The Background:

For a developing country like India the control of abundant growth rate is very essential. If the population explosion is allowed to increase at the present rate, it is estimated that we will be more than 100 crores by 2000 A.D. Let us think how difficult it will be to provide such a huge population, the basic necessities of life, food, clothes and shelter, for which we are committed to provide under our polity and for the establishment of the socialistic pattern of society. Top priority has to be given to researches in the area of population control as this problem has to be solved at all costs of save the country from starvation and scarcity of essential commodities. The main problems which India is facing today are illiteracy, ignorance, poverty and population explosion. But the most important in the present days is the unchecked rapid growth of population in India. We have to provide the bare necessities to all our people from our resources. So we have not only to give top priority to this problem, but also special attention is required for this alarming problem. March 1, 1991 census has revealed that we have become 84.4 crores and the population growth is still rising at the rate of 23.50
We may have to face a situation when our economy will be shattered and growth is hampered. Therefore, we have to give a serious thought to this menacing problem and it is the duty of the educationists, planners, researchers, economists, philosophers and sociologists to contribute their best in solving this major problem of the country.

**POPULATION GROWTH IN INDIA**

India, among the developing countries, presents a unique case in terms of the sheer size of its population characterised by wide diversities in respect of physical, economic, social and cultural conditions. Its population constitute about 15 percent of the total world population with only 2.4 percent of total land area. Population in our country is increasing at the rate of 2.5 percent every year. With this rate, our population doubles in 30 years and we have already more than doubled in number since the beginning of the century and this will be the second doubling with in hundred years.

The further analysis has revealed that every year India is adding about 13.6 millions which is equal to that of Australia. It is also evident that every seventh person in the world is an Indian today and India is the
seventh largest country in terms of size or area and the second largest in terms of population.

Table No. I

Growth of population in India 1891-1991

<table>
<thead>
<tr>
<th>Year</th>
<th>Pop. in million</th>
<th>Growth in million</th>
<th>% decade growth rate</th>
<th>Female per 1000 males</th>
<th>Density of pop. per sq. km</th>
<th>% of urban to total pop.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1891</td>
<td>235.9</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1901</td>
<td>238.4</td>
<td>2.4</td>
<td>-</td>
<td>972</td>
<td>77</td>
<td>10.83</td>
</tr>
<tr>
<td>1911</td>
<td>252.1</td>
<td>13.8</td>
<td>+5.75</td>
<td>964</td>
<td>82</td>
<td>10.29</td>
</tr>
<tr>
<td>1921</td>
<td>251.3</td>
<td>0.7</td>
<td>-0.31</td>
<td>955</td>
<td>81</td>
<td>11.18</td>
</tr>
<tr>
<td>1931</td>
<td>279.0</td>
<td>27.6</td>
<td>+11.00</td>
<td>950</td>
<td>90</td>
<td>12.00</td>
</tr>
<tr>
<td>1941</td>
<td>318.7</td>
<td>39.7</td>
<td>+14.22</td>
<td>945</td>
<td>103</td>
<td>13.86</td>
</tr>
<tr>
<td>1951</td>
<td>361.1</td>
<td>42.4</td>
<td>+13.31</td>
<td>946</td>
<td>117</td>
<td>17.30</td>
</tr>
<tr>
<td>1961</td>
<td>439.2</td>
<td>78.1</td>
<td>+21.51</td>
<td>941</td>
<td>142</td>
<td>17.98</td>
</tr>
<tr>
<td>1971</td>
<td>548.2</td>
<td>108.2</td>
<td>+24.80</td>
<td>930</td>
<td>177</td>
<td>19.91</td>
</tr>
<tr>
<td>1981*</td>
<td>638.8</td>
<td>136.4</td>
<td>+24.75</td>
<td>935</td>
<td>221</td>
<td>22.04</td>
</tr>
<tr>
<td>1991**</td>
<td>843.9</td>
<td>160.1</td>
<td>+23.50</td>
<td>916</td>
<td>D.N.A.</td>
<td>D.N.A.</td>
</tr>
</tbody>
</table>


The growth of population during the twentieth century should caution about the explosive situation which spells dire consequences. From 1911 to 1921, it was 250 million with a growth rate of 0.9 per thousand. It was slow and fluctuating, since both the birth and death rates were high (48 and 47 per thousand respectively). Population size was affected by pestilence, famine and other catastrophes. Mortality rate declined steadily during the next four decades, reaching the level of 22.8 per thousand in 1951 to 61 and 16.9 per thousand in 1972. The birth rate also declined in these years but it was slower. In 1961 and 1972, the birth rate were 41.7 and 36.6 per thousand people respectively.

