Zabeena Hameed P. “Female education and demographic transition in Kerala with special reference to Malappuram district” Thesis. Department of Economics, Dr. John Matthai Centre, University of Calicut, 2007
CHAPTER VIII

SUMMARY, MAJOR FINDINGS AND CONCLUSION

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The nexus between population and economic development is very complex. An accelerating population growth increases the share of 'demographic investments' and the danger of poverty, unemployment and inequalities. This calls for attention on the part of policy makers to curtail the growth rate of population.

Education as an investment in human resources plays an important role among the factors, which contribute to economic growth. Synchronizing with human investment revolution in economic thought, many countries around the world, and more particularly the newly independent developing countries, including India expanded their educational systems and made heavy investments in education. The family is the world's smallest school. Most children in developing countries spend more time with their mothers than with any other educational medium, including school. In fact, when women are educated, they tend to encourage their children to become educated as well. Thus education, especially female education and associated variables play a catalytic role in demographic transition.

8.1 SUMMARY

Population explosion is a concrete reality in the third world countries including India. The level of population in these countries has become larger than what can be sustained at the existing level of development. Socio-economic
transformation is the effective solution to the problems of population growth and related issues. Thus, economic development is a central factor in the solution to population and interrelated problems in developing countries. As population is a major determinant of the level of development of a nation, human development is necessary because it helps to lower family size by slowing human reproduction. Increased educational facilities make people aware of the benefit of a small family and reduction in infant mortality reduces the incentives of having large families as fewer child deaths are now feared.

The study consists of eight chapters. The first chapter is an introductory one and deals with the nexus between population and economic development, importance of education in economic development and female education and demographic transition and briefly examines the socio-economic status of Muslims in India. Besides these, the first chapter gives the significance, objectives, data source, sample selection, definition of concepts, methods of analysis and limitations of the study. In Kerala, little effort has been made in studying the impact of female education on the demography of the backward districts of the state, especially Malappuram. Thus, the present study has significance and aims to fill this gap. The study is an attempt to analyse the extent of influence of female education on the demography of the state in general and Malappuram district in particular.

The present study has four objectives. Firstly, it examines the trend and pattern of demographic transition in India by major states, with emphasis on the state of Kerala. Secondly, it analyses the trend and pattern of demographic transition in Kerala, district wise, with special reference to Malappuram district. Thirdly, the role of female education on the demographic variables of the state is
analysed. Lastly, the influence of various socio-economic factors in demographic transition in Malappuram district is discerned on the basis of primary data. The introductory chapter is followed by seven chapters, which fulfil the goal and objectives of the present study.

The second chapter gives a detailed review of literature on female education and demographic transition and the theoretical issues related to fertility. An extensive review of literature on female education and demographic transition at international, national and state levels is attempted in this chapter. Studies on fertility are not unique in the sense that the models differ from each other in the determinants of fertility. Several theoretical models have been formulated by eminent demographers. The existing studies are categorised into the following depending upon the determinants of fertility decline – Fertility and Contraceptive Use, Fertility and Child Mortality and Fertility and Maternal Education. Among these categories, our study comes in the third category, which links maternal education and fertility.

The third chapter examines the demographic and structural features of population of India by fifteen major states. This chapter satisfies the first objective by examining the trend and pattern of demographic transition in India with special reference to Kerala, and throws light on the inter-state disparities in demographic transition in India. It shows the existence of ‘North-South’ demographic disparity and clearly depicts that the ‘BIMARU’ states are lagging behind in several respects when compared with other states of India. From this chapter, it is seen that Kerala is ahead of the rest of the Indian states with respect to demographic transition and a number of structural variables.
Among the states of India, Kerala is the state where the growth rates of population, birth, death, infant mortality and fertility rates are the lowest. Female age at marriage, life expectancy, literacy rates and sex ratio registered its highest value in Kerala. Kerala is also ahead of all other states with respect to health and education, and hence ranks first in human development. Kerala is also the state where poverty is comparatively low and ranks third among the states with lowest poverty. The southern states like Tamil Nadu, Andra Pradesh and Karnataka also follow the same suit as that of Kerala while the northern states, especially BIMARU states, have still a long road to travel.

