CHAPTER I

INTRODUCTION
Population growth is a major problem that most of the developing countries including India has been facing during the 20th century. Till the onset of this century population growth level in the past history grew as rapidly as we see today and pose the greatest threat practically to all the fields of development. It is growing at an alarming proportion in Asia and Africa and at somewhat a lower level in Latin America and the least in the developed countries. The rapid growth of population has been contributed by three major components of population viz., fertility, mortality and migration and they have been influenced by several antecedent factors.

Intensive research in the field of human fertility has assumed more importance in recent years. It is felt that to stabilize the growth of population what is most needed in reduction in fertility. From the view point of Demographic Transition Theory India appears to be in second stage of demographic cycle. Fertility rate is still higher whereas mortality rate has come down, with the result that the rate of population growth has gone up. The rate of population growth was about 2.1 per cent per annum in 1951-61 decade whereas at present it is about 2.5 per cent per annum according to the recent estimates. This is also a clear indication that mortality rate will decline still further as
advancement in the field of public health and medicine taken place.

The prospects of automatic decline in fertility rate are not so bright. Hence to check the higher growth of population the only factor which control the means of modification of fertility by deliberate methods for avoiding unwanted births to restrict the family size. In realization of the necessity the Government of India has accepted the family planning programme as a national policy with a view to encouraging the voluntary control of family avoiding unwanted births. A constant effort is being made to popularise the programme by Government of India at national level (An idea of the effort can be had by the budget allocations for family planning programme which have increased from approximately Rs.145 millions in the First Plan to an estimated Rs.300 millions for the Fourth Plan). A careful consideration of the factor points out the need for reliable and intensive statistical information concerning the fertility and reproduction. Such information is needed for both Government and public.

Among the various aspects of socio-cultural environment influencing fertility, 'Religion' has been considered important. Several studies undertaken to study
fertility behaviour by religion affiliation within multi-religious populations have found variations in fertility among different religious groups.

**STATEMENT OF THE PROBLEM**

An unprecedented increase in numbers due to a rapid decline in mortality without a concurrent fall in fertility resulted in world-wide apprehension about population. To safeguard the universal goal of better and satisfactory living standards for all the people, a check on population growth is warranted. The problem is more serious among developing countries as their rate of population growth has surpassed the rate of socio-economic development.

India is one of the pioneers in the world to accept in the early 1950s itself the need for checking population growth and advocating family planning as part of its socio-economic development programme. Yet the achievements are not up to the mark and at best have marginal impact in reducing societal fertility. Under these circumstances, extensive research studies are needed for better understanding of the various determinants of fertility behaviour. Though a number of studies on different aspects of fertility have been undertaken, there still exists a considerable gap in understanding the determinants of
fertility. The study of fertility has been gaining increasing importance in the recent period. Further the efforts of the Government of India to reduce the birth rate as expeditiously as possible through the National Family Planning Programme has added considerable emphasis on the study of fertility and on its orientation to related official programmes and policies. It is therefore essential to make a study of urban population in Andhra Pradesh. In Andhra Pradesh urban fertility studies are very rare, hence this study is in attempt in this direction.

REVIEW OF LITERATURE

Human fertility as a complex process responsible for the biological maintenance of society, constitutes the essential aspect of demographic studies (U.N. 1973). The countries of the world have been broadly classified into high fertility and low fertility countries, taking a crude birth rate of 30 or gross reproduction rate of 2 as the cutting point. Low fertility has been observed among the developed countries while the developing countries have demonstrated very high levels of fertility. On the average, fertility is about twice as high in the developing regions as in the more developed regions of the world. The study of the factors contributing to high fertility levels and those associated
with fertility decline assume great importance in view of the high rate of natural increase of population experienced by most of the developing countries and wide variations in the levels of fertility observed within many high fertility countries. A thorough understanding of the determinants of fertility levels and of their variations in different societies is essential for effective implementation of any planned effort to achieve a proper balance between population growth and economic development.

Several factors have been identified as having either direct or indirect influence on fertility behaviour. The U.N. (1973) report observes, "within the limits exhibited by physiological factors, a multitude of economic, social and cultural factors are the ultimate determinants of fertility levels and of the variations in different societies. Most of the studies conducted hitherto in different parts of the world. U.S.A, Europe, Latin America and a few Asian countries have taken one or the other of the stratification variables as the basis of study and have generated a certain amount of knowledge to explain the causes of differential fertility. There still exists a considerable gap in our knowledge of the determinants and differentials in fertility of many countries including India. In the light of this fact this thesis presents the analysis of the available data on the trends in Hindu-Muslim-Christian-religious fertility and
examine the factors which might be responsible for the differentials.

As the promotion of family planning has been intensified in India through larger outlays in each successive plan, concern has been expressed about the implications of the official policy for the religious composition of the population. It is suggested that in a multi-religious country like India, if family planning is adopted uniformly by members of all religious groups, their numerical balance would be upset. The subject of Hindu-Muslim-Christian Religious differentials in fertility has thus assumed considerable importance. In the light of this fact this thesis presents the analysis of the available data on the trends in Hindu-Muslim-Christians religious fertility and examines the factors which might be responsible for the differentials of fertility as well as family planning adoption.

In recent decades there has been a sudden spurt in growth of population as a result of the steep decline in mortality with very little drop in fertility. Therefore fertility is the main component of this population growth and a decline in population growth stems from a reduction in birth rate. It is clear that the future growth of population will depend more on the trend in fertility than on the trend
in mortality. These demographic changes form a basis for modern economic and social planning, which is an imperative need for a detailed analysis of fertility, patterns and differentials in relation to socio-economic variables based on the current and historical data. In this context the acceptance of family planning as a means to regulate the growth of population has become all the more necessary. Thus interest in fertility has received encouragement in the context of modern economic planning and development.

One of the important aspects of fertility behaviour is that of fertility differences among population distinguished by socio-economic and other characteristics. Differential fertility according to demographers, is the study of systematic variations in fertility which are observed within or between populations. If every woman in a population has to bear an identical number of children, there would not be any fertility differentials. But in reality people of different social categories tend to have different fertility rates. Past studies have shown that there is considerable woman to woman variations in fertility, and it is this variation which gives rise to the need for a study on differential fertility.

Differential fertility provides a detailed analysis of various variables which affect the general
fertility levels. The importance of such analysis is that it provides an insight into the process of permeation of the pattern of fertility behaviour for formulating population policy more systematically and in a realistic manner. In fact, a variety of factors have been identified as being directly or indirectly responsible for fertility differentials at different levels and notable among them are social, economic, cultural religious demographic factors and family planning interventions. Several of these factors have been considered in various studies which exhibit the relationship between these variables and fertility behaviour. Although fertility differentials have been found in relationship to certain other factors, the direction and the degree of relationship vary between religious and cultural groups. Such of those factors possibly relevant to explain religious variations in fertility differentials in the population under examination have been reviewed in the lines that follow. The pattern of review is on the basis of specific proven variables.

Socio-Economic Status Variables

A considerable effort has been made to study the relationship between socio-economic status and fertility all over the world (Whelpton and Kiser, 1946-58' Grabill et. al,
1958; Freedman et al, 1959; U.N. Mysore Population Study, 1961; Westoff et al, 1963; Kupinsky 1971; Rosen and Simons, 1971; Saksena, 1973; Rele and Kanitkar, 1980). Socioeconomic status has been inversely related to fertility. However, several recent studies demonstrated that the traditional negative association between socioeconomic status and fertility observed for many years in the USA, UK and Europe has diminished considerably in recent decades (Freedman 1959; Tien 1965). Westoff et al (1963) agreed with the view that the negative association of fertility with socioeconomic status diminishes and tends to become positive among couples with several generations of urban living.