The growth rate, decadewise during 1921 to 51 was moderate and ranged between 11 and 14.2 per cent per decade. But the growth rates of 21.6 per cent and 24.8 per cent were evident for the decades 1951 to 60 and 1961 to 1970 respectively. This indicates that if this growth rate continues, the population of India would cross the billion mark by the end of this century.

Experts had come up with even more startling figures for the decade 1971-1981, when they said "During the next years i.e. between 1971 and 1981 population growth would be 16.5 crores and the total population would
reach 73 crores (730 million). This was slightly exaggerated as the figure was 684 million.

These comparisons help us to judge accurately the magnitude of India's population problem and its explosive character in view of the fact that it acts as a major hurdle in our socio-economic progress.

Different sets of projections have been worked out about the future growth of India's population. Indeed, there are innumerable pitfalls in forecasting the population of a country as they are based on a number of assumptions regarding future trends in birth and death rates which many a time may be away from reality. Available techniques do not permit reliable predicitons to be made 5, 10, 20 and 50 years ahead.

India's population was probably 68.4 million people in 1981. The rate of India's population growth was almost 3% each year rather than 2.5 per cent reported. Drastic action is needed to cut the birth rate to half. India's problem of population is the 'super problem' of the world.

The under estimations of our birth rate in the past have, to some extent, upset the target, which we were to achieve in our development plans. In 1951 when the First
Five Year Plan come into operation it was believed that the population of India would grow at the rate of 1.25 per cent per year. The Second Five Year Plan was also based on the assumption that the India's growth rate was 1.25 per cent per annum as the Planning Commission believed that the growth rate of 1.25 per cent per year would prevail throughout the decade from 1951 to 1961 and it will rise to 1.33 per cent per annum during the decade 1961 to 1971. Subsequent events, however, have proved that these plans were based on gross under estimates of birth rate which actually prevailed in India in the decades under question.

During the ten years from 1961-71, the Indian population increased by 108 million, giving a rate of growth of 2.45 per cent per annum as against 2.16 in the previous decade. "United Nations experts have estimated that India's population by the turn of this century will be about 1000 million when the world will have about 6500 million people. In other words by 2000 A.D. roughly every sixth man in the world will be an Indian."4 The implications of this uncontrolled growth and its effects on national economy and socio-economic structure of the country can very well be imagined.

Our population is increasing from decade to decade at a phenomenal and terrific speed resulting in more
shares of the national pie, which is increasing no doubt, but at a very low speed.

We shall see the effects which this ever-increasing waves of population growth have made on our economic development and nullified most of our achievement in the post-independence period.

One of the substantial achievements of the last 30 years has been sharply declining death rate. Declining death rate is regarded in European countries as a sign of well-being of a nation. Let us also consider this as a healthy feature of our national life. We cannot be in agreement with Julian Huxiety when he wrote: "The Indian mortality rate could doubtless be reduced by half, but what would you do with the increased population?.... Have you done any good by causing more babies to live and to creating greater population pressure or by opening up new lands to be filled at once by the human flood?" This is an argument against health reforms which is not tenable in the world, today, when we are bent upon decreasing the death rate still further.

Causes of Population growth in India

Population growth is a complex problem but its main components are: Birth rate and the death rate: If we think in terms of "Closed populations" which implies that
emigration and immigration will not significantly affect the future size of population.

Under Indian conditions immigration seems to have little effect on our population increase, hence we are to concentrate only on the other two variables, namely, the birth rate and the death rate, the dynamics of which affects our population growth.

The following table gives the birth and death rates for India from 1901 to 1980. (Comparative View).

