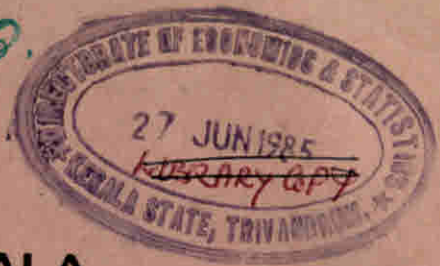


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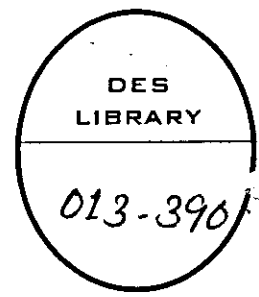


**GOVERNMENT OF KERALA**

**India population project-III  
kerala state  
report on the baseline survey**

**DEPARTMENT OF ECONOMICS & STATISTICS**

**OCTOBER-1984**



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## P R E F A C E

A baseline survey on the World Bank aided India Population Project III implemented in Kerala was conducted by the Department in the four Project Districts. The Survey aims at providing baseline estimates of the demographic variables relating to these Districts, which are essential for evaluating the achievements of the programme.

The findings of the survey are presented in this report. It is hoped that the data will be useful for those implementing the programme as well as those evaluating the performance.

The field work relating to the survey was conducted by the experienced Investigators and Junior Statistical Inspectors of this Department in addition to their normal duties. The work was supervised by Statistical Inspectors/Additional Statistical Inspectors at Taluk level and by Deputy Directors/District Officers/Additional District Officers at the District level. Tabulation, analysis and report writing was done at the Head Quarters.

Sri.N.V.George, Joint Director (Survey & Design) prepared the scheme of the survey and was closely associated with all the items of work relating to the scheme, including the drafting of the report. I express my appreciation on the sincere co-operation of Sri.George.

Smt.C.Zainaba, Joint Director was in charge of the scheme and was responsible for completing the tabulation of the data collected. The Deputy Directors, District Officers, Statistical Inspectors, Investigators and Compilers of this Department co-operated in completing the work allotted to each of them in time.

I wish to acknowledge with thanks the sincere and timely help rendered by the various persons in the Directorate of Economics and Statistics.

I also wish to express my sincere thanks to Dr.J.K.Mhas, Director of Health Services (IPP & FW) and Project Co-ordinator for making necessary arrangements for printing of the schedules at the offset press of the Directorate of Health Services within a short time and for providing necessary facilities for the survey. The help received from the District Project Officers is also gratefully acknowledged.

Trivandrum,  
9-11-1984.

N.GEORGE JOHN  
DIRECTOR

Report on the Baseline survey on  
India population project III Kerala

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Report on the Baseline Survey on India Population  
Project III - Kerala

Chapter-I  
INTRODUCTION

Government of India have accorded sanction for implementation of two 'Area Projects' aided by the World Bank, India Population Projects I and II in the States of Uttar Pradesh, Karnataka and Andhra Pradesh. Under India Population Project III, Karnataka and Kerala States have been selected by Government of India and the World Bank. The Population Projects are to assist the Government in accelerating the implementation of Health and Family Welfare Programme in the areas selected. Under Project III ten backward districts in Karnataka and Kerala have been selected, out of which six are in Karnataka and four in Kerala. The Districts selected in Kerala are Idukki, Palghat, Malappuram and Wynad. The project is being implemented in the State for a period of five years from 1-4-84.

The project focuses attention on those areas that are relatively backward in terms of socio-economic development. Even though the State has achieved remarkable progress in reducing the birth rate, death rate, infant mortality rate, maternal mortality etc. compared to the other States of Indian Union, the performance is poor in certain backward districts of the State. Perhaps this may be due to the uneven distribution of health facilities and services in certain parts.

The Districts of Wynad, Malappuram, Palghat and Idukki are pragmatically backward in the availability of such facilities and services and as such they were selected for implementation of the projects.

The objectives of the project are to:

- a) Support the attainment of India's Population goal in the context of the area project programme;
- b) Reduce fertility and lower infant, child and maternal mortality by focussing attention on specific programme intervention and generating demand for service and
- c) Ameliorate programme constraints at State and district levels by improving coverage and quality management, planning, monitoring and evaluation.

These objectives are proposed to be achieved by providing staff and facilities needed for and by developing the information, education and communication strategies.

Major components of India Population Project III are the following:

- i) Service delivery
- ii) Demand generation including information, education and communication activities and population education;
- iii) Research and evaluation;
- iv) Project management;
- v) Construction

The total project cost for the 5 year period is estimated to be Rs.47 crores.

In order to assess the achievements of the project it is necessary to have baseline data regarding its objectives. For this the Department of Economics and Statistics was entrusted with the work of conducting a baseline survey. The details of the survey conducted and its results are given in the following Chapters.

## CHAPTER - II

### Survey design and field operations

#### Objectives:

The survey was intended to provide precise base year estimates of birth, death, infant mortality rates, fertility rates, morbidity rates, immunisation rates and knowledge, attitude and practice of family planning methods in the project areas.

#### Coverage:

The project districts of Idukky, Palghat, Malappuram and Wynaad were covered by the survey. In addition to this two blocks each adjacent to each of the four project districts also were covered in the survey, for comparison between project and non-project areas.

Sampling design and sample size:

A stratified three stage random sampling design was adopted for the survey in Rural areas and two stage in Municipalities. Blocks and Municipalities were considered as the stratum. Within each Block the Panchayats were the first stage units and wards were the second stage units. Wards in the municipal areas were the first stage units. All the selected wards on rural and urban areas were enumerated for collection of data on population, births and deaths. A ten percent sample of households was enumerated for collecting data on family planning and related aspects.

From each of the Blocks, three Panchayats were selected and from each of the selected Panchayats, one ward was selected. In the Municipalities three wards each were selected except in Palghat where six wards were selected. In Wyanad District, six Panchayats were selected from Sultan Battery Block. The Number of Panchayat/Municipal wards and households enumerated are given in the following table.

Table-1  
Number of wards selected and households enumerated

District	Wards selected		Households enumerated	
	Panchayat	Municipality	Panchayat	Municipality
<u>Project area</u>				
Idukky	24	6	6259	1180
Palghat	36	12	10712	3404
Malappuram	42	12	11553	3108
Wyanad	12	..	2954	..
<u>Non-Project areas</u>				
Kottayam	6	..	1728	..
Trichur	6	..	2086	..
Kozhikode	6	..	1655	..
Cannanore	6	..	1790	..
<b>Total</b>	<b>138</b>	<b>30</b>	<b>..</b>	<b>..</b>



In the selected wards all the household were enumerated if the number of households in the ward was less than or equal 500. If the number exceeded 500 such wards were divided in two hamlets and one hamlet was selected at random. The selected hamlet was enumerated completely. A list of selected Panchayat/Municipal wards is given in the Appendix.

Field Operations:

The field work was done by the Investigators/Junior Statistical Inspectors of the Department in addition to their normal duties. For this additional work, they were paid an honorarium of Rs.200/- per sample. The work was supervised by the Statistical Inspectors at the Taluk level and district level officers at the District level. The Statistical Inspectors were paid an honorarium of Rs.150/- per month.

Period of survey:

The field work was started during the last week of May 1984 and was completed by the middle of August 1984.

Details collected:

The details required were collected in five schedules.

The schedules are:

- |      |     |   |  |
|------|-----|---|--|
| Form | I   | - | General details of the population                |
| Form | II  | - | Details of births                                |
| Form | III | - | Details of deaths                                |
| Form | IV  | - | Fertility history and family planning            |
| Form | V   | - | Details of medical and public-health facilities. |

In Form I the details of Population in the houses of the selected wards as on 1-4-84 and 1-4-83 were collected. It was also ascertained whether any birth or death had taken place during the two year period from 1-4-82 to 31-3-84. In Form II details of all the births during the reference period were collected from all households where births have taken

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place during the reference period. In Form III details of all the deaths that have taken place during the reference period were collected. Form IV was canvassed in ten percent households in the selected wards. For this a random number less than or equal to 10 was given as the random start. Every 10th household commencing from the random start was selected for detailed enumeration. In this schedule the demographic particulars of all normally resident members, details of preventive measures taken, morbidity, nutritional status, fertility history of evermarried females in the 15-54 age-group and knowledge, attitude and practice of family planning, among currently married couples whose female partner was in the 15-54 age-group were collected. Form V was a schedule for collecting the details of medical facilities in the District in public and private sectors.

In order to collect the correct information from the respondents Malayalam version of the schedules were used for the survey.

Copies of the same are given in the Appendix.

In the seminar on Fertility and Family Planning held at Trivandrum from 26th to 28th November 1984, it was suggested that the birth and death rate obtained during the survey may be checked through an Intensive Sample check. Accordingly an intensive sample <sup>check</sup> on the births and deaths enumerated during the base line survey was conducted and the birth and death rates presented in this report are those corrected in the basis of the intensive sample check. In the sample check survey a 15% Sub-sample of the households enumerated during the baseline survey were selected at random and they were re-enumerated by Statistical Inspectors under the close supervision of the District level officers of the Department of Economics and Statistics.

Results of the analysis of the data collected in the schedules are given in the subsequent chapters.

### CHAPTER III

#### General profile of the Project Districts:

India Population Project III is being implemented in the four districts of Kerala viz. Idukki, Palghat, Malappuram and Wynaad Districts. In the following paragraphs a general

picture of the project Districts is given based on the census and other sources.

Idukky:

The District was formed on 26th January 1972.. The District consists of four taluks. Three taluks are in the High Range areas, which is 300 metres above sea level. Cardamom and tea are the main plantation crops grown in the district. The District is industrially backward. Tea packing, canning, plywood and match manufacture are the important industries functioning in the districts.

