GOVERNMENT OF KERALA

DIRECTORATE OF ECONOMICS AND STATISTICS

A STUDY OF THE CHARACTERISTICS OF STERILISED PERSONS IN KERALA

(1974-75 & 1975-76)

POPULATION RESEARCH CENTRE
DIRECTORATE OF ECONOMICS & STATISTICS
TRIVANDRUM
AUGUST 1980

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PREFACE

Eventhough Family Welfare Programme in the State began in 1957, it has attracted the attention of the people during the mid nineteen sixties only. The ultimate object of the programme is to bring about a reduction in fertility which will result in the reduction of rate of growth of population. Among the different methods of the programme Male and Female sterilisations are the most important. This report gives the demographic characteristics of sterilised persons at the time of their acceptance and the impact of the programme.

The report was prepared by Sri M. K. Bhaskaran Pillai, Assistant Director of this Bureau. He was assisted in tabulation work by the staff of the Population Research Centre. The valuable suggestions of Sri S. Sthanukrishna Iyer, Deputy Director have been helpful in the preparation of this report.

Trivandrum,
4-5-1980.

Dr. P. A. Nair,
Director.

37/3775/MC

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APPENDIX

A STUDY OF THE CHARACTERISTICS OF STERILISED PERSONS IN KERALA 1974-75 & 1975-76

1. Introduction and objectives:

The Family Welfare Programme in the State began modestly in 1957 but gathered momentum in 1965 only. The programme has offered various methods for acceptance by eligible couples. Of these methods male and female sterilisation (vasectomy and tubectomy) are the most important ones as they are permanent methods. Considering the years 1974-75 and 1975-76 it can be seen that the number of vasectomy operations exceeded tubectomy operations in 1975-76 whereas the reverse was the case in 1974-75. The maximum number of sterilisations was done during 1976-77 viz. 2.14 lakhs. During 1977-78 and 1978-79 there was decline in acceptance when compared to 1976-77. The Demographic Centre, Trivandrum has been publishing the characteristics of acceptors of sterilisation and IUD upto 1973-74. This paper attempts to study the characteristics of sterilised persons during 1974-75 and 1975-76. Inter-districts variations in the characteristics of acceptors have also been studied.

The demographic impact of the programme is also studied here.

2. Source of data and limitations:

There were 117 Hospitals, 163 Primary Health Centres and 567 dispensaries under the State Government during 1974-75 and other private medical institutions in the State, where provision for vasectomy was available. But during 1975-76 there were 125 Hospitals, 163 Primary Health Centres and 561 Dispensaries under State Government in addition to private medical institutions where facilities for vasectomy operation were available. In all the above Government Hospitals facilities for tubectomy operations are also available. In some of the Primary Health Centres and private medical institutions provision for tubectomy operations has been made available. Data from all the institutions in the State providing sterilisation services have been collected. The details of each person sterilised are recorded in the register maintained in the medical institutions. These data have been copied down by the staff of the Bureau of Economics and Statistics attached to District Statistical Offices. The records in certain institutions are incomplete and hence full details could not be collected in certain cases. The collected data have been analysed. The non-coverage of the data is given in the following table:

TABLE 1

Non-coverage of data during 1974-75 & 1975-76

Year	*No. of sterilisations*			*No. on which data have been collected*			*Percentage of data collected (Total sterilisation)*
	Vasectomy	*Tubectomy*	*Total*	*Vasectomy*	*Tubectomy*	*Total*	
1974-75	18466	43685	62151	16282	33991	50273	80.88
1975-76	94270	62352	156622	70084	50898	120982	77.24

The above table shows that the data collected are imcomplete. The information collected to this extent are taken for the present study.

3. Characteristics of sterilised persons:

3.1 *Age composition*:

The age at which a person accepts sterilisation is an important factor which determine the demographic impact of the programme. If more young people having less number of children adopt sterilisation more births would be saved. Therefore, the age-distribution of the sterilised persons is an important factor to study. The percentage distribution of vasectomised and tubectomised persons by age for the years 1967-68 to 1975-76 is given in tables I (a) and I(b) in the appendix. Males below 35 years and females below 30 years can be considered as young.

The percentage of young acceptors, in this State is shown below for the various years.

TABLE 2

Percentage of Vasectomised persons below 35 years and tubectomised persons below 30 years over the years

Year	*Vasectomy*	*Tubectomy*
1957-67	31.6	44.5
1967-68	31.5	49.6
1968-69	32.9	50.0
1969-70	36.3	53.9
1970-71	42.7	56.1
1971-72	44.3	56.3
1972-73	49.2	60.6
1973-74	48.8	66.7
1974-75	48.2	67.1
1975-76	41.5	65.0

It is seen from the table that the percentage of the younger people who accepted sterilisation is increasing over the years except in 1975-76. The percentage of vasectomised persons below 35 years of age has increased from 31.6 in 1957-67 to 49.2 in 1972-73 and declined thereafter to 41.5 in 1975-76. As regards tubectomised persons below 30 years of age the percentage has increased from 44.5 in 1957-67 to 67.1 in 1974-75 and declined to 65.0% in 1975-76. The small decline in percentage during 1975-76 may be due to persons in the higher age-groups accepting sterilisation in the mini camps organised in different parts of the State in that year.

3.2 *Median age of sterilised persons:*

The median age of vasectomised and tubectomised persons from 1957-68 to 1975-76 is as given below:

TABLE 3

Median age of sterilised persons

Year	*Male*	*Female*
1957-68	38.1	33.8
1968-69	37.6	30.5
1969-70	37.0	29.5
1970-71	36.4	29.2
1971-72	36.4	29.2
1972-73	35.2	28.7
1973-74	35.2	28.0
1974-75	35.2	28.0
1975-76	36.7	28.2

The median age of vasectomised and tubectomised persons has shown a declining trend over the years, till 1974-75, and thereafter a slight increase is noticed during 1975-76. The median age of vasectomised persons has declined from 38.1 in 1957-68 to 35.2 in 1974-75 and thereafter a slight increase is noticed during 1975-76.

Similarly the median age of tubectomised persons has declined from 33.8 in 1957-68 to 28.0 in 1974-75 and there is an insignificant increase during 1975-76.

3.3 *No. of living children:*

The number of living children to a person at the time of the acceptance of sterilisation helps to know the desired family size of acceptor and indicates the impact of the programme. The following table gives the percentage distribution of sterilised persons having one child, two children and three children at the time of acceptance.

TABLE 4

Percentage distribution of sterilised persons having one child, two children and three children at the time of acceptance of sterilisation

Year	*One child*	*Two children*	*Three children*	*Three or less than 3 children*
1957-61	0.8	4.7	19.9	25.4
1961-62	0.9	5.3	20.6	26.8
1962-63	0.5	6.9	23.1	30.5
1963-64	0.4	6.6	25.4	32.4
1964-65	0.5	6.3	28.0	34.8
1965-66	0.7	8.7	27.4	36.8
1966-67	0.9	12.1	26.1	39.1
1967-68	0.9	14.9	26.9	42.7
1968-69	1.0	17.7	26.7	45.4
1969-70	0.9	17.8	27.8	46.5
1970-71	1.2	19.5	28.7	49.4
1971-72	1.4	18.5	31.5	51.4
1972-73	1.3	17.6	33.7	52.6
1973-74	1.4	19.1	34.8	55.3
1974-75	1.8	23.7	33.9	59.1
1975-76	2.1	25.9	29.9	57.9

It is observed from the above table that the percentage of the sterilised persons having 2 or less children is increasing over the years. The percentage of sterilised persons having 2 or less children has increased from 5.5 in 1957-61 to 25.5 in 1974-75 and 28.0 in 1975-76. It is worth noting that even the percentage of sterilised persons having one child has increased from 0.8 in 1957-61 to 2.1 in 1975-76. The trend shows that people having less number of children are accepting this method. The percentage of sterilised persons having three or less number of children is increasing from 25.4 in 1957-61 to 59.1 in 1974-75 and then decreases to 57.9 in 1975-76.

3.4 *Average No. of living children to sterilised persons:*

The average number of living children to sterilised persons (Male and Female) for the period from 1968-69 to 1975-76 are given in the following table

TABLE 5

Average No. of living children to sterilised persons

Year	*Male*	*Female*
1968-69	4.2	4.4
1969-70	3.8	4.2
1970-71	3.7	4.0
1971-72	3.6	3.9
1972-73	3.4	3.8
1973-74	3.3	3.7
1974-75	3.3	3.6
1975-76	3.5	3.6

The average number of living children to vasectomised and tubectomised persons has decreased over the years. In the case of males it has decreased from 4.2 in 1968-69 to 3.5 in 1975-76 whereas for tubectomised persons the average number of children has declined from 4.4 in 1968-69 to 3.6 in 1975-76. Here also the decreasing trend has shown a deviation during 1975-76.