Historically there has been an inverse rather than a positive relationship between socioeconomic status and fertility in the West during the period of urbanisation and industrialisation. Large families were more prevalent among the poor and uneducated. Recently these differentials have been narrowed down or even reversed in certain developed countries. This change was predicted by a number of authors (Mayer 1959; Freedman 1959; Deborah Freedman, 1963) for two reasons. (1) As the population has become more universally educated and urbanised, knowledge of contraception is no longer limited to the higher socioeconomic group, so that an effective choice of desired number of children is possible for all strata of the society and (2) as our economy has lost
its rural character, children have lost their economic utility. This in turn has induced widespread acceptance of small family norms.

While recent studies have demonstrated the consistency and prevalence of small ideal family size (Freedman 1959, Freedman et al, 1963; Glick, 1967), the pattern of completed fertility also similarly reflects the negative association between socio-economic status and fertility. Most of the Indian studies also support this hypothesis that socio-economic status negatively correlated with fertility (Das Gupta, 1955, Agarwala, 1960; Chandrasekharan and George, 1962; Chandrasekharan, 1964). Under these circumstances in the following some of the important and specific socio-economic variables have been considered for detailed review in order to examine their relevance and possible consideration in the present study.

(1) Family Structure

The reproductive process is familially conditioned by direct or indirect influence of the members of the kinship group. The influence of family and kinship on fertility differences is probably strongest in developing countries and is not substantial in developed countries on account of the higher degree of individualism in them. The role of family
structure in fertility behaviour was studied as early as 1950s in Indianapolis study where factors like husband. Wife dominance and marital adjustments were included. Blake (1961) in her study of Jamaican fertility, and Hill, Stykos and Back (1959) in their Puerto Rico Study also used family structural variables. The Princeton Studies of two-child families in the metropolitan United States incorporated family group variables as one of the three major categories of independent variables. Goldberg (1960) notes with regard to the Indianapolis and Princeton studies that there is a systematic relationship between family structure and fertility. And each one attempts to show how difference in family structure has produced the pattern of differential fertility observed over the past hundred years or so. Each seemed to agree that family structure is the variable underlying socio-economic differentials in fertility. Hill, Stykos and Back (1955) find that communication between husband and wife is an important factor influencing contraceptive practice, and thereby fertility. Goldberg (1960) reports positive correlations between frequency of family gatherings and desired and expected family size.

The concept of various kinds of family as it is understood in the West is very much different in the context of Indian society. Generally there are three basic types of
family in India viz., the joint family, the extended family and the nuclear. A nuclear family typically consists of a husband and a wife and their unmarried children. An extended family includes the father, the mother, the siblings and their families. The extended family may involve joint households or separate domiciles clustered together to form a large family household. The joint family household includes several related nuclear and extended families in the same household. The study of fertility has been influenced by the family structure.

In India, interest in the study of family structure in relation to fertility is of very recent origin. A lot of empirical studies are generated by the findings of the studies are diverse. There are mainly two schools of thought i.e., some studies have found the joint family to be associated with higher fertility (Lorimer, 1954; Davis, 1955; Nag, 1967; Pakrasi and Malakar, 1967; Stockel and Chowdhary, 1969; Bebarta, 1967; Hashmi, 1965; Goyal, 1968; Mosena and Stockel, 1972; Karkal, 1972; Karim, 1974; Cain and Devries, 1976). While others have found the opposite or little relationship between them (Styco, 1950; Liv 1967; Karkal, 1972; Palmore, 1972).

Historically the hypothesis is that the extended or joint family is associated with high fertility and
conversely nuclear family is related to low fertility. This is because joint families provide a better conjugal atmosphere for higher fertility as the economic cost and burden of rearing and bearing of children are shared by other members of the family. On the other hand, in nuclear families, couples have to bear the cost of bearing and rearing of children themselves. According to other point of view, the extended or joint family operates to depress fertility for various reasons. For example privacy is more in the nuclear than in the joint family. The freedom of a couple to meet in privacy is to a large extent curtailed in a joint family by the traditional pattern of behaviour enforced by the elders of the family. The available information is fragmenting and the findings are often contradictory. Yet most of the studies conducted in different regions of India, came out with common findings i.e., that the joint family registers lower fertility in comparison to the nuclear family.

The earliest work on the empirical relationship of family type with fertility—at micro level seems to have been undertaken by Potti and Dutta as early as in 1956 in a survey in West Bengal. They classified the families into the three categories as nuclear, joint and extended families. Among these categories, the joint family showed the lowest fertility. In the same state, Nag (1967) collected data in
1960-61 from ever-married women living in seven villages of West Bengal which showed that average number of children in joint families was less than that in the nuclear families, when women of all ages are considered. Pakrasi and Malakar (1967) also collected data from couples belonging to three major socio-economic groups in Calcutta city. They reported that the joint family being less fertile than the nuclear family. Babarta (1967) found in his study of women belonging to joint families and nuclear families from six Delhi villages that while the nuclear families had higher fertility than the joint families in each age group. Goyal (1968) from his survey in Western U.P. found that women in nuclear families were more fertile than those in joint families. Karkal (1972) in her survey of women in nuclear and joint families from 27 villages in Nasik District of Maharashtra State found that the joint family had on an average 4.4 and 4.8 children in contrast to the averages of 4.3 and 4.2 for the nuclear family. On the other from Central India carried out by Driver (1963) have reported no significant relationship between family type and fertility.

The preceding findings indicating the relationship of family structure with fertility behaviour confirmed two types of relationships over the years. Before the 1950s joint families invariably manifested high fertility for
several reasons as cited earlier. But during the last five decades after the introduction of Five Year Plans and the consequent socio-economic development, the earlier pattern of relationship between family type and fertility has completely changed, leading to higher fertility in nuclear families and lesser fertility in joint families. In this changing scenario of Indian society it is necessary to re-examine the relationship of family structure with fertility. Therefore the family structure assumes great importance in the present study.

Urban Residence

Urban-rural differences in fertility have been well documented in several parts of the world, particularly among the developed countries. Some scholars have advocated that it is urban mentality rather than mere residence in cities which is responsible for declining family size in urban areas (Goldberg, 1958). Rosen and Simmons (1971) from a survey of women in five Brazilian communities, concluded that as a result of industrialisation and urbanisation, the general economic and social factors related to industrialisation appear to influence fertility in part through shift in the work and social status of women in part through new female role, attitudes and aspirations, and impact through egalitarian modes of family life. Variations
in fertility are also observed among the residents of metropolitan cities. Several studies have dealt with fertility differentials in metropolitan cities by formed residence of the respondents (Goldbert, 1959; Ritchey and Stokes, 1971; Rele and Kanitkar, 1974). Studying the Detroit urban population by Goldberg (1959) found that the socio-economic factors income, education, and occupation failed to predict the fertility differentials when persons of farm background were withheld from the urban population. Among the 'two generation urbanities' no relationship was found between socio-economic status and fertility. On the other hand, a definite inverse relationship between socio-economic status and fertility was observed among the farm background urbanities. The inverse fertility pattern so frequently reported to exist in urban areas is, according to Goldberg, largely due to the presence of the larger proportion of persons with farm background, and higher fertility in the lower and modest ranks on the socio-economic status scales. Among the protestants in U.S. the lower class persons want more children than middle and upper classes (West-off et al. 1963; Rainwater, 1965; Blake, 1968 b).

