CHAPTER II

SURVEY OF THE RELATED LITERATURE

2.1 Introduction:

Familiarity with the library is fundamental to all research. It helps the researcher in knowing the work already done in the area. Ignorance of this, leads to the wastage of efforts, time, money and energy, as the investigation may, by chance, be a mere duplication. For a beginner, who is out in search of a good and interesting problem, the reports of investigations already carried out suggest many related problems which the researchers, themselves could not take up for some reasons. The romance of research lies in the fact that with the solution of one problem, many more show their heads. By studying the previous investigations one learns a lot. Good, Bar and Scates (1941) have summed up the purpose of studying the related literature as:

(1) To show whether the evidence already available solves the problem adequately without further investigation and thus to avoid the risk of duplication.

(2) To provide ideas, theories, explanations or hypotheses valuable in formulating the problems.

(3) To suggest methods of research appropriate to the problem.

(4) To locate comparative data useful in interpretation of results; and

(5) To contribute to the general scholarship of the investigator.
2.2 Studies Conducted

Pal, Amrit (1986) found out that the postgraduate students had sufficient population awareness. She had found that there was significant difference amongst subject coming from different family sizes. Larger the size of the family to which a subject belonged, more was his awareness about population programmes, but it was realised that after a certain limit, size of the family ceased to affect the population awareness level of subjects. Extended joint-family students were more aware of population problems than the other students.

Sukhpreet (1986) conducted a study on population awareness among post-graduate students in relation to the number of siblings and their ordinary position, found out that post-graduate students had sufficient population awareness. Boys were more aware than girls. Likewise science students were more aware than arts students. No difference in population awareness of students belonging to different age groups was noted. Significance difference among subjects having different number of siblings was realised after a certain limit of population awareness increased as the number of siblings in a family increased. There was also a significant difference among subjects relating to their ordinal position which meant that population awareness was inversely proportional to the ordinal position of a sibling in a family because in large families, the last born was
almost always the most neglected child. As a result, he or she had to suffer the most.

Zarabi, Dazy (1983) conducted a study, for the completion of her M.Phil. degree in Sociology on the problem of, "Population Education among Industrial Workers: A Study of their Perceptions Knowledge and Attitudes." She found that some of the social, cultural and economic factors of the workers both exposed and non-exposed, to population education, seem to be influencing their perception towards the population problem. There was not much of difference between the two groups with respect to demographic factors such as age, social and cultural factors i.e. family structure, educational level, occupational status and the economic factors. This was mainly because they were drawn in with similar backgrounds. On the basis of the analysis done with regard to the knowledge and attitudes of workers towards population education, it was interesting to observe that though at the general conception level of population problem and education, both the exposed and non-exposed groups, showed adequate understanding, yet the non-exposed group showed inadequacy in regard to specific dimensions of knowledge related to family planning and family welfare programmes. The non-exposed group of workers had certain misconceptions and doubts which needed to be removed through information and by imparting correct knowledge, so that appropriate attitudes and though patterns could
be developed for effective functioning. There was also a need to correct some of the ambivalent responses in regard to attitudes related to population education dimensions including practice of family planning, age at which boys and girls should marry etc., into positive attitudes for appropriate personality development. This is primarily with an aim to motivate people to adopt, a small family norm by making them conscious of population problem and by imparting them correct knowledge to have a positive response towards it. This study brought out an urgent need to prepare the out of school youth population, who were potential parents tomorrow, adequately with the population problem.

The Department of Education, Panjab University, Chandigarh (1984) conducted an investigation entitled, "A Study of Status of Population Education in the Text Books of Primary Classes in Punjab and Scope of Integration of Additional Population Education Concepts" and found that out of 512 pages analysed in 7 volumes of current text books of General Science and Social Studies prescribed in Primary Classes in Punjab, there was 6.03 per cent contents on population education. In the subject of general science at class 2 level the population education concepts were 4 per cent. In the subject of social studies at class 3 level there were 9.09 per cent population education concepts.
The scope to integrate additional population education concept was 3.69 per cent at class 2 level, 2.69 per cent at class 3 level, 5.11 per cent at class 4 level and 1.68 per cent at class 5 level, in subject of general science. In the subject of social studies, the scope to integrate additional population education concepts was 1.17 per cent at class 3 level, 1.19 per cent at the class 4 level and 1.97 per cent at class 5 level.