3.5 *Religion of sterilised persons:*

The percentage distribution of sterilised persons according to religion for the year 1970-71 to 1975-76 is given in Table-2 appended.

It is seen from the table that though all major religious groups in the State accepted this method, acceptors among Hindus form a higher percentage in all the years. 73.11% of the acceptors were Hindus in 1974-75 as against 72.46 in 1975-76. The percentage of Christians accepting the method during 1974-75 and 1975-76 were 16.98 and 17.44% respectively. Similarly the percentage of acceptors among Muslims during 1974-75 and 1975-76 was 9.91% and 10.10% respectively. It may be mentioned here that the percentage of Muslim acceptors is less than half of their population proportion.

3.6 *Education of sterilised persons:*

Table No. 3 in the appendix gives the percentage distribution of sterilised persons according to their educational status from 1970-71 to 1975-76. Of the sterilised persons during 1974-75 illiterates form as many as 10.35% as against 12.47% during 1975-76. Literate having below primary standard who accepted sterilisation was of the order of 28.38% and 33.28% during 1974-75 and 1975-76 respectively. Thus it is seen that more illiterate persons are coming forward to accept the programme. Similarly more persons having below primary standard also accept sterilisation than the previous years. 35.35% of the persons who accepted sterilisation have above primary but below middle educational standard during 1974-75 as against 32.44% during 1975-76. It is also seen that the percentage of sterilised persons having middle and above educational standard have declined during 1975-76 when compared to 1974-75.

3.7 *Income of sterilised persons:*

Reliable data on this item are hardly available. On the basis of data available from records the percentage distribution of sterilised persons according to their income for the years 1974-75 and 1975-76 is given in Table No. 4 appended. It is seen from the table that 68.11 per cent of the sterilised persons had an income of less than Rs. 100 per month during 1974-75 and 57.55% during 1975-76. Of these persons 1.02% and 1.49% had a monthly income of less than Rs. 50 per month during 1974-75 and 1975-76 respectively. 13.29% of the acceptors have a monthly income between Rs. 100 and 149 during 1974-75 and 21.47% in 1975-76. The percentage of acceptors having an income above Rs. 200 per month was of the order of 12.52 during 1974-75 and 12.13% during 1975-76.

3.8 *Occupation of the acceptors:*

The percentage distribution of sterilised persons according to their occupation for the years 1974-75 and 1975-76 is given below:

TABLE 6

Percentage distribution of sterilised persons according to occupation—1974-75 & 1975-76

	Occupation	*Year*	
		1974-75	1975-76
1	Agriculture workers	2.05	5.76
2	Skilled workers	7.17	5.93
3	Unskilled workers	45.33	58.82
4	Cultivator & Farmers	13.11	10.32
5	Professional workers	2.95	2.04
6	Traders and businessmen	6.16	3.83
7	Clerical workers	3.01	2.17
8	Others	8.97	6.53
9	No occupation	11.25	4.60
	Total	100.00	100.00

It is revealed from the above table that unskilled workers form the higher percentage among sterilised persons during 1974-75 and 1975-76.

4. Inter-district variations in the characteristics of sterilised persons:

The details regarding inter-district variations in the characteristics of sterilised persons like their age composition, number of living children at the time of sterilisation, their income and religion for the years 1974-75 and 1975-76 are analysed in this report.

4.1 *Age composition:*

The percentage distribution of vasectomised and tubectomised persons according to their age at the time of sterilisation for the years 1974-75 and 1975-76 is presented in table 6(a) and 6(b) appended. It is seen from the table that the percentage of persons who accepted vasectomy in the State was maximum in the age group 35-39 years both during 1974-75 and 1975-76. But during 1974-75 in Trivandrum district, the maximum percentage of the vasectomised persons was seen to be in the age group 25-29 years. In all the other districts the percentage in the age group was lower when compared to the age groups 30-34 years and 35-39 years. The percentage of vasectomised cases in the age group 30-34 years was maximum in Ernakulam district and minimum in Quilon district. The percentage of vasectomised persons in the age group 30-34 years was greater than in the age group 35-39 years in Quil on, Kottayam, Ernakulam and Trichur districts during 1974-75 and 1975-76 (except in Trichur district during 1975-76). The percentage of vasectomised persons in the age-group 35-39 years was greater than the State average in Alleppey, Kottayam, Idukki, Palghat, Malappuram, Kozhikode and Cannanore districts during 1974-75 whereas the percentage was greater than the State average in Palghat, Kozhikode, Malappuram and Cannanore districts in 1975-76. Of the vasectomised persons below the age 35 years the percentage of acceptors was 48.17 in 1974-75 while the percentage during 1975-76 was 41.45 in the State.

In the case of tubectomised persons it is seen that the miximum percentage of acceptors are in the age-group 25-29 years for the State, and in all districts during 1974-75 and 1975-76. The percentage was greater than the State average in Quilon, Alleppey, Kottayam, Ernakulam, Trichur and Palghat districts during 1974-75, while the percentage was greater in Trivandrum, Quilon, Alleppey, Kottayam, Trichur and Cannanore districts in 1975-76. Of these tubectomised persons below the age 30 years was 67.07 per cent and 65.50 per cent during 1974-75 and 1975-76 respectively in the State. The percentage of females accepting this method below the age 25 was greater than the State average in Trivandrum, Quilon and Kozhikode districts during 1974-75 and 1975-76 and in Ernakulam during 1975-76 only. The table shows that more females are accepting this method before attaining the age 30 years.

4.2 *Median age of sterilised persons:*

The median age of sterilised persons in the various districts of the State during 1974-75 and 1975-76 is as follows:

TABLE 7

Median age of sterilised persons 1974-75 & 1975-76

District/State	1974-75		1975-76	
	Male	*Female*	*Male*	*Female*
Trivandrum	32.35	27.18	33.61	27.81
Quilon	33.33	27.66	34.76	28.07
Alleppey	35.44	28.27	36.41	28.17
Kottayam	33.81	28.78	34.93	28.80
Idukki	34.93	28.94	35.83	29.52
Ernakulam	32.90	28.37	33.53	28.26
Trichur	34.40	28.59	36.17	28.38
Palghat	36.95	28.14	38.34	29.14
Malappuram	36.58	28.80	38.01	28.88
Kozhikode	36.32	27.81	37.12	27.70
Cannanore	37.12	28.48	38.79	28.49
STATE	35.16	28.00	36.66	28.21

It is seen from the above table that the median age of vasectomised persons is maximum in Cannanore district and minimum in Trivandrum district and that of tubectomised persons the median age was maximum in Idukki district followed by Malappuram district and minimum in Trivandrum district during 1974-75. The median age of vasectomised persons was maximum in Cannanore district and minimum in Ernakulam district and the median age of tubectomised persons was maximum in Idukki district and minimum in Kozhikode district during 1975-76.

The median age of vasectomised persons was above the State average in Alleppey, Palghat, Malappuram, Kozhikode and Cannanore districts during 1974-75. It is seen that during 1975-76, the median age was greater than

the State average in Palghat, Malappuram, Kozhikode and Cannanore districts in the case of vasectomised persons. The median age of tubectomised persons during 1974-75 was 28.00 for the State . The median age was greater than the State average in Alleppey, Kottayam, Idukki, Ernakulam, Trichur, Palghat, Malappuram and Cannanore districts during 1974-75. The State average of tubectomised persons during 1975-76 was 28.21 and the median age is greater than the State average in Kottayam, Idukki, Ernakulam, Trichur, Palghat, Malappuram and Cannanore districts.

4.3 *No. of living children:*

The percentage distribution of vasectomised and tubectomised persons according to their number of children living at the time of sterilisation is given in table-7(a) and 7(b) in the appendix respectively. The average number of living children to vasectomised and tubectomised persons in the State during 1974-75 was 3.3 and 3.6 respectively. This number was 3.5 in the case of vasectomised persons and 3.6 in the case of tubectomised persons in 1975-76. It is seen from table 7(a) that the maximum percentage of vasectomised persons during 1974-75 and 1975-76 was those having two children at the time of sterilisation. About one third of the vasectomised persons belong to this category. The percentage of vasectomised persons of this category was above the State average in Trivandrum, Quilon, Alleppey, Kottayam (in 1975-76 only), Ernakulam, Trichur and Kozhikode Districts (in 1975-76 only) during 1974-75 and 1975-76. The percentage of vasectomised persons in the State having three children living at the time of operation was 30.21 and 25.99 during 1974-75 and 1975-76 respectively. The percentage was greater than the State average in Kottayam, Idukki, Ernakulam, Kozhikode and Cannanore districts during 1974-75 and the percentage was greater than the State average in Trivandrum, Alleppey, Ernakulam, Palghat, Kozhikode and Cannanore districts in 1975-76.