Diverse findings have been reported about fertility differentials by migration status and also by type of former residence among migrants. Kiser (1938) found no fertility differentials between white rural migrant wives
born in rural areas but who had moved to cities before marriage and white non-migrant wives in the cities. Goldberg (1960) using data from Indianapolis study, observed similar fertility levels among migrants of rural and urban origin. Hender Shot (1971) in a study conducted in Manila found that the mean number of children ever born was lower among migrants than among natives. Iutaka et. al. (1971) in Brazil observed that the fertility of the natives of urban areas was much lower than that of the migrants.

In India there has been no evidence of rural-urban fertility differentials in the past except the metropolitan cities like Bombay, Calcutta and Madras which exhibited lower fertility than country areas (Davis, 1952). But recent studies have shown that urban fertility has tended to be lower than rural fertility (Rele, 1972). The fertility survey conducted in Greater Bombay in 1966, Rele (1974) observed that the age standardised general marital fertility rate was the highest for wives who had migrated to Greater Bombay from rural areas while those who moved into Greater Bombay from other urban areas had the lowest. For the non-migrant wives the rate was intermediate between these two values. Desai (1970) in a survey conducted in Delhi in 1970 observed higher fertility among natives of the city than migrants from rural areas and other urban areas.
Education

Education is one of the most important variables in studies of differential fertility, unlike other variables education once obtained does not change over time. Historically many studies have shown strong inverse relationship between education and fertility (Grabill et al. 1958; Kiser, 1960; Driver, 1960; Blake, 1967; Stykos and Weller, 1967; Stykos, 1968; Desai, 1969, Minkler, 1970; Hussain, 1970; Mitchel, 1971; Mahadevan, 1979). However some researchers have arrived at the conclusion that the relationship between education and fertility is a complex one. Kiser (1942) using data collected in urban communities in the National Health Survey (1935), found an inverse relationship between educational level and fertility of whites but no pattern among non-whites. Thompson and Lewis (1965) found education to be inversely related to fertility among both white and non-white women of 45-49 years of age drawn from 1940 and 1950 census. Bogue (1969) reviewing the educational impact on fertility covering U.S. Census data as well as international comparisons, concluded that throughout the world there seems to be a strong inverse correlation between the amount of educational attainment and level of fertility. Bogue remarked that with each succeeding level of education comes a progressive lowering of birth rate. Duncan
(1965) in a study on farm background and differential fertility in the United States observed education to be inversely related to fertility in the population as a whole. This pattern was greatly attenuated among non-farm couples, both spouses having non-farm background. The inverse relationship was pronounced, if either spouse had a farm background. Although education of both husband and wife are important in decision on the number and spacing of children, the educational level of the wife is more strongly correlated with measures of fertility and contraceptive use than the educational level of husband (Dinkel, 1965; Schultz, 1973; U.N. 1975; Chowdhary, 1977). Many authors (Dandekar, 1965; Dinkel, 1965; Styco and Weller, 1967; Micro, 1968; Rothschild, 1969; Chowdhary, 1977) who have written on fertility changes argue that the increase in the educational level affects the degree of fertility change. The rise in the educational level changes attitudes and encourages rational thinking.

The Fertility Survey of 1972 in Poland (Smolinski, 1974) shows a clear negative relation between fertility and education like-wise some surveys performed in the Soviet Union indicate a similar i.e., traditional, negative relationship in that country.
Kowaliski (1987) analysed the relation between illiteracy and fertility in developing countries using published U.N. data and noted that countries with high rates of illiteracy also exhibit high fertility. Ageyi & Manya (1989) using data from the 1977-78 Kenya Fertility Survey found that education and fertility were inversely related. At the national level women with no education had 3.12 children more than those who had secondary or higher education. If the level of education rises beyond primary education, stronger fertility differentials with respect to education will become evident. Sathar & Mason (1989) from the study in the data from Karachi, Pakistan observed that the education of women, especially at the secondary level appeared to be powerful force for fertility change in the urban Pakistan and perhaps in the rural areas as well. Higher educated women bear fewer children than the less educated women.

Several studies conducted in India have confirmed the existence of strong inverse relationship between education and fertility (Driver, 1960; U.N. Mysore Population Study, 1961; Jorapur, 1967; Hussain, 1970; Saksena, 1973; Mahadevan, 1979; Rele and Kanitkar, 1980). Driver (1960) in his survey of Nagpur District obtained the weighted average number of children born alive as 4.7 for the uneducated
husband, 4.5 for the primary, 4.3 for the middle school, 3.9 for secondary and 4.0 for the college educated husbands. The weighted average for the uneducated wives was 4.6 children, for primary 4.7, and 3.8 for those with above primary education. The Mysore Population Study (1961) showed a complete family size of 6.0 children for those women with less than high school education, 5.0 for the high school passed and 2.0 for the college educated. In Dharwar Survey Jorapur (1967) found an inverse relationship between education and fertility in the urban areas of Dharwar. The Delhi Fertility Survey (Desai, 1969) showed negative correlation of fertility with level of education. While fertility differed only a little between the illiterates and those having below primary education, it steadily declined with attainment of higher education reaching the lowest level among the post-graduates.

Rele and Kanitkar (1980) in their Fertility and Family Planning Survey of Greater Bombay found that female education having greater depressing effect on fertility than male education. The standard average number of children over born was 3.39 for illiterate women or literate with non-formal education, 3.07 for women with primary upto matriculation and 1.90 for women of matriculation and above as against 3.32, 3.37 and 2.74 live births for men of
corresponding educational level. According to Nag (1982) differential fertility at both individual and aggregate levels had shown that education, particularly female education was more influential than any other factor in decreasing fertility. Talukdar (1982) observed that high fertility was prevalent in people with low position in the caste hierarchy, low economic and educational status. Nayar (1983) stated that education has contributed in several ways to fertility decline. It has raised the age at marriage of women, caused better understanding of contraception and family responsibilities and also promoted adoption of family planning. Nishikawa (1984) by analysing the factors affecting the Indian state of Kerala, stated that both educational and provision of health services have led to significant declines in fertility.

Jain and Nag (1985) stated that female education in India monotonically increased the use of contraception and age at marriage both of which, in turn decreased fertility. Bhargava Saxena (1987) has found their survey in Bombay city that women's educational status was the main factor associated with fertility differentials, followed by age at marriage. Radha Devi (1988) from a survey on currently working married women aged 20-49 years in 1976 also found that education was an important variable indirectly affecting fertility by placing women at higher occupational levels, by
raising age at marriage and by reducing the number of children desired. Various other studies also provided evidence to the effect that the number of children born to less educated women was higher than the women of higher educational levels (Anand, 1966; Jolly and Jacob, 1968; Rao and Namboothiri, 1967; Agarwala, 1977; Saksena, 1973; Zacharaiah (1984).

The preceding studies reviewed are consistent with general expectations i.e., the higher level of education the lower is the fertility in most cases. Fertility differentials analysis had shown increased adoption of family planning practices and consequently decreased family size among people of higher educational status especially among women.

