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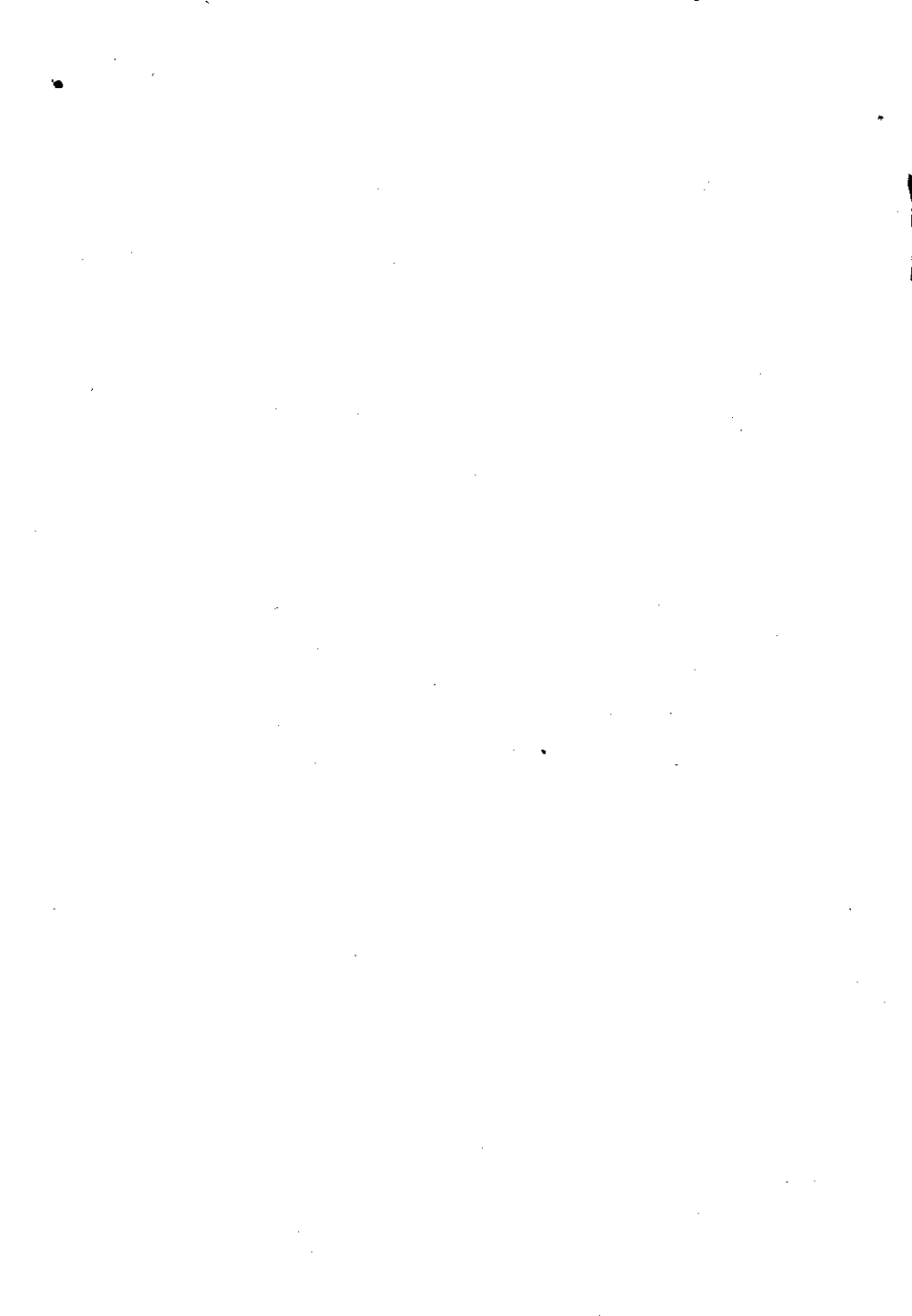
GOVERNMENT OF KERALA

BUREAU OF ECONOMICS AND
STATISTICS

REPORT ON THE FERTILITY SURVEY
IN MALAPPURAM DISTRICT

DEMOGRAPHIC RESEARCH CENTRE
TRIVANDRUM
AUGUST, 1977

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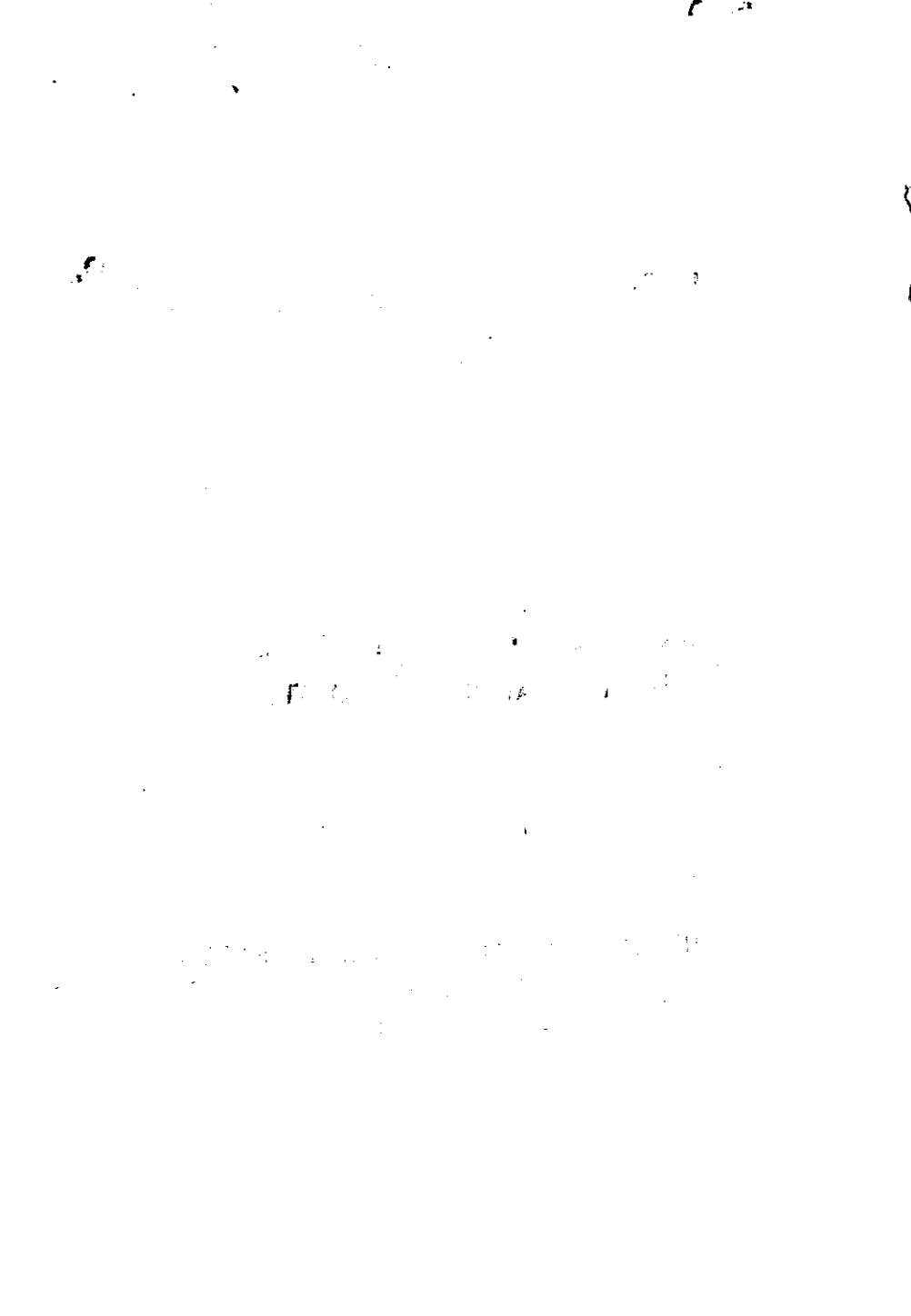
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P R E F A C E

The study of fertility has been gaining increasing importance in India since the inception of Family Planning Programme. This is the first fertility study conducted by this Department. Attempt has been made here to obtain reliable data on the level of fertility in the rural and urban areas of Malappuram District. High population growth, low acceptance rate in family planning and industrial, agricultural, and educational backwardness are the important considerations for selecting this District for the survey.

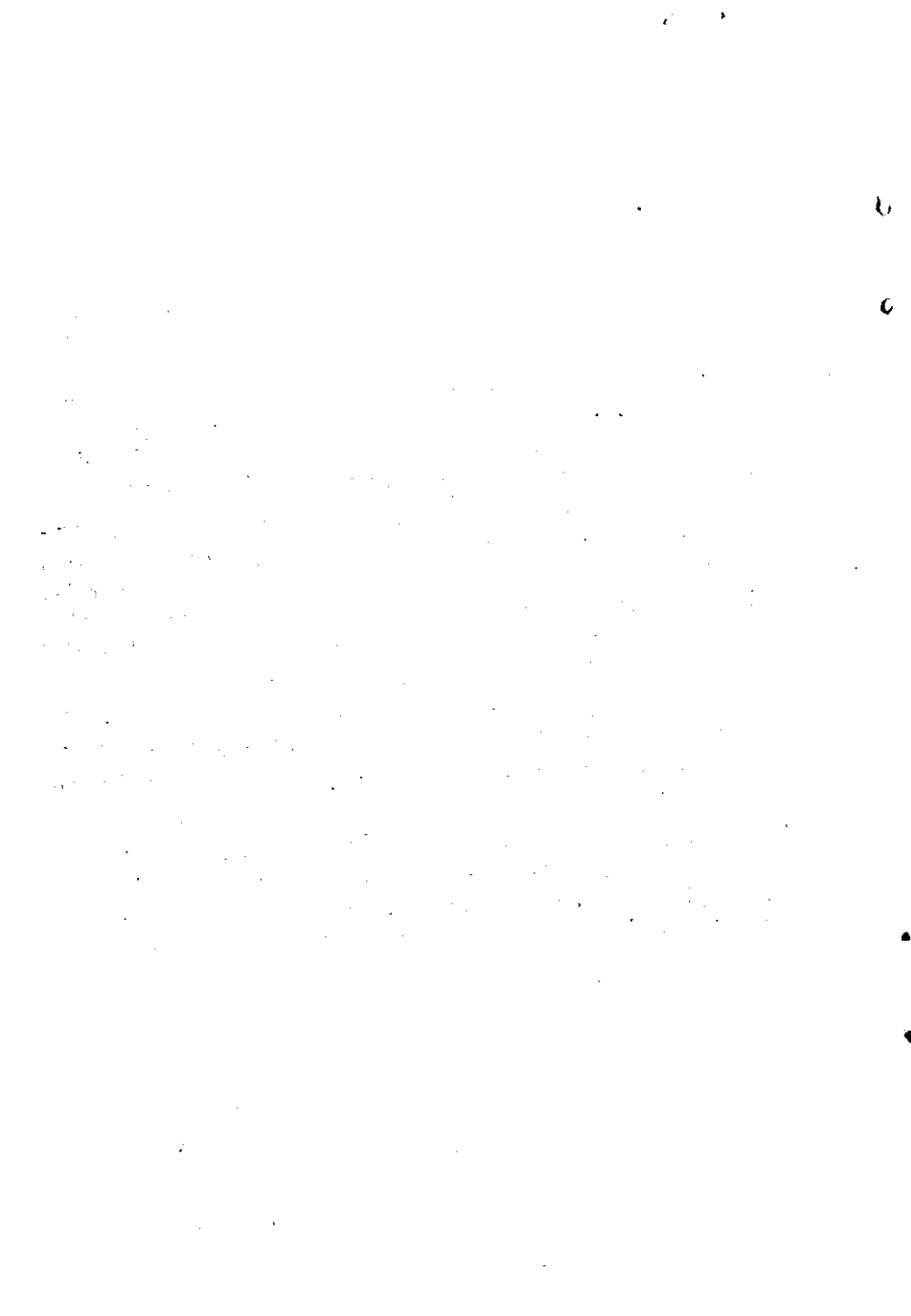
The predominant religious community in this District is Islam. The survey revealed that majority of the muslim women entered into marital union in their teens. Among the married males nearly 6 per cent are either widowed, divorced or separated; 12 per cent of the females are widowed or divorced. Among the married females more than 8 per cent had married more than once. The mean age at marriage is 19 years.