As regards tubectomised persons it is seen that the percentage of acceptor is maximum for those having three living children at the time of sterilisations The percentage of persons accepted this method at the time of three living children was 35.77 and 35.56 during 1974-75 and 1975-76 respectively. The percentage was greater than the State average in Trivandrum, Quilon and Alleppey districts during 1974-75. While the percentage was greater than the State average in the above three districts and in addition in Kozhikode district during 1975-76. The next major percentage of acceptors of tubectomy was those having four living children at the time of sterilisation. Their percentage for the State was 22.17 and 21.94 during 1974-75 and 1975-76 respectively. The percentage of females having four children at the time of sterilisation was greater than the State average in the Districts of Kottayam, Idukki, Ernakulam, Trichur, Palghat, Kozhikode and Cannanore in 1974-75 and Alleppey, Ernakulam, Malappuram, Kozhikode and Cannanore during 1975-76.

The percentage of sterilised persons who had three or less children at the time of operation for the years 1974-75 and 1975-76 is given in the table below:

TABLE 8

Percentage of sterilised persons having three or less children at the time of sterilisation

District	1974-75		1975-76	
	Male	*Female*	*Male*	*Female*
Trivandrum	80.46	66.24	77.24	65.44
Quilon	71.25	62.68	64.82	62.59
Alleppey	67.60	56.28	63.53	58.24
Kottayam	68.53	49.78	65.10	50.27
Idukki	58.29	42.34	53.93	41.00
Ernakulam	77.21	48.76	71.76	53.48
Trichur	67.41	49.41	58.60	60.70
Palghat	65.50	50.73	57.66	52.25
Malappuram	51.59	37.87	45.16	40.01
Kozhikode	62.45	48.39	60.21	53.54
Cannanore	59.71	47.00	50.20	47.66
STATE	66.30	55.89	59.21	56.10

It is seen from the above table that the percentage of males and females having three or less children living at the time of operation was maximum in Trivandrum district and minimum in Malappuram district in 1974-75 and 1975-76. The percentage was greater than the State average in the case of males in Trivandrum, Quilon, Alleppey, Kottayam, Ernakulam and Trichur districts during 1974-75. But in the case of females the percentage was greater than the State average in Trivandrum, Quilon and Alleppey districts only during 1974-75. In the case of vasectomised persons during 1975-76 the percentage was greater than the State average in Trivandrum, Quilon, Alleppey, Kottayam, Ernakulam and Kozhikode districts. During 1975-76 Trivandrum, Quilon, Alleppey and Trichur districts showed higher percentage than the State.

4.4 *Religion:*

The percentage distribution of sterilised persons according to religion for the period 1974-75 and 1975-76 is given in table-8 appended. The table shows that the percentage of accepting this method by Hindus is more than their proportion in the general population. 73.11% and 72.46% of the acceptors are Hindus in the State during 1974-75 and 1975-76 respectively. Among the Hindu acceptors Cannanore district has the maximum percentage and the minimum percentage was in Ernakulam district both during 1974-75 and

1975-76. The percentage of Christian acceptors is less than their respective proportion in general population. Acceptors among Christians in the State was 16.98% and 17.44% during 1974-75 and 1975-76. The maximum percentage of acceptors among Christians was in Ernakulam district followed by Kottayam district during 1974-75. In 1975-76, the maximum percentage of acceptors of Christians was in Kottayam district followed by Ernakulam district and minimum in Palghat district. The Muslim acceptors formed 9.91% and 10.10% of the State during 1974-75 and 1975-76 respectively. The maximum percentage of acceptors was in Malappuram district and minimum in Kottayam district during 1974-75 and 1975-76 respectively.

4.5 *Education:*

Table-9 in the appendix gives the percentage distribution of sterilised persons according to Education in each district of the State. It is seen that the percentage of illiterates accepting this method is increasing during 1975-76 when compared to 1974-75. This means that more illiterate people are coming forward to accept this method. Literate persons of below matric standard form the bulk of the acceptors. Acceptors having matriculation and above standard are also increasing over years. Among the illiterate acceptors Idukki district has the maximum percentage of acceptors followed by Ernakulam district and the minimum in Kottayam district during 1974-75 whereas the maximum percentage in 1975-76 was in Palghat district and minimum in Kottayam district. Literate persons having below matriculation standard was maximum in Alleppey district and minimum in Idukki district.

4.6 *Income:*

The percentage distribution of sterilised persons according to their income is given in table No. 10 appended. As already mentioned the people have a tendency to report their income inaccurately. The available data from records have been collected and analysed. It is seen that 67.09% of the acceptors and 55.06% acceptors in the State have an income of above Rs. 50 and less than Rs. 100 per month during 1974-75 and 1975-76 respectively. The maximum percentage of acceptors having an income of less than Rs. 100 per month was in Trichur district and minimum percentage having this income was in Palghat district during 1974-75. But in 1975-76, the maximum percentage of acceptors having a monthly income of less than Rs. 100 per mensem was in Trichur district and minimum percentage has this income in Idukki district. Acceptors having a monthly income of more than Rs. 100 per mensem was comparatively less. But their percentage is increasing over the years and among districts in most cases.

4.7 *Occupation:*

The percentage distribution of sterilised persons according to their occupation for the years 1974-75 and 1975-76 is given in table No.11 appended. It is seen from the table that majority of the acceptors are unskilled workers.

The occupation of 45.33% of the acceptors during 1974-75 and 58.82% of the acceptors during 1975-76 in the State was reported to be unskilled workers. The occupation of 13.11% and 10.32% of the acceptors in the State during 1974-75 and 1975-76 respectively was cultivators and farmers. Next important occupation of acceptors was skilled workers. Their composition was 7.17% and 5.53% during 1974-75 and 1975-76 respectively. During 1975-76 more percentage of agriculture labourers accepted this method when compared to 1974-75.

5. Impact of the Programme

In order to study the demographic impact of the programme it is essential to know the extent of the eligible couples protected, the number of births averted and the impact of programme on birth rate. The impact of the programme on birth rate is measured based on the number of couples protected and the number of births averted which would have taken place but for the implementation of the Family Welfare Programme methods. Sterilisation has carry-over effect till the death of one of the spouses or before the reproductive period. The demographic impact of sterilisation is dealt with in the following paragraphs:

5.1 *Rates of sterilised persons per* 1000 *population:*

The rates of vasectomised persons per 1000 males and tubectomised persons per 1000 females for the years 1967-68 to 1975-76 is given in table-12 in the appendix. The table shows that the rate of vasectomised persons per 1000 male population has increased from 5.46 during 1967-68 to 11.93 in 1971-72 and then declined to 1.64 during 1974-75 and again increased to 8.20 during 1975-76. In the case of tubectomised persons per 1000 females, the rate increased from 1.13 during 1967-68 to 5.21 during 1975-76. In 1967-68, the rate of vasectomised persons per 1000 male population was maximum in Trivandrum district followed by Alleppey district and minimum in Cannanore district.

Due to the mass camp held at Ernakulam and Trichur during 1971-72 in the rate of vasectomised persons has increased to 16.70 per 1000 male population in Ernakulam and 31.11 per 1000 male population in Trichur district. In Trivandrum district also the rate was 17.82 during 1971-72 in the case of vasectomy. During 1972-73 the rate per male population was maximum in Ernakulam district followed by Kottayam district and minimum in Malappuram district. In case of tubectomised persons per 1000 female population the rate was 6.34 in Trivandrum district and 5.50 in Kottayam district during 1974-75. The rate of tubectomised persons in Trivandrum district was 12.51 during 1975-76 while the rate during the same period was only 1.55 in Malappuram district.

5.2 *Couples protected by sterilisation:*

The number of eligible couples currently protected by sterilisation from 1957-68 (cumulative effect) to 1975-76 has been worked out and presented in Table No. 13 in the appendix. It is seen that the number of eligible couples currently protected by sterilisation till the end of 1975-76 was 7.41 lakhs. It is seen that the number of eligible couples protected by sterilisation was maximum in Ernakulam District followed by Trivandrum district and minimum in Idukki district during 1974-75. But in 1975-76 the number of eligible couples protected by sterilisation was maximum in Trivandrum district followed by Ernakulam district and minimum in Idukki district of the State.

