do.) | 1073.43 | 2788.99 | 5209.05 | .. | 783.00 | 5992.1 | .. |
| 3.3 KV Lines (do.) | .. | .. | .. | .. | 33.10 | 33.10 | .. |
| L. T. lines (do.) | 997.79 | 3687.00 | 8899.10 | .. | 1992.00 | 10891.1 | .. |
| Units generated million units/annum | 150.98 | 349.78 | 581.82 | 1410 | .. | 715.55 | 1410 |
| | | | (at the end of 3rd Plan) | | | | |
| Units purchased million units/annum | 16.84 | 1.46 | 50.34 | .. | .. | 59.36 | .. |
| Purja load (dewatering KV) | 8700 | 12057 | 20211 | .. | .. | 24478 | .. |
| Total connected load KW | 69569 | 142353 | 311343 | .. | .. | 380571 | 800000 |
| Per Capita consumption/annum (units) | 13.00 | 18.50 | 30.10 | 59.50 | .. | 39.8 | 59.50 |
| | | | (at the end of 3rd Plan) | (at the end of March '63) | | | |

* Includes also 15,000 KW of installed capacity of Neriamangalam II Commissioned on 9-4-1961.

† Neriamangalam III

6.6. A number of difficulties were experienced during this period which account for the shortfall in the implementation. Almost all the major equipment necessary for the projects had to be imported. By the middle of plan period the foreign exchange position was at its worst and projects were classified into 'core' and 'non-core' projects. Foreign exchange was subsequently released only according to priority. The protracted delay in getting the sanction for foreign exchange and delays in land acquisition procedures and clearance of certain designs from the Central water and Power Commission were the major difficulties which contributed to the non-implementation of power schemes during the Second Plan period.

6.7. Under rural electrification and distribution schemes power supply was extended to 947 new centres and 95,418 additional consumers were connected to the power system. The per capita power consumption in the State increased considerably during the plan period. It is estimated at 30.10 units at the end of the Plan period as against 18.50 units at the beginning. Table 6.4 gives the progress of power development in the State till the end of the Second Plan. It also indicates the anticipated development in the Third Plan.

6.8. Of the Rs. 170 crores outlay for Third Plan of Kerala, the outlay envisaged for power development is Rs. 43.56 crores. This will however be exceeded. Power development programme has been drawn up with an eye to the future requirements of power in the State. The Panniar Project is expected to be commissioned by the beginning of 1964 and the Sholayar Project by March 1965. The U.S.A. has agreed to grant loans totalling Rs. 9.6 crores for the Sabarigiri project for meeting the cost of imported machinery and a loan of Rs. 15.3 crores for meeting the local cost of the project. The scheme is expected to be completed in 1966. With the commissioning of these three projects, installed capacity of power in the State will be raised to 5,46,500 k.w. The construction of a 220 k.v. line linking the Kerala and Madras State grids will be undertaken during the plan period. 750 new centres will be given power supply and about

a lakh of consumers will be connected up. The Third Plan also intends to commence work on two new Hydro-electric projects, viz., the Kuttiadi and Idikki. These projects, however, will be completed during the Fourth Five Year Plan period. Kuttiadi project having an installed capacity of 75,000 k.w. will be stabilising the power supply position in Malabar. The Idikki project (5 lakhs k.w.) will serve the object of long term power requirements for the State and also the Southern Zonal Grid which is expected to materialise soon.

6.9. Of the total third Plan outlay of Rs. 43.56 crores for power, the expenditure for the first two years is Rs. 14.23 crores. It is estimated that the expenditure till the end of the third year would be Rs. 25.63 crores. During the first two years 8,663 street lights were installed, 190 new centres were electrified and 51,441 additional consumers were connected up. About 1,992 circuit K.M. of L.T. lines, 783 Circuit K.M. of 11 K.V. lines and 557 circuit K.M. of E.H.T. lines were also constructed.

6.10. Adequate power supply is a basic factor in industrialisation. Based on the past trend it had been estimated by the Kerala Electricity Board that Kerala's power demand is doubling every five years. But it should be possible to achieve a higher tempo of industrialisation during the Third Plan itself. In that case it is likely that there would be a trebling of power demand over the Plan period. It is now estimated that the demand at the end of the Third Plan period will be about 365,000 k.w. and that at the end of the Fourth Plan period about 620,000 k.w. The demand and supply position during the Fourth Plan period is estimated to be as follows:—

| | <i>Capability of 70% L.F.(M.W.)</i> | <i>Demand (M.W.)</i> | <i>Surplus (M.W.)</i> |
|---------|---|--------------------------|---------------------------|
| 1966-67 | 406 | 341 | + 65 |
| 1967-68 | 446 | 391 | + 55 |
| 1968-69 | 546 | 456 | + 90 |
| 1969-70 | 660 | 536 | + 124 |
| 1970-71 | 750 | 620 | + 130 |

6.11. Large scale exploitation of hydro-electric potential in the State will create a sizeable surplus of power by the end of the Fourth Plan period, while in the neighbouring States there will be deficit. So supply of power to the neighbouring States can very well form the long term objective of power planning in Kerala. But the State's industries which need power should be satisfied before disposing of power through sale. The possibility of disposing of surplus power during the particular period when it will be available in large quantities will have to be explored. With the establishment of the grid system covering the Southern States of Andhra Pradesh, Mysore, Madras and Kerala, the State's power system will have a greater role to play. A number of advantages are put forward in favour of the grid system. An integrated power system will require less generating capacity and less stand-by capacity than an individual system. Most economic sites in the region can be selected for putting up large generating Stations. There will be effective use of transmission facilities and during periods of emergency mutual assistance can be easily arranged.

6.12. The State Electricity Boards have been constituted by the State Governments under the Electricity (Supply) Act, 1948, to nationalise the production and supply of electricity and generally to assist power development. The Act states that the electricity Board shall not, as far as practicable and after taking any subvention from the State Government, carry on its operations at a loss.

6.13. The State Electricity Board is at present running at a loss and it is only reasonable that the charges are adjusted so as to yield a plus margin.

6.14. The major consumer of electric power in the State is industries and power to industries is supplied at rates lower than that for domestic and commercial purposes. For domestic consumption the rate charged is 30 nP. per unit in Kerala. Domestic consumption accounts for nearly 41.5% of the revenue collected even though it covers only 8.5% of consumption. On the other hand the industrial consumption

accounts for 77.5% but it contributes only 42.7% of the total revenue.

6.15. As more than 75% of the electricity generated is consumed by the industries it is obvious that without increasing the tariff for industries no substantial increase in the revenue can be obtained. Excepting for four or five units, for all the industries the percentage share of power in the total input is less than four. Therefore even a 10% increase in the tariff for such industries will not affect the cost structure to any appreciable extent. Mr. Spotts Wood of the International Bank for Reconstruction and Development said that "the idea is often expressed with sincere conviction by many people that low power rates, even if it is necessary to subsidise them, are required for industrial development. This is simply not so." A revision of the rates of industrial power is all the more justified as most of the industries are now operating under favourable circumstances protected from competition from both inside and outside the country. Power for domestic consumption will of course be costlier than that of industrial consumption for obvious reasons. However, revenue from domestic consumption is far higher than its reasonable share of the total revenue (refer Table 6.5.)

TABLE—6.5
Consumption of energy and receipts (1962-63)

| Sl. No. | Category of Consumers | Energy consumed | Revenue collected |
|---------|---------------------------------------|--------------------|----------------------|
| | | % | % |
| 1 | Domestic heat and small power | 1.03 | 2.14 |
| 2 | Light and fans | 7.50 | 39.39 |
| 3 | Commercial heat and small power etc. | 0.27 | 0.98 |
| 4 | Industrial power L. T. | 7.82 | 11.66 |
| 5 | Industrial power H. T. | 69.64 | 31.03 |
| 6 | Public lighting | 1.13 | 5.33 |
| 7 | Irrigation and Agriculture | 2.97 | 3.77 |
| 8 | Water works and Sewage pumping | 1.20 | 0.95 |
| 9 | Bulk supplies to licensees and Export | 8.44 | 4.75 |
| | | 100.00 | 100.00 |

6.16. A realistic planning for power development in Kerala calls for a proper assessment of the demand for power in the State. Though it is not an easy problem it is time the demand position under the various heads like rural electrification, industrial use and domestic use is known with some amount of accuracy.

6.17. Planning for more electrical energy should be done sufficiently in advance. Various bottlenecks which cause delay in implementation should be spotted out early and remedial measures taken. It is obvious that such caution was not exercised in the Second Plan period. The schemes under the Second Plan could not be properly implemented and targets achieved because the necessary attention was not bestowed on avoidable difficulties in planning like delay in land acquisition and delay in getting the clearance of designs by the Central Water and Power Commission. As power is a commodity which cannot be stored up and as keeping the power generating machines idle will only add to the cost of generation, there should be constant demand for power either from indigenous consumers or other States.

CHAPTER VII

TRANSPORT

Transport development contributes to economic growth by enlarging the market and thereby stimulating specialisation. It enables exploitation of resources by making them accessible. In short, it would enable the economy to become more dynamic. Bottlenecks in transport exert an inhibiting influence on the utilization of existing capacity and on increased production. As one of the strategic infrastructures of a developing economy transport contributes to the national income directly by its own services and indirectly by aiding the expansion of almost all the sectors of the economy.

Road Transport

7.2. Kerala possesses a satisfactory system of road transport. With fairly good road transport and water transport facilities Kerala's position is favourable compared to many other States in India. Road transport provides the major means of transport and easily occupies the first place among the various modes of transport obtaining in the State. Kerala's is one of the earliest transport systems to be nationalised in India. The State has a total road mileage of 10739 miles comprising 276 miles of national highways, 1156 miles of provincial highways, 3873 miles of district roads and 5434 miles of village roads. The average road mileage in the State is 72 per 100 square miles against the all India average of 25. The average road mileage per lakh of population is only 66 in the State as against 82 for India as a whole. The low extent of mileage in relation to population is the outcome of high density of population in the State. Even though the average road mileage in the State considerably exceeds the mileage target laid down by the Nagpur Plan of 1943 (26 miles per 100 Sq. miles) there are several shortcomings like sub-standard surface of

roads, lack of bridges on many roads, the poor condition of many of the existing culverts and bridges, prevalence of narrow roads where there is high traffic density, delays to traffic resulting from the existence of a number of level crossings and excessive vehicle density on arterial routes. These defects in the existing transport system need early attention, for the great industrial and agricultural development which is likely to take place in the coming years is bound to generate a vast amount of additional traffic. The past experience shows that it has not been possible to keep pace with the growth of traffic due to the above mentioned shortcomings. The distribution of road mileage in the different districts is uneven. The average mileage is the lowest in Calicut district (36 miles per 100 sq. miles) the next higher position being taken up by Trichur district (57 miles). Among the districts the Alleppey district leads the others in road mileage. In view of the expanding industrial complex around Ernakulam a comprehensive plan of development of roads radiating from Ernakulam has to be drawn up urgently.

Transport Department

7.3. The Kerala State Transport Department is a commercial concern running profitably. The Department was operating passenger services in 433 routes covering a route distance of 7621 miles at the beginning of 1962-1963. In the course of the year the number of routes increased to 448 and the route mileage to 8682. The number of bus schedules in operation went up from 554 to 614 during the period April 1962 to March 1963. Including the parcel lorry services and goods lorry services the total number of schedules as at the end of March 1963 was 649. Table 7.1 gives the total mileage operated under each kind of service and the earnings from these services during the years 1961-62 and 1962-63.

TABLE—7.1

| <i>Kind of Service</i> | 1961-62 | | 1962-63 | |
|------------------------|---------------------------------|-----------------------------|---------------------------------|-----------------------------|
| | <i>Mileage operated (Lakhs)</i> | <i>Earnings (Rs. Lakhs)</i> | <i>Mileage operated (Lakhs)</i> | <i>Earnings (Rs. Lakhs)</i> |
| Express | 28.2 | 28.4 | 16.8 | 16.0 |
| Fast passenger | 14.4 | 19.9 | 48.9 | 67.5 |
| Ordinary | 214.4 | 253.9 | 233.2 | 276.9 |
| City | 33.5 | 33.2 | 36.1 | 35.7 |
| Parcel service | 2.8 | 2.0 | 2.6 | 1.9 |
| Goods service | 5.5 | 7.8 | 4.4 | 7.9 |
| Private hire | 1.7 | 4.7 | 1.1 | 2.3 |
| Others | 5.2 | 12.1 | 5.9 | 26.1 |
| All | 305.7 | 362.0 | 349.0 | 434.3 |

7.4. The above figures indicate that the idea of fast passenger service has gained considerable popularity among the travelling public. There is an increase of nearly 20% in the earnings of 1962-1963 over that of the previous year. Of the net increase of Rs. 72.3 lakhs in 1962-1963, that due to bus operations is Rs. 60.7 lakhs.

An analysis of revenue and expenditure for the last five years reveals that except for 1959-1960 the Transport Department has earned profits. (vide Table 7.2). There is an increase of 25% in the profits earned in 1962-1963 compared to 1961-1962.

TABLE—7.2

(Rs. Lakhs)

| <i>Year</i> | <i>Revenue</i> | <i>Expenditure</i> | <i>Profit</i> |
|-------------|----------------|--------------------|---------------|
| 1958-59 | 240.88 | 223.52 | 17.36 |
| 1959-60 | 247.17 | 259.63 | (—)12.46 |
| 1960-61 | 294.18 | 284.01 | 10.17 |
| 1961-62 | 361.95 | 330.39 | 31.54 |
| 1962-63 | 434.20 | 394.70 | 39.50 |

7.5. At the end of March 1962 the State Transport Department had 6068 employees of whom 4549 were permanent and 1519 temporary. The total employment had risen to 6116 at the end of March 1963. Of this total 5343 belonged to the permanent staff and the remaining 773 to temporary staff.

7.6. The annual collections under the Motor Vehicles Tax are increasing year by year. There is an increase of nearly 17% in the collections in 1962-1963 compared to 1961-1962 (Vide Table 7.3).

TABLE—7.3

| <i>Year</i> | <i>Annual Collection under Motor Vehicle Tax (Rs. Lakhs)</i> |
|-------------|--|
| 1957-58 | 124.34 |
| 1958-59 | 166.58 |
| 1959-60 | 164.99 |
| 1960-61 | 204.80 |
| 1961-62 | 217.87 |
| 1962-63 | 255.24 |

The proceeds under the Motor Vehicles Tax in 1962-1963 are more than double that in 1957-1958.

Inland Navigation

7.7 Water transport in India is confined to the States of Assam, West Bengal, Bihar, Uttar Pradesh, Orissa, Andhra Pradesh, Madras and Kerala. This mode of transportation plays an important role in the industrial and agricultural spheres of Kerala's economy. An inland navigation system has become a reality in the State mainly due to the existence of a number of west-flowing rivers and a coastline interspersed with a number of backwaters. The existing canal system which is navigable throughout the year extends from Trivandrum in the South to Badagara in the North and is developed by connecting backwaters and river mouths by artificial canals. The interior coastal canal system, known as the West Coast Canal system, stretches from Trivandrum in the South to Hosdurg in the North. The length of this canal is 347 miles. There are about 387 miles of inland cross canals which are mostly confined to the Travancore and Cochin areas. The various rivers in the State provide about 500 navigable miles. Thus the State has about 1200 miles of waterways, accounting for about 20% of the inland navigation lines in India as a whole. About 25000 country crafts, 500 motor boats and 1300 crafts are licenced to ply in the waterways of the State.

7.8. Kerala State Water Transport Corporation was formed in April 1958. It operates passenger boats in the Quilon-Cochin area. The Corporation is at present running at a loss. The revenue expenditure position of the Corporation relating to the last five years is brought out in Table 7.4.

TABLE—7.4

| <i>Year</i> | <i>Revenue</i> | <i>Expenditure</i> | <i>(Rs.)</i> | |
|-------------|----------------|--------------------|---------------|--------|
| | | | <i>Profit</i> | |
| 1958-59 | 555903 | 556140 | (—) | 237 |
| 1959-60 | 584470 | 616781 | (—) | 32311 |
| 1960-61 | 580007 | 750036 | (—) | 170029 |
| 1961-62 | 555542 | 729698 | (—) | 194156 |
| 1962-63 | 582903 | 755118 | (—) | 172213 |

The Corporation at present possesses eleven powered boats having a seating capacity of 1473. The Government have decided to liquidate the Corporation owing to recurring losses.

Railway Transport

7.9. Railways are the principal means of transport in India. There are about 552 miles of railways in Kerala which give an average of 3.6 miles per 100 square miles of State territory. The railway system in the State is made up of 344 miles of broad gauge lines and 208 miles of metre gauge lines. The districts of Quilon, Palghat, Calicut and Trichur and Cannanore are more favourably placed with regard to railways than other districts. Alleppey has the least railway mileage and the districts of Kottayam and Ernakulam though they have only low railway mileage are compensated by roads and water-ways. The area south of Ernakulam and Cochin is served by the metre gauge line while the area north of these by broad gauge. The major harbour of Cochin, however, is served by both gauges, the metre gauge giving access to the south and the broad gauge to the north including adjoining areas of the Madras State. Traffic is not balanced in the various railway sections in the State. The inward movements of traffic are generally higher than the outward movements, especially in

the Cochin-Shornur line. The railways have an important role to play in the coming years. With the emergence of new industries as a result of the Five Year Plan programmes more and more traffic, especially of the inter-state category, will have to be borne by the State's railway system. Railways being a Central subject, the Centre has to bestow greater attention on the development of railways in the slowly emerging backward States like Kerala whose industrial development hinges on a well developed railway transport system.

CHAPTER VIII

EXPORT—IMPORT TRADE

Cash crops contribute about 51 percent of the State's regional gross income of Rs. 257 crores from agriculture and most of these cash crops are good foreign exchange earners. Hence the Kerala economy is dependant to a great extent on the world market conditions.

8.2. Considering the total sea borne trade of Kerala for the last six years ended 1961-62, it is seen that Kerala had a favourable balance of trade during these years. Over the above period value of exports increased by about 42 per cent Imports decreased upto 1958-59 and thereafter showed a rising trend. The overall increase in the value of imports during the period was about 19 per cent.

8.3. The value of sea borne export trade in 1961-62 was higher than that for 1960-61 by about 3.3 per cent whereas the corresponding rise in 1960-61 over 1959-60 was about 12 percent. Analysing the trade, commodity-wise, it is seen that both quantity and value of exports have risen in 1961-62 over 1960-61 in the case of a number of commodities like cardamom, cashew kernels, coffee, coir products, fish products, coconut products etc. Export earnings of a few commodities like ginger, pepper and tea have fallen due to a fall in the prices of these commodities and in the case of tea there was a fall in quantity exported also.

8.4. The rise in the value of imports is accounted for mostly by larger imports of commodities like sugar, grain and pulses, manures, mineral oil and vegetable oil.

8.5. Tables 8.1 to 8.4 show the summary position of Kerala's exports and imports during the past few years. The trend in the export-import trade of some of the important commodities is discussed below:—

TABLE-8.1
Exports (Foreign and Coastal) from the Ports of Kerala

| Sl. No. | Commodities | Unit | 1956-57 | | 1957-58 | | 1958-59 | | 1959-60 | |
|---------|----------------------|-------------|----------|----------------------|----------|----------------------|----------|----------------------|----------|----------------------|
| | | | Quantity | Value (Rs. lakhs) | Quantity | Value (Rs. lakhs) | Quantity | Value (Rs. lakhs) | Quantity | Value (Rs. lakhs) |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
| 1 | Betelnuts | Tonnes | 2502.58 | 75.75 | 3603.07 | 134.81 | 5397.87 | 213.87 | 4555.65 | 229.02 |
| 2 | Cardamom | " | 265.19 | 58.51 | 297.14 | 61.73 | 293.79 | 64.05 | 254.11 | 55.49 |
| 3 | Cashew Kernel | '000 Litres | 26348.21 | 1194.11 | 36239.46 | 1371.30 | 37299.20 | 1432.42 | 36326.84 | 1572.35 |
| 4 | Cashew Shell liquid | " | 5121.00 | 39.60 | 4378.00 | 35.85 | 3659.00 | 29.59 | 4313.89 | 35.29 |
| 5 | Coconut | Lakhs | 1355.80 | 233.99 | 1098.30 | 225.90 | 998.80 | 223.37 | 1338.70 | 311.45 |
| 6 | Coconut oil | '000 Litres | 4285.00 | 73.63 | 5615.00 | 114.36 | 9070.74 | 202.15 | 12701.05 | 293.01 |
| 7 | Coconut oil cake | Tonnes | 2443.60 | 8.52 | 2966.87 | 11.85 | 3887.41 | 17.28 | 4752.07 | 19.42 |
| 8 | Copra | " | 10347.45 | 142.12 | 10362.69 | 174.95 | 20627.85 | 343.38 | 17984.09 | 313.07 |
| 9 | Coffee | " | 3578.83 | 200.56 | 2883.50 | 144.91 | 5691.40 | 260.48 | 6110.58 | 223.17 |
| 10 | Coir & Coir products | " | 93357.26 | 1033.88 | 86809.84 | 900.70 | 86938.83 | 911.50 | N.A. | 916.03 |
| 11 | Fish and Meat | " | 4683.74 | 124.87 | 6018.47 | 149.46 | 4666.92 | 177.21 | 3614.44 | 122.20 |
| 12 | Ginger | " | 12312.85 | 240.21 | 7407.11 | 76.97 | 5848.94 | 59.14 | 7486.51 | 113.91 |
| 13 | Lemongrass Oil | '000 Litres | 1213.23 | 147.19 | 1459.57 | 138.41 | 1348.60 | 92.75 | 1236.73 | 141.43 |
| 14 | Pepper | Tonnes | 21308.60 | 484.57 | 16111.96 | 334.49 | 15729.17 | 333.21 | 26906.50 | 1137.99 |
| 15 | Rubber | " | 20663.56 | 696.38 | 21278.96 | 684.68 | 20153.76 | 661.68 | 17583.77 | 592.99 |
| 16 | Rubber manufactures | " | .. | .. | .. | .. | .. | .. | .. | .. |
| 17 | Tea | " | 37366.48 | 2233.71 | 46069.83 | 2507.86 | 41039.15 | 2232.26 | 40543.85 | 2239.54 |
| 18 | Wood and Timber | " | .. | 30.72 | .. | 58.89 | .. | 211.95 | .. | 238.05 |
| 19 | Sundries | " | .. | 1285.68 | .. | 1487.88 | .. | 1760.71 | .. | 1733.59 |
| TOTAL | | | .. | 8304.00 | .. | 8615.00 | .. | 9227.00 | .. | 10288.00 |

TABLE—8.1—(Contd.)
Exports (Foreign and Coastal) from the Ports of Kerala

| Sl. No. | Commodities | Unit | 1960-61 | | 1961-62 | |
|---------|----------------------|-------------|------------------|------------------------------|------------------|------------------------------|
| | | | Quantity (12) | Value (Rs. lakhs) (13) | Quantity (14) | Value (Rs. lakhs) (15) |
| (1) | (2) | (3) | (12) | (13) | (14) | (15) |
| 1 | Betelnuts | Tonnes | 8882.80 | 465.66 | 11499.01 | 650.90 |
| 2 | Cardamom | " | 380.30 | 78.07 | 414.29 | 68.31 |
| 3 | Cashew Kernel | " | 36373.53 | 1695.61 | 41878.35 | 1701.27 |
| 4 | Cashew Shell liquid | '000 Litres | 5182.91 | 48.53 | 5953.64 | 57.41 |
| 5 | Cocanut | Lakhs | 1069.17 | 237.49 | 1384.28 | 311.40 |
| 6 | Cocanut Oil | '000 Litres | 12793.59 | 317.76 | 13637.72 | 361.79 |
| 7 | Cocanut Oil Cake | Tonnes | 3325.00 | 13.99 | 2376.20 | 9.95 |
| 8 | Copra | " | 23584.07 | 460.21 | 23248.80 | 429.09 |
| 9 | Coffee | " | 8130.10 | 226.10 | 8341.12 | 258.73 |
| 10 | Coir & Coir Products | " | 81856.30 | 1042.19 | 89244.32 | 1298.75 |
| 11 | Fish and Meat | " | 6094.51 | 194.17 | 6585.60 | 260.14 |
| 12 | Ginger | " | 10893.94 | 188.58 | 10893.33 | 177.73 |
| 13 | Lemongrass Oil | '000 Litres | 1144.67 | 200.76 | 995.61 | 276.38 |
| 14 | Pepper | Tonnes | 23486.06 | 1065.49 | 26858.76 | 1017.96 |
| 15 | Rubber | " | 21090.49 | 806.44 | 23776.91 | 851.28 |
| 16 | Rubber manufactures | " | 1304.83 | 41.40 | 1595.86 | 53.86 |
| 17 | Tea | " | 41413.10 | 2317.30 | 41017.12 | 2252.13 |
| 18 | Wood and Timber | " | .. | 230.08 | .. | 326.88 |
| 19 | Sundries | " | .. | 1799.53 | .. | 1447.60 |
| TOTAL | | | .. | 11429.36 | .. | 11811.56 |

TABLE—8.2
Foreign Exports from the Ports of Kerala

| Sl. No. | Commodity | Unit | 1956-57 | | 1957-58 | | 1958-59 | |
|---------|--------------------------|-------------|----------|----------------------|----------|----------------------|----------|----------------------|
| | | | Quantity | Value (Rs. lakhs) | Quantity | Value (Rs. lakhs) | Quantity | Value (Rs. lakhs) |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| 1 | Cardamom | Tonnes | 247.87 | 54.84 | 253.45 | 55.90 | 263.77 | 58.40 |
| 2 | Cashew Kernel | , , | 26331.95 | 1193.23 | 36145.98 | 1366.61 | 37268.71 | 1431.02 |
| 3 | Cashew Shell liquid | '000 Litres | 5121.00 | 39.60 | 4368.00 | 35.81 | 3659.00 | 29.59 |
| 4 | Coffee | Tonnes | 3176.48 | 185.49 | 2728.65 | 138.22 | 5545.75 | 255.17 |
| 5 | Coir and Coir Products - | , , | 80224.91 | 914.11 | 69068.95 | 719.02 | 72261.88 | 759.93 |
| 6 | Fish and Meat | , , | 4678.35 | 124.72 | 6007.09 | 149.33 | N.A. | 177.03 |
| 7 | Ginger | , , | 3945.32 | 61.40 | 2398.89 | 23.14 | 2804.55 | 29.46 |
| 8 | Lemongrass Oil | '000 Litres | 1212.86 | 147.00 | 1459.57 | 138.41 | 1348.60 | 92.75 |
| 9 | Pepper | Tonnes | 15362.12 | 348.81 | 11047.46 | 226.79 | 10208.66 | 220.27 |
| 10 | Tea | , , | 32599.15 | 1989.55 | N.A. | 2280.94 | 36714.86 | 2023.29 |
| 11 | Betelnuts | } | | | | | | |
| 12 | Coconut | | | | | | | |
| 13 | Coconut Oil | | | | | | | |
| 14 | Oilcake | | | | | | | |
| 15 | Copra | | | | | | | |
| 16 | Rubber (raw) | | | | | | | |
| 17 | Rubber manufactures | | | | | | | |
| 18 | Wood and Timber | | | | | 714.16 | .. | 1408.48 |
| 19 | Sundries | | .. | 603.95 | .. | | .. | |
| | TOTAL | | .. | 5662.70 | .. | 5848.33 | .. | 6485.39 |

* Included under sundries upto 1960-61.

TABLE-8.2- (Contd.)

Koreigga Exports from the Ports of Kerala

| Sl. No. | Commodity | Unit | 1959-60 | | | 1960-61 | | | 1961-62 | | |
|---------|------------------------|-------------|----------|----------------------|----------|----------------------|----------|----------------------|---------|--|--|
| | | | Quantity | Value (Rs. lakhs) | Quantity | Value (Rs. lakhs) | Quantity | Value (Rs. lakhs) | | | |
| (1) | (2) | (3) | (10) | (11) | (12) | (13) | (14) | (15) | | | |
| 1 | Cardamom | Tonnes | 225.82 | 51.37 | 369.90 | 76.28 | 405.49 | 66.82 | | | |
| 2 | Cashew Kernel | " | 36249.62 | 1568.89 | 36278.93 | 1691.44 | 41637.65 | 1691.08 | | | |
| 3 | Cashew Shell liquid | '000 Litres | 4313.89 | 35.29 | 5182.91 | 48.53 | 5953.64 | 57.41 | | | |
| 4 | Coffee | Tonnes | N.A. | 222.14 | 6233.10 | 178.89 | 5630.02 | 146.82 | | | |
| 5 | Coir and Coir Products | " | " | 771.78 | 64782.00 | 854.98 | 75277.62 | 1096.29 | | | |
| 6 | Fish and Meat | " | 3588.23 | 121.00 | 5789.91 | 193.13 | 6498.60 | 258.54 | | | |
| 7 | Ginger | " | 2222.91 | 36.21 | 4513.04 | 68.47 | 5214.83 | 84.00 | | | |
| 8 | Lemongrass Oil | '000 Litres | 1236.73 | 141.43 | 1144.67 | 200.76 | 995.61 | 276.38 | | | |
| 9 | Pepper | Tons | 21268.21 | 911.78 | 15745.70 | 713.87 | 20928.26 | 757.90 | | | |
| 10 | Tea | " | 36207.45 | 2023.61 | 36528.70 | 2069.29 | 36007.42 | 1987.19 | | | |
| 11 | Betelnuts | " | " | " | " | " | " | " | | | |
| 12 | Cocanut | Lakhs | " | " | 0.10 | 0.04 | 0.21 | 0.09 | | | |
| 13 | Cocanut Oil | " | " | " | " | " | " | " | | | |
| 14 | Oil cake | Tonnes | " | " | 1477.00 | 4.75 | 1338.80 | 4.03 | | | |
| 15 | Copra | " | " | " | " | " | " | " | | | |
| 16 | Rubber (Raw) | Tonnes | " | " | 0.19 | 0.01 | 0.41 | 0.03 | | | |
| 17 | Rubber manufactures | " | " | " | 9.60 | 0.39 | 0.18 | 0.57 | | | |
| 18 | Wood and Timber | " | " | " | N.A. | 142.18 | N.A. | 239.61 | | | |
| 19 | Sundries | " | " | 1186.96 | " | 500.93 | " | 882.39 | | | |
| TOTAL | | | " | 7070.46 | " | 6743.94 | " | 7549.15 | | | |

TABLE—8.3
Coastal Exports from the Ports of Kerala
(Value in Rs. lakhs)

| Sl. No. | Commodity | Unit | 1956-57 | | 1957-58 | | 1958-59 | |
|---------|------------------------|-------------|----------|---------|----------|---------|----------|---------|
| | | | Quantity | Value | Quantity | Value | Quantity | Value |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| 1 | Cardamom | Tonnes | 17.32 | 3.67 | 43.69 | 5.83 | 30.02 | 5.65 |
| 2 | Cashew Kernel | " | 16.26 | 0.88 | 93.48 | 4.69 | 30.49 | 1.40 |
| 3 | Cashew Shell liquid | '000 Litres | .. | .. | 10.00 | 0.04 | .. | .. |
| 4 | Coffec | Tonnes | 402.35 | 15.07 | 154.85 | 6.69 | 145.65 | 5.31 |
| 5 | Coir and Coir Products | " | 13132.35 | 119.77 | 17740.89 | 181.68 | 14676.95 | 151.57 |
| 6 | Fish | " | 5.39 | 0.15 | 11.38 | 0.13 | N.A. | 0.18 |
| 7 | Ginger | " | 8367.53 | 178.81 | 5008.22 | 53.83 | 3044.39 | 29.68 |
| 8 | Lemongrass Oil | '000 Litres | 0.37 | 0.19 | .. | .. | .. | .. |
| 9 | Pepper | Tonnes | 5946.48 | 135.76 | 5064.50 | 107.70 | 5520.51 | 112.94 |
| 10 | Tea | " | 4767.33 | 244.16 | N.A. | 226.92 | 4324.29 | 208.97 |
| 11 | Betelnuts | " | 2502.58 | 76.75 | 3603.07 | 134.81 | 5397.87 | 213.87 |
| 12 | Coconut | Lakhs | 1355.80 | 233.99 | 1098.30 | 225.90 | 998.80 | 223.37 |
| 13 | Coconut Oil | '000 Litres | 4285.00 | 73.63 | 5615.00 | 114.36 | 9070.74 | 202.15 |
| 14 | Oil Cakes | Tonnes | 2443.60 | 8.52 | 2966.87 | 11.85 | 3787.41 | 17.28 |
| 15 | Copra | " | 10347.45 | 142.12 | 10362.69 | 174.95 | 20627.85 | 343.38 |
| 16 | Rubber (Raw) | " | 20663.56 | 696.38 | 21278.95 | 684.68 | 20153.76 | 661.68 |
| 17 | Rubber Manufactures | " | .. | .. | .. | .. | .. | .. |
| 18 | Wood and Timber | " | N.A. | 30.72 | N.A. | 58.89 | N.A. | 211.95 |
| 19 | Sundries | " | .. | 681.73 | .. | 773.72 | .. | 352.23 |
| Total | | | .. | 2641.30 | .. | 2766.67 | .. | 2741.61 |