Osman, Mohamad (1984) conducted a study entitled, 'Evaluation of the Population and Development Program’s Impact on Family Planning in Rural Egypt' with the objectives to assess the impact of the population and development programmes (PDP) on family planning practice. The PDP is an action programme to implement the national population policy by means of integrating development and population program share the belief that direct family planning efforts alone are incapable of reducing high fertility in Egypt. Thus assessing the PDP impacts on contraceptive use should help to clarify the connections between development and population change in Egypt, but also throw light on the general issue of the development approach to fertility reduction. Although the apparent impact of the PDP was in the right direction, the size of this impact was so small that analysis gave little support to development approach to fertility reduction, at least in so far as that could be measured in the short run.
Manuel, Ernest Harry Jr. (1984) conducted an investigation entitled, "Economic Effects of Environmental Factors on Industrial Firms: Benefits From Regular Air Pollution." He found that industries were subject to government regulations intended to limit the discharge of environment population. Discussion of these regulations typically focussed on three issues. These include: The cost to industry of complying with the regulations; the benefits to society of a cleaner environment; or alternative methods for achieving environmental goals at lower cost. The work is concerned with the beneficial impacts of environmental regulations and specifically regulations on air pollution. However, the focus was somewhat unusual in that the dissertation is concerned with beneficial impact on industry. The empirical analysis was based on econometric models derived directly from the economic theory of the firm and applied welfare economics. The principal findings of the analysis were that total costs of production in certain industries were positively associated with local ambient air pollution concentrations, after controlling for other sources of variation (e.g. input prices, level of production, in place capital and climate). A test for possible spurious correlation with costs of pollution controls was negative.

indicated that in Thailand, the official population was announced in 1970. It favoured voluntary family planning as the vehicle of reducing the fertility. The population growth rate has declined about one full per cent during the latest decade. In 1980, the annual growth rate was 2.2 per cent. The current Fifth National Economic and Social Development Plan (1982-86) has its goal from 2.1 per cent to 1.5 per cent, per annum, by the last year of the plan. In order to achieve the population target for the present plan as well as to attain ultimately a zero population growth more sophisticated population policy measures beyond family planning would be necessary. The objectives of the study were three folds:

1. To evaluate the population policy measures/strategies of Thailand's Fifth Plan, how and why could they bring about faster decline in the rates of population growth in Thailand;

2. To investigate various population policies and programmes which have been adopted in other Asian countries such as the People's Republic of China, South Korea, and Taiwan. The latter have experienced a faster decline in fertility and population growth rates; and

3. To analyze which of these population policies could be applied to Thailand.

Evidence indicated that a substantial decline in fertility in Thailand and three other studied countries, have been the results of the family planning programmes. They play the role of supply side or direct determinants of the decline
of fertility. Moreover, modernization process or socio-economic factors have also helped reducing fertility further in these countries. The results show that socio-economic variables serve as the demand forces or indirect determinants of the fertility declines. Above all, Thailand needed a comprehensive population policy which included the following measures:

1. Comprehensive family planning services;
2. Incentives and disincentives; and
3. Socio-economic development, in order to achieve the goal of population.

Pushpa (1984) in her unpublished dissertation for the degree of M.Phil. (Education) entitled, "Attitude of Teachers and Educational Administrators Towards the Introduction of Population Education in Schools of Punjab" has stated that population education should be made an integral part of school curriculum. The main responsibility of planning, organising and conducting population education programme should be of female teachers rather than male teachers. The investigator also concluded that unmarried teachers were very low in number. The reason for this was that when the teachers got the job, they had reached the age of marriage.