It is seen however, that the average number of children born per woman decreases as is found in any community, with the increase in the age at marriage. A large proportion of the couples showed a tendency of building up large families.

This report has been prepared by Sri K. Divakaran Pillai, Research Officer of the Demographic Research Centre under the guidance of Sri P. S. Gopinathan Nair, Deputy Director. Dr. R. S. Kurup, Joint Director read through the draft and made many suggestions to improve the report.

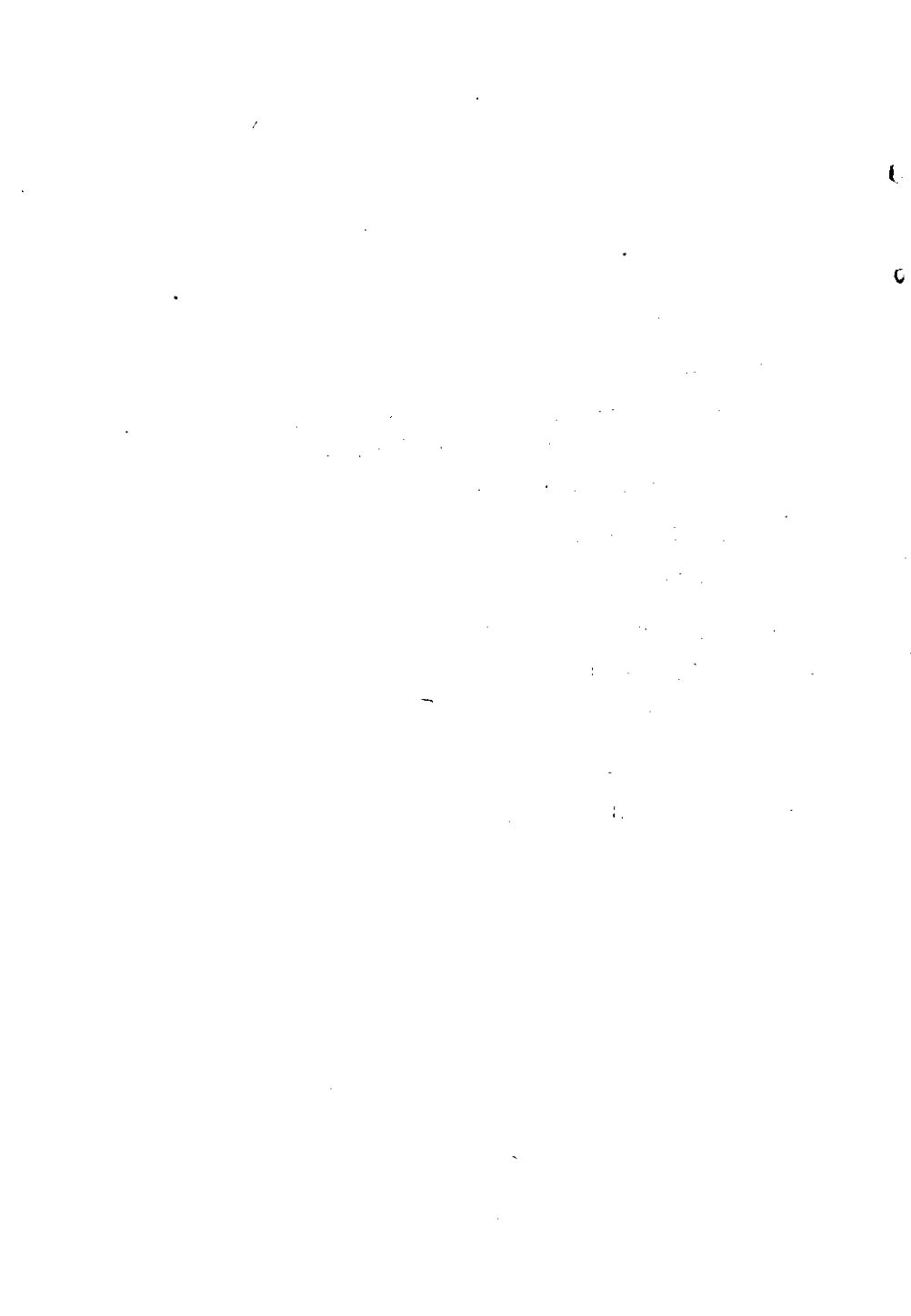
TRIVANDRUM,
AUGUST, 1977

DR. P. A. NAIR,
Additional Director-in-Charge



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**REPORT ON THE FERTILITY SURVEY IN
MALAPPURAM DISTRICT
KERALA STATE**

I. 1. Introduction

The objective of the fertility survey in Malappuram District is to get reliable data on the level of fertility in the rural and urban areas of the District. High rate of population growth, low acceptance rate of family planning, and industrial agricultural and educational backwardness are the important considerations for selecting Malappuram District for the present study.

2. Sampling Design

The design is one of stratified multi-stage random sampling. For the purpose of this survey the District is divided into two strata—Rural and Urban. The rural samples are the N. E. S. Blocks in the District. Out of the 13 N. E. S. Blocks in the District, seven Blocks are selected at random and from each selected Block, one Panchayat and from the selected Panchayat one ward each is selected at random. From each ward thus selected, 50% of the households (every alternate household) are selected. For urban samples, one ward each from Ponnani and Manjeri towns is selected at random. From each of the selected urban ward, 60 households are taken by systematic random sampling. A total of 1413 households has been covered by the survey including 120 households from urban areas.

3. Schedules and Instructions

The schedule designed for the survey contains 6 Blocks to canvass information regarding identification particulars of the household, general particulars of normal household members, marriage history of ever married women of the selected households, pregnancy and fertility history of ever married women. Copy of schedule used in this survey is given in Appendix-B.

The field work of the survey commenced in December 1974 and was complete by the end of March 1975.

II. DISTRICT PROFILE

Before analysing the data of the present survey, it will be relevant to present the socio-economic and demographic profile of Malappuram District to serve as a background. Malappuram District came into existence on 14-6-1969 as a result of the reorganisation of the Districts of Palghat and Kozhikode. The District consists of 4 Taluks, 13 N. E. S. Blocks, 92 Panchayats and 132 Villages. The area of the District is 3638 Sq. km.

Malappuram is bounded by Kozhikode District on the North, by the Nilgiris district of Tamil Nadu on the East, by Palghat and Trichur Districts in the South and by the Arabian Sea on the West.

This District is industrially and agriculturally the most backward District in Kerala. With respect to the population growth, this district witnessed rapid increase during all the decades. Eight per cent of the population of the State is living in this District. The Table given below shows the high rate of population growth in this District since 1951.

TABLE 1
Population and Percentage Decade Variation—
Malappuram District

Population	Percentage decade increase
1149718 (in 1951)	17.67 (1941-51)
1387378 (in 1961)	20.67 (1951-61)
1856362 (in 1971)	33.80 (1961-71)

The population growth during the decade 1961-71 is significantly higher in this district than in Kerala as a whole. The population of Kerala has increased by 26.29% during the decade, while the population in Malappuram District has increased by 33.80%.

TABLE 2
Population Growth During 1961-1971 Period

District/State	Percentage decade variation (1961-71)
Malappuram	33.80
Palghat	23.06
Kozhikode	32.60
Cannanore	32.85
Kerala	26.29

Malappuram District is not as densely populated as the State. The density of population of Malappuram District is 510 per sq. kilometre where as it is 547 for the State.

The sex-ratio of Malappuram District according to 1971 Census is 1041 which is much higher than that of the State. The religious composition of the District as per 1971 census shows that the largest single religious community is Muslims 64%. Only 6.73 per cent of the population is living in urban areas. The urban growth rate is very low.

Some of the socio-economic data given in Appendix Table 3 reveals the extent of backwardness of Malappuram District.

Facilities of education, medical and health care and communication are relatively insufficient. The comparative backwardness of the District is evident.

III. ANALYSIS OF THE SURVEY RESULTS

1. Demographic and Socio-economic Picture of the Population covered by the Survey

The socio-economic characteristics of the sample population as obtained from the survey are discussed in this section.

Religion and Caste Composition of the Population

Distribution of population according to religion is given below:

TABLE 3

Distribution of Population according to Religion

Religion/Caste	Rural Percentage	Urban Percentage	Total Percentage
1. Hindus	39.87	29.68	39.27
2. Muslims	58.85	68.44	59.47
3. Christians	1.23	1.88	1.26
4. Others			
Total	100.00	100.00	100.00

59 per cent of the total sample population are Muslims. The proportion of Muslims in urban sample is comparatively higher than the rural population (68%). The second largest religious community is Hindus. The percentage of Hindu population is 39. The percentage of Hindu population in urban areas is much less than their proportion in Rural areas (29%)

The religious composition of the general population of the district according to 1971 census is given below.

TABLE 4

Religious Composition of the Population

Religion	Percentage
Hindus	34.08
Muslims	63.93
Christians	1.99
Others	..
Total	100.00

It is seen that the religious composition of the survey population is not closely comparable with that of the general population. The Hindu population is over-represented in the survey population.

The caste-wise break-up of the Hindu Population is given below:

TABLE 5
The Caste Composition of the Hindu Population

Religion/Caste	Rural Percentage	Urban Percentage
Hindus:		
Total	100.00	100.00
(a) Nairs	23.24	22.50
(b) Thiyyas	31.84	37.50
(c) Others	44.92	40.00

The important castes included in the category 'others' are, Kanakkan; Ezhuthachan, Brahmin, Cherumakkal, Mannan and Kammala. The largest single caste in the survey population is Thiyya.

2. Educational Level

The percentage distribution of population according to the level of education is given in Appendix Table I A.

Among the rural population 35 per cent of the males and 50 per cent of the females are illiterates. The per cent of illiterates among the urban males and females are 25 and 39 respectively. The level of higher education among the survey population is very low. Nearly 3 per cent rural population and 5 per cent urban population attained the standard of S. S. L. C. and above. Educational facilities are inadequate in this district. Only 3 villages have Colleges, 51 villages have High Schools and 105 villages have primary schools out of a total of 122 villages.

3. Monthly Income

Distribution of households according to monthly income is given below.

TABLE 6
Percentage Distribution of Household according to Monthly Income

Monthly income	Rural Percentage of households to total households	Urban Percentage of households to total households
Below 50	0.70	0.83
50-99	3.40	..
100-199	25.83	22.50
200-299	30.70	24.17
300-399	20.12	22.50
400-499	10.05	11.67
500+	9.20	18.33
Total	100.00	100.00

Based on the above data, it can be presumed that majority of the population is economically very poor. More than 60 per cent of the households reported a monthly income of less than Rs. 300. Nearly 9% of households are receiving a monthly income of more than Rs. 500

The percentage distribution of the households according to means of livelihood of the sample households is given in Appendix Table 2. This shows that more than 63 per cent of the households in rural areas is engaged in agricultural activities, either as cultivators or as agricultural labourers. The percentage of households who have reported their main activity as agricultural labourer comes to more than 39 per cent. In the urban areas more than 80% of the households is engaged in activities other than agriculture. Nearly 26 per cent of the households is engaged in trade and commerce. The percentage of households engaged in agricultural or allied activities in urban areas is nearly 13 per cent.

The distribution of households according to means of livelihood and monthly income is given in Appendix A—Table 3.