TABLE—8.3—(Contd.)

| Sl. No. | Commodity | Unit | (Value in Rs. lakhs) | | | | | |
|---------|------------------------|-------------|----------------------|---------|----------|---------|----------|---------|
| | | | 1959-60 | | 1960-61 | | 1961-62 | |
| | | | Quantity | Value | Quantity | Value | Quantity | Value |
| (1) | (2) | (3) | (10) | (11) | (12) | (13) | (14) | (15) |
| 1 | Cardamom | Tonnes | 28.29 | 4.12 | 10.40 | 1.79 | 8.8 | 1.49 |
| 2 | Cashew Kernal | " | 77.22 | 3.46 | 94.60 | 4.17 | 240.70 | 10.19 |
| 3 | Cashew Shellliquid | '000 Litres | .. | .. | .. | .. | .. | .. |
| 4 | Coffee | Tonnes | N.A. | 1.03 | 1897.00 | 47.21 | 2711.10 | 111.91 |
| 5 | Coir and Coir Products | " | N.A. | 144.25 | 17074.30 | 187.21 | 13966.70 | 202.46 |
| 6 | Fish | " | 26.21 | 1.20 | 304.60 | 1.04 | 87.00 | 1.60 |
| 7 | Ginger | " | 5263.60 | 77.70 | 6380.90 | 120.111 | 5678.50 | 93.73 |
| 8 | Lemongrass Oil | '000 Litres | .. | .. | .. | .. | .. | .. |
| 9 | Pepper | Tonnes | 5638.29 | 226.21 | 7731.36 | 351.62 | 5930.50 | 260.06 |
| 10 | Tea | " | 4336.40 | 215.93 | 4884.40 | 248.01 | 5009.70 | 264.94 |
| 11 | Betel nuts | " | 4555.65 | 229.02 | 8882.80 | 465.66 | 11499.01 | 650.90 |
| 12 | Coconut | Lakhs | 1338.70 | 311.45 | 1069.07 | 237.45 | 1384.07 | 311.31 |
| 13 | Coconut Oil | '000 Litres | 12701.05 | 293.01 | 12793.59 | 317.76 | 13637.72 | 361.79 |
| 14 | Oil Cakes | Tonnes | 4752.07 | 19.42 | 1848.00 | 9.24 | 1037.40 | 5.92 |
| 15 | Copra | " | 17984.09 | 313.07 | 23584.07 | 460.21 | 23248.80 | 429.09 |
| 16 | Rubber Raw | " | 17583.77 | 592.99 | 21090.30 | 806.43 | 23776.50 | 851.25 |
| 17 | Rubber Manufactures | " | .. | .. | 1295.23 | 41.01 | 1595.68 | 53.29 |
| 18 | Food and Timber | " | N.A. | 238.05 | .. | 87.90 | .. | 87.27 |
| 19 | Sundries | " | .. | 546.63 | .. | 1298.60 | .. | 565.21 |
| TOTAL | | | .. | 3217.54 | .. | 4685.42 | .. | 4262.41 |

TABLE—8.4

Valuation of Imports through the Ports of Kerala

| Sl. No. | Commodity | Unit | 1956-57 | | 1957-58 | | 1958-59 | |
|---------|--|-------------|-----------|---------|----------|---------|----------|---------|
| | | | Quantity | Value | Quantity | Value | Quantity | Value |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| 1 | Cotton | Tonne | 18215.00 | 597.38 | 16275.00 | 660.50 | 16300.00 | 552.79 |
| 2 | Cotton piece goods | '000 Metres | N.A. | 319.19 | N.A. | 288.44 | N.A. | 289.84 |
| 3 | Building & Engineering Materials | | | | | | | |
| 4 | Copra | Tonnes | 45045.00 | 66.13 | 46210.00 | 76.32 | 36260.00 | 89.13 |
| 5 | Fruits & Vegetables including Cashewnuts | " | 63034.98 | 255.77 | | 218.44 | | 324.67 |
| 6 | Grains- Pulses etc. | " | 109322.00 | 464.78 | 97519.66 | 633.78 | 99116.80 | 616.18 |
| 7 | Soap | " | 3683.00 | 543.49 | 55635.00 | 285.55 | 24347.00 | 126.59 |
| 8 | Sugar | " | 14344.00 | 100.38 | 3022.00 | 76.04 | 2831.00 | 62.65 |
| 9 | Drugs and Medicines | " | | 130.21 | 14493.00 | 168.67 | 28128.00 | 330.25 |
| 10 | Manure | " | | 25.00 | | 25.48 | | 20.70 |
| 11 | Metals | " | 50108.00 | 112.93 | 26219.00 | 53.86 | 44445.00 | 63.27 |
| 12 | Mineral Oils | " | 29568.00 | 457.71 | 27491.00 | 446.75 | 57911.20 | 415.46 |
| 13 | Vegetable Oil | Lakh Litres | 2511.95 | 440.42 | 2505.36 | 450.19 | 2033.50 | 340.81 |
| 14 | Beedi leaves | '000 Litres | 2937.47 | 41.01 | 2709.01 | 37.35 | 2841.65 | 32.00 |
| 15 | Chemicals | Tonnes | 41.00 | 0.56 | 248.00 | 2.88 | 19.00 | 0.27 |
| 16 | Coal Coke and pitch | '000 Tons | | 117.90 | | 121.47 | | 95.30 |
| 17 | Liquors | '000 Lts. | 249.57 | 172.72 | 312.84 | 231.71 | 266.33 | 213.00 |
| 18 | Paper and Pasteboard | Tonnes | 286.06 | 12.08 | N.A. | 5.06 | N.A. | 5.02 |
| 19 | Silk manufactures | | 3943.00 | 46.54 | 4068.00 | 52.96 | 6370.00 | 64.99 |
| 20 | Sulphur | Tonnes | | 60.36 | | 32.29 | | 0.12 |
| 21 | Tobacco (manufactured & unmanufactured) | | 12506.00 | 36.94 | 11485.00 | 21.78 | 14835.00 | 24.88 |
| 22 | Wood pulp | " | 2840.00 | 108.29 | 1878.00 | 67.88 | 2324.00 | 86.38 |
| 23 | Sundries | " | 3257.00 | 35.12 | 3131.00 | 33.24 | 4481.00 | 44.44 |
| | | | | 1895.09 | | 1777.36 | | 1715.26 |
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Arecanut

8.6. Arecanut has become almost a conventional necessity for a larger percentage of India's population both rich and poor. It is, therefore, imported from foreign countries such as Ceylon and Malaysia notwithstanding the fact that India tops the list of arecanut growing countries in respect of acreage and production. Improvement in the supply position of the commodity would, by saving foreign exchange, help in the general economic development of the country. Arecanut is cultivable only in certain parts of the country where climatic conditions are favourable. The estimated area of arecanut cultivation in India is 1.15 lakh hectares and production is 96697 metric tons. The main growing areas are in Kerala, Mysore and Assam. Kerala holds the bulk of the area under the crop in the country. As per official estimates, the area under the crop in the State in 1962-63 comes to 54,659 hectares, which is about 50% of the total area under the crop in India. Efforts are being made to augment local supplies and thus cover the deficit by more intensive cultivation and increasing yields. Annual imports have been on the decline as is evident from the Table 8.5.

TABLE—8.5
Import of Arecanut into India

| <i>Year</i> | <i>Quantity (Quintals)</i> | <i>Value (Rs. lakhs)</i> | <i>Average prices per quintal</i> |
|-----------------------|--------------------------------|------------------------------|---------------------------------------|
| 1955-56 | 424468 | 436 | 102.72 |
| 1956-57 | 407175 | 545 | 133.85 |
| 1957-58 | 308325 | 298 | 96.65 |
| 1958-59 | 183635 | 84 | 45.74 |
| 1959-60 | 141746 | 72 | 50.80 |
| 1960-61 | 111700 | 65 | 58.19 |
| 1961-62 | 102443 | 14 | 42.96 |
| 1962-63 (July-May) | 74555 | 28 | 37.56 |

Source: Indian Central Arecanut Committee.

8.7. Imports declined by 27% in 1962-63 compared to the previous year. So also the import price of arecanut which manifested an upward trend during 1960-61 has fallen rather steeply. Arecanut trade

in the Kozhikode market has been uniformly going up and it has more than doubled during 1963. In the other two important arecanut markets such a trend could not be discerned probably because arrivals and disposals declined considerably in these markets during the period January to August 1963. Table 8.6 shows the arrival and disposal of arecanut in important South Indian markets.

TABLE—8.6
Arrival and Disposal of Arecanut in Quintals

| <i>Year</i> | <i>Arrival</i> | | | <i>Disposal</i> | | |
|------------------------|------------------|----------------|------------------|------------------|----------------|------------------|
| | <i>Mangalore</i> | <i>Shimoga</i> | <i>Kozhikode</i> | <i>Mangalore</i> | <i>Shimoga</i> | <i>Kozhikode</i> |
| 1960 January-September | 96656 | 42321 | 9187 | 94358 | 46148 | 7747 |
| 1961 do. | 115246 | 49202 | 16819 | 110434 | 40705 | 18889 |
| 1962 do. | 126960 | 46011 | 17425 | 175590 | 73478 | 28964 |
| 1963 January-August | 118808 | 39980 | 36665 | 114954 | 40952 | 33145 |

(Source: Indian Central Arecanut Committee).

Cardamom

8.8. Production of cardamom in India touched a fresh record of 3300 tons during the year 1962-63. The new crop will however be smaller owing to inadequate rains in Kerala. Official estimates place the 1963-64 crop at 3000 tons. Kerala is the principal cardamom growing State in India and within the State Kottayam district contributes to about 90% of the total production. Table 8.7 shows Kerala's production and export of cardamom during the last few years.

TABLE—8.7
Production and Export of Cardamom (Kerala)

| <i>Year</i> | <i>Production tonnes</i> | <i>Export (tonnes)</i> | | |
|-------------|--------------------------|------------------------|--------------------------|------------------------------------|
| | | <i>Quantity</i> | <i>Value (Rs. lakhs)</i> | <i>Average price Rs. per tonne</i> |
| 1958-59 | 1337 | 294 | 64 | 21801 |
| 1959-60 | 1280 | 254 | 55 | 21050 |
| 1960-61 | 1263 | 380 | 78 | 20526 |
| 1961-62 | 1263 | 414 | 68 | 16425 |

Though production has remained unchanged, exports have gone up by nearly 30 tonnes. But there has been a sweeping decline in prices; this has adversely affected export earnings from cardamom. To accentuate this, cardamom cultivators in India are confronted with low yields and falling prices. Marketing is not properly organised, with a large number of middlemen predominating the scene. The current situation, calls for the setting up of a commodity board, or the introduction of a well organised co-operative to tide over the existing difficulties. The trade delegation sponsored by the Spices Export Promotion Council observed in its report that technological research and improved methods should be accelerated to produce green and shapely cardamom.

Cashewnut

8.9. Cashew is one of India's versatile plantation crops contributing handsomely to our foreign exchange earnings. The State is the largest cashew producing area in India and has about 2,02,941 acres devoted to its cultivation. From a paltry 50 tons in 1925, production of cashew kernels has rapidly risen to nearly 90,592 tons in 1962-63. Cashew shelling and processing is in fact one of the major industries of Kerala. A feature of this industry is that domestic production of raw nuts is inadequate to meet the demands of the existing cashewnut processing factories. Hence, the commodity is being imported from foreign countries, chiefly East Africa. Table 8.8 shows the trend of our imports of raw nuts during the last few years.

TABLE—8.8
Imports of raw nuts into India

| <i>Year</i> <i>January-September</i> | <i>Quantity</i> <i>(Tonnes)</i> | <i>Value</i> <i>(Rs. Crores)</i> | <i>Average price</i> <i>Rs. per tonne</i> |
|---|------------------------------------|-------------------------------------|--|
| 1958 | 95858 | 5.96 | 621 |
| 1959 | 60280 | 3.96 | 656 |
| 1960 | 68461 | 5.49 | 803 |
| 1961 | 98981 | 7.78 | 786 |
| 1962 | 131108 | 7.75 | 591 |
| 1963 | 161415 | 10.00 | 618 |

(Source: Cashew Export Promotion Council)

8.10. Cashew occupies a special position in India's export trade. Cashewnuts exports to U.S.A. occupy a position second only to the exports of jute and its manufactured components. During the period 1956-61 cashew exports earned for India as much as 142.87 million dollars or about 11% of total India's exports to U.S.A. Also, as in the case of jute, India is the predominant supplier of cashewnuts to the U. S. market. Other important exporting countries are Mozambique, East Africa and Brazil. The share of Mozambique in the U.S. Market has continuously grown in the last 7 or 8 years, thereby lessening India's hold on the U.S. market. The U.S. also imports cashew shell liquid for various industrial uses. India provides the bulk of the U.S. imports of this commodity. Table 8.9 shows the trend of exports of cashew and cashew shell liquid from India during the last four years.

TABLE—8.9

| A. Export (foreign) of Cashew Kernel from India | | | |
|--|------------------------------------|-------------------------------------|--|
| <i>Year</i> <i>January-September</i> | <i>Quantity</i> <i>(Tonnes)</i> | <i>Value</i> <i>(Rs. Crores)</i> | <i>Average price</i> <i>Rs. per tonne</i> |
| 1960 | 30614 | 14.17 | 4629 |
| 1961 | 32428 | 15.08 | 4651 |
| 1962 | 34314 | 13.69 | 3990 |
| 1963 | 40280 | 16.22 | 4027 |
| B. Export (foreign) of Cashew shell liquid from India | | | |
| <i>Year</i> <i>January-September</i> | <i>Quantity</i> <i>(Tonnes)</i> | <i>Value</i> <i>(Rs. lakhs)</i> | <i>Average price</i> <i>Rs. per Kg.</i> |
| 1960 | 4041 | 34.56 | 0.85 |
| 1961 | 4825 | 45.40 | 0.96 |
| 1962 | 4249 | 42.67 | 1.00 |

There has been in recent years a welcome change in the pattern of India's cashew export trade which is mainly a striking example of the rewarding results of diversification. During 1950's nearly 80 to 85 per cent of our trade was with the U.S.A. New markets have since been opened up and the total share in our trade, with countries other than U.S.A. moved upto nearly 45 percent. This has been achieved through larger exports and without reduction in the actual quantum of our sales to the U.S.A. While U.S.A.

continues to be our largest buyer there has been a phenomenal increase in the off-take by U.S.S.R. and other European Countries.

8.11. Expansion of trade and realisation of the proper value for cashew products depends largely upon our ability to satisfy foreign customers of the quality of our products. Realising the importance of this, the Cashew Export Promotion Council has introduced from 1st April 1963, a system of pre-shipment inspection and certification by the Quality Control Staff of the Cashew Export Promotion Council. This is a significant step in the right direction and will generate adequate confidence in foreign markets. The production and export of cashew kernel has been on the rise continuously. Kerala's production and exports of cashew kernel and cashew shell liquid are given in the Tables 8.10 and 8.11.

TABLE—8.10

Kerala's Production and Exports (Foreign & Coastal) of Cashew Kernel

| <i>Year</i> | <i>Production tonnes</i> | <i>Exports on</i> | | <i>Average price Rs. per tonne</i> |
|-------------|------------------------------|----------------------------|----------------------------|--|
| | | <i>Quantity tonnes</i> | <i>Value Rs. lakhs</i> | |
| 1958-59 | 72513 | 37299 | 1432 | 3840 |
| 1959-60 | 81678 | 36327 | 1572 | 4328 |
| 1960-61 | 84634 | 36373 | 1696 | 4665 |
| 1961-62 | 85804 | 41878 | 1701 | 4062 |

TABLE—8.11

Export (Foreign & Coastal) of Cashew shell liquid from Kerala

| <i>Year</i> | <i>Quantity (000' litres)</i> | <i>Value (Rs. lakhs)</i> | <i>Average price Rs. per 000 (litres)</i> |
|-------------|-----------------------------------|------------------------------|---|
| 1958-59 | 3659 | 29.59 | 809 |
| 1959-60 | 4314 | 35.29 | 818 |
| 1960-61 | 5183 | 48.53 | 936 |
| 1961-62 | 5954 | 57.41 | 962 |

According to the Cashew Export Promotion Council the export of cashew kernels from India during the calendar year 1963 amounted to 53,400 tonnes as against 46,400 tonnes in 1962. Earnings in foreign exchange amounted to Rs. 22 crores representing a significant increase of more than Rs. 3 crores over the previous year.

Coconut and Coconut Products

8.11. About 70% of the total Indian production of coconut is from Kerala. Two major industries in the State, viz. coconut oil and coir making, depend directly on the cultivation of the coconut palm. The earnings from exports of coconut and its products (including coir products) comes to Rs. 18 to Rs. 20 crores annually. Both the area under cultivation and production of coconuts in Kerala have registered a slight increase in 1961-62. The trend in area and production of coconuts in Kerala during the last four years are given in Table 8.12. Production in 1962-63 is estimated to be still higher at about 3305 million nuts.

TABLE—8.12
Area and Production of Coconuts in Kerala

| <i>Year</i> | | <i>Area (000 acres)</i> | <i>Production (Million nuts)</i> |
|-------------|----|-------------------------|--------------------------------------|
| 1958-59 | .. | 1175 | 3200 |
| 1959-60 | .. | 1217 | 3365 |
| 1960-61 | .. | 1237 | 3220 |
| 1961-62 | .. | 1247 | 3247 |

Export of coconut and coconut products during the last few years is given in Table 8.13.

TABLE—8.13
A. Export (Coastal) of Coconut from Kerala

| <i>Year</i> | | <i>Quantity No. lakhs</i> | <i>Value Rs. lakhs</i> | <i>Average price Rs. per lakh nos.</i> |
|-------------|----|-------------------------------|----------------------------|--|
| 1958-59 | .. | 999 | 223 | 22363 |
| 1959-60 | .. | 1339 | 311 | 23260 |
| 1960-61 | .. | 1069 | 237 | 22210 |
| 1961-62 | .. | 1384 | 311 | 22471 |

B. Export (Coastal) of Coconut oil

| <i>Year</i> | | <i>Quantity (000 litres)</i> | <i>Value Rs. lakhs</i> | <i>Average price Rs. per 000 litre</i> |
|-------------|----|----------------------------------|----------------------------|--|
| 1958-59 | .. | 9071 | 202 | 2229 |
| 1959-60 | .. | 12701 | 293 | 2307 |
| 1960-61 | .. | 12793 | 318 | 2486 |
| 1961-62 | .. | 13637 | 362 | 2655 |

C. Export (Coastal) of Copra

| <i>Year</i> | <i>Quantity</i> 00 tonnes | <i>Value</i> Rs. lakhs | <i>Average price</i> Rs. per tonne |
|-------------|------------------------------|---------------------------|---------------------------------------|
| 1958-59 | 206 | 343 | 1664 |
| 1959-60 | 180 | 313 | 1741 |
| 1960-61 | 236 | 460 | 1949 |
| 1961-62 | 233 | 429 | 1841 |

Exports of coconuts which showed a falling tendency upto 1960-61 have increased in 1960-61. Exports of coconut oil showed a steadily increasing trend upto 1961-62 while coastal exports of copra showed an uptrend upto 1960-61 and then decreased by about 300 tonnes. Foreign exports of these commodities are negligible.

8.12. Though India is one of the important coconut producing countries in the world the internal demand for coconut and coconut products exceeds supplies and India has to import annually large quantities of copra and coconut oil. Imports valued over Rs. 10 crores were made in 1962-63. Trend in imports in the last two years is indicated in Table 8.14.

TABLE—8.14

Import of copra and coconut oil into India

| <i>Year</i> | <i>Coconut</i> | | <i>Copra</i> | | <i>Coconut oil</i> | |
|-------------|-------------------------------|---------------------------------|---------------|---------------------------------|--------------------|---------------------------------|
| | <i>Nos.</i> <i>in '000</i> | <i>Value</i> <i>Rs. '000</i> | <i>Tonnes</i> | <i>Value</i> <i>Rs. '000</i> | <i>Tonnes</i> | <i>Value</i> <i>Rs. '000</i> |
| 1961-62 | 312 | 36 | 88922 | 94218 | Nil | .. |
| 1962-63 | Nil | .. | 94492 | 99667 | 4340 | 6030 |

Coir and Coir Products

8.13. India ranks first in the world in the matter of coir production and trade. Table 8.15 shows the world output of coir.

TABLE—8.15

World output of Coir

| <i>Sl. No.</i> | <i>Country</i> | <i>Production in Tonnes</i> | |
|----------------|----------------|-----------------------------|--------|
| 1 | India | .. | 152400 |
| 2 | Ceylon | .. | 91970 |
| 3 | Pakistan | .. | 6100 |
| 4 | Zanzibar | .. | 6050 |
| 5 | Philippines | .. | 2030 |
| 6 | Sierra Leone | .. | 400 |
| 7 | Mexico | .. | 400 |
| 8 | Liberia | .. | 170 |
| 9 | Nigeria | .. | 120 |
| 10 | Brazil | .. | 40 |
| 11 | Indonesia | .. | 40 |
| Total | | .. | 259720 |

8.14. Coir is of growing importance in the Indian economy both as an earner of foreign exchange and as a source of providing full time and part-time employment to a large section of people in the South-west of India especially in Kerala. Production of coir and coir products is concentrated in Kerala and it is estimated that Kerala's share of total Indian production is around 95%. Naturally Kerala is the largest exporter of coir products.

8.15. In 1963 coir and coir products valued at about Rs. 12 crores were exported. The trend in exports of coir fibre, rope, yarn, mats, mattings, rugs and carpets in the last three years are given in Table 8.16.

8.16. It is reported that the export trade is rather stagnant over these years mainly because of the ruling high prices. The basic cause of high prices and stagnant trade is the continued use of the traditional methods of production and the insufficient endeavour to find diversified uses for husks.

8.17. Various schemes for modernising and diversifying production and manufacture of new items like rubberised coir products are now being encouraged by the Coir Board. This is a welcome

TABLE.8.16

Export of Coir and Coir goods from the Indian Ports
Year (January to December)

| <i>Commodity</i> | 1961 | | 1962 | | 1963 | |
|----------------------------------|-------------------------------|------------------------|-------------------------------|------------------------|-------------------------------|------------------------|
| | <i>Quantity (Quintal)</i> | <i>Value (Rs.)</i> | <i>Quantity (Quintal)</i> | <i>Value (Rs.)</i> | <i>Quantity (Quintal)</i> | <i>Value (Rs.)</i> |
| Coir fibre | 13145 | 1591058 | 12939 | 1655396 | 9537 | 1181725 |
| Coir yarn | 547739 | 71523985 | 572371 | 83193164 | 558682 | 78959612 |
| Coir mats mattings | 150592 | 27468735 | 152223 | 29617979 | 165526 | 32691367 |
| Coir carpets, floor rugs etc. | 15548 | 3622264 | 15291 | 3705883 | 15343 | 3409741 |
| Coir cordage & rope | 21190 | 2333422 | 27487 | 3444811 | 25856 | 3190268 |
| Total | 748214 | 106539464 | 780311 | 121617233 | 774944 | 119432713 |

(Source: Coir Board, Ernakulam).

change which will reduce costs of traditional items and create new products with large export possibilities.

8.18. The panel for coir and coir manufactures of the Government of India has recommended the release of necessary foreign exchange for the phased mechanisation of the coir matting sector. It has also urged to set up immediately plants in coconut growing areas for defibring and decorticating. Another suggestion of the panel is the introduction of voluntary pre-shipment inspection scheme for coir products and the provision of positive encouragement to the expansion of exports particularly in new and difficult foreign markets through a cash bonus based on the annual exports.

Ginger

8.19. India has the largest ginger production in the world and naturally she has a major share in the world trade in ginger. Kerala is the largest producer in the country and the annual production is over 11000 tons, which forms 70% of India's ginger output. The dry ginger of commerce comes almost exclusively from Kerala.

TABLE—8.17
Foreign Export of Ginger (India)

| <i>Year</i> | <i>Quantity (000 Kilogram)</i> | <i>Value (Rs. lakh)</i> |
|-------------|--------------------------------|-------------------------|
| 1960-61 | 5722 | 90 |
| 1961-62 | 7600 | 109 |
| 1962-63 | 6087 | 120 |

Though the volume of exports has considerably declined, the value of the exports has gone up. A Spices Trade Delegation sponsored by the Spices Export Promotion Council visited the Middle East and European Countries including the U.K. to assess the market situation and to recommend measures for augmenting and diversifying India's spice exports to these countries. According to the Delegation's report, steps should be taken to encourage the production of ginger without fibre and great care should be bestowed on good peeling and drying, so that Indian ginger could become more and more popular and yield better returns. It should be better processed to comparad with Hongkong ginger, India's main competitor. Jamaican and Chinese seed ginger should be obtained and supplied to cultivators for the purpose. Kerala's production and exports of ginger in the last 5 years are given in Table 8.18.

TABLE—8.18
The Trend of Kerala's Production and Export of Ginger

| <i>Year</i> | <i>Production (tonnes)</i> | <i>Export (Coastal & Foreign)</i> | | <i>Average price Rs. per tonne</i> |
|-------------|----------------------------|---------------------------------------|-------------------------|------------------------------------|
| | | <i>Quantity (Tonnes)</i> | <i>Value (Rs. lakh)</i> | |
| 1958-59 | 7785 | 5849 | 59 | 1011 |
| 1959-60 | 9977 | 7487 | 114 | 1521 |
| 1960-61 | 11086 | 10894 | 189 | 1734 |
| 1961-62 | 11185 | 10893 | 178 | 1643 |
| 1962-63 | 11250 | .. | .. | .. |

There has been a steady rise in production but the quantity exported has remained stationary after 1960-61. Price per ton of the exported product rose steeply upto 1960-61 but has since then shown a downward trend.

8.20. Ginger cultivation was upset to some extent due to failure of monsoon, and it will not be a surprise if production in 1963-64 fails to touch the 1962-63 level of 11250 tonnes. Prices touched new peaks in 1963, so much so there is every possibility of India earning more through the export of ginger though production might be lower.

Lemongrass oil

8.21. Kerala has almost a monopoly in the production of lemongrass oil in the country. This is one of the most important essential oils exported from India. (Kerala produces over 88% of the world output of lemongrass oil most of which is exported). It is also produced in Guatemala, Malaya, Java and the Carribean Islands. India's chief rival is Guatemala. The annual production of lemongrass oil in the State is about 1600 tons. A major part of the oil produced in this State is exported in the raw form to Europe and U.S.A.

TABLE—8.19

Kerala's production and export (foreign) of lemongrass oil

| <i>Year</i> | <i>Production</i> (000 litres) | <i>Export (foreign quantity)</i> (000 litres) | <i>Value</i> <i>Rs. lakhs</i> |
|-------------|-----------------------------------|--|----------------------------------|
| 1958-59 | 1351 | 1349 | 93 |
| 1959-60 | 1693 | 1237 | 141 |
| 1960-61 | 1734 | 1145 | 201 |
| 1961-62 | 1717 | 996 | 276 |

The lemongrass oil industry in Kerala has good scope for expansion provided the prices are kept competitive. However since the Second World War some of the Latin American countries, especially Guatemala have started cultivation on a commercial scale and extraction of oil with efficient methods of distillation. Compared to these countries both the yield of the grass as well as its oil content is low in Kerala.

Pepper

8.22. In India pepper production is concentrated in Kerala and the State accounts for about 95% of India's production. Table 8.20 gives State-wise

figures of area and production of pepper in India in 1962-63.

TABLE—8.20

| <i>State</i> | | <i>Area in 000 acres</i> | <i>Production in 000 tons</i> |
|--------------|----|--------------------------|-------------------------------|
| Kerala | .. | 245.23 | 24.08 |
| Madras | .. | 0.72 | 0.06 |
| Mysore | .. | 5.78 | 1.34 |
| Total | .. | 251.73 | 25.48 |

The figures relating to production and exports of pepper from India shows that despite a fall in production, India has been able to maintain her export trade (Table 8.21)

TABLE 8.21

Production and export (foreign) of pepper relating to India

| <i>Year</i> | | <i>Production '000 tonnes</i> | <i>Export '000 tonnes</i> |
|-------------|----|-------------------------------|---------------------------|
| 1959-60 | .. | 28.45 | 19.61 |
| 1960-61 | .. | N.A. | 19.92 |
| 1961-62 | .. | 28.4 | 22.05 |
| 1962-63 | .. | 25.9 | 21.23 |

Area under and production of pepper in Kerala in the last 5 years are given in Table 8.22.

TABLE—8.22

| <i>Year</i> | | <i>Area (acres)</i> | <i>Production (tonnes)</i> |
|-------------|----|---------------------|----------------------------|
| 1958-59 | .. | 223916 | 25432 |
| 1959-60 | .. | 226080 | 25279 |
| 1960-61 | .. | 246500 | 27027 |
| 1961-62 | .. | 246720 | 26976 |

Area under pepper has increased during the period 1958-62, but production has not risen correspondingly. Exports from Kerala in the last five years are shown in Table 8.23.

TABLE—8.23

Export (foreign and coastal) of pepper from Kerala

| <i>Year</i> | <i>Quantity (tonnes)</i> | <i>Value (Rs. lakh)</i> | <i>Average price Rs. per tonne</i> |
|-------------|------------------------------|-----------------------------|--|
| 1958-59 .. | 15729 | 333 | 2118 |
| 1959-60 .. | 26907 | 1138 | 4229 |
| 1960-61 .. | 23486 | 1065 | 4521 |
| 1961-62 .. | 26858 | 1018 | 3790 |

8.23. The year 1963 turned out to be another bad year for pepper. World supply position outstripped demand. The major trend of pepper prices remained downward during 1963 with two minor secondary corrective trends. The first rise was recorded because of the apprehensions about a war over Brunei, Sarawak, Singapore and Malaya. And the second was listed after the actual rupture of diplomatic and trade relations between Malayasia and Indonesia. The future of world's pepper depends upon the buying policy of U.S. and U.S.S.R. and other East European countries and the selling policy of Indonesia, from where information on carry-over stocks and the size of the new crop is lacking.

8.24. In India though the new crop arrivals are fairly large prices are well maintained following the buying support from exporters who sold some parcels to Russia and European countries. There are also reports that a section of the growers are placing their new arrivals under loans with co-operatives on the west coast. As a result arrivals do not look as heavy as expected. Co-operatives have to some extent helped the farmers to pledge the produce with the society in the hope of getting a better price at a later date.

Coffee

8.25. Coffee production in India during the year 1962-63 (upto July) amounted 54561 tons as against 44756 tons in the previous year. The new crop is presently estimated at 60000 tons.

TABLE—8.24
Coffee production and exports (India)

| <i>Crop year</i> | | <i>Total production in tons</i> | <i>Exports in tons</i> |
|------------------|----|---------------------------------|------------------------|
| 1952-53 | .. | 23565 | 3048 |
| 1953-54 | .. | 29555 | 9767 |
| 1954-55 | .. | 25025 | 3592 |
| 1957-58 | .. | 43790 | 14055 |
| 1958-59 | .. | 46175 | 16141 |
| 1959-60 | .. | 48954 | 17893 |
| 1960-61 | .. | 66945 | 31761 |
| 1961-62 | .. | 44756 | 19516 |
| 1962-63 | .. | 54561 | 10292 |
| (upto July 1963) | | | |

(Source: Indian Coffee Statistics)

Coffee suffers from a specially disadvantageous market situation abroad. There has been a decline in world prices for Indian coffee since 1957. Oddly enough this has occurred at a time when the Indian crop has been increasing. The trend in prices is indicated in Table 8.25.

TABLE—8.25

| <i>Year</i> | <i>Pool price per Cwt. of Plantation 'A'</i> |
|-------------|--|
| 1957-58 | 242.01 |
| 1958-59 | 236.99 |
| 1959-60 | 212.00 |
| 1960-61 | 163.50 |
| 1961-62 | 213.50 |
| 1962-63 | 185.50 |

The return to the grower is depressed by the falling export prices. The larger the production the greater the grower stands to lose. Coffee can stand up to batterings of lower export price on the one side and rising production costs on the other only if the yield per acre can be increased. The fact that the entire crop is being pooled and marketed provides a total and absolute physical control over coffee. Such a position may well tend to enlarge the idea that the internal market can be wholly controlled for pumping more coffee into the export pipe line. The Coffee Board has been following a policy of tightening

the belt on the internal market to make available for export as much as possible. Table 8.26 shows the quantities of coffee receipts into the pool of the Coffee Board during last five years.

TABLE—8.26

| <i>Crop Season</i> | <i>Plantation</i> | <i>Arabica cherry (in tonnes)</i> | <i>Robusta cherry</i> | <i>Total</i> |
|--------------------|-------------------|---|---------------------------|--------------|
| 1958-59 | .. | 17822 | 7465 | 20913 |
| 1959-60 | .. | 25197 | 5693 | 17344 |
| 1960-61 | .. | 28968 | 10278 | 28341 |
| 1961-62 | .. | 22482 | 6620 | 16551 |
| 1962-63 | .. | 24457 | 9271 | 22032 |
| | | | | 55760 |

The total crop received into the pool in 1960-61 is the highest on record. The production in 1961-62 was lower due to unfavourable climatic condition and as a result receipts into the pool in that year fell by 22%. The point to be noticed is the higher proportion of Robusta receipts. The main problem is to set up production of the better qualities needed for export.