Table No. 2

<table>
<thead>
<tr>
<th>Year</th>
<th>Birth rate for 1000-Estimated</th>
<th>Death rate for 1000-Estimated</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1901-1910</td>
<td>49.2</td>
<td>42.6</td>
<td>6.6</td>
</tr>
<tr>
<td>1911-1920</td>
<td>48.1</td>
<td>47.2</td>
<td>0.9</td>
</tr>
<tr>
<td>1921-1930</td>
<td>46.4</td>
<td>36.3</td>
<td>10.1</td>
</tr>
<tr>
<td>1931-1940</td>
<td>45.2</td>
<td>31.2</td>
<td>14.0</td>
</tr>
<tr>
<td>1941-1950</td>
<td>39.9</td>
<td>27.4</td>
<td>12.5</td>
</tr>
<tr>
<td>1951-1960</td>
<td>41.7</td>
<td>22.3</td>
<td>18.9</td>
</tr>
<tr>
<td>1961-1970</td>
<td>41.0</td>
<td>18.9</td>
<td>22.2</td>
</tr>
<tr>
<td>1971-1980</td>
<td>37.0</td>
<td>14.0</td>
<td>23.0</td>
</tr>
</tbody>
</table>

It is observed from the above table that in a period of 80 years the birth rate in India has gone down by 12.2 points whereas the death rate declined sharply by 28.6 points during the same period.

It is also observed that before the year the 'big divide' i.e. 1921, the death rate was nearly equal to the prevailing birth rate, so that the population grew very little before that year. But since 1921 the gap between the birth and the death rates, has become wider and wider from decade to decade, resulting in greater additions to the existing population. The trend of rising population is seen from the decade 1921-1930, but it has been more accelerated from 1951-1960 when the death rate has sharply come down to 22.8 only, while the birth rate maintained itself more or less static at 41.7.

What has happened in India during the past fifty years or so, is also true of other developing countries of Asia. Thus Gunnar Myrdal while writing about South-East Asian countries, says: "In South Asia, the long-run trend has been towards gradually widening gap and culminating in a "demographic explosion." But now the developing countries are trying hard to establish the correct balance between births and deaths but their attempts in doing so have achieved only a limited success. This is true also in the case of India.
"The balance between births and deaths in India, prior of 1921 had been maintained by Malthusian checks of famines, wars and epidemics. The growth of India's population shows a very close relation between the intensity of food shortages and the violence of epidemics, on the one hand and the growth of population on the other hand."

From the decade 1921-1931 the effects of the positive checks in India have been increasingly moderated. The ravages of famine have been largely eliminated by the improvements in transport and by better political and economic organisation for famine relief. Rather large reclamation projects and some modest improvements in agricultural practices have also contributed to a large and more certain food supply.

Allied to this, the control of epidemic and endemic diseases like malaria, improvements in drinking water facilities, improved drainage, increase in medical and health facilities, knowledge of preventive medicines, increased blood transfusion facilities, introduction of sulpha drugs and antibiotics—all these discoveries and inventions, besides organisation of effective and efficient health services upto the District level and the extension programme to the villages, through the Community Development Programme, have led to a decline in death rate
in India. The decline was rather slow in the beginning but gathered momentum during the last 40 years which brought down the death rate from 42.6 in 1901-1910 to 31.2 in 1931-1940 and still dropping to 14.0 by 1971-1980.

The fall in death rates in the more developed countries of the world was spread, therefore, over a long period of more than hundred years and thus it was a gradual process. On the other hand, the decline in death rates in less developed countries of the world occurred hardly in a period of less than twenty five years.

Second, in more developed countries the death rates came down because of various reasons like efficient organisation of health and medical services, rise in standards of living of the people in these countries, consequent of industrial and agricultural revolutions, urbanization, modernization and spread of education. All this helped in giving them a new outlook on life and increased their living span. Accordingly to Harold F.Dorn "Around 1700, the expectation of life at birth of the white population of North America and of Western Europe was about thirty-three years and probably had increased very little during the preceding three or four centuries. In 1950, the expectation of life at birth of white population of the United States was sixty nine years, an increase of more than 100 per cent."
Writers like Thompson and Lewis believe that improved health services in developing countries have restricted effect in sloping down the death rates there. The per capita supply of necessities sets the lowest limit towards a further decline. If the per capita supply of necessities should decrease in any appreciable degree, the death rate will almost certainly increase in most of them inspite of better health services. 9

It is a healthy sign that death rate in India, so also in other developing countries, is decreasing fast. This decline, however, is to be viewed with some concern in the context of the countries like India which are in the process of economic development, because the other variables of population growth i.e. birth rate, show no sign of similar decline.