Palghat:

The District known as the granary of Kerala produces the largest share of State's rice production. Attappady in the District is a tribal area. The irrigation projects of Malampuzha, Walayar, Mangalam, Meenkara, Chittur and Manjira-puzha provide irrigation facilities to large areas in the District.

Malappuram:

The District was formed in 1969. As the name of the District indicates the District consists of hills and valleys. The Teak plantations of Nilambur in the District are the eldest in the State. A large number of tribals are found in the hilly areas of the District.

Wynad:

The District formed in 1980 consists of hilly areas of 700-2100 metres high above sea level. The District till recently was inhabited by a few landlords and tribals. Persons from other parts of the State began to migrate and settle in the area during the 1st half of the present century. The District is accessible by the ghat roads.

The details of the population in this project districts as per 1981 census are given in the following table.

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District	Population (1981 census) lakhs	Growth rate 1971-81	Density per sq. km.	Sex ratio (females per 1000 males)	Percentage of literate
Idukky	9.72	26.91	192	963	62.55
Palghat	20.44	21.30	456	1056	51.55
Malappuram	24.03	29.43	677	1052	55.34
Wynad	5.44	33.87	260	949	51.51

The project Districts have growth rates higher than the States growth rate of about 19% during the decade 1971-81. The population of the project districts is about 23.5% of the state's population.

Density of population in the project Districts except Malappuram is less than that of the State. Females exceed males in two project districts and the sex ratio is less in the two high land Districts of Idukky and Wynad. In all the project districts percentage of literates is less than the State's percentage. The percentage is the highest in Idukky District and less than 60 in the other three districts.

#### CHAPTER IV

##### Health facilities

The details of existing medical and public health facilities in the project districts and the selected Blocks of the Non-Project Districts were collected in Schedule V. The number of institutions, personnel and beds in the Government and private sectors were included in the schedule. The facilities according to the various systems of medicine viz. Allopathy, Ayurvede, Homoeo, Unani, Sidhavaidya and other systems were given separately. The details include the number of institutions, doctors, compounders, nurses, other paramedical personnel and beds.

The following table gives the doctor-population ratio, availability of beds per lakh population and rate of medical personnel other than doctors per lakh population. The rates given are for all the system together.

Table-2

Availability of medical facilities in the project and non-project areas

District	No. of doctors per lakh population	No. of beds per lakh	No. of medical personnel other than doctor per lakh
Idukky	47	344	114
Palghat	34	121	86
Malappuram	24	158	78
Wynad	58	386	192
<u>Selected Blocks in</u>			
Kottayam	76	424	187
Trichur	26	136	89
Kozhikode	43	88	75
Cannanore	23	109	46

The above rates are worked out taking into consideration all the systems of medicine in the private and public sectors. It is seen that Wynad is in a comparatively better position in doctor population ratio and other medical facilities. Only the area in Kottayam District has a higher position than Wynad. Idukky comes second among the project districts.

The details of the medical facilities in each district are given in Tables 4.1 to 4.8 in the Appendix.

CHAPTER V

Birth and death rates

The most important objective of the population project is to reduce the birth and death rates in the project districts by providing more facilities. In order to evaluate the effect of implementation of the project it is necessary to have reliable estimates of birth and death rates before the project has been launched. For this details of births and deaths during a two year period prior to the implementation of the project viz. 1.4.82. to 31.3.84 were collected. The events for the period

1-4-82 to 31-3-83 and from 1-4-83 to 31-3-84 were analysed separately. On comparison it was found that due to recall lapse, a large percentage of the events in the former period are missed in enumeration. The respondents were not able to remember correctly the events two years prior to the date of survey. Hence data relating to the one year reference period from 1-4-83 to 31-3-84 were used for working out the rates.

The data for the above period were analysed and presented in the following paragraph. The birth and death and infant mortality rates estimated for the project and control districts are given in the following tables.

Table 3.1

Birth rates 1-4-83 to 31-3-84 (for 1000 Population)

<u>District</u>	<u>Birth rate</u>	<u>SRs</u>
Idukky	26.57	22.9
Palghat	25.96	26.2
Malappuram	28.86	33.5
Wynad	29.12	31.8
<u>Selected Blocks in</u>		
Kottayam	25.94	
Trichur	25.99	
Kozhikode	28.47	
Cannanore	28.45	

for Palghat

The birth rates vary from 26 to 30 for Wynad in the project district and 26 to 28 for the selected areas in the control districts.

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Table 3.2.

Death rates  $\times$  1.4.83 to 31.3.84 (for 1000 population)

<u>District</u>	<u>Death rate</u>
Idukky	6.55
Palghat	6.82
Malappuram	6.59
Wynad	6.42
<u>Selected blocks in</u>	
Kottayam	6.49
Trichur	6.32
Kozhikode	6.89
Cannanore	6.49

Similarly the estimates for death rates vary from about 6.4 for Wynad to about 6.8 for Palghat.

Table 3.3

Estimates of Infant mortality rates (number of infant deaths per thousand live births) during the reference period for project district are given below

Idukky	46.18
Palghat	47.20
Malappuram	43.44
Wynad	43.63

Births according to mothers age

As can be seen from Table 5.1 which gives the percentage distribution of births according to age of mother at the time of confinement, most of the births are to mothers in the age-group 15-29 years. The percentages in 15-24 and 15-29 age groups in the districts surveyed are given below:

Table-4

Percentage of birth according to mother's age

District	<u>Percentage of births according to mother's age</u>	
	15-24 years	15-29 years
Idukky	54.88	86.34
Palghat	48.32	76.94
Malappuram	52.43	76.13
Wynad	44.47	76.62
<u>Selected blocks in</u>		
Kottayam	52.07	83.79
Trichur	43.14	75.84
Kozhikode	60.31	82.84
Cannanore	54.40	82.17

More than 75% of the births reported are to mothers in the age-group 15-29 years. More than 50% births in most of the districts are that of mothers in 15-24 age group. Births to females above 50 years are not reported. Even births to females above 40 years are very rare. This is an indication of the prevailing consciousness among the population about the need for family limitation.

Table 5.2. presents the percentage distribution of births according to order of birth. It is seen that a large percentage of the births are third or lower order births. The percentage of 3rd or lower order births in the different districts are given below.

District	<u>Percentage of 3rd or lower order births</u>	
	Percentage of 3rd or lower order births	Percentage of 2nd or lower order birth
Idukky	84.53	66.21
Palghat	72.80	55.61
Malappuram	64.70	47.87
Wynad	66.64	52.60
<u>Selected blocks in</u>		
Kottayam	88.61	72.53
Trichur	80.77	64.85
Kozhikode	72.86	52.81
Cannanore	75.15	54.09



It can be seen from the above that more than 50% births (except in Malappuram) are 1st or 2nd order births. The percentage is as high as 72 in Kottayam. When we consider 3rd or lower order births, more than 70% births in all districts except Malappuram and Wynaad are 3rd or lower order births. The lower percentage of higher order births is an indication of the increasing awareness of family limitation among the population. A small percentage of higher order births of 10 or above are also seen reported, indicating the absence of awareness of family limitation among some of the couples even now.

Table 5.3 gives the sex ratio of the births reported during the reference period. In Idukky, Trichur and Malappuram male babies exceed female babies and in other districts, female babies exceed male babies.

In Table 5.4 the percentage distribution of births according to place of delivery is given. It is seen that most of the deliveries are taking place in hospitals either Government or private. Only exception to this general pattern is Malappuram District where 60% deliveries are reported to be taking place in the home itself. Other two districts where more than 40% births taking place in the home are Kozhikode and Palghat.

Table 5.5, which gives the percentage distribution of births according to the medical attendance at the time of delivery, shows that medical aid from allopathy doctor is availed in most cases. One exception is Malappuram District where about 45% depend on the services of midwife at the time of delivery. In Palghat also about 50% depend on sources other than allopathy doctor. In Idukky and Wynaad Districts about 10% have to deliver without any medical attendance probably with the help of elder women of the family or neighbourhood.

The percentage distribution of the deaths according to age is given in Table 5.6. As can be naturally expected, a large percentage of deaths are of persons aged 65 and above. The percentage of such deaths are given below:

District	Percentage of deaths to persons aged 65 and above
Idukky	38.36
Palghat	43.46
Malappuram 8	37.98
Wynad	34.92
<u>Selected Blocks in</u>	
Kottayam	63.93
Trichur	42.68
Kozhikode 31	31.04
Cannanore	45.75

The sex ratio of deaths as females per 1000 males is given in Table 5.7. Male deaths exceed female deaths in all districts. The excess is more pronounced in the case of Idukky and Cannanore Districts.

The distribution of deaths according to place of death is given in Table 5.8. According to this table more than 50% of the deaths in all the districts take place in the home of the deceased itself. In Kottayam, Trichur, Palghat and Malappuram the percentage is almost 70%. Districts where a sizeable percentage of the deaths take place in Government hospitals are Kottayam, Wynad and Cannanore.

The distribution of deaths according to cause of death is given in Table 5.9. It may be noted that the cause of death given is based on the informant's version and is not based on any medical certification.

## CHAPTER VI

### Demographic characteristics of the Population surveyed

As mentioned earlier, a ten percent sample of households in the selected wards were selected by systematic sampling for collection of death relating to demographic characteristics of the population and their attitude towards family planning. In these selected households Form IV was canvassed. The results of analysis of the data collected in this schedule are given in this Chapter and the following four chapters. Block I of the schedule was to gather information on age, sex, marital status, educational status and employment status of all the normally resident members of the households. In this Chapter the age and sex composition, educational status, marital status and employment status are discussed.