Pandit, Neeraj (1983) conducted an investigation for the degree of M.Phil. (Sociology) entitled "Extent and
Mode of Child Labour among Scheduled Castes and Non-Scheduled Castes" and found that the size of the family was closely related to the extent of child labour and that the extent of labour was high in those households where families were large.

Brondit, Lorent (1983) conducted research on topic of, "Population Growth, Agricultural Change and Economic Integration in Central and Eastern China 1890's-1930's". It depicted that late nineteenth and early twentieth century China had often been taken as the prototype Malthusian case. By most indications, the Chinese population had exceeded the limits set by the economy's resources endowment and the prevailing technology in agriculture. During this period, grain had flown Central and Eastern China, an historical gain surplus region, to the rest of China dropped off sharply and grain imports subsequently increased. Only through the positive checks that Malthus enumerated war, famine and disease was population checked. To the contrary, this dissertation argued that the Malthusian model was actually inappropriate for analysing large parts of China. Most of the attention was directed to Central and Eastern China, a region of appropriately 160 million. Between 1890's and the 1930's population in the region increased between 40-45 million. Data that have been used previously was found to be often inaccurate, incomplete and ultimately
misleading as to the trends in agriculture over this period. In turn, in the tradition of the new economic history, this dissertation relies heavily on price data that existed for the period.

Koornhof, Gerhardus William (1983) conducted a study entitled "The Economic Consequences of Urbanization in Lebowa", with the purpose to contribute to a better understanding of this phenomenon, as it is developing in one of the national states, namely, Lebowa. To achieve this, a thorough description of the extent of urbanization, internationally and within the study area, as well as of the underlying causes of urbanization, was necessary. It was projected that Lebowa would experience a high urban population growth rate in next four decades which would place tremendous pressure on the resources of the country and on the planning capability of the government. The promotion of urbanization in Lebowa would require the development of an urbanisation strategy which would have to be linked to a national urbanisation strategy for South Africa.

Njuki, Caroline (1982) in the study of, "Problems of Access to Women's Education in Kenya", indicated that the majority of illiterates in the world were women. Women lacked in decision-making process. Moreover, in the labour market, they tend to be found in the low paying jobs.
Because of the significance of education to the economic and social roles of women, the author decided to undertake a case study of the obstacles of access to women's education. The conclusions of the study was, that between primary school and university level, obstacles existed which contributed to women's access and success in education, in Kenya. These obstacles included financial limitations, traditional attitudes towards women education, geographical location, shortage of girls schools and religious attitude.

Ramana, D.V. (1981) pointed out that the impact of population on environment, was governed by two sets of factors, namely the demographic characteristics of the population and its pattern of living. The thesis was that trends both in regard to population and to consumption were disconcerning, but that trends were not destiny and that they could be shaped to yield less harsh results.

Sharma, G.D. (1981) conducted an investigation entitled, "A Study of the Relationship Between Educational Level, Social Status, Attitudes and Family Size of Middle Aged Parents" and found that matric, graduate and highly qualified husbands when compared with middle pass individuals separately and graduates and highly qualified individuals as compared to matriculates in separate groups and highly qualified group as compared to the graduate husbands of the study had more favourable attitude towards the introduction
of population education, in the total group of the investigation. It also demonstrated that higher was the educational qualification, the more favourable was their attitude towards the introduction of population education. The study also revealed that in the rural areas, the more favourable attitude of highly educated group as compared to middle, matric, graduate groups of the investigation, separately and of graduates as compared to middle pass males indicated that the highly qualified group had more favourable indication towards the introduction of population education as compared to the lower qualified groups.

He had found that in the urban areas both highly educated group and graduate group when compared separately with middle and matriculate groups provided the evidence that higher educated groups had more favourable attitude towards population education than lower educated groups of the study.

Tahman, Shri Siddique (1979) conducted a study entitled, "Developing a Population Education Curriculum for Out-of-School Youths". In this study he found that out-of-school youths could be preferably taught the population education concepts. He demarked five areas i.e. (i) population situation in family, community and country, (ii) population growth, (iii) consequences of
rapid population growth, (iv) population control for
better living, (v) human reproduction and contraception.