Monthly releases of coffee for internal use in the last few years have been as shown in Table 8.27.

TABLE—8.27

| <i>Year</i> | <i>Plantation</i> | <i>Arabica</i> | <i>Robusta</i> | <i>Total</i> |
|-------------|-------------------|----------------|----------------|--------------|
| 1959-60 | .. | 10873 | 3918 | 12530 |
| 1960-61 | .. | 11386 | 4353 | 15474 |
| 1961-62 | .. | 11235 | 3756 | 16463 |
| 1962-63 | .. | 12182 | 3634 | 15193 |
| | | | | 31009 |

Kerala's production and export of coffee in the last four years are shown in Table 8.28.

TABLE—8.28

| <i>Year</i> | | <i>Production (tonnes)</i> | <i>Export (Foreign & Coastal)</i> | |
|-------------|----|--------------------------------|---------------------------------------|------------------------------|
| | | | <i>Quantity (tonnes)</i> | <i>Value (Rs. lakhs)</i> |
| 1958-59 | .. | 7072 | 5691 | 260 |
| 1959-60 | .. | 7409 | 6111 | 223 |
| 1960-61 | .. | 7409 | 8130 | 226 |
| 1961-62 | .. | 8275 | 8341 | 259 |

A steady rise in the production of coffee in Kerala and exports of coffee through Kerala ports can be observed from Table 8.28. The exports through Kerala ports however include in part production in neighbouring States routed through Kerala ports.

8.26. India has now become a member of the International Coffee Agreement and it has been assigned an export quota of 21,600 tonnes under this agreement. It has been able to fulfil this quota during the current year. India is asking for a more liberal quota. The market performance of coffee during the year under review was better and this would enable the Coffee Board to give a reasonable return to growers. The total earnings on coffee exports during 1962-63 were to the tune of Rs. 7.61 crores.

Rubber

8.27. Though India's production of natural rubber in 1962-63 was of the order of 32239 metric tons her imports of natural rubber in the year touched a level of 23,360 metric tons. It is estimated that about 10723 metric tons of synthetic rubber were also consumed in 1962-63.

8.28. The rubber manufacturing industry in India has progressed in a phenomenal manner since India attained independence and the internal production has not been able to keep pace with the increasing demand for rubber by the manufacturers and this necessitates large imports involving a heavy drain on the foreign exchange resources of the country.

Table 8.29 gives the State-wise production of natural rubber in the last four years.

TABLE—8.29

| | | (in tonnes) | | | |
|---------------------|----|-------------|---------|---------|---------|
| <i>State</i> | | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| Kerala | .. | 21890 | 23165 | 24954 | 29057 |
| Madras | .. | 1814 | 2040 | 2060 | 2695 |
| Mysore | .. | 437 | 452 | 402 | 447 |
| Andamans and others | | 32 | 30 | 30 | 40 |
| Total | .. | 24173 | 25697 | 27446 | 32239 |

Source : Rubber Board, Kottayam.

Area under rubber in India in the above period has also increased from 305452 acres in 1959-60 to 361142 acres in 1962-63 ie. an increase of 18 per cent. The increase in production in the period is of the order of 33%.

8.29. Rubber occupies a very important position in the economy of Kerala. The State accounts for more than 90% of the total area under rubber in India with possibilities of increasing the area under the crop. The rising trend in the consumption of rubber in India is indicated in Table 8.30.

TABLE—8.30
Consumption of rubber in India
(in tonnes)

| <i>Year</i> | | <i>Natural</i> | <i>Synthetic</i> | <i>Total</i> |
|-------------|----|----------------|------------------|--------------|
| 1959-60 | .. | 40491 | 4964 | 45455 |
| 1960-61 | .. | 48148 | 7397 | 55545 |
| 1961-62 | .. | 48410 | 10186 | 58596 |
| 1962-63 | .. | 53553 | 10723 | 64276 |

8.30. The percentage share of synthetic rubber has increased rapidly in the last few years despite a rise in the production of natural rubber. The above facts and also the rising trend in imports of rubber into India indicate the rapidly expanding needs within the country. The imports of rubber into India during the last four years were as shown in Table 8.31.

TABLE—8.31
Import of rubber into India
(in tonnes)

| <i>Year</i> | | <i>Natural</i> | <i>Synthetic</i> | <i>Total</i> |
|-------------|----|----------------|------------------|--------------|
| 1959-60 | .. | 15287 | 5718 | 21005 |
| 1960-61 | .. | 23125 | 8097 | 31222 |
| 1961-62 | .. | 22528 | 10121 | 32649 |
| 1962-63 | .. | 23360 | 10297 | 33657 |

Imports are made from Malaya, Indonesia, Ceylon, Burma and Indochina.

8.31. The increase in imports during the last four years is due mainly to the fact that while consumption has gone up by 44 per cent in 1962-63 over 1959-60, production has increased only by 33 per cent. This shows an ever-widening gap between demand and supply; hence the urgent need to step up production in the country.

Tea

8.32. India ranks first among the tea producing countries of the world. Production in 1962 was of the order of 214 million kgs. India's share in the world trade has been declining in recent years and this trend is seen from Table 8.32.

TABLE—8.32
World tea trade

| Year | | World export | Indian export | (in million kilogram) |
|------|----|--------------|---------------|---------------------------------------|
| | | | | Indian export as % of world export |
| 1951 | .. | 457.8 | 206.0 | 45.0 |
| 1957 | .. | 514.2 | 200.8 | 39.1 |
| 1962 | .. | 560.6 | 214.0 | 38.2 |

8.33. World export trade in tea has increased by 22% in the period 1951 to 1962 while exports from India increased by only 3.8%. The world tea trade is now dominated by the three leading tea producing regions, India, Ceylon and East Africa. The export figures given in Table 8.33 would give an idea of the change that is taking place in the world tea situation.

TABLE—8.33
Export of tea from India, Ceylon and British East Africa
(in million kilogram)

| Year | India | Ceylon | East Africa |
|------|-------|--------|-------------|
| 1951 | 206.0 | 138.4 | 13.6 |
| 1957 | 200.8 | 166.8 | 22.2 |
| 1962 | 214.0 | 204.9 | 36.7 |

8.34. Production of tea in India in the above period has increased from 285.4 million kilograms to 344.4 million kilograms ie. by 21 per cent, whereas export increased by 3.8 percent only. In respect of

Ceylon however the percentage rise in exports was 48 percent. Ceylon now exports almost as much tea as India notwithstanding the fact that this country produces half as much as India. The explanation to this is that India's home consumption has steadily risen; it is now estimated at over 140 million kg. per annum. While this provides the Indian industry with an invaluable buffer against possible excess of world supply the pressure of its competition for exportable tea undeniably proves a constant obstacle to expanding exports.

8.35. Kerala's production of tea is around 40,000 tons and this forms about 11.6 per cent of Indian production. Exports of tea through Kerala ports include besides tea grown in Kerala, a portion of the production in the neighbouring States. Table 8.34 furnishes the figures of tea exports through Kerala ports in the last four years.

TABLE—8.34

Export of tea through Kerala ports

| <i>Year</i> | <i>Export (foreign and coastal)</i> | |
|-------------|-------------------------------------|------------------------------|
| | <i>Quantity (tonnes)</i> | <i>Value (Rs. lakhs)</i> |
| 1958-59 | 41039 | 2232 |
| 1959-60 | 40544 | 2240 |
| 1960-61 | 41413 | 2317 |
| 1961-62 | 41017 | 2252 |

CHAPTER IX

PRICES AND COST OF LIVING

World prices of food stuffs and raw materials in 1963 were generally at their peak levels since mid 1959. Booming prices for tin, sugar, wool, coffee and, of late, some grains—all because of world shortages—made these commodities leaders in the upswing. But long term outlook continued to be qualified by basic economic problems involving the developing countries which produced most of the world's primary products.

9.2. In the developed countries like U.S.A., Canada etc. consumer price indices registered a rise in 1963 over 1962. In the developing countries like India, Ceylon, Burma etc. also the consumer price indices had an upward trend but sharper than in developed countries.

9.3. In India if prices had crept along to higher levels in the year 1962 they registered a higher increase in the year 1963. There has been a more or less persistent upward pressure on prices particularly in the case of rice and sugar. The working class consumer price indices in most States in India have also generally, and more or less uniformly, risen in the year 1963 compared to 1962.

9.4. As the previous four years, the year 1963 has been characterised by an overall rise in prices in Kerala. This was reflected in the cost of living also.

9.5. Table 9.1 gives the working class consumer price index numbers in selected towns of Kerala during the last five years. In 1963 there was a pronounced rise in most of the centres compared to 1962. Alleppey, Alwaye, Ernakulam and Shertallai are some of the centres where the rise was rather very high. Compared to 1962, the indices in these centres rose by 26, 23, 28 and 34 points respectively.

TABLE—9.1

Working class consumer price index numbers in Kerala

| <i>Sl. No.</i> | <i>Centre</i> | 1959 | 1960 | 1961 | 1962 | 1963 |
|----------------|----------------|------|------|------|------|------|
| 1 | Trivandrum | 433 | 456 | 474 | 487 | 500 |
| 2 | Quilon | 455 | 455 | 493 | 507 | 509 |
| 3 | Punalur | 469 | 458 | 473 | 503 | 516 |
| 4 | Alleppey | 426 | 439 | 461 | 466 | 492 |
| 5 | Changanacherry | 446 | 447 | 468 | 472 | 485 |
| 6 | Kottayam | 433 | 443 | 470 | 485 | 495 |
| 7 | Alwaye | 482 | 462 | 479 | 488 | 511 |
| 8 | Ernakulam | 450 | 463 | 493 | 489 | 517 |
| 9 | Trichur | 463 | 464 | 484 | 491 | 510 |
| 10 | Chalakyudy | 475 | 475 | 489 | 489 | 507 |
| 11 | Munnar | 444 | 463 | 477 | 463 | 472 |
| 12 | Shertallai | N.A. | N.A. | N.A. | 462 | 496 |
| 13 | Kozhikode | 476 | 471 | 501 | 512 | 529 |

Base for Kozhikode—year ended June 1936=100.

Base for other centres—August 1939=100.

Table 9.2 gives the consumer price index numbers for selected centres in India in 1962 and 1963 (vide also diagrams 1 and 2).

TABLE—9.2

| <i>Centres</i> | 1962 | | | | 1963 | | | |
|----------------|----------------------|--------------|-------------|----------------------|----------------------|--------------|-------------|----------------------|
| | <i>Janu- ary</i> | <i>April</i> | <i>July</i> | <i>Octo- ber</i> | <i>Janu- ary</i> | <i>April</i> | <i>July</i> | <i>Octo- ber</i> |
| ALL INDIA | 127 | 128 | 132 | 134 | 130 | 131 | 135 | 138 |
| Bombay | 142 | 143 | 146 | 145 | 143 | 142 | 146 | 148 |
| Delhi | 129 | 129 | 133 | 131 | 130 | 132 | 133 | 136 |
| Madras | 149 | 149 | 151 | 151 | 150 | 149 | 151 | 151 |
| Nagpur | 131 | 131 | 133 | 136 | 135 | 132 | 143 | 146 |
| Ajmer | 115 | 113 | 114 | 117 | 111 | 115 | 121 | 122 |
| Cuttack | 134 | 139 | 138 | 141 | 142 | 149 | 149 | 148 |
| Trichur | 138 | 135 | 138 | 139 | 138 | 138 | 144 | 146 |

Base 1949=100.

Source: Labour Bureau, Government of India.

9.6. The all India index which by January 1963 had declined by four points from the October 1962 level of 134 showed a rising trend in the subsequent months of the year. The maximum level of 138 points was reached in October 1963. In all cities excepting Cuttack the maximum was reached in the period July to September 1963. During the year Ajmer recorded the maximum rise of 13 points followed by Nagpur with 11 points. The minimum rise of 2 points was observed in Madras. On the whole, all centres showed an upward trend steeper than in 1962.

9.7. The cost of living index numbers in India and some foreign countries are furnished in Table 9.3. The movement of indices is sharper in India than in other countries.

TABLE—9.3

**Index numbers of cost of living in India and
some principal foreign countries**

Base 1958=100

| <i>Year/Month</i> | <i>India</i> | <i>U.S.A.</i> | <i>Canada</i> | <i>U.K.</i> |
|-------------------|--------------|---------------|---------------|-------------|
| 1959 | .. 104 | 101 | 101 | 101 |
| 1960 | .. 106 | 102 | 102 | 102 |
| 1961 | .. 108 | 103 | 103 | 105 |
| 1962 | .. 112 | 105 | 104 | 110 |
| 1963 (January) | .. 112 | 105 | 106 | 111 |
| 1963 (February) | .. 111 | 105 | 106 | 112 |
| 1963 (March) | .. 112 | 105 | 106 | 112 |
| 1963 (April) | .. 113 | 105 | 106 | 112 |

Table 9.4 gives the cost of living index numbers in selected towns in Kerala during certain months of 1962 and 1963.

TABLE.—9.4

Working class consumer price index numbers for selected towns in Kerala

| Sl. No. | Centres | 1962 | | | | | 1963 | | | | | | |
|---------|----------------|------|-------|------|------|------|------|------|-------|------|------|------|------|
| | | Jan. | April | July | Oct. | Nov. | Dec. | Jan. | April | July | Oct. | Nov. | Dec. |
| | KERALA* | | | | | | | | | | | | |
| 1 | Trivandrum | 479 | 475 | 488 | 488 | 493 | 487 | 492 | 488 | 500 | 511 | 518 | 530 |
| 2 | Quilon | 478 | 476 | 491 | 489 | 497 | 500 | 506 | 487 | 496 | 504 | 511 | 529 |
| 3 | Punalur | 510 | 504 | 507 | 507 | 512 | 504 | 501 | 497 | 504 | 522 | 531 | 549 |
| 4 | Alleppey | 490 | 490 | 511 | 511 | 513 | 506 | 511 | 501 | 509 | 521 | 527 | 543 |
| 5 | Changanacherry | 463 | 460 | 469 | 471 | 471 | 471 | 482 | 477 | 487 | 504 | 515 | 522 |
| 6 | Kottayam | 471 | 467 | 474 | 473 | 480 | 479 | 475 | 478 | 483 | 490 | 502 | 516 |
| 7 | Alwaye | 473 | 478 | 494 | 490 | 492 | 481 | 487 | 479 | 501 | 500 | 510 | 522 |
| 8 | Ernakulam | 483 | 477 | 492 | 498 | 502 | 487 | 497 | 499 | 514 | 522 | 525 | 539 |
| 9 | Trichur | 490 | 477 | 497 | 497 | 505 | 491 | 504 | 503 | 518 | 534 | 539 | 549 |
| 10 | Chalakudy | 493 | 482 | 495 | 496 | 501 | 496 | 494 | 494 | 516 | 523 | 532 | 540 |
| 11 | Munnar | 489 | 479 | 492 | 492 | 502 | 495 | 501 | 486 | 505 | 522 | 529 | 543 |
| 12 | Sherattalai | 459 | 463 | 464 | 462 | 463 | 463 | 470 | 466 | 474 | 473 | 474 | 488 |
| 13 | Kozhikode | 447 | 447 | 472 | 472 | 473 | 472 | 480 | 487 | 492 | 515 | 521 | 523 |
| | | 509 | 498 | 522 | 514 | 527 | 514 | 516 | 516 | 530 | 536 | 544 | 563 |

Base for Kozhikode is average prices for the year ended June 1936=100.

Base for other centres is August 1939=100.

* Average of the centres excluding Kozhikode.

9.8. In January 1963 the indices in all centres except Quilon were higher than in January 1962. During January to March 1963 the indices in most centres showed a declining trend. After that there was a steady rise reaching a maximum in December 1963 (vide diagrams 3 to 7). The maximum percentage increase in the different centres during 1962 and 1963 is given in Table 9.5.

TABLE—9.5
Trends of working class consumer price index numbers in Kerala

| Sl. No. | Centre | Maximum rise reached from the beginning of the year | |
|---------|----------------|---|----------|
| | | 1962 (%) | 1963 (%) |
| 1 | Trivandrum | .. 4.60 | 4.55 |
| 2 | Quilon | .. 0.39 | 9.58 |
| 3 | Punalur | .. 5.71 | 6.26 |
| 4 | Alleppey | .. 1.73 | 8.30 |
| 5 | Changanacherry | .. 1.91 | 8.63 |
| 6 | Kottayam | .. 4.44 | 7.19 |
| 7 | Alwaye | .. 3.93 | 8.45 |
| 8 | Ernakulam | .. 3.06 | 8.93 |
| 9 | Trichur | .. 1.62 | 9.31 |
| 10 | Chalakyudy | .. 2.66 | 8.38 |
| 11 | Munnar | .. 1.96 | 3.83 |
| 12 | Shertalai | .. 6.71 | 8.96 |
| 13 | Kozhikode | .. 3.54 | 9.11 |

The year 1963 showed a firm trend in the consumer price index compared to 1962 both for Kerala and India as is evident from Table 9.6.

TABLE—9.6
Trend of working Class cost of living index in India and Kerala

| Year | | Maximum rise reached | |
|------|----|----------------------|---------|
| | | Kerala % | India % |
| 1961 | .. | 5.36 | 4.07 |
| 1962 | .. | 2.92 | 5.51 |
| 1963 | .. | 7.72 | 6.15 |

9.9. The price situation in the State can be explained further by taking into consideration the price trends of specified commodities like rice, sugar etc.

TABLE—9.7

Wholesale price of rice in selected centres in Kerala

(Unit—Quintal (Price Rs.))

| Sl. No. | Centre | Variety | 1962 | | | | | 1963 | | | | | | |
|---------|----------------|----------------|---------|-------|-------|---------|----------|----------|---------|-------|-------|---------|----------|----------|
| | | | January | April | July | October | November | December | January | April | July | October | November | December |
| 1 | Trivandrum | Chemba | 64.67 | 61.67 | 64.38 | 60.33 | 61.12 | 60.42 | 59.91 | 58.06 | 61.43 | 61.60 | 68.32 | 72.04 |
| 2 | Quilon | Chemkala white | 66.47 | 63.86 | 65.52 | 62.25 | 63.66 | 62.60 | 59.79 | 57.66 | 61.56 | 67.25 | 68.38 | 75.00 |
| 3 | Alleppey | Chemkala | 68.38 | 62.70 | 65.49 | 62.75 | 65.03 | 61.22 | 61.22 | 59.86 | 62.24 | 66.41 | 68.81 | 70.24 |
| 4 | Changanacherry | Rose | 66.67 | 66.15 | 67.36 | 62.02 | 64.46 | 62.02 | 60.81 | 62.01 | 61.67 | 61.85 | 66.43 | 72.01 |
| 5 | Cochin | Chemkala | 65.76 | 62.09 | 64.39 | 62.01 | 63.96 | 62.16 | 61.23 | 58.79 | 60.65 | 64.47 | 67.56 | 70.09 |
| 6 | Palghat | Matta medium | 58.73 | 58.57 | 60.54 | 51.04 | 55.93 | 54.60 | 52.03 | 53.78 | 56.69 | 52.03 | 58.85 | 64.70 |
| 7 | Kozhikode | Tanjore | 67.19 | 67.87 | 68.74 | 63.45 | 66.52 | 63.96 | 59.71 | 61.44 | 63.62 | 64.55 | 66.75 | 72.15 |

9.10. Rice being the most important food crop, deserves special mention. Table 9.7 shows the whole-sale prices of rice in selected centres in Kerala during 1962 and 1963.

In the first quarter of 1963 rice prices in some centres showed a declining trend but in the subsequent months of the year prices in all centres rose sharply reaching a maximum in December 1963. (Vide diagrams 9 to 15).

TABLE—9.8
Wholesale price index of rice in Kerala

| <i>Year</i> | <i>Yearly average</i> | <i>January</i> | <i>February</i> | <i>March</i> | <i>April</i> | <i>May</i> | <i>June</i> | <i>July</i> | <i>August</i> | <i>September</i> | <i>October</i> | <i>November</i> | <i>December</i> |
|-------------|-----------------------|----------------|-----------------|--------------|--------------|------------|-------------|-------------|---------------|------------------|----------------|-----------------|-----------------|
| 1960 | 122 | 111 | 113 | 113 | 117 | 123 | 124 | 124 | 128 | 128 | 128 | 121 | 129 |
| 1961 | 131 | 124 | 124 | 124 | 126 | 128 | 133 | 135 | 137 | 138 | 135 | 133 | 135 |
| 1962 | 128 | 133 | 129 | 127 | 126 | 128 | 130 | 131 | 129 | 126 | 123 | 127 | 123 |
| 1963 | 124 | 120 | 115 | 112 | 120 | 121 | 123 | 124 | 127 | 128 | 126 | 133 | 141 |

Base: (1952-53=100)

9.11. Table 9.8 shows the trend of wholesale price indices of rice in Kerala during the last four years. The index for January 1960 was 111 and it rose by 18 points reaching 129 in December. In January 1961, the index dropped to 124 and remained steady at that level upto March but rose steadily to 138 by September and fell to 135 in December. Beginning with 133 in January 1962 the index with some fluctuations came down to 123 by the year end and the average worked out to only 128. The declining trend at the end of 1962 continued in the first quarter of 1963 and the index touched a low level of 112 in March. From April onwards the trend was upward and was rather steep in the last quarter touching a level of 141 points in December 1963. The average for the year was however only 124.

TABLE—9.9
All India price index for rice

| Year | Yearly average | January | February | March | April | May | June | July | August | September | October | November | December |
|------|-------------------|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|
| 1960 | 110 | 104 | 105 | 106 | 110 | 114 | 114 | 115 | 115 | 114 | 111 | 106 | 102 |
| 1961 | 105 | 99 | 100 | 101 | 101 | 103 | 106 | 108 | 110 | 110 | 108 | 106 | 102 |
| 1962 | 109 | 101 | 102 | 103 | 106 | 109 | 110 | 112 | 114 | 115 | 115 | 116 | 110 |
| 1963 | 122 | 108 | 109 | 110 | 117 | 121 | 124 | 127 | 128 | 131 | 132 | 130 | N.A. |

N. A.—Not Available.
Base: 1952-53=100.

9.12. Diagram 8 compares the price situation of rice in Kerala and all India. Table 9.9 gives the wholesale price indices of rice in India during the last few years. The all India index declined by 5 points in 1961 over 1960 but in 1962 it rose by 4 points and still further by 13 points to a level of 122 in 1963. In the case of Kerala the trend has been just the reverse. From a level of 122 for 1960 it rose to 131 in 1961 and then fell to 128 in 1962 and 124 in 1963. Comparing the monthly indices for 1963 it is observed that both Kerala and all India indices followed parallel trends upto October 1963 when the all India Index reached a maximum of 132 points. Trend of the all India index was then reversed and it fell to 130 in November 1963. The Kerala index, however, continued the upward trend reaching the maximum of 141 points in December 1963.

9.13. The price situation of rice in the State is, to a very large extent, determined by the price levels in the two important markets in Andhra and Madras from where Kerala purchases rice. Table 9.10 shows the prices of rice in these two markets during 1961, 1962 and 1963. In Andhra Pradesh average price levels in 1961 and 1962 were almost equal. In the first few months of 1963, price of rice declined in Andhra Pradesh but rose sharply in the last quarter of the year. In Madras the average price declined in 1962 and the declining trend continued in the first few months of 1963. From April 1963 onwards, the trend was upwards reaching a maximum in December 1963 as in the Andhra market.

TABLE—9.10

Wholesale price of rice at Vijayawada & Kumbakonam

| Centres | Yearly | average | January | February | March | April | May | June | July | August | September | October | November | December |
|------------|--------|---------|---------|----------|-------|-------|-------|-------|-------|--------|-----------|---------|----------|----------|
| Vijayawada | 1961 | 57.95 | 50.95 | 52.30 | 54.70 | 56.03 | 57.94 | 59.10 | 60.75 | 61.61 | 62.05 | 61.53 | 61.34 | 57.29 |
| | 1962 | 57.36 | 53.56 | 53.88 | 57.60 | 58.12 | 58.38 | 57.50 | 57.94 | 58.50 | 58.38 | 58.14 | 57.91 | 58.46 |
| | 1963 | | N.A. | 48.38 | 49.20 | 53.25 | 54.36 | 57.70 | 58.25 | 58.54 | 60.31 | 62.75 | 64.08 | N.A. |
| Kumbakonam | 1961 | 61.20 | 55.35 | 57.62 | 58.05 | 59.08 | 60.24 | 61.83 | 63.50 | 65.31 | 65.69 | 64.48 | 62.10 | 63.18 |
| | 1962 | 58.36 | 62.96 | 62.96 | 57.20 | 56.60 | 58.94 | 60.01 | 59.61 | 59.61 | 58.29 | 54.82 | 55.10 | 54.20 |
| | 1963 | | 51.07 | 50.73 | 49.32 | 53.42 | 55.30 | 56.37 | 57.29 | 61.66 | 66.20 | 64.51 | 63.57 | N.A. |

N.A.—Not available

9.14. Another essential consumer article which deserves attention when analysing the price situation in Kerala is sugar. The susceptibility of the sugar industry to the vagaries of nature was fully exposed in 1962-63 season when production recorded a precipitous fall. After a period of surpluses, the industry was ironically faced with the problem of shortage. The total quantity of sugar that actually came off the crushing plants of the mills was no more than 2.16 million tons as against over 2.71 million tons produced in 1961-62 and the all time peak output of 3.03 million tons in 1960-61. Since the carryover stocks were also smaller at 1.03 million tons in 1962-63 as against 1.20 million tons in 1961-62 the aggregate available supply was appreciably lower at 3.18 million tons as compared with 3.92 million tons in 1961-62. This supply was insufficient to cover adequately the domestic requirements and export commitments and to leave a sizable quantity as running stocks with the industry and trade.

9.15. The deterioration in the supply position of white sugar, coinciding as it did with the all round increase in commodity prices, the Government's determination to export a sizable quantity of sugar, and the buoyancy of world sugar markets led to a hardening of prices. Pointing to the rising trend of prices and expressing its anxiety to bring them down the Government of India introduced once again controls on sugar prices and distribution through an order issued under the Defence of India Rules on 17th April 1963. The statutory price control was extended to the whole country. The sugarcane crop in 1962-63 suffered a distinct setback, owing to floods in the Punjab, prolonged dry weather in Uttar Pradesh and Bihar and pest attack in the Deccan. The total cane yield was much smaller than what was harvested in 1961-62 season, being about 97.56 million tons as against 192.46 million tons. The recovery percent was also lower.

9.16. While the overall supply of sugar (3.18 million tons) during the season 1962-63 was considerably less than that in the previous year (3.92 million tons), the pace of despatches from mills was

faster, due to higher domestic consumption and export commitments. No estimate is available to indicate the quantity of sugar actually consumed during the season. Rough estimates place it at 2.60 million tons as against 2.56 million tons in 1961-62. Export commitments of India aggregated 4,38,000 tons in addition to the 1,02,000 tons in respect of which contracts had been entered into in the previous season. India benefited greatly from the firmness of world sugar prices during the major part of the season under review. Early in November 1963, sugar in the London market touched a new peak at £105 (Rs. 1,400) per ton which was over 3 1/2 times the price a year ago. The high level of world sugar prices is likely to persist throughout the 1963-64 season, thanks to the serious set back in the sugarcane crop of Cuba and reduced beet sugar output of Russia and East Europe.

9.17. Retail prices of some essential commodities like chillies, green and black grams, sugar, coconut oil, jaggery and firewood were higher in 1963 compared to 1962 for most centres. The rise in prices of chillies, green and black grams and jaggery was rather sharp. Rice and arecanut prices showed a decline. Table 9.11 gives the average annual retail prices of selected commodities for some centres in Kerala for 1962 and 1963.

9.18. The wholesale price indices of some agricultural commodities in Kerala are shown in Table 9.12. The yearly average index for all commodities rose from 126 in 1961 to 130 in 1962 but declined to 127 in 1963. The index for non-food crops which declined by 4 points in 1962 over the previous year rose sharply to 144 in 1963. The yearly average index for food crops, rose from 122 in 1961 to 125 in 1962, but declined to a lower level of 117 in 1963.

9.19. An examination of the monthly indices for 1963, however, shows that the lower index for 1963 compared to 1962 does not give a correct picture of the situation. Despite a declining trend in the first quarter of the year the indices showed an upward trend from April 1963 and in the last quarter the rise was rather steep.

TABLE—9.11
Retail prices of some important commodities at selected centres in Kerala during 1962 and 1963

(In Rupees)

| Sl. No. | Commodity | Unit | Trivandrum | | Quilon | | Kottayam | | Ernakulam | | Trichur | | Kozhikode | |
|---------|-------------|----------|------------|------|--------|------|----------|------|-----------|------|---------|------|-----------|------|
| | | | 1962 | 1963 | 1962 | 1963 | 1962 | 1963 | 1962 | 1963 | 1962 | 1963 | 1962 | 1963 |
| 1 | Rice | Kg. | 0.75 | 0.72 | 0.69 | 0.67 | 0.69 | 0.67 | 0.68 | 0.66 | 0.74 | 0.72 | 0.68 | 0.69 |
| 2 | Coriander | " | 1.48 | 1.35 | 1.26 | 1.15 | 0.96 | 0.92 | 0.94 | 0.93 | 1.42 | 1.25 | 1.12 | 1.29 |
| 3 | Chillies | " | 2.84 | 3.34 | 2.73 | 2.99 | 2.48 | 2.88 | 2.71 | 3.19 | 2.90 | 3.13 | 2.51 | 2.95 |
| 4 | Tapioca | " | 0.14 | 0.13 | 0.15 | 0.12 | 0.15 | 0.15 | 0.16 | 0.15 | 0.12 | 0.11 | 0.17 | 0.17 |
| 5 | Green gram | " | 0.80 | 0.82 | 0.83 | 0.94 | 0.79 | 0.88 | 0.84 | 0.92 | 0.93 | 0.99 | 0.63 | 0.68 |
| 6 | Black gram | " | 0.89 | 1.08 | 0.92 | 0.95 | 0.87 | 0.88 | 0.87 | 0.90 | 0.82 | 0.88 | 0.84 | 0.87 |
| 7 | Sugar | " | 1.23 | 1.23 | 1.23 | 1.24 | 1.18 | 1.24 | 1.18 | 1.24 | 1.21 | 1.24 | 1.18 | 1.24 |
| 8 | Coconut oil | Litre | 2.46 | 2.72 | 2.57 | 2.89 | 2.37 | 2.65 | 2.43 | 2.65 | 2.84 | 2.86 | 2.57 | 2.81 |
| 9 | Jaggery | Kg. | 0.72 | 1.10 | 0.78 | 1.10 | 0.95 | 1.10 | 0.69 | 1.04 | 0.69 | 1.20 | 0.67 | 1.12 |
| 10 | Mundu | Each | 3.20 | 3.20 | 3.19 | 3.12 | 3.19 | 3.13 | 3.07 | 3.21 | 2.99 | 2.97 | 2.90 | 2.98 |
| 11 | Firewood | Quintal | 5.30 | 5.79 | 5.33 | 5.68 | 3.20 | 3.23 | 5.56 | 5.71 | 5.14 | 5.45 | 4.60 | 5.00 |
| 12 | Arecanut | 100 Nos. | 4.15 | 2.96 | 3.62 | 2.92 | 4.89 | 3.27 | 3.60 | 2.37 | 4.97 | 3.31 | 3.68 | 2.51 |

TABLE--9.12
Index Numbers of Wholesale Prices of Agricultural Commodities in Kerala

| Commodity | Yearly Average 1963 | | | | | | | | | | | | | | |
|-----------------------|-----------------------|------|------|------|------|-------|-------|-----|------|------|------|------|------|------|------|
| | 1961 | 1962 | 1963 | Jan. | Feb. | March | April | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
| Rice | 131 | 128 | 124 | 120 | 115 | 112 | 120 | 121 | 123 | 124 | 127 | 128 | 126 | 133 | 141 |
| Molasses | 81 | 98 | 157 | 123 | 128 | 123 | 143 | 166 | 165 | 156 | 171 | 175 | 169 | 186 | 184 |
| Condiments & Spices | 125 | 156 | 111 | 91 | 105 | 117 | 121 | 120 | 123 | 112 | 106 | 110 | 112 | 109 | 110 |
| Fruits and Vegetables | 95 | 93 | 89 | 86 | 86 | 94 | 90 | 87 | 86 | 87 | 87 | 91 | 93 | 92 | 91 |
| Food Crops | 122 | 125 | 117 | 110 | 109 | 110 | 116 | 117 | 118 | 117 | 118 | 120 | 120 | 124 | 129 |
| Oil seeds | 141 | 153 | 159 | 167 | 174 | 161 | 156 | 159 | 154 | 151 | 151 | 157 | 158 | 161 | 162 |
| Plantation Crops | 112 | 100 | 108 | 105 | 106 | 107 | 106 | 106 | 104 | 107 | 109 | 110 | 111 | 111 | 108 |
| Non food Crops | 132 | 128 | 144 | 148 | 152 | 145 | 141 | 143 | 139 | 138 | 138 | 143 | 144 | 146 | 146 |
| All Commodities | 126 | 130 | 127 | 124 | 125 | 123 | 125 | 126 | 126 | 125 | 125 | 128 | 129 | 132 | 135 |

Base 1952-53=100.