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### 6.1. Age and sex Composition:

For any population the age and sex composition are important determinants of fertility and mortality trends. The percentage distribution of the population in the project districts and selected Blocks of the neighbouring districts are given in Tables 6.1.1 to 6.1.8. in the Appendix. The percentage of females in 15-54 age group are important from the point of fertility trends. These percentages and the sex ratio (number of females per 1000 males) estimated from the survey are given below:

Table 5

Percentage of population in specified age groups and sex ratio

District	Percentage of population in 0-14 age group	Percentage of females in 15-54 age group	Sex ratio	Sex ratio 1981 cens
Idukky	32.07	59.09	919	963
Palghat	32.13	53.74	1043	1056
Malappuram	39.50	51.21	1019	1052
Wynad	36.75	57.09	1021	949
<u>Selected Blocks in</u>				
Kottayam	26.82	60.88	978	
Trichur	33.40	54.22	1011	
Kozhikode	36.49	55.59	1037	
Cannanore	34.63	52.08	1188	

The percentage of population in 0-14 age group is 40.27 in Kerala according to 1971 Census. The percentages estimated from the survey for the project districts and control districts are lower than this, which is an indication of the decline in birth rate in the State. Idukki and Palghat districts have a lower percentage than that the Wynad and Malappuram. The percentage of females in 15-54 age group, (which is the reproductive age group) ranges from 51 to 59 in the programme districts. The percentage in 15-59 age group in the state according to 1971 Census was 54.03.

The sex ratio estimated from the survey along with the 1981 Census figures are given in the table 5. Except in Wynad the figures compare favourably with the Census figures for the project districts. The reason for variation in Cannanore may perhaps be due to the fact that only two Blocks of the district were covered in the survey.

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### 6.2. Marital Status:

In fertility studies the percentage of married persons is of crucial importance. The percentage distribution of the population sex-wise, according to the five categories of marital status viz. never married, married, widowed, divorced and separated are given in Tables 6.2.1 to 6.2.8. It is noted that the percentage of never married persons form about 55% of the population in all the districts surveyed. The range of variation between district is from 53 in Palghat to 57 in Wynad and Kozhikode. The corresponding percentage for the State in 1971 was 58. In all the districts surveyed and in the State the percentage is a little higher for males than females.

The percentage of married persons range from 37 to 40 in the districts against 36 for the State according to 1971 census. As in the Census the percentages among males and females show very little difference.

### 6.3 Educational Status:

The percentage distribution of the population according to educational status is given in Table 6.3. The literates are classified into four based on the educational attainment. While first category of literates consist of those who are literates but have not passed any examination, the other categories are those passed primary, matric and degree examinations. The percentage of literates range from 64 to 81 in the districts surveyed. The percentage of literates estimated from the survey along with 1981 Census figures are given below:

Table 6  
Percentage of literates

District	Percentage of literates	
	Baseline Survey	1981 Census
Idukky	75	67
Palghat	66	58
Malappuram	69	61
Wynad	64	66
<u>Selected Blocks in</u>		
Kottayam	81	
Trichur	65	
Kozhikode	78	
Cannanore	81	

The large variation noticed between census figures and survey figures in the control areas is due to the fact that only two Blocks in these districts were covered in the survey.

The percentages of persons having qualification matric and above ranges from 5.3 in Malappuram District to 17.1 in the selected Blocks of Kottayam District. Except these and the selected blocks in Kozhikode district the percentages are in the range 9 to 11.

#### 6.4. Employment Status:

Percentage distribution of the population according to the three categories - gainfully employed, unemployed and other is given in Table 6.4. The percentage in the first category can be taken to be corresponding to main workers in the 1981 Census. The percentages estimated from the survey along with 1981 Census percentages are given below.

Table 7

#### Percentages of gainfully employed and workers

District	Percentage of gainfully employed	Percentage of main workers (1981 Census)
Idukky	35.05	34.62
Palghat	35.59	32.66
Malappuram	23.57	21.76
Wynad	35.96	33.54
<u>Selected Blocks in:</u>		
Kottayam	29.33	27.22
Trichur	25.14	26.00
Kozhikode	23.57	21.86
Cannanore	16.62	26.93

The two sets of figures are comparable with the Census except for Cannanore district. This can be explained by the coverage of only a part of the district. The figures show that among the project districts the heaviest burden of dependency is Malappuram district. In the other districts an earner has to support two dependents on an average.

## CHAPTER VII Morbidity

Data on the incidence of diseases in the sample households was also collected in Form IV. The reference period was 30 days preceding the date of survey. The diseases which started during the reference period and those commenced before the reference period but continued during the 30 days were considered as incidences of diseases. For the purpose of the survey, a person was considered sick if the person was not able to pursue the normal activities due to the illness. The period of the illness and also the medical aid availed of by the diseased were enquired.

In Table 7.1 the percentage of persons who were reported sick based on the above definition is given. The percentage was 5 or 6 in the three project districts and about 16 in Wynad.

### facilities

Analysis of medical <sup>facilities</sup> availed of by the ~~xxxxx~~ persons who were ill shows that more than 66% sought the medical aid of Allopathy doctors. The percentage distribution according to medical aid availed is given in Table 7.2. In Malaappuram among the project districts and in all the control districts except Trichur more than 80% sought the medical aid from allopathy doctors. Only very few in most of the districts had not availed no medical aid. The highest percentage who had not availed medical aid was in Trichur (22) followed by Wynad (17).

Table 7.3 gives the percentage distribution of diseases according to the duration. More than 30% in all the districts were of less than one week duration. A substantial percentage of the diseases were of 4 weeks or above duration. In Wynad the percentage exceeded 50. The next highest percentage was in Trichur District (47%). The diseases in this category were obviously commenced before the reference period. This may include chronic illnesses also. It may be noted that in Wynad where the incidence of diseases was highest, more than 50% were diseases commenced before the 30 days prior to the date of survey.

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## CHAPTER VIII

### Immunisation and nutritional level

Inoculation of preventive vaccine for various diseases is prevalent among the people. The extent of adoption of preventive measures by the people was enquired in the survey. The preventive measures mentioned were inoculation against typhoid, diphtheria, tetanus, T.B. and Polio. Those who have adopted the inoculation and continued in the immunisation period on the date of survey were considered as adopted the preventive measures.

#### 8.1. Preventive measures among the general population

The percentages of persons who have adopted the different preventive measures and continued in the immunisation period are given in Table 8.1. It can be seen that the percentage of persons who were immune on the date of survey was very low. Generally the percentage was below 5. Only less than 3 percent of the population were immune to typhoid. The percentages were a little higher in the case of diphtheria. The percentage who have adopted tetanus inoculation was around 4 in most districts. In Wynad a high percentage (12) have adopted B.C.G. vaccination. Polio vaccine has yet to gain popularity among the people. The highest reported percentage is from Wynad (6).

After

#### 8.2 Preventive measures among children:

After ascertaining the popularity of preventive measures among the population, the extent of adoption among children below 5 years was ascertained. The measures mentioned were Triple antigen (various doses), polio vaccine (various doses) and B.C.G. The percentages of children who have adopted these inoculations are given in Table 8.2. It is gratifying to note that a substantial percentage of the children have adopted preventive measures against the diseases - tetanus, diphtheria, whooping cough, polio and T.B. It is to be noted that the percentage of children who have taken polio vaccine is very low (less than 5%) in Malappuram District. In the case of other preventive measures also, Malappuram District is seen to be very backward with only 2% adopting B.C.G. and 30-40% adopting the different doses to triple antigen. In other districts the situation is more or

encouraging. Another feature noticed is the low percentage taking the booster dose of triple antigen and polio vaccine. Compared to other measures B.C.G. appears to be less popular. In Wynad the percentage is low as 11 and in Palghat 19.

Though a comparatively better sense of necessity is seen to be existing in the case of adoption of preventive measures for children, the situation requires more improvement.

### 8.3 Reasons for non-adoption:

After ascertaining the extent of adoption of preventive measures the reasons for not adopting the methods was also enquired from those who have not yet adopted the preventive measures. This enquiry was made in the case of children below 5 years. Tables 8.3.1 to 8.3.9 in the Appendix give the percentage distribution of children who have not adopted according to the reason. The tables are given for each preventive measure. Three most important reasons were listed in the schedule. They were 1) ignorance of the measure; (2) necessity of the measure not felt and (3) difficulty to get the service.

On an examination of the tables it is seen that the reasons vary from district to district rather than from method to method. The reason for not adopting the preventive measures was difficulty to get the services is more than 50% cases in Idukki District. The only exception to this general pattern in the District was in the case of booster dose of triple antigen and polio vaccine. In these cases also the percentages were above 45%. The necessity for taking a booster dose after taking three doses was not felt by a higher percentage in all the districts. Even those who feel it necessary to take 3 doses of triple antigen and polio vaccine are not convinced of the necessity for taking a booster dose. As mentioned earlier the difficulty to get the service was ~~reason for about 25% of cases~~ the most important impediment in adopting preventive measures for children in Idukki District. In Palghat the difficulty for getting the service was the reason for about 25 or less percentage of cases. Here more than 40% were either ignorant of the measures or did not think it necessary for their children. Health education to convince the



population about the preventive measures is necessary in the District. In Malappuram District the difficulty to get service prevented about 30% from adopting preventive measures and about 40% were either ignorant or not convinced of the necessity for adopting preventive measures. In Wynaad also more than 30% had not adopted the methods due to the difficulty to get the service. In the control districts the problem of the difficulty to get the service was felt by only a lesser percentage. In these districts also a sizeable percentage were either ignorant of the preventive measures or even if they knew about the method they were ignorant of the necessity to adopt them. So also the need for taking the prescribed doses of the medicine for effectiveness was not known to many. Therefore it is necessary to make a concerted effort for educating the people on the necessity for preventive measures to get immunity to various contagious diseases, to which the children are subjected.

#### 8.4 Medical aid during pregnancy and antenatal period:

The need for seeking the aid of medical personnel during pregnancy and after pregnancy is increasingly felt by the people now-a-days. This has improved the health conditions of infants, pregnant women and feeding mothers. The hazards inherent during these periods have also decreased. The extent to which the medical advice was sought by pregnant women and feeding mothers as revealed by the results of the survey is discussed here.