Thakore, Rashmin (1979) worked on the problem
'Developing a Curriculum in Population Education for
Under Training Secondary Teachers'. In this study he
developed a curriculum model for imparting population
education to the trainees of the secondary teachers
training colleges. He developed the model of curriculum
on ten areas. He revealed that the model was effective
in carrying the message of population education to the
teachers trainees. The study indicated that it was
possible to impart an effective training programme in
population to the teachers under training in Secondary
Teacher Training Colleges in a programme lasting for 30
periods of 40 minutes duration.

Desai, D.B. et al (1979) conducted a study, "An
Experiment in Population Education" and found that the
developed curriculum was effective in conveying the message
of population education to pupils.

Khan, M.E. (1979) conducted an investigation
entitled "Family Planning Among Muslims in India" and
found that one of the most important factors causing
fertility was high child mortality and the other was the
perceived benefits of having children. Education could
be used to control fertility. A strong preference for
male children was observed.
Calado, R.R. (1978) in his article pointed out that population growth had been increasingly recognised as a major variable affecting educational development in Philippines. The author reported that from 1960 to 1975, the population aged 7 years to 12 years increased roughly by 50 per cent while the 13 to 15 years old and 17 to 20 years old showed increases of 83 to 73 per cent respectively. Consequently, there were little chances of implementing quality improvement programmes, such as training of teachers, introducing modern teaching equipment and providing better library facilities and instructional materials.

Chawla, S.P. (1978) completed a study, "A Study of the Co-ordination between Education and Population Policies". He found that an integrated programme based upon national education and population policies, go a long way in solving the population problem of the country. The population problem needed to be tackled simultaneously, both at individual or family level (micro-level) and also at societrical level (macro level). There is a need to strengthen the population education programme in the country in view of the perennial nature of the problem and the need for tackling the problem on long term basis.

Remili, A (1977) studied the relationship between education and population. The study stated that
a reduction in the birth rate among poor people could not reasonably be expected unless countries provide their citizens with adequate minimum levels of education, health services, and economic and social security.

Verma, J.S. (1977) conducted a study in the district of Uttar Pradesh on the basis of scientifically drawn sample of 286 Hindus and 212 Muslims and concluded that education had significant role to play in family limitation. Education, disciplined our emotions, enabled us to understand and analyse the realities and developed a rational power and was most important from the standpoint of the shaping of individual’s attitudes and values.

Sharma, A.D. (1977) conducted an investigation and observed that the total fertility rate in the sample increased at low level of incomes and reached a maximum in the group having incomes between 101 and 200 rupees. As income rose further, fertility declined. Fertility was also found higher among agricultural occupations and lower among the professionals.

Vaswani, N.V. et al (1977) made an investigation entitled, “School Teachers Attitude Towards Population Education”. They found that some teachers did not know the real meanings and need of population education. When
the meaning and scope of population education was made clear about 75% of the teachers felt that it should be introduced as a subject in the school curriculum and 13.9% teachers did not express their opinion. Nearly 49% of teachers preferred not to teach this subject as they were not qualified to do so.

Lee, K. Sik (1977) conducted a survey of more than 1500 nursing, medical and education students at university and college level in Korea. The survey showed that health professionals were, in general, more likely to show favourable attitude toward family planning and population related issues than were teaching professionals.

Bhattacharyya, et al (1977) stated that higher standards of living, for rural people compared to urban people, would tend to result in reduced rural family size. He persuasively indicated that studies of population and economic development must take into account the nature of the distribution of income and resources.

Das Gupta, Monica (1976) studied an Indian village and relationship among population change, social status and socio-economic development. He found that with population growth and increasing mechanisation of agriculture, larger proportion of villages sought urban enjoyment. The upper socio-economic village groups appeared to secure better paid jobs. They invested heavily in education and
such investment seemed to be related to their lower fertility.

Dhamija, H.S. (1976) made a survey of 100 youths residing in Chandigarh and its surrounding slums and investigated that education played a significant role in solving natural problems and carrying out the development programmes including that of family planning. He further observed that more educated were more favourably oriented towards smaller family size than the lesser educated ones.