5.3 *Percentage of eligible couples protected by sterilisation:*

The number of couples protected by the programme in Kerala has been calculated till the year 1972 by R. S. Kurup*. Subsequently Government of India have issued a note indicating the method of calculation. According to the method the number of couples protected by sterilisation have been calculated. Deviation in the revised calculation is that in the earlier calculation based on the ratios of the joint survivorship, the average annual attrition rate for sterilisation was 2.3 for Kerala and the same was used uniformly for the subsequent years of acceptance. In the Government of India's note different attrition rates for each five year period (by working at the geometric attrition rates based on survivors of each five year period) based on the survivors as obtained from the joint survival of Kerala for accounting mortality attrition. The details of district have been calculated assuming the State ratio of joint survivorship and attrition rate.

The married women in the reproductive ages 15-44 was 25.5 lakhs according to 1961 census which increased to 29.8 lakhs in 1971. Thus during the decade 1961-71 total women in the reproductive ages 15-44 was 4.3 lakhs. This shows that there is an annual increase of 43,000 married women in the reproductives age 15-44 during 1961-71. The average number of married women in reproductive age-group 15-44 since 1971 is estimated as 66800 per annum. Thus the total number of married women in the age group 15-44 during the mid year 1976 is estimated as 33.1 lakhs.

The district-wise percentage of eligible couples protected by sterilisation (cumulative) is given in table No. 14 appended. The percentage of couples protected by sterilisation in each district of the State is increasing over the years. The percentage of eligible couples protected by sterilisation has increased from 7.01 in 1967-68 to 22.79 in 1975-76. The maximum percentage of couples protected was in Ernakulam district followed by Kottayam

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* Kurup R. S. A note on the calculation of births averted due to the family planning programme in Kerala paper No.78 DRC. Trivandrum, 1973.

district and minimum in Malappuram district during 1974-75. During 1975-76, the percentage of eligible couples protected was maximum in Kottayam district followed by Ernakulam district and minimum in Malapuram district.

5.4 *No. of births averted by sterilisation:*

The number of births averted by sterilisation in Kerala was calculated till the year 1972 by R. S. Kurup* in paper number 78 of the Demographic Research Centre. The Government of India thereafter issued a note indicating the calculation of birth averted. As per this note the births averted by sterilisation have been recalculated. Deviations in the revised calculations are as follows:

1. Calculations were done separately for the tubectomy and vasectomy.

2. For both type of sterilisations, the values of births averted per one sterilisation were worked out by adopting age distribution of the time periods the average of the percentage age distributions during 1957-70 and average of the period 1970-71 to1973-74 and it has been applied for the rest of the years also.

3. In the earlier calculations, the following values of expectation of life for obtaining the joint survival rates were adopted from West model life tables.

	1st five years	*2nd five years*	*3rd five years*	*4th five years*
Male	47.1	49.5	51.8	54.1
Female	50.0	52.5	55.0	57.1
	(1957-60)	(1961-66)	(1966-71)	(1971-76)

For the revised calculation, expectation of life at birth for the age distribution of 2 time periods 1957 to 1970-71 and for the period 1971-72 to 1978-79 are as follows:

	1 set			*II set*	
	Female	*Male*		*Female*	*Male*
1957-60	50.0	47.1	1971-76	62.5	58.8
1961-66	52.5	49.5	1976-81	65.0	61.2
1966-71	57.5	54.1	1981-86	67.5	63.6
1971-76	62.5	58.8	1986-91	68.8	64.9

* Ibid

4. Regarding allocation of births between 1st year and 2nd year the proportion of vasectomy and tubectomy (separately) alone during the first quarter of the financial year was worked out as in the note of the Department of Family Welfare.

The number of births averted by sterilisation during 1957-58 to 1975-76 is presented in Table No. 15 appended. The number of births averted by sterilisation will give a quantitative assessment of the impact of the programme till the end of 1975-76. The births averted by vasectomy and tubectomy was of the order of 6.45 lakhs and 2.72 lakhs respectively in the State. Thus by the end of 1975-76, a total number of 9.17 lakhs births could be averted by sterilisation. The number of births that would be averted in future years (upto 2000-2001) due to sterilisation done upto 1975-76 is estimated as 23.83 lakhs. The total number of sterilisation done till the end of 1975-76 was 9.3 lakhs as is seen from Table-16 in the Appendix.

6. Summary

(i) The percentage distribution of vasectomised and tubectomiced persons shows that more younger people are accepting this method over the years. But the percentage distribution of vasectomised persons below 35 years of age was 48.2 during 1974-75 and this decreased to 41.5 during 1975-76 respectively. In the case of tubectomised persons below 30 years of age the percentage of acceptors was 67.1% and 65 % during 1974-75 and 1975-76 respectively. This shows that the trend has changed in 1975-76 when compared to 1974-75. The maximum percentage of sterilised male person was seen in the age-group 35-39 both during 1974-75 and 1975-76.

During the year 1974-75, it is seen that the maximum percentage of vasectomised persons was in the age-group 25-29 in Trivandrum district. The phenomina is not seen in any other district. During 1975-76 the percentage of vasectomised persons in the age-group 30-34 was maximum in Ernakulam district and minimum in Cannanore district. The percentage of vasectomised persons was maximum in the age-group 35-39 in Cannanorre District and minimum in Trivandrum district during 1974-75. In the case of tubectomised persons, the maximum percentage of acceptors are in the age-group 25-29. The percentage of females accepting this method below the age 25 was greater than the State average in Trivandrum, Quilon, Ernakulam (in 1975-76 only) and Kozhikode district during 1974-75 and 1975-76.

(ii) *Median age of sterilised persons:* The median age of vasectomised persons shows a declining trend upto 1974-75 and a slight increase is noticed during 1975-76. In the case of tubectomised persons, the median age is declining over the years. The median age of sterilised persons during 1974-75 was less than the State average in Trivandrm, Quilon, Kottayam, Ernakulam, Idukki and Trichur districts. In the case of female the median

age of sterilised persons was less than the State average in Trivandrum, Quilon and Kozhikode districts during 1974-75. The median age of vasectomised persons was less than the State average in Trivandrum, Quilon. Alleppey, Kottayam, Idukki, Ernakulam and Trichur districts. But in the case of tubectomised persons the percentage was less than State average in Trivandrum, Quilon, Alleppey and Kozhikode districts during 1975-76.

(iii) *Number of living children*: The average number of living children to vasectomised and tubectomised persons in the State during 1974-75 was 3.3 and 3.6 respectively. This was 3.5 in the case of vasectomised persons and 3.6 in the case of tubectomised persons in 1975-76. The percentage of sterilised persons having three or less children has increased from 25.4 in 1957-61 to 59.1 in 1974-75 and 57.9 in 1975-76. The maximum percentage of vasectomised persons during 1974-75 and 1975-76 was those having two children at the time of sterilisation. Their percentage was greater than the State average in Trivandrum, Quilon, Alleppey, Kottayam (1975-76), Ernakulam and Trichur. Those males having three children living at the time of sterilisation was greater than the State average in Kottayam, Idukki, Ernakulam, Kozhikode and Cannanore districts in 1974-75 and Trivandrum, Ernakulam, Kozhikode and Cannanore districts in 1975-76. In the case of tubectomised persons having 3 children living at the ime of sterilisation, it was greater than the State average in Trivandrum, Quilon and Alleppey districts during 1974-75 and 1975-76. The percentage of vasectomised and tubectomised persons having 3 or less children living at the time of sterilisation was maximum in Trivandrum district and minimum in Malappuram district in 1974-75 and 1975-76.

(iv) *Religion*: The percentage of Hindu acceptors of sterilisation was greater than their proportion in the general population. Among the total acceptors Hindus formed 71.14% and 72.5% during 1974-75 and 1975-76 respectively. Among Hindu acceptors Cannanore district has maximum percentage and the minimum percentage was in Ernakulam district during 1974-75 and 1975-76. The percentage of Christian acceptors were 16.98 and 17.44 during 1974-75 and 1975-76. The maximum percentage of acceptors of Christians was in Ernakulam District followed by Kottayam district in 1974-75. During 1975-76 the maximum percentage of acceptors among Christians was in Kottayam district and minimum in Palghat district. The Muslim acceptors formed 9.91% and 10.10% of the State in 1974-75 and 1975-76 respectively. The maximum percentage of acceptors among Muslims was in Malappuram district and minimum in Kottayam district during 1974-75 and 1975-76 respectively.

(v) *Education:* The percentage of acceptors of sterilisation among illustrates is increasing over the years. Literate persons having educational standard below matriculation forms bulk of the acceptors. Among the illiterate acceptors, Idukki district has the maximum percentage of acceptors followed by Ernakulam district and the minimum in Kottayam district in 1974-75, but the maximum percentage in 1975-76 was in Kozhikode district and the minimum in Kottayam district.