The women were asked the type of medical aid utilised during the pregnancy and antenatal period. More than 90% had utilised ~~during the pregnancy and~~ during one or other of the external advice preferably that of allopathy doctor except in Palghat, Malappuram and Trichur Districts. In Malappuram about 21%, in Palghat 24% and in Trichur 32% had not utilised any medical aid. Even in these districts more than 60% had the medical aid from allopathy doctors. In the other districts more than 88% had used the medical aid from allopathy doctors. Only very few depended on medical aid of other doctors or mid-wife

The results suggest that efforts are necessary in the two project districts of Malappuram and Palghat to persuade the pregnant and feeding mothers to seek the services of medical personnel for better health of their infants and their own health.

#### 8.5. Nutritional level:

The health of the persons depends on the food they are taking. The nutritional content of the food items is very important apart from the quantity. The nutritious items of food are especially necessary for pregnant women and feeding mothers. A question whether the following items were included in the food of the family or atleast pregnant women and feeding mothers as a regular item was asked. The items specified were:

- 1) Egg
- 2) Fish
- 3) Meat
- 4) Leafy vegetables
- 5) Other nutritional food
- 6) Vitamin tablets.

The percentage of households which have given an affirmative answer to the different items are given in Table 8.5. It is noticed that more than 50% households in all districts except Cannanore have included egg as a regular item. Fish is seen to be a more usual item of food. More than 90% in 4 districts, more than 85% in 2 districts and more than 75% in the remaining 2 districts have fish as a regular item of food. Though meat is seen to be less popular item more than 60% in 6 districts have this as a regular item. Only 1/6th of the households in Cannanore and two fifths in Kottayam have meat as a regular item of food. Leafy vegetables is noticed to be included in the food of more than 90% households except in Cannanore where it is a little less than half the households. Other nutritional foods also find a place in the food of more than 50% of households. The vitamin tablets are seen to be taken only a very small percentage of the households.

Contd.....

8.6. Reason for not including nutritional food items in the diet

As seen in the previous section of large percentage of households have included nutritional items as a regular item on the food atleast the case of pregnant women and feeding mothers. The reasons for not including the items were also enquired. The following probable reasons were listed in the schedule:

- 1) Poverty;
- 2) Ignorance;
- 3) Superstition;
- 4) Religious objection

The percentage distribution of the households who have not included the items are given in Tables 8.6.1 to 8.6.9 according to the reason. The reasons for each items are given in these tables separately. From table 8.6.1 it can be seen that poverty is the predominant reason for not taking egg. In the case of fish also poverty is the important reason followed by religious objection. It may be noted that most of the households have included fish in their diet. As in the case of the other two items poverty is the main barrier in including meat in the diet. ~~As in the case of the other two~~ food of the households. In the case of leafy vegetables, most of them have no objection other than the means to procure the item. For including nutritional foods and vitamin tablets considerations other than money also play a role. Some of them are ignorant of their value though there is no religious objection.

8.7. Feeding Centres:

Feeding centres are established in various parts of the State under the Social Welfare Department and other agencies. Food items are supplied from these centres to feeding mothers, pregnant women and children. A question was asked whether the households have obtained milk, bread, corn soymilk and other items from these centres. The percentages given in Table 8.7 show that only a very small percentage (less than 5 percent in most cases) availed the facilities of these centres.

Contd.....

The discussion in the foregoing paragraphs have shown that the value of nutritional items of food and immunisation against diseases have not been felt as important by the people.

### CHAPTER IX Fertility History

The message of small family is gaining popularity among the people recently. The idea of limiting the family size is increasingly adopted by the couples. In this context it is relevant to know the fertility history of married females. In the schedule canvassed the details regarding the number of children born alive, still births, abortions and number of children living were collected. These details were collected from females in the age group 15-54 years and were married at any time. All those were married and continuing in that State and widowed, divorced and separated came under the purview of the enquiry.

The percentage distribution given in Table 9.1 gives the distribution according to the number of children born alive. As can be seen from the table a large percentage have less than 3 children born alive.

The following table gives the percentage distribution of evermarried females in 15-54 age group who have less than 3 children.

Table 8

<u>District</u>	<u>Percentage of evermarried females having less than 3 children</u>
Idukky	48.51
Palghat	51.95
Malappuram	49.76
Eynad	44.49
<u>Selected Block in</u>	
Kottayam	48.82
Trichur	50.29
Kozhikode	46.81
Cannanore	46.75

About one half of the females in most of the districts have less than 3 children as can be seen from the above. If the percentage having 3 children also is included it will be round about 65 in most of the districts.

Table 9.2 gives the percentage distribution according to number of children living. This is more relevant from the point of view of small family norm. The percentage of evermarried females having less than 3 children living is given below:

Table 9

District	Percentage of evermarried females 15-54 having less than 3 children living
Idukky	50.47
Palghat	55.15
Malappuram	51.42
Wynad	46.58
<u>Selected Blocks in</u>	
Kottayam	50.81
Trichur	53.32
Kozhikode	48.24
Cannanore	46.72

The above distribution also presents more or less the same picture with about 50% evermarried females having less than 3 children living. Another 15 to 21% have 3 children living. But an unpleasant fact seen in the Table 9.2 is that about 8 to 15% of females have 6 or more living children which is a large family by any standard. The need for bringing the message of small family norm to them is evident from this.

As we normally see most of the pregnancies terminate as live births. A small percentage of them either terminate as still births or abortions. From Table 9.3 it is seen that more than 92% females had no still births. Only in Malappuram and Wynad Districts there were more than 5 % females had still births. In Wynad the percentage is about 8. Two percent each had 2 or 3 still births. The reason for this high incidence of still births is worth further investigation. In Malappuram most of the females reported still births had the experience of only one stillbirth.

Table 9.4 gives the percentage distribution of evermarried females in 15-54 age group according to the number of abortions. More than 91% of the females in the districts except Wynad had no abortions. In Wynad the percentage was 89. Only in very few cases more than one abortion had taken place. Since medical termination of pregnancies are permitted under certain conditions, some of the abortions reported may be induced abortions.

## CHAPTER X

### Family Planning knowledge and practice

Family Planning has been accepted as a national policy of our country and every effort is made to propagate this idea. Facilities are also provided for the adoption of different family planning methods in the various institutions throughout the country. The idea is an accepted principle and requires no further investigation to its acceptability. However the practice has not become universal and there are sections to be brought into the fold. In this context it is pertinent to enquire whether all the couples who require the methods know them and put them into practice. In the baseline survey the questions on these aspects were included in Form IV. The questions were asked to couples who were currently married and having female partner in the age group 15-54 age group. The answers to questions on family planning are analysed in the following paragraphs.

#### 10.1. Knowledge of family planning:

The first step in family adoption is a knowledge of the idea. Hence it was first ascertained whether they have heard about family planning. More than 97% heard about family planning. The percentages are given in Table 10.1.

#### 10.2 Source of knowledge:

Having ascertained the extent of the spread of the idea, the next step is naturally to know the source of the knowledge. The percentage distribution according to source of knowledge is given in Table 10.2. It can be seen that the most important source

of knowledge is the Health Department. Next comes Radio and Newspapers. In this table the first source of knowledge is taken into account. The Health Department can be proud of their achievement in bringing the message to many of the couples.

### 10.3. Time of obtaining knowledge:

In Table 10.3 the percentage distribution of couples according to the time of obtaining knowledge is given. The periods are classified into four as follows:

1. Before marriage
2. After marriage before 1st delivery
3. After 1st delivery before 2nd delivery
4. After 2nd delivery.

The Table shows that a substantial percentage have knowledge before their first child was born. The percentages of couples who have knowledge before 1st delivery are given below:

District	Percentage of couples who have knowledge of family planning before first delivery
Idukky	57.55
Palghat	56.99
Malappuram	61.01
Wynad	46.51
<u>Selected Blocks in:</u>	
Kottayam	68.44
Trichur	56.85
Kozhikode	74.99
Cannanore	75.15

The above figures clearly show that the knowledge of family planning reach the couples in the appropriate time in large percentage of cases. Except in Wynad more than 55% have knowledge even before the 1st delivery. Another 10-25% gained knowledge before their second delivery. Thus most of the couples get the knowledge before it is late.

### 10.4 Knowledge of methods:

After the general question of family planning awareness the couples were asked about the specific methods they knew.

Among the six methods of vasectomy, female sterilisation, IUCD, condom, oral pills and M.T.P. the sterilisation operations were the widely known methods. Almost all of the couples who had heard about family planning knew about vasectomy and female sterilisation. The condom is the method largely known other than the sterilisation operations. IUCD comes next with percentages less than condom. The oral pills and M.T.P. have not reached a large percentage of couples in most of the districts. The percentages of couples having knowledge of each method are given in Table 10.4.

#### 10.5. Favourable attitude to family planning methods:

In Table 10.5 the percentage of couples who are favourable to different methods of family planning are given. More than two thirds have a favourable attitude towards vasectomy. The percentage is the highest in Idukky (93). Female sterilisation was more favoured than vasectomy. Those favourable to female sterilisation constituted more than 65% in all the districts. A large percentage was favourable towards IUCD also. Condom was more favoured than IUCD in all districts except Wynad, where it was only 40. Pills was a less favoured method in all the districts. Only in Idukky more than 65% favoured this method. M.T.P. is a method favoured by only a minority. The proportion of couples favoured M.T.P was below one third in most of one district.

#### 10.6 Reasons for favouring methods of family planning:

The extent to which family planning methods were favoured was discussed in the last paragraph. The couples who were favourable to the methods were further required to state the reasons for their attitude. Five specific reasons were given for the favourable attitude.

- 1) Easy
- 2) Permanent
- 3) No aftereffects
- 4) Easily available
- 5) Cheap



The percentage distribution of those who were favourable to the methods according to reasons are given in Tables 10.6.1 to 10.6.7. The most predominant reason for favouring vasectomy was that the method is a permanent method. This reason accounts for a large proportion in the districts. In the case of female sterilisation also, the permanent nature of the method was the reason for favouring it.