The fourth chapter is on the analysis of the trend and pattern of demographic transition in Kerala, district wise with special reference to Malappuram district. This chapter satisfies the second and third objectives of the present study. There exist wide variations in demographic and structural features of population among the districts of Kerala. Moreover, the pace of demographic transition is not the same for all the districts of Kerala and this is especially true in the case of Malappuram district. From this chapter, it is crystal clear that Malappuram district is the demographically vulnerable district of Kerala.

Malappuram is the district, which has the largest size of population and the highest growth rate of population. Statistical figures on the demographic features of Malappuram show that crude birth rate, total fertility rate, proportion of females married below the age of 20, child woman ratio, and dependency ratio, are highest in this district of Kerala. It is also the district having the lowest couple protection rate, crude death rate and mean age at marriage for both males and females. Malappuram it is also having the second highest child mortality ratio.
An examination of the structural features of population shows that Malappuram is having the lowest work participation rates (for both males and females) and per capita income. Literacy rate of this district lies below the state average while sex ratio and density of population are above the state average. Malappuram district is having the third lowest urban population among the districts of Kerala. Number of schools, arts and science colleges, and hospital beds in relation to population are lowest in this district. Thus, the structural factors conducive to demographic transition register an unfavorable trend. Besides Malappuram, Kasargod is also lagging behind with regard to a number of demographic variables.

Statistical evidence helps us to conclude that Malappuram is demographically vulnerable district of Kerala. The correlation matrix worked out on the basis of data on three points of time establishes a high degree of negative association between female education, crude birth rate, total fertility rate, crude death rate, infant mortality rate where as mean age at marriage and couple protection rate are positively related to female education. Thus it is seen that female education has a significant role in influencing demographic variables.

The profile of the sample area and the sample with focus on the education and employment of the samples is attempted in the fifth chapter. This chapter deals with selection of samples, general details of the sample households, housing conditions, socio-political involvement, education and attitude towards education and details on employment of our samples. This chapter clearly reveals that the educational attainment is very low among the religious group of Muslims when compared with non-Muslims. Besides this, gender inequality is seen in educational aspirations for children among our samples. Early marriage,
economic problems of the household and low parental motivation are important reasons for cutting short the education of girls.

Details on employment show that Muslims are lagging behind with regard to participation in employment activities. Their employment in government and private sector is the lowest and their average monthly salary is also the lowest, when compared with other religious groups.

Attitudes on education influence the educational attainment and employment of people and their fertility decisions, as fertility and education are inversely related. As Muslims form the single largest majority in Malappuram, and as their attitude on education is less progressive when compared with other religious groups, it certainly influences the fertility behaviour of the people.

An elaborate exposition of fertility and family planning among our samples is presented in the sixth chapter. The analysis of fertility behaviour of our samples of Malappuram district reveals a number of facts, confirming that Malappuram is backward with respect to demographic transition. The mean age at the time of first marriage for females, males and the age at the time of dissolving is the lowest among the religious group of Muslims. Mean age at first pregnancy is also the lowest among Muslims. Mean age at first marriage and mean age at first pregnancy are found to increase with an increase in the educational attainment of our samples. Mean age at marriage and pregnancy is seen to decline over the years when samples were categorized on the basis of their year of marriage. Females, who had eight and more number of pregnancies, were either illiterate or had only 1-4 years of schooling. Mothers who responded that they were unaware of the treatment of the disease that caused the death of their children had only 1 to 4 years of schooling.
In the seventh chapter, we analyse the individual influence of ten socio-economic factors like age at marriage, number of years of migration of the husband, number of years of female schooling, religion, number of years of male schooling, female employment, family income, place of residence, nature of family and female income on children ever born to our sample population. Here, religion, female employment, place of residence and nature of family are treated as dummy variables. Out of the selected variables female education is found to have a strong influence on fertility. Besides female education, age at marriage and family income are also found to affect fertility significantly.

This chapter (eighth) is a concluding one. It gives a brief summary of the study, major findings that emerge from the study based on both primary and secondary data and the concluding remarks.

8.2 MAJOR FINDINGS

The major findings that emerge from the present study are shown below under two headings, viz, findings from secondary data and findings from primary data.