Hemmanulu, V. (1976) in his work, "To find out the knowledge and attitude of parents of out-of-school youths, towards population education" had found that most of the parents were aware of the population problems. From their own experience of rearing a large family, they favoured a small family norm for the younger generation. Majority of the parents welcomed the idea of their children receiving population education in schools.

Kuznets, Simon (1976) in an exploratory essay examined some population aspects of income distribution based on data from Germany, Israel, Philippines and the United States. The results indicated for all countries, that larger families or households tend to have smaller income per person and unfavourable attitude towards population education.
Janowitz, B.S. (1976) analysed the impact of education on family size. It indicated that profession with higher level of education, by a woman, tends to increase her participation in the labour force and age at marriage which proved helpful in retaining smaller family size.

Katiyar, R.K. (1976) made a study on determinants of value in small family norms on a sample of 1757 adults and found that education, higher income and younger age were dominant factors for making decisions of smaller families.

Datta (1975) found a positive relationship between level of education and fertility up to 9 point after which the latter was found to be negatively related with the former. According to him the pattern of variation in fertility indicated that up to certain critical level the positive association between fertility and educational status must have arisen due to factors associated with the rise in levels of living conducive to high fertility and thereafter, the education might have played an important role in moulding the attitude of couples to make conscious efforts in reducing their fertility.

Freedman, Deborah (1975) resolved apparent contradiction in the relation between income and fertility.
The study was related to a thesis first put forward by Richard Easterlin that the difference between aspiration and income levels might be such that couples limit their family size.

Nadkarni, M.V. (1975), based on socio-economic survey of the six villages in the command area of the Jayak Wadi, tested the hypothesis that rural households, particularly, the poor ones were burdened with excessive populations and rejected it.

Ganrada, K.D. (1975) conducted a survey, "Population Education for University Youth - A Research-cum-Action Study". He revealed that an action oriented programme in population education should have seminars, exhibitions, film shows, lectures on sex education, inter college debates and paper readings. Population education should form a part of all courses and it should be integrated in the various fields of study. Different methodologies should be adopted to impart the population education contents.

Nagda S.L. et al (1975) conducted an investigation entitled, "A Survey of the Perceptions of the Students of the Women's Colleges Towards Population Education". He noticed that 90% of them felt that a small family size would lead to happy and comfortable life. Most of the
students agreed that population education was necessary for the youth for initiating responsible parenthood. 80% of them thought that over population lead to socio-economic instability in the country. Most of them agreed to implement the population education at college level, however, they differed on methods to do so.

Prabhakar, G. (1975) conducted a study entitled 'A Study of the Opinion of Students of a Few Secondary Schools of Bangalore City Towards Introduction of Population Education at the Secondary School Level,' and found that the students, both boys and girls, were of the opinion that introduction of population education at the secondary school level, was absolutely necessary. Regardless of age, sex, type of the school and religious affiliation, most of the students favoured the introduction of population education in secondary schools.


Education in Schools.' He found that majority of the teachers had a good knowledge of the causes and consequences of the over population. They favoured the introduction of population education in schools.

Freedman, Bernard (1974) in an article entitled "The Human Population" reviewed world population trends throughout history. The author emphasised that socio-economic factors were closely related to population trends. The socio-economic development was often reflected in a slower population growth rate.

West, Charless (1974) stated that after 1940, the increase in fertility had been greater amongst the "White Collar" occupations than among those involving manual labour and secondly trends towards urban fertility were also upward. The study showed that between 1940 to 1952, urban fertility increased 51% as compared with 16% for rural folk. However, fertility was still inversely related to the wealth and resources of the community and to the educational and social statuses of the parents.

Chatterjee, A and Bhatia, J. (1974) undertook a study to find out the relationship between fertility, family planning and education of women in India. The study supported that education affected fertility by enhancing the possibility of acquiring and following up the information about the advantages and methods of
planning, the size of family and by generating self-conscious efforts based on the need for a planned family on the part of the couple.