**Occupational Studies**

Occupation, especially of the husband, has been most widely utilised in the study of fertility differentials. It is an index of social and economic status of an individual and thereby it may be expected to influence fertility. Fertility is not uniform across different occupations. It varied from one occupation to another because different occupations create different socio-economic environments and thus different attitudes towards family size. Generally
people engaged in traditional and low paid jobs had higher fertility as compared to non-agricultural and modern jobs.

Notestein and Sydenstricker (1930) in a study of native white married women in United States, found that there were large differences in size of family as between social and economic classes. The proportion of wives aged 40-44 in 1910 who had born one or two children, or none, was significantly higher in the business and professional classes (63.1 per cent) than in farmer and unskilled labour classes (42.3 per cent). On the other hand, the proportion of wives of business and professional men who had born five or more children (9.6 per cent) was much lower than for the wives of farmers and unskilled labourers (30.8 per cent). Kiser (1942) using data collected in urban communities in the National Health Survey in United States, showed substantial fertility differentials among professional, business, skilled and semi-skilled and unskilled occupational groups.

Mire and Rath (1965) using celade data for three Latin American cities, found definite inverse relationship between fertility and occupational status classified into higher non-manual, lower non-manual and manual categories. In Iran, Paydarfar and Sarram (1970) observed a strong inverse relationship between occupations of males and fertility. they had grouped males into four categories (a)
professional, managerial and technical, (b) clerical, service, sales, (c) skilled and semi-skilled and (d) unskilled. More than 60 per cent of the husbands in the highest occupational category had two or three children as against five or more children to those in the lowest occupational group. Bogue (1969) in his study of differential fertility in the United States found that the mean number of children was 2.3 among clerical staff and 3.9 among agricultural labourers. Ajami (1976) in his study in six Iranian villages found that the mean number of children ever born was 5.1 among farmers and it was 3.9 for labourers. Similar relationship was also noticed in one of the African societies (Ware, 1977). A Report of the United Nations (1981) Department of Economic and Social Affairs demonstrated the fertility differences among husbands following various occupations namely professional and clerical, sales and service, agriculture, skilled and unskilled occupations in different countries. For example the mean number of children ever born to agricultural categories was 5.3 in Mexico and Panama, 4.4 in Fiji and Pakistan, 4.3 in Thailand and Srilanka, 4.6 in Republic of Korea and Malaysia. In case of professionals and clerical categories it was 3.9 in Pakistan; 3.3 in Mexico; 3.2 in Malaysia and Fiji; 3.0 in Srilanka; 2.9 in Thailand and Republic of Korea, and 2.7 in Panama.
The Indian studies have not shown any definite association between occupational status of the husband and fertility. Dandekar and Dandekar (1953) from their sample surveys of Kolhapur city in Poona district of Maharashtra, reported that high fertility was associated with both higher grade occupations and large income. Driver (1963) in the central Indian study, found the lowest fertility in the clerical group and the highest in the agricultural group. However, when standardised for age, the differences in fertility between these two groups was found to be insignificant. Saxena (1965) observed an inverse relation between occupational status of husband and fertility. Highest fertility was exhibited by wives of the labourers and agriculturists; the lowest by the wives whose husbands were employed in the service sector. The businessmen and artisans had an intermediate level of fertility between these two extremes.

Anand (1966) found that clericals followed by petty shop-keepers had large families relative to the administrators, businessmen and professionals. But, here it must be noted that the occupational status was also closely associated with their educational levels. Agarwala (1970) found that cultivators and labourers had 7.4 children while those who were in the service and in the professionals had
only 6.6 children. A survey conducted in 1970 in Delhi (Desai, 1970) found that the total fertility rate was inversely related to the position of the husband's occupation in the status hierarchy. The total fertility rate was 6.7 in unskilled workers, 5.6 for petty shopkeepers, 5.0 for clerical workers, 4.5 for lower professional workers and 3.3 for senior professionals and executives. George (1976) in a rural community of Kerala state found that the high ranking officials had lower fertility when compared to other classes, namely unskilled, semi-skilled and landlords. In several studies it was noticed that occupations like agriculture, agricultural labourers, other unskilled workers etc., had high fertility and employees, professionals, skilled personnel, executives etc., manifested low fertility (Srivastava, 1970; Mahadevan, 1972; Haw, 1977).

The above review of studies showed that occupational differences influence fertility levels differentially. The analysis to a certain extent supports the assumption that persons engaged in modern and high paid jobs have lower fertility while labourers, cultivators and other engaged in traditional and low paid jobs have higher fertility. However funds are inconclusive and in some cases contradictory.
**Income**

The income is conceived here as the economic status. Income is a composite variable which has different types of associations with fertility according to the situations. Income is closely correlated with other socio-economic variables which are associated with fertility and it is difficult to separate the particular role of income from that of education and female labour force participation. A wide array of results are found in studies that attempt to relate, income to fertility. Some found a positive, others negative and still others a curvilinear relationship as family income raises and in a few studies no relationship at all is found. One of these reasons for these mixed results is the poor quality of data. However, the most important reason for the contradiction of results both at the micro and macro level is that income is strongly correlated to several other variables, particularly all socio-economic variables that might be important in explaining fertility are correlated with income.

A number of studies had found negative relationship between farm income and fertility (Khuda, 1988; Samper, 1988; Aramburu, 1988; Kocher, 1973; Lee and Sun, 1973). Many cross sectional and time series studies, however
had in fact observed a positive relationship between economic status and fertility particularly in less developed and agricultural economies. Jain (1939); Stys (1957); and Hull (1977), may be cited as examples of studies for a positive or ambiguous relationship between economic status and fertility.

Driver (1963) in the Central India found similar fertility in the lowest and the highest income groups indicated the absence of any direct or indirect association between fertility and income. Jorapur (1967) in the Dharwad study observed higher fertility in the higher income strata than in the lower strata. From a demographic survey of six urbanised villages near Delhi, Agarwala (1970) observed no variations in fertility in relations to income levels. Mahadevan (1979) in rural areas of Tamilnadu found a positive association of income with fertility. However, a study conducted by Rele and Kanitkar (1980) found a strong inverse relationship between the economic status of the family with fertility.

From 17 household studies reviewed by Muller and Short (1983) a clear pattern emerged of positive income effects in rural areas and negative effects in urban areas. Less consistently, the review suggested that fertility may be related positively to income at low income levels and negatively at higher levels. Balasubramaniam (1984) stated
that the primary reason for higher fertility among Muslims was their lower socio-economic status, which rendered, themselves to respond to modernisation pressures that help bring about the transition to lower levels of fertility and that was the reason for the more pronounced difference in the late 1960s and 1970s than was the case in 1940s and 1950s. Patnaik (1985) by analysing the socio-economic correlates of fertility stated that high fertility was associated with low education, low occupational status and low income. Dhindsa (1986) from his survey in rural Punjab stated that the level of income was found to be significantly related to the fertility rate of rural population.

Analyse the effect of income on fertility showed differing results and indicated the difficulties posed by income in fertility research. However, today more number of women were engaged in economically productive activities, trying to meet their present and future family needs. This type of attitude among large number of people towards raising their income and aspiring to live more comfortably would have negative impact on the fertility behaviour of the individuals, thus resulting in small number of high quality children rather than a large number of low quality children.
Women's participation in the labour force has been considered as another important predictor of fertility. Many studies had shown both positive and negative relationship between female employment and fertility. When a woman worked, she increased household income. This income effect induces increased fertility. However, the opportunity cost of children also increased, and this price or substitution effect could lower fertility. On the other hand women who expanded opportunities to carry out various roles, include working outside the home, would have less inclination to devote working outside the home, would have less inclination to devote themselves solely to home and children and would therefore have lower fertility.