Though the reason for favouring IUCD vary from district to district, lack of aftereffects was the main reason for not adopting in Palghat.

Condom was favoured by the largest percentage for its easiness or easy availability in the District surveyed.

Pills were also preferred for its easiness and easy availability by large percentage of couples in districts other than Kottayam and Cannanore. In these districts more than 50% favoured the method being cheap.

The main reasons for favouring M.T.P. was its easiness. In Cannanore 76% favoured M.T.P. for its easiness.

The above analysis gives an idea of the reasons for favouring particular methods of family planning. This will help to plan the propagation of different methods which suit the preference of the couples.

#### 10.7. Reasons for unfavourable attitude:

From section 10.5 we have seen that most of the couples are favourable to family planning methods. But certain percentage are still not favouring the methods due to various reasons. Those unfavourable to the methods were asked about the reason for their unfavourable attitude. The following reasons were listed in the schedule.

- 1) costly
- 2) religious opposition
- 3) health reason

The largest percentage were unfavourable to vasectomy on grounds of religious opposition or health reasons. The attitude to the other permanent method of female sterilisation was also unfavourable to a large percentage on the same ground. Health reasons was the predominant reason for the unfavourable attitude towards IUCD as seen from Table 10.7.3. In Malappuram religious opposition was also stated to be a major reason. Condom was also unfavourable to a large percentage on religious grounds and health reasons. A large percentage (more than 50%) was unfavourable to the pills on the grounds of health reasons. M.T.P. was also unfavourable on grounds of health reasons and religious opposition.

The small percentage of couples who were unfavourable to the methods of family planning was due to different reasons. The reasons for their unfavourable attitude towards each method was discussed above. This analysis will help to launch suitable action to create a favourable attitude to different methods. The reasons for the attitude may be some times unfounded which can be removed by proper understandings.

#### 10.8 Practice of family planning

The knowledge of the family planning methods is seen to be fairly widespread among the couples of the districts surveyed as seen from the previous paragraphs. A large percentage of them are also favourable to the methods. But all of them do not practice these methods. The percentage of those who have practised these methods among those who have knowledge of the methods are given in Table 10.8. Most widely adopted methods are the male and female sterilisation operations. Among the sterilisation operations female operations are more popularly adopted than male operations. Condom is the next largely adopted method. This followed by IUCD though to a very less extent. A large percentage of couples remain to adopt the methods.

#### 10.9 Source of adoption:

Facilities for adopting the family planning methods are provided in the Government hospitals of the State. They are

the principal agencies from where the couples get the services. Table 10.9, which gives the percentage distribution of the sources of those who adopted the methods confirms this. More than 60% in all the districts except Palghat depend on Government hospitals for the source. In Palghat a large percentage was seen to depend on other sources for the source. Since condom was the largely adopted method in the district as seen from table 10.8 the source can very well be those other than hospitals.

#### 10.10 Reason for not adoption:

A large percentage of couples remain to be brought to the family planning fold for adopting the method. They have to be ~~brought~~ properly motivated for adopting the methods suitable for each. The knowledge is almost universal among the couples and good percentage are favourable to the methods also. But hesitation to accept the method still prevails. It is in this context that a question was asked to those couples who do not adopt in spite of their knowing the methods, on the reason for the same. The four reasons were listed 1) Difficult; (2) costly; (3) religious objections; and (4) health reasons.

The first two reasons were stated by a very small percentage. The third reason accounted for more than 15% in certain districts. Health was also another important reason stated by more than 20% in Idukky and Palghat. Some couples did not specify the reasons since it was not ripe to limit their family size.

### CHAPTER XI CONCLUSIONS

The base line survey conducted in the project Districts of India Population Project III has made available much information on the demographic and socio economic variables of the population in the project Districts.

The estimates of birth rates for the period 1-4-1983 to 31-3-1984 in the project Districts vary from 26x8 26 to 20-29. The death rates in the project Districts for the above period was about 6. These estimates for the selected Blocks in the

neighbouring districts are more or less the same.

A study of the demographic characteristics of the population has shown that the percentage of the population below 15 years was 40 in all the districts surveyed. The percentage of females in the age group ranged from 51 to 61 in the districts studied. Married females form about 55% of the total females.

The study of morbidity has revealed that about 6 percent of the persons in three project districts and 16 in Wynad were reported to be sick during the 30 days preceding the date of survey.

Parents were seen to be more concerned to give preventive inoculation to their children below 5 years.

Nutritional items were seen to be included in the diet of a large percentage of the households in the areas surveyed. The main reason for not including these items was lack of means to procure them.

The study of fertility history of ever married females has shown that about 44-52% have less than 3 children, born alive and 47-55% have less than 3 children living.

It was seen that almost all the currently married couples with wives in 15-54 age group have heard of family planning.

The most important source of the knowledge was the Health Department.

Above 55 percent couples had knowledge before their first delivery.

Among the various methods of family planning sterilisation operations were the most known methods. These were followed by condom and IUCD.

More than two thirds of the couples were favourable to sterilisation. Condom and IUCD were also favourable to a large percentage.

Permanent nature of the methods was the reason for favouring sterilisation operations.

Health and religious are the reasons for those who were unfavourable towards family planning.

Only a very small percentage of couples adopted the family planning methods. Among the methods sterilisation operations were more popularly adopted.

The largest source for adopting the methods was Government Hospitals.

The reasons for not adopting family planning methods were mainly health reasons and religious objections.

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## A P P E N D I X

TABLE 4.1.  
Details of health facilities  
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District: Imkky

Category	Institutions		Doctors		Compounders		Nurses		Other medical persons		Beds	
	Govt.	Pri- vate	Govt.	Pri- vate	Govt.	Pri- vate	Govt.	Pri- vate	Govt.	Pri- vate	Govt.	Pri- vate
1	2	3	4	5	6	7	8	9	10	11	12	13
1. Allopathy	53	181	68	237	52	100	125	422	118	220	524	2875
2. Ayurveda	27	65	30	58	21	10	10	1	3	15	60	13
3. Homoeo	15	51	17	52	8	3	6	2	5	8	..	10
4. Unani	..	1	..	1	..	..	..	..	..	..	..	..
5. Siddhavalidya	1	..	1	..	..	..	..	..	..	..	..	..
6. Others	7	14	1	14	..	..	..	..	..	..	..	..
7. Total	103	312	115	362	81	113	141	425	149	247	584	2918

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District: Palghat

Category	Institutions			Doctors			Compounders			Nurses			Other para-medical persons			Beds		
	Govt.	Pri-vate		Govt.	Pri-vate		Govt.	Pri-vate		Govt.	Pri-vate		Govt.	Pri-vate		Govt.	Pri-vate	
1	2	3	4	5	6	7	8	9	10	11	12	13						
Allopathy	93	168	216	204	121	138	392	204	701	118	1707	765						
Ayurveda	46	148	53	175	43	34	22	15	43	24	131	72						
Homeo	14	73	19	76	13	9	17	6	4	11	30	..						
Unani	..	3	..	6	..	1	..	..	..	..	..	..						
Siddhavidya	..	6	..	6	..	..	..	..	..	..	..	..						
Others	..	3	..	12	..	3	..	..	..	..	..	..						
Total	163	413	288	479	177	185	431	225	747	155	1858	837						



## Details of health facilities

District: Malappuram

Category	Institutions			Doctors		Compounders		Nurses		Other para-medical persons		
	Govt.	Pri- vate		Govt.	Pri- vate	Govt.	Pri- vate	Govt.	Pri- vate	Govt.	Pri- vate	Govt. Pri- vate
1	2	3	4	5	6	7	8	9	10	11	12	13
Allopathy	108	140	231	215	107	70	347	227	728	200	2380	1410
Ayurveda	58	82	68	51	41	54	37	54	113	50	146	179
Homeo	23	53	25	60	15	10	6	9	8	19	45	94
Unani	..	1	..	1	..	..	..	..	..	..	..	..
Siddhavalidya	..	1	..	1	..	..	..	..	..	..	..	..
Others	..	..	..	..	..	..	..	..	..	..	..	..
Total	189	277	324	328	163	134	390	290	849	269	2571	1683

# Details of health facilities

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District: Wynad

Category	Institutions			Doctors			Compounders			Nurses			Other para-medical persons			Beds		
	Govt.	Pri- vate		Govt.	Pri- vate		Govt.	Pri- vate		Govt.	Pri- vate		Govt.	Pri- vate		Govt.	Pri- vate	
1	2	3	4	5	6	7	8	9	10	11	12	13						
Allopathy	28	92	61	103	29	32	106	140	337	109	452	1291						
Ayurveda	12	45	13	34	8	20	2	..	8	7	10	..						
Homeo	2	47	3	45	2	4	..	1	3	3	25	..						
Unani	..	..	..	..	..	..	..	..	..	..	..	..						
Siddhavalidya	..	1	..	1	..	..	..	..	..	..	..	..						
Others	..	14	..	8	..	..	..	..	..	..	..	..						
Total	42	193	77	191	39	56	108	141	408	136	494	1291						

# Details of health facilities

District: Kottayam(selected Blocks)

Category	Institutions			Doctors			Compounders			Nurses			Other para-medical persons			Beds		
	Govt.	Pri-vate		Govt.	Pri-vate		Govt.	Pri-vate		Govt.	Pri-vate		Govt.	Pri-vate		Govt.	Pri-vate	
1	2	3	4	5	6	7	8	9	10	11	12	13						
Allopathy	14	44	24	66	16	41	59	117	106	174	307	974						
Ayurveda	7	80	7	80	7	2	3	..	11	16	10	2						
Homeo	4	45	4	45	4	..	1	4	8	2	..	..						
Unani	..	1	..	1	..	..	..	..	..	..	..	..						
Siddhavalidya	..	3	..	3	..	..	..	..	..	..	..	..						
Others	..	1	..	1	..	..	..	..	..	..	..	..						
Total	25	174	35	196	27	43	63	121	125	192	317	976						