TABLE—9.13

**Wholesale price indices of agricultural commodities
in Kerala and India**

| <i>Year</i> | | <i>Kerala</i> | <i>India</i> |
|-------------|----|---------------|--------------|
| 1956-57 | .. | 99 | 105 |
| 1957-58 | .. | 103 | 107 |
| 1958-59 | .. | 111 | 114 |
| 1959-60 | .. | 119 | 117 |
| 1960-61 | .. | 125 | 124 |
| 1961-62 | .. | 126 | 123 |
| 1962-63 | .. | 129 | 123 |

(Base 1952-53=100)

9.20. The price situation of agricultural commodities in Kerala compared to all India wholesale price indices is shown in Table 9.13. In 1956-57 the index for Kerala stood at 99 (base 1952-53=100) while all India index was 105. In the next three years the index for Kerala attained a rate of growth higher than the all India index and in 1959-60 reached a level of 119 against the all India index of 117 for that year. In the subsequent years the Kerala index rose but at a lower pace and reached a level of 129 in 1962-63. All India index, however, reached a level of 124 in 1960-61 but declined to 123 in the subsequent years.

TABLE—9.14

**Index numbers of parity between prices received and
prices paid by farmers in Kerala**

(base 1952-53=100)

| <i>Year</i> | <i>Index Numbers of</i> | | | | <i>Parity</i> |
|-------------|-------------------------|-----------------------------|------------------------------|--------------------|---------------|
| | <i>Prices received</i> | <i>Domestic expenditure</i> | <i>Farm cultivation cost</i> | <i>Prices paid</i> | |
| 1953-54 | 95 | 96 | 103 | 99 | 97 |
| 1954-55 | 76 | 89 | 90 | 89 | 85 |
| 1955-56 | 74 | 91 | 89 | 90 | 82 |
| 1956-57 | 82 | 102 | 96 | 98 | 83 |
| 1957-58 | 83 | 103 | 99 | 101 | 82 |
| 1958-59 | 87 | 111 | 101 | 106 | 83 |
| 1959-60 | 104 | 116 | 109 | 112 | 99 |
| 1960-61 | 108 | 119 | 117 | 118 | 92 |
| 1961-62 | 112 | 123 | 129 | 126 | 89 |
| 1962-63 | 112 | 125 | 141 | 133 | 84 |

9.21. The prosperity of the farmers is to some extent explained by the trend in the parity indices (vide Table 9.14). The parity index indicates the ratio between the prices received by the farmer for his products and those paid by him which constitute farm cultivation costs and domestic expenditure. The parity index (base 1952-53=100) which stood at 97 in 1953-54 declined to 82 in 1955-56 and thereafter with some fluctuations touched a level of 99 in 1959-60. In subsequent years the trend was reversed and in 1962-63 the index stood at 84. The fall of 5 points in 1962-63 compared to 1961-62 is greater than the fall of 3 points only in 1961-62 compared to the previous year. The prices received by the farmer in 1962-63 was the same as in 1961-62 while in 1961-62 there was 3.6 percent rise compared to 1960-61. As against this, the price paid by the farmer rose by 5.6 percent in 1962-63 and 6.3 percent in 1961-62. This is brought about by higher cultivation costs.

9.22. Table 9.15 gives the price trends of some selected commodities many of which are important foreign exchange earners. The upward trend in the prices of these commodities continued in 1963 also except in the case of pepper, coir, arecanut and lemon-grass oil. The downward move in the prices of pepper which continued in 1962 was nearly arrested in 1963, though the average for the year was lower than in 1962. Inactive foreign demand continues to be the main factor contributing to the dullness of the market. Pepper price at Cochin market which ruled at Rs. 252.75 in January 1963 rose to Rs. 279.63 in April but the trend was reversed in the subsequent months to reach a level of Rs. 266.13 in June 1963. By about October of the year, price per quintal rose again to Rs. 295 but declined to a level of Rs. 272.50 by the year end. The ginger market continued to be active during the year and maximum price of Rs. 331.00 per quintal for the year was secured in August 1963. Turmeric prices advanced with some hesitancy to Rs. 175 per quintal in May 1963 but thereafter it remained at a lower level around Rs. 145 per quintal. Arecanut prices were on the decline for the major part of the year. Average price of

4/632

TABLE—9.15
Statement showing wholesale prices of some important commodities at selected centres in Kerala

| Sl. No. | Commodity | Centres | Unit | Variety | 1960 | 1961 | 1962 | Average | 1963 | | | |
|---------|------------------|--------------|----------|-----------------|---------|---------|---------|---------|---------|----------|---------|---------|
| | | | | | | | | | January | February | March | April |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| 1 | Rice | Trivandrum | Quintal | Chempala | 58.43 | 62.15 | 63.03 | 62.29 | 59.91 | 58.56 | 57.51 | 58.06 |
| " | " | Ernakulam | " | " | 61.46 | 66.19 | 63.51 | 62.32 | 61.39 | 56.13 | 54.37 | 59.66 |
| " | " | Kozhikode | " | Tanjore | 61.84 | 64.90 | 67.11 | 63.76 | 59.71 | 59.11 | 59.34 | 61.44 |
| 2 | Copra | Alleppey | " | Sundried | 163.84 | 160.23 | 180.31 | 191.40 | 210.50 | 202.00 | 180.00 | 178.00 |
| 3 | Coconut oil | Cochin | " | Mill | 239.73 | 234.01 | 260.51 | 277.47 | 302.25 | 305.88 | 270.00 | 264.81 |
| 4 | Coconut oil cake | " | " | " | 42.19 | 40.77 | 49.24 | 51.15 | 58.00 | 55.38 | 41.30 | 44.38 |
| 5 | Coir | " | " | Parur yarn thin | 80.89 | 108.88 | 106.43 | 103.67 | 98.00 | 101.63 | 103.50 | 105.50 |
| 6 | Pepper | Alleppey | " | Palai | 508.46 | 372.81 | 292.89 | 268.13 | 243.90 | 249.99 | 261.38 | 275.90 |
| " | " | Cochin | " | Ungarbled | 509.84 | 378.56 | 294.43 | 273.82 | 252.75 | 254.25 | 264.60 | 279.63 |
| 7 | Ginger | Alleppey | " | Dry | 152.60 | 124.84 | 174.54 | 244.35 | 158.54 | 177.85 | 201.62 | 228.66 |
| " | " | Cochin | " | " | 161.24 | 129.28 | 172.88 | 259.87 | 171.88 | 191.25 | 212.00 | 243.75 |
| 8 | Turneric | " | " | Alleppey | 105.59 | 125.96 | 143.62 | 150.80 | N.A. | 165.00 | 148.00 | 156.25 |
| 9 | Arecanut | Alleppey | 100 Nos. | Kizhakan | 3.13 | 2.97 | 3.90 | 2.49 | 2.69 | 2.88 | 2.78 | 2.56 |
| 10 | Lemongrass oil | Cochin | Qntl. | 80 centrol | 1689.19 | 2224.07 | 2303.93 | 1435.50 | 1850.00 | 1733.75 | 1485.00 | 1437.50 |
| 11 | Tapioca | Nedumangad | " | Raw | 7.38 | 8.02 | 9.39 | 8.62 | 9.81 | 9.37 | 8.40 | 8.25 |
| 12 | Cashew | Quilon | " | Dry | 80.73 | 76.48 | 59.00 | 66.97 | 58.59 | 59.02 | 63.28 | 63.62 |
| 13 | Coconut | Alleppey | 100 Nos. | " | 22.12 | 22.29 | 24.66 | 25.80 | 25.75 | 27.63 | 25.10 | 25.25 |
| 14 | Rubber | Kottayam | Qntl. | R.M.A. II | 353.41 | 321.92 | 305.13 | 310.10 | 308.75 | 311.00 | 311.60 | 311.00 |
| 15 | Tea | Mattancherry | Kg. | Sholayar | 5.69 | 5.03 | 5.03 | 6.15 | 6.66 | 6.77 | 6.66 | 5.97 |

TABLE—9.15—(Contd.)

| Sl. No. | Commodity | Centres | Unit | Variety | 1963 | | | | | | |
|---------|------------------|--------------|----------|-----------------|---------|---------|---------|---------|-----------|---------|----------|
| | | | | | May | June | July | August | September | October | November |
| (1) | (2) | (3) | (4) | (5) | (14) | (15) | (16) | (17) | (18) | (19) | (20) |
| 1 | Rice | Trivandrum | Quintal | Chempala | 63.32 | 61.94 | 61.43 | 62.64 | 62.10 | 61.60 | 68.31 |
| " | " | Ernakulam | " | " | 60.36 | 61.93 | 61.32 | 64.46 | 65.27 | 65.17 | 66.70 |
| " | " | Kozhikode | " | Tanjore | 62.81 | 63.33 | 63.62 | 65.67 | 66.68 | 64.85 | 66.75 |
| 2 | Copra | Alleppey | " | Sundried | 183.60 | 180.00 | 182.00 | 187.60 | 200.00 | 198.50 | 201.80 |
| 3 | Coconut oil | Cochin | " | Mill | 263.50 | 260.63 | 260.75 | 269.80 | 287.50 | 281.25 | 286.00 |
| 4 | Coconut oil cake | " | " | " | 48.60 | 49.38 | 47.25 | 49.60 | 54.50 | 51.25 | 57.20 |
| 5 | Coir | " | " | Parur yarn thin | 106.50 | 103.50 | 100.75 | 98.40 | 102.50 | 108.50 | 108.80 |
| 6 | Pepper | Alleppey | " | Palai | 274.79 | 262.60 | 270.17 | 272.35 | 280.54 | 287.09 | 272.76 |
| " | " | Cochin | " | Ungarbled | 279.00 | 266.13 | 274.00 | 279.00 | 287.88 | 295.25 | 280.80 |
| 7 | Ginger | Alleppey | " | Dry | 251.48 | 241.87 | 254.06 | 302.44 | 293.76 | 286.58 | 273.17 |
| " | " | Cochin | " | " | 257.00 | 257.50 | 275.00 | 331.00 | 315.50 | 305.00 | 286.00 |
| 8 | Turmeric | " | " | Alleppey | 175.00 | 145.00 | 145.00 | 140.00 | 143.75 | 145.00 | 145.00 |
| 9 | Areca nut | Alleppey | 100 Nos. | Kizhakan | 2.57 | 2.37 | 2.13 | 2.37 | 2.57 | 2.47 | 2.22 |
| 10 | Lemongrass oil | Cochin | Qntl. | 80 centrol | 1373.00 | 1187.50 | 1300.00 | 1380.00 | 1375.00 | 1375.00 | 1375.00 |
| 11 | Tapioca | Nedumangad | " | Raw | 9.00 | 9.00 | 9.00 | 8.60 | 8.00 | 8.00 | 8.00 |
| 12 | Cashew | Quilon | " | Dry | 65.57 | 60.02 | 59.25 | 60.40 | 69.25 | 79.97 | 82.58 |
| 13 | Coconut | Alleppey | 100 Nos. | " | 26.30 | 25.00 | 24.25 | 24.20 | 26.13 | 26.38 | 27.20 |
| 14 | Rubber | Kottayam | Qntl. | R.M.A. II | 310.80 | 311.75 | 311.00 | 310.00 | 310.00 | 310.00 | 308.80 |
| 15 | Tea | Mattancherry | Kg. | Sholayar | 5.71 | 5.91 | 6.31 | 6.42 | 6.00 | 5.95 | 5.73 |

lemongrass oil for 1963 was about 38 per cent lower than in 1962. Starting from a level of Rs. 1850 per quintal in January 1963 the price of lemongrass oil declined to Rs. 1187.50 per quintal in June. Thereafter prices rose and fluctuated around Rs. 1375.

9.23. Prices of coir yarn—Parur (thin)—at Cochin moved irregularly during the year and the average for the year was lower than that for 1962. Prices of coconut and coconut products remained higher in 1963 than in 1962. Cashew prices showed a steady upward trend and ruled higher than in 1962. Tapioca, an important food crop, showed a declining trend. Prices of rice both of imported and indigenous varieties showed a declining trend upto the end of March 1963 but went up thereafter reaching a maximum in December.

9.24. Thus it can be concluded that the situation with respect to prices and cost of living in 1963 was one causing concern. Though in the first few months the cost of living index and retail and wholesale prices of essential commodities like rice declined, in the latter half of the year they showed firm trends and rose to high levels.

WORKING CLASS CONSUMER PRICE INDEX NUMBERS
KERALA, Base - Aug:1939=100

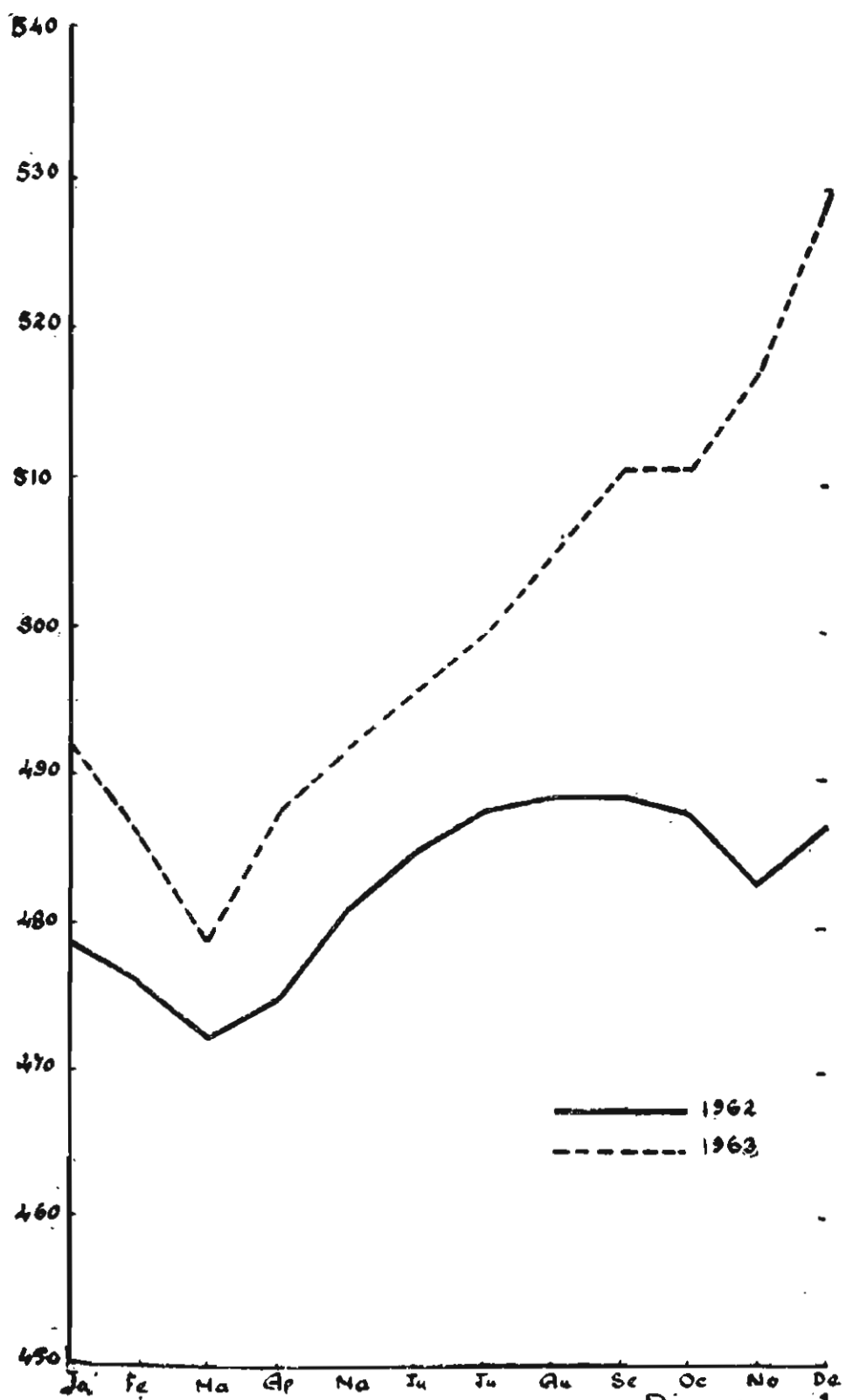


Diagram.1

WORKING CLASS CONSUMER PRICE INDEX NUMBERS
INDIA, Base-1949:100

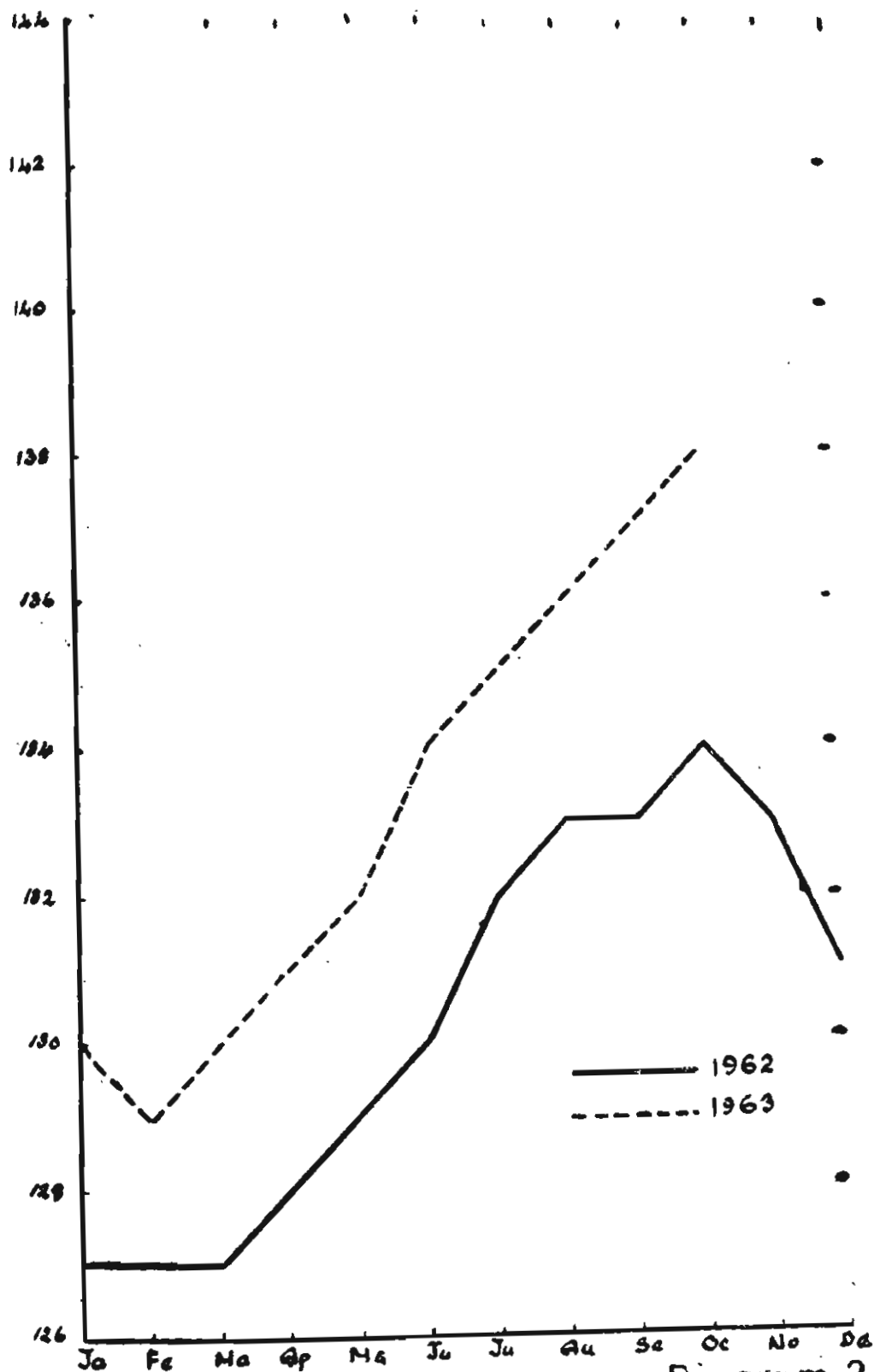


Diagram. 2

WORKING CLASS CONSUMER PRICE INDEX NUMBERS

TRIVANDRUM, Base-Aug: - 1939 = 100

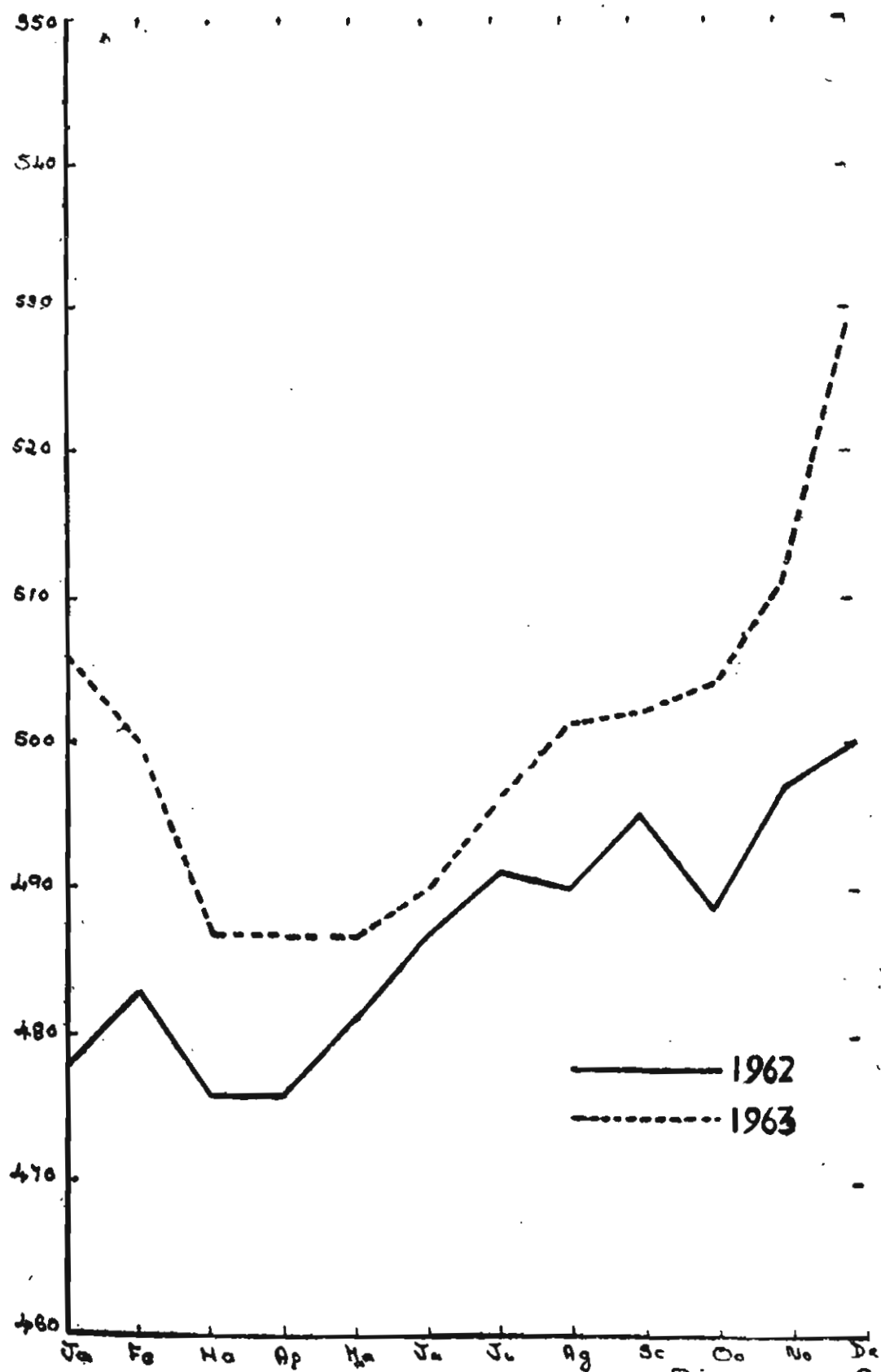


Diagram. 3

WORKING CLASS CONSUMER PRICE INDEX NUMBERS

QUILON, Base- Aug.1939 = 100

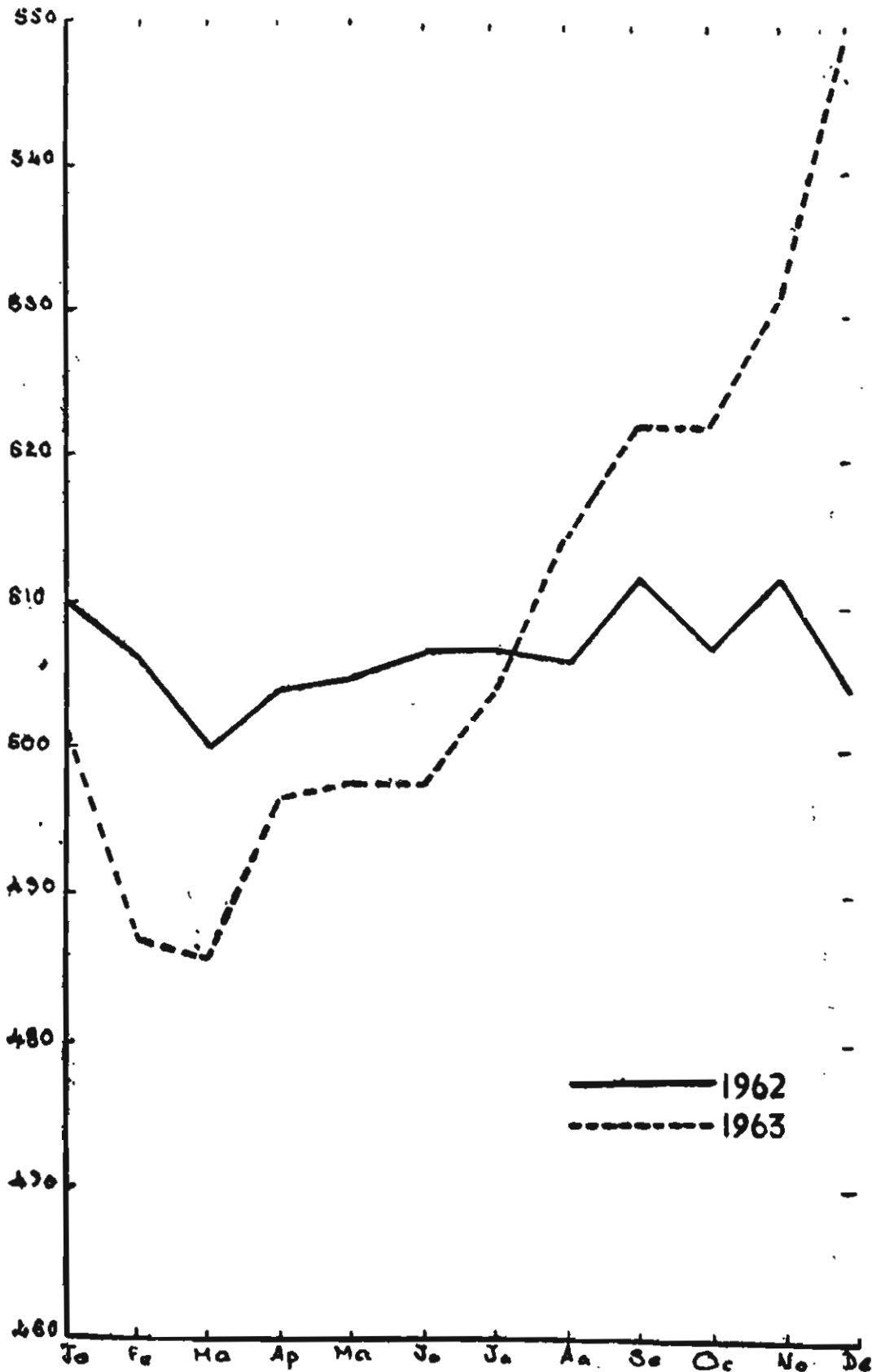


Diagram.4

VORKINGCLASS CONSUMER PRICE INDEX NUMBERS

KOTTAYAM, Base - Aug:1939=100

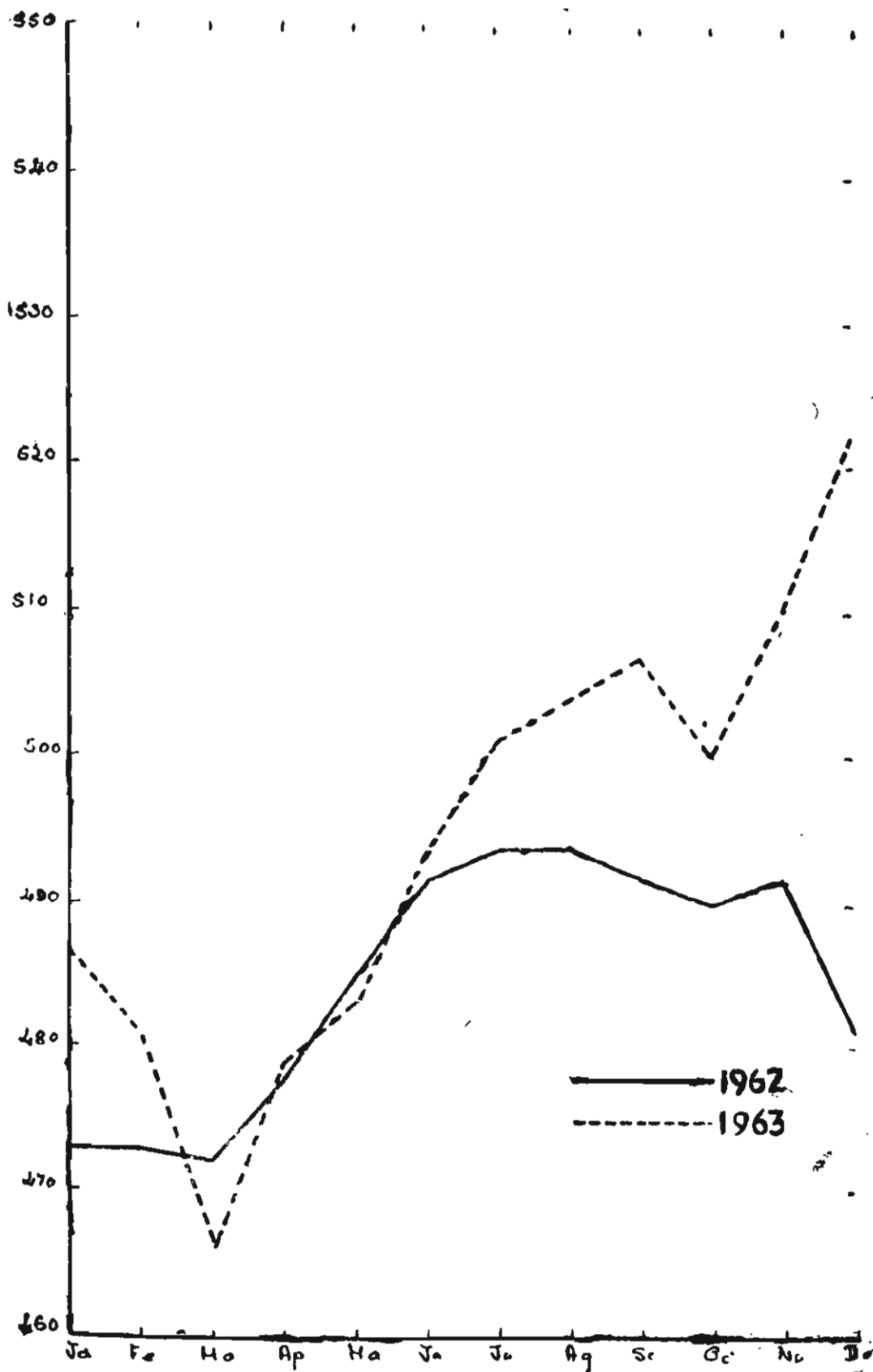


Diagram 5

WORKING CLASS CONSUMER PRICE INDEX NUMBERS
ERNAKULAM, Base- Aug: 1939=100

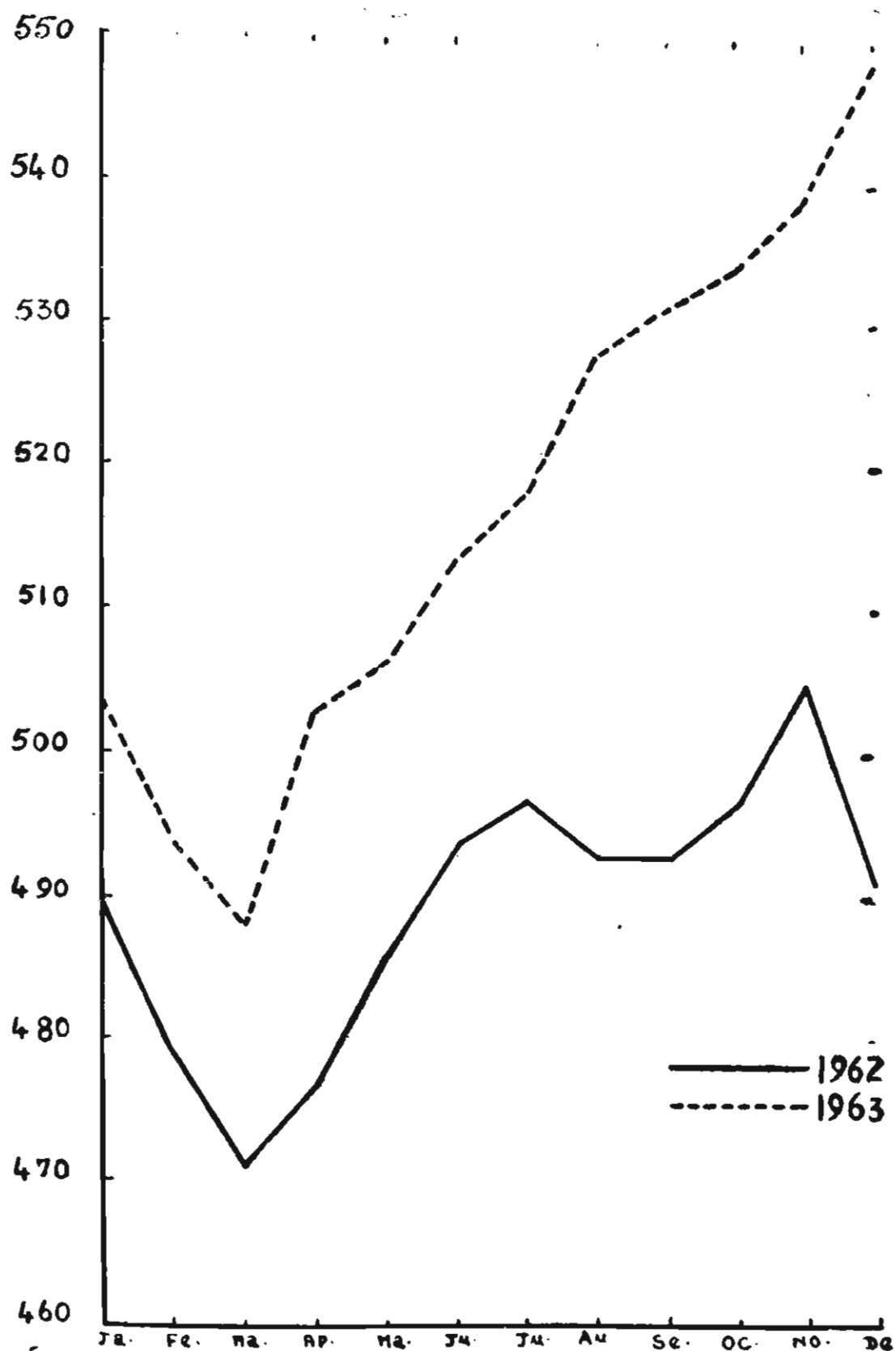


Diagram.6

WORKING CLASS CONSUMER PRICE INDEX NUMBERS
KOZHIKODE, Base - year ended june 36=100