The present review discussed both the positive and negative aspects of female employment on fertility.

Many studies in Russia and Eastern Europe also confirmed the hypothesis that working women had lower fertility than others (Szabady, 1964; Urlanis, 1967; Sadvokasov, 1967; Davtyam, 1967). A number of studies in Puerto Rico Paru and Turkey had also shown that experience in the labour force reduced fertility of both the upper and
lower class working women (Stycos, 1965; Stycos and Weller, 1967; Weller, 1968). Gainful employment of married women outside the home has been found to be inversely related to fertility according to a number of studies, conducted in different parts of the world (Ridley, 1957; Grabill et al., 1958; Namboodri, 1964; U.N. 1961; Heer and Turner, 1965; Blake, 1967; Desai, 1970; Gendell, et al. 1970; Kupinsky, 1971). From the results of the fertility surveys in three Latin American cities, Mirro and Rath (1965) showed that working women had lower fertility than non-working women. Gendell, et al. (1970) in a study in Guatemala City found that economically active women had considerably lower fertility than economically inactive women. Goldstein (1972) in Bangkok found that the fertility level of economically active women was markedly, below that of housewives, in contrast to the rest of Thailand.

Several studies found positive relationship between women's work and fertility in rural areas also. This was the conclusion of studies in Soviet Union, Czechoslovakia and Italy (Pinelli, 1971), Thailand (Goldstein, 1972), Egypt (Bindary et al., 1973). In Italy a regression analysis suggested that regional, fertility rates were related to the female occupational activity rate positively in the case of agricultural work and negatively in the case of other
occupations (Federici, 1967, Pinelli, 1971) found that Italian women working in agriculture had higher fertility rates than those who were economically inactive. The Mysore Population Study (1961) revealed a definite negative association between working status of women and fertility, the average number of live births being systematically lower in all age groups and in all communities for gainfully occupied women than for women performing mainly household duties. For the rural and small urban areas in Chile, Columbia and Mexico, Miro and Mortins (1968) found no clear cut differences in fertility between working and non-working women. The Delhi Fertility Survey (Desai, 1970) showed that the total fertility rate was 5.5 for non-working housewives, 6.9 for manual workers and 2.7 for other workers. Pinelli (1971) indicated that women in permanent agricultural jobs had lower fertility than those doing temporary agricultural work. This observation suggested that many poor working class women did not leave their jobs when they had children.

Thus these studies do not provide uniform support to the hypothesis of female employment and fertility. But generally we find an inverse relationship between fertility and female employment.
Demographic Variables

Under this section two important demographic variables that are related to fertility behaviour have been reviewed i.e., age at marriage and infant mortality.

(i) Age at Marriage: (Age at marriage especially of females plays an important role in determining fertility performance). Age at marriage occupies a prominent place in population studies as one of the proximate determinants of fertility especially of females. Malthus was the first person to recognise age at marriage as an important factor for population growth and suggested late marriage as a 'preventive check' for the growth of the population. Observing the marriage patterns all over the world both late marriage and a high proportion of unmarried people had long been observed as characteristics of Western Europe. East Asia has by far, the lowest prevalence of early marriage. Latin America occupied second place regarding the lowest prevalence of early marriage. But Indian sub-continent ranks first followed by African continent in the prevalence of early marriage. Age at marriage in India varies considerably among the different cultural groups. Among the religious groups, the Christians have the highest mean age of marriage, while the Hindus have the lowest. As between urbanities and
rural folk the former has a great figure compared to latter considering educational level, the more educated girls (high school and above) marry at a later age than less educated girls. Compared to other nationals in Asia, who are culturally nearer to Indians. Indian girls and boys marry earlier than their counterparts in other parts of Asia (Chandrasekhar, 1968). Many studies have shown the strong negative relationship between age at marriage and fertility (Mahadevan, 1986; Zacharaiah, 1983; Bongaarts, 1983; Ram, 1972; Krishnan, 1971; Wyon and Gorder, 1971; Venkatacharyya, 1970; Karkal, 1968; Agarwala, 1965; Freedman, 1963; Leisure, 1963; Coal and Tye, 1961).

Bumpass (1961) found interesting interaction effects between age at marriage and some socio-economic characteristics on fertility of U.S. women. Nazrul Islam Mian (1981) in his study of Bangladesh found that age at marriage was one of the significant variable taken into consideration for differential fertility level. An increase in age at marriage was found to be one of the factors contributing to a lower fertility rate, the relationship between fertility and mean age at marriage is an inverse. Several studies have shown that an increase in the age at marriage or decline in the percentage of ever married women in certain age groups, was an important factor in the decline of fertility in developing countries (Caldwell, 1963;
Bhuyan and Bhuyan (1984) from his survey in Bangladesh stated that, there existed positive correlation between female age at marriage and family planning practice and an inverse relationship between age at marriage and fertility. Ageyi and Manya (1989) using data from the 1977-78 Kenya fertility survey found that age at first marriage, was the main determinant of cumulative fertility. Early age at marriage was related to high fertility. Women who married between age 10 and 17 years had at least one child more than who married at ages 23 years and above. Age at marriage was inversely related to cumulative fertility, women who married between the ages of 10 and 17 years had at least 0.63 children more on average than those who married at 23 years old and over women marrying between ages 10 and 17 has 0.88 more children than those marrying between 18 and 22 and 2.14 children more than those marrying at 23 years old and over.

Several studies in India have been conducted to estimate the effects of higher female age at marriage on fertility (Hattu and Ohlesson, 1984; Fakhrul Islam, 1984; Caldwell, et. al, 1982; Agarwala, 1977; Mahadevan, 1976; Goyal, 1975).
Fakhrul Islam (1984) from his study in Uttar Pradesh village stated that the study indicated 91.8 per cent of the respondents were married before the age of 21 years as many as 61.2 per cent have been married before the age of 15 years. The majority of such respondents were from the backward and scheduled castes. The age at marriage was comparatively higher among upper caste Hindus such as Brahmins and Kshatriyas. A change in age at marriage has been noticed at two levels first, the age at marriage of the eldest son/daughter was higher than the age at marriage of the parents, respondents. Secondly, age at marriage of the youngest son/daughter was higher than the age at marriage of eldest son/daughter of the respondent. Thus there was a raising trend of higher age at marriage among all castes and status groups.