(vi) *Income and Occupation*: The income of 68.11% of the sterilised persons was less than Rs. 100 per mensem during 1974-75 as against 57.55% during 1975-76. The maximum percentage of acceptors having an income of less than Rs. 100 per month was in Trichur district and the minimum percentage having this income was in Palghat district during 1974-75. In 1975-76 the percentage of acceptors having an income of less than Rs. 100 per mensem was in Trichur district and minimum percentage was in Idukki district. Acceptors having a monthly income of more than Rs. 100 per mensem is increasing over the years and among districts. The occupation of sterilised persons was maximum among unskilled workers both during 1974-75 and 1975-76.

(vii) *Impact of the programme*: The rates of vasectomised persons per 1000 males has increased from 5.46 during 1967-68 to 11.93 in 1971-72 and the declined to 1.64 during 1974-75 and increased to 8.20 in 1975-76. In the case of tubectomised persons per 1000 females that rate has increased from 1.13 in 1967-68 to 3.72 in 1974-75 and increased to 5.21 in 1975-76. The rate of vasectomised persons per 1000 male population was maximum in Quilon district during 1974-75. In the case of tubectomised persons per 1000 females the rate was maximum in Trivandrum district during 1974-75. The rate of tubectomised persons was maximum in Trivandrum district and minimum in Malappuram district during 1975-76.

The number of eligible couples currently protected by sterilisation was 7.41 lakhs till the end of 1975-76 in the State. The number of eligible couples protected by sterilisation was maximum in Ernakulam district followed by Trivandrum and minimum in Idukki district during 1974-75. In 1975-76 the number of eligible couples protected by sterilisation was maximum in Trivandrum district and minimum in Idukki district.

The percentage of eligible couples protected by sterilisation is increasing over the years in the State as well as in districts. The percentage has increased from 7.01 in 1967-68 to 22.79 in 1975-76. The maximum percentage of copules protected was in Ernakulam district followed by Kottayam district and minimum in Malappuram district during 1974-75. The percentage of eligible couples protected was maximum in Kottayam district and minimum in Malappuram district in 1975-76.

The number of births averted by sterilisation from 1957-58 to 1975-76 is of the order of 9.17 lakhs. The number of births that would be averted by sterilisation done upto 1975-76 for future years (upto 2000-2001) is estimated as 23.83 lakhs. The total number of sterilisation done till the end of 1975-76 was 9.3 lakhs in the State.

References:

1. A study of persons who have undergone sterilisation operation—Demographic Research Centre No. 29, May 1965.
2. Sterilisation operation in Kerala—Demographic Research Centre No. 52—July 1968.

3. A study of sterilised persons in Kerala during 1967-68—Demographic Research Centre No. 59—September 1970.

4. Sterilised persons in Kerala (1968-69)—An appraisal—Demographic Research Centre No. 68—November 1971.

5. A note on the calculation of birth averted due to Family Planning Programme in Kerala—Demographic Research Centre No. 78—October 1973.

6. Characteristics of sterilised persons in Kerala 1957-71—Demographic Research Centre No. 86—May 1975.

7. A study of sterilised persons in Kerala 1971-74—Demographic Research Centre No. 95—July 1977.

APPENDIX

TABLES

LIST OF TABLES

TABLE 1(a)

Percentage distribution of Vasectomised persons according to age

Age group	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
15-19	..	..	0.09	..	..	..	..	..
20-24	0.7	1.00	2.11	1.63	1.99	1.61	1.76	1.50
25-29	10.4	12.2	16.08	17.12	19.37	19.92	20.16	17.17
30-34	21.8	23.1	24.28	25.58	27.79	27.25	26.25	22.78
35-39	27.6	28.1	27.10	29.02	27.63	27.95	27.18	25.77
40-44	20.6	18.5	16.45	15.24	14.49	15.42	15.03	17.75
45+	18.9	17.1	13.89	11.41	8.73	7.85	9.62	15.03
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

TABLE 1(b)

Percentage Distribution of Tubectomised persons according to age

Age group	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
15-19	0.3	0.3	0.13	0.47	0.44	0.43	0.43	0.35
20-24	13.8	15.2	17.66	17.95	19.31	23.09	23.89	21.99
25-29	35.9	38.4	38.30	37.86	40.88	43.14	42.75	42.66
30-34	29.7	28.1	26.76	26.29	24.30	21.09	20.89	20.96
35-39	17.2	15.2	14.18	14.70	12.84	10.55	10.02	11.50
40-44	2.7	2.4	2.42	2.37	1.95	1.52	1.78	2.09
45+	0.5	0.4	0.61	0.36	0.28	0.18	0.24	0.45
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

TABLE 2

Percentage distribution of sterilised persons according to religion 1970-71 to 1975-76

Years	*Hindu*	*Christians*	*Muslims*	*Total*
(1)	(2)	(3)	(4)	(6)
1970-71	72.40	19.30	8.40	100.00
1971-72	66.95	23.91	9.14	100.00
1972-73	70.92	19.44	9.63	100.00
1973-74	72.88	16.12	11.00	100.00
1974-75	73.11	16.98	9.91	100.00
1975-76	72.46	17.44	10.10	100.00

TABLE 3

Percentage distribution of sterilised persons according to Educational Status 1970-71 to 1975-76

Educational Status		1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
(1)		(2)	(3)	(4)	(5)	(6)	(7)
Illiterate	..	17.7	15.37	7.42	9.92	10.35	12.47
Literate below primary	..	35.4	33.39	33.13	27.32	28.38	33.28
Above primary below middle	..	26.9	28.49	31.57	33.10	35.35	32.44
Above middle below matric		6.9	10.00	9.97	12.23	13.19	10.70
Matric and above	..	7.7	10.39	15.42	15.93	12.24	10.28
Literate not specified	..	5.4	2.36	2.49	1.50	0.49	0.83
Total	..	100.00	100.00	100.00	100.00	100.00	100.00

TABLE 4

Percentage distribution of sterilised persons according to Monthly Income

Monthly Income (Rs.)	*Years*					
	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Below 50	12.35	6.40	3.62	2.36	1.02	1.49
50—99	64.74	71.60	75.57	75.11	67.09	55.06
100—149	13.62	10.07	7.35	7.75	13.29	21.47
150—199	4.22	4.58	5.08	4.86	6.08	9.85
200 and above	5.07	7.55	8.38	9.92	12.52	12.13
Total	100.00	100.00	100.00	100.00	100.00	100.00

TABLE 5

Percentage of sterilised persons according to the number of living children

Number of living children	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	1.2	1.4	1.3	1.4	1.82	2.13
2	19.5	18.5	17.6	19.1	23.67	25.94
3	28.7	31.5	33.7	34.8	33.90	29.87
4	22.3	22.1	22.8	22.1	20.21	19.42
5	14.1	13.0	12.30	11.7	10.46	11.06
6	7.8	7.5	6.8	5.9	5.40	6.23
7	3.9	3.6	3.1	2.9	2.68	4.14
8	1.6	1.4	1.5	1.3	1.17	1.43
9	0.6	0.7	0.5	0.4	0.45	0.54
10	0.3	0.4	0.3	0.3	0.24	0.24
Total	100.00	100.00	100.00	100.00	100.00	100.00

TABLE 6(a)

Percentage distribution of Vasectomised persons according to age 1974-75 and 1975-76

District	*Year*	15-19	20-24	25-29	30-34	35-39	40-44	45+
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Trivandrum	1974-75	..	2.03	34.74	28.41	18.75	13.23	2.84
	1975-76	..	2.25	26.73	29.09	22.63	11.38	7.92
Quilon	1974-75	..	1.94	26.61	31.27	24.55	10.59	5.04
	1975-76	..	2.29	23.69	25.26	23.89	15.02	9.85
Alleppey	1974-75	..	1.80	21.78	24.03	27.40	14.72	10.27
	1975-76	..	1.28	18.52	23.02	25.34	17.28	14.56
Kottayam	1974-75	..	2.88	21.10	34.29	27.82	10.31	3.60
	1975-76	..	2.45	23.28	24.64	24.01	15.33	10.29
Idukki	1974-75	..	3.03	18.18	29.44	29.44	15.15	4.76
	1975-76	..	2.77	22.40	20.87	23.80	17.56	12.60
Ernakulam	1974-75	..	1.98	29.74	31.50	24.45	9.25	3.08
	1975-76	..	1.73	27.24	29.79	23.98	11.26	6.00
Trichur	1974-75	0.05	2.81	23.31	27.06	23.88	14.36	8.53
	1975-76	..	1.33	18.88	24.08	24.55	16.75	14.42
Palghat	1974-75	..	0.68	14.73	23.63	28.08	18.15	14.73
	1975-76	..	0.57	10.52	19.46	29.09	20.78	19.58
Malappuram	1974-75	..	1.82	15.41	24.15	31.19	15.66	11.77
	1975-76	..	1.29	11.87	19.71	28.49	21.39	17.25
Kozhikode	1974-75	..	1.27	14.69	26.44	28.86	16.82	11.92
	1975-76	..	1.25	14.83	22.77	26.34	18.37	16.44
Cannanore	1974-75	..	0.84	10.85	24.44	32.77	18.00	13.10
	1975-76	..	0.79	8.80	19.42	27.73	21.36	21.90
State	1974-75	..	1.76	20.16	26.25	27.18	15.03	9.62
	1975-76	..	1.50	17.17	22.78	25.77	17.75	15.03