4. Age Composition

The age distribution of the population as revealed in the survey is given in Table 4 in Appendix—A. The age structure of the sample population is more or less representative of the age structure of the general population of the District. In the case of age group 15—49 there is slight difference from the general population; 48 per cent of the survey population belong to age group 15—49 as compared to 51 per cent in the general population.

The age structure of the general population and of the survey population, are given below for comparison.

	0—14	15—59	60+
General population			
Male	41.1	53.0	6.0
Female	39.5	54.0	6.5
Total	40.3	53.5	6.2
Survey population			
Male	43.2	51.4	5.3
Female	41.4	53.5	5.1
Total	42.3	52.5	5.2

It is seen that the dependency ratio is slightly higher for the general population as compared to the survey population. The relevant figures are given below :—

TABLE 7
Dependency Ratio

Ratio	Survey population	General population
Young dependency (0—14)	80	85
Old dependency (60+)	10	11
Total dependency (0—14 and 60+)	90	96

It is revealed that 90 persons belonging to age group 0—14 and 60+ are dependent on 100 persons of working age i.e. 15—59 in the survey population; such ratio in the general population is 96 : 100

Nearly 52 per cent of the total females are in the reproductive age group 15—49.

IV. ANALYSIS OF MARRIAGE HISTORY

Analysis of the data relating to marital status of the population is very important in fertility studies. The marital pattern of the population is influenced by its sex composition, customs and practices relating to marriages divorces etc. prevalent in the community.

Majority of the muslim women enter into marital union at an early age, ranging from 12 to 19. The general trend is to marry the girls, when they are in their early teens. In many cases, old men marry young girls with the consent of religious leaders. There is no restriction to old men marrying young girls provided he is capable of giving them food and shelter. One man is permitted to marry more than one woman and allowed to maintain four wives at a time. Among the well-to-do classes there is a special urge to get their daughters married as early as possible and as a result the marriage takes place within the age group 12—16. Besides most of the youngsters prefer to marry very young girls. Because of these, there is very little demand for girls who are grown up without getting married. The marriage of a grown up girl is a difficult problem in this society as she is out modelled because of her age.

Separate data relating to marital status of different religious groups in this district are not taken for analysis. Hence the proportion of currently married females among the muslims are not known. The percentage distribution of currently married females in each age group given in table 9 reveals the high proportion of married females in the district.

2. 0. Percentage Distribution of Population by Marital Status

The distribution based on marital status has been done separately for men and women in rural and urban samples. It is found that more than 64.40 per cent of the total male population and 52.44 per cent of the female population are unmarried. The percentage of ever-married males is 36 in the age group 15+, among the total males, and 48 among females. From among the currently married males, the highest percentage is from the age group 40—44 while the highest percentage of females currently married is from the age group 30—34. The percentage distribution of population based on marital status is given in Appendix A—Table 5.

3. 0. Age Distribution of Currently Married Persons

The age distribution of currently married males and females in both rural and urban areas are given below:

TABLE 8
Age Distribution of Currently Married Male, Female
Rural and Urban

Age	Rural		Urban	
	Male	Female	Male	Female
Below 15	..	0.13	..	..
15—19	0.21	7.32	..	10.56
20—24	6.00	18.84	8.51	11.97
25—29	14.33	18.77	12.06	17.61
30—34	12.91	13.92	7.80	15.49
35—39	16.12	12.72	15.60	15.49
40—44	11.70	8.26	17.73	9.16
45—49	10.91	7.99	14.89	8.45
50—54	8.42	4.66	6.38	3.52
55—59	6.49	4.06	3.55	4.23
60+	12.91	3.33	13.48	3.52
Total	100.00	100.00	100.00	100.00

The percentage of married males in each age group increase as age advances and reaches a maximum at the age group 35—39 in rural areas and 40—44 in urban areas, and then declines. The increases after the age 40 shows a declining trend. The percentage of married females reaches the maximum at the age group 20—24 for rural and 25—29 for urban and shows declining trends thereafter. But the decline in the case of females is more sudden than in the case of males. This can be explained to a certain extent by the high proportion of widowed or divorced among the females compared to that of males in all the age groups. A gradual increase in the proportion of females widowed after the age group 30—34 can be seen. The proportion of married females show a decline after the age 35 onwards because more and more females become widowed or divorced after the age 35. It is in the age group 35—39 in the urban areas that the proportion of married males is almost the same as that of the proportion of married females. In the case of males in the urban areas the highest proportion of married males is in the age group 40—44 and that of females in the age group 25—29.

Referring to the tables 5A and 5B in the appendix, it is seen that in the age group 15—19 majority of the males remained unmarried, while 23.7 per cent of rural females in the age group are currently married. Among the females above the age 60, 23.04% in rural areas and 25.2% in

urban areas remained in marital union while more than 81 per cent of the males above the age 60 in rural areas and 65 per cent in urban areas remained in the marital union. 2.65 per cent of the males remained unmarried even after the age of 60 in rural areas while the percentage of unmarried females will be 1.18 per cent in this age group.

4.0 Percentage Distribution of Currently Married Females

The percentage distribution of currently married females is given below:

TABLE 9

Percentage Distribution of Currently Married Females in each Age Group

Age group	Percentage in each age group
Below 15	0.30
15—19	23.55
20—24	66.74
25—29	84.17
30—34	86.00
35—39	83.40
40—44	71.67
45—49	73.61
50—54	49.64
55—59	52.58
60+	23.04

The proportion of currently married females increases with increase in the age of population. It is seen that more than 80 per cent of the females who got married entered into marital union before they attained the age 30. 67 % of the females in the age group 20—24 are currently married.

5.0 Sex Ratio of Married Persons

For every 100 currently married males in the sample population, it is noted that there are 107 married females. It is interesting to note that the sex-ratio of currently married persons is a little higher (1070) than the sex ratio of the general population (1041). This may be due to the following.

(1) A good percentage of married males may be living outside the District, with their wives remaining in the District, (2) a husband may have more than one wife. The prevalence of polygamy among the muslims may be responsible to a great extent for the larger number of married females than males. For every 100 married males in urban areas, the number of married females is 133. The percentage of females in the child-bearing age-group (15—49) among the total currently married females for rural and urban samples are 88.15 and 88.73 per cent respectively.

The percentage of females in the age group 15—49 to the total female population of the rural sample is 47.90 and for urban sample 44.05. The number of currently married women in the age group 15—44 who could be considered as eligible couples, covered in the study are 1199 in the rural area and 114 in the urban area.

6.0 Occupation and Marital Status

The distribution of persons in each occupation and marital status group is given in Table 6 in Appendix A. This shows that 71.15 per cent of the working males in rural and 79.08 per cent of males in urban areas are ever-married. The percentage of ever married females in rural and urban areas are 79.04 and 87.01 respectively. A large percentage of males and females in both rural and urban areas belong to the category of currently married.

In certain occupational categories, the number of persons covered by the survey is very small. Hence a comparative study of the marital pattern of different occupational categories may not be very meaningful, in all cases.

The highest percentage of currently married persons among the working males is from among the category of 'construction'. The percentage of currently married persons among the category 'trade and commerce' is nearly 80 per cent. Among the male agricultural labourers the percentage of 'never married' comes to 29 per cent in rural areas. Among the female workers in rural areas, the highest percentage of currently married is found in the category of "manufacturing other than household industries". Among the category "Agricultural labourers" the percentage of currently married females comes to 48% in rural areas. The incidence of widowhood, among the categories of 'cultivators' and 'trade and commerce' is also very high when compared with the other occupational groups. In urban areas more than 93 per cent of the male agricultural labourers are currently married.

7.0 Non-working household Members by Marital Status

The distribution of non-working household members by marital status reveals that the percentage of males ever married, in the category of non-working males, is only 6.56 while the percentage of females ever married is 44.00. Only 5.21 per cent of the non-working males are currently married whereas the percentage for females is 33.73.

TABLE 10
Percentage Distribution of Ever married, Currently married
Women and Men by Working/Non-working Status

Sample Population	Ever married		Currently married	
	Rural	Urban	Rural	Urban
Male	35.81	38.46	33.72	36.15
Female	47.62	49.25	35.07	36.93
<u>Working Population</u>				
Male	71.16	80.25	67.64	79.62
Female	79.04	87.02	51.68	63.63
<u>Non-working Population</u>				
Male	6.56	8.78	5.21	5.26
Female	44.00	39.44	33.73	29.33

9.0 Widowhood, Divorced and Separation

Incidence of widowhood, divorce and separation and the age at which these occurred are important factors affecting fertility. The distribution of persons widowed, separated and divorced according to age, sex and age at marriage in the rural and urban areas are given in Table 7, 8 and 9 Appendix A. 2.06 per cent of the male population are either widowed or divorced, From among the married males 5.77 per cent are either widowed or divorced or separated. The percentage of females in these categories is comparatively higher than the males. 12.28 per cent of the females is either widowed or separated. A gradual increase is witnessed in the proportion of widowed or divorced among females after the age 30-34.

The percentage distribution of persons, divorced, separated and widowed by age in which these events occurred is given below:

TABLE 11
Percentage Distribution of Females by Age at Separation,
Divorced or Widowed — Rural —Urban

Age	Separation		Divorced		Widowed	
	Rural	Urban	Rural	Urban	Rural	Urban
Below 15	..	..	8.72	..	..	..
15-19	16.67	100.00	38.26	41.38	24.6	10.91
20-24	30.95	..	30.88	37.94	7.38	10.91
25-29	28.57	..	10.73	10.34	10.45	21.82
30+	23.81	..	11.41	10.34	79.71	56.76
Total	100.00	100.00	100.00	100.00	100.00	100.00

From the above analysis it is revealed that the highest percentage of persons 'separated' is from the age group 20-24. The percentage distribution of persons separated by present age, age at marriage, and age at separation is given separately in Appendix, Table 7. The higher incidence of separation has occurred to persons who were married at early ages. More than 59 per cent of the persons separated were married in the age group 15-19.

More than 68 percent of the divorced persons in the rural areas and 79 per cent in the urban areas belong to the age group 15-24. Among the divorced persons nearly 73.82 per cent were married before they completed the age 19- Divorces are common in the early years of married life. The percentage of divorced decreases with the increase in age. The distribution of divorced persons by present age, age at divorce is given in Table 8, Appendix A.

The percentage of widowed persons increases with the age, especially after the age of 30. 79.46 per cent of the widowed persons belong to the age group 30 and above. The distribution of widowed persons by present age, age at marriage and age at widowhood is given in Table 9, Appendix A.

10.0 Age at Marriage

The age at which a woman enters marital union has considerable influence on fertility. A woman has a given number of years when she has the biological capacity to give birth. If she spends all those years in marriage (by marrying very early) then she will get chance to produce more children than if she spends only part of the period in marriage (by marrying late). The distribution of ever married females by age at marriage is given below:

TABLE 12

Distribution of Ever Married Females by Age at Marriage

Age at marriage	Rural		Urban	
	Percentage	Cumulative percentage	Percentage	Cumulative percentage
Below 15	17.38	..	12.50	..
15.19	61.88	79.26	71.35	83.85
20.24	17.93	97.19	11.97	95.82
25.29	2.27	99.46	4.18	100.00
30.34	0.44	99.90	..	..
35+	0.10	100.00	..	..
Total	100.00	..	100.00	..

Majority of the females in both rural and urban areas have entered into marital union before they completed the age 20. In the urban area this percentage is higher than in the rural areas, with 83 per cent of the females getting married before the age of 20. In rural areas, 97 per cent of the females got married before they reached the age 25. Nearly 28 per cent of the females now in the age above 50 got married below the age 15. But the percentage of females in the age group 20-24 who got married below the age 15 is only 10.22 in rural areas. This shows that at present, females prefer to marry late. Distribution of ever married women by age at first marriage is given in Table 10 in Appendix A.