Nair and Koteswar (1987) in their study on age at marriage in rural Northern Karnataka stated that the medium age at marriage was 16 years. Further, two-thirds of the girls were married before 18 years and nearly one-fourth of the marriages were even pre-puberty cases. This was due to the various socio-cultural, socio-psychological and economic factors responsible for the perpetuation of very early marriages in the study area inspite of the child marriage restraint act.
Many studies in India have shown significant inverse relationship between age at marriage and fertility (U.N. 1861; Majumdar, 1962; Driver, 1963; Jain, 1964; Agarwala, 1965; Wyon and Gordon, 1971). Krishnamurthy (1974) in his study found that age at marriage has a significant negative relationship with fertility even when education and economic status were controlled. Education and economic status affected fertility mostly through age at marriage. Mahadevan (1976) in his study in Tamilnadu found higher age at marriage among greater proportion of the Gounders as against the rest of the population. He found that it influenced their fertility significantly. The inverse relationship of age at marriage with family size norms was generally found in all the three caste groups. Chandrasekharan (1986) on the basis of data obtained by the Mysore Population Study stated that the estimate of overall fertility would be reduced by roughly 15 per cent, if no women married before 18 and if the fertility pattern after 18 did not change further. Kadi (1987) observed that during the preceding two decades, Indian population had witnessed a major change in its social attitudes with regard to the age at marriage. The incidence of child marriage was on the decline. The mean age at marriage was on the increase. It increased from 15.4 years in 1971 to 16.5 years in 1981. This was likely to influence fertility behaviour.
significantly. Audinarayana (1981, 1985) observed a negative relationship between age at marriage of females and fertility among the caste Hindus as well as Scheduled Castes in Andhra Pradesh. The mean number of live births for the caste Hindus and the Scheduled Caste women who married below 14 years of age 3.7 and 3.8 respectively which were reduced to 2.8 and 2.4 when their marriage ages were raised to 18 years and above.

The above cited studies revealed that by improving the socio-economic status, there would be social change which in turn would lead to greater exposure to modern ideas and change of attitude from the traditional way of life, and these would in turn increase the age at marriage. It was quite obvious that increase in age at marriage would reduce the level of fertility.

Infant Mortality

The influence of infant and child mortality on fertility behaviour and attitudes is considered one of the most important areas of policy oriented population research. Demographers argue that one of the necessary conditions for decline of fertility is on account of the control of infant mortality. The mortality level of a society is known to be
related to its fertility level because fertility and mortality interact in various ways. High infant and child mortality is considered one of the deterrent factors in the adoption of small family size norm in developing countries because successful reproduction requires high fertility to offset high mortality (Davis, 1945, Notestein, 1945). Lower the infant mortality implies the requirement of fewer births to produce a given number of children. In other words, the same number of births will result in more children surviving to any given age, and pressure is created for fertility control. Thus infant mortality seem to have a decisive influence on the reproductive behaviour of families.

Studies done with both aggregate and individual data demonstrate a positive association of infant and child mortality on fertility. In a cross-cultural regression analysis, Heer (1966) found that the infant mortality level is one of the strongest and most consistent predictors of the fertility level. Schultz (1974) found a clear statistical relationship between mortality and fertility for several developing countries. Taylor, et. al (1976) using data from 53 countries drawn from Asia, Africa and Latin America, also found close relationship between the rate of decline in infant mortality and fertility decline.
Infant mortality may influence fertility through several means. The most important may be the psychological or biological effect. The death of a child that is being breastfed terminates the mother's location prematurely, and this may reduce the post partum period, a time when she is likely to ovulate. The longer her child lives and is breastfed the more time will lapse between pregnancies. The child replacement effect involves a deliberate decision by couples to compensate for dead children. In other words, couples continue bearing children until they replace the ones who died at a young age. As a result the mother is likely to end up with more births because she had shorter birth intervals.

Many studies have proved that one of the best predictors of infant mortality is the survivorship (Stockel and Chowdhary, 1972; Heady, et.al 1955). These findings suggest that a reduction in infant mortality could possibly lead to a reduction in fertility. By examining retrospective pregnancy histories found the higher fertility among women who lost children compared with those whose children survived and concluded that the observed differentials in fertility were due to a desire to replace the children who had died. Hassan (1966) in Egypt, Adlakha (1970) in Turkey, Wyon and Gordon (1971) in India, Harrington (1971) in West Africa;

In India Chandra Sekhar (1972) in his analysis of birth rates and infant mortality rates for 14 of the Indian states over the period 1951-61 observed a low positive, but not significant correlation of 0.34 between these two variables. Several studies at the micro level have also revealed positive relationship between infant mortality and fertility (Bocon and Mason, 1972; Hassan, 1973; Subhadradevi, 1978; Mahadevan, 1979). Infant mortality has been lower among the urban areas than the rural areas. In Andhra Pradesh the infant mortality rate in 1976 was 97 per 1000 live births for urban areas and 127 for the rural areas as against on all India average of 80 for the urban areas and 139 for the rural areas (India, Office of the Registrar General, 1979). All India survey on 'Infant and Child Mortality' conducted in 1978 by the Office of the Registrar General, India (1979) revealed that the level of infant mortality among the children born to urban females who were illiterate (81/1000), labourers (121) and married under 18 years of age (78) was approximately twice as high as among the children to those females who were illiterate (53), non-workers (63) and married above 21 years of age (46). The
average infant mortality rate for all India urban areas was 70 per 1000 live births (1978). From the above review infant mortality influences the fertility.

*Cultural Variables*: Human fertility is influenced by a variety of cultural factors and the cultural aspects of population growth constitute an important area of research. Cultural values affect the reproductive behaviour either as an independent variable or in some case as an intervening variable. In recent years several theories have been formulated in an attempt to discover the cultural factors that have a specific relationship to human fertility. Two important factors that have had a strong impact on fertility according to several other studies are religion and value of children. These have been discussed here.

*Religion*: Among the various aspects of socio-cultural environment influencing fertility religion has been considered important. Religious affiliation is an important social characteristic differentiating human behaviour. Religion prescribes a code of life, refers to a system of beliefs, attitudes and practices which individuals share in groups and through this orientation towards life and death is supposed to affect one's fertility behaviour. Religion affiliation has a considerable theoretical bearing on
fertility. A couple's religious status connotes a system of values that can influence fertility in two ways. Firstly by directly imposing sanctions on the practice of birth control or legitimising practice of only some methods such as non-appliance methods. Secondly by indirectly indoctrinating the followers with a moral and social philosophy of marriage and family that emphasises the virtues of reproduction (West-off, 1959). All the religions have their roots in some distant past, usually in periods when mortality levels were very high. As a functional response to high mortality, religions all over the world have propagated the importance of having many children. However with changing times and advancing societies, the influence of religion on fertility stared receding. Having many children was no longer the norm, as life became more stable. This has been the experience of most of the developed countries. But in some of the developing countries it has been observed that the religious factor still plays an important role in influencing fertility behaviour of the people (Chanana, 1985).

There are many reasons why religious affiliation is particularly worthwhile dimension with which to investigate fertility. First in many countries (example, India, Israel, Ireland, Philippines, Mauritius, Lebanon etc.,) it is a characteristic that has immense social, economic and political significance. Secondly religious
affiliation has considerable theoretical bearing on fertility. Religion can influence reproduction in two ways, through stimulation of behaviour which further reproduction and through restraint of behaviour which inhibits reproduction (West-off, 1959). Thirdly substantial religious differentials in fertility have been empirically documented in a large number of countries, e.g., Sinha (1957) in India, Yankey (1961) in Lebanon, Rizk (1963) in Egypt, Mazur (1967) in the Soviet Union, Kirk (1970) in Malaysia, Matras (1973) in Israel.

Several studies undertaken to study fertility behaviour by religious affiliation within multi-religious populations have found variations in fertility among different religious groups. In the United States a number of studies have clearly revealed a higher fertility among the Roman Catholics, and a lower fertility among the jews as compared to the protestants (Jones and Nortman, 1968:3; West-off, 1958:131; Freedman and Whelpton, 1961:608). Similarly in many Indian studies the existence of differential fertility among various religions has been observed (Davis, 1968:80), U.N. 1961:218; E.Badry, 1967:314-315; Saksena 1972:123).