The demographic revolution in India which may be claimed to have been started by 1921 and gathered strong momentum in the fifties is characterised by an unprecedented growth of population caused by the ever-widening gap between falling death rates and nearly static birth rates. India is said to be now in the second stage of 'demographic transition' and is struggling hard to get over it, making strenuous efforts to curb her birth rate of 39 per 1000 population to 25 per 1000 in a decade. It has been made quite clear that the birth rate
was around 49.2 per 1000 in the first decade of this century. It slowly declined to 45.2 in 1931-41. The birth rate further dropped to 41 per 1000 between 1961-66, "During 1967-68 and 1970-71 between one and one quarter million births are believed to have been averted each year as a result of the family planning activities. As a result, the birth rate declined by two points and came from 41 to 39.

It is also clear that from 1901 to 1980 while the death rate declined steeply by 67.2 per cent, the birth rate hardly came down by 25 per cent. This is, therefore, the crux of the whole population problem of India. The population growth may be described as a basic problem of the Indian economy and a great handicap in our national progress. Increasing population is no longer viewed as a source of national strength. The qualitative aspect of population matters more than its quantitative aspect. The gravity of India's population problem can be judged from the words of our late Prime Minister, Pandit Nehru when he said: "The danger to our country from population rise is worse than the danger of Chinese aggression"(10)

Developing countries like India are now in the second stage of demographic transition with a difference that India's growing population is, at present, acting a
a neutralizing factor or rather as a check in her economic development and this has negated the benefits which the development plans could endow to the people.

The higher birth rate which is the sole cause of our population growth must be held, therefore, under control. The causes of high birth rate and its reluctance to decline may be attributed to the (1) Early Marriages (2) Remarriages of Widows (3) Universality of Marriage (4) Joint Family System (5) Belief in large families (6) Preference for sons and (7) Low Standard of living (8) Lack of entertainment facilities (9) Food habits (10) Working with the hands-professional diversity.

Ill Effects of Population Growth

The fast increasing population is responsible for many effects:

3) Low Living Standard of the People:

The standard of living of people depends upon the share of total national wealth that they are able to enjoy. Since independence, the increase in production of foodgrain, cloth, steel, cement and many other agricultural and industrial products has been manyfold. Yet the per capita income has been low because the population has been increasing at faster rate than the national wealth.
(b) Shortage of Food:

The production of foodgrains in India is given in the following table:

Table No. 3

<table>
<thead>
<tr>
<th>Year</th>
<th>Thousand Tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950-51</td>
<td>55.011</td>
</tr>
<tr>
<td>1960-61</td>
<td>82.326</td>
</tr>
<tr>
<td>1970-71</td>
<td>108.422</td>
</tr>
<tr>
<td>1977-78</td>
<td>126.407</td>
</tr>
<tr>
<td>1978-79</td>
<td>131.900</td>
</tr>
<tr>
<td>1979-80</td>
<td>109.700</td>
</tr>
<tr>
<td>1980-81</td>
<td>129.867</td>
</tr>
</tbody>
</table>

Source: Publication Division, Ministry of Information and Broadcasting, India 1982.

Whereas the production of foodgrains was up by 136 per cent in 1981 as compared to that in 1951, the per capita consumption of foodgrains increased by only 52 per cent in the same period because of the increase in population.

(c) Increase in the rate of Unemployment:

As the population increase, the resources and capital investment are reduced thus limiting the opportunities for employment. This affects the efficiency
of the workers and the welfare of their families. The effect of increase in population is evident from the rising number of applicants on the Live Registers of the Employment Exchange as given below:

Tale No. 4

Number of Applicants

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of applicants (1956-81) on the Live Register of the Employment Exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>1956</td>
<td>758503</td>
</tr>
<tr>
<td>1961</td>
<td>1832703</td>
</tr>
<tr>
<td>1966</td>
<td>2622460</td>
</tr>
<tr>
<td>1971</td>
<td>5099919</td>
</tr>
<tr>
<td>1976</td>
<td>9784322</td>
</tr>
<tr>
<td>1981</td>
<td>17838058</td>
</tr>
</tbody>
</table>

Source: Publication Division, Ministry of Information and Broadcasting, India 1982.