11.0 Mean Age at Marriage

The mean age at marriage for females for both rural and urban areas combined is 18.9 years. The median ages at marriage for rural and urban areas are 18.00 and 17.6 respectively. Mean age at marriage in other districts of Kerala is given below for comparison.

TABLE 13
Mean Age at Marriage—Districts 1961

Districts	Mean age at marriage for females
Cannanore	18.59
Kozhikode	18.28
Palghat	19.08
Trichur	21.49
Ernakulam	21.18
Kottayam	20.64
Alleppey	21.30
Quilon	20.18
Trivandrum	20.59

Source: Kurup R.S., Nair P.S.G. and Pillai K.D. Fact book on Population and Family Planning, Demographic Research Centre, Trivandrum 1974.

The mean age at marriage given above was calculated based on the data available in the 1961 census. Even in 1961 the mean age at marriage in all the districts of Kerala is higher than the mean age at marriage in Malappuram District calculated from the survey data in 1974.

12.0 Ever married Women by Number of Times Married

The distribution of ever married women by number of times married is given below:—

TABLE 14
**Distribution of Ever Married Women by
 Number of Times Married**

	Percentage of women			Total
	Married once	Married twice	Married thrice or more	
Rural	91.20	7.49	1.31	100.00
Urban	83.47	12.60	3.93	100.00

Among ever married females of all age groups together 7.49 per cent in rural and 12.60 in the urban areas are married twice. The females married more than twice in urban areas is slightly higher (3.93%) than in the rural area (1.31%). The percentage distribution of ever married females by number of times married in each age group is given in table (11) in Appendix A. The highest proportion of females who are married more than once is in the age group 40-4+ for rural areas and in the age group 35-39 in the urban areas. In all the other age groups

the proportion of females married more than once in rural areas is lower than that in the urban areas. The proportion of females married more than once, increases with increase in age, thereby showing that the prevalence of marrying more than twice is becoming less and less, though gradually over the years.

V. LEVEL OF FERTILITY

The analysis based on the number of children born alive with present age of the females, age at marriage and duration of marriage will bring out a correct picture of the extent of the level and pattern of fertility of different groups of women. Average number of children born alive may be taken from females of incomplete fertility and of completed fertility.

The average number of children born alive as a measure of fertility is more meaningful in respect of females of completed fertility.

1.0 Average Number of Children born alive per currently married women

The average number of children born alive to currently married female in rural and urban areas of the sample covered is given below:

TABLE 15

Average Number of Children born alive per currently married women by age

Present age	Rural		Urban	
	No. of Females	Average No. of children born per currently married women	No. of Females	Number of children born per currently married women
15—19	110	0.38	17	0.35
20—24	283	1.40	18	1.72
25—29	282	2.67	26	3.34
30—34	209	3.98	22	5.13
35—39	191	4.90	21	5.71
40—44	124	4.88	14	5.50
45—49	120	5.55	12	5.66
50 & above	181	4.94	17	5.23
Total	1500	3.42	147	4.02

The average number of children born alive increases as the age of mother increases. The average number of children born alive, is higher in the case of females in the urban areas than in rural areas. The percentage distribution of children born alive to currently married females is given in Appendix A, Table 12.

2.0. Duration of Marriage and Number of Children born alive

The average number of children born per woman by duration of marriage is given below:

TABLE 16

Average number of Children born per woman by duration of married life (currently married and married only once)

Duration of Married life (in years)	Rural		Urban	
	No. of women	Average No. of children born alive	No. of women	Average No. of children born alive
Below 2	92	0.31	16	..
2—4	182	1.24	19	0.94
5—9	248	2.02	28	2.03
10—14	237	3.35	23	2.91
15—19	179	4.31	23	3.47
20—24	174	4.68	21	4.47
25—29	112	5.26	9	4.11
30 & above	193	5.38	23	4.00
Total	1417	3.36	162	3.64

The average number of children born per woman increases as duration of married life increases. The average number of children born per woman with less than 10 years of married duration is 3.

3.0 Duration of Marriage and Number of Children born alive

Percentage distribution of children born alive to currently married females (married only once) by duration of marriage is given in Table 13 in Appendix A. It is seen that more than 15 per cent of the total children are born to females with a marriage duration of less than 10 years in both rural and urban areas.

4.0 Age at marriage and average number of children born alive

The following table gives the percentage distribution of births by age at marriage and the average number of children born alive to currently married females (married only once) by age at marriage.

TABLE 17

Percentage Distribution of Births by age at marriage and average number of children born per woman (Currently married and married only once) by age at marriage

Age at marriage	Rural		Urban	
	Percentage of births	Average No. of children	Percentage of births	Average No. of children
Below 15	14.19	4.08	18.65	3.60
15—19	71.77	3.90	71.91	3.20
20—24	12.83	3.02	7.42	1.83
25—29	0.91	2.55	2.02	1.50
30 & above	0.30	2.83	..	..
Total	100.00	3.36	100.00	3.64

The average number of children born per woman decreases with increase in the age at marriage. It is evident that higher age at marriage definitely reduces the total number of children born. More than 80 per cent of the total births in rural areas and 90 per cent of the total births in urban areas contributed by females who were married below the age 20. The number of births were relatively less for females married after the age 25. Rising age at marriage may contribute in reducing the number of children. The total fertility decreases systematically with increase in age at marriage of women (An increase in age at marriage is associated with the decrease in the average number of children born). The urban females currently married and married only once have more number of children than the rural females.

VI. VITAL RATES

It is reported that a total of 245 births in rural areas and 27 births in urban areas have occurred during the one year preceding the period of the survey. The distribution of births according to the age of mothers is given below.

TABLE 18

**Percentage Distribution of Live-births that occurred during the one year preceding the period of the survey—
According to the age of mothers**

Age of Mother	Rural		Urban	
	No of births	Percentage of births	No. of births	Percentage of births
15—19	22	9.28	3	11.11
20—24	80	31.65	6	22.22
25—29	72	29.12	9	33.34
30—34	36	15.19	3	11.11
35—39	28	11.81	6	22.22
40—44	7	2.95	..	..
45+	..	..	..	..
Total	245	100.00	27	100.00

It is interesting to compare the percentage distribution of rural births with that of Sample Registration (which also relates to the rural areas of the State) data for 1974.

<u>Age of mother</u>	<u>Percentage of births</u>
15—19	9.9
20—24	35.2
25—29	27.2
30—34	15.3
35—39	9.3
40—44	2.5
45+	0.6

More than 31 per cent of the total births have occurred to females in the age group 20—24 in rural areas. The number of births decreases with increase in the age of females. The vital rates obtained from the survey have been revised by applying the survival ratio (adopted from the west model life table for ie. 60.62 for male and 62.08 for females) as there was heavy under-reporting of births and infant deaths.

Crude Birth Rate

The crude birth rate calculated by applying the reverse survival ratio comes to 32.2 for the District (Rural and Urban combined).

The underenumeration has resulted from memory lapse of the respondents, misstatement of age of new born babies, and failure to report births which would have ended in infant deaths.

Marital Fertility Rate

The marital fertility rate separately for rural and urban areas and total are given below:

TABLE 19
Marital Fertility Rate

Age	Rural			Urban			Total	
	No. of married women	No. of births	M.F.R.	No. of married women	No. of births	M.F.R.	(Rural and Urban)	Sample Registration 1974 (Rural only)
15—19	110	22	200.00	15	3	200.00	192.6	314.6
20—24	283	80	282.68	17	6	352.94	254.9	321.5
25—29	282	72	255.31	27	9	333.33	238.8	232.1
30—34	209	36	172.24	23	3	130.43	154.1	157.6
35—39	191	28	146.59	22	6	272.72	145.2	101.6
40—44	124	7	56.45	5	..	..	51.9	31.9
45—49	120	..	..	12	..	..	6.5	9.4
Total	1319	245	..	121	27	..	..	..

The number of children increases with increase in age till the age 29 and decreases thereafter. The maximum number of children are born to females in the age group 20—29.

The percentage of births that occurred to females after the age 35 are nearly 4 per cent. About 70 per cent of the births in rural areas and 66 per cent of the births in urban areas have occurred to females below the age 29. A large number of births were contributed by very young females.

Age Specific Fertility Rate

The age specific fertility rate for the rural and urban areas of Malappuram District is given below:

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TABLE 20
Age Specific Fertility Rate

Age group	Rural			Urban			Total (Rural&Urban)	
	No. of females	No. of births	A.S.F.R.	No. of females	No. of births	A.S.F.R.	A.S.F.R.	Sample Registration (1974) (Rural only)
15—19	467	22	47	41	3	73	49	44.7
20—24	424	80	188	24	6	250	181	178.7
25—29	335	72	215	30	9	300	214	189.7
30—34	243	36	148	25	3	120	146	134.7
35—39	229	28	122	23	6	261	135	86.4
40—44	173	7	40	7	..	..	39	25.6
45 +	163	..	..	18	..	..	..	6.9
Total	2034	245	—	168	27	..	..	..

The child bearing pattern of a group of women can be better assessed by constructing age specific fertility schedule.

The level of fertility is highest for the age group 25—29, followed by 20—24 age group. The fertility rates decline with an inverse relationship to age, after the age group 25—29.

It is also seen that females complete 60% of their child bearing, by age 29 and 80% by age 34. It is very important to note that if couples on the attainment of the age 29 and after having 3 children could be successfully motivated to accept terminal family welfare methods, the fertility could be reduced by 40%. In rural areas by the age of 29, an average female gets 2.7 children. The average number of children is less for rural females than the urban females.

The distribution of births during the one year preceding the date of the survey by parity of mother is given in Table 14 in Appendix A. 28% of births in rural areas and 18% of the births in urban areas are contributed by first order of births. The first three orders of births contribute for more than 52 per cent of the total births occurred during the year. Nearly 49% of the births in rural areas and 52% of births in urban areas could have been avoided if the couples are motivated to accept family welfare methods after the birth of three children.

Mortality Rates

The surveyed population is reported to have experienced a total of 44 deaths in rural areas and 8 deaths in urban areas during this period. Out of these deaths 33.96 per cent in rural areas and 37.50 per cent in urban areas have occurred to infants. The per cent of deaths that occurred to children below the age of 5 years in rural and urban areas are 11.32 and 12.50 per cent respectively. The death rate shows a sharp decline after the age 14, and increases after the age 60. 28.30 per cent deaths in rural areas and 37.50 deaths in urban areas have occurred to persons in the age 60. The crude death rates for the District is calculated as 9 and infant mortality rate as 100.3 for both rural and urban combined. The percentage of deaths occurred in each age group for rural and urban and total for the District is given in Table 15 in Appendix A.

VII. PREGNANCY HISTORY ANALYSIS

1. Age at First Pregnancy:

The age at which the females terminate their first pregnancy is an important aspect in fertility analysis. The following table gives the age group at which, first pregnancies have occurred to ever married females.

TABLE 21

Distribution of Females by age at Termination of First Pregnancy

Age group	Rural		Urban	
	No. of Pregnancies	Percentages	No. of Pregnancies	Percentages
15—19	951	54.81	110	62.14
20—24	599	34.52	53	29.94
25—29	129	7.44	8	4.51
30—34	38	2.19	4	2.25
35—39	12	0.69	1	0.58
40—44	5	0.29	1	0.58
45 +	..	0.06	..	..
Total	1735	100.00	177	100.00

It may be seen from the above Table that nearly 55 per cent of the first pregnancies are shared by females in the age group 15—19 in rural areas. 90 per cent of the first pregnancies have terminated before the attainment of age 25 by females. The mean age at termination of first pregnancy for rural and urban females works out to be 20.43 years and 20 years respectively.

2.0 Age at Termination of Last Pregnancy:

Knowledge about the age at marriage and the termination of last pregnancy can help to measure the actual duration of child bearing for a group of females. The termination of last pregnancy occurred to females in each age is given below.