Busia (1954) noted no differences between Muslim and Christian fertility in Ghana. Driver (1963) found no
significant difference between Muslim and Hindu fertility in India. Also, in an investigation of 1960 Census of Thailand, Goldstein (1970) reported Muslim fertility to be lower than that of either Buddhists or Confucianists. A possible explanation for such mixed results is that the effect of religion on fertility is generally by the simultaneous effects of other variables. Though fertility studies have revealed the existence of differences in fertility by religion, there has been little effort to explore the role of religion in influencing fertility by controlling the effect of the associated socio-economic and demographic variables.

A number of sociologists following Dumont, have hypothesized that religious minorities shown higher fertility than those around them. Such experience however need not be universal. According to the Parsis of Bombay who are zoroastriansians and a minority group have the lowest fertility (El Badry, 1967). The same is true of the Jewish community in the United States. A condition contributing to high fertility of the religious minorities of the country is the resistance created by their religious faith in the assimilation of culture. In India religion is a frequently mentioned factor in the investigation into fertility differences. Religious fertility differences mean the differences in a fertility between Hindus, Muslims and
Christians. In many Indian studies recent as well as earlier, the existence of differential fertility among various religions has been observed. Among the three major religious groups viz., Hindus, Muslims and Christians, the Muslims have had the highest fertility. Muslims showed higher fertility rate than the Hindus in the census reports of undivided India (Davis, 1951). Since then most of the surveys done corroborate the above differentials (Stockel and Chowdhary, 1960; U.N. 1961; Rele, 1963; Agarwala, 1966; E.I. Badry, 1967; Srinivasan, 1967; Dandekar, 1967; Zacharaiah, 1983) indicated that religion is associated with fertility.

A sample survey of married women in Lucknow, conducted in 1954-55 by Mukherjee and Singh (1961), indicated that the number of pregnancies per mother was 3.9 for Muslims, 3.6 for Hindus, and further that the proportion of pregnancies resulting in the live births was higher among Muslims than among Hindus. The Mysore Population Study (1961) conducted in 1951-52 under the auspices of United Nations, indicated that in Bangalore city, the pregnancy rate for Muslim women was 69 per 100, years of exposure as compared to 59 for Hindu women. The difference is small but the same was true of towns as well as rural areas. Edwin Driver's Study (1963) of differential fertility conducted
during 1958 in Nagpur district, revealed that the average number of children born to Hindu and Muslim couples (Standardised for age) was 4.5 and 4.6 respectively. Thus the difference between Hindu and Muslim fertility was very small.

Muslims in most of the world community generate higher fertility often than that of their non-Muslim neighbours (Kirk, 1966). In India some part of this was because of the greater number of remarried widows among them, but this accounted for only about a third of the differential before 1941 (Davis, 1951:81). In recent decades it has less significance, probably of some significance were the greater values that Hindus place on abstinence and religious celibacy, the longer visits of young Hindu wives to their parents' home, the more numerous sacred Hindu occasions that require several abstinence (Mysore, 1861:120; Nag, 1965; 1972:236-237; Chowdhary, 1971).

Birth rates of four religious groups - Hindus, Muslims, Christians and Sikhs were calculated from 1963-64 round of the National Sample Survey (Number 175, 1970:5). In both rural and urban samples, Christians showed the lowest birth rates, followed by Sikhs. For rural Christians the average annual births per thousand persons was 30.58, for
rural Hindus 38.07. Urban Christians were still lower 29.97 as against 31.61 for urban Hindus.

Zacharaiah (1983) in his study conducted in Kerala found that the average parity of Muslim women was 4.1, while that of Hindus was only 2.9 i.e., a difference of 1.2 children per woman. The completed fertility of these two groups differs by 2.5 children.

Thus the preceding review reveals that religion plays a significant role in influencing the fertility.

Value of Children

The concept value of children is a new research area to demographers even though it has been used most often by economists, psychologists and anthropologists. Demographers became interested in the values and costs of children, primarily because these qualities are thought to have an important relationship to fertility behaviour. Research on the value of children is needed to understand better the determinants of human fertility and to suggest guidelines for policies through which societies may bring about regulation of fertility. Although systematic research on the value of children is a recent development the quantity of research is impressive.
By the value of children we mean, the values that parents attach to children and the satisfactions they derive from having a large or small family. Children are valuable to parents since they provide certain satisfactions—social, economic, psychological to them. Value of children usually refers to positive functions i.e., satisfactions derived from having children but there are also significant dysfunctions (costs) in having children. It is difficult to obtain satisfaction without incurring some cost, conceptually therefore value of children refers to a net balance of positive (satisfaction) and negative (costs) functions of having children.

During the past two decades several value of children studies were carried out in various parts of the world, especially in Asia (Fawcett, 1972; 1974; Mueller, 1972; Choi and Chan, 1973; Yang, 1974; Caldwell, 1974; Turner, 1974; Cisneros, 1975; Kagitcibasi, 1975; Arnold et. al, 1975; Bulatao, 1975). All these value of children studies revealed that there were significant statistical relationships between the VOC dimensions and indices of fertility and planning behaviour. Some of these surveys concluded that preference for large families are in fact linked with parents perceptions of such instrumental
contributions from children as financial and practical assistance and old age support. It is argued that, as economic roles for children diminish during the process of modernisation, parents perceive fewer advantages acquiring from large number of children. The demand for children is correspondingly adjusted downwards. In this manner, changes in the perceptions of the values and disvalues attached to children have emerged as one pre-condition for the shifts to controlled and low fertility. In other words, the shift from high to low levels of fertility is usually accompanied by a corresponding shift in the demand for children, in terms of the values and disvalues attached to children (Bulatao, 1980).

Empirical studies on the value of children were conducted in the United States (Terhune, 1973; Beckman, 1974; Evanson, 1974; Bourque et. al, 1975), Latin America (Turner, 1974) and Asia (Chung, Cha and Lee, 1974; Hull, 1975). Studies which have examined the role of the value of children in the fertility transition have stressed varying aspects of this relationship, for example, a series of studies have examined both the economic and non-economic values of children and their links with family size desires in a number of less and more developed societies (Mandani, 1972; Haffman and Haffman, 1973; Arnold and Fawcett, 1975; Asiripi, 1977;
Few other studies have examined the various components of value of children, such as the economic contribution of children in some less developed nations including Bangladesh, Nepal, Malaysia and India (Nadkarni, 1976; Cain, 1977; Caldwell, 1978; Vlassoff, 1979; Reddy, 1980; Detray, 1983; Kanbagiri and Kulakarni, 1984). The majority of these studies confirmed that children of both sexes contribute substantially to the labour needs of their families.

Cultural factors also have a strong effect on individual perceptions of value of children that influence specific satisfactions and costs of children. These findings were observed by (Ruzicka, 1977; Ware, 1978; Saefallah, 1979; Mayer, 1981) certain studies which investigated the value of children as their expectations regarding old age security, in diverse societies including Taiwan (Muller, 1972), Thailand (Arnold et.al, 1977), Gujarat, Maharashtra and Andhra Pradesh (Anker and Anker, 1982; Vlassoff and Vlassoff, 1980;
Kulkarni, 1983; Mahadevan, 1983). They did, in fact observe a strong positive relationship between perceived costs of children and fertility. Similarly another study conducted in Bangladesh and India (Cain, 1981) has shown the importance of risk insurance attached to valuing children, changes and the influence of landed property holdings over generations on fertility behaviour. In short the consensus arising from these diverse studies suggest that the demand for children is strongly influenced by parent's perceptions regarding value of children.

