INTRODUCTION

Teday, we are concerned with a kind of human living that goes far beyond survival, just when we have learnt, in fact, that survival itself depends on limiting out population to the number of human beings our planet can support. And with growing self-confidence, we are coming to understand that awareness and freedom of choice are the basis for both individual development and a society that values human dignity. In such a society being parents of choice and being a chosen child are equally necessary.

- Margaret Mead, Anthrepelegist.

Teday is the age of crisis. There are at least half a dezen world problems of crisis-dimensions such as population crisis, food crisis, poverty crisis, energy crisis, raw materials crisis and others. All the countries, developed as well as developing, are responsible for this state of affairs, and all should combine to find solutions to these problems.

There are two main factors responsible for the present situation: rising population, and rising affluence with its characteristic consumption-based life-style. The developing countries, by their high rate of population growth, are contributing to the problems by increasing the number of people, and the developed countries have added to these problems by their rising affluence (Sharma, 1976). The rapid increase of population is a threat to the nation's stability, security and development. It threatens the very

existence of individual families which find it increasingly difficult to provide the growing number of children with the bare necessities required for more survival.

A large and increasing population requires a correspending increase in a nation's economic, social and welfare capabilities of the quality of life of people deteriorates. Whether it be agriculture and land reform, manpower development, education, health, housing or the entire socioeconomic development programme for that matter, one can hope to achieve lasting success only within the framework of a manageable pepulation growth (Verma, 1978). The 1981 census report reveals that India is the second largest pepulated country in the world with the population of 683,813,051. The decennial growth rate of India has increased from 1921. The recent census of 1981 shows a growth rate of 24.75 per cent which is less only by .05 per cent than recorded in the 1971 census (Census of India, 1981). This decline in growth rate is very negligible inspite of the huge investments in family planning especially in the Hindi belt ever the last decades, e.g., the decadal growth rate for Rajasthan was 27.83 per cent during 1971-81, which is still higher than the national growth rate.

There are manifold reasons of this rapid growth in population in our country. One of the major reasons of this population rise is a sharp fall in the death rate due to the advances in the medical sciences; though the birth rate has remained unchanged, mertality rate has fallen down and as a

result, life expectancy has increased. Rapid urbanisation and internal migration has also contributed to a certain extent to the population problem. Some of the determinants of population growth are deep rooted in our traditions and culture like early marriages, preference for having a son because people believe that only a son can pave the parents' way to heaven. People continue to express their preference to have large families in order to have security in old age (Poffenberger, 1976). Children are considered to be economic assets to the family and so the family keeps on enlarging.

One result of this rapid rate of population growth is the very high population of young dependents. In the developing world more than 40 per cent are under 15 years of age. In the industrialized world it ranges between 20 to 30 per cent. This difference in age structure proves that population growth rates are higher in the developing than in industrialized nations (Sadashivaiah, 1979). Having a large group of young people in developing countries has far reaching implications for development, since this group makes a heavy demand on social overheads, viz., education, health, and housing, apart from feeding the growing population. These expenditures pose considerable amount of strain on the nation's economy.

Teday, early child bearing is apparently on the increase throughout the world (IYC Report, 1978). In many countries teenage metherhood as well as unwed metherhood is

increasing due to the mushrooming of urbanisation, disintegration of families, early age at menarche, erosion of sexual constraints and so on. Reports from both the developed and developing countries indicate that the incidence of both legal and illegal abortion among adolescents has risen significantly within the last few years.

In India, with the early age of marriage, the problem is equally acute. Early and even childhood marriages are still prevalent. According to a Survey Report, 1976 (SIE, Rajasthan) the marriage age in Rajasthan is 13 years for girls and 18 years for boys. A more recent study by Sadashivaiah, et al. (1981) reported that the mean age at marriage in Rajasthan is 14.7 years, wherein it is 16.7 years for urban areas and 15.17 years for rural areas. A study conducted by Bhasin (1978), in India, found that about half of the girls in the age-group 19-23 years are victims of illegitimate pregnancy. The same study also revealed that the girls were alarmingly naive about basic biological facts as to how conception occurs and at what time during their menstrual cycle they have the greatest risk of pregnancy. Not surprisingly, 95 per cent of the cases had ne sex education at all and the remaining 5 per cent had enly a gague idea about it.