Takayama of the Institute of Child Research in Tokyo conducted a survey (1974) on the living consciousness. Among 400 school children aged 10 to 11 years (200 males and 200 females) fifth grade pupils in the Tokyo Prefecture. In reply to the question, "Do you think that mankind will perish during your lifetime?" 61.9% said 'no' while 47.8% gave answer in the affirmative. Out of men's possible extinction (1) out-break of nuclear war, (2) coming of a glacial age, (3) air and water pollution, (4) invasion of men from outer space, (5) food shortage, (6) drain of natural resources, (7) spread of incurable diseases. The pollution was ranked at the top.

Pareek, et al (1974) made a close analysis of the results of 69 studies carried out in India focussing on the relationship between education and fertility and arrived at the following conclusions:

(i) Contraceptive behaviour could be predicted only on the basis of educational level.

(ii) Education was an important variable for rapid dissemination of knowledge regarding family planning.

(iii) Education was an important reliable tool influencing attitudes and education seems to render people more receptive to new ideas and practices.
(iv) The more educated the people the more prone they were to accept small family norms.

(v) The educated tended to have a wider choice of contraceptive methods.

(vi) Educational level was not related to the use of sterilization as a method of planning.

Kalyan R. Salkar (1974) conducted a study entitled, "A Study of Population Awareness Among School Students in Goa (Standard VII to XI) as well as Teachers and Parents and their Reactions to the Inclusion of Population Education in the School Curriculum." He found that majority of the students were aware of the population problem of the country and were willing to learn it. The teachers were in favour of introducing population education in school curriculum. They desired the integration of population education with major subjects of school curricula. They also recommended sex education. The teachers desired some training to teach population education. The parents also favoured population education at the school level. They were of the opinion that it should be taught by the teachers themselves rather than by outside experts.

Mahta, Ganesh Lal (1974) conducted a work entitled 'A Study of the Opinion of Parents and Teachers Towards Introduction of Population Education in High Schools of Bubhaneshwar'. He reported that students favoured the inclusion of population education in school subjects.
However, teachers and parents felt that agencies other than schools were more suitable to teaching of population education. They were of the opinion that population education would help in creating right attitude towards small family size.

Arriaga (1974) reported that in the past demographic changes in developing countries was less favourable to educational development, and that a future reduction in fertility would significantly help them to achieve a higher educational level.

Nagda, S.L. et al (1974) conducted a study entitled, "A Study of the Opinion of Teachers Towards Population Education". The study was conducted in Chittor district of Andhra Pradesh. He noted that 90% of the teachers knew the meaning of population education. 90% of the teachers felt that population education was necessary for the youth for responsible parenthood. Most of the respondents agreed that a small family norm was necessary to lead a happy and comfortable life. Many of the respondents felt that population education would develop right attitudes concerning family size among younger generation.

Ramachandran (1974) investigated on the title, "A Study of the Knowledge and Attitude of Teachers of Kurnool towards Population Education". He adopted the
technique of pre-test and post-test. He found positive results at the post-test level. Most of the teachers felt the need of population education in schools and colleges to check the rapid growth of population. Majority of the participants considered late marriage as one of the methods for controlling the family size. They were of the opinion that over population hindered in the economic and social development. Majority of the participants considered that population education was necessary for developing responsible parenthood among the youths.

Mukerjee, B.N. (1974) carried out a study in Haryana, Tamil Nadu and Meghalaya, which indicated that the adoption of family planning and favourable attitude towards smaller family size, were linked to the frequency of communication about family planning between husband and wife. The communication appeared to increase with levels of education and the status which women perceive they had at home.

Srivastava, N.N. (1973) conducted a study entitled 'A Study of the Knowledge and Attitude of Teachers Towards the Introduction of Population Education in School Curricula'. He concluded that most of the teachers suggested that the best way of checking over population was by educating the younger generation. Many teachers were of the opinion that the population education should be introduced at
university stage while others viewed that it should be integrated with existing school subjects, especially through social studies courses.