8.2.1 Findings from Secondary data

- In India, the states of Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh (BIMARU States) are demographically vulnerable, whereas the southern states exhibit favourable demographic trends. Among the southern states, Kerala ranks first with respect to demographic transition.

- Kerala state has the lowest crude birth rate (15.0 per 1000), crude death rate (6.4 per 1000), infant mortality rate (14 per 1000), decadal growth
rate of population (9.4 per cent) and total fertility rate (1.93) among the Indian states.

➤ The female average age at marriage is 22 years and is the highest in Kerala.

➤ The male literacy (94.2 per cent) and female literacy (87.9 per cent) are the highest in the state of Kerala among the Indian states.

➤ Life expectancy for males (70.6 years) and females (76.1 years) are the highest in Kerala.

➤ Kerala ranks first in Human Development Index, Gender Equality Index and in primary health and education poverty is the third lowest. In Kerala, among the Indian states.

➤ Malappuram is the most populated district in Kerala having the highest decadal growth rate of 17.22 per cent whereas it is the lowest in the district of Alappuzha (5.21 per cent).

➤ Crude birth rate is the highest in Malappuram (22.4 per 1000), whereas it is the lowest in Pathanamthitta (14.5 per 1000).

➤ Crude death rate is the lowest in Malappuram (4.08 per 1000) and it is highest in Thrissur (7.34 per 1000).

➤ Total fertility rate is 2.4 in Malappuram, while it is found to be the lowest in Pathanamthitta, Alappuzha and Ernakulam (1.5). The only district in Kerala, which has not attained Zero Population Growth, is Malappuram.
The mean age at marriage is the lowest in Malappuram (24.7 years for males and 18.7 years for females). Mean age at marriage for males is the highest in Thrissur (29.1 years) and for females it is the highest in Kottayam (24.4 years).

Individual estimates of infant mortality rate show that infant mortality in Malappuram is 26 per 1000, and it is the same as the state average. It is the lowest in Trivandrum (16 per 1000) and the highest in Kozhikode (34 per 1000).

Couple Protection Rates are the lowest in Malappuram (49.6 per cent) and are the highest in Trivandrum and Pathanamthitta (90.3 per cent).

Malappuram is having a literacy rate for both males (91.46 per cent) and females (85.96 per cent) below the state average.

In Malappuram sex ratio (1063) and density of population (1022) are found to be higher than the state average.

Malappuram is characterised by the lowest work participation rate for both males (42.8 per cent) and females (6.6 per cent).

The per capita income is the lowest in the district of Malappuram.

The number of educational institutions and institutions for higher education is very low in Malappuram, when compared with the population of the district.

The number of health institutions per lakh population (6) and the number of hospital beds per lakh population (81) are the lowest in the district of Malappuram.
Malappuram district ranks last with respect to Human Development Index and Gender Development Index.

Correlation analysis shows that female literacy is inversely related to crude birth rate, crude death rate, infant mortality rate and total fertility rate. Female literacy is directly related to the mean age at marriage and the couple protection rate. Thus the influence of female education on demographic variables seems to be very strong.

### 8.2.2 Findings from Primary data

**Education and Attitude Towards Education**

- Females having ten or fewer years of schooling are the highest among the religious group of Muslims, when compared with Hindus or Christians. It is as high as 75.9 per cent.

- Mean years of schooling for females shows that it is relatively higher among Christians (12.08 years) followed by Hindus (8.29 years). It is lowest among Muslims (7.06 years). For all the respondents, it is 7.45 years.

- Respondents who are not willing to educate their children is found highest among Muslims (12.3 per cent) when compared with Hindus (4.5 per cent). No respondent belonging to Christianity expressed their unwillingness in educating their children.

- Opinion on the willingness to educate children of both sexes equally reveals that one fifth of our samples are not willing to educate their boys and girls equally. A religious wise break up of our samples shows that the
percentage of respondents who are not willing to educate girls on a par with boys is high among Muslims (23.8 per cent) followed by Hindus (16.4 per cent), whereas all the respondents belonging to Christianity revealed that they prefer to educate children of both sexes equally. Education wise break up of the samples shows that the percentage of respondents who are not willing to treat children of both sexes equally (with regard to education) declines with an increase in the educational attainment of the respondent. The reasons given for this gender-biased treatment in education are religious (33.8 per cent), economic (21.15 per cent), additional burden at the time of marriage (18.5 per cent), and others.