TABLE 6(b)

Percentage distribution of Tubercromised persons according to age 1974-75 and 1975-76

District	*Year*	15-19	20-24	25-29	30-34	35-39	40-44	45+
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Trivandrum	1974-75	0.62	31.37	41.32	18.78	6.61	1.13	0.17
	1975-76	0.28	25.54	43.04	18.92	9.29	2.08	0.85
Quilon	1974-75	0.22	26.28	44.20	20.12	7.79	1.28	0.11
	1975-76	0.27	23.52	42.88	21.23	10.39	1.41	0.30
Alleppey	1974-75	0.46	20.66	44.23	21.43	10.51	2.06	0.65
	1975-76	0.20	21.10	45.29	20.96	10.45	1.65	0.35
Kottayam	1974-75	0.12	16.98	43.17	23.99	12.70	2.88	0.16
	1975-76	0.09	16.46	44.09	23.40	13.80	1.87	0.29
Idukki	1974-75	0.42	17.55	40.80	24.95	13.11	2.54	0.63
	1975-76	0.23	16.34	36.96	21.24	20.36	4.83	0.04
Ernakulam	1974-75	0.21	18.18	46.88	20.25	12.22	1.99	0.27
	1975-76	0.63	22.10	41.79	21.32	11.65	1.83	0.68
Trichur	1974-75	0.49	18.13	43.73	22.56	12.62	2.17	0.30
	1975-76	0.42	20.46	43.09	21.23	12.74	1.80	0.26
Palghat	1974-75	0.88	21.43	44.12	21.70	9.82	1.76	0.29
	1975-76	1.35	17.21	38.92	26.06	13.60	1.88	0.98
Malappuram	1974-75	0.41	19.62	39.33	23.38	13.82	3.11	0.33
	1975-76	0.49	19.88	38.21	25.74	12.84	2.65	0.19
Kozhikode	1974-75	0.58	26.28	41.12	19.52	10.87	1.51	0.12
	1975-76	0.57	27.01	41.48	18.98	9.96	1.80	0.20
Cannanore	1974-75	0.31	20.56	41.88	22.48	12.18	2.19	0.40
	1975-76	0.28	18.42	44.88	21.54	11.60	3.05	0.23
State	1974-75	0.43	23.89	42.75	20.89	10.02	1.78	0.24
	1975-76	0.35	21.99	42.66	20.96	11.50	2.09	0.45

TABLE 7(a)

Percentage distribution of vasectomised persons according to number of living children

District	Year	Number of children living									
		1	2	3	4	5	6	7	8	9	10+
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Trivandrum	1974-75	3.09	47.73	29.64	12.95	3.34	1.95	0.81	0.33	0.16	..
	1975-76	2.81	45.60	28.83	11.72	5.61	2.47	1.67	0.72	0.49	0.08
Quilon	1974-75	3.43	40.37	27.45	15.30	7.78	2.90	1.58	0.79	0.40	..
	1975-76	2.58	36.45	25.79	15.93	9.35	5.68	2.54	1.18	0.38	0.12
Alleppey	1974-75	3.39	34.29	29.92	14.67	8.42	5.12	2.29	1.28	0.30	0.32
	1975-76	3.94	33.44	26.15	16.97	9.66	5.82	2.62	0.88	0.42	0.10
Kottayam	1974-75	2.45	32.20	33.90	19.61	7.02	3.15	0.97	0.73	..	..
	1975-76	3.94	35.76	25.40	15.01	9.13	5.21	3.06	1.54	0.45	0.50
Idukki	1974-75	0.57	18.86	38.86	18.29	12.57	5.14	2.86	1.71	0.57	0.57
	1975-76	3.51	28.93	21.49	17.71	11.00	8.03	5.38	2.30	0.92	0.73
Ernakulam	1974-75	1.10	42.73	33.03	14.32	5.95	1.10	0.66	0.44	0.22	..
	1975-76	2.46	39.44	29.85	15.30	6.03	3.91	1.84	0.90	0.23	0.04
Trichur	1974-75	2.23	36.20	28.98	15.88	8.33	4.67	2.07	1.27	0.32	0.05
	1975-76	2.40	31.00	25.20	18.78	11.22	6.08	2.28	1.90	0.50	0.10
Palghat	1974-75	3.17	32.75	29.58	15.49	9.15	4.93	1.41	2.46	1.06	0.10
	1975-76	1.80	29.43	26.43	19.86	11.43	5.95	2.91	1.37	0.62	2.12
Malappuram	1974-75	1.18	24.61	25.80	18.02	10.42	8.83	5.12	2.47	1.77	..
	1975-76	2.04	19.14	23.98	21.15	15.37	9.67	6.78	1.40	0.47	..
Kozhikode	1974-75	1.60	30.46	30.39	18.05	9.29	5.41	2.92	1.37	0.36	0.15
	1975-76	2.56	30.67	26.98	17.34	11.26	6.45	3.08	1.10	0.40	0.16
Cannanore	1974-75	0.91	25.83	32.99	19.72	9.82	5.33	3.16	1.19	0.77	0.28
	1975-76	1.55	22.41	26.24	20.44	13.69	8.54	4.25	1.90	0.67	0.31
State	1974-75	2.46	33.63	30.21	16.34	8.35	4.76	2.35	1.23	0.42	0.25
	1975-76	2.67	30.55	25.99	17.72	10.97	6.58	3.44	1.38	0.49	0.21

TABLE 7(b)

Percentage distribution of Tubectomised persons according to number of living children

District	Year	Number of children living									
		1	2	3	4	5	6	7	8	9	10+
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Trivandrum	1974-75	1.02	25.76	39.46	18.55	10.63	2.66	1.33	0.41	0.18	..
	1975-76	1.16	26.44	37.84	21.46	7.90	3.08	1.35	0.50	0.20	0.7
Quilon	1974-75	3.17	21.53	37.98	20.75	8.70	4.79	2.02	0.61	0.29	0.16
	1975-76	2.06	23.73	36.80	19.34	9.25	4.50	2.31	1.23	0.52	0.26
Alleppey	1974-75	1.48	18.70	36.10	21.93	12.06	5.25	3.05	1.03	0.36	0.04
	1975-76	0.15	18.64	38.55	22.60	10.71	4.83	2.34	0.84	0.35	0.09
Kottayam	1974-75	1.79	14.66	33.33	24.08	12.10	6.70	4.38	1.87	0.93	0.16
	1975-76	1.03	14.55	34.69	21.24	13.38	7.79	4.13	2.10	0.63	0.46
Idukki	1974-75	2.55	11.99	27.80	22.19	14.80	8.42	6.63	2.04	2.30	1.28
	1975-76	1.73	13.68	25.59	20.58	16.09	10.27	4.90	3.68	2.26	1.22
Ernakulam	1974-75	0.14	13.25	35.37	25.38	14.36	6.93	2.77	1.11	0.55	0.14
	1975-76	2.98	15.49	35.01	23.23	11.99	6.22	3.30	1.21	2.39	0.17
Trichur	1974-75	1.34	14.19	33.88	23.72	12.68	7.68	4.01	1.51	0.50	0.39
	1975-76	0.48	36.76	23.46	12.28	7.22	3.49	1.87	0.69	0.17	0.08
Palghat	1974-75	2.37	18.48	29.88	23.67	11.98	7.69	3.70	1.78	0.15	0.39
	1975-76	2.10	22.68	27.47	21.71	12.50	7.71	3.29	1.50	0.60	0.44
Malappuram	1974-75	0.86	13.54	23.47	20.71	14.20	11.05	6.90	4.93	2.17	2.17
	1975-76	1.61	12.43	25.97	22.94	16.33	7.98	2.25	7.64	2.25	..
Kozhikode	1974-75	0.53	13.16	34.70	25.19	12.95	7.50	3.82	1.52	0.35	0.28
	1975-76	0.35	16.01	37.18	22.86	12.82	6.14	2.75	1.18	0.35	0.36
Cannanore	1974-75	1.26	13.79	31.95	26.68	12.75	8.20	2.48	1.58	0.81	0.50
	1975-76	0.62	11.59	35.44	24.60	14.50	7.53	3.39	1.24	0.52	0.57
State	1974-75	1.48	18.64	35.77	22.17	11.53	5.72	2.85	1.15	0.46	0.23
	1975-76	1.35	19.19	35.56	21.94	11.20	5.68	2.69	1.50	0.60	0.29