(d) Social Problems:

With the rapid increase in population, a number of social problems erupted as housing problem and that of overcrowding. The average density of population has gone up to 2.7 times in 60 years, being 208 km in 1981. The general shift of population from rural to urban areas results in overcrowding of schools, colleges, buses, trains, hospitals and other facilities.
India adds 13 million to its population every year. This means that every year 127,000 more schools, 373,000 more school teachers, 2.5 million more houses, 4 million more jobs, 190 million more metres of cloth and 12,500 tonnes more food are needed to meet the requirements of this additional population.

(e) Health Problems:

There is a direct relationship between nutrition and health and both are affected by population growth. If the nutrition is inadequate and faulty, it can cause many diseases. Due to malnutrition children become weak and fall easy prey to diseases. Surveys have revealed that 5 to 25 per cent of children under five years of age in some states suffer from general protein malnutrition.

As mothers bear more children, it causes physiological and psychological setbacks to the health of the mother and the children. The health of the mother deteriorates through repeated deliveries. This adds to the misery of the mother and the family.

(f) Low National Development:

The rate of national development depends upon the capital resources. It is directly related to the per capita income and the standard of living of its people. It is often said that people are poor because they are
poor. This means that if people happen to be poor, their income is low, their savings are scantly, investment is insufficient and in turn their income falls. Thus, the vicious circle of poverty continues. Inspite of sustained efforts made to increase production and productivity, the results have been far from satisfactory, partly due to uncontrolled population growth.

The demographic situation in India, though quite serious, is not out of control. We, as a nation, have to bring down the population growth within a reasonable limit in the foreseeable future. The aim is to reduce the birth rate, the death rate and infant mortality rate from the present 26.15 and 125 to 21.9 per thousand respectively by the turn of the century. The population growth rate by then should fall to 1.2 per cent per annum.

Since family planning is a part of the total national effort, everyone has a role to play. One must remain aware of the dangers of the population explosion and the means by which, family size can be limited. According to the present law, a girl should be at least 18 years of age before she gets married and the boy come eligible for marriage when he attains the age of 21 years. Those who break this law are liable to be fined and punished. Even after marriage, a pregnancy can be delayed.
for a couple of years, if health, financial or other conditions do not allow it. Each child should be brought up with love and care and in good health before the next arrives. There are easy methods of spacing out children or of avoiding more children if so desired.

Population Control and Population Policy in India:

The Indian Government is conscious of this phenomenon and is trying its best to solve the economic problems of the country but for the population factor and its threatening march onwards.

The measures taken by the Government to meet the challenge of population growth consists of a two-pronged approach: (1) Clinical Approach and (2) Educational approach. The target groups of these two approaches are different.

It may be observed from the available statistics that 42 per cent of our population is in the age group 0-14 years and 21 per cent in the age groups beyond 45 years. Considering that the fertility of women is limited between the ages 15 to 45 years, our clinical approach in the form of family planning programme covers hardly 37 per cent of population.

Therefore, the educational approach which will cover 42 per cent of population in the age group 0-14
acquires an important dimension, because this group will decide about the population trends in the next one or two decades. Hence necessary population awareness is to be created among them. This new trend in education is named as Population Education. This does not render infructuous the Government thinking in enhancing family planning in the country as both of these approaches are complementary to each other.

The impact of population rise in the second half of the present century has been rather unfavourable on the socio-economic life of India. This sense of unawareness on the part of Indian people at large had led us to the present quagmire of poverty, unemployment and degrading standards of living.

Thus, we are, at present on the threshold of a new crisis which has been caused ironically enough because of rapid increase in 'death control' not accompanied by a decline in birth rate.