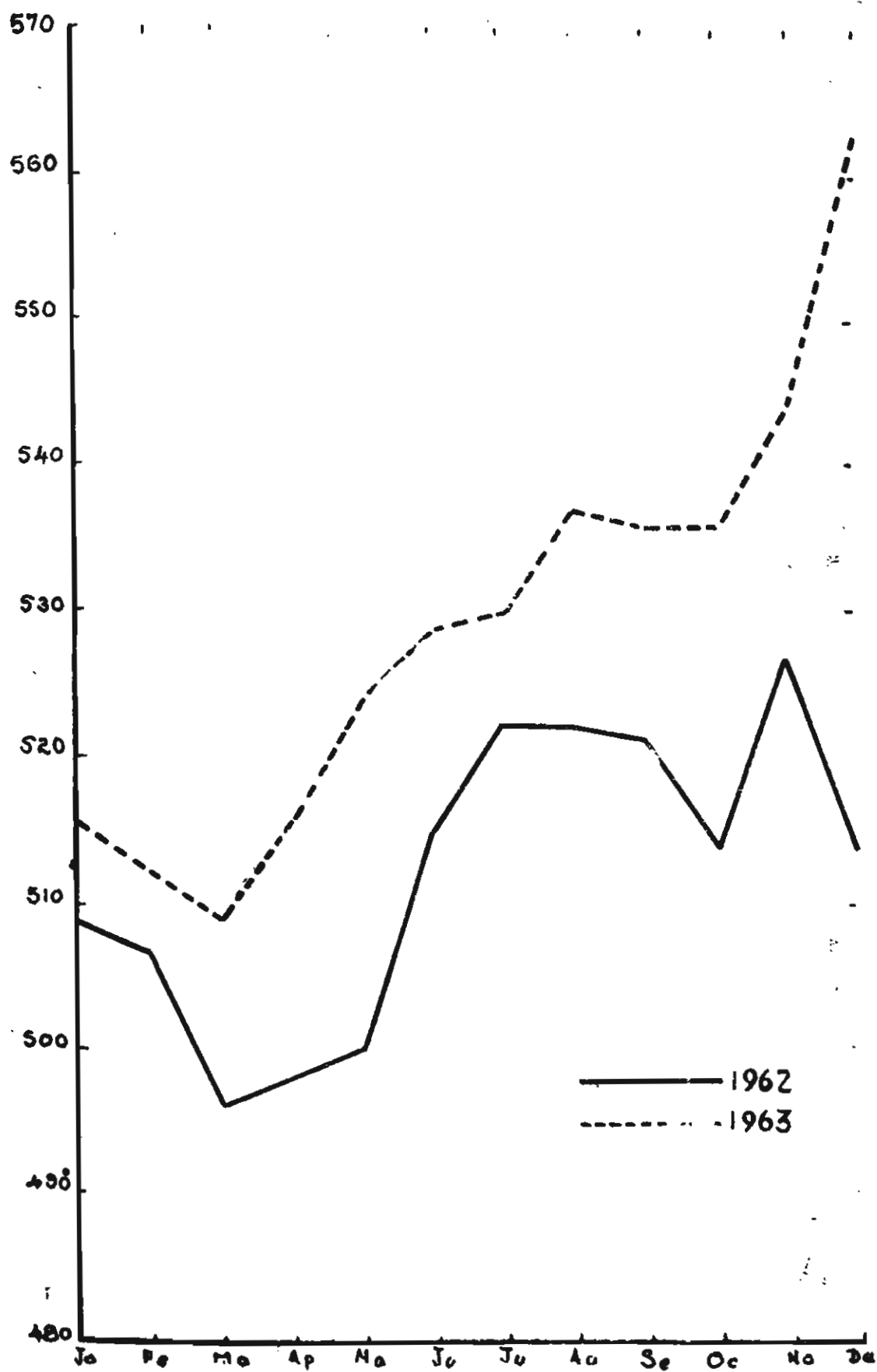


Diagram.7.

WHOLE SALE PRICE INDICES OF RICE KERALA & INDIA Base 1952-53=100

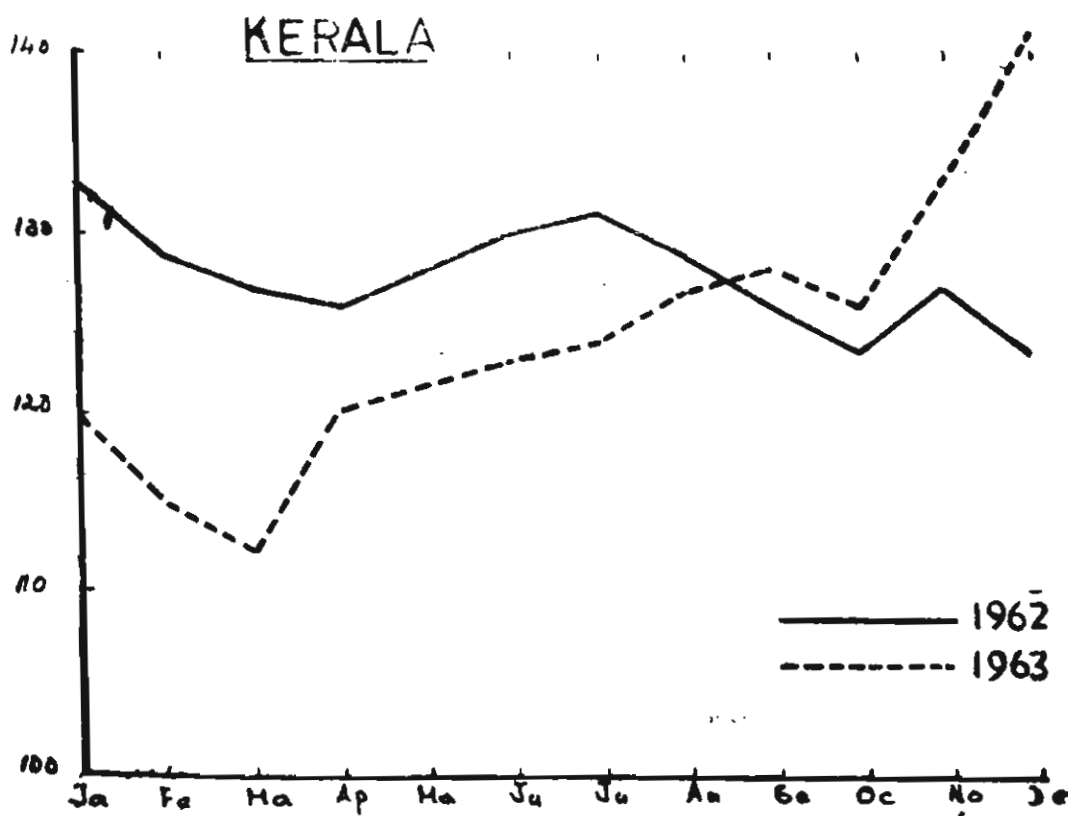
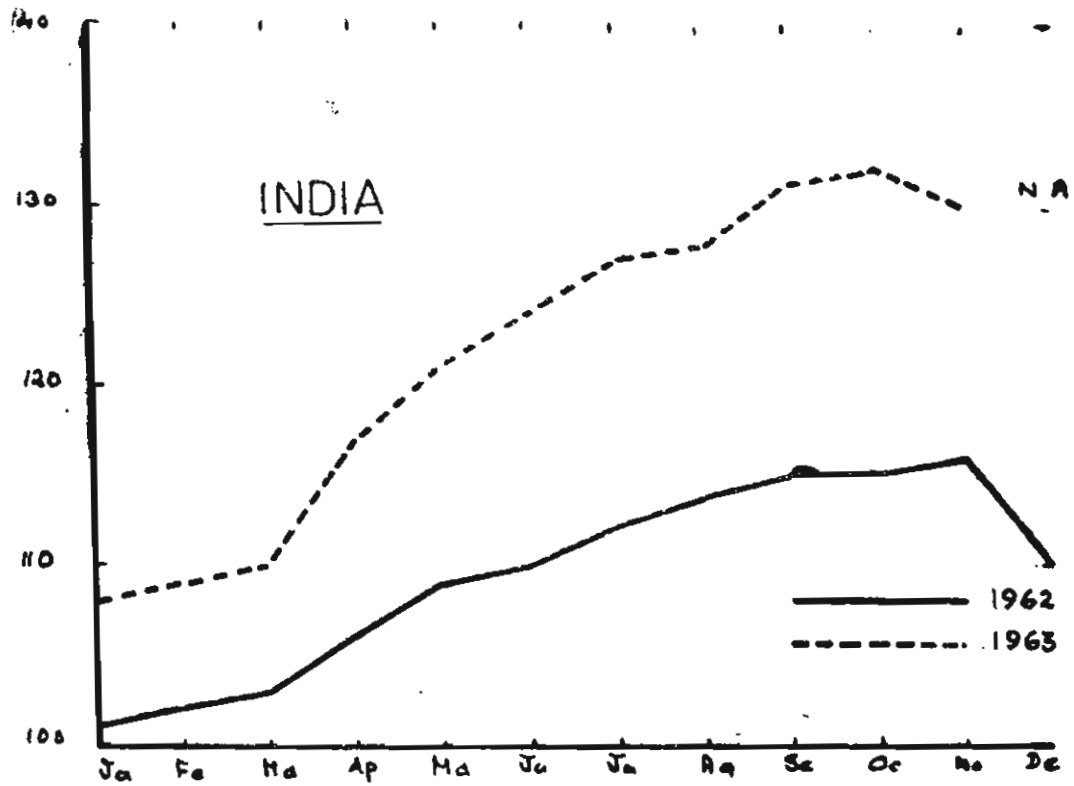


Diagram.8

WHOLSALE PRICE OF RICE-AT TRIVANDRUM
unit:- quintal

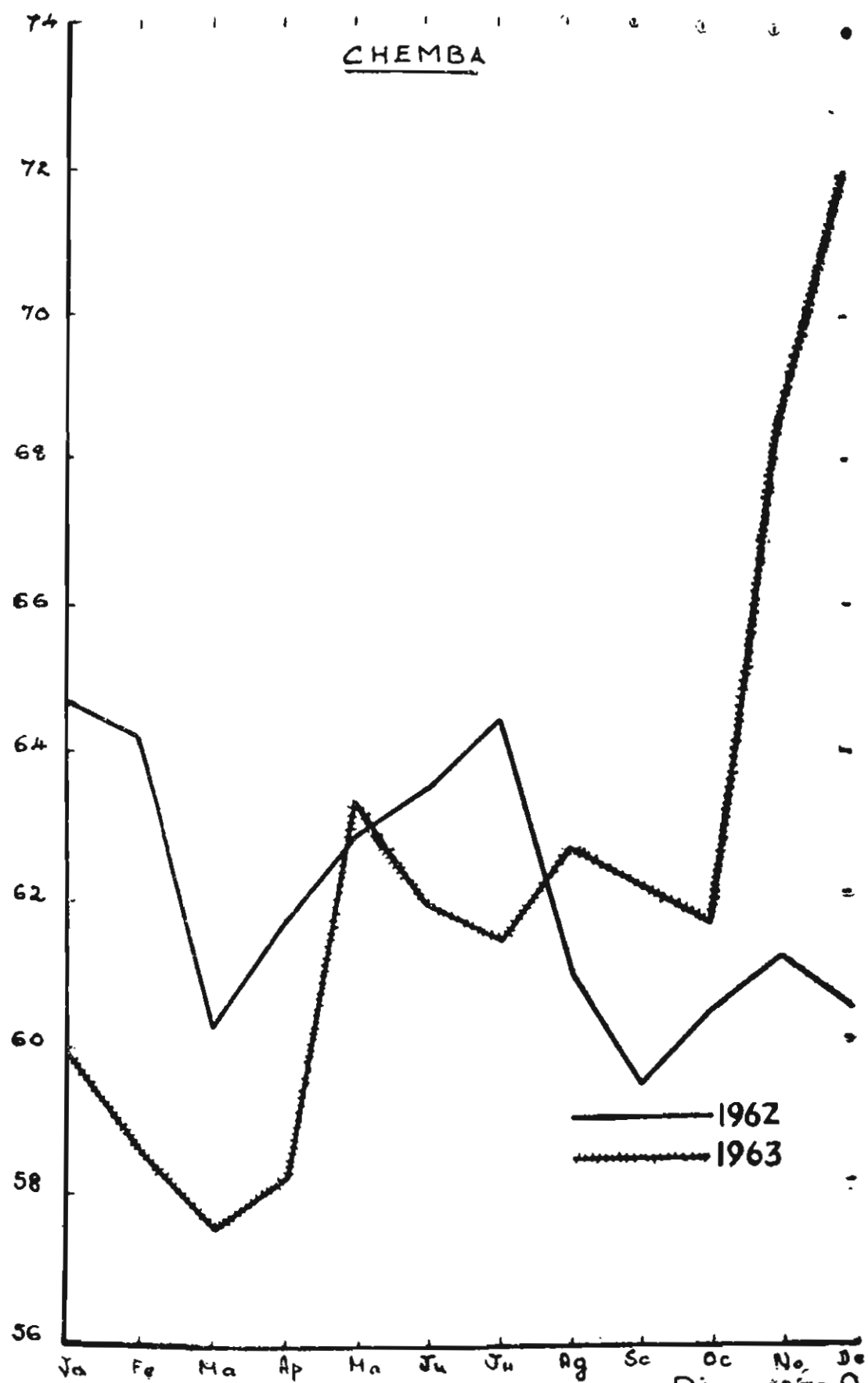
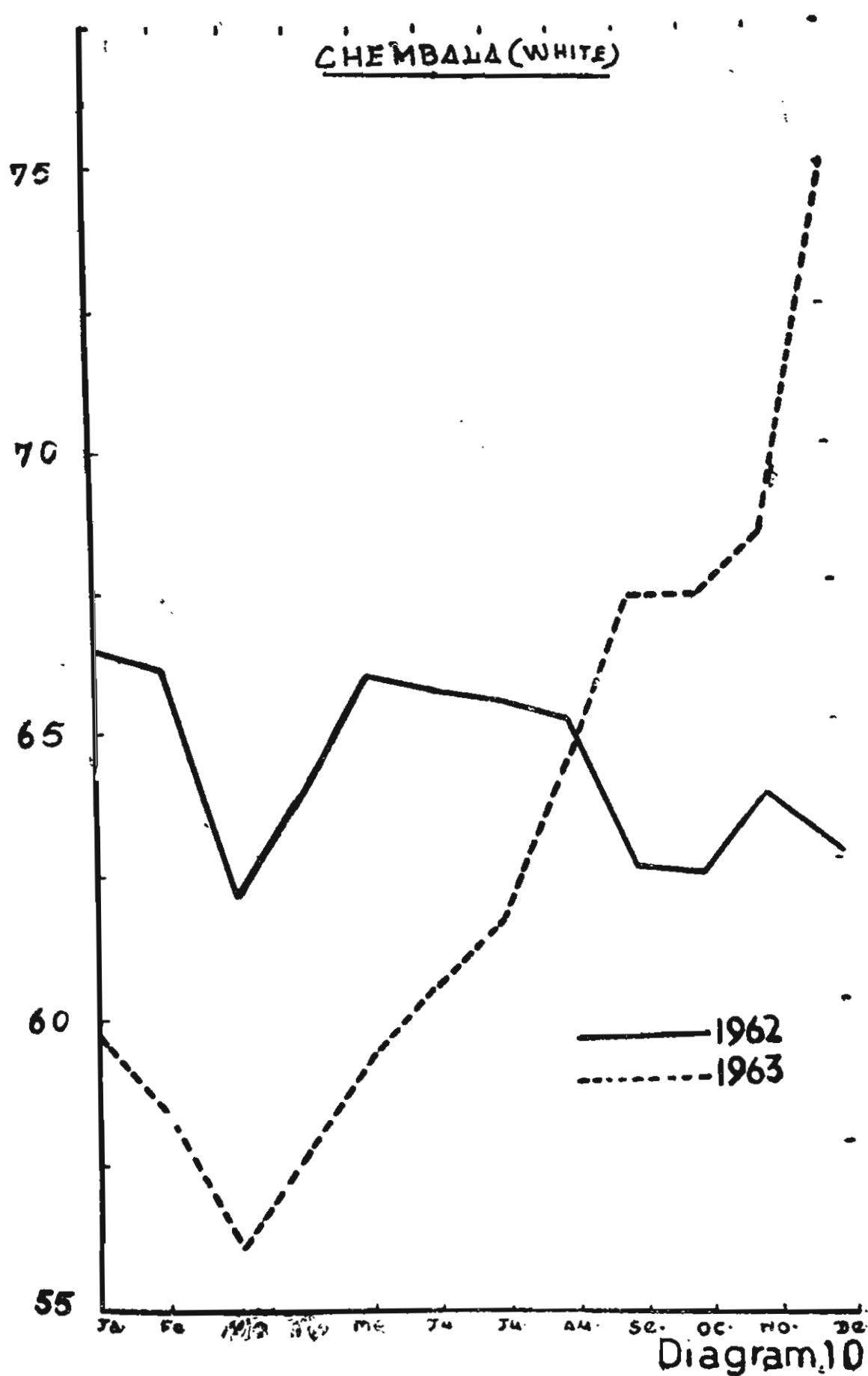


Diagram 9

WHOLE SALE PRICE OF RICE-QUILON
(unit: quintal)



WHOLE SALE PRICE OF RICE AT CHANGANACHERRY.

unit: quintal

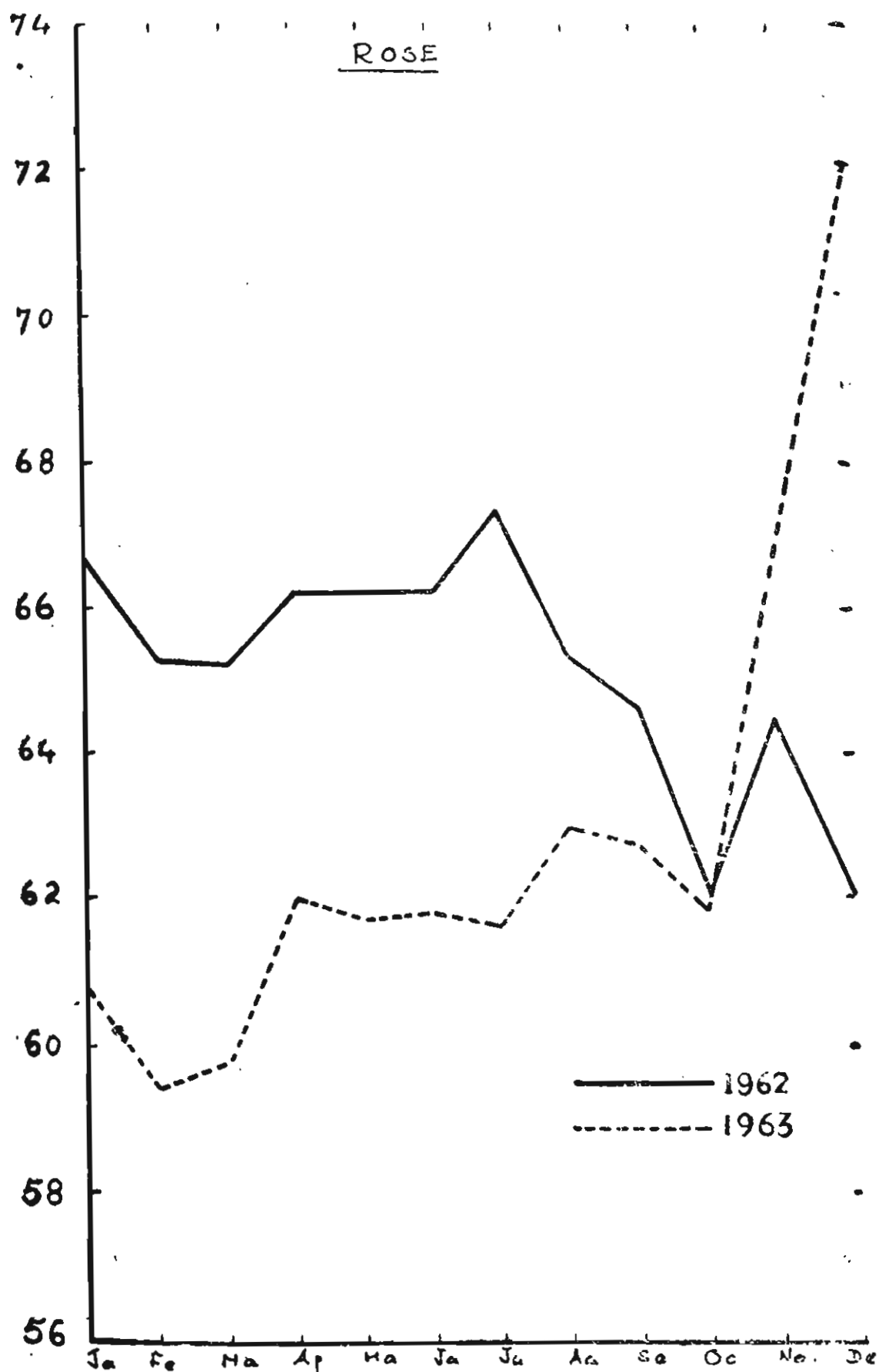


Diagram.11

WHOLE SALE PRICE OF RICE ALLEPPEY

(unit: Quintal)