Thus, the above review studies reveals that the value of children plays an important role in determining the fertility in the Indian society.

**FAMILY PLANNING PROGRAMME**

A major reason for the fertility declines might be the impact of family planning programme. It constitutes the corner-stone of most antinatalist fertility policies and is a key element in the population, control strategies of developing countries like India. In this field India's the pioneer among developing countries. India was the first country to have launched the family planning programme right in 1952. The effectiveness of the programme in lowering birth rates has been widely acknowledged in certain states in
India viz., Kerala, Tamilnadu, Maharashtra, Punjab and Haryana, but not the rest in India. In a number of developing countries birth rates have fallen rapidly during the last three decades as was the case in Europe during the whole of the 19th century. In all these countries a key factor in declining fertility, has been organised family planning programmes. The family planning programmes on the other hand have a direct impact on fertility behaviour. The effective practice of family planning can prevent most unwanted pregnancies.

It has been established that significant decline in fertility are already taking place in a number of countries where family planning programmes are in operation. Certain countries such as Thailand, Srilanka, China and Indonesia have achieved impressive fertility declines, despite lower per capita income and a predominantly rural population.

Inter-country analysis have been carried out by Mouldin and Berelson (1978), Sui and Bogue (1978), Curtright and Kelly (1981) and several other authors. After looking at countries for which data were available, Mauldin and Berelsaw found that between 1965 and 1975, countries with both significant family planning effort and high social setting had an average of crude birth rate decline of about 30 per
cent, those with high social setting alone a drop of 5 per cent, those with neither a zero change. All these studies confirm the decline of birth rate of 10 per cent or more with the intervention of a moderate family planning programme.

In India the family planning programme started in 1952 it has gathered momentum only after 1966. Several studies were conducted in India to find out the impact of family planning programme on the reduction in fertility (Rele and Kanitkar, 1969), Suri, 1970; Simmons, 1971; Agarwala, 1972; Chandrasekharan, 1972; Srinivasan, 1972; Jain, 1974; Misra, 1974). In all these studies, it was found that family planning has its own effect although the magnitude varies. Zacharaiah (1983) in his study carried out in Kerala provides enough evidence to show that the official family planning programme made a significant contribution to the drop in the marital fertility of Kerala women, especially middle and lower strata.

Pathak and Prasad (1977) made an attempt to identify a set of variables affecting family planning performance in various states of India over the time period 1967 to 1973. A set of important variables was selected for studying their direct and indirect effects on the family planning performance in the states by applying path analysis. Over the two periods 1967-70 and 1970-73, the role of
selected variables were determined and the changes in the components of their correlation with total family planning performance were determined. The group of variables selected for the analysis explained about 74 per cent of the total variation in two time periods.

Srikantan (1977), analysed the relationships among socio-economic programme input and output variables by using the data available during the period 1967 to 1969. (Correlation matrices are used to find major independent variables for each dependent variable. He found that the programme input effect is somewhat less than the total effect of socio-economic indicators, but larger than their direct effect in both the regression and path models. Finally the principal component analyses of ten salient indicators is used to draw profiles of each state). According to his study female literacy rate, the programme infrastructure facility and female participation in labour force are found important factors for acceptance of different family planning methods.

Pathak and As Mohammad (1979) studied the contribution of some organizational factors towards the acceptance of sterilisation in rural India for the pre-emergency period. They found that of organizational factors, the net contribution of the variable, namely, the number of
family welfare centres towards the acceptance of sterilisation had highest direct effect (0.63). And the proportion of non-agricultural workers and the general literacy rate were the other two important variables giving direct effects towards acceptance of sterilisation 0.54 and 0.33 respectively.

Nair (1982) made an attempt to identify certain socio-economic variables of the inter-state differentials in contraceptive acceptance in India, in seventies, through multi-variety technique. He found that urbanisation, female literacy, per capita income and population size together explained a substantial part of inter-state variance in contraceptive acceptance in India. Audinarayana (1986) has made an attempt to study the variation in fertility as well as in the adoption of family planning methods due to the changes in the female age at marriage among the three cultural groups of women belonging to the rural areas of Andhra Pradesh. Increase in the age at marriage in future will certainly boost the adoption of family planning methods.

Bhuyan (1986) concludes that there is a positive association between the husband's education, wife's education and age at marriage with family planning adoption in Bangladesh and inverse relation with fertility. Raju (1987) found that the education of husband and wife are important
because these are directly related to the intra-spouse communication among the spouses, which is directly related to the rate of acceptance of family planning. This funding is similar to the findings of Khan and Prasad (1983). Jain and Sarma (1988) by using multiple regression analysis analysed the variation in the use of contraception between different states of India. The socio-economic factors, such as wife's education, husband's education and urbanisation were found positively associated with the use of family planning methods. Jolly (1989) studied the pattern of performance of different components of family planning performance in 15 major states of India during 1969-87 and also made an attempt to explain the differential performance of different methods of the programme in the two phases (1969-82 and 1982-87). The states with high per capita income, having low proportion of people below poverty line, higher proportion of electrified villages, higher proportion of land having irrigation facilities and economically developed had shown higher performance of non-terminal methods of family planning.

Srinivasan et. al, (1991) ascertained the nature of inputs actually deployed in the family planning programme performance and related facilities at the primary her centre level, studied the inter-relationship between programme inputs and the socio-economic
population in which they are deployed and assessed in quantitative terms the impact of family planning programme inputs on contraceptive use in rural areas of the four states - Maharashtra, West Bengal, Karnataka and Tamilnadu. The data used were collected during the mid 1980s from 2175 (PHCs) primary health centres in rural areas of these states. The results showed that the percentage of the variance in sterilisation acceptance was explained by the programme inputs and socio-economic variables was highest in Karnataka and the lowest in Tamilnadu. The amount of the variance in IUD acceptance explained by these predictors was also more or less the same in each respective states as in the case of sterilisation. The personnel inputs are more important than facilities, at least in case of sterilisation or IUD (Intra Urinary Devices).

NEED OF THE STUDY

The study of differential fertility is of special significance in view of economic development and national planning. It is also important from the point of view of implementation of family planning programme because it helps to identify high fertility religion on which the programme efforts can be concentrated. In Western countries much concentration has been devoted to study the fertility
differentials of various groups of the population of a country but unfortunately in India not only the statistics on overall fertility are lacking but differential fertility rates are also rare. In India differentials are not yet greatly affected by such variables as occupation, education and economic status. There are, however, indications that the western pattern will also be repeated in India in course of time.

Studies on fertility differentials among religions have not been undertaken in Rayalaseema region of Andhra Pradesh though such studies have been carried out elsewhere in India and abroad. Therefore the present effort is innovative. It deals with Anantapur district in Rayalaseema region of Andhra Pradesh. Anantapur district is so backward and got the second position in the country for drought conditions. Keeping in view of these things in mind the present thesis is formulated.

CONCLUSION

Thus the preceding review reveals that there is an increasing need for fertility studies so as to understand and contain the population problem and there exists significant differences among different populations in terms of their fertility behaviour. And that in this context mention may be
made that very few studies have been conducted in the state of Andhra Pradesh. Therefore there is a need to study fertility differentials among religions. Hence the present study is a humble attempt to study the fertility differentials among Hindus, Muslims and Christians of urban areas in Anantapur District.