Shailbala Dayal (1973) conducted a study entitled "Knowledge of School Teachers about Family Planning and their Reaction to Population Education Curriculum". He reported that 75% of teachers thought it desirable to use methods to prevent unwanted pregnancies. About 55% of the teachers recommended the teaching of trends in population growth, birth rate and migration be taught at the high school level. Only 6% of teachers thought it suitable for the elementary level and 17% of teachers thought it suitable for middle school level. While 67.6% teachers recommended that government policy and programme of population control be taught at the high school level, 70% of the teachers recommended that population education should be integrated with social studies, 30% wanted it to be integrated with biological sciences and 29% favoured its integration with civics and economics.

Maheswari, J.R. (1972) conducted a study, "A Study of the Receptiveness of School Teachers to Population Education". He revealed that the teachers had very high awareness of population problem that the world is facing. About 92% of the teachers said that unemployment and poor standard of living were mainly due to over population.
Majority of the teachers favoured small family. The majority of the teachers did not believe in the effectiveness of population education at school level. A majority of the teachers favoured the idea of integrating population education concepts with existing school subjects. They felt that most of the concepts could be integrated through social studies, sciences, languages and mathematics.

Lee, K.K. (1972) studied that Korean families in cities had smaller size, increased participation of women in social activities and a decrease in the fathers' authority. It is noted, however, that the basic structure of the family and family values have only been slightly affected by social and economic changes in Korea.

Thomas, Poffenberger (1971) conducted a study, "Population Learning Among Secondary School Students in an Indian Village." He found that the village secondary school students were well aware of the population problem. They imbibed the knowledge about population problem through the mass media particularly news papers and also through extension education efforts of the family planning programme such as film shows, exhibitions and the visits of family planning workers to homes. The students voted in favour of a small family and this was mainly prompted by the difficulty experienced by their parents in rearing a large family.
Revellé (1971) stated that the quantity and quality of education in developing countries affected fertility rates and hence population growth, in the following ways:

(a) Education postpones the age of marriage;
(b) Educated women have fewer children;
(c) Educational costs to parents lead to smaller desired family.

Mehta, T.S. and others (1971) conducted a study entitled, 'Plug Points for Population Education in School Curriculum.' In this study they found that population education concerned topics could be taught in subjects such as general science, geography, economics, civics, social studies and mathematics.

Pohlman, Edward, et al (1971) arranged interviews with those poor parents in Delhi whose monthly income was less than Rs. 150/-. In general the parents favoured teaching population education with slightly fewer in favour of reproduction or contraception education. The sample was of the view that poorer families should have fewer children.

The nation wide survey covering entire India excepting a few places like Jammu and Kashmir by the Operations Research Group, Ministry of Health and Family Planning, (1970-71) indicated that as the educational level increased the attitude towards family planning tended
to become more favourable. The study further indicated that the differences in practice observed among couples, with different levels of education of life, were significant in different age groups. It was also observed that diaphragm jelly foam tablet and oral contraceptive were mostly used by strata having higher educational achievements whereas IUCD, sterilisation etc. seemed to be relatively more in vogue in the lower socio-economic strata.

T. Poffenberger, (1970) worked on the problem, "A Study of the Knowledge and Attitudes of Indian College Students Towards Population Related Problems". He found that 96% of the girls agreed with the statement that the population of India was growing too rapidly. The respondents indicated that they favoured a small family norm. On the average the desire of the girls was, at least one son among the children. Most of the girls approved family planning methods.

Wadia, A.B. (1970) in her study on population education has observed that for achieving better life the legal age of marriage be raised and population education be introduced.

Teachers to Population Education as Integral Part of the Curriculum.” They found a very high awareness of the population problem amongst teachers in India. The teachers replied that unemployment, low standard of living and food shortage were due to over population. Most of the teachers were of the opinion that population education should be introduced in school curricula. Majority of the teachers were of the opinion that sex education should be given along with population education. About 23% of the teachers were of the opinion that population education should be taught as a separate subject, while 49% of the teachers felt that it should be integrated with other subjects.