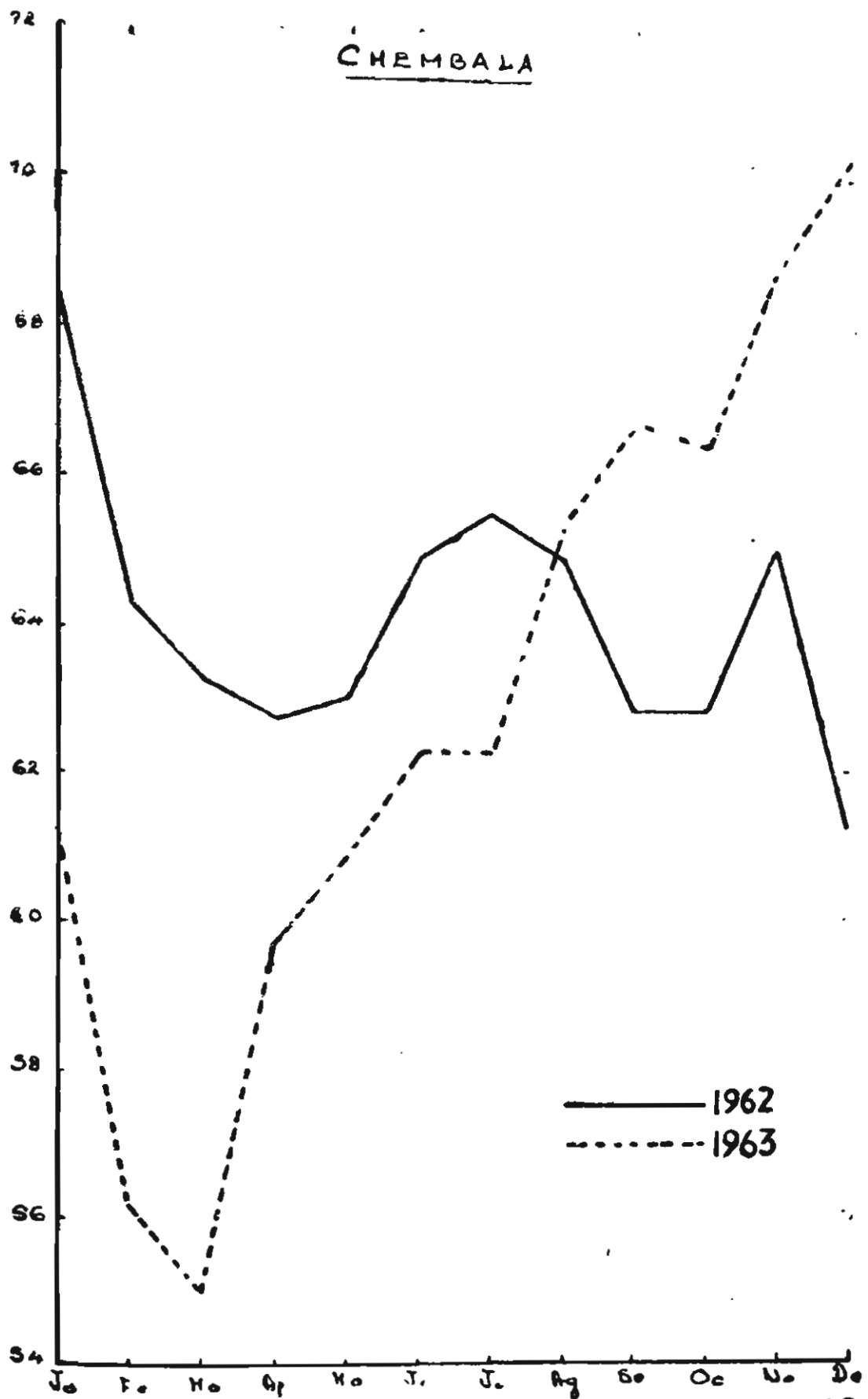


Diagram.12

WHOLE SALE PRICE OF RICE-MATTANCHERRY

unit: quintal



Diagram.13

WHOLE SALE PRICES OF RICE-PALGHAT
unit: quintal

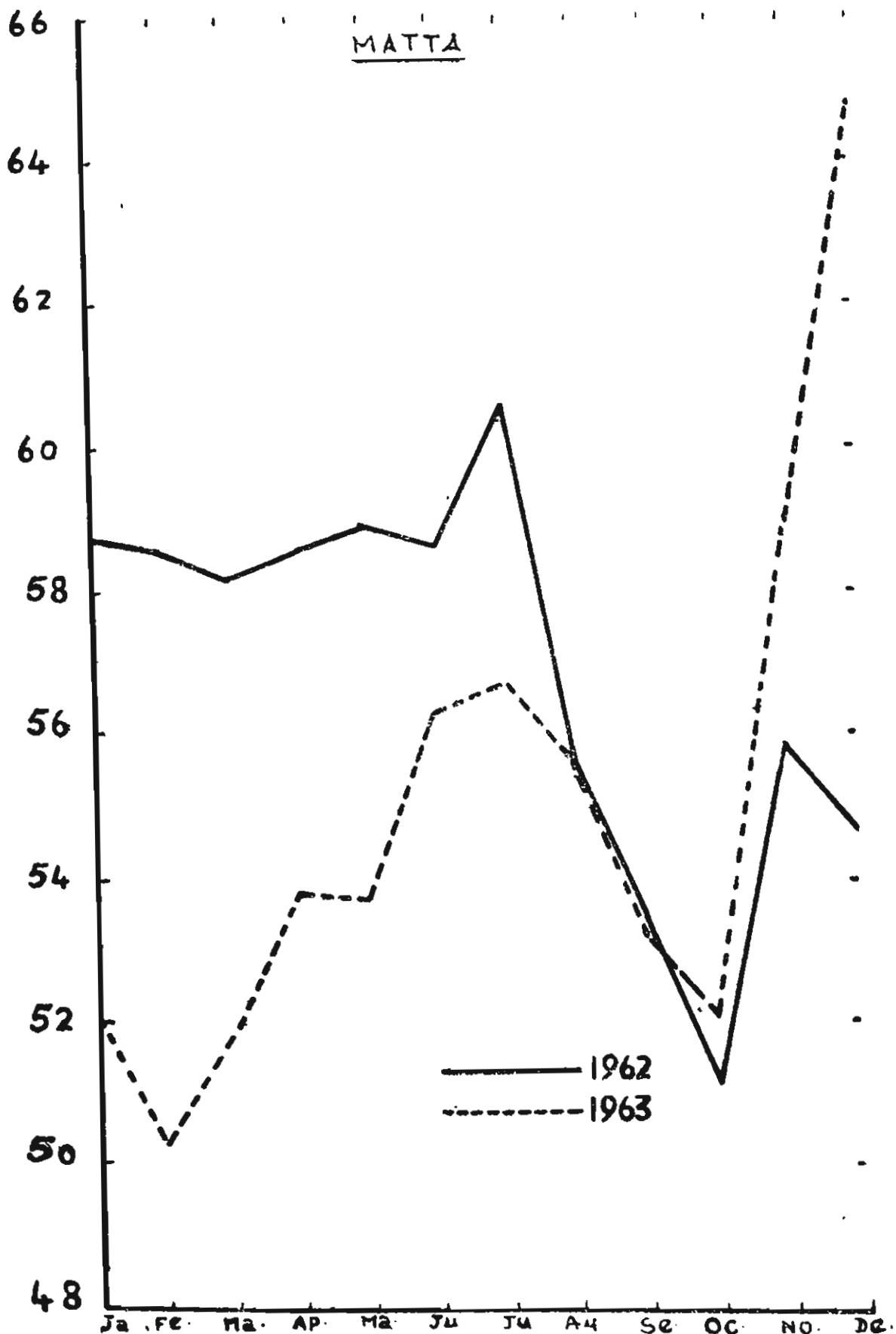


Diagram.14

WHOLE SALE PRICE OF RICE - KOZHIKODE
unit: quintal

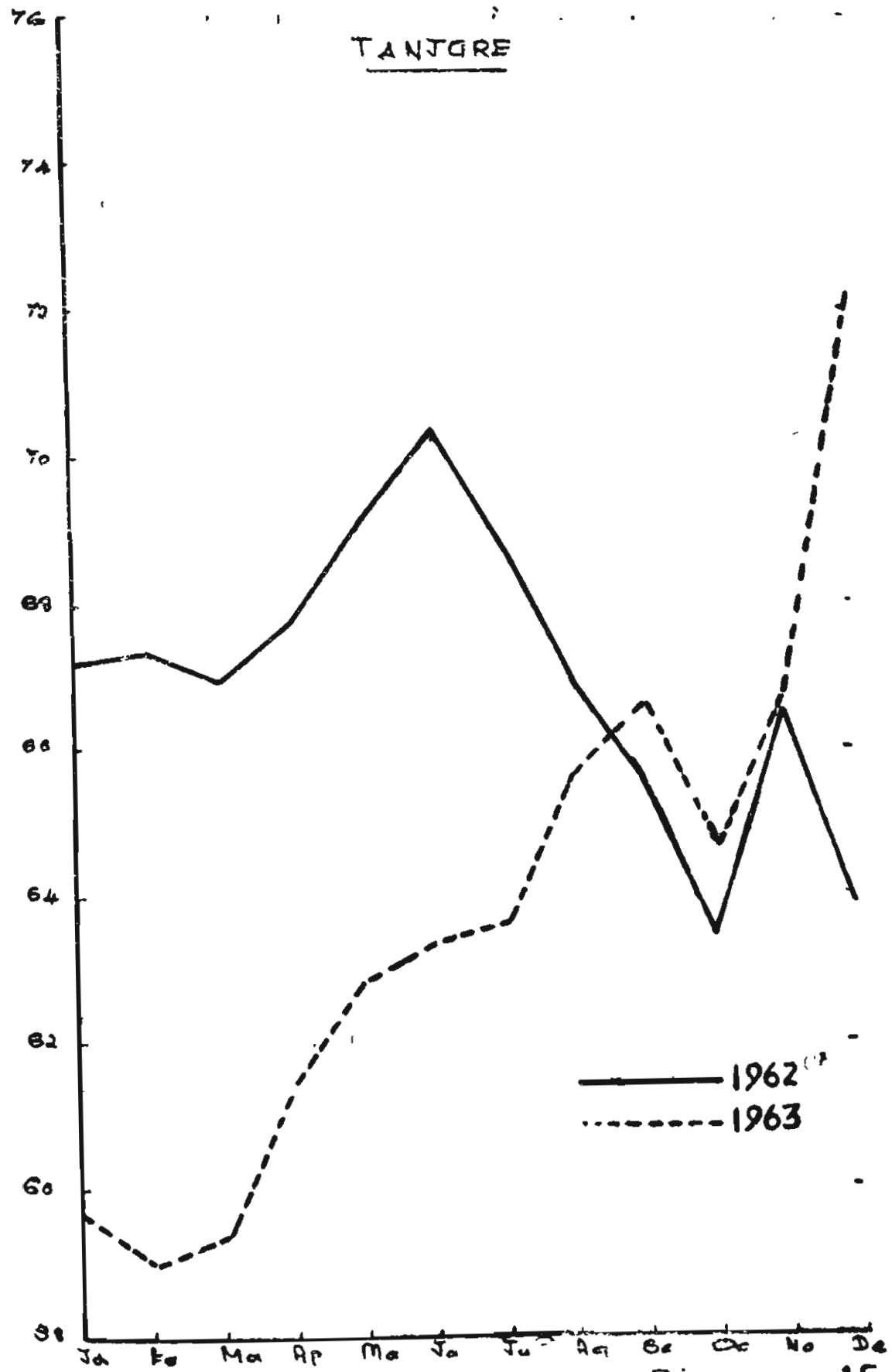


Diagram.15

WHOLESALE PRICE OF PEPPER - COCHIN

unit: quintal

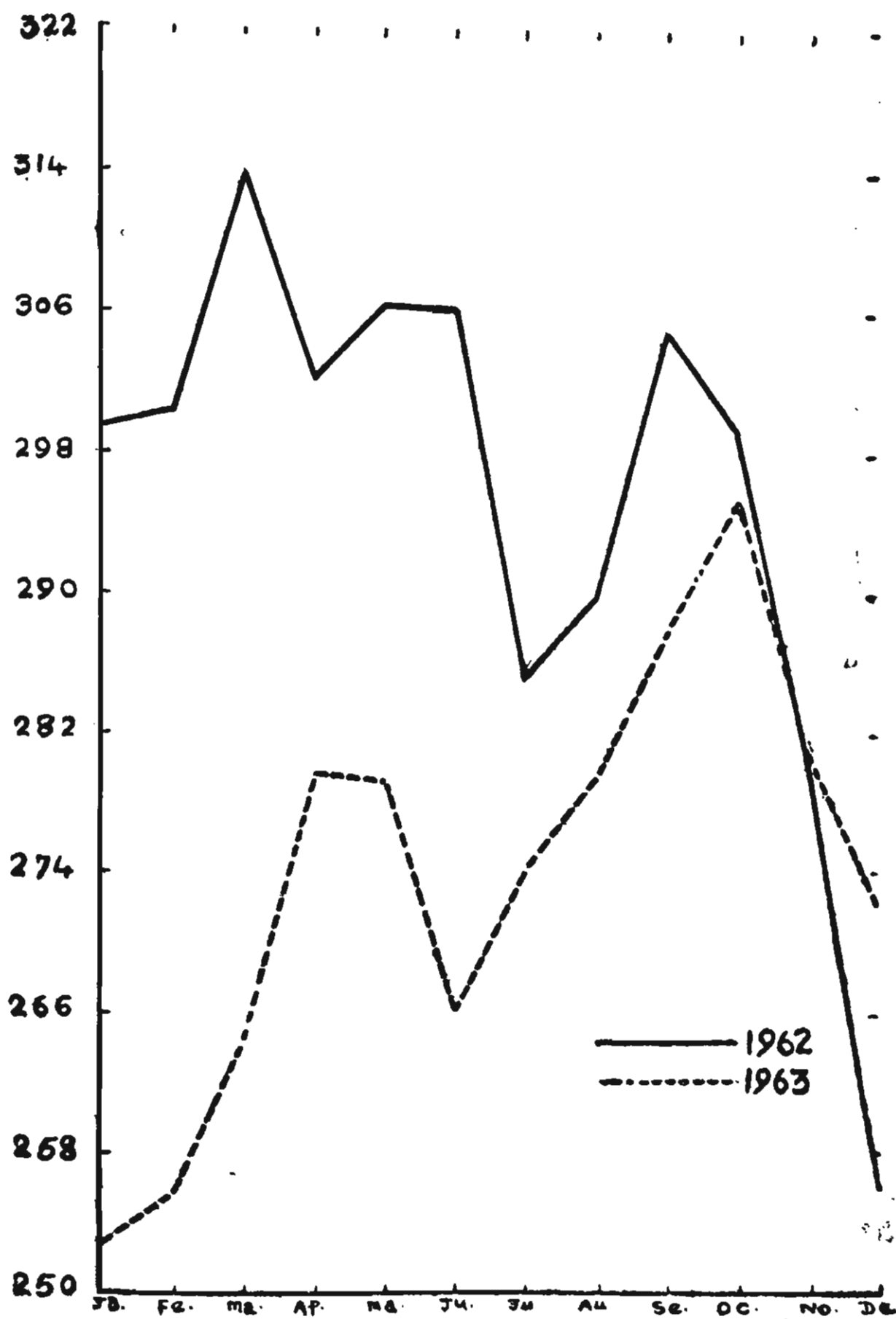


Diagram.16

WHOLE SALE PRICE OF GINGER AT COCHIN
unit :- quintal

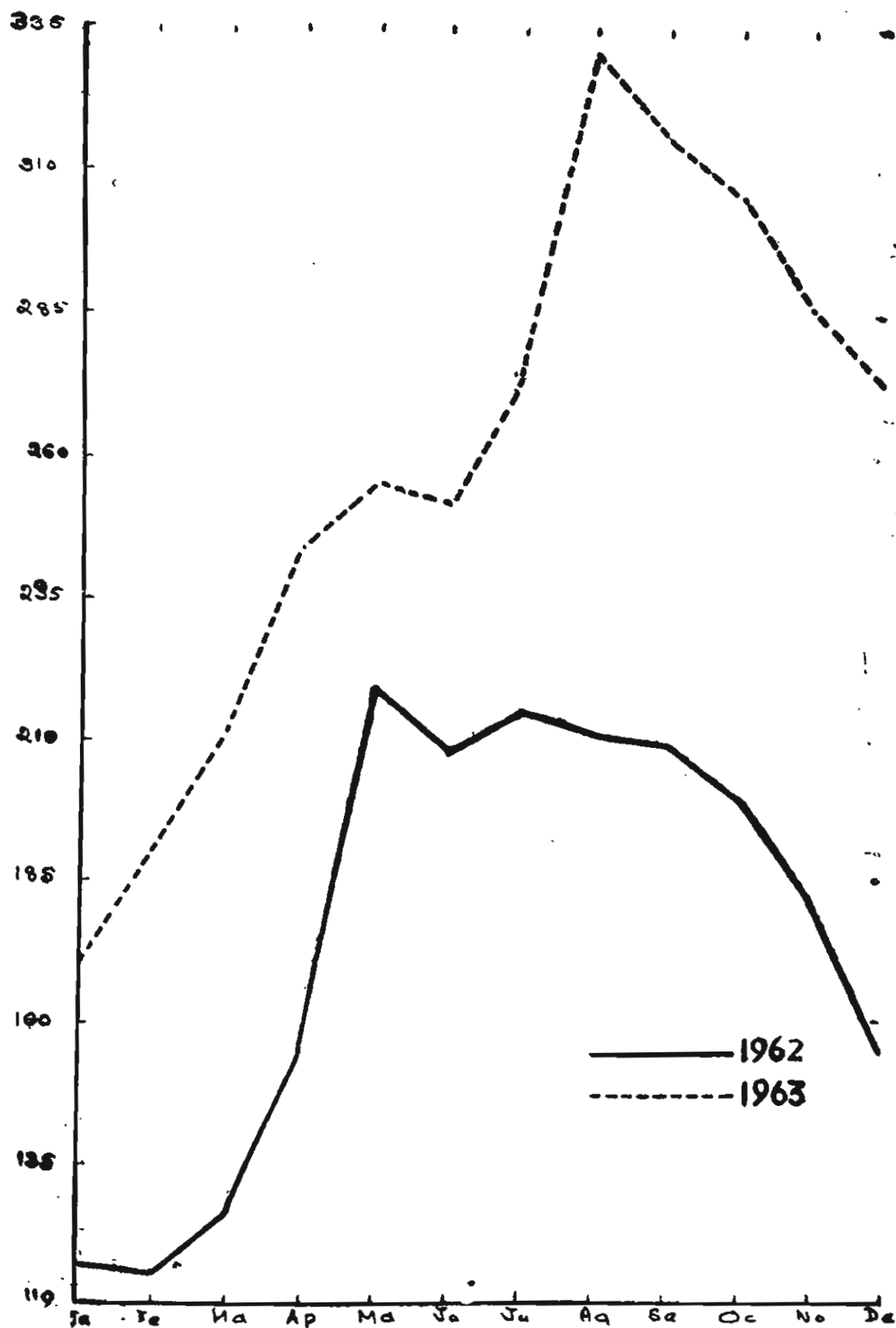


Diagram.17

WHOLESALE PRICE OF ARECANUT AT ALLEPPEY
unit:- 100nos

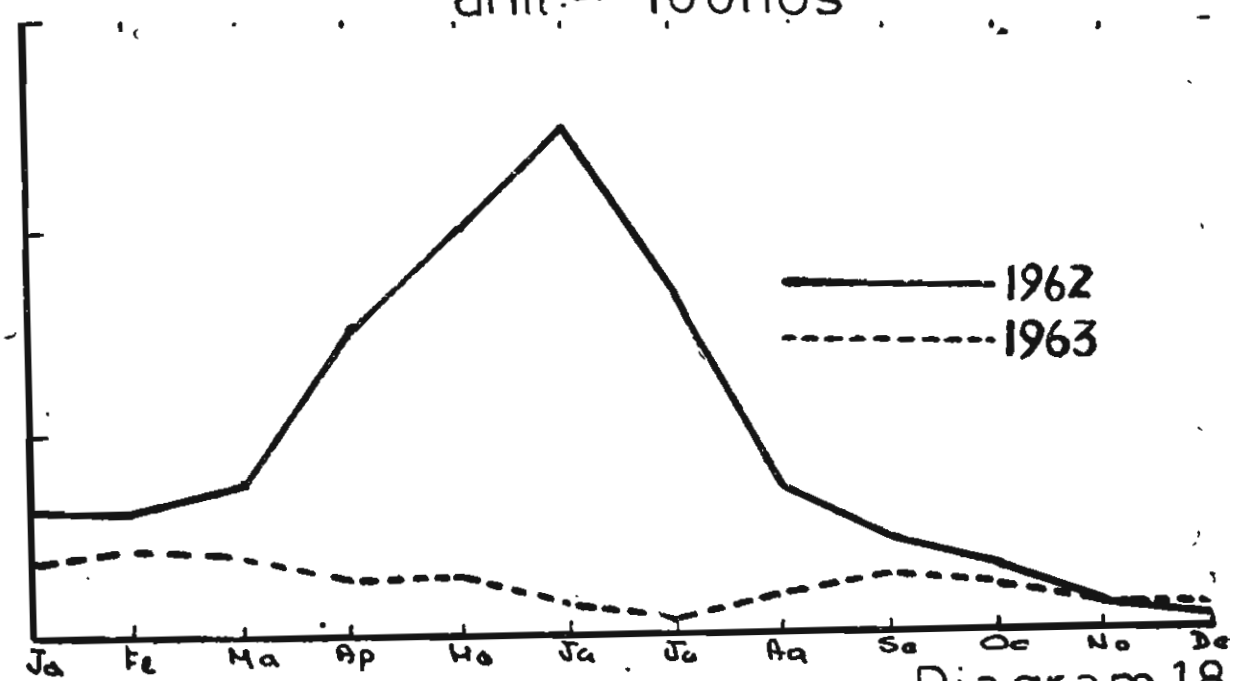


Diagram.18

AVERAGE PRICES OF LEMONGRASS OIL
AT COCHIN, unit-quintal

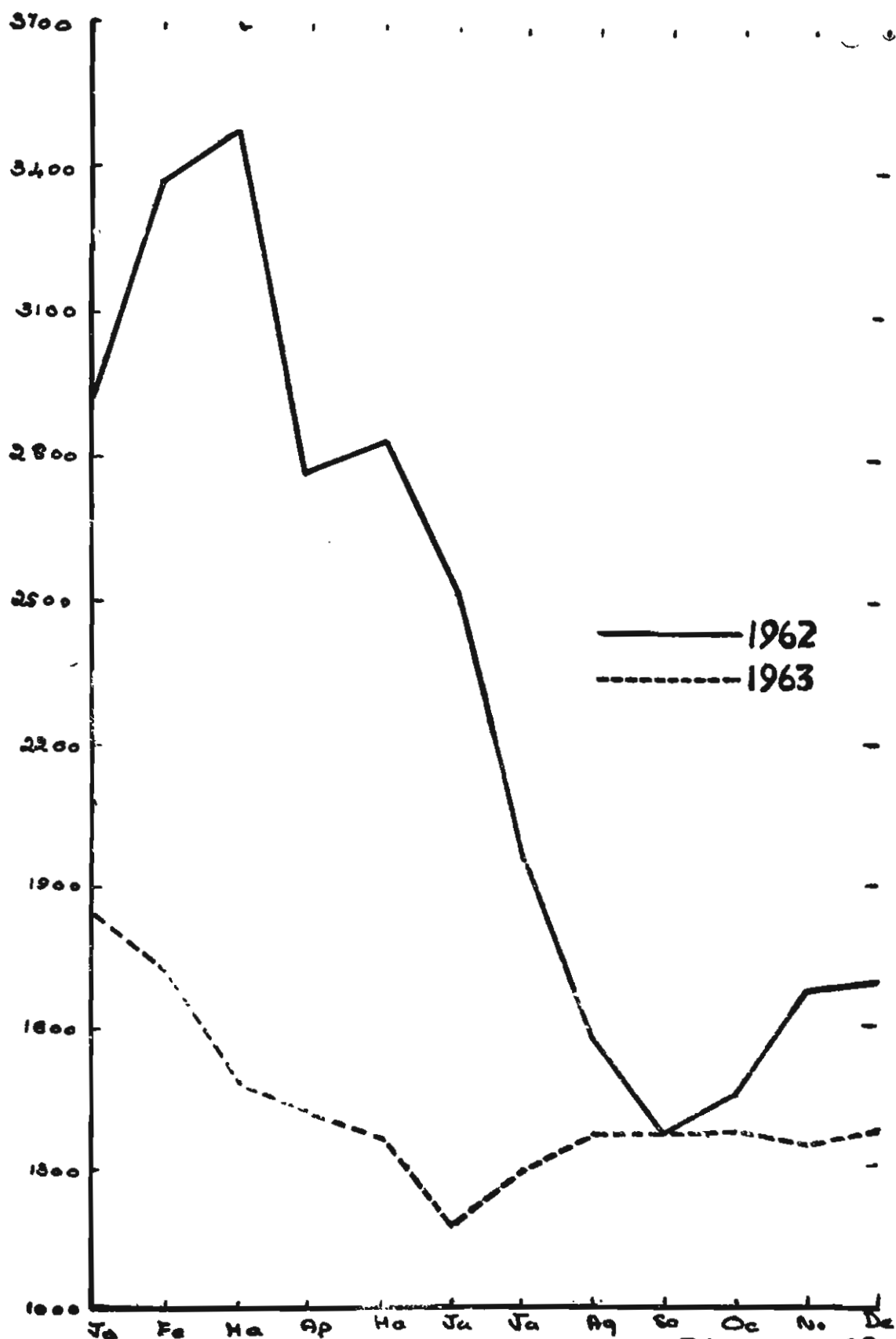


Diagram.19

AVERAGE PRICES OF COCONUTS WITH HUSK
AT ALLEPPEY
unit: 100nos

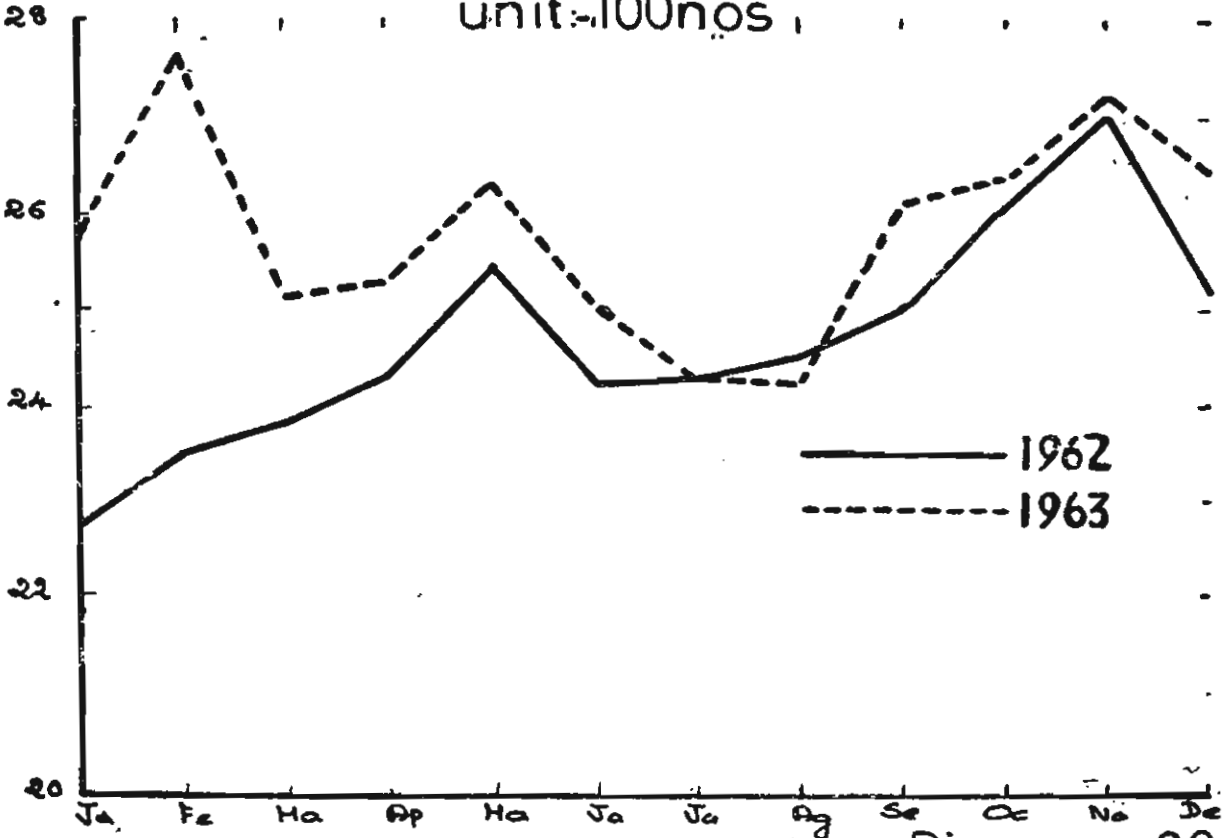


Diagram: 20

AVERAGE PRICES OF COCONUT OIL - COCHIN

unit : quintal

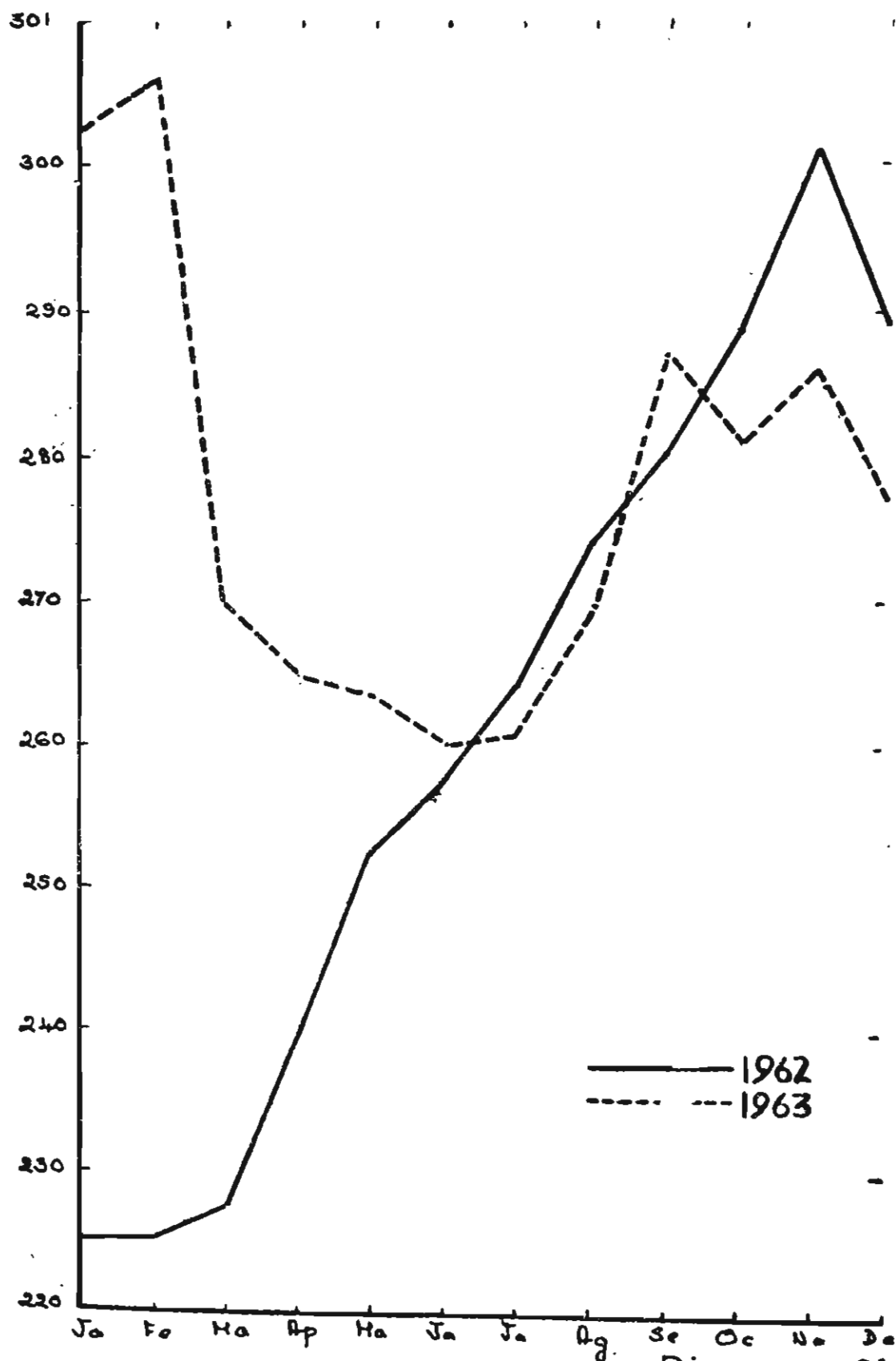


Diagram.21

AVERAGE PRICES OF COPRA - AT ALLEPPEY
unit: quintal



Diagram. 22

CHAPTER X

SOCIAL SERVICES

Development of human resources is an important and integral part of all social and economic planning for creation of a welfare state. It is usually said that "investment in the human factor may well have a higher return in terms of increased output than does any other input". In India and particularly in Kerala one has to think in terms of qualitative improvement of human resources rather than quantitative improvement. Facilities have to be provided for creation of adequately educated and trained manpower and for proper medical care to the citizens. Groups like scheduled castes and scheduled tribes who are socially and economically very backward require special attention in the planned efforts to improve the human resources.

Education

10.2. Kerala stands foremost in the matter of literacy among the Indian States. The percentage of literate population in the various States according to the 1961 census is given in Table 10.1

TABLE—10.1
Literacy rates in the various Indian States

| State | Percentage of literates | | |
|----------------|-------------------------|---------|------|
| | Males | Females | All |
| INDIA | 34.4 | 12.9 | 24.0 |
| Andhra Pradesh | 30.2 | 12.0 | 21.2 |
| Assam | 37.3 | 16.0 | 27.4 |
| Bihar | 29.8 | 6.9 | 18.4 |
| Gujarat | 41.1 | 19.1 | 30.5 |
| Kerala | 55.0 | 38.9 | 46.8 |
| Madhya Pradesh | 27.0 | 6.7 | 17.1 |
| Madras | 44.5 | 18.2 | 31.4 |
| Maharashtra | 42.0 | 16.8 | 29.8 |
| Mysore | 36.1 | 14.2 | 25.4 |
| Orissa | 34.7 | 8.6 | 21.7 |
| Punjab | 33.0 | 14.1 | 24.2 |
| Rajasthan | 23.7 | 5.8 | 15.2 |
| Uttar Pradesh | 27.3 | 7.0 | 17.6 |
| West Bengal | 40.1 | 17.0 | 29.3 |

10.3 Kerala leads both in the matter of male and female literacy. Kerala has a long history of educational activity especially in the matter of general education of school and collegiate standard. The Government expenditure per scholar in the educational institutions in the State worked out to Rs. 52 during 1961-62. The corresponding figure for 1957-58 was only Rs. 34. Taking the average for the period 1957-58 to 1961-62, the Government expenditure on education formed 32% of the total expenditure of Government on revenue account. The per capita Government expenditure on education in the various Indian States during 1962-63 is given in Table 10.2.

TABLE—10.2

Per capita expenditure of Government on education (1962-63)

| <i>State</i> | <i>Per Capita Expenditure on Education</i> |
|-------------------|--|
| | Rs. |
| Andhra Pradesh | 5.96 |
| Assam | 6.92 |
| Bihar | 3.54 |
| Gujarat | 6.08 |
| Jammu and Kashmir | 7.70 |
| Kerala | 11.23 |
| Madhya Pradesh | 7.33 |
| Madras | 7.79 |
| Maharashtra | 4.78 |
| Mysore | 7.02 |
| Orissa | 4.32 |
| Punjab | 6.66 |
| Rajasthan | 6.22 |
| Uttar Pradesh | 3.42 |
| West Bengal | 5.93 |

10.4. The financial commitment of the Kerala Government on general education (school standard) during 1962-63 was of the order of Rs. 18.03 crores and is expected to go upto Rs. 19.46 crores in 1963-64. University education (other than technical education) was costing the State Government about Rs. 1.04 crores in 1962-63 and is estimated to cost Rs. 1.37 crores in 1963-64. Technical education claimed only Rs. 0.66 crore in 1962-63. The expenditure is however expected to be Rs. 1.21 crores in 1963-64. The per capita expenditure in education was Rs. 11.23 during 1962-63 as against Rs. 6.36 in 1957-58. A review of the achievements in the field

of education—both general and technical—during the past few years is attempted below:

A. General Education (School Standard)

10.5 The number of schools for general education (secondary and primary) has increased from 9,631 in 1957-58 to 10,205 in 1962-63 while the enrolment in the schools changed from 28.42 lakhs to 36.22 lakhs. There was an increase of 28% in the number of scholars during the six year period. Coming to sex-wise position, the enrolment of boys has increased from 15.91 lakhs to 19.68 lakhs and of girls from 12.51 lakhs to 16.54 lakhs. The percentage increase was 24 in the case of boys and 32 in the case of girls. The sex ratio of the scholars was 79 girls per 100 boys in 1957-58 and 84 girls per 100 boys in 1962-63. Table 10.3 gives the year wise position.

TABLE—10.3

Scholars in schools for general education in Kerala

| Year | Number of Scholars (in lakhs) | | |
|----------|-------------------------------|-------|-------|
| | Boys | Girls | Total |
| 1957-58 | 15.91 | 12.51 | 28.42 |
| 1958-59 | 16.66 | 13.58 | 30.24 |
| 1959-60 | 17.11 | 14.03 | 31.14 |
| 1960-61 | 17.87 | 14.79 | 32.66 |
| 1961-62 | 18.88 | 15.74 | 34.62 |
| 1962-63. | 19.68 | 16.54 | 36.22 |

10.6. The average school size of Kerala has increased during the period from 295 to 368. The distribution of schools and scholars by type of management during the years under review is presented in Table 10.4.

TABLE—10.4

Distribution of schools for general education according to type of management

| Type of Management | Number of Schools for General Education | | Number of Scholars in Schools for General Education (In lakhs) | |
|--------------------|---|---------|--|---------|
| | 1957-58 | 1962-63 | 1957-58 | 1962-63 |
| Government | 3609 | 4008 | 12.39 | .. |
| Private | 6022 | 6197 | 16.03 | N. A. |
| Total | 9631 | 10205 | 28.42 | 36.22 |

10.7 The number of teachers in the schools for general education increased from 84,185 in 1957-58 to 1,11,048 in 1961-62. The teacher-pupil ratio thus worked out to 1:34 in 1957-58 and 1:31 in 1961-62.

10.8. The total direct expenditure on schools for general education (as reported by the schools) increased from Rs. 8.73 crores in 1957-58 to Rs. 14.49 crores in 1961-62. Of the direct expenditure of Rs. 8.73 crores in 1957-58, 87.5% was met from Government funds while the corresponding percentage for 1961-62 was 92.6%. The average cost (direct expenditure) per pupil thus worked out to Rs. 30.70 in 1957-58 and Rs. 41.86 in 1961-62.

10.9. The main item of direct expenditure was salary of teachers. The total expenditure on this item which stood at Rs. 7.76 crores in 1957-58 rose to Rs. 12.80 crores in 1961-62. The average annual salary per teacher thus showed an increase from Rs. 920 in 1957-58 to Rs. 1,150 in 1961-62, the percentage increase being about 25%.

10.10 The number of scholars in receipt of scholarships, stipends and other financial concessions showed an increase from 1.90 lakhs in 1957-58 to 3.03 lakhs in 1961-62, the amount disbursed to them being Rs. 20.65 lakhs and Rs. 40.92 lakhs respectively. Besides these, there were free studentships also.

10.11 A preliminary appraisal of the numerical wastages in general education has revealed that 41% of the students enrolled in class I either give up their studies in the middle of the lower primary course or do not pass the promotion examination in Class IV. In respect of secondary education, out of every 100 boys and 100 girls enrolled in Class VIII, only 26 boys and 24 girls successfully completed the course and passed the S.S.L.C. Examination. The wastage is thus as high as 75%. The standard-wise strength in the schools for general education in 1962-63 is given in Table 10.5.

TABLE—10.5

**Standard-wise strength in schools for general education
(Kerala) 1962-63.**

| <i>Standard</i> | <i>Boys</i> | <i>Girls</i> | <i>Total</i> |
|-------------------|-------------|--------------|--------------|
| I | 343678 | 313640 | 657318 |
| II | 300177 | 267922 | 568099 |
| III | 266989 | 233744 | 500733 |
| IV | 247368 | 210619 | 457987 |
| Total (I to IV) | 1158212 | 1025925 | 2184137 |
| V | 206063 | 167002 | 373065 |
| VI | 173375 | 135707 | 309082 |
| VII | 149156 | 116063 | 265219 |
| Total (V to VII) | 528594 | 418772 | 947366 |
| VIII | 134040 | 105118 | 239158 |
| IX | 99714 | 70735 | 170449 |
| X | 47619 | 33338 | 80957 |
| Total (VIII to X) | 281373 | 209191 | 490564 |
| Grand Total | 1968179 | 1653888 | 3622067 |

10.12. The number of candidates who appeared for and passed in the S.S.L.C. examination in March and September 1963 was shown in Table 10.6.