The high rate of improvident maternity in our country, to a considerable extent, affects the well being of the mother and the baby. Thus, the infants born to adolescent mothers, are markedly prone to low birth-weights,

congenital defects, blindness and mental retardation. Neonatal mertality is also higher during this age. The women of this age produce children early and hence, fail to complete their education (Cabrera, 1977).

Fortunately, there seems to be a growing awareness regarding the speedy growth of population, with its implied and inevitable consequences, in several parts of the world. The improvement of human life is a value with which all cencur. To achieve this improvement, there must be a rational werkable balance between people and resources, which involves conscious decision-making so that the quality of life every where can be improved through better knowledge, informed pelicy and action (Verma, 1978). Our country along with other countries of the world is trying to solve the problem through various measures. India was the first country to adopt nation-wide family planning programmes to lewer the growth rate in 1952. China fellowed four years later in 1956. China began its efforts to bring down pepulation growth later than India but has dene far better according to a report of the UNFPA (United Nations Fund for Pepulation Activities) as per the news item in Indian Express (June 11, 1982). Thus the progress achieved hardly matches the expectations.

Large scale efforts to expand family welfare programmes have been made; abortion was legalized; the marriage age for boys and girls was raised. Most of these

pregrammes, however, concentrate on and affect the age group already in the reproductive stage. The pre-marriage age group is not greatly affected by these programmes, though this age group of boys and girls forms a substantial per cent of the total population, i.e., 45 per cent (Sadashivaiah, 1979). It is important that this population enters the reproductive stage with an adequate orientation to the problems related to rapid and unchecked population growth.

Education is one of the most important means for a society to move forward. Education is a lifelong, continuing precess. It aids in developing skills and attitudes to achieve pelitical, secial and economic stability (Chung, 1971). Educational institutions in both the more developed and developing countries are eminently suitable for imparting knowledge and inculcating desirable social values among the students. It is universally accepted/recognized that the school is one of the key institutions of the society. It is through this institution that every individual student learns about social behaviour, values and othics, morals and ideals. The tremendous speed of education system and communication media in the last two decades has shown that schools can be very appropriate conduits in advancing knowledge and understanding of new needs and appreciations in revitalizing life styles, without causing undue trauma (Wadia, 1974). Through education it will be possible to premote among the future generation an awareness of different aspects of population and its relationship with social

and economic development of the nation as a whole. Such an understanding can provide the student with the knowledge, skills and sensitivities needed for rational and responsible decisions concerning his future, both as an individual and as a member of his society (Viederman, 1973).

The need for information, education and communication was realized in the sixties by national and international agencies. Education was not emphasized in our country to sensitize the population to understand the benefits of small family norm and efforts were concentrated on achieving the physical targets.

POPULATION EDUCATION - NEED OF THE DAY

The history of the 20th century becomes more and more a race between numbers and quality of life. If we are to use our intelligence in our present population dilemma, we must make our educational systems relevant. Participants and those about to become participants in the vital revolution, then will require an education that includes 'Population Education' (Burleson, 1969). The deliberations of various national and international seminars have strongly recommended that in order to reach the largest number of young people, population education should become an integral part of the education system at all levels. The workshop held on population growth and Educational Policy at New Delhi, 1973, had supported the view that population education should be included at all levels of education,

primary, secondary and higher secondary.

The National Pepulation Pelicy of India (Centre Calling, 1976) announced in 1976 and later revised in 1977 places a greater emphasis on the educational approach and highlights that:

Population values be introduced in the educational system to sensitize the younger generation. It is essential that the younger generation should grow up with an adequate awareness of the population problem and a realization of the national responsibility in this regard.