# District, Trichur (selected blocks)

Category	Institutions				Doctors		Compounders		Nurses		Other medical persons		Beds	
	Govt.	Pri- vate	Govt.	Pri- vate	Govt.	Pri- vate	Govt.	Pri- vate	Govt.	Pri- vate	Govt.	Pri- vate	Govt.	Pri- vate
1	2	3	4	5	6	7	8	9	10	11	12	13		
Allopathy	14	18	24	18	14	7	17	9	167	30	311	121		
Ayurveda	14	15	20	13	7	..	8	..	50	2	60	..		
Homoeo	2	4	2	6	..	..	..	..	2	..	..	..		
Unani	..	..	..	..	..	..	..	..	..	..	..	..		
Siddhavalidya	..	..	..	..	..	..	..	..	..	..	..	..		
Others	4	..	1	..	2	..	3	..	3	..	..	..		
Total	34	37	57	36	23	7	28	9	222	32	371	121		

# Details of health facilities

District: Kozhikode (selected blocks)

Category	Institutions			Doctors			Compounders			Nurses			Other para-medical persons			Ref's		
	Govt.	pri-vate		Govt.	pri-vate		Govt.	pri-vate		Govt.	pri-vate		Govt.	pri-vate		Govt.	pri-vate	
1	2	3	4	5	6	7	8	9	10	11	12	13						
Allopathy	30	43	52	64	18	32	43	69	59	79	86	360						
Ayurveda	5	58	6	56	1	10	..	..	9	26	..	..						
Homeo	6	39	6	34	1	8	2	..	7	16	..	..						
Unani	..	..	..	..	..	..	..	..	..	..	..	..						
Siddhavidya	..	..	..	..	..	..	..	..	..	..	..	..						
Others	..	..	..	..	..	..	..	..	..	..	..	..						
Total	41	140	64	154	20	50	45	69	75	121	86	360						

District: Cannanore (selected blocks)

Category	Institutions			Doctors			Compounders			Nurses			Other medical persons			Total
	Govt.	pri- vate	Govt.	pri- vate	Govt.	pri- vate	Govt.	pri- vate	Govt.	Govt.	pri- vate	Govt.	pri- vate	Govt.	pri- vate	
1	2	3	4	5	6	7	8	9	10	11	12	13				
Allopathy	18	28	7	40	18	14	48	51	37	17	188	278				
Ayurveda	3	18	3	21	8	1	..	..	2	..	..	..				
Homeo	2	18	2	19	1	..	..	..	..	..	..	..				
Unani	..	..	..	..	..	..	..	..	..	..	..	..				
Siddhavalidya	..	..	..	..	..	..	..	..	..	..	..	..				
Others	..	..	..	6	..	..	..	..	..	..	..	..				
Total	23	64	12	86	27	15	48	51	39	17	188	278				

### Percentage distribution of deaths according to cause of death

[illegible]





**Table 5.2 Percentage distribution of birth, according to order of birth**

[illegible]

Table 5.3 sex ratio at birth (Female babies per 1000 males)

	Idukki	Palghat	Malemppuram	Wynad	Kottayam	Trichur	Kozhikode	Cannanore
sex ratio	919	1026	912	1081	1033	947	1164	1139

**Table 5.4 Percentage distribution of birth- according to place of birth**

[illegible]

**Table 5.5 Percentage distribution of birth- according to Medical attendance**

[illegible]



Table 5.7 sex ratio of deceased (female per 1000 male)

	Idukki	Palghat	Malappuram	Wynad	Kottayam	Trichur	Kozhikode	Cannanore
sex ratio	510	736	717	875	984	975	911	344

Table 5.8 Percentage distribution of death according to place & death

	Idukki	Palghat	Malappuram	Wynad	Kottayam	Trichur	Kozhikode	Cannanore
Home	59.31	71.35	63.14	56.47	66.12	67.37	52.27	63.09
Private Hospital	29.94	12.59	17.05	11.54	6.58	13.63	34.23	6.24
Government Hospital	12.23	12.21	9.36	22.52	25.30	12.34	4.58	25.14
Other	6.92	3.85	5.45	7.47	2.00	3.66	7.36	4.93
Total	100.	100	100	100	100	100	100	100

Table - 6.1.1.

Percentage distribution of population according to age.

District : Idukky.

Age group	Male	Female	Total
0-4	9.26	9.37	9.31
5-9	10.49	10.70	10.59
10-14	12.92	11.42	12.17
15-19	12.42	13.63	13.02
20-24	10.79	11.40	11.10
25-29	9.34	9.46	9.40
30-34	7.17	6.18	6.67
35-39	5.59	6.66	6.13
40-44	5.20	5.66	5.44
45-49	5.20	5.66	5.44
50-54	3.23	2.24	2.73
55-59	2.93	4.04	3.49
60-64	2.32	1.85	2.08
65 and above	3.34	3.53	3.43
All	100.00	100.00	100.00

Sex ratio - 919

Table - 6.1.2.

Percentage distribution of population according to age.

District : Palghat

Age group	Male	Female	Total
0-4	11.29	11.10	11.20
5-9	10.90	10.16	10.52
10-14	12.17	10.68	11.41
15-19	12.60	10.77	11.67
20-24	9.25	10.57	9.93
25-29	7.17	8.06	7.62
30-34	6.62	6.43	6.52
35-39	5.11	6.09	5.61
40-44	4.79	4.14	4.46
45-49	4.56	4.74	4.65
50-54	3.12	2.94	3.03
55-59	4.00	4.83	4.43
60-64	3.05	3.56	3.31
65 and above	5.37	5.93	5.64
Total	100.00	100.00	100.00

Sex ratio - 1043.



Table - 6.1.3.

Percentage distribution of population according to age.

District : Malappuram.

Age group	Male	Female	Total
0-4	14.42	12.90	13.65
5-9	12.96	11.67	12.31
10-14	13.74	13.34	13.54
15-19	12.75	12.77	12.46
20-24	10.23	9.99	10.11
25-29	6.98	7.59	7.29
30-34	5.19	5.90	5.55
35-39	5.49	5.73	5.61
40-44	3.53	3.30	3.42
45-49	4.12	4.38	4.25
50-54	3.22	1.55	2.38
55-59	2.16	3.76	2.97
60-64	2.28	2.51	2.40
65 and above	3.51	4.61	4.06
Total	100.00	100.00	100.00

Sex ratio - 1019.

Table - 6.1.4.

Percentage distribution of population according to age.

District : Wynad

Age group	Male	Female	Total
0-4	10.27	13.48	11.89
5-9	14.25	9.91	12.06
10-14	13.26	12.36	12.80
15-19	11.01	14.30	12.80 12.67
20-24	10.44	10.48	10.46
25-29	7.59	8.36	7.98
30-34	5.16	6.23	5.70
35-39	6.60	6.06	6.33
40-44	4.56	3.21	3.88
45-49	3.62	5.43	4.54
50-54	3.04	3.00	3.02
55-59	4.26	2.61	3.42
60-64	1.85	1.57	1.71
65 and above	4.09	3.00	3.54
Total	100.00	100.00	100.00

Sex ratio - 1021.

Table - 6.1.5.

Percentage distribution of population according to age.

District : Kottayam.

Age group	Male	Female	Total
0-4	9.38	8.51	8.94
5-9	6.737	8.46	7.61
10-14	11.28	9.29	10.27
15-19	10.44	16.38	13.45
20-24	11.48	13.72	12.61
25-29	11.65	8.41	10.01
30-34	8.14	3.76	5.93
35-39	4.22	6.87	5.56
40-44	4.39	5.10	4.75
45-49	4.54	4.88	4.71
50-54	3.53	1.76	2.64
55-59	3.85	4.32	4.09
60-64	3.48	1.75	2.60
65 and above	6.89	6.79	6.83
Total	100.00	100.00	100.00

Sex ratio - 978.

Table - 6.1.6.

Percentage distribution of population according to age.

District : Trichur

Age group	Male	Female	Total
0-4	10.58	10.62	10.60
5-9	11.07	11.34	11.21
10-14	13.19	10.00	11.59
15-19	12.39	9.46	10.92
20-24	7.13	10.02	8.58
25-29	7.75	9.72	8.74
30-34	6.90	6.20	9.35
35-39	6.36	9.30	7.84
40-44	4.01	2.39	3.20
45-49	6.62	4.76	5.69
50-54	2.00	2.37	2.19
55-59	1.45	4.25	2.87
60-64	3.20	4.25	3.73
65 and above	7.35	5.29	3.49
Total	100.00	100.00	100.00

Sex ratio - 1011

Table # 6.1.7.

Percentage distribution of population according to age.

District : Kozhikode

Age group	Male	Female	Total
0-4	11.91	9.35	10.86
5-9	11.85	12.38	12.12
10-14	15.29	11.79	13.51
15-19	10.06	13.21	11.66
20-24	11.87	11.83	11.85
25-29	7.62	8.57	8.10
30-34	8.10	4.83	6.44
35-39	5.20	6.56	5.89
40-44	3.98	3.09	3.53
45-49	3.11	5.00	4.07
50-54	2.20	2.50	2.35
55-59	2.44	4.03	3.25
60-64	3.69	2.40	3.03
65 and above	2.68	3.96	3.34
Total	100.00	100.00	100.00

Sex ratio - 1037

Table - 6.1.8.

Percentage distribution of population according to age.

District : Cannanore

Age group	Male	Female	Total
0-4	8.99	9.76	9.41
5-9	8.93	11.44	10.29
10-14	14.99	14.88	14.93
15-19	13.00	9.82	11.27
20-24	9.54	10.23	9.92
25-29	7.38	8.36	7.92
30-34	5.52	6.41	6.00
35-39	4.70	4.31	4.49
40-44	5.22	4.11	4.62
45-49	4.39	6.64	5.61
50-54	3.05	2.20	2.59
55-59	4.14	4.45	4.32
60-64	4.39	1.61	2.88
65 and above	5.76	3.75	5.75
Total	100.00	100.00	100.00

Sex ratio - 1128

Table - 6.2.1.