TABLE—10.6

Number of S. S. L. C. students appeared and passed in 1963.

| <i>Year</i> | <i>Appeared</i> | <i>Passed</i> | <i>% passed</i> |
|----------------|-----------------|---------------|-----------------|
| March 1963 | 98025 | 48666 | 49.6 |
| September 1963 | 47540 | 19350 | 40.7 |

B. Professional and special education

10.13. Table 10.7 gives the district-wise distribution of schools for professional and special education in the State in 1961-62 and 1962-63.

TABLE—10.7

| Name of District | Engineering and Polytechnics* | | | Teacher's Training and Nursery Training | | | Other Technical and Arts and Crafts | | | Physically handicapped | | |
|------------------|-------------------------------|---------|---------|---|---------|---------|-------------------------------------|---------|---------|------------------------|---------|---------|
| | 1961-62 | 1962-63 | 1961-62 | 1962-63 | 1961-62 | 1962-63 | 1961-62 | 1962-63 | 1961-62 | 1962-63 | 1961-62 | 1962-63 |
| | G | P | T | G | P | T | G | P | T | G | P | T |
| Trivandrum | 6 | .. | 6 | 6 | 6 | .. | 6 | 6 | 6 | 6 | .. | 1 |
| Quilon | .. | 1 | 1 | .. | 1 | 1 | 2 | 8 | 10 | 2 | 3 | 5 |
| Alleppey | .. | 2 | 2 | .. | 2 | 2 | 5 | 12 | 17 | 6 | 6 | 12 |
| Kottayam | 2 | .. | 2 | 2 | .. | 2 | 3 | 8 | 11 | 2 | 3 | 5 |
| Ernakulam | 2 | .. | 2 | 2 | .. | 2 | 4 | 6 | 10 | 3 | 6 | 9 |
| Trichur | 3 | 2 | 5 | 4 | 2 | 6 | 3 | 3 | 6 | 13 | 9 | 22 |
| Palghat | 1 | .. | 1 | 1 | .. | 1 | 3 | 3 | 6 | 3 | .. | 3 |
| Kozhikode | 3 | .. | 3 | 3 | 1 | 4 | 5 | 3 | 8 | 6 | 4 | 1 |
| Cannanore | 2 | .. | 2 | 2 | .. | 2 | 4 | 1 | 5 | 3 | .. | 3 |
| KERALA | 19 | 5 | 24 | 20 | 6 | 26 | 31 | 49 | 83 | 38 | 54 | 92 |

Note:—G—Government; P—Private; T—Total. N.A.—Not available.

* Includes Polytechnics, Survey Schools and Industrial Training Institutes.

10.14. The number of polytechnics in the State during 1962-63 was 16 (including 2 women's polytechnics) with an annual in-take capacity of 2000. Teachers' training institutions (including nursery training) numbered 83 and the annual intake capacity was 5230. The number of Junior Technical Schools in 1962-63 was 20 providing for admission to about 1200 scholars. There were 7 Industrial Training Institutes with 3290 trainees in 1962-63.

There were 6 schools for physically handicapped in the State in 1962-63 with 384 scholars (306 boys and 78 girls).

C. Higher Education

10.15. The district-wise distribution of colleges for general education in the State in 1961-62 and 1962-63 is given in Table 10.8.

TABLE—10.8
Colleges for general education in Kerala

| <i>District</i> | <i>Number of Colleges</i> | | <i>Number of students</i> | |
|-----------------|---------------------------|---------|---------------------------|---------|
| | 1961-62 | 1962-63 | 1961-62 | 1962-63 |
| Trivandrum .. | 7 | 7 | 6724 | 7194 |
| Quilon .. | 5 | 5 | 5588 | 6329 |
| Alleppey .. | 4 | 4 | 3716 | 4261 |
| Kottayam .. | 7 | 7 | 6992 | 7673 |
| Ernakulam .. | 8 | 9 | 6970 | 7647 |
| Trichur .. | 5 | 5 | 4570 | 4696 |
| Palghat .. | 5 | 5 | 2297 | 2488 |
| Kozhikode .. | 9 | 9 | 3806 | 3907 |
| Cannanore .. | 4 | 4 | 1095 | 2180 |
| State Total .. | 54 | 55 | 42513 | 46375 |

10.16. The number of students in colleges for general education increased from 42513 in 1961-62 to 46375 in 1962-63. A statement showing the district-wise distribution of colleges for professional education is also given below (Table 10.9).

TABLE—10.9
Colleges for professional education in Kerala

| <i>District</i> | <i>Number of institutions</i> | | <i>Number of students</i> | |
|-----------------|-------------------------------|---------|---------------------------|---------|
| | 1961-62 | 1962-63 | 1961-62 | 1962-63 |
| Trivandrum .. | 8 | 8 | 2901 | 2947 |
| Quilon .. | 3 | 3 | 764 | 815 |
| Alleppey .. | 3 | 3 | 299 | 300 |
| Kottayam .. | 4 | 5 | 449 | 562 |
| Ernakulam .. | 4 | 4 | 550 | 703 |
| Trichur .. | 3 | 3 | 1004 | 1055 |
| Palghat .. | 2 | 2 | 353 | 495 |
| Kozhikode .. | 4 | 4 | 896 | 1182 |
| Cannanore .. | 1 | 1 | 98 | 98 |
| State Total .. | 32 | 33 | 7314 | 8157 |

Besides the above, there were 267 scholars in the University Teaching Departments in 1962-63.

10.17. Table 10.10 presents the faculty-wise distribution of students in the institutions for higher education in 1961-62 and 1962-63.

TABLE—10.10
Faculty-wise distribution of students in 1961-62 & 1962-63

| <i>Sl. No.</i> | <i>Type of Institution</i> | <i>Number of students</i> | | <i>Percentage change</i> |
|----------------|------------------------------------|---------------------------|---------|----------------------------|
| | | 1961-62 | 1962-63 | in 1962-63 over 1961-62 |
| 1 | Arts, Science and Oriental Studies | 40428 | 44341 | 9.68 |
| 2 | Fine arts | 29 | 21 | —27.59 |
| 3 | Law | 385 | 448 | 16.36 |
| 4 | Education | 2141 | 2199 | 2.71 |
| 5 | Engineering | 2674 | 3243 | 21.28 |
| 6 | Commerce | 2199 | 2260 | 2.77 |
| 7 | Medicine | 1479 | 1693 | 14.47 |
| 8 | Ayurveda | 109 | 79 | —27.52 |
| 9 | Agriculture | 218 | 222 | 1.83 |
| 10 | Veterinary Science | 328 | 293 | —10.67 |
| | Total | 49990 | 54799 | 9.62 |

Note: Data regarding courses of study relating to the University of Kerala alone are given. University. Teaching Departments also included.

10.18. In 1962-63 there were 6 engineering colleges in the State with an annual intake capacity of 900 students and 3 medical colleges with an annual intake of 435 students (including Dental Science students). The training colleges numbered 19 and there were facilities for admitting 2180 students. The intake capacity of the Agricultural College was 85 and of the Veterinary College 70.

Health Services

10.19. The expectation of life at birth for males and females in the State for the decade 1941-1951 was 40 and 42 years respectively. This was higher than the all India figure of 32 for both males and females. It has been estimated that the expectation of life has increased by 6.7 years for males and 7.3 years for females during the period 1951-1961.

10.20 The high rate of growth of population (about 2.5% per annum) in the State is an aspect which calls for special attention in the context of ensuring adequate health standards to the citizens.

10.21. In the First Five Year Plan an amount of Rs. 295 lakhs was spent on medical, public health and housing activities. In the Second Plan the plan expenditure on these activities was about Rs. 813 lakhs. In the Third Plan the amount proposed to be spent is Rs. 1630 lakhs. The per capita Government expenditure on health services in the various Indian States during 1962-63 is shown in Table 10.11.

TABLE—10.11

Per capita government expenditure on health services (1962-63)

| <i>State</i> | <i>Per capital-expenditure (Rs.)</i> | |
|-------------------|--------------------------------------|------|
| Andhra | .. | 2.28 |
| Assam | .. | 3.12 |
| Bihar | .. | 1.78 |
| Gujerat | .. | 1.99 |
| Jammu and Kashmir | .. | 3.82 |
| Kerala | .. | 3.67 |
| Madhya Pradesh | .. | 2.73 |
| Madras | .. | 2.63 |
| Maharashtra | .. | 2.81 |
| Mysore | .. | 3.20 |
| Orissa | .. | 2.00 |
| Punjab | .. | 2.43 |
| Rajasthan | .. | 2.87 |
| Uttar Pradesh | .. | 1.41 |
| West Bengal | .. | 3.05 |

10.22. In regard to institutional facilities under modern system of medicine, there were 437 medical institutions (Government Hospitals, Government Dispensaries, Health Centres and Grant-in-aid Institutions) with a strength of 15753 beds at the end of 1962-63. Table 10.12 gives the district-wise distribution of the institutions.

TABLE—10.12

District-wise Distribution of Medical and Public Health Institutions in Kerala as on 31-3-1963

| <i>Institutions</i> | <i>Kerala</i> | <i>Trivandrum</i> | <i>Quilon</i> | <i>Alleppey</i> | <i>Kottayam</i> | <i>Ernakulam</i> | <i>Trichur</i> | <i>Palghat</i> | <i>Kozhikode</i> | <i>Cannanore</i> |
|------------------------------|---------------|-------------------|---------------|-----------------|-----------------|------------------|----------------|----------------|------------------|------------------|
| Government Hospitals | 86 | 13 | 8 | 9 | 5 | 14 | 13 | 8 | 11 | 5 |
| Beds | 12171 | 3147 | 813 | 1452 | 473 | 1460 | 1886 | 647 | 1628 | 665 |
| Dispensaries | 205 | 23 | 19 | 15 | 27 | 28 | 17 | 28 | 22 | 26 |
| Beds | 856 | 43 | 55 | 73 | 182 | 119 | 75 | 112 | 61 | 136 |
| Secondary Health Centres | 9 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | .. | 1 |
| Beds | 694 | 163 | 40 | 96 | 95 | 114 | 75 | 34 | .. | 77 |
| Primary Health Centres | 104 | 15 | 11 | 15 | 6 | 13 | 11 | 11 | 13 | 9 |
| Beds | 817 | 131 | 84 | 135 | 80 | 151 | 64 | 112 | 12 | 48 |
| Grantinaid Institutions | 14 | 2 | .. | 1 | .. | 3 | 3 | 2 | 3 | .. |
| Beds | 1086 | 184 | .. | 210 | .. | 229 | 150 | .. | 313 | .. |
| Other Medical Institutions | 19 | 2 | 3 | 3 | 2 | 3 | 2 | 2 | .. | 2 |
| Beds | 129 | 32 | .. | .. | 21 | 76 | .. | .. | .. | .. |
| Total number of Institutions | 437 | 57 | 42 | 44 | 41 | 62 | 47 | 52 | 49 | 43 |
| Beds | 15753 | 3700 | 992 | 1966 | 851 | 2149 | 2250 | 905 | 2014 | 926 |

The growth in the number of institutions (modern medicine) and beds during the past few years is given in Table 10.13.

TABLE—10.13

Growth in the Number of Medical Institutions and Beds in Kerala

| <i>Year</i> | <i>Number of Institutions</i> | | <i>Number of Beds</i> |
|-------------|-------------------------------|-----|-----------------------|
| 1957-58 | .. | 363 | 11954 |
| 1958-59 | .. | 382 | 12352 |
| 1959-60 | .. | 390 | 12810 |
| 1960-61 | .. | 397 | 13978 |
| 1961-62 | .. | 422 | 14108 |
| 1962-63 | .. | 437 | 15753 |

10.23. A population of 40000 is served by one institution. According to the norm suggested by the Health Survey and Planning Committee of the Government of India at least one hospital bed should be available per 1000 of population. The present availability is 0.89 bed per 1000 of population. The availability of beds per lakh of population was highest in Trivandrum District and lowest in Kottayam District (vide Table 10.14.)

TABLE—10.14

Number of Beds available per lakh of population in the Districts of Kerala (1962-63)

| <i>District</i> | <i>Total Number of Beds</i> | | <i>Population (Lakhs)</i> | <i>Number of Beds available per lakh of population</i> |
|-----------------|-----------------------------|-------|---------------------------|--|
| Trivandrum | .. | 3700 | 18.3 | 202 |
| Quilon | .. | 992 | 20.4 | 49 |
| Alleppey | .. | 1966 | 19.0 | 103 |
| Kottayam | .. | 851 | 18.3 | 46 |
| Ernakulam | .. | 2149 | 19.5 | 110 |
| Trichur | .. | 2250 | 17.2 | 131 |
| Palghat | .. | 905 | 18.6 | 49 |
| Kozhikode | .. | 2014 | 27.5 | 73 |
| Cannanore | .. | 926 | 18.6 | 50 |
| Kerala | .. | 15753 | 177.4 | 89 |

10.24. A comparative picture of the institutional facilities in some of the Indian States as at the end of the Second Five Year Plan period is given in Table 10.15.

TABLE—10.15
Medical Institutions in States 1960-61

| <i>Name of State</i> | <i>Number of Hospitals</i> | <i>Number of Dispensaries</i> | <i>Number of Beds</i> |
|----------------------|----------------------------|-------------------------------|-----------------------|
| Andhra Pradesh .. | 397 | 601 | 19345 |
| Assam .. | 51 | 651 | 3499 |
| Gujarat .. | 399 | 866 | 8002 |
| Kerala .. | 180 | 217 | 13978 |
| Madhya Pradesh .. | 189 | 459 | 14005 |
| Madras .. | 367 | 564 | 24063 |
| Maharashtra .. | .. | 1185* | 14504 |
| Mysore .. | 186 | 732 | 13786 |
| Orissa .. | 155 | 228 | N.A. |
| Punjab .. | .. | 842* | 13270 |
| Rajasthan .. | 253 | 226 | 7962 |
| West Bengal .. | 1321† | 591 | 27611 |

* Includes hospitals and dispensaries

† Hospitals, health centres and clinics

The per capita availability of beds was highest in Kerala, closely followed by West Bengal and Madras.

10.25. Ayurvedic system of medicine and Homoeopathic system are being given due encouragement. The district-wise distribution of Ayurvedic Hospitals and Dispensaries in the State during 1962-63 is given in Table 10.16.

TABLE—10.16
District-wise Distribution of Ayurveda Hospitals and Dispensaries during 1962-63.

| <i>District</i> | <i>Number of Hospitals</i> | <i>Number of Beds</i> | <i>Number of Dispensaries</i> | <i>Number of patients treated in Hospitals & Dispensaries</i> |
|-----------------|----------------------------|-----------------------|-------------------------------|---|
| Trivandrum | 17 | 344 | 16 | 527383 |
| Quilon | 3 | 40 | 23 | 380876 |
| Alleppey | 5 | 50 | 25 | 380028 |
| Kottayam | 4 | 50 | 15 | 244007 |
| Ernakulam | 6 | 74 | 25 | 1292213 |
| Trichur | 8 | 103 | 41 | 1062562 |
| Palghat | 4 | 50 | 21 | 587762 |
| Kozhikode | 2 | 20 | 17 | 578996 |
| Cannanore | 3 | 30 | 16 | 482165 |
| Total | 42 | 761 | 199 | 5535992 |

10.26. The present availability of medical personnel cannot be considered to be adequate in any way to cater to the needs of the people. As pointed out elsewhere in this review, there are 4 medical colleges for modern medicine in the State with an annual intake capacity of about 400 students. The two Government Ayurveda Colleges at Trivandrum and Trippunithurai and three other Colleges in the private sector provide facilities for training in the Indigenous system of medicine. Every year 50 are admitted for training in the degree course and 240 for the diploma course for physicians.

10.27. Though the average number of medical practitioners (Graduates and licentiates) per unit of population is lower in the State when compared to India as a whole, this has been increasing steadily during the past few years.

10.28. Low nutritional diet is a common feature of a vast number of the households in the State. Consumption of foods like milk of nutritional value is the lowest in Kerala (except perhaps Orissa) when compared to other States.

10.29. The high rate of growth of population in the State, mentioned earlier, is the result of the high birth rate and relatively low death rate. Family Planning measures have been taken by the State administration with a view to assist in the control of population growth.

10.30. Towards the close of 1955, there were only 10 family planning clinics in the State. In 1963 the number of clinics stood at 351 consisting of 238 centres attached to Government hospitals, 93 in panchayats and 20 run by private agencies. Facilities for sterilisation are available in all the major hospitals of the State. Table 10.17 shows the number of persons who have visited the clinics during the past few years.

TABLE—10.17
Number of persons visiting family planning clinics

| <i>Year</i> | <i>Number of visitors</i> | <i>Number of persons who made revisits</i> |
|-------------|---------------------------|--|
| 1959-60 .. | 106360 | 24784 |
| 1960-61 .. | 161246 | 32904 |
| 1961-62 .. | 263208 | 65956 |

Source: Administration Report of the Department of Health Services : 4/632

The details of sterilisation operations conducted so far in the State are given in Table 10.18.

TABLE—10.18
Sterilisation operation conducted in Kerala

| <i>Year</i> | <i>Male</i> | <i>Female</i> | <i>Total</i> |
|--------------------------|-------------|---------------|--------------|
| Upto March 1962 .. | 11824 | 6928 | 18752 |
| 1962-63 .. | 3901 | 2847 | 6748 |
| 1963-64 (upto July 1963) | 2436 | 885 | 3321 |
| Total .. | 18161 | 10660 | 28821 |

10.31. Sterilisation is a permanent method of birth control and is thus advocated as the best suited for the low income couples of Kerala. This has yet to gain adequate popularity with the people. The other methods require better living conditions and knowledge on the part of the users. The sterilisations conducted so far are found to be mostly for couples with more than 4 children.

WATER SUPPLY AND SANITATION

10.32. This section reviews the social amenities provided by the Government by way of protected water supply and other sanitary facilities during the Third Plan period. The Public Health Engineering Department of the State undertakes the work coming under these heads. Though the whole work of this Department comes under the main head of social development, in the context of planning, it has been broadly divided into plan schemes and non-plan schemes. The salient achievements in this field as a whole are examined.

10.33. The Water Supply Schemes are divided into urban water supply and rural water supply schemes. By the end of the second plan there were five urban water supply schemes (Quilon, Kottayam, Ernakulam, Trichur and Palghat) which, owing to non-completion, were carried over to the Third Plan. Out of these, it is expected that four schemes (Quilon, Kottayam, Trichur and Palghat) will be completed by the end of this Plan, and one scheme (Ernakulam) will have to be carried over to the next Plan.

10.34. The progress of these schemes by the end of June 1963 is briefly given below. Almost all the work connected with the water supply to Quilon town has been completed. Two hundred and thirty-five street fountains were also installed. The major works relating to Kottayam Water Supply Scheme have been finished. Some house connections were also given. The only work that remained to be completed was of the purification plant. The more important works connected with the Trichur Water Supply Scheme have also been completed. As regards the Palghat Water Supply Scheme, the construction of ground level reservoir has been finished. Erection of pump-sets was also completed. Nearly 300 house connections were given. In the Ernakulam-Mattancherry Water Supply Scheme, the main work relating to the intake well and river pump house has been completed. The construction of clarifiers and the filter house has also been finished. Site surveys for distribution are in progress.

10.35. As regards the Water Supply Scheme of Trivandrum, the total quantity of water supplied for use in the city in 1960-61 was 1510.02 million gallons, in 1961-62, 1578.23 million gallons and in 1962-63, 1688.62 million gallons. Table 10.19 gives the progress, under major heads, of the working of the Wellington Water Works, Trivandrum, for the three years 1960-61 to 1962-63.

TABLE—10.19

| <i>Item</i> | 1960-61 | 1961-62 | 1962-63 |
|--|---------|---------|---------|
| 1. Quantity of water supplied (million gallons) .. | 1510.02 | 1578.23 | 1688.62 |
| 2. New meters provided (No.) .. | 778 | 640 | 698 |
| 3. Total length of pipe lines laid (ft.) .. | 12083 | 9558 | 21735 |
| 4. Expenditure incurred (Rs. lakhs) .. | 5.62 | 6.80 | 6.74 |

TABLE—10.20

| Sl. No. | Name of the Scheme | Area to be covered | Population to be benefited | Total estimated Cost | Expenditure up to the end of 2nd Plan | Expenditure during the 3rd Plan upto 31-12-1963 | Total cumulative expenditure |
|-------------------------------------|---|--------------------|----------------------------|----------------------|---------------------------------------|---|------------------------------|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| I. URBAN WATER SUPPLY SCHEME | | | | | | | |
| 1 | Quilon Water Supply Scheme | Quilon town | .91 | 133 | 71.15 | 23.45 | 94.60 |
| 2 | Kottayam Water Supply Scheme | Kottayam town | .53 | 78.05 | 38.60 | 14.36 | 52.96 |
| 3 | Trichur Water Supply Scheme | Trichur town | .73 | 88.59 | 76.53 | 13.17 | 89.70 |
| 4 | Palghat Water Supply Scheme | Palghat town | .77 | 37.66 | 43.18 | 2.32 | 45.50 |
| 5 | Ernakulam-Mattancherry Water Supply Scheme | Ernakulam town | 2.39 | 352.00 | 112.26 | 77.24 | 189.50 |
| 6 | Ottapalam Water Supply Scheme | Ottapalam | 0.11 | 3.94 | 1.88 | 2.02 | 3.90 |
| 7 | Trivandrum Water Supply Scheme (Augmentation) | Trivandrum city | 2.40 | 332.0 | .. | 53.90 | 53.90 |
| 8 | Kozhikode Water Supply Scheme (Augmentation) | Kozhikode town | 1.94 | 269 | .. | 0.40 | 0.40 |
| 9 | Cannanore Water Supply Scheme | Cannanore town | .46 | 86 | .. | 0.05 | .05 |
| 10 | Tellicherry Water Supply Scheme | Tellicherry town | .45 | 30 | .. | 0.08 | .08 |
| 11 | Vaikom Water Supply Scheme | Vaikom town | .17 | 10.12 | .. | 2.70 | 2.70 |

TABLE—10.12—(contd.)

| <i>Sl. No.</i> | <i>Name of the Scheme</i> | <i>Area to be covered</i> | <i>Population to be benefited</i> (<i>lakhs</i>) | <i>Total estimated Cost</i> | <i>Expenditure upto the end of 2nd Plan</i> (<i>Rs. in lakhs</i>) | <i>Expenditure during the 3rd Plan upto 31-12-1963</i> | <i>Total cumulative expenditure</i> |
|--------------------------------------|---|----------------------------|---|-----------------------------|--|--|-------------------------------------|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 12 | Kayamkulam Water Supply Scheme | Kayamkulam | .45 | 10.00 | .. | 3.16 | 3.16 |
| 13 | Sherthallai Water Supply Scheme | Sherthallai | .31 | 26.00 | .. | 6.02 | 6.02 |
| 14 | Badagara Water Supply Scheme | Badagara | .44 | 53.00 | .. | 0.45 | 0.45 |
| 15 | Perumbavoor Water Supply Scheme | Perumbavoor | .16 | 7.00 | 2.00 | .. | 2.00 |
| II. RURAL WATER SUPPLY SCHEME | | | | | | | |
| | Spill Over Scheme Rural Water Supply Scheme | .. | .. | .. | 30.30 | 15.65 | 45.95 |
| III. OTHER SCHEMES | | | | | | | |
| | Swimming Pool | Trivandrum city | .. | 3.08 | .. | .. | .. |
| | Spill over Scheme Urban Drainage Scheme: | | | | | | |
| 1 | Trivandrum (B and C Block) | Trivandrum city | 2.46 | 36.9 | 25.92 | 14.88 | 40.80 |
| 2 | Ernakulam-Mattancherry | Ernakulam and Mattancherry | 2.03 | 171.23 | 16.13 | 1.57 | 17.70 |

Details of area covered by, population benefited by and expenditure incurred for these schemes till December 1963 are given in Table 10.20.

10.36 Further, nine new urban Water Supply Schemes are to be taken up and completed during the Third Plan, but since the provision for these items is meagre, they will have to be carried over to the Fourth Plan as spill over schemes. Thus, by the end of the Third Plan, 10 out of the 32 municipal towns in the State having a population of over 20000 each, will have protected water supply. Besides the spill over schemes, 12 new Water Supply Schemes are proposed to be taken up during the Fourth Plan.

10.37. Forty rural water supply schemes were carried over from the Second Plan, and 60 new ones were proposed for completion during the Third Plan. It is now expected that 40 spill over schemes and 30 out of the 60 new schemes can be completed by the end of the current plan.

10.38. As regards Sanitation Schemes, two urban drainage schemes—Trivandrum and Ernakulam—were carried over to the Third Plan. Even if the present work in Trivandrum—viz., completion of Block 'B' is finished, the sanitary needs of the entire city will not be catered to and so the sanitation work in the city will have to be taken over to the Fourth Plan also.

10.39. The length of the sewers in Trivandrum Drainage (Block 'A') by the end of 1962-1963 was 99.5 miles. The number of house connection outlets (Syphon blocks) provided in the city then was 6770 or about 20% of the total number of houses; out of this only 3644 or about 12% have been made use of by the public.

10.40. Another urban drainage work in Trivandrum city relates to the Storm Water Disposal and checking of flood havoc in the densely settled areas of the city. Almost all the work in this connection have been completed by 1962-63. The total expenditure incurred under this head during the Third Plan amounted to Rs. 4.36 lakhs.

10.41. The drainage in Ernakulam will also have to be carried over because work here has not progressed as anticipated earlier. Further, seven new schemes are proposed for towns where water supply facilities are available by the end of the current Plan.

10.42. In rural sanitation an important milestone is Environmental Sanitation Pilot Project. Every month a batch of Gramsevakas and public health personnel are being trained in the various subjects concerning health and sanitation in the Project.

10.43. The Water Supply and Sanitation Projects to be implemented in the near future are listed below:

Spill over Schemes

A. URBAN WATER SUPPLY SCHEMES

1. Trivandrum Augmentation Water Supply Scheme.
2. Ernakulam-Mattancherry Water Supply Scheme.
3. Kozhikode Water Supply Scheme.
4. Cannanore do.
5. Tellicherry do.
6. Vaikom do.
7. Kayamkulam do.
8. Sherthallai do.
9. Badagara do.
10. Perumbavoor do.

B. URBAN DRAINAGE SCHEMES

1. Ernakulam-Mattancherry Drainage Scheme.
2. Trivandrum Drainage Scheme.

C. RURAL WATER SUPPLY SCHEME

1. 30 Spill over Schemes.

New Schemes

A. URBAN WATER SUPPLY SCHEMES

1. Attingal Water Supply Scheme.
2. Neyyattinkara do.
3. Thiruvalla do.
4. Mavelikara do.

5. Changanacherry Water Supply Scheme.
6. Muvattupuzha do.
7. Parur do.
8. Irinjalakuda do.
9. Chittoor-Thathamangalam do.
10. Kunnamangalam do.
11. Palai do.
12. Alleppey do. (Augmentation)

B. URBAN DRAINAGE SCHEMES

1. Alleppey Drainage Scheme.
2. Kozhikode do.
3. Kottayam do.
4. Quilon do.
5. Trichur do.
6. Palghat do.
7. Cannanore do.

C. RURAL WATER SUPPLY SCHEMES

80 Rural Water Supply Schemes.

Welfare of Backward Classes

10.44. The scheduled tribes, scheduled castes and other backward communities form a class of people who are backward—socially, economically and educationally. According to the 1961 census, the population of scheduled tribes and scheduled castes in the various districts of Kerala was as follows (Table 10.21).

TABLE—10.21

Population of Scheduled Castes & Scheduled Tribes in Kerala

| <i>District</i> | <i>Population of Sche- duled castes</i> | <i>Percentage to total population of district</i> | <i>Population of Sche- duled tribes</i> | <i>Percentage to total population of district</i> |
|-----------------|---|---|---|---|
| Trivandrum | 161667 | 9.3 | 9939 | 0.6 |
| Quilon | 227411 | 11.7 | 2854 | 0.2 |
| Alleppey | 166707 | 9.2 | 625 | 0.03 |
| Kottayam | 158516 | 9.1 | 20822 | 1.2 |
| Ernakulam | 151151 | 8.1 | 9551 | 0.5 |
| Trichur | 163000 | 9.9 | 6575 | 0.04 |
| Palghat | 216590 | 12.2 | 20709 | 1.2 |
| Kozhikode | 134697 | 5.1 | 68299 | 2.6 |
| Cannanore | 42318 | 2.4 | 68622 | 3.9 |
| STATE | 1422057 | 8.4 | 207996 | 1.2 |

Figures are not available on the population of other backward communities.

10.45. The scheduled castes are concentrated mainly in the Palghat and Quilon districts and the scheduled tribes in the Cannanore and Kozhikode districts. A statement showing the percentage distribution of members of scheduled castes and scheduled tribes in the various states is appended. 2.20% of the total scheduled castes population of India and 0.70% of the scheduled tribes are in Kerala.

10.46. The Harijan Welfare Department is the main agency in the State responsible for work designed to raise the social, economic and educational backwardness of these classes of people.

10.47. An amount of Rs. 64.90 lakhs was spent under the First Five Year Plan for amelioration of backward communities. In the Second Five Year Plan the total outlay for Welfare of Backward Classes was Rs. 302.68 lakhs. The anticipated outlay under the Third Five Year Plan is Rs. 275 lakhs as against the original provision of Rs. 195.00 lakhs (State Plan). (Centrally Sponsored Schemes are to cost Rs. 42 lakhs during the current Plan period).

A. WELFARE OF SCHEDULED TRIBES

(i) Education

10.48. At the end of the Second Five Year Plan, the population of Scheduled Tribes in the school going age group 6-17 was 0.59 lakh. The number of scheduled tribe scholars in schools for general education was 14,738 (consisting of 9106 boys and 5632 girls) and in schools for professional and special education 24 (14 boys and 10 girls). The number of scholars thus formed 25% of the population in the school going age group 6-17. But it has to be noted that the school going age group for these tribes may be wider say 6-20. The number of scholars has increased to 15,684—15,531 in schools for general education and 153 in schools for professional and special education—in 1961-62.

10.49. In the Second Five Year Plan period, though 120 tribal schools were planned to be opened only 82 were actually opened. The number of tribal schools at the end of the Second Five Year Plan was 92. There are at present 98 schools. During the first two years of the Third Plan ten tribal schools were converted into residential basic schools. 3 tribal schools are proposed to be converted in 1963-64.

10.50. The number of students belonging to scheduled tribes in schools for general education who were in receipt of scholarships and other financial concessions during 1960-61 were 7093 boys and 4545 girls. In 1961-62, the number of beneficiaries in the schools for general education were 7564 boys and 4780 girls. Besides the above, students pursuing vocational studies were also given educational concession. Including such students the total number of students of the scheduled tribes who were in receipt of educational concessions in 1961-62 was 16,571. In 1962-63, the corresponding number was 15,789. The actual outlay under the Plan on account of scholarships, stipends etc., for scheduled tribe students during 1961-62 and 1962-63 was Rs. 1.33 lakhs and Rs. 1.41 lakhs respectively. An outlay of Rs. 1.40 lakhs is anticipated for 1963-64.

10.51. Another item of plan expenditure for education of scheduled tribes is boarding grants. The number of students given boarding grants during 1961-62, 1962-63 and 1963-64 was 163, 120 and 143 respectively.

(ii) Economic Uplift

10.52. The organisation of Model Training Centres and co-operatives and the award of grants for purchase of agricultural implements are the main items under schemes of economic uplift of scheduled tribes.

10.53. During the Third Five Year Plan period it is proposed to continue the 15 model training centres at an estimated cost of Rs. 3.65 lakhs. These centres are intended to give training in crafts to the members of the scheduled tribes. Stipends at the rate of Rs. 25 p.m. is paid to each trainee. The expenditure

on this account during the first two years of the Plan was Rs. 0.79 lakh and Rs. 0.38 lakh, respectively.

10.54. Organisation of co-operative societies for the benefit of the scheduled tribes is undertaken as a part of the scheme for economic uplift of the tribes. During the Second Five Year Plan period 13 societies were organised as against the target of 24. The target set for the Third Plan period is 20 societies. But it is seen that no new co-operative society has been organised yet.

(iii) Health, Housing and Other Schemes

10.55. Provision of water supply and mobile medical units, construction of houses, establishment of colonies and settlements and provision of house sites are some of the other measures taken up by the Harijan Welfare Department for bettering the lot of the scheduled tribes. These schemes have special significance in view of the unhygienic condition under which most of these tribal peoples live.

10.56. In the Second Five Year Plan period the target was to provide 60 wells for supply of drinking water. But only 26 could be completed during the period. During the Third Plan period water supply arrangements for 15 settlements are proposed to be completed at a cost of Rs. 2.19 lakhs. During the first year work was started in 3 settlements but was not completed during the year. Only Rs. 5,600 was spent on the account. In the second year water supply scheme in one settlement was fully completed and in another partially. The expenditure incurred was Rs. 18,400. It is doubtful whether the target fixed will be fulfilled.

10.57. During the Second Five Year Plan two mobile medical units were established for the benefit of the scheduled tribes. These units are to continue during the Third Plan period. In addition, 10 dispensaries are to be opened during the period. The target of 2 dispensaries for the first year was achieved. During the second year also 2 dispensaries were started.