TABLE 8

Percentage distribution of sterilised persons according to religion District-wise

District	*Religion*	1974-75	1975-76
(1)	(2)	(3)	(4)
Trivandrum	Hindu	82.30	77.69
	Christian	8.84	16.43
	Muslim	8.86	6.88
	Total	100.00	100.00
Quilon	Hindu	74.80	75.74
	Christian	16.93	16.01
	Muslim	8.27	8.25
	Total	100.00	100.00
Alleppey	Hindu	71.68	76.50
	Christian	21.62	19.60
	Muslim	6.70	3.90
	Total	100.00	100.00
Kottayam	Hindu	53.88	59.06
	Christian	40.76	37.36
	Muslim	5.36	3.58
	Total	100.00	10.000
Idukki	Hindu	63.26	63.20
	Christian	27.38	32.23
	Muslim	9.36	4.57
	Total	100.00	100.00
Ernakulam	Hindu	44.18	53.22
	Christian	42.98	32.90
	Muslim	12.84	13.88
	Total	100.00	100.00

TABLE 8 (*Contd.*)

District	*Religion*	1974-75	1975-76
(1)	(2)	(3)	(4)
Trichur	Hindu	67.32	70.14
	Christian	26.58	23.43
	Muslim	6.10	6.43
	Total	100.00	100.00
Palghat	Hindu	81.62	83.20
	Christian	5.35	3.66
	Muslim	13.03	13.14
	Total	100.00	100.00
Malappuram	Hindu	55.98	55.16
	Christian	6.14	4.60
	Muslim	37.88	40.24
	Total	100.00	100.00
Kozhikode	Hindu	80.13	74.60
	Christian	6.46	8.95
	Muslim	13.41	16.45
	Total	100.00	100.00
Cannanore	Hindu	85.08	83.79
	Christian	8.79	9.66
	Muslim	6.13	6.55
	Total	100.00	100.00
STATE	Hindu	73.11	72.46
	Christian	16.98	17.44
	Muslim	9.91	10.10
	Total	100.00	100.00

TABLE 9

Percentage distribution of sterilised persons according to Education 1974-75 and 1975-76 District-wise

Distric	*Year*	*Illiterate*	*Literate below primary*	*Above primary below middle*	*Above middle below matric*	*Matric and above*	*Literate not specified*	*Total*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Trivandrum	1974-75	14.86	26.69	29.48	16.68	12.08	0.21	100.00
	1975-76	16.10	28.06	26.21	11.58	18.03	0.02	100.00
Quilon	1974-75	7.02	27.01	33.45	10.32	22.20	..	100.00
	1975-76	7.34	37.05	33.27	11.16	10.92	0.26	100.00
Alleppey	1974-75	2.76	36.60	37.96	12.11	10.54	0.03	100.00
	1975-76	4.85	42.03	33.15	9.18	10.50	0.29	100.00
Kottayam	1974-75	2.57	24.51	38.37	16.37	18.13	0.05	100.00
	1975-76	1.55	35.79	37.49	11.85	12.07	1.25	100.00
Idukki	1974-75	26.22	21.35	25.80	10.78	12.26	3.59	100.00
	1975-76	5.38	41.43	36.26	10.40	5.25	1.28	100.00
Ernakulam	1974-75	18.28	36.94	28.30	8.05	8.43	..	100.00
	1975-76	11.64	40.27	31.05	7.50	9.04	0.50	100.00
Trichur	1974-75	4.07	39.97	30.31	16.34	9.17	0.14	100.00
	1975-76	12.34	37.73	26.71	11.21	11.52	0.49	100.00
Palghat	1974-75	14.82	16.16	31.48	17.53	18.01	2.02	100.00
	1975-76	33.17	20.58	22.96	8.48	10.78	4.03	100.00
Malappuram	1974-75	7.89	23.95	41.38	13.38	11.76	1.64	100.00
	1975-76	15.84	33.13	34.36	9.13	7.20	0.34	100.00
Kozhikode	1974-75	15.32	20.78	45.11	10.53	7.83	0.43	100.00
	1975-76	16.80	28.20	38.87	9.89	6.20	0.04	100.00
Cannanore	1974-75	15.92	20.42	37.81	11.95	11.64	2.46	100.00
	1975-76	7.46	20.34	38.81	18.77	12.32	2.30	100.00
STATE	1974-75	10.35	28.38	35.35	13.19	12.24	0.49	100.00
	1975-76	12.47	33.28	32.44	10.70	10.28	0.83	100.00

TABLE 10

Percentage distribution of sterilised persons according to monthly income District-wise

District	*Year*	50	50-99	100-149	150-199	200 *and above*	*Total*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Trivandrum ..	1974-75	0.31	67.98	6.67	6.08	18.96	100.00
	1975-76	0.97	63.63	11.41	7.21	16.78	100.00
Quilon ..	1974-75	0.93	67.43	14.37	4.79	12.48	100.00
	1975-76	1.52	62.95	20.75	8.81	5.97	100.00
Alleppey ..	1974-75	0.39	62.39	19.84	7.83	9.55	100.00
	1975-76	1.02	59.48	22.52	8.68	8.30	100.00
Kottayam ..	1974-75	0.41	53.21	16.50	11.66	18.22	100.00
	1975-76	1.84	41.96	25.66	15.11	15.43	100.00
Idukki ..	1974-75	0.72	55.73	17.00	11.00	15.55	100.00
	1975-76	3.70	20.40	23.09	23.52	29.29	100.00
Ernakulam ..	1974-75	..	65.47	20.44	6.79	7.30	100.00
	1975-76	1.06	55.51	17.52	10.47	15.44	100.00
Trichur ..	1974-75	0.78	74.98	10.83	4.60	8.81	100.00
	1975-76	0.17	71.57	11.22	6.42	10.62	100.00
Palghat ..	1974-75	0.13	50.00	14.29	9.26	26.32	100.00
	1975-76	0.58	58.06	18.23	8.32	14.81	100.00
Malappuram ..	1974-75	4.76	61.28	13.41	5.45	15.10	100.00
	1975-76	3.00	48.82	28.18	8.05	11.95	100.00
Kozhikode ..	1974-75	2.32	72.13	12.60	4.23	8.72	100.00
	1975-76	2.50	62.28	19.82	5.99	9.41	100.00
Cannanore ..	1974-75	1.15	67.54	13.70	5.53	12.08	100.00
	1975-76	0.83	43.91	30.55	12.72	11.99	100.00
STATE ..	1974-75	1.02	67.09	13.29	6.08	12.52	100.00
	1975-76	1.49	55.06	21.47	9.85	12.13	100.00

TABLE No. 11

Percentage Distribution of Sterilised Persons According to Occupation District-wise 1974-75 and 1975-76