For the solution of this problem two alternatives are available, "an increase in deaths or a decrease in births (other theoretical alternatives, such as migration to other planets, are not at present or in the immediate future realistic possibilities). Increasing the death rate in morally untenable. Decreasing the birth rate is possible."
To reduce fertility rate is the only solution to the population problem we are facing today and which is at the very roots of all our evils; how this has been accomplished by the developed countries of the world and some of the developing Asian countries require deep study on our part.

Results of research studies have yielded a wide variety of reliable methods of fertility control. But the problem of population cannot be solved by scientists and researchers alone. It is a social problem with cultural, economic and political implications. The right to have children or not to have them, the individual citizen alone is entitled to decide, and not the scientist, the researcher, or the government.

Citizens at best can be appealed to plan their families in such a way that they could be happier for life if they adhere to small family norms. Men and women belonging to different age-groups need to be approached and enlightened about the urgent problems of population caution. Youth of both the sexes should be made aware of the need for small families with one or two children only. Population education to bring the right attitude among the young people who are yet to enter the fertility age-groups should be given, 'Catch them young' is the slogan. In a country like India where the population increase is
reaching almost the level of explosion, top priority should be given to population education.

Some thing needs to be done quickly and effectively to save the situation. The younger generation should be made aware of the problem fully and explained the imminent dangers. A planned adult life is a must for the young for which they should be provided proper education. In India, half of our population is below the age of 18 years. Marriage is universal and takes place in most cases at a very young age. The figures of unemployment are quite high. The present and the future could be saved only with the awareness brought about the population education.

National Population Policy:

Realising the importance of adequate awareness of the Population problem especially by the younger generation the Government of India evolved on a National Population Policy. On April 16, 1976. The then Minister of Health and Family Planning (Dr. Karan Singh) declared a National Policy in the Parliament. The main thrust of the policy continues to be meeting the challenge of high rate of population growth, it is conceived of, as a part of multifaceted strategy for economic development and social emancipation, directed towards building a strong and prosperous India, by educating people on population
problem, its consequences and remedies. This educational strategy also takes into account the various socio-cultural and other barriers that come in the way of full appreciation of the national population policy. Some of these barriers are negative influence of elders, economic utility of children to parents, desire for a male child, insecurity in old age, desire for large families to do away with dependence on hired labour, the low status of women and their non-involvement in the nation's labour force outside the home, early marriage, infant mortality etc. A frontal assault on all such barriers is possible through population education of the children and adolescent, the young and old, the male and the female. Before considering the concept of Population education in depth and the programmes of its implementation it may be appropriate to outline the main features of the national population policy.

It is intended to achieve the target of reducing the birth rate from an estimated 35 per thousand to 25 per thousand and bring down the annual growth rate of 2.2 per cent to 1.4 per cent by 1984. Some of the important and forward-looking measures adopted under the policy were as under:-

1. Raising the age of marriage to 18 years for girls and 21 years for boys.
2. Freezing the representation in the Parliament and State legislative up to 2001 on the basis of 1971 census.

3. Reservation of 8 per cent of Central assistance/resources specifically for states showing better performance in family planning.

4. Annual review of progress of family planning by union cabinet.

5. Group incentives to make family planning a mass movement.

6. Introduction of model schemes for voluntary organisations for family planning.

7. Increased incentives for adoption of family planning methods.

8. Promotions and research in reproductive biology and contraception.

9. Inducements and fringe benefits to those who have accepted family planning.

10. Development of a new multi media motivational strategy, with a rural oriented approach.

11. Launching sterilisation programmes based on the facilities and conditions in various states.

12. Introduction of population education in the educational system.
Thus it is evident that the idea of population control by clinical means is not only one of the measures in the overall national policy what is perhaps most important; is to create an awareness of population problems a part of multifaceted strategy for overall development. Such an approach is essentially educational character-be it formal, non-formal and informal and should cover various sectors of population through various media.

Demographic Situation in Haryana

As a matter of continuity, the demographic situation in Haryana is also needed to be discussed as it was chosen as study area for detailed investigation of the problem of the researcher. At the outset it must be admitted that the demographic situation in Haryana is in no way better than the all India level.