Attitude on whether girls' education is more fruitful than boys was gathered. Nearly half of the respondents belonging to Muslim community (49 per cent) responded that girls' education is not as fruitful as that of the boys. Majority of the respondents belonging to Christians (61.53 per cent) and Hindus (56.7 per cent) opined that girls' education is more fruitful as it empowers them, increases the socio-economic status of the family and creates a better future generation.

Females with higher levels of education are more willing to send their girls for job when compared with females having low levels of education. Nearly half of the respondents (49 per cent) who are not ready to send their girls for job even if she gets it opined that 'females need not go for job'. This argument is found to be the highest among the religious group of Muslims.
Early marriage (36 per cent) and economic problems (25 per cent) are the dominant factors that prevented the use of educational facilities by our respondents. Lack of parental consent, distance and transportation problems and the burden of household activities are also cited as factors that prevented them from getting educated. Only Muslims (9.7 per cent) pointed lack of parental motivation and consent as factors that prevented them from getting educated. In the case of their children, economic problems are more dominant than early marriage, which stands in the way of their childrens’ education.

There exists educational backwardness among Muslims on account of attitudinal problems (20.3 per cent), early marriage (33.7 per cent), and religious orthodoxy and lack of social awareness (46 per cent).

Educational aspirations of children (both boys and girls) are high among Christians, while they are the lowest among Muslims. The percentage of respondents who wish to educate their girls till the commencement of marriage comes to 23.12 per cent and this tendency is found to be the highest among Muslims (28.6 per cent) followed by Hindus (8.95 per cent) and it is nil among Christians.

Majority of the respondents prefer to educate both boys and girls upto the desire of their children. But the respondents who prefer to educate their boys' upto the desire of their children is certainly high (69.4 per cent) when compared with the respondents who prefer to educate their girls' upto the desire of their child (41.36 per cent).
Employment

- A religion wise break up of the respondents who go for job shows that it is high among Christians (38.46 per cent), followed by Hindus (13.43 per cent) and is very low among Muslims (3.52 per cent). Majority of the respondents who works in government sector are Christians whereas it is low among Muslims. The percentage of respondents working as teachers is high among Christians and all the Christian samples who are employed are teachers while this percentage is lowest among Muslims. The percentage of respondents who work as 'coolie' and who are self employed is seen only among the religious group of Muslims.

- The average monthly salary is also low for Muslims (Rs.3325) when compared with other religious groups (Rs.5528). Increased earnings accompany increase in educational attainment from employment, irrespective of religion.

- Only 27.4 per cent of the members of our sample households go for one or the other type of work or employment. Among those who go for work, majority work for daily wages as coolies (10 per cent). The percentage of non-resident Indians comes to 5.6 per cent, self-employed - 3.3 per cent, business - 2.7 per cent, government service - 2.2 per cent, any other job - 2.8 per cent and agriculturists - 0.7 per cent. Thus the role of agriculture and industry in generating employment and providing a source of livelihood is insignificant among our sample households.
Socio Political Involvement

➢ The respondents who did not use their right to vote (9.4 per cent) is also high among respondents with low levels of education and among Muslims (11 per cent). It is also high in rural areas (11.7 per cent).

➢ Only 6.2 per cent of our respondents have political activities and this participation is high among the respondents with degree and above. Participation in political activities is relatively high among Christians (15.9 per cent) while it is lowest for Muslims (3 per cent).

➢ Participation in women's associations or organisations is found high among respondents with low income and is also low among those with more years of schooling.

➢ Kudumbhasree units, Self Help Groups and Ayalkkootams are the most important women agencies in which our respondents are participating. Among those who participated in these agencies 67 per cent opined that it helped in providing job and raising socio-economic status of the women.