TABLE 22

Distributoin of Females by age at Termination of Last Pregnancy

Age group	Rural		Urban	
	Age at termination of last pregnancy	Percentage	Age at termination of last pregnancy	Percentage
15—19	--	--	..	..
20—24	..	..	..	..
25—29	5	2.42	3	7.14
30—34	45	21.74	16	38.10
35—39	89	43.00	16	38.10
40—44	59	28.50	7	16.66
45—49	9	4.34	..	..
Total	207	100.00	42	100.00

The age at termination of last pregnancy reaches maximum in the age group 35—39. Nearly 34 per cent of the rural females and 16 per cent of the urban females terminated the last pregnancy after the age 40. The mean age at termination of last pregnancy for both rural and urban areas are 38.26 years and 35.71 respectively.

3.0 Order of Pregnancy and Type of Terminations

The survey has covered a total of 9290 pregnancies of which 366 pregnancies terminated as still births and 206 as sponaneous abortions. The number of induced abortions is negligible. In other words 3.60 per cent of the pregnancies terminated as Still births and 2.05 Abortions. The average number of pregnancies experienced by the females in the survey is calculated as 5.64 pregnancies of which only 03.2 were found to be s till births and abortions. The rate of still births and abortions is more in the first, second and third order of the pregnancies, 3.70% of the first order of pregnancies and 4.50 per cent of the second order of pregnancies terminated either as still births or sponaneous abortions. More than 50% of the total still births and nearly 40% of the abortions are contributed by the first three orders of pregnancies. The distribution of order of pregnancies and type of terminations for both rural and urban females is given in Table 16 Appendix A.

4.0 Age of mother, number of pregnancies and type of Termination

The percentage distribution of pregnancies by order and age of mother at termination is given in Table 17 in Appendix A. 71.50 per cent of the total pregnancies have occurred to females before completing 30 years

of age 30 per cent of the pregnancies were contributed by females belonged to the age group 20.24. Out of the total still births and abortions 65.31 per cent have occurred to females in the same age group. It is revealed that more than 50 percent of abortions and 40 per cent of still births occurred to the first three order of pregnancies. The number of pregnancies decreased rapidly after the age 35.

5.0.

The percentage distribution of pregnancies by age of mother at termination and type of termination is given in Table 18 in Appendix A. 95.02 per cent of the total pregnancies have terminated as live births. The highest percentage of still births and abortions are contributed by females in the age group 35-39 in rural areas. The percentage of still births is very high among urban females. It is 11.35 of the total pregnancies. The highest incidence of still births occurred to females in the age group 30-34 in urban areas.

VIII. ORDER OF BIRTHS

The first three orders of births contribute more than 56 per cent of the total births in both rural and urban females. In other words the first three order of births account for nearly 60 per cent of the average family size. The average family size can be reduced by about 40 per cent if measures are adopted to prevent births of order 4 and above. The distribution of births by order of births and duration of marriage are given in Table 19 in Appendix A. This table reveals that the process of family building is at its peak in the marriage duration groups 1-4 and 5-9 years irrespective of the age at marriage. As the duration of married life advances, the number of births decreases. The table given below shows the percentage distribution of births by order of births.

TABLE 23
Distribution of births by order of births

Order of births	Rural Percentage of total births	Urban Percentage to total births
1	22.48	22.13
2	19.00	18.46
3	15.90	15.93
4	13.14	12.77
5	10.01	10.24
6	7.37	7.33
7	5.00	5.81
8	3.11	3.19
9	2.08	2.40
10	1.91	1.14
Total	100.00	100.00

2.0 Interval between Marriage and First Termination

Distribution of currently married women (married only once) according to age at marriage and interval between marriage and first termination are given in Table 20 in Appendix A. More than 45% of the females in rural samples and 48% in urban samples have terminated their first pregnancy within the first two year duration of their married life. Nearly 90% of the first termination of pregnancies are contributed by females by marriage duration of 1-5 years in rural areas and 78% in urban areas. With increase in the age at marriage the chances of terminating the first pregnancy with in the same year of marriage or the next year is highest than those who are married below the age 15. More than 75% of the pregnancies terminated during the same year of marriage to females who entered into marital union while they are in the age group 15-19 years.

3.0 Marriage duration and first live birth

Nearly 47% of the females married in the age group 15-19 have terminated their first pregnancy within less than two years of marriage. The percentage of females who terminated their first pregnancy within a period of two years, increases with increase in the age at marriage. The distribution of currently married women by age at marriage and interval in years between marriage and first live birth is given in Table 21 in Appendix A.

4.0 Parity Progression Ratio

Parity progression ratio will give an idea of the effect of each birth on the future fertility performances of females. Parity ratio of order 'n' is defined in terms of probability of women having 'n' children, giving birth to (n+1)th child. The parity progression ratio for females in the rural and urban samples is given below:

TABLE 24

Parity Progression Ratio [Proportion of women having 'n' children already born, giving birth to the (n+1)th child]

Party order Progression from 'n' child to (n+1) th child	Parity Ratio	
	Rural Percentage of female	Urban Percentage of female
First to second	86	85
Second to third	84	80
Third to fourth	84	79
Fourth to fifth	80	77
Fifth to sixth	71	72
7th to 8th	69	70
8th to 9th	65	67
9th to 10th	63	56

The parity progression ratio based on all pregnancies terminating in live births shows that majority of the females prefer to build up large families. 86% of the married females in the rural and 85% in the urban areas who have given birth to first child go for the second child. Nearly 15 per cent of the females ceases child bearing after the first birth. Nearly 70% of the females having six children go for one more child. Nearly 63% married females in rural areas and 56% in urban areas having 9th child went on for 10th. In both rural and urban areas, parity declines as order of birth increases, but this decline starts only at very high parities.

Average No. of Children born alive to women of completed fertility

The average number of children born alive to women of completed fertility is given in the table below.

TABLE 25

Average No. of Children born alive per woman of completed fertility

Present age	Average No. of children	
	Rural	Urban
45-54	5.39	5.33
55-64	4.76	5.88
65-74	4.86	..
Total	5.11	5.51

For the study of completed fertility only women who have had unbroken marital life till the age of 49 and married only once considered. These women are representing three different cohorts. The women who are born during the decade 1901-1911 and now in the age group 65-74 have an average of 5 children. The average number of children born per woman of completed fertility in rural areas is 5.11 and 5.51 for urban.

6.0 Average number of Children born to women of completed fertility by their age at marriage

The average number of children born alive to women of completed fertility by their age at marriage is given in Table 22 in Appendix A.

The average number of children born per women of completed fertility is higher among the women who married in the age group below 15 and 15-19. The average number of children born alive per women decreases as age increases. In the case of women born in their different decades the average number of children born per women of completed fertility is high for the women now in the age group 65-74 and who were married before the age 15.

7.0 Childless women

Percentage distribution of currently married women without any children born alive at the time of the survey is given below.

TABLE 26
Percentage Distribution of currently married women without children

Present age group	No. of C.M.W.		Childless		Percentage	
	Rural	Urban	Rural	Urban	Rural	Urban
15-19	110	17	96	11	80.00	64.70
20-24	283	18	86	3	25.29	3.84
25-29	282	26	30	1	9.11	..
30-34	209	22	11	..	4.29	4.76
35-39	191	21	5	1	2.28	-
40-44	124	14	5	..	3.35	25.00
45-49	120	12	30	3	21.12	..
Total	1319	130	263	19	16.91	14.61

Among the currently married women the highest percentage of women who have no child at the time of the survey is among the females in the age group 15-19. The percentage of childless women in all ages for rural is 16.91 and for urban 14.67. The percentage of childless women in all ages is higher in the rural areas.

8.0 Age at marriage of daughter and age at marriage of mother

There is no significant change in the age at marriage of mothers and daughters noticed in the survey results. The distribution of mothers and daughters according to age at marriage is given below.

TABLE 27

**Distribution of ever married females by age at marriage
of mother and daughter**

Age at Marriage	Rural				Urban			
	Mother (No.)	Percen- tage to total	Daugh- ter (No.)	Percen- tage to total	Mother (No.)	Percen- tage to total	Daugh- ter	Percen- tage to total
Below 15	284	16.33	67	37.51	27	13.84	9	6.82
15—19	1123	64.54	748	83.86	136	69.74	108	81.82
20—24	303	17.41	75	8.41	27	13.84	13	9.85
25—29	28	1.61	2	0.22	4	2.05	2	1.51
30+	2	0.11	..	..	1	0.53	..	..
Total	1740	100.00	892	100.00	195	100.00	132	100.00

Rural		Urban	
Mean age at marriage of Mother	18.01	Mother—Mean	17.78
Median age	17.68	Median	17.59
Mean age at marriage Daughter	17.65	Daughter—mean	17.80
Median	17.56	Median	17.64

In this respect an earlier study* shows results which are different, as the mothers have a lower age at marriage than daughters in most other centres.

The analysis shows an upward trend in the age at marriage of daughters compared to their mothers. 11.33 per cent of the mothers were married below the age 15. The corresponding percentage for daughters below the age 15 is 7.51. Majority of the daughters are married in the age group 15—19.

9.0 Interval between marriage and first child birth and corresponding interval of mother

Distribution of ever married women by interval between marriage and first child birth and corresponding interval of mother is given below:

* R. S. Kurup and N. V. George Variation in Fertility Between Two Generations. Paper No. 45, DRC of BES., Trivandrum, July 1968.

TABLE 28

Percentage Distribution of ever married women by interval between marriage and first child birth and corresponding interval of mother

Interval (in years)	Rural		Urban	
	Marriage and first child birth daughter %	Marriage and first child birth mother %	Mother	Daughter
Below 1	8.07	2.30	1.16	1.74
1-2	33.24	24.45	43.61	47.69
2-3	24.63	43.02	25.59	23.85
3-4	13.02	14.50	13.95	10.46
4-5	11.61	8.43	7.56	7.55
5-9	6.90	6.84	6.97	5.81
10-15	2.12	0.35	0.58	2.32
15+	0.41	0.11	0.58	0.58
Total	100.00	100.00	100.00	100.00

More than 8% of the daughters in rural samples has less than one year interval between marriage and first child birth, whereas the corresponding percentage of mothers is 2.30.

More than 80% daughters in both rural and urban areas had their first live birth within 5 years of their married life. The corresponding percentage of mothers in respect of rural areas is more than 86. The percentage of mothers and daughters who had first live birth decreases with the increase in their married life. The distribution of ever married women by interval between marriage and first child birth of corresponding interval of mother is given in Table 23 in Appendix A.

10.0 Ever married women by age at first birth (Single year)

Distribution of ever married women by age at 1st birth in single years is given in Table 24 in Appendix A. This reveals that the highest percentage of first live births, occurred to females in the age 18 for rural and urban areas. The percentage of females who had their first live birth decreases gradually after the age 20. More than 66 of the 1st births have occurred to females aged 20 and below the age 20. More than 52% of females in urban samples and 51 per cent of the rural females have male children in their first live birth.

IX. SUMMARY AND CONCLUSIONS

A total number of 1413 households in Malappuram District has been covered by the survey including 120 households from urban areas of the District.

54 per cent of the sample population are Muslims. The proportion of Muslims in urban sample is comparatively higher than the rural sample.

Among the rural population 35 per cent of the males and 50 per cent of the females are illiterates. The percentage of illiterates among the urban population is less than the rural population.

More than 60 per cent of the households reported to have a monthly income of less than Rs. 300.

Nearly 63 per cent of the households is engaged in agricultural activities, either as cultivators or as agricultural labourers. In urban areas more than 25 per cent of the households is engaged in trade and commerce.

The age structure of the sample population is more or less representative of the age structure of the general population of the District.

52 per cent of the total females are in the reproduction age group i.e. 15-49.