Pepulation education for the younger generation has been now accepted as a positive step towards controlling the population explosion. It is abount time for 20th century school curriculum to incorporate 20th century demographic findings in the context of 20th century implications. (Hauser, 1962). Since 1965, interest and enthusiasm among educationists have increased and attempts at curriculum development and reforms have been made the world over. The recent years in India have witnessed a greater stress on the interaction of population education as part of the curriculum at all levels of education. A nation-wide project has been launched since April 1981 in this direction.

MEANING OF POPULATION EDUCATION

Pepulation education is one of the innovative strategiesm which will be useful for imparting information, education and communication on population in the existing

formal and informal education system of the country (Nagda, 1979). The programme of population education has now been viewed as a 'beyond family planning' measure.

Pepulation education aims at creating among the people an awareness and understanding of population and involves the study of population trends and their impact on the various aspects of human life: social, cultural, economic and in particular the close interaction with the whole process of human growth and development. Population education seems to develop an informed citizenry capable of understanding pepulation characteristics and processes and making respensible decisions about their own reproductive behaviour as a result of this knowledge and understanding. Pepulation is discussed, not as a problem to be controlled, but as a phenemenen - secial and bielegical - that needs to be understood (Viederman, 1972). Population education does net merely consist of conveying information concerning population characteristics, causes and consequences of population change; this implies much more than simply a study of births, deaths, migration and growth rates. Among ether things, it includes an attempt to develop an understanding of a wide range of phenomena that are closely linked with and affected by population, such as urbanisation and the role and status of women. Furthermore, since all demographic processes stem from the behaviours of individuals, population study also attempts to elucidate the social and psychological basis for this behaviour. It

must lead to the development of certain insights and attitudes about the place of man in the modern world. It is a strategy to build up a new othic of responsible behaviours in human reproduction and family living. In this way, it can become one of the most significant and innovative measures towards the younger generation in realistic and meaningful terms to face one of the major problems of our time.

Pepulation education programme discusses the advantages and disadvantages of the two-child family, but does not advocate a preference. The students are exposed to the development of an awareness of the nature of pepulation growth and an understanding of why and how decision making process of today has an impact in future years. The resultant effects of this education g tend to promote responsible parenthood not only of the micro-level but may also be reflected at macro-level. Thus, this education is hoped to k improve the quality of life and thereby contribute to the national progress.

Several individuals have defined the term population education differently with the bias and purpose they had in mind. Therefore, for the purpose of the present investigation the following workable definition is framed by the investigator.

Pepulation education is the process by which the student develops an awareness of the population characteristics, the causes and consequences of population change, both

at the micro and macro levels. Further, it aims to develop an appreciation of the fact that family size is controllable for improving the quality of life of the individuals.

NEED FOR POPULATION EDUCATION FOR SECONDARY SCHOOL STUDENTS

The future pattern of our population growth will depend on our present generation. Students of today are the parents of temorrow (Jain, 1971). Looking to the magnitude of the problem and urgency to check population growth, the target group has to be very carefully selected to impart population education. Educators strongly feel that given limited funds and personnel, priority should be placed on the secondary schools as they prepare students for the various roles in later life. During these years of school an individual learns to think through problem and obtains the relevant information and knowledge. In fact, during these years of school, children are growing up. There are many physiological as well as psychological changes which their bedies are undergoing. These adelescents become curious to know about these changes in their own bodies. It is a matter of regret that the adults in our society/ culture who have knowledge do not necessarily pass on this knowledge to these young children. They should be informed with correct knowledge to help them find their own ways to regulate their own conduct in order to win the normal satisfaction of life (Elizabeth, 1962). The marriage age in India is also noted to be lowest as compared to that of the

•ther countries. It is, therefore, an important target group, since adolescents are on the threshold of parenthood. It is really unfortunate that this young group enters the reproductive stage without a proper orientation to the problems related to population.

Jayasuria (1972) said:

As secondary pupils are only a handful of years away from the time when they would make decisions regarding marriage and reproduction, a programme of population education would be full of meaning to them and may make an impact on their decision-making process in these areas.