10.58. Provision of proper shelter to the scheduled tribe families should find a foremost place in schemes for uplift of the tribes. During the Second Plan period 849 houses were constructed for the use of scheduled tribe families, against the target of 859. In the Third Plan period a target of 560 houses has been proposed. During the first two years 46 houses were completed and work on 159 houses were in progress. The progress in the implementation of the scheme is thus not satisfactory in terms of physical targets. As regards financial targets, it appears that the original plan provision of Rs. 5.93 lakhs may be exceeded by about Rs. 1.32 lakhs.

B. WELFARE OF SCHEDULED CASTES

(i) Education

10.59. The population of scheduled castes in the usual school going age group 6-17 at the end of the Second Five Year Plan was estimated at 4.02 lakhs. For backward communities the school going age group may be wider. The age group 6-20 may be considered. The population in the age group 6-20 was 5.00 lakhs. There were 314121 students (176481 boys and 137640 girls) reported as belonging to scheduled castes in schools for general education in 1960-61. There were another 1588 scholars (1010 boys and 578 girls) in schools for professional and special education. The number of scholars thus constituted 62.8% of the population in the age group 6-20. In 1961-62, the number of scholars in schools for general education increased to 335410 (186081 boys and 149329 girls). There was also an increase in the number of scholars in schools for professional and special education, the number of scholars in 1961-62 being 2125 (1331 boys and 794 girls).

10.60. An amount of Rs. 29.09 lakhs was disbursed to about 2.65 lakhs of students belonging to scheduled castes in schools for general education. The *per capita* grant was thus about Rs.10.98. In 1961-62 also there were an equal number of beneficiaries and the *per capita* grant was almost the same.

10.61. Educational concessions were reported to be given, in all, to about 3.21 lakhs students in 1961-62 and 3.75 lakhs students in 1962-63.

10.62 Boarding grants are given to scheduled caste students residing in recognised hostels. A provision of Rs. 3.65 lakhs has been included in the Third Plan for the purpose. The number of beneficiaries was 502 in 1961-62 and 535 in 1962-63. The number of scheduled caste students in approved hostels during 1961-62 was 2080 as reported by the schools for general and professional education.

10.63 During the second Plan period 3 hostels were started for the scheduled caste students. These hostels are continued during the Third Plan period. Three more hostels are proposed to be provided during the current Plan period. Of these one has already been completed. Another is to be put up at Palghat during the current year.

(ii) Economic Uplift

10.64 As in the case of scheduled tribes schemes under economic uplift include provision of Industrial Training Centres, organisation of Co-operative Societies and grants for agricultural development. 15 Industrial Training Centres are being run for the benefit of scheduled castes. Stipends are given to the trainees. The number of Co-operative Societies organised for the benefit of scheduled castes during the Third Plan period was 32, against the target of 50. The target for the Third Plan period is also 50. The number of new societies organised during the first two years of the Plan is 11. Grants are given to scheduled castes families for purchase of agricultural implements, seeds etc. The number of beneficiary families during the first two years of the Plan was nil.

(iii) Health, Housing and Other Schemes

10.65 Drinking water supply facilities have to be provided in the centres where scheduled caste families are concentrated. Against a target of 100 wells

in the Second Five Year Plan, only 68 wells were completed. The target set for the Third Plan period is construction of 250 wells. The anticipated expenditure for a well is about Rs. 1,500 and a provision of Rs. 3.65 lakhs has been made in the Third Plan for the purpose. The progress made in respect of this items is not satisfactory.

10.66. In regard to the provision of house sites for the scheduled caste families, the performance is poor. In the Second Plan period against the target of acquiring 6500 house sites only 1160 could be acquired. The target of 12500 house-sites set for the Third Plan period thus appears to be too ambitious. The estimated achievement during the period is only 3496 house sites. The provision made originally for acquiring 12500 house sites was only Rs. 14.60 lakhs. Even for acquiring 3496 house sites an investment of Rs. 18.44 lakhs is expected to be necessary. The average cost per acquisition of an acre of land was Rs. 6,000 in 1961-62 and Rs. 4,500 in 1962-63.

10.67. A provision of Rs. 29.93 lakhs is included in the Third Plan for assisting 3320 families in the construction of houses. On the basis of the performance so far, it is felt that only half the target will be achieved in physical terms, though the achievement will be 70% in financial terms.

C. WELFARE OF OTHER BACKWARD COMMUNITIES

10.68. In regard to members of other backward communities, poor students belonging to these communities and converts to christianity from scheduled castes and scheduled tribes are given fee concessions for all courses of studies. Boarding grants are given to students residing in hostels approved by the Harijan Welfare Department.

10.69 The non-plan expenditure on the account for 1961-62 and 1962-63 was Rs. 14.97 lakhs and Rs. 17.32 lakhs respectively. The Plan expenditure for the years was Rs. 0.27 lakh and Rs. 1.28 lakhs respectively.

D. HIGHER EDUCATION FOR SCHEDULED CASTES AND SCHEDULED TRIBES ETC.

10.70. The number of scholars belonging to scheduled tribes, scheduled castes and other backward classes in Arts and Science Colleges was 8444 in 1961-62 (consisting of 6359 boys and 2085 girls). The number of scholars in colleges for professional and special education during the same year was 1812 (1617 boys and 195 girls). Including the post-matric students in schools for professional and special education the total number of scholars was 13066 (10675 boys and 2391 girls) in 1961-62.

E. UNEMPLOYMENT POSITION

10.71. No separate study on the unemployment position of the scheduled castes and scheduled tribes has been made. The registrations in the employment exchanges can be treated as indicative of the extent of unemployment. The number of registrants belonging to scheduled castes in Employment Exchanges in 1960-61 was 5026.

10.72. In the first nine months of 1962-63, the number of registrants was 4873. The number of placings of registrants belonging to scheduled castes in 1960-61 was 650, whereas in the first nine months of 1962-63 only 319 applicants could be placed in employment. The number of scheduled caste registrants in the live register increased from 8989 at the end of June 1961 to 11121 at the end of June 1963. As regards scheduled tribes, the number of registration during 1960-61 was 260. In the first nine months of 1962-63, 156 persons were registered in the employment exchanges. The placings during the two periods were 73 and 41 respectively. The number on the live register at the end of June 1963 was 599 as against 667 at the end of June 1961.

APPENDIX
Distribution of Scheduled Castes and Scheduled Tribes in the Various States (According to 1961 Census)

| <i>State</i> | <i>Scheduled Castes</i> | | | <i>Scheduled Tribes</i> | | |
|-----------------------------------|---------------------------|--|--|---------------------------|--|--|
| | <i>No. (in lakhs)</i> | <i>Percentage to total population of State</i> | <i>Percentage distribution of scheduled castes in various States</i> | <i>No. (in lakhs)</i> | <i>Percentage to total population of State</i> | <i>Percentage distribution of scheduled tribes in various States</i> |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| India | 645.11 | 14.71 | 100 | 298.33 | 6.81 | 100 |
| Andhra Pradesh | 49.74 | 13.82 | 7.71 | 13.24 | 3.68 | 4.43 |
| Assam | 7.33 | 6.17 | 1.14 | 20.68 | 17.42 | 6.92 |
| Bihar | 65.37 | 14.07 | 10.13 | 42.05 | 9.05 | 14.07 |
| Gujarat | 13.67 | 6.63 | 2.12 | 27.54 | 13.35 | 9.22 |
| Jammu & Kashmir | 2.68 | 7.54 | 0.42 | .. | .. | .. |
| Kerala | 14.22 | 8.41 | 2.20 | 2.08 | 1.23 | 0.70 |
| Madhya Pradesh | 42.53 | 13.14 | 6.59 | 66.78 | 20.63 | 22.35 |
| Madras | 60.72 | 18.03 | 9.41 | 2.53 | 0.75 | 0.85 |
| Maharashtra | 22.27 | 5.63 | 3.45 | 23.97 | 6.06 | 8.02 |
| Mysore | 31.17 | 13.22 | 4.83 | 1.92 | 0.81 | 0.64 |
| Orissa | 27.64 | 15.75 | 4.28 | 42.24 | 24.07 | 14.13 |
| Punjab | 41.39 | 20.38 | 6.42 | 0.14 | 0.07 | 0.05 |
| Rajasthan | 33.60 | 16.67 | 5.21 | 23.09 | 11.46 | 7.73 |
| Uttar Pradesh | 154.17 | 20.91 | 23.90 | .. | .. | .. |
| West Bengal | 69.51 | 19.90 | 10.78 | 20.64 | 5.91 | 6.91 |
| Union Territories and other areas | 9.10 | 12.84 | 1.41 | 11.93 | 3.98 | 16.82 |

CHAPTER XI

EMPLOYMENT SITUATION

The prevalence of widespread unemployment in the State is the outcome of a number of factors like high rate of population growth, extremely high density, low worker participation rate and excessive pressure on land. An analysis of sectoral distribution of the workforce indicates that the proportion of workers in the primary agricultural sector is low as compared to that in the other southern States and in India as a whole. This is mainly due to the fact that there is little additional land for cultivation purposes. Agriculture has gone beyond the saturation level. The percentage increase in employment in the primary sector was only a meagre 7.8% during the decade 1951-61, while in India as a whole it was more than four times that in Kerala. The secondary sector has also made little progress in Kerala, for Kerala's industry is characterised by units employing very little capital and having little growth potential. The secondary sector has only an unimpressive growth during the plan decade 1951-61. During 1951-61 the increase in employment was only 22% in this sector as against 57% for all India. The lack of opportunities for employment both in the primary and secondary sectors has contributed to the swelling up of the ranks of tertiary sector. The flow of labour to the tertiary sector is common to most of the developed economies. The flow to tertiary sector in Kerala is not very much the result of economic advancement, but the direct outcome of an overcrowded primary sector and a rudimentary secondary sector.

11.2. The existing data are inadequate for building up a sufficiently detailed picture of the state of employment in this State. Detailed statistics on the unemployment situation are not available, except those from the few sample surveys conducted by the Statistics Department. An appraisal of the unemployment problem on the basis of the sample

survey conducted in January-February 1962 shows that 7.60 lakhs are unemployed of the total labour force of 54.76 lakhs. The unemployed constitute 14% of the labour force. Further, about 1.28 lakh persons are reported to be available for employment among persons outside the labour force. Thus the unemployment figure is of the order of 8.88 lakhs. Besides, about 2.72 lakh house-workers are available for work, provided suitable jobs exist. The survey results also show that about 19 lakh persons are under-employed.

11.3. The Employment Exchanges in the State are performing employment service activities by assisting employers to find suitable workers and the employment seekers to find the jobs best suited to their qualifications, experience and tastes, as rapidly as possible. The statistics of registrations and placings serve as an indicator of the employment situation. But beyond recording the trends, the live registers do not provide a correct indication of the level of unemployment.

11.4. Table 11.1 gives the number on the live Register at the end of June 1963, state-wise. The size of live register in Kerala is rather bulky compared to most other States.

TABLE—11.1

Working of Employment Exchanges in Kerala and Other Indian States

| <i>Name of State</i> | <i>No. on the Live Register as on 30th June 1963</i> |
|----------------------|--|
| 1. Andhra Pradesh | 130075 |
| 2. Assam | 48618 |
| 3. Bihar | 184272 |
| 4. Gujarat | 83653 |
| 5. Jammu and Kashmir | 7288 |
| 6. Kerala | 199485 |
| 7. Madhya Pradesh | 137311 |
| 8. Madras | 207739 |
| 9. Maharashtra | 268167 |
| 10. Mysore | 111289 |
| 11. Orissa | 77011 |
| 12. Punjab | 95240 |
| 13. Rajasthan | 58399 |
| 14. Uttar Pradesh | 471826 |
| 15. West Bengal | 493034 |

11.5. The Employment Exchange data on placings and registrations in 1963 indicate that during 1963, the number of placings and registrations decreased by 3.4% and 6.5% from the corresponding figures for 1962. During the same year, the number of employers using the Exchanges increased to 366 from 323 in 1962. (Table 11.2).

TABLE—11.2
Employment Exchange data on placings and registrations

| | 1961 | 1962 | 1963 |
|---|---------|---------|---------|
| 1. Number of Registrations | 105,885 | 151,883 | 141,878 |
| 2. Number of Placings | 14,526 | 18,822 | 18,187 |
| 3. Average number of employers using the Exchange | 238 | 323 | 366 |

The occupational distribution of the Live Register at the end of December 1962 and December 1963 is presented in Table 11.3.

TABLE—11.3
Occupational distribution of the Live Register

| Sl. | Occupational division | December 1962 | | December 1963 | |
|-------|--|---------------|-------|---------------|-------|
| | | No. | % | No. | % |
| 1 | Professional, technical and related workers | 15319 | 7.6 | 9974 | 7.8 |
| 2 | Administrative, executive and managerial workers | 283 | 0.1 | 173 | 0.1 |
| 3 | Clerical and related workers | 13673 | 6.8 | 3970 | 3.1 |
| 4 | Sales workers | 58 | 0.0 | 17 | 0.0 |
| 5 | Farmers, fishermen, hunters, loggers and related workers | 1836 | 0.9 | 682 | 0.5 |
| 6 | Miners, quarrymen and related workers | 133 | 0.1 | 41 | 0.0 |
| 7 | Workers in transport and communications | 5368 | 2.7 | 3549 | 2.8 |
| 8 | Craftsmen, production process workers and labourers not elsewhere classified | 23466 | 11.6 | 11061 | 8.6 |
| 9 | Service, sport and recreation workers | 11218 | 5.6 | 6160 | 4.8 |
| 10 | Workers not elsewhere classified by occupations | 130456 | 64.6 | 92917 | 72.3 |
| Total | | 201810 | 100.0 | 128544 | 100.0 |

Table 11.4 provides the statewise estimated employment in the public sector upto the end of June 1963.

TABLE—11.4

Employment in the Public Sector as on 30th June 1963

(Figures in thousands)

| | <i>Central Govern- ment</i> | <i>State Govern- ment</i> | <i>Quasi Govern- ment</i> | <i>Local bodies</i> | <i>Total</i> |
|-----------------------|-------------------------------------|-----------------------------------|-----------------------------------|-------------------------|--------------|
| 1 Andhra Pradesh | 132.5 | 232.8 | 66.5 | 156.2 | 588.0 |
| 2. Assam | 56.2 | 97.4 | 32.1 | 13.6 | 199.3 |
| 3. Bihar | 161.5 | 240.1 | 117.4 | 119.6 | 638.6 |
| 4. Gujarat | 96.3 | 99.4 | 54.7 | 124.5 | 374.9 |
| 5. Kerala | 38.2 | 157.6 | 24.0 | 11.0 | 230.8 |
| 6. Madhya Pradesh | 140.3 | 311.6 | 88.9 | 69.9 | 610.7 |
| 7. Madras | 181.6 | 249.3 | 117.5 | 158.2 | 706.6 |
| 8. Maharashtra | 359.5 | 235.4 | 110.5 | 288.2 | 993.6 |
| 9. Mysore | 77.4 | 199.1 | 105.7 | 42.3 | 424.5 |
| 10. Orissa | 47.8 | 146.8 | 46.3 | 18.7 | 259.6 |
| 11. Punjab | 74.3 | 262.4 | 31.4 | 30.1 | 398.2 |
| 12. Rajasthan | 115.5 | 176.9 | 18.3 | 53.8 | 364.5 |
| 13. Uttar Pradesh | 352.4 | 476.0 | 36.5 | 221.9 | 1086.8 |
| 14. West Bengal | 355.2 | 206.7 | 173.1 | 69.9 | 804.9 |
| 15. Union Territories | 159.7 | 110.0 | 32.8 | 79.6 | 382.1 |
| Total | 2348.4 | 3201.5 | 1055.7 | 1457.5 | 8063.1 |

11.6. As regards the employment in the public sector in Kerala the total number of employees increased to 2.37 lakhs (as on 30-9-1963) from 2.25 lakhs (as on 30-9-1962). The indices of employment in Table 11.5 signify that the private sector employment has been receding and the public sector employment maintains an upward trend. The combined index shows that as a whole the level of employment in 1963 increased to 106.8 from 105.1 in 1962.

TABLE—11.5

Indices of Employment (Base 31-3-1961=100)

| <i>Period</i> | <i>* Private sector</i> | <i>Public sector</i> | <i>Combined</i> |
|----------------------------------|-------------------------|----------------------|-----------------|
| For the quarter ending 30-9 1961 | 101.6 | 105.0 | 102.8 |
| Do. 30-9-1962 | 101.3 | 111.6 | 105.1 |
| Do. 30-9-1963 | 100.3 | 118.2 | 106.8 |

[(*Covers all establishments employing 10 and above persons in the non-agricultural sector (except plantations) according to the broad classifications- (1) Mining and Quarrying, (2) Manufacturing, (3) Construction, (4) Electricity, gas, water and sanitary services (5) Trade and Commerce, (6) Transport, storage and communications, (7) Services and (8) Plantations.]

CHAPTER XII

THE ECONOMY IN RETROSPECT

The State's agriculture fared well during 1962-63. There was considerable increase over the year in the net area sown as well as the total cropped area. While the net area sown increased by 1.91 lakh acres the total cropped area increased by 2.61 lakh acres, thereby indicating an expansion in the multi-cropped area.

12.2. Almost all the important crops registered sizable increases in production during 1962-63. Rice production increased from 9.88 lakh tons in 1961-62 to 10.76 lakh tons in 1962-63. Coconut which claims the biggest share in the State's agricultural income registered an increase of 58 million nuts compared to the previous year. Other crops like banana, arecanuts, cashewnuts and sugarcane also recorded remarkable rise in output during the year. The rise was most pronounced in the case of banana which recorded an increase in production of almost 40%, from 55 thousand tons in 1961-62 to 76 thousand tons in 1962-63. This is a particularly welcome trend in view of the expanding foreign market for the commodity. The production of arecanuts increased by as much as 221 million nuts and that of cashew nuts by more than 6 thousand tons.

12.3. Among the plantation crops rubber stands first in the matter of increased output. Its production increased by about 16% compared to 1961-62. The production of tea and coffee also increased, but the percentage increase was small viz., about 2.1% and 2.4% respectively. Rubber is an important industrial raw material whose production in the country is much short of demand. Our State has a special responsibility in wiping out the deficit since Kerala accounts for more than 90% of the country's output of natural rubber. The high rate of increase in rubber production is, therefore, in the interests both of the State and the nation at large.

12.4. In this general picture which is quite bright, there are certain dim spots which should be taken as a note of warning and a challenge. We are losing ground as it were in the export trade of some of our traditional export commodities like pepper and ginger. Pepper is already facing keen competition from other producers like Sarawak and Malaya. The consequent fall in price is acting as a disincentive against increased production of the crop with the result that the production of pepper is falling in spite of all the development efforts. As a matter of course the problem can be solved only by maximising the productivity per acre and thus improving our capacity to compete. There is great scope for stepping up the average yield per acre through the adoption of scientific methods of production. The Government through the Agriculture Department is rendering all possible aids for this purpose. The situation is more or less similar in the case of crops like ginger, turmeric and cardamom.

12.5. The increased production in the major crops resulted in an increase in the gross agricultural output. The index number of agricultural production (base 1956-57=100) rose from 108.4 in 1961-62 to 111.0 in 1962-63, recording an increase of 2.4% over the year.

12.6. Though animal husbandry is one of the most backward sectors of the State's economy, the progress in the development of this sector in recent years has been quite satisfactory. The total milk production as well as the average milk yield of animals has increased considerably between 1956 and 1961. The total production is estimated to have increased from about 55 lakh Mds. in 1956 to 89 lakh Mds. in 1961.

12.7. Marine fish production in the State reached a peak level of about 4 lakh metric tons in 1960-61 owing to unusually large landings of sardines in the year. Non-recurrence of such large shoals resulted in a steep fall in the output of fish to 2.57 lakh metric tons in 1961-62. The 1962-63 season proved to be still worse with a smaller catch of 2.11 lakh metric tons for the year.

12.8. Our forest revenues have been increasing steadily. Expenditure also has been on the increase but gross revenue increased at a faster rate with the result that there has been steady rise in net revenue. In 1957-58, the first financial year after the formation of Kerala, the gross revenue from forests was Rs. 2.93 crores and net revenue Rs. 2.15 crores. By 1962-63 the gross revenue rose to Rs. 4.80 crores and the net revenue to Rs. 3.59 crores. The steadily rising returns from forests is the result of a continuous increase in the out turn of almost all the major forest products like timber, softwood and firewood. The rising trend in the prices of many of the items has also contributed to the rise in revenues.

12.9. Food position in the State continued to be satisfactory during 1963. The internal production of rice was higher in 1962-63 by 88 thousand tons compared to the previous year and there was no serious bottleneck to the supply from outside the State. The only untoward occurrence that threatened to disturb the smooth food situation during the year was a sharp, but short-lived rise in the price of rice during November-December 1963 which was soon curbed by the timely action of the State Government.

12.10. The co-operative movement has made considerable progress. Government are paying increasing attention to both the credit and service activities of village co-operatives. Much progress was made in the development of consumers' co-operatives which had assumed greater importance with the declaration of National Emergency. Wholesale stores were opened in all the district headquarters in the State. More primary consumer stores are being set up with a view to holding the price line and preventing the evils of adulteration in food products. The Kerala Co-operative Central Land Mortgage Bank's floatation of its Rs. 75 lakhs—II series 15 years rural debentures—will step up the availability of the funds needed for long term and permanent improvements in agriculture. Of the two co-operative Sugar Mills in the State, one is well nearing completion of construction, while the other has gone into production recently.

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12.11. Compared to the last few months of 1962 the working class cost of living indices in Kerala showed a falling tendency at the beginning of 1963. All through the year 1963 the Kerala indices were steadily rising except for a set-back in March. In 1963 the maximum rise was obtained in December in all the centres while in 1962, maximum rise was recorded in most of the centres in the month of November. Between January and November the indices rose by 7.7%. Among the different centres in the State the rise in cost of living was pronounced in Quilon, Trichur, Kozhikode and Shertallai and the index numbers rose by 9.58%, 9.31%, 9.11% and 8.96% respectively. In Munnar the indices rose by only 3.83% while in Trivandrum and Punalur they recorded an increase of 4.55% and 6.26% respectively. Compared to 1962 the rise in the indices was higher in all the centres except Trivandrum. Moreover the rise in consumer prices was higher in Kerala than in India as a whole. The rise in the consumer price indices in Kerala in 1963 over 1962 was comparatively higher than that in all India.

12.12. The price situation in the State as measured by the wholesale price indices of agricultural commodities indicates that the beginning of 1963 marked a slowing down in the general price level which lasted till April. The index (base 1952-53=100) of 123 in April suddenly moved upto 126 in May and again to 135 in December though a slight setback was noticed in July and August. Between January and December 1963 the wholesale price indices of food crops registered an increase of 17.3% while those of non-food crops moved down by 1.4%. However, the price indices indicate that during 1963 the rise in prices was not so steep as in the previous year when the wholesale price indices reached a record level of 144 in May. The pressure of prices during 1963 was largely accounted for by food articles, the most important among them being rice. The first quarter of the year witnessed a sharp fall in rice prices but the indices steadily went up thereafter though a falling tendency was noticed in October. Rice price indices (1952-53=100) which stood at 120

in January fell to 112 in March but shot up to 141 in December having registered an increase of 25.9% between March and December. Compared to the beginning of the year the rise was 17.5%. Retail prices of rice also followed a steadily rising trend in most centres from March onwards. Rice prices have registered a fall in January 1964 compared to December 1963.

12.13. Retail prices of some commodities showed a rising trend during the year. Prices of chillies, sugar, coconut oil, black gram etc. were higher in 1963 over the previous year. Coconut oil prices followed a more or less irregular trend; but the second part of the year witnessed a general rise in the prices of this commodity. Sugar prices were steadily going up from January to April.

12.14. The production of sugar, commercial plywood, dipped rubber goods, cement and sanitary wares showed improvement in 1962 over 1961. Increase in sugar production was of the order of 15%. The production of such items as vegetable oils, cotton, coffee and tea however showed a fall in 1962 compared to the previous year. The decrease is more pronounced in the production of coffee which fell by 42.27%. The production of sugar, soap, vegetable, coffee and tea during the first six months of 1963 was 10054 tonnes, 6703 tonnes, 899 tonnes, 8538 tonnes and 20472 k.gms. respectively.

12.15. The total factory employment in Kerala increased from 1.71 lakhs in December 1961 to 1.75 lakhs in December 1962 and to 1.77 lakhs in June 1963. The increase in employment in 1963 is mainly attributable to the growth of workforce in cashew factories.

12.16. The number of factories increased from 2573 in 1962 to 2600 in 1963. Though 230 factory units were opened during 1963, 203 factories were closed during the period. Cotton textiles stand prominent both as regards the number of additional units opened and the number of units cancelled.

There was a considerable reduction in the number of coir factories during the year.

12.17. Since the declaration of the National Emergency, the labour-management relations in the State have shown a marked improvement. The man-days lost during the period November 1962 to October 1963 compared to the previous corresponding period shows that there is a growing awareness both among labour and management that they should solve differences peacefully and through voluntary methods and not resort to strikes or strife. The following figures clearly speak for themselves.

| <i>Period</i> | <i>No. of strikes</i> | <i>No. of workers affected</i> | <i>Mandays lost</i> |
|----------------------------|-----------------------|------------------------------------|-------------------------|
| November 1961—October 1962 | 461 | 1,40,336 | 21,31,895 |
| November 1962—October 1963 | 113 | 30,726 | 1,99,895 |

Further the Emergency Production Committees formed in various industries are taking measures to set up production and productivity. The Industrial Relations Committees constituted for different industries and the Industrial Relations Board are also engaged in ironing out differences and thus enlarging the area of industrial peace and furthering industrial relations.

12.18. In the sphere of mineral production it is found that there is a considerable fall in the production of ilmenite. As against a production of ilmenite of 138,006 tonnes in 1962 it was 23,650 tonnes in the corresponding period of 1963. This poor performance is the result of a dwindling export market for the product. The production of china clay is maintaining an increasing trend.

12.19. Power programmes have all along received high priority in the State Plans. The present position of shortage will be relieved with the commissioning of new projects which are under construction. The Madras Government has been good enough

to release from the Madras Grid 21,000 K.W. of power for use in the State during the night. As the State's industrialisation hinges on power development great attention has to be bestowed on power development. The installed generating capacity of the five power stations of Pallivasal, Sengulam, Peringalkuthu, Neriamangalam and Panniar is 1,77,500 K.W. The Panniar Project whose first unit was commissioned in January is expected to be fully commissioned before the expiry of this year. The Sholayar Project is expected to be commissioned in 1965. The Sabarigiri Project for which the U.S. has agreed to grant loans will be put in operation by the end of 1966.

12.20. In social services like education and health Kerala is comparatively well placed. It is seen that the social services sector accounted for 42.9% of the total expenditure on revenue account during 1962-63. Of this about three fourths went for education. The literacy rate in the State in 1961 was 46.8% as against 24.0% for all India. The per capita expenditure on education in 1962-63 in Kerala is Rs. 11.23 against Rs. 3.42 in U.P., Rs. 4.78 in Maharashtra, Rs. 4.32 in Orissa and Rs. 7.79 in Madras. In the field of general education, the number of institutions rose from 9631 in 1957-58 to 10205 in 1962-63, the total enrolment in these institutions being 28.42 lakhs and 36.22 lakhs respectively. The teacher-pupil ratio during 1961-62 was 1:31 as against 1:34 in 1957-58. The expenditure per pupil was Rs. 41.86 in 1961-62.

12.21. Among educational programmes primary education is of utmost importance in Kerala. The Third Plan has assigned high priority to compulsory primary education in the State. The percentage of children receiving primary education in Kerala is 14.8% of the total population while the corresponding percentage for All India is 8.2. At the end of the Second Plan a primary school was available for every 246 pupils with a teacher pupil ratio of 1 : 33. During the same period for every 324 school going pupils requiring upper primary education there was no upper primary|senior basic institution. In this

case the teacher-pupil ratio came to 1 : 27. The State has already achieved 85% enrolment of students in the age group 6-14. By the end of 1960-61 one higher| senior basic school was available for every 373 students seeking High School education. The average teacher-pupil ratio for High Schools works out as 1 : 25.

12.22. The number of arts and science colleges in Kerala rose from 54 in 1961-62 to 55 in 1962-63. The total number of students and teachers in these institutions increased from 42,513 to 46,375 and from 2,384 to 2,481 respectively during the same period. The average enrolment of students per institution was 787 in 1961-62 but it rose to 843 in 1962-63.

12.23. There were 33 professional colleges in the State in 1962-63 as against 32 in the previous year. The total enrolment of students in these professional colleges rose from 7,314 in 1961-62 to 8,157 in 1962-63, the number of teachers during the same period being 660 and 691 respectively. The average number of students engaged by one institution was 247 in 1962-63 as against 229 in the previous year.

12.24. There has been considerable improvement in the health situation of Kerala due to the implementation of the various schemes included in the Five Year Plans. The general death rate in the State declined from 12.57 per 1000 population in 1957 to 6.94 per 1000 population in 1960. Infant mortality also came down substantially from 61.02 per 1000 live births to 39.79 per 1000 live births during the same period. The per capita expenditure on medical and public health services during 1960-61 was Rs. 1.85. But the institutions available now are not adequate to meet the demands of the rapidly increasing population. The State had 437 medical institutions with a bed strength of 15,753 in 1962-63. At present only an average of 0.89 bed is available for 1000 persons. Compared to other Indian States the number of patients treated per institution is the highest in Kerala. During 1958 it was 45,166 in

Kerala as against 13,863 in India as a whole. The number of doctors available per lakh of population in the State during 1960-61 was 5.44.

12.25. Unemployment is a matter of great concern for the State. The fact that quite a large number of the labour force is remaining unemployed is a major disquieting economic feature. An appraisal of the unemployment problem on the basis of the sample survey conducted in 1962 reveals that 7.60 lakhs are unemployed of the total labour force of 54.76 lakhs. Thus the unemployed constitute 14% of the labour force. Further, about 1.28 lakhs of persons are reported to be economically active among persons outside the labour force. Thus the unemployment figure is of the order of 8.88 lakhs. The Employment Exchanges in the State are doing valuable employment service activities. In accordance with the national policies, the Employment Exchanges continued to assist employment seekers to secure suitable jobs and employers to obtain suitable workers. With regard to the Employment Exchange data, it is an admitted fact that beyond indicating the trends they do not provide correct indication of the level of unemployment. The total number of placings by the Employment Exchanges in 1963 has recorded a slight fall compared to 1962. The average number of employers using the Exchanges increased to 366 in 1963 as against 323 in 1962. The following table shows the figures of placings, the average number of employers using Exchange and the number of registrations during the last three years.

| | 1961 | 1962 | 1963 |
|---|---------|---------|----------|
| Number of placings | 14,526 | 18,822 | 18,187 |
| Average number of employers using the Exchanges | 238 | 323 | 366 |
| Number of registrations | 105,885 | 151,883 | 1,41,878 |

12.26. As regards the employment in the public sector the total number of employees increased to

2.37 lakhs (as on 30-9-1963) from 2.25 lakhs (as on 30-9-1962). The indices of employment (Base 31-3-1961) signify that private sector employment has been receding and the public sector employment maintains an upward trend. The combined index indicates that as a whole the level of employment in 1963 increased to 106.8 from 105.1 in 1962.

INDEX OF EMPLOYMENT

| <i>Quarter ending</i> | <i>Private sector</i> | <i>Public sector</i> | <i>Combined</i> |
|-----------------------|-----------------------|----------------------|-----------------|
| 31-3-1961 | 100.0 | 100.0 | 100.0 |
| 30-9-1961 | 101.6 | 105.0 | 102.8 |
| 30-9-1962 | 101.3 | 111.6 | 105.1 |
| 30-9-1963 | 100.3 | 118.2 | 106.8 |

12.27. Kerala's economy is more or less of an agrarian nature characterised by severe unemployment and under employment due to the acute pressure of population on the limited resources. The alarming trend of population growth needs effective curb in the coming years. For the fruits of planned development to reach the masses serious thinking on this line is needed. The regional income figures (provisional) indicate that the per capita income in the State is not growing as it should, due to the high demographic pressure. During 1962-63 the State income has registered an increase of 3% (at 1960-61 prices) over the previous year, the absolute increase of the income being Rs. 15 crores. (The per capita income of the State increased from Rs. 297 in 1961-62 to Rs. 299 in 1962-63 at 1960-61 prices. Thus while the State income showed a rise of 3%, the per capita income recored only a rise of 0.6%; the difference has been accounted for by the increase in population. Compared to 1960-61, the per capita income in 1962-63 was lower by Rs. 8. This is due to the slow rate of growth of the State income in relation to the growth of population. During the period between 1960-61 and 1962-63 the increase in State income was only 1.7% as against the growth

of population of 4.7%. The slow rate of growth of the State income is mainly attributable to the slow growth in agricultural production and fall in fish production during the period.

12.28. The new industries coming up in the State are slowly placing the Kerala economy on the threshold of industrialisation. While the current situation is encouraging enough, a much greater effort is needed to ensure self-sufficiency and prosperity which are our basic goal of development.