The percentage of ever married males is 36 among the total males in the age group 15+ and the percentage of ever married females is more than 48. From among the currently married males, the highest percentage is from the age group 40-44, while the highest percentage females currently married are from the age group 30-34.

For every 100 currently married males, it is noted that there are 107 married females.

71.15 per cent of the working males in rural areas and 80.25 per cent of males in urban areas are ever married among the working population.

The proportion of married males in each age group increases as age advances and reaches a maximum at the age group 35-39 in rural areas and 40-44 in urban areas and then decline. The proportion of married females reaches the maximum at the age group 20-24 for rural and 25-29 for urban and showing declining trends thereafter. But the decline in the case of females is more sudden than in the case of males.

Among the married males 5.77 per cent are either widowed, divorced or separated. 12.28 per cent of the females are either widowed or divorced. A gradual increase is seen in the proportion of widowed or divorced among females after the age 30-34.

Nearly 83 per cent of the females enter into marital union before they reached the age 20. In the urban area this percentage is higher than in the rural areas. The mean age at marriage for females for both rural and urban areas combined is 18.00 years,

Among ever married females of all age groups taken together, 7.49 per cent in rural and 12.60 in urban areas are married more than once. 3.93% females in urban areas and 1.31 per cent in rural areas are married more than twice.

It is found that the average number of children born alive to women in rural areas and urban areas are 3.42 and 4.02 respectively.

Of the total number of children born, 25 per cent of the children in rural and 90 per cent in urban areas were born to females married before the age 20. It is revealed that the average number of children born to per woman decreases with the increases in the age at marriage.

The crude birth rate for the District works out to 32.2 according to the survey results and the crude death rate is 9.

55 per cent of the first order of pregnancy in rural areas and 62 per cent in urban areas occurred to females who are in the age group 15-19.

The mean age at last pregnancy for both rural and urban areas are 38.26 years and 35.71 respectively.

3.60 per cent of the pregnancies terminated as abortion and still births. The average number of pregnancies experienced by the females in the survey is 5.64 of which 0.32 are found to be still births or abortions. 50 per cent of abortions and 40 per cent of the still birth have occurred to the first three order of pregnancies.

The first three orders of births, contributes more than 56 per cent of the total births. The average family size can be reduced by more than 40 per cent if measures are adopted to prevent births order 4 and above-

More than 45% of the females in the rural areas and 48% in urban areas terminated their first pregnancy within the first two years after the marriage.

A large proportion of the females showed the tendency of building up of large families. Nearly 63 per cent of the females in the rural areas and 56% in the urban areas having 9th child went on for 10th.

The average number of children born per woman of completed fertility in rural and urban areas are 5.11 and 5.51 respectively.

16.91 per cent of the married females in rural areas and 14.67 female in urban areas have no living children at the time of the survey.

There is no significant change in the age at marriage of mothers and daughters.

It is noticed that there is an upward trend in the age at marriage of daughters compared to their mothers.

The highest percentage of first live births occurred to females in the age 18.

APPENDIX—A

TABLES

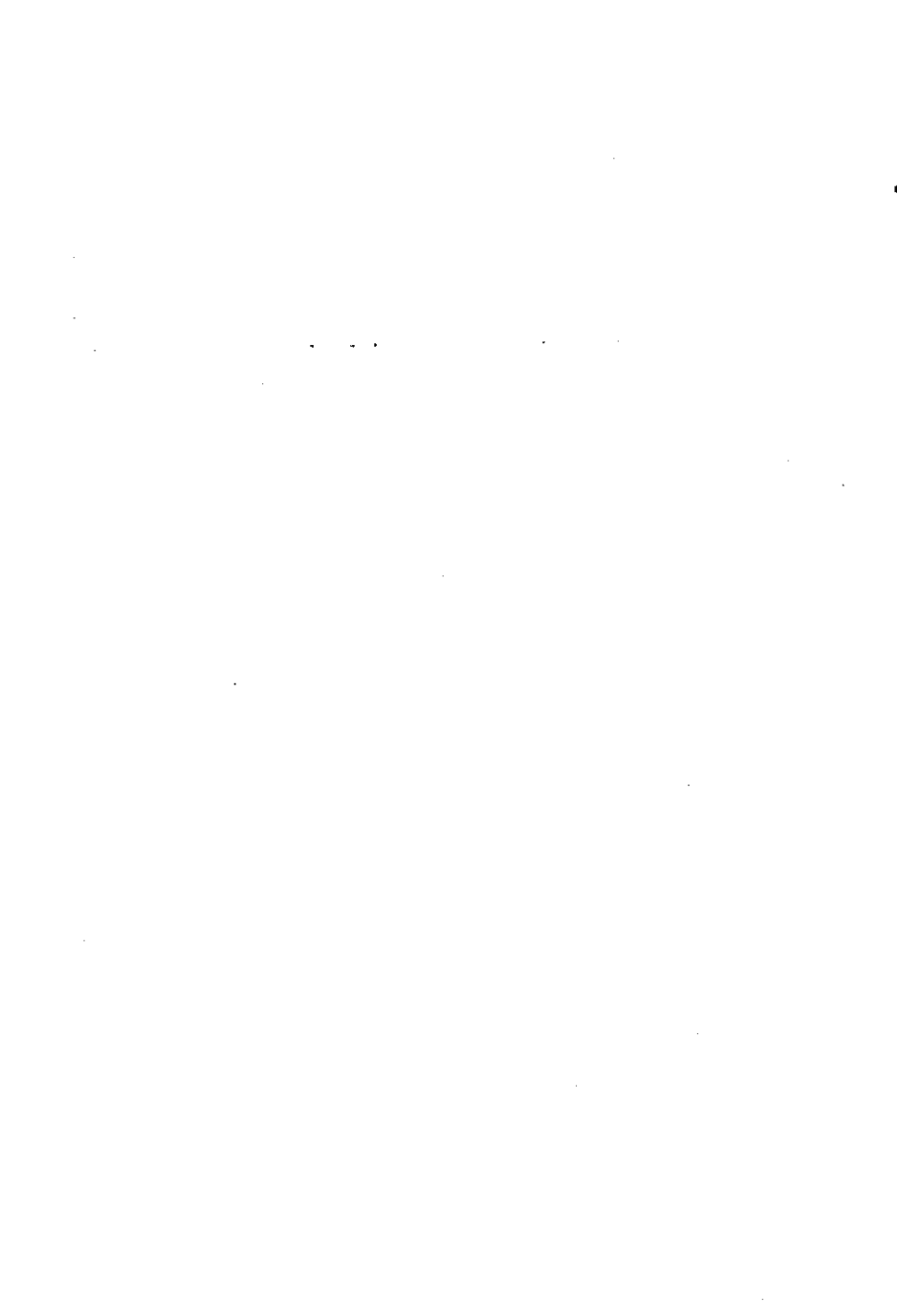


TABLE 1
Socio-Economic Indicators

	Trivandrum	Quilon	Alleppey	Kottayam	Ernakulam	Trichur	Palghat	Malappuram	Kozhikode	Cannanore
1. Literacy rate:										
Total	62.54	64.97	70.44	67.92	65.29	61.61	46.69	47.50	57.23	54.84
Male	68.64	70.10	75.22	71.77	70.34	66.35	54.58	55.32	65.82	63.20
Female	56.48	59.84	65.79	63.59	60.15	57.23	39.22	40.78	48.56	46.61
2. Percentage of Urban population	26.0	7.8	16.9	10.2	27.6	11.7	12.7	6.7	26.7	13.7
3. No. of medical institutions per Sq. K. M.	110	180	343	202	282	..	56	57	..	92
4. Bed population—Ratio 1974-75 (No. of Hospital Beds per lakh of population)	205	64	135	117	107	131	65	37	133	70
5. Percentage of workers engaged in non-agricultural activities	56.10	52.30	53.33	49.66	63.14	53.51	35.83	42.03	48.08	47.76

Source:—1, 2, 3 and 5—Census Reports 1-71.

4—Economic Review—1975

TABLE 1 A

Distribution of Population According to Educational Level

Educational Status	Rural			Urban		
	Male	Female	Total	Male	Female	Total
Illiterate	35.36	50.02	42.76	25.38	39.85	32.65
Literate but below Primary	27.70	20.90	24.27	36.67	28.43	32.52
Primary	21.41	18.79	20.08	16.67	17.77	17.22
Middle	11.39	8.17	9.77	12.82	11.67	12.25
S.S.L.C.	3.49	1.86	2.67	6.92	1.52	4.21
Graduate and above	0.65	0.26	0.45	1.54	0.76	1.15
Total	100.00	100.00	100.00	100.00	100.00	100.00

TABLE 2

Distribution of Households by Means of Livelihood

Occupation	Rural%	Urban%
1. Cultivator	22.89	5.00
2. Agricultural labour	39.37	8.34
3. Livestock, forestry etc.	0.77	..
4. Mining and quarrying	0.15	..
5. Manufacturing, processing, servicing and repairs in household industry	4.95	14.17
6. Other than household industry	0.85	5.00
7. Construction	2.01	3.33
8. Trade and commerce	9.05	25.83
9. Transport	1.01	3.33
10. Other services	18.95	35.00
Total	100.00	100.00

TABLE 3

Distribution of Households by Monthly Income and Livelihood

(a) RURAL

Monthly Income	1	2	3	4	5	6	7	8	9	10	11	12
		Cultivator	Agricultural Labourers	Livestock, Forestry, Fishing, Plantation etc.	Mining and Quarry- ing	Manufacturing, Processing	Other than House- hold Industry	Construction	Trade & Commerce	Transport, Storage & Communication	Others	Total
Below 50		0.68	0.39	..	..	..	..	..	0.86	..	1.63	0.70
50—99		2.03	5.11	..	..	3.13	18.18	..	0.86	..	2.86	3.40
100—199		14.87	37.33	50.00	50.00	21.87	45.46	3.85	17.09	46.15	19.59	25.83
200—299		27.36	36.35	30.00	50.00	20.31	18.18	38.46	33.33	46.16	23.27	30.70
300—399		22.97	15.32	..	..	35.94	18.18	53.84	26.50	7.69	17.55	20.12
400—499		17.23	4.72	..	..	14.06	..	3.85	7.69	..	14.69	10.05
500 & above		14.86	0.78	20.00	..	4.69	..	..	13.67	..	20.41	9.20
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

TABLE
Percentage Distribution of

Male						
Age group	N.M	C.M	W	D	S	Total
1	2	3	4	5	6	7
Below 15	100.00	..	..	..	..	100.00
15—19	99.33	0.67	..	..	..	100.00
20—24	77.63	21.60	0.77	..	..	100.00
25—29	33.23	64.84	0.64	0.97	0.32	100.00
30—34	10.53	86.60	..	2.39	0.48	100.00
35—39	3.34	94.56	0.84	..	1.26	100.00
40—44	1.75	95.35	1.75	1.15	..	100.00
45—49	2.44	93.29	1.83	1.83	0.61	100.00
50—54	1.59	93.65	3.97	0.79	..	100.00
5—59	..	88.22	9.60	0.98	..	100.00
60+	2.24	81.17	16.14	..	0.45	100.00
Total	64.40	33.54	1.46	0.43	0.17	100.00

TABLE
Percentage Distribution of

Male						
Age group	N.M	C.M	W	D	S	Total
1	2	3	4	5	6	7
Below 15	100.00	..	..	..	..	100.00
15—19	100.00	..	..	..	..	100.00
20—24	63.64	36.36	..	..	..	100.00
25—29	29.16	70.84	..	..	..	100.00
30—34	..	100.00	..	..	..	100.00
35—39	..	100.00	..	..	..	100.00
40—44	7.40	92.60	..	..	..	100.00
45—49	..	100.00	..	..	..	100.00
50—54	10.00	90.00	..	..	..	100.00
55—59	..	100.00	..	..	..	100.00
60+	3.45	65.52	27.58	3.45	..	100.00
Total	61.54	36.15	2.05	0.26	..	100.00