Marriage

➢ Dissolved marriages is high among Muslims (6.6 per cent) and the respondents who are married more than once is also high among Muslims (5.3 per cent). The percentage who are married more than once is three among Hindus while it is zero for Christians. Harassment by in-laws are pointed as the main reason for dissolving marriages in rural areas whereas dowry, wife beating and physical and mental illness of either husband or wife are equally important reasons in urban areas.
Current staying status of females with their husband shows that it is lowest among Muslims (57.7 per cent). This is on account of migration and the percentage of husbands gone abroad is highest among Muslims (30.8 per cent). Of all of our respondent's husbands who have gone abroad, majority have gone to Middle East countries (86.6 per cent).

Migration helped in increasing the family income and in improving the standard of living. Unfortunately, the percentage of females who does not go for work in their husband's absence is very high.

The practice of polygamy still exists in Malappuram district (8 per cent) and is relatively high among respondents belonging to Muslim community. The percentage of husbands of our respondents having another wife is highest among Muslims (10 per cent) followed by Hindus (3.2 per cent) and it is zero among Christians. Males who have more than two wives are seen only among the Muslims. The incidence of polygamy is higher in rural areas and among nuclear families. It is also seen that an increase in the level of education is associated with one marriage.

Mean age at first marriage is highest among Christians (20.85 years) followed by Hindus (19.94 years) and is the lowest among Muslims (16.09 years). Mean age at first marriage among Muslims is lower than that prescribed by the Marriage Act. It is also seen that mean age at marriage increases with an increase in the educational attainment. This is true among all the religious groups.

Mean age at the time of dissolving first marriage is as low as 17.5 years among Muslims.
Mean age at marriage of males is also lowest among Muslims (24.82 years) while it is highest among Christians (28.62 years). It is also seen that mean age at marriage for males is high for those with higher levels of education.

Mean age at marriage among Muslims show an increasing trend over the years. It is 14.08 for females who are married before 1970 and it increased to 15.8, 16.31, 17.00 and to 19.00 years respectively in the decades 1970-1980, 1980-1990, 1990-2000 and 2000 and after. Among other religions also, mean age at marriage has increased over the years.

**Pregnancy**

Mean age at first pregnancy is also the lowest among Muslims (17.41 years) while it is highest among Christians (22.54 years).

On account of the occurrence of still births/spontaneous abortions/induced abortions, only 67 per cent of females got a surviving child from their first pregnancy. The percentage of females who did not get a surviving child from their first pregnancy is found high among Christians (46.2 per cent) and among joint families (40 per cent) when compared with nuclear families (28 per cent).

On account of various diseases, 15.3 per cent of our respondents lost at least one of their children. Incidence of epidemic diseases like cholera, typhoid and diarrhoea as causes of death of children is seen only among those respondents with less than ten years of schooling. Mothers who responded that they were unaware of the treatment of the disease that caused the death of their children had only 1 to 4 years of schooling.
Among our samples, 27.4 per cent had either stillbirths or spontaneous abortions or induced abortions. Of our samples 5 per cent had stillbirths. The incidence of spontaneous and induced abortions comes to 14 per cent and 10.74 per cent respectively. The percentage of females who had induced abortions is 9.69 per cent among Muslims, 13.43 per cent among Hindus and 15.38 per cent among Christians. Increase in education is associated with a decline in the incidence of stillbirths or spontaneous abortions or induced abortions with the exception to the category professionals. It is slightly high in urban areas.

Respondents who have not become pregnant come to 6.8 per cent. Among those who have not become pregnant, 66 per cent have completed more than 5 years after marriage. The incidence of samples who have not become pregnant is high in rural areas.

Females who had one and two pregnancies are highest among Christians whereas females who had more than three pregnancies are the highest among Muslims. It is seen that the number of pregnancies declines with an increase in educational attainment. Respondents who had six and above number of pregnancies were either illiterate or had only 1 to 7 years of schooling.

The mean number of pregnancies is declining over the years. It declined from 5.13 before 1990 to 2.53 in 1990-2000 among our samples. Among Muslims, the mean number of pregnancies declined to 2.78 between 1990-2000 from 5.38 before 1970. Among Hindus it declined from 4.67 to 1.95 and among Christians it declined from 5.00 to 2.50 during the same period.
Mean number of pregnancies is the highest among other backward castes (3.53) and is the lowest among other eligible castes (2.5).

Mean number of pregnancies is high for urban samples (3.79) whereas it is 3.33 for rural areas.