It has higher birth rate (36 per 1000) than the national level (33 per 1000) around 1981. However, death rate in Haryana was slightly lower (10.6 per 1000) than the national average (12.8 per 1000) for the same period. This has led to the greater natural increase in Haryana in the recent years. Thus the strengthening of the family planning programme in Haryana is highly essential though population education as the population control is a voluntary programme in our country.
The size and distribution of population in Haryana compared to India can be illustrated through the following table:-

Table No. 5

<table>
<thead>
<tr>
<th>Year</th>
<th>Haryana (Population '000)</th>
<th>India (% of India's population)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1901</td>
<td>4623</td>
<td>1.94</td>
</tr>
<tr>
<td>1911</td>
<td>4175</td>
<td>1.66</td>
</tr>
<tr>
<td>1921</td>
<td>4256</td>
<td>1.68</td>
</tr>
<tr>
<td>1931</td>
<td>4560</td>
<td>1.63</td>
</tr>
<tr>
<td>1941</td>
<td>5273</td>
<td>1.65</td>
</tr>
<tr>
<td>1951</td>
<td>5674</td>
<td>1.57</td>
</tr>
<tr>
<td>1961</td>
<td>7591</td>
<td>1.73</td>
</tr>
<tr>
<td>1971</td>
<td>10037</td>
<td>1.83</td>
</tr>
<tr>
<td>1981*</td>
<td>12851</td>
<td>1.88</td>
</tr>
<tr>
<td>1991**</td>
<td>16316</td>
<td>1.93</td>
</tr>
</tbody>
</table>

Note: The population figures of Haryana stands according to 1971 boundary.


**The Tribune, Thursday March 28, 1991,p.3 (Provisional Population figures gathered through the census operations which concluded on March 10).
Before glancing at the above table, it is to recall that Haryana comprises only 1.35 per cent of the area of India. The above table shows that Haryana harbours larger size of population than its area compared to national level in all the preceding decades for which data is available and the share of Haryana has steadily increased after 1961. This further indicates that the demographic problem in Haryana is no less acute. Thus, research into in this area is highly significant and shall certainly contribute towards increasing understanding of the serious problem like population growth in the context of people of Haryana and India.

The provisional data of 1991 census shows that Haryana retains the 15th position of 1981 census in the country, according to the size of its population among the 25 states and seven Union territories. The population of Haryana on the basis of last census 1991 has increased to 16,317,715 of which 8,705,379 are males and 7,612,336 females, against 1.27 crores in 1981. The population growth rate in Haryana has declined, from 33.79 per cent during 1951-61 to 32.33 per cent in 1961-71 and again 28.75 per cent during 1971-81 to 26.28 per cent during 1981-91. The density of population has increased from 292 persons per sq.km. in 1981 and 369 persons in 1991.
The state has made rapid strides in the field of economic development. Haryana is not only self-sufficient in food production but also among the top contributors of food grains to the national pool. But the literacy level in Haryana which was relatively lower than the country as a whole in 1971 reached to the country's level in 1981. The female literacy rate has reached to 22.3 in 1981 from 14.9 in 1971.

Despite these positive indications, the rate of population growth in Haryana during past three decades has been relatively higher than the national figure, meaning thereby that the population of Haryana is increasing with a faster pace than the country as a whole. The birth rate is still hovering around 34 as against the national figure of 32.40.

The social development has not been able to keep pace with population growth. Haryana's population is young, as the average age of male and female in the state is 24.26 and 23.72 years as against the national figures of 25.48 and 25.39 years respectively. The women's status in Haryana is considerably low. The very fact that there are 870 women for every 1000 men as against the national average of 933, that the female literacy rate is 22.3 as against 48.2 male literacy rate, speaks of the low status of women in Haryana.
In Haryana, however, under information, our emphasis has been on dissemination of information on family planning rather than on generating understanding and awareness about the broader demographic goals of the country as well as people's needs and aspirations. Moreover, our younger generation, the students and non-student youth, the adolescent and teenagers, the school dropouts are still groping in the darkness for acquiring scientific knowledge and understanding which could help them in the formation of their attitudes and shaping their own reproductive destiny.