5 (A)

Persons according to Marital Status

RURAL

Female					
N.M	G.M	W	D	S	Total
8	9	10	11	12	13
99.89	0.11	..	..	..	100.00
74.14	23.71	0.21	1.08	0.86	100.00
24.76	66.75	1.18	5.19	2.12	100.00
5.05	83.68	1.48	7.42	2.37	100.00
1.23	86.01	5.35	4.12	3.29	100.00
1.75	83.40	8.30	4.37	2.18	100.00
2.34	72.52	18.71	4.68	1.75	100.00
0.62	74.07	22.22	2.47	0.62	100.00
..	49.65	47.52	2.13	0.70	100.00
1.72	52.59	42.25	1.72	1.72	100.00
0.46	23.04	74.66	1.84	..	100.00
54.44	35.28	9.14	2.18	0.96	100.00

5 (B)

Persons according to Marital Status

URBAN

Female					
N.M	C.M	W	D	S	Total
8	9	10	11	12	13
100.00	..	..	..	..	100.00
100.00	..	..	..	..	100.00
58.54	41.46	..	..	..	100.00
4.19	75.00	..	16.67	4.16	100.00
..	92.85	3.57	3.58	3.57	100.00
..	91.67	8.33	..	..	100.00
..	95.46	4.54	..	..	100.00
..	87.50	6.25	6.25	..	100.00
5.88	64.71	29.41	..	..	100.00
..	58.34	41.66	..	..	100.00
..	35.29	58.82	5.89	..	100.00
50.75	36.93	10.05	2.01	0.26	100.00

TABLE
Percentage Distributing Persons in each

Occupation group	Males					
	N.M	C.M	W	D	S	Total
1	2	3	4	5	6	7
1. Cultivator	29.00	67.40	1.94	0.84	0.83	100.00
2. Agriculture Labourers	34.34	61.44	2.50	1.31	0.41	100.00
3. Livestock, Forestry etc	23.53	76.47	..	..	..	100.00
4. Mining, quarrying	15.79	84.21	..	..	..	100.00
5. Manufacturing						
(a) Household industry	31.43	66.67	1.85	..	..	100.00
(b) Other than household Industries	25.00	75.00	..	..	..	100.00
6. Construction	17.25	82.75	..	..	..	100.00
7. Trade and Commerce	18.85	79.82	1.33	..	..	100.00
8. Transport and Storage	..	100.00	..	..	..	100.00
9. Other services	25.29	71.72	1.19	0.90	0.90	100.00
Total	23.84	68.22	1.80	0.74	0.40	100.00

TABLE
Percentage Distributing Persons in each

Occupation group	Male					
	N.M	C.M	W	D	S	Total
1	2	3	4	5	6	7
1. Cultivator	16.67	83.33	..	..	..	100.00
2. Agriculture Labourers	6.67	93.33	..	..	..	100.00
3. Livestock, Forestry etc.	..	100.00	..	..	..	100.00
4. Mining, quarrying	..	..	..	..	..	..
5. Manufacturing						
(a) Household Industry	34.79	65.21	..	..	..	100.00
(b) Other than household industries	50.00	50.00	..	..	..	100.00
6. Construction	..	100.00	..	..	..	100.00
7. Trade & Commerce	12.50	87.50	..	..	..	100.00
8. Transport & Communication	37.50	62.50	..	..	..	100.00
9. Other services	20.31	78.13	..	1.56	..	100.00
Total	19.75	79.62	..	0.63	..	100.00

6 (A)

Occupation group according in Marital Status

RURAL

Females					
N M	C.M	W	D	S	Total
8	9	10	11	12	13
10.16	45.76	30.50	1.72	11.86	100.00
24.45	48.61	19.50	3.72	3.72	100.00
..
25.00	62.50	12.50	..	..	100.00
..	85.72	..	14.28	..	100.00
12.50	37.50	50.00	..	..	100.00
..
9.67	48.29	35.48	6.46	..	100.00
20.96	48.84	22.11	3.72	4.37	100.00

6 (B)

Occupation group according in Marital Status

URBAN

Female					
N M	C.M	W	D	S	Total
8	9	10	11	12	13
..	..	100.00	..	..	100.00
10.00	40.00	30.00	10.00	10.00	100.00
..
10.41	70.83	10.41	6.25	2.10	100.00
14.29	85.71	..	..	..	100.00
100.00	..	..	..	..	100.00
..	..	100.00	..	..	100.00
..
25.00	62.50	12.50	..	..	100.00
12.99	63.64	15.58	5.19	2.60	100.00

TABLE

Percentage Distribution of Separated Persons by

Present Age	Age at Marriage					Total
	Below 15	15-19	20-24	25-29	30+	
15-19	25.00	75.00	..	..	..	100.00
20-24	12.50	50.00	37.50	..	..	100.00
25-29	..	66.67	22.22	11.11	..	100.00
30-34	..	62.50	37.50	..	..	100.00
35-39	..	60.00	20.00	20.00	..	100.00
40-44	..	100.00	..	..	..	100.00
45-49	..	100.00	..	..	..	100.00
50+	..	20.00	60.00	20.00	..	100.00
Total	4.76	59.53	28.57	7.14	..	100.00

TABLE

Percentage Distribution of Divorced Persons by

Present Age	Age at Marriage					Total
	Below 15	15-19	20-24	25-29	30+	
15-19	14.28	85.72	..	..	..	100.00
20-24	12.00	72.00	16.00	..	..	100.00
25-29	18.75	59.38	21.87	..	..	100.00
30-34	7.69	46.15	23.08	23.08	..	100.00
35-39	35.71	21.43	35.71	7.15	..	100.00
40-44	6.67	59.99	20.00	6.67	6.67	100.00
45-49	..	50.00	25.00	..	25.00	100.00
50+	28.57	47.61	14.28	4.77	4.77	100.00
Total	17.03	55.57	20.00	4.44	2.96	100.00

7

Present Age, Age at Marriage and Age at Separated

RURAL

Below 15	Age at Separation				Total
	15-19	20-24	25-29	30+	
..	100.00	..	..	..	100.00
..	25.00	75.00	..	..	100.00
..	..	25.00	75.00	..	100.00
..	12.50	50.00	37.50	..	100.00
..	..	..	50.00	50.00	100.00
..	..	..	..	100.00	100.00
..	..	..	..	100.00	100.00
..	..	..	25.00	75.00	100.00
..	16.67	30.95	28.57	23.81	100.00

8 (A)

Present Age, Age at Marriage and Age at Divorce

RURAL

Below 15	Age at Divorce				Total
	15-19	20-24	25-29	30+	
..	100.00	..	..	..	..
8.00	40.00	52.00	..	..	100.00
12.50	37.50	37.50	12.50	..	100.00
7.69	15.38	46.15	15.39	15.39	100.00
14.29	28.57	21.43	23.57	7.14	100.00
..	53.28	..	26.64	19.98	100.00
..	40.00	..	10.00	50.00	100.00
14.28	38.08	14.28	4.76	28.60	100.00
8.88	40.75	27.41	11.85	11.11	100.00

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TABLE

Percentage Distribution of Divorced Persons by

Present Age	Age at Marriage					Total
	Below 15	15-19	20-24	25-29	30+	
15-19	..	..	..	..	..	..
20-24	..	60.00	40.00	..	..	100.00
25-29	25.00	50.00	25.00	..	..	100.00
30-34	..	66.67	33.33	..	..	100.00
35-39	..	66.67	33.33	..	..	100.00
40-44	..	..	100.00	..	..	100.00
45-49	..	..	66.67	33.33	..	100.00
50+	10.00	70.00	10.00	10.00	..	100.00
Total	6.90	62.07	27.58	3.45	..	100.00

TABLE

Percentage Distribution of Widowed Persons by

Present Age	Age at Marriage					Total
	Below 15	15-19	20-24	25-29	30+	
15-19	..	..	..	..	..	..
20-24	16.67	66.66	16.67	..	..	100.00
25-29	25.00	50.00	12.50	12.50	..	100.00
30-34	7.14	64.29	28.57	..	..	100.00
35-39	22.73	54.55	9.09	13.63	..	100.00
40-44	18.92	54.05	16.22	8.11	2.70	100.00
45-49	7.32	51.22	31.70	7.32	2.44	100.00
50+	16.37	48.76	22.42	6.76	5.69	100.00
Total	15.89	50.61	22.00	7.10	4.40	100.00

8 (B)

Present Age, Age at Marriage and Age at Divorce

URBAN

Age at Divorce					Total
15-19	20-24	25-29	30+		
..
40.00	60.00	..	..	..	100.00
50.00	25.00	25.00	..	..	100.00
66.67	33.33	..	..	..	100.00
66.67	33.33	..	..	..	100.00
..	..	..	100.00	..	100.00
66.37	33.33	..	..	..	100.00
30.00	30.00	20.00	20.00	..	100.00
41.38	37.94	10.34	10.34	..	100.00

9 (A)

Present Age, age at Marriage and Age at Widow hood

RURAL

Age at Widowed					Total
Below 15	15-19	20-24	25-29	30+	
..
..	50.00	50.00	..	..	100.00
..	37.50	25.00	37.50	..	100.00
..	14.29	42.86	28.57	14.28	100.00
..	4.55	9.09	18.18	68.18	100.00
..	2.70	16.22	21.62	59.46	100.00
..	..	2.44	7.32	90.24	100.00
..	0.71	3.56	7.12	88.61	100.00
..	2.93	7.34	10.27	79.46	100.00

9 (B)

present Age at Marriage and Age at Widowhood

URBAN

Age at Widowed					
Below 15	15-19	20-24	25-29	30+	Tot 1
..
..
..	..	50.00	50.00	..	100.00
..	..	50.00	50.00	..	100.00
..	75.00	..	25.00	..	100.00
..	37.37	33.33	..	33.34	100.00
..	..	16.67	16.67	66.67	100.00
..	..	9.90	23.68	66.42	100.00
..	10.91	10.91	21.82	56.76	100.00

10

present Age and Age at First Marriage

MARRIAGE

URBAN

Below 15	15-19	20-24	25-29	30-34	35+
..
..	..	12.41	..	..	..
..	..	15.32	8.70	..	..
..	20.83	14.60	17.39	..	..
..	12.50	10.95	21.74	..	..
..	20.83	10.95	4.35	..	..
..	4.17	7.30	13.04	25.00	..
..	8.84	9.49	4.35	12.50	..
..	33.33	18.98	50.43	62.50	..
..	100.00	100.00	100.00	100.00	..