A study conducted by the Geographic Research Centre, Institute of Economic Growth, Delhi (1969-70) entitled “Delhi Fertility Survey” based on a sample of 9000 households, indicated the inverse relationship between couples’ educational level and average number of live births in a pronounced way, only when both husband and wife were above matric. The later being 2.33 for this group and 4.47 for illitratates couples.

Hussain, I.Z. (1969) conducted a study on educational status and differential fertility in India on sample survey of 4,420 households in the city of Lucknow, in order to determine the level of fertility and socio-
economic differences to ascertain the opinion of the heads of households on certain aspects of population control and to provide data for drawing a stratified sample for the depth study of fertility. The study found a positive relationship between the educational attainments of household members including their heads and the mean age at marriage of males and females, a strong negative relationship between fertility and educational status of the households and a direct relationship of preference for two or three children, with the educational level of the head and household members was found.

Karup, K.S. (1967) gathered data from 250 families in the state of Kerala. The findings of the study point towards more liberal trends and thinking with regard to marriage, family planning, status of women, and so on by the educational people.

Mysore Population Study (1961) reported that amongst the social and economic factors studies, the one which appeared to be most significant in relation to fertility in Bangalore city was educational status. Married women aged forty five and above with high school or university education had given birth on an average to 4.00 children as compared to 5.40 for those with less education. Educational status below the high school or university was not found to be related significantly to average number of children born.
The National Sample Survey (1960-61) in its sixteenth found that the number of children born alive to an illiterate woman was 6.60, while it was 5.00, 4.60 and 2.00 respectively for those who were educated upto middle, matric and university standard. This clearly indicated that differential fertility by education level does exist in India when females are educated upto matriculation level or more.

Febrey, Maurice (1959) took a sample of married women from the 1954 census of France (age group 45-54). It showed that there were still substantial difference in fertility of wives when their husbands were classified by occupations.

Yankey, David (1961) interviewed about 900 Lebanese women about their fertility histories. The results of the study indicated that the influence of urban residence and of high socio-economic status of fertility had operated rather independently. The results in general lead to the conclusion that patterns of fertility differentials associated with rural urban residence and socio-economic status, were different.

Weibel, S.R. (1942) found that purity of water as well as an adequate supply of it, was a mounting problem. Approximately 32 million people in the U.S. and more than half of nation's industries used surface water from which erosion produced silt must be filtered.
In the 1933 census, the German Statistical Office made a comprehensive study of fertility. It showed that the differences in fertility between cities and small communities were still large. The women who lived in communities of less than 2000 inhabitants and who had been married 21 to 25 years had given birth to an average of 3.95 children while the women of the same duration of marriage who lived in cities of over 1,00000 had born an average of only 2.41 children. These studies of fertility in Germany indicated that the lower the economic and social status, the greater was the fertility.

2.3 **Summary**

The picture that emerged as a result of the findings of many of these studies was that a positive correlation existed between small family size and the urban climate as compared with small family size and the rural climate, but some evidence was also available which did not lend support to these findings. However, no such study could be traced which dealt with the depressed section of the society like scheduled castes. There was enough evidence to show that there was a positive correlation between the educational level, mostly above matriculation, and the smaller family size, but none of the studies was conducted on the scheduled caste population which seemed to behave in diversified directions. On the
whole little work seemed to have been done on socially, culturally and economically depressed section of the society of scheduled castes where outward behaviour seemed to be contradictory and divergent.

Some evidence, was, however, available to show that those male parents who had large families longed for smaller families and for this purpose practised family planning methods which indirectly indicated their positive attitude towards small families and thus towards population education. Again no such evidence was available for the scheduled castes who are socially, culturally and economically different than high castes, in India.

The investigator had failed to collect such studies in which environmental education has been related with the problems of population education, rural and urban variables and the sizes of the families. Even when much evidence of the behaviour of normal population was not available, the behaviour of the scheduled castes on population education and environmental education with regard to the educational levels and family size was bound to give some interesting results. It had further been observed that effect upon population problem of the present investigation, of the research worker, had neither been investigated with regard to rural urban distribution nor on the basis of the family size.