Mean number of pregnancies is low for employed samples (2.96) when compared with unemployed samples (3.4).

Mean number of pregnancies is seen to decline with an increase in education. For illiterates, it is 4.63 whereas for degree holders it is 2.15.

Mean number of pregnancies by religion shows that it is 3.6 for Muslims, 2.94 for Hindus and 3.31 for Christians. For all respondents it is 3.45.

The decision maker in the termination of undesired pregnancies shows that the major decision maker among Hindus is husband (53.3 per cent), husband and both husband and wife among Christians (50 per cent each) and mother-in-law among Muslims (40.9 per cent). In the case of Hindus also mother-in-law is a decision maker in the termination of undesired pregnancies (22.2 per cent).

More than one fourth (26.1 per cent) of our respondents said that none of their pregnancies were at the time they wished for. Incidence of undesired pregnancies is high in rural areas (32 per cent) when compared with urban areas (6 per cent). The percentage of respondents who terminated their undesired pregnancies is lowest among Muslims (10.0 per cent) whereas it is 15.4 per cent among non-Muslims. Incidence of termination of undesired pregnancies is found high in nuclear families (13.1 per cent) when compared with joint families (8.7 per cent).
Size of the Family

➢ On an average, the number of members in a Muslim household is higher than that of other religious groups. The mean number of members in Muslim households is 7.08 as against 6.19 for Hindus and 5.9 for Christians.

➢ Mean number of children ever born is the highest among Muslims (3.33) and is the lowest among Christians (2.54). Mean number of boys (1.70) and girls (1.63) ever born is also high among Muslims. Among the religious group of Hindus the mean number of boys (1.37) is relatively higher than girls (1.27) whereas among Christians, it is higher for girls (1.38) than boys (1.15). Mean number of children is high in urban areas (3.41) and for unemployed women (3.2). Mean number of children declines as the level of education increases. It is 4.36 for those with 1 to 4 years of schooling and 1.78 for those with degree and above.

➢ Mean number of children is declining among all religions, over the years. Among Muslims it declined from 5.03 among samples who are married before 1970 and is 2.47 among those married between 1990-2000. Among all the respondents it declined from 4.73 among samples married before 1970 to 2.21 among the samples married between 1990-2000.

➢ Mean number of dead children is very low among the respondents with higher levels of education. It is 0.08 for respondents who have degree and above whereas for illiterates it is 0.46. Mean number of dead children declines as the respondent's educational attainment.
Samples who are aged have more children. Seven and more number of children is seen only among respondents who are aged 40 and above. The importance attached to children changes over the years and it is showing a declining tendency among our samples.

Females who are not satisfied with the number of children they have are high among Muslims (37.4 per cent) and in rural areas.

**Sex Composition of Children and desired Family Size**

Of our samples, 37.1 per cent are not satisfied with the sex composition of their children. The percentage of respondents who are not satisfied with the sex composition of the children is highest among Christians (46.2 per cent) while it is lowest among Hindus (32.8 per cent).

Respondents who desire to have two and more sons to attain their desired sex composition of children is the highest among Muslims (61.6 per cent). On the other hand, respondents who would not like to have any more girls to attain the desired sex composition, is as high as 31.4 per cent among Muslims. It is seen that females belonging to the religious group of Muslims desired to have more boys and girls to attain their desired family size.

Among Muslims, 59 per cent prefers a family size of 3 to 4 children and 12.8 per cent prefers to have 5 to 6 children. The percentage of respondents who prefer to have 1 to 2 children is found highest among Christians (53.8 per cent) followed by Hindus (49.3 per cent).

Even in the urban areas of Malappuram, 50 per cent prefers to have 3 to 4 children and the females who prefers to have 1 to 2 children is just 10.5
per cent as against 33.3 per cent in rural areas. It is shocking to note that 32.9 per cent of the respondents living in urban areas preferred 'as many children as given by God as their preferred size of family.

Son Preference

➢ Sons are preferred to daughters by 25.4 per cent of respondents. The percentage who prefers sons to daughters is highest among Muslims (26.9 per cent) and is nil among Christians. Son preference is found low among those respondents with an educational attainment of degree and above (8.4 per cent) whereas among illiterates it is 33.3 per cent. Son preference is found to be stronger in rural areas (28.6 per cent) when compared with urban areas (15.8 per cent).