Percentage distribution of population according to marital status.

District : Idukky

Marital status	Male	Female	Total
Never married	59.04	50.66	54.85
Married	38.39	42.05	40.22
Widowed	1.96	5.79	3.88
Divorced	0.10	0.33	0.21
Separated	0.51	1.17	0.84
All	100.00	100.00	100.00

Table - 6.2.2.

Percentage distribution of the population according to marital status.

District : Palghat

Marital status	Male	Female	Total
Never married	58.94	46.59	52.63
Married	39.02	40.98	40.02
Widowed	1.72	10.91	6.41
Divorced	0.02	0.52	0.27
Separated	0.30	1.01	0.67
All	100.00	100.00	100.00

Table - 6.2.3.

Percentage distribution of the population according to marital status.

District : Malappuram

Marital status	Male	Female	Total
Never married	63.47	49.78	56.56
Married	35.32	38.92	37.14
Widowed	0.84	9.35	5.14
Divorced	0.16	1.22	0.69
Separated	0.21	0.73	0.47
All	100.00	100.00	100.00

Table - 6.2.4.

Percentage distribution of the population according to marital status.

Marital status	District : Wynad		
	Male	Female	Total
Never married	59.40	55.04	57.20
Married	39.70	38.43	39.06
Widowed	0.80	4.96	2.90
Divorced	0.03	0.94	0.49
Separated	0.07	0.63	0.35
All	100.00	100.00	100.00

Table - 6.2.5.

Percentage distribution of the population according to marital status.

Marital status	District : Kottayam		
	Male	Female	Total
Never married	55.09	52.46	53.76
Married	42.30	38.97	40.62
Widowed	2.42	6.90	4.68
Divorced	0.19	0.75	0.47
Separated	..	0.92	0.47
All	100.00	100.00	100.00

Table - 6.2.6.

Percentage distribution of the population according to marital status.

Marital status	District : Trichur		
	Male	Female	Total
Never married	58.99	47.85	53.39
Married	38.15	39.47	38.81
Widowed	2.53	10.92	6.75
Divorced	..	1.00	0.51
Separated	0.33	0.76	0.54
All	100.00	100.00	100.00

Table - 6.2.7.

Percentage distribution of the population according to marital status.

District : Kozhikode			
Marital status	Male	Female	Total
Never married	64.34	50.78	57.44
Married	34.92	39.97	37.39
Widowed	0.45	7.82	4.20
Divorced	..	1.07	0.55
Separated	0.39	0.45	0.42
All	100.00	100.00	100.00

Table - 5.2.5.

Percentage distribution of the population according to marital status.

District : Cannanore			
Marital status	Male	Female	Total
Never married	60.76	51.04	55.49
Married	36.51.	38.13	37.39
Widowed	2.16	9.59	6.19
Divorced	0.25	0.29	0.27
Separated	0.30	0.95	0.66
All	100.00	100.00	100.00

Table 3.3 Percentage distribution of the population according to educational status -

[illegible]

Table 6.4 Percentage distribution of the population according to employment status

[illegible]



Table 7.1 Percentage of persons who have attack of disease during 30 day prior to the survey

District	Percentage of persons who had disease
Idukki	5.45
Palghat	5.96
Malappuram	6.23
Wynad	10.46
Kottayam	19.51
Trichur	4.60
Kozhikode	6.88
Cannanore	6.53

### Table 7.2 Percentage distribution of dl-ea-e- according to Medical aid availed

[illegible]

### Table 7.3 Percentage distribution of disease according to duration of disease

[illegible]

Table 8.1 Percentage of persons who have adopted preventive measure

Preventive measure	Idukki	Palghat	Malamnaram	Wyzad	Kottayam	Trichur	Kozhikode	Cananore
Typhoid	3.10	2.10	2.03	2.32	1.34	0.23	1.92	3.38
Diphtheria 1st dose	4.41	4.87	3.00	4.73	7.84	7.24	8.31	3.20
2nd dose	3.83	4.04	2.63	4.41	6.74	6.34	8.58	3.34
Tetanus	4.67	4.89	3.05	3.25	17.80	3.69	5.53	4.28
BC.G.	4.16	3.69	1.48	11.97	21.24	1.34	6.53	0.47
Polio	--	2.75	2.14	--	2.40	1.30	6.26	--
Other	1.53	4.76	1.03	4.07	0.03	0.69	4.02	0.74

Table 3.2 Percentage of Children below 8 years who have adopted preventive measures

Preventive measure	Idukki	Palghat	Malappuram	Wynad	Kottayam	Trichur	Kozhikode	Cananore
<u>Typhoid</u>								
1st dose	62.24	42.63	35.65	46.50	80.51	42.94	73.09	45.59
2nd dose	53.81	33.36	33.70	40.27	76.32	33.18	71.55	45.59
3rd dose	54.34	32.20	23.35	27.30	65.04	36.36	64.47	43.45
Booster dose	21.95	13.93	14.01	10.06	37.90	23.94	45.92	35.41
<u>Polio Vaccines</u>								
1st dose	57.83	40.25	4.20	50.13	81.12	41.67	77.37	54.63
2nd dose	54.04	36.71	4.56	43.60	75.25	35.75	70.87	53.24
3rd dose	46.76	31.92	4.11	35.94	68.34	34.53	66.25	49.41
Booster dose	20.49	14.23	1.94	13.70	30.83	21.21	45.70	36.37
B.C.G.	24.69	19.21	2.35	11.14	57.71	21.07	49.83	24.68
Other	0.34	1.10	0.16	0.78	--	--	--	--

Table 83.1 Percentage distribution of Children who have not adopted preventive measures according to reason preventive measure - Triple antigen 1st dose

[illegible]

Table 3.3.2. Percentage distribution of Children who have not adopted preventive measures according to reason - Preventive measures Triple Antigen 2nd dose

[illegible]

**Table 8.3.3 Percentage distribution of Children who have not attended preventive measure according to reason**

[illegible]



Percentage

Table 3.3.4. Preventive Distribution of Children who have not adopted

preventive measure according to reason

Preventive measures: Trifle too late to do

[illegible]





Table: 8.3.7 Percentage distribution of children who have not adopted preventive measure, according to region.

Preventive use of Polio vaccine - 3rd dose

[illegible]





Table 3.4 Percentage distribution of pregnant women and feeding mother according to medical aid

[illegible]

Table 8.6 Percentage of household who have included nutritional item of food

Item of food	Idukki	Balghat	Kalsouram	Vynad	Kottayam	Trichur	Kozhikode	Cannanore
1. Egg	67.11	57.34	55.03	77.23	55.05	55.36	60.34	33.54
2. Fish	75.94	79.65	95.35	95.10	85.60	97.70	97.14	92.95
3. Meat	66.50	57.25	69.52	73.15	41.60	65.81	69.37	16.64
4. Leafy vegetable	95.36	95.49	90.00	94.82	95.42	97.93	99.04	46.47
5. Other nutritional food	46.20	60.25	51.43	51.93	45.72	51.36	35.81	67.90
6. Vitamin tablet	13.83	14.06	8.32	13.36	13.92	2.06	3.66	19.29





## Fond Item Fish

111

Table: 8.6.3 - Percentage distribution of households who have not included nutritional items according to reason.

Reason	Food item:					
	Idukky	Polahat	Kelappuram	Kottayam	Trichur	Kozhikode
Poverty	84.83	72.52	90.10	84.88	78.52	55.63
Ignorance	9.91	2.00	4.13	2.48	1.57	-
Superstition	0.12	0.25	0.30	-	-	0.80
Religious objection	5.02	10.94	1.89	3.35	10.43	14.06
Others	0.12	14.29	3.58	9.29	9.48	29.31
ALL	100.00	100.00	100.00	100.00	100.00	100.00

Meat

63.03

59.65

30.34

-

7.77

7.96

2.78

7.23

100.00

Table: 8.6.4 - Percentage distribution of households who have not included nutritional items according to reason.

Food item: Leafy vegetable

[illegible]

Food Item: Other nutritional food.

[illegible]

Table 8.6.6 - Percentage distribution of households who have not included respondents in the sample by type of household.

[illegible]

Table: 8.7 - Percentage of households who have got food items from feeding centres.

Food items	Idukki	Palakkad	Malappuram	Wynad	Kottayam	Trichur	Kozhikode	Canara
Milk	3.01	1.70	3.88	-	1.32	-	-	-
Bread	2.91	1.30	6.05	0.54	-	-	-	-
C.S.M.	3.38	3.17	5.71	6.09	3.20	1.34	5.18	2.62
Others	3.72	5.10	4.25	5.84	0.51	4.33	1.49	0.44

Table: 9.1 -- Percentage distribution of ever-married females 15-54 years according to number of children born alive.

[illegible]







Table 9.4 - Percentage distribution of ever-married females 15-54 years according to number of abortions.

[illegible]

Table 10.1 - Percentage of couples who have heard about family planning.

District	Percentage of couples who have heard about family planning
Idukky	97.17
Palghat	99.49
Malappuram	99.18
Wynad	99.03
Kottayam	100.00
Trichur	98.22
Kozhikode	97.41
Canara	97.55

Table 10:2. Percentage distribution of couples who have heard about family planning according to source.

[illegible]

Table 10.7. Percentage distribution of couples who have heard about family planning according to time of obtaining knowledge.