Viederman and Wayland (1973) are of the opinion that the first priority in school education should be focused on the secondary level to try to raise the level of population knowledge and awareness of students who will one day lead the society. Many others in the field also support their views (Parikh, 1972; Salkar, 1975; Mathur, 1976; Chandra, 1976 and Robinson, 1976). The secondary level would sharpen whatever insights they have gained through the planned or unplanned exposures to this knowledge. Whatever incidental knowledge they have through mass media could be clarified and strengthened.

"Ferewarned is ferearmed", according to Mathur (1976). Hence, little doubt exists about the appropriateness of population education for pupils at the secondary level.

KNOWLEDGE-BASE FOR POPULATION EDUCATION PROGRAMME

Pepulation education encompasses a wide area of centent or subject-matter. The selection and the treatment will obviously vary from place to place and culture to culture. However, a few major areas are easily identifiable which could form the core of any population education programme since the knowledge-base has received relatively or little attention either on a generalized basis/for a particular national setting. The major components for such a programme were suggested by Mehta (1972) as follows:

"(1) Demography, (2) Determinants and consequences of population growth, (3) Human reproduction and (4) Family Planning.
All these components be included to make the programme on population education more comprehensive and to gear it to the need of the country."

No educational programme can be planned in a vacuum. In order to plan a programme on population education it is important to find out the existing knowledge and opinions of the individuals for whom it is planned. This would provide a bench mark for planning and developing the curriculum (Viederman and Wayland, 1973).

Chandra (1976) has recommended that the formal contents of the syllabus on population education need to be extensive and have to be based on various surveys relating to population problem and their effects. The NCERT has developed a few good models on population education for

students of different age levels. The departments of education of the states should be persuaded to adopt these models or their modified versions (Centre Calling, 1977).

The present study has been undertaken keeping in view the need for developing a population education curriculum for the target group for whom the programme is to cater in future.

OBJECTIVES OF THE STUDY

The BROAD OBJECTIVE of the present study was to develop, execute and evaluate a population education programme for the students of secondary classes, i.e., IX and X, studying in the secondary schools of Udaipur District, Rajasthan.

The SPECIFIC OBJECTIVES of the present study were:

- to develop and execute a population education programme, and
- II. to evaluate the population education programme.
- I. The sub-specific objectives in terms of development and evaluation of a population education programme were:
- 1. To plan a need oriented population education programme based on the knowledge and understanding of the students for whom it is planned.
 - 2. To execute the programme to:

- (a) create an awareness and understanding regarding all the majer areas of population
 education, and
- (b) develop understanding regarding the specific concepts in which they lack knowledge and understanding within these major areas of population education,
- (c) equip the students with the necessary knowledge and understanding that will enable them to make rational and responsible decisions regarding their reproductive behaviour in future,
- (d) create an awareness in them regarding the importance of population education in order to perform their roles as responsible adults for the improvement of family, community and national life.
- II. The sub-specific objectives in terms of evaluation of the population education programme were:
- 1. To find out the gain in knowledge of the Ss in the major areas of the population education programme planned.
- 2. To find out the changes in their understanding about the various population issues under study.

16

3. To find out the extent to which the programme is found suitable and acceptable to both boys and girls or whether there is any difference among them in their acceptance.

Delimitations of the Study

The present study was delimited to:

- 1. students of IX and X standards studying in the Secondary Schools of Udaipur, Rajasthan, and
- 2. only two selected schools of Udaipur, Rajasthan, i.e., one school for boys and one for girls, were taken for the purpose of experimental teaching and evaluation of the population education programme.

Organization of the Thesis

This chapter is followed by a review of literature, i.e., Chapter II. The details of method regarding the selection of students, tools and their construction, procedure of data collection and statistical analysis have been presented in Chapter III. Chapter IV contains the detailed information regarding the development, execution and evaluation of population education programme for secondary school students. The results of the various evaluations thereby have been discussed in Chapter VI. The last part of the report contains the summary, major findings, conclusions and recommendations for further research.