District	*Year*	*Agricultural labourer*	*Skilled worker*	*Unskilled worker*	*Cultivator and farmers*	*Professional workers*	*Traders, Business men*	*Clerical workers*	*Others*	*No occupation*	*Total*
Trivandrum	1974-75	1.55	1.62	53.79	9.07	1.55	6.07	10.57	6.38	9.40	100.00
	1975-76	1.42	7.30	52.80	10.69	1.74	2.57	0.98	12.58	9.92	100.00
Quilon	1974-75	1.21	1.27	30.14	22.97	3.98	11.35	2.46	24.40	2.22	100.00
	1975-76	10.89	1.03	47.96	12.56	2.68	3.03	0.46	8.53	12.86	100.00
Alleppey	1974-75	3.37	18.77	38.42	5.03	1.69	6.93	2.03	10.61	13.15	100.00
	1975-76	7.32	6.88	54.48	8.42	2.55	5.16	0.91	11.42	2.86	100.00
Kottayam	1974-75	3.43	3.43	33.58	38.93	3.43	7.59	1.35	8.26	..	100.00
	1975-76	9.27	5.68	45.22	17.05	1.90	4.60	0.97	12.83	2.48	100.00
Idukki	1974-75	5.56	5.98	46.79	19.88	2.99	4.27	4.49	5.34	4.70	100.00
	1975-76	9.68	1.75	74.53	6.65	3.02	1.48	0.82	0.38	1.69	100.00
Ernakulam	1974-75	..	1.03	49.05	17.31	1.03	7.70	0.60	4.56	18.72	100.00
	1975-76	1.47	1.92	59.99	9.58	0.89	5.77	1.97	11.02	7.39	100.00
Trichur	1974-75	1.35	8.13	56.71	10.96	5.46	7.12	0.84	8.94	0.49	100.00
	1975-76	1.51	8.19	56.49	8.81	2.83	5.29	1.42	2.58	12.88	100.00
Palghat	1974-75	2.84	4.26	41.26	15.33	3.54	9.43	3.42	17.92	2.00	100.00
	1975-76	6.23	2.50	66.68	6.04	1.33	5.66	2.61	8.38	0.57	100.00
Malappuram	1974-75	3.48	5.19	51.20	15.67	7.25	3.48	..	..	13.73	100.00
	1975-76	16.76	10.84	60.50	8.24	0.31	3.35	..	..	..	100.00
Kozhikode	1974-75	1.66	2.13	44.36	9.07	1.78	3.30	0.83	8.74	28.13	100.00
	1975-76	2.69	2.86	70.03	10.78	1.16	4.66	0.54	6.66	0.62	100.00
Cannanore	1974-75	2.99	21.99	43.80	15.31	4.88	4.82	1.61	4.37	0.23	100.00
	1975-76	3.06	12.18	58.26	10.91	3.18	3.37	2.70	5.37	0.97	100.00
State	1974-75	2.05	7.17	45.33	13.11	2.95	6.16	3.01	8.97	11.25	100.00
	1975-76	5.76	5.93	58.82	10.32	2.04	3.83	2.17	6.53	4.60	100.00

TABLE 12

Rates of Vasectomy (District-wise) per 1000 Male and Tubectomy per 1000 Female Population

District		1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
Trivandrum	V	7.14	7.46	4.17	3.84	17.82	1.24	1.25	1.31	5.31
	T	2.73	3.63	3.93	4.71	5.90	4.94	5.61	6.34	12.51
Quilon	V	5.68	5.86	4.57	4.43	5.35	9.37	3.59	0.62	7.04
	T	1.46	1.56	1.62	2.15	4.15	3.96	4.60	4.35	5.48
Alleppey	V	7.10	7.16	6.91	5.43	11.32	0.89	0.94	3.98	11.40
	T	0.93	1.12	1.30	1.21	1.43	1.33	2.05	3.95	4.30
Kottayam	V	4.44	5.42	3.73	2.88	11.85	14.48	2.94	1.12	8.82
	T	1.04	1.37	1.59	2.26	2.85	4.70	4.71	5.50	6.78
Idukki	V	..	..	..	..	..	..	..	1.19	12.92
	T	..	..	..	..	..	..	..	1.49	5.40
Ernakulam	V	5.67	7.75	4.73	16.30	16.70	19.99	0.64	1.17	6.31
	T	1.42	1.92	2.48	2.48	2.47	2.95	3.32	4.37	4.96
Trichur	V	6.29	4.74	3.68	1.96	31.11	0.54	0.85	1.68	9.75
	T	1.02	1.13	1.42	2.45	2.91	2.85	3.41	4.27	5.12
Palghat	V	3.90	3.11	2.40	1.36	1.16	11.8	0.26	0.57	4.43
	T	0.33	0.44	0.40	0.69	0.84	0.99	0.11	1.12	1.74
Malappuram	V	..	..	..	1.22	1.83	0.74	0.64	0.84	5.15
	T	..	..	..	0.47	0.66	0.70	0.90	1.23	1.55
Kozhikode	V	5.37	4.61	3.46	2.47	2.19	1.63	2.01	3.76	11.97
	T	0.50	1.03	1.27	2.29	2.85	3.19	3.93	4.28	5.60
Cannanore	V	3.56	5.25	2.91	1.92	12.83	3.51	0.58	1.28	9.34
	T	1.00	1.00	1.40	1.46	2.75	1.87	2.00	2.34	2.72
State	V	5.46	5.82	3.98	4.49	11.93	5.47	1.33	1.64	8.20
	T	1.13	1.44	1.70	1.99	2.53	2.74	3.11	3.72	5.21

V—Vasectomy
T—Tubectomy

TABLE 13

Eligible couples currently protected by sterilisation (Cumulative) District-wise

District	*Upto* 1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
Trivandrum	31443	42064	49176	56087	79306	82636	85517	92987	110085
Quilon	25424	33352	39537	45259	52962	67107	74479	77472	89971
Alleppey	25179	32530	38566	44286	56485	54953	55497	61024	74805
Kottayam	18725	25257	29901	33203	46252	59665	63108	65674	75356
Idukki	..	..	..	..	..	..	..	1082	8798
Ernakulam	25162	34525	41868	60781	79207	96023	97158	97494	105899
Trichur	18036	22706	26461	29745	64055	65476	68172	72901	86079
Palghat	10876	13805	15975	16847	17624	27770	27493	27603	31712
Malappuram	..	..	..	1609	3855	5174	6585	8505	15196
Kozhikode	26434	33668	39664	42134	45255	48188	52362	58647	76347
Cannanore	15686	22178	25688	28294	44198	49044	50278	52624	66302
State	196965	260085	306836	358245	489199	556036	580649	616013	740550

Note: Worked out on the baiss of the Government of India's Note.

TABLE 14

Percentage of eligible couples protected by sterilisation (Cumulative) District-wise

District	*Upto* 1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
Trivandrum	10.88	14.30	16.44	18.51	25.83	26.31	26.72	28.49	30.28
Quilon	7.95	10.29	12.20	13.63	15.71	19.00	21.26	21.75	24.76
Alleppey	8.80	11.25	13.25	15.06	19.02	18.21	18.16	19.74	23.85
Kottayam	6.74	8.99	10.53	11.52	15.89	20.12	20.35	29.42	33.27
Idukki	..	..	..	..	..	..	..	0.94	7.46
Ernakulam	8.14	10.96	13.04	18.59	23.79	28.18	27.93	30.26	32.13
Trichur	6.44	8.00	9.19	10.19	21.64	21.53	21.98	22.38	25.87
Palghat	3.44	4.29	4.81	7.26	7.50	11.57	11.26	11.11	12.52
Malappuram	..	..	..	0.63	1.48	1.94	2.41	3.03	5.27
Kozhikode	6.19	7.83	9.01	14.53	15.45	15.94	16.90	18.48	23.45
Cannanore	5.14	7.15	8.10	8.71	13.39	14.45	14.45	14.76	18.12
State	7.01	9.12	10.58	12.19	16.42	18.23	18.66	19.37	22.79

Note: Worked out on the basis of the Government of India's note.

TABLE 15

Number of births averted by Sterilisation

Year	*Number of births averted by*			*No. of births that would be averted in future years (up to 2000-2001)*
	Vasectomy	*Tubectomy*	*Total sterilisation*	
1957-58	36	34	70	3251
1958-59	309	248	557	8602
1959-60	856	716	1572	11585
1960-61	1494	1299	2793	12568
1961-62	2168	1870	4038	15011
1962-63	2965	2555	5520	18936
1963-64	4348	3192	7540	32797
1964-65	7328	3920	11248	56148
1965-66	12622	5027	17649	88050
1966-67	20008	6485	26493	85302
1967-68	27102	8263	35365	137866
1968-69	37930	11037	48967	157329
1969-70	48184	14592	62776	132050
1970-71	54295	18784	73079	148974
1971-72	62410	23835	86245	410546
1972-73	87350	30239	117589	250702
1973-74	94515	37365	131880	146237
1974-75	90803	45661	136464	180274
1975-76	90186	56537	146723	486717
Total	644909	271659	916568	2382945

Note: Worked out on the basis of the government of India's Note.

TABLE 16

Progress of achievements of Vasectomy and Tubectomy in Kerala

Year	*Vasectomy*	*Tubectomy*	*Total sterilisation*
(1)	(2)	(3)	(4)
Up to 1965-66	89035	26307	115342
1966-67	33069	7205	40274
1967-68	53756	11399	65155
1968-69	58775	15065	73840
1969-70	42142	18404	60546
1970-71	46621	21396	68017
1971-72	123747	27364	151111
1972-73	59465	30924	90389
1973-74	14751	35638	50389
1974-75	18466	43685	62151
1975-76	94270	62352	156622
Total	634097	299739	933836

Source: Report of the Committee for Evaluation of Family Welfare Programme (Kerala) 1978.

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