➢ Among our samples 7.2 per cent determined the sex of their unborn child with the help of modern techniques like scanning. It is interesting to note that this habit is seen only among respondents in rural areas.

➢ If they don't have sons, 20 per cent opined that they would continue child bearing until a boy comes and this response is relatively high among Muslims (23.3 per cent). Majority (63.8 per cent) said that they will stop giving birth after having 3 to 5 girls, in case if they do not get boys.

➢ Among our respondents, 27.4 per cent opined that females who give birth only to girls are ill treated. This argument is strong among respondents of joint families (32.2 per cent) and majority said that it took the form of verbal harassment.
Spacing between children

- Majority (79.2 per cent) agreed that spacing between children is needed. This argument is strong among respondents with higher levels of education. Those who do not prefer spacing is found high among illiterates (30 per cent). It is Christians who prefer more years of spacing between children when compared with other religious groups.

Awareness on AIDS

- Among our respondents, 11.1 per cent have not at all heard about AIDS and this ignorance is high among Hindus (22.4 per cent) followed by Muslims (8.4 per cent) and is nil among Christians. It is low in urban areas and nil among those with ten and more years of schooling. The respondents who are ignorant about the spread of AIDS is 12.8 per cent and is the highest among Muslims (15 per cent) and in rural areas (15 per cent).

Family Planning

- A health or family planning worker visited majority (82 per cent) of the households at least once in a year. Public sector workers visited majority of the households.

- Among all religious groups, female sterilization is the most important method of birth control that is adopted (40.7 per cent). The percentage of male sterilization is 2.7 per cent and is seen only among the religious group of Christians. The use of temporary methods of birth control is found high in urban areas, and among respondents with higher levels of education. Female sterilization is found highest among illiterates (52.4 per cent).
It is alarming to note that 6.7 per cent of our respondents who are sterilised got it done before the age of twenty and 28.9 per cent got sterilised between the age of twenty and twenty-five. Majority of respondents who are sterilised got sterilised between the age of 25 and 30 (33.3 per cent). Those who are sterilised below the age of 25 comes too high as 40 per cent of the respondents who are sterilised among Muslims, while this percentage is nil among Christians.

Females who used a scientific method of birth control even before having one child and after having only one child is high among Christians (50 per cent). Among Muslims, 21.4 per cent, used a method of birth control after having 3 children, 14.5 per cent after having fourth child and 7.6 per cent after the fifth child.

Regression result strengthens our argument of strong inverse relationship between education and fertility. Female education seems to be the most important determinant of fertility among our samples. Other factors that influence fertility are age at marriage and family income. Besides these factors, the factors that have an individual influence on fertility are husband’s education, female income and religion.

8.3 CONCLUSION

Female education seems to have the most powerful influence on demographic variables because educated women marry later, tend to have fewer children, and are more likely to use effective methods of contraception and have greater means to improve their economic livelihood, thereby slowing population growth. Mother's education is even more important to her children's health as
she can respond to health related emergencies better and can raise a healthier family.

As all demographic variables show favourable tendency among females with high levels of education, irrespective of religions, it is the educational backwardness that lead to high fertility in Malappuram district. Attitude on education influences the educational attainment of people and their fertility decisions, as fertility and education are inversely related. As Muslims form the single largest majority in Malappuram, and as their attitude on education and employment are less progressive than other religious groups, it certainly influences the fertility behaviour of the people. It has been observed that religious differentials in fertility and the use of family planning methods decline with the increase in education and socio-economic development. Thus the operative forces seem to be more socio-economic and educational rather than directly religious.

Even though the link between female education and fertility is very strong, there are various factors, which prevent female education especially among Muslim women. Early marriage and child bearing, additional burden at the time of marriage and economic problems, attitudinal problems and lack of parental motivation are the major factors cutting short the education of girls. Effective enforcement of minimum age at marriage, increase the number of institutions for higher education (in the case of Malappuram district), creation of social awareness regarding the importance of education together with attitudinal change and movement of women into paid employment can help to increase female education and to control population.