[illegible]

Table 10.4. Percentage of couples having knowledge of each method

Method	1	2	3	4	5	6	7	8	9
		Idukky	Palghat	Malappuram	Kottayam	Trichur	Kozhikode	Cannanore	
Vasectomy		84.78	95.12	97.13	95.94	100.00	88.83	98.42	98.21
Female sterilisation operation		85.30	97.53	99.05	95.70	99.08	97.44	99.12	98.21
I.U.D.		72.66	62.10	69.34	74.70	94.74	36.54	95.21	69.30
Condom		73.26	82.43	76.18	83.66	94.39	55.36	98.88	71.55
Pills		49.43	58.26	59.95	58.06	77.23	33.96	96.41	58.98
L.T.P.		44.13	63.73	64.36	62.44	48.00	14.45	96.16	68.15
Others		3.30	11.63	3.82	34.30	9.55	..	..	3.41

Table 10.3. Percentage of couples who are favourable to methods of family planning

Method	Idukky	Palghat	Malappuram	Wymal	Kottayam	Trichur	Kozhikode	Cannanore
	2	3	4	5	6	7	8	9
Vasectomy	92.66	71.37	68.73	73.86	87.57	79.83	67.71	48.52
Female sterilisation	92.47	74.13	68.87	71.23	89.17	87.43	93.76	64.51
I U C D	83.62	48.19	33.58	63.17	73.22	61.80	51.62	41.03
Condoms	53.63	72.46	64.24	39.82	71.26	77.73	73.21	76.80
Pills	66.64	36.98	47.49	33.76	50.13	44.92	47.11	44.88
MTP	26.76	22.89	17.51	20.50	23.39	8.16	29.82	76.29
Others	81.67	33.43	20.09	12.78	2.13	..	..	..



Table 10.6.1. Percentage distribution of couples who are favourable to family planning methods according to reason.

### Method: Vasectomy

[illegible]

Table 10.6.2. Percentage distribution of couples who are favorable to family planning methods according to region.

[illegible]



10.6.4. Percentage distribution of couples who are favourable to family planning methods according to reason.

The figure consists of six micrographs arranged in a vertical column, labeled (a) through (f) from top to bottom. Each micrograph shows a different stage of cell growth or aggregation. (a) shows a single cell. (b) shows a small cluster of cells. (c) shows a larger cluster of cells. (d) shows a cluster of cells with some internal structure. (e) shows a cluster of cells with a more defined boundary. (f) shows a cluster of cells with a very distinct, dark boundary.

[illegible]

Table 10.0.3.7. planning methods according to reason.

[illegible]

Table 10.6.6. Percentage distribution of couples who are favourable family planning methods according to reason.

**Method : M.T.P.**

[illegible]

Table: 10.6.7

Percentage distribution of couples who are favourable to family planning methods according to reason

....

Method: Other methods

Reason	Idukky	Palghat	Malappuram	Tynda	Kottayam	Trichur	Kozhikode	Cannanore
Any	23.92	9.70	23.91	-	-	-	-	-
Forced	12.90	-	-	-	-	-	-	-
No after effects	-	35.09	13.70	22.31	71.29	-	-	-
Really available	6.18	4.13	-	-	-	-	-	-
Cheap	2.02	6.06	-	8.54	-	-	-	-
Others	54.98	44.94	62.39	69.15	28.71	-	-	-
All	100.00	100.00	100.00	100.00	100.00	-	-	-

Jsk.

Table: 10.7.1 Percentage distribution of couples unfavourable to family planning methods according to reason

[illegible]





Table: 10:7.3.

Percentage distribution of persons who are unaccountable to family planning methods according to reason

● ● ● ● ● ● ●

Method: I.V.C.P.

[illegible]



Table 10-7.5

Percentage distribution of couples who are unfavourable to family planning methods according to reason

method according to reason

# Methodology

[illegible]



Table. 10-7-7

Percentage distribution of couples who are unfavourable to family planning methods according to reason

Method: Other methods

Reason	Idukki	Palghat	Melappuram	Wymad	Kottayam	Trichur	Kozhikode	Canmarore
Difficult	2.33	8.50	-	13.65	-	-	-	-
Costly	-	1.04	-	2.25	-	-	-	-
Religious Opposition	1.09	3.92	11.66	40.01	-	-	-	44.44
Health reasons	71.63	21.65	13.78	23.17	-	-	-	11.12
Others	24.90	64.83	74.56	20.92	100.00	-	-	44.44
All	100.00	100.00	100.00	100.00	100.00	-	-	100.00

Table : 10-3 Percentage of couples who have adopted family planning methods among those who knew the method .....

Method	Idukki	Pulicat	Malappuram	Wund	Kottayam	Trichur	Kozhikode	Cannanore
Vasectomy	22.24	6.77	4.68	13.32	16.42	11.94	13.94	5.23
Purse sterilisation	26.71	13.04	12.49	18.02	21.07	22.44	21.49	16.74
IUCD	3.02	8.28	2.32	1.00	2.38	12.95	2.92	1.09
Condom	7.53	20.49	4.72	2.19	4.52	23.85	6.45	6.85
Pills	0.09	2.00	0.57	-	-	-	0.72	1.28
M.R.F	-	0.04	0.50	-	-	-	-	-
Others	3.73	5.37	1.58	2.50	-	-	-	-

**Table 10.9** Percentage distribution of couples who have adopted family planning methods according to source

[illegible]



Table 10.10

Percentage distribution of couples who have not adopted family planning according to reasons for not adopting

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Reason	Idukky	Thiruvananthapuram	Kottayam	Trichur	Kozhikode	Cannanore
Difficult	0.49	1.15	0.11	1.56	-	1.38
Costly	1.47	0.14	0.12	8.30	0.84	0.53
Religious objection	9.98	8.46	26.12	17.90	13.39	17.33
Health reasons	20.12	25.77	13.72	29.22	5.99	10.80
Others	67.94	64.78	59.93	67.95	79.78	69.96
All	100.00	100.00	100.00	100.00	100.00	100.00

List of Samples selected for base line Survey.

District: IDUKKY

<u>Block</u>	<u>Selected panchayat</u>	<u>Selected Ward No.</u>
1. Adimali	1. Kanna thady	6
	2. Mannankandon	6
	3. Vella thoovai	3
2. Azhutha	4. Elappara	4
	5. Poornade	6
	6. Vandiperiyar	3
3. Dovicolan	7. Zanthalloor	6
	8. Munnar	9
	9. Vattavada	3
4. Elamdasen	10. Kodikulam	2
	11. Udumbanmoor	7
	12. Vellamatten	4
5. Idukky	13. Karakshy	6
	14. Mariapuzha	7
	15. Vazhathope	8
6. Pattapuzha	16. Chakkupallam	1
	17. Kanchiyoor	4
	18. Upputham	3
7. Nedumkandon	19. Karumpuzha	5
	20. Rajalnd	2
	21. Nedumkandon	9
8. Thodupuzha	22. Edavetty	4
	23. Kuzhampangalam	2
	24. Mutton	7

TOTAL

Thodupuzha

10, 7, 23

Idukky Township

2, 4, 3

District: KRIAPPURAM

<u>Elock</u>	<u>Selected Panchayat</u>	<u>Selected Ward No</u>
1. Ananthode	1. Maranchery	4
	2. Perumadampu	3
	3. Veliyankode	2
2. Kondotty	4. Cheekode	8
	5. Kondotty	4
	6. Grungattiri	2
3. Kuttipuram	7. Edayur	2
	8. Kattimaruthy	3
	9. Marakam	8
4. Malappuram	10. Amakayam	4
	11. Moreyur	7
	12. Ponnala	5
5. Manjery	13. Aroskoda	3
	14. Edavanna	2
	15. Pulpatta	7
6. Menkade	16. Angadipuram	3
	17. Kuruva	2
	18. Pulanthol	2
7. Nilambur	19. Anarambalam	4
	20. Chunnatham	3
	21. Nilambur	2
8. Perinthalamana	22. Alipammba	9
	23. Kozhattur	1
	24. Perinthalamana	9
9. Ponnani	25. Ekapal	6
	26. Eravathuruthy	7
	27. Ravannur	7
10. Tanur	28. Ozhur	9
	29. Janur	7
	30. Valavannur	8
11. Tirur	31. Puzhathur	5
	32. Thiruvavaya	6
	33. Votton	4
12. Tirurangadi	34. Munniyur	6
	35. Parappanangadi	5
	36. Vallikunnu	9
13. Vengam	37. Ottukungal	7
	38. Thenhipalam	7
	39. Vengam	5
14. Vandur	40. Kalikavu	5
	41. Koppad	2
	42. Thevur	5

TOWN

1. Manjery - 18, 9, 2

2. Malappuram

22, 6, 21

**District: WYND**

<u>Block</u>	<u>Selected Panchayat</u>	<u>Selected Ward</u>
1. Kalpetta	1. Meppady	7
	2. Padinjarethara	7
	3. Vythiri	1
2. Manantoddy	4. Edavala	7
	5. Pannamam	8
	6. Thirumolly	5
3. Sultan Battery	7. Kanjambetta	1
	8. Meenagady	7
	9. Muttill	7
	10. Neelpuzha	6
	11. Poothady	9
	12. Sultan Battery	6

**District: KOTTAYAM**

1. Kanjirappally	1. Erumely	2
	2. Kanjirappally	6
	3. Manimala	8
2. Uzhavur	4. Kadaplamattom	2
	5. Kurevilangad	1
	6. Uzhavur	6

**District: TRICHUR**

1. Puzhayannur	1. Vallatholamgar	3
	2. Puzhayannur	6
	3. Thiruvillavala	8
2. Padakkancherry	4. Kadangad	1
	5. Thekkumkara	4
	6. Padakkancherry	3

**District: KOZHIKODE**

1. Kozhikode	1. Baypore	10
	2. Perake	6
	3. Olavanna	5
2. Kummangalam	4. Karassery	7
	5. Kummangalam	5
	6. Peruvayal	13

**District: CANNANORE**

1. Peravur	1. Kaninhar	4
	2. Kolayad	2
	3. Malur	8
2. Kuthuparamba	4. Kuthuparamba	4
	5. Tenniyannur	2
	6. Vengode	9

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