TABLE 12
 Percentage Distribution of Children to currently married women

Present Age	Rural				Urban			
	No. of children born alive				No. of children born alive			
	Male	Female	Total	Average No. of children	Male	Female	Total	Average No. of children
15-19	0.80	0.83	0.82	0.38	2.00	0.41	1.22	0.40
20-24	7.85	7.65	7.76	1.40	6.00	5.33	5.67	1.64
25-29	13.35	15.59	14.69	2.67	15.60	16.80	16.19	2.96
30-34	16.20	15.27	16.23	3.98	21.20	20.50	20.85	4.47
35-39	18.44	18.07	18.26	4.90	19.60	16.80	18.22	4.10
40-44	11.83	11.78	11.80	4.88	14.80	10.66	12.75	4.20
45-49	13.16	12.82	13.00	5.55	8.40	14.75	11.54	5.66
50+	17.87	16.97	17.44	4.94	12.40	14.75	13.56	3.42
Total	100.00	100.00	100.00		100.00	100.00	100.00	
Average	1.75	1.66	..	3.42	1.74	1.65		3.36

TABLE 13

Duration of marriage (ages)	Rural			Urban		
	No. of children born alive			No. of children born alive		
	Male	Female	Total	Male	Female	Total
Below 2	0.57	0.65	0.61	..	..	..
2—4	4.72	4.81	4.76	5.55	2.62	4.04
5—9	10.49	10.61	10.55	12.04	13.54	12.81
10—14	16.42	16.88	16.65	12.96	17.03	15.06
15—19	15.16	17.27	16.18	19.44	16.59	17.98
20—24	17.56	16.58	17.08	25.00	17.47	21.12
25—29	12.23	12.51	12.37	7.41	9.17	8.31
30 +	22.85	20.69	21.80	17.60	23.53	20.68
Total	100.00	100.00	100.00	100.00	100.00	100.00

TABLE 14

Percentage Distribution of Births according to order of Birth

Order of Birth	Rural	Urban
1	27.85	18.51
2	15.18	11.12
3	9.70	18.52
4	13.08	7.41
5	13.93	25.93
6	8.86	7.41
7	6.33	3.70
8	1.69	3.70
9	1.69	3.70
10	1.69	..
11	..	..
12	..	..
TOTAL	100.00	100.00

TABLE 15

Percentage Distribution of Deaths according to Age—
Rural and Urban and Total

Age group	Rural	Urban	Total
	Percentage to Total deaths	Percentage to Total deaths	Percentage to Total death
Below 1 year	33.96	37.50	34.42
1—4	11.32	12.50	11.47
5—9	1.89	..	1.64
10—14	3.77	..	3.28
15—19	3.77	..	3.28
20—24	1.89	..	1.64
25—29	..	..	..
30—34	3.77	..	3.28
35—39	1.89	..	1.64
40—44	..	..	..
45—49	..	12.50	1.64
50—54	7.55	..	6.56
55—59	..	..	..
60+	28.30	37.50	29.51
N.R.	1.89	..	1.64
Total	100.00	100.00	100.00

TABLE 18

Percentage Distribution of Pregnancy by Age of Mother at Termination and Type of Termination

Age of mother at termination	Rural				Urban			
	Live births	Still births	Spontaneous abortion	Total	Live births	Still births	Spontaneous abortion	Total
15-19	94.86	3.23	1.91	100.00	96.45	3.55	..	100.00
20-24	96.15	2.28	1.57	100.00	91.50	8.16	0.34	100.00
25-29	95.08	2.69	2.23	100.00	85.92	13.59	0.49	100.00
30-34	94.39	2.77	2.84	100.00	78.33	19.58	2.09	100.00
35-39	93.11	3.51	3.38	100.00	84.13	15.87	..	100.00
40-44	93.00	3.50	3.50	100.00	69.23	30.77	..	100.00
45-49	96.30	3.70	..	100.00	50.00	50.00	..	100.00
50+	..	..	..	..	..	..	..	..
Total	95.02	2.78	2.20	100.00	83.08	11.35	0.57	100.00

TABLE 19
 Percentage Distribution of Births by Order of Births
 according to Duration of Marriage

Rural

Marriage duration in years	Birth Order											Total (12)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		
0	7.38												1.66
1-4	77.53	49.63	10.13	1.80	0.62								28.78
5-9	12.04	40.25	64.99	44.07	17.83	4.91	1.75	0.40					28.72
10-14	2.28	7.16	20.17	41.03	52.99	41.62	26.43	14.06	5.39	2.61			20.76
15-19	0.50	2.43	3.61	10.35	21.82	38.58	43.89	44.98	40.72	18.30			12.33
20-24	0.22	0.53	0.86	2.75	5.36	11.51	22.94	30.92	38.32	50.98			5.91
25-29	..	..	0.24	0.0	1.25	2.71	4.49	8.03	12.58	21.57			1.51
30+	..	..	..	..	0.13	0.67	0.50	1.61	2.99	6.54			0.33
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Percentage (%)	22.48	19.00	15.90	13.14	10.01	7.37	5.00	3.11	2.08	1.91			100.00

TABLE 19 (Contd.)

Urban

Marriage duration in years	Birth Order											Total (23)	
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)		
2.85													0.63
80.00	62.30	8.73	1.98										30.85
14.29	30.15	69.84	57.43	28.40	6.90								30.60
2.29	6.16	15.08	33.66	51.85	58.90	28.26	23.33	10.52					20.86
0.57	0.68	4.76	4.95	17.28	34.48	60.87	40.00	42.11	44.45				12.52
..	0.68	1.59	1.98	2.47	1.72	10.87	36.67	42.11	22.22				4.30
..	..	..	..	..	..	..	..	..	..	..	..	..	0.12
..	..	..	..	..	..	..	..	..	..	..	..	..	0.12
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
22.13	18.46	15.93	12.77	10.24	7.33	5.81	3.79	2.40	1.14				100.00

TABLE 22

Average No. of children born alive to women of completed fertility by their age at marriage and present age (married only once and who have had unbroken marital life till the 45th or 49th of age)

RURAL

	45-54	55-64	65-74	75+	Total for all ages
Age at Marriage	Average No. of children	Average No. of children	Average No. of children	Average No. of children	Average No. of children
(1)	(2)	(3)	(4)	(5)	(6)
Below 15	5.60	4.93	6.57	5.25	5.38
15-19	5.62	5.04	5.00	6.00	5.41
20-24	4.93	4.51	4.85	2.42	4.54
25-29	3.33	5.00	2.00	..	3.18
30+	2.50	4.00	..	..	3.00
Total	5.39	4.78	5.11	4.35	5.11

TABLE 22 (Contd.)

URBAN

	45-54	55-64	65-74	75+	Total for all ages
Age at Marriage	Average No. of children	Average No. of children	Average No. of children	Average No. of children	Average No. of children
(7)	(8)	(9)	(10)	(11)	(11)
4.00	5.00	..	..	..	4.50
5.31	4.42	..	..	..	4.88
3.00	2.50	..	..	..	2.00
..
..
5.33	5.88	..	..	..	5.15

TABLE 23
 Percentage distribution of ever married women by interval between marriage and first
 child birth of corresponding interval of mother
 RURAL

Interval between marriage and 1st child birth of mother & daughter									
Below 1	1-2	2-5	3-4	4-5	5-9	10-15	15+	Total	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Below 1	12.82	6.99	8.36	8.54	11.89	3.45	..	..	8.07
1-2	43.59	35.42	30.68	32.52	32.17	39.65	50.00	50.00	33.24
2-3	15.38	23.37	25.8	23.58	21.68	25.86	16.67	..	24.63
3-4	10.26	15.66	13.01	14.63	9.09	6.04	..	50.00	13.02
4-5	2.56	6.75	7.26	6.91	3.50	9.48	..	..	6.90
5-9	15.39	9.88	11.64	9.76	16.78	14.66	..	..	11.61
10-15	..	1.21	2.33	2.85	4.19	0.86	..	..	2.12
15+	..	0.72	0.14	0.81	0.70	..	..	..	0.41
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	2.30	24.45	43.02	14.50	8.43	6.84	0.35	0.11	100.00

TABLE 23 (Contd.)
 URBAN

Interval between marriage and first child birth of mother & daughter									
Below 1	1-2	2-3	3-4	4-5	5-9	10-15	15+	Total	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Below 1	..	2.27	4.16	..	8.33	..	..	..	1.74
1-2	52.56	47.73	37.50	53.85	..	100.00	100.00	..	47.69
2-3	24.35	15.91	41.67	23.08	16.67	..	..	..	23.85
3-4	6.42	15.64	..	..	10.67	..	..	..	5.81
4-5	1.28	2.27	4.17	7.09	..	..	..	..	2.32
5-9	7.69	9.09	8.33	7.69	41.66	..	..	..	10.46
10-15	6.41	9.09	4.17	7.69	16.67	..	..	..	7.55
15+	1.23	..	..	..	..	..	..	..	0.58
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	43.61	15.59	13.95	7.56	6.97	0.53	0.58	0.11	100.00

TABLE 24
Distribution of ever married women by age and 1st birth (Single year)

Age of women	Rural			Urban		
	Male	Female	Total	Male	Female	Total
	15	5.65	7.57	6.58	2.20	3.53	3.41
16	9.57	11.11	10.32	18.68	18.82	14.7
17	13.96	12.82	13.41	13.19	17.65	15.34
18	15.69	15.63	15.66	10.99	18.82	18.75
19	10.50	7.94	9.25	9.89	7.05	8.52
20	9.11	12.58	10.80	14.30	10.58	12.59
21	8.07	6.59	7.36	8.10	4.71	6.82
22	7.15	7.20	7.18	3.30	4.71	3.97
23	4.84	4.19	4.36	7.70	1.13	4.54
24	3.00	3.54	3.26	4.40	1.18	2.84
25	2.54	3.54	3.13	1.09	1.18	1.14
26	1.62	1.71	1.66	..	1.18	0.57
27	1.50	1.19	1.54	..	..	..
28	1.04	0.61	0.83	1.09	3.53	2.27
29	0.92	0.49	0.71	..	2.55	1.14
30	1.27	0.85	1.07	..	2.35	1.14
31	0.69	0.37	0.53	..	..	..
32	0.46	0.85	0.63	1.09	..	0.57
33	0.12	..	0.03	1.09	..	0.57
34	1.15	0.12	0.65	..	..	..
35	1.15	..	0.59	1.09	1.18	1.14
Total	100	100	100	100	100	100

APPENDIX—B

SCHEDULE



FERTILITY SURVEY IN MALAPPURAM DISTRICT, 1974-75

SCHEDULE

Block I. Identification Particulars of the Household

1. Name of Panchayat/Town.....
 2. Ward No.....
 3. House No.....
 4. Religion.....
 5. Total monthly income of the household.....
 6. Means of livelihood of the household.....
- Caste.....

Block II. General Particulars of normal household members

Sl. No.	Name	Relation to the Head	Sex	Age in years completed	Marital Status	Educational Status	Occupational Status	Remarks
1	2	3	4	5	6	7	8	9
..
..
..
..
..

Block III. Marriage History of Evermarried Women of the Household

1	2	3	4	5	6	7
Present age	No. of times married (With Sl. No. for each marriage)	Age at marriage (in years for each marriage)	Age at widowhood/Divorce/Separation (in years)	Marriage duration in years (in respect of each marriage)	Date if sterilized (indicate H or W)	
..
..
..
..

Block IV

- No. of live births during the past one year (from Dec. 1, 1973 to Nov. 30, 1974) to the normal residents of the house hold.

Sex of child	Date of birth	Age of mother	Parity
.....
- No. of deaths during the past one year (from Dec. 1, 1973 to Nov. 30, 1974) to the normal residents of the household.

Sex	Age at death	Cause of death
.....

Block VI. Fertility History of Mothers of Evermarried Women

Sl. No. in Block II	Name of mother	Present age if alive	Age at death if dead	Age at marriage in years (for each marriage if married more than once)	No. of births		Age of mother at the birth of each child									
					Born alive	Still birth	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
..
..
..
..

Block VII

1. Average monthly household expenditure
2. Respondent (Sl. No. in Block II)
3. Date of Interview.
4. Name of Interviewer

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LIST OF PRICED PUBLICATION

1. Statistical Hand Book of Kerala, 1972 (Latest) and back issues
2. Basic statistics relating to Kerala Economy 1956-57 to 1973-74
3. Administration Report 1975-76 and back issues
4. Land Reform Survey of Kerala
5. The Third Decennial World Census of Agriculture 1970-71—
Report for Kerala State Vol. I & II
6. Demographic Report of Kerala
7. Planning for Employment
8. Fact Book on Man Power 1977
9. An assessment of the camp performance and the unprotected couple
in Palghat District after the mass camp

Publication under print

1. Kerala in Maps 1975
2. Municipal Year Book 1973
3. Statistical Hand Book of Kerala 1975
4. Statistical Abstract of Kerala 1974

Copies of the above priced publications can be had from the
Government Press, Trivandrum on payment.