WORLD PERSPECTIVE

Today our interdependent world is increasingly confronted with major global problems of accelerated population growth. More attention is being devoted to population problem nationally and inter-nationally. On the world scene a number of Governments e.g. Japan, India, Pakistan, Korea, Singapore, the United Arab Republic, Turkey and mainland of China, as a matter of policy, are striving to dampen rates of population increase by means of fertility control. For this explicit formulation of the need to control population growth is the product of three centuries of accelerating world population increase unprecedented in scale—"the demographic revolution."
The population situation has worsened as, among the developing nations, many countries are now growing ten times as fast as they did a century ago. As a result "A child born today living through the seventies would know a world of 1500 crores of people. His grandsons will share this planet with 6000 crores of people. This is a rather glooming picture for the whole of manking and united efforts are to be made if the impending disaster is to be averted.

Population explosion of global scale has reached such large perportions that it is now threatening to become one of the opposing influence in man's continuing efforts to increase his material and spiritual well being. In the absence of global nuclear warfare and the present rate of world population increase, over population may ultimately become the major cause of social and political instability in the world. Not that man did not multiply in the past or that he will stop doing so in future, but in the high speed at which the growth has been taking place is quite alarming.

According to the most recent official estimate of united nations, the latest recorded average annual rate of population growth from 1963 to 1971 was 20 per thousand as may be seen from the following table given on next page. Some other population experts claim the rate to be even higher.
## Table No. 6

**Estimated population of the world since 1650**

<table>
<thead>
<tr>
<th>Years</th>
<th>Population (in billion)</th>
<th>Average annual increase per 1000 since preceding date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1650</td>
<td>548</td>
<td>-</td>
</tr>
<tr>
<td>1750</td>
<td>728</td>
<td>3.2</td>
</tr>
<tr>
<td>1800</td>
<td>906</td>
<td>4.8</td>
</tr>
<tr>
<td>1850</td>
<td>1,171</td>
<td>5.8</td>
</tr>
<tr>
<td>1900*</td>
<td>1,608</td>
<td>7.4</td>
</tr>
<tr>
<td>1950**</td>
<td>2,486</td>
<td>10.9</td>
</tr>
<tr>
<td>1963</td>
<td>3,162</td>
<td>20.5</td>
</tr>
<tr>
<td>1971***</td>
<td>3,706</td>
<td>21.5</td>
</tr>
<tr>
<td>1981****</td>
<td>4,577</td>
<td>23.5</td>
</tr>
</tbody>
</table>


** Cars Saunber, "Estimate of World Population" for 1900 and United Nations estimate of World Population 1950.


Thus it is very clear that in recent years the rate of population growth the world over has been unprecedented in human history. From 1750 to 1850 the world population increased roughly by 50 per cent. From 1850 to 1950 it increased 100 per cent, the estimate for next 50 years i.e. up to the year 2000 shows that it will be more than double by then. From the above it is very clear that the demographic situation in the world is quite serious. The population is increasing at a rate disproportionate to its size. This reminds us of the French Riddle, "The twenty-ninth day", 1978, The riddle tells us a story and asks a question. A lily pond contains a single leaf. Each day the number of leaves doubles, two leaves the second day, four the third, eight the fourth and so on. If the lily was allowed to grow unchecked it would completely cover the pond in thirty days. At what point is it half full? The answer is on the 29th day. The owner of the pond had only one day to save the pond. Like the owner of the pond, mankind has reached the penultimate day. The population is increasing at a rate proportional to its size, just like the water lily in the French Riddle. This is exponential growth. For some years, demographers, who study population change and human biologists, who study people, have been concerned that the death rate of human population doubling has diminished progressively.
Unfortunately, the exponential growth phenomenon is not just confined to people. Not only is the rate of population growth exponential, but so is the production of consumer goods, so is the production of waste, so is population and so is land occupancy. In no finite system is it possible for exponential growth to continue, eventually the limits to growth are reached, and Planet Earth, which is very small planet, is finite. The estimated total surface area of the earth is 510,065,600 square kilometers, of which the sea of hydrosphere covers five-seventh (5/7) or more accurately 70.92 per cent and the land of lithsphere (2/7) two-sevenths or 29.08%. The population is often measured in terms of number. The present population of this small planet is estimated at 5.234 billion by 1990 could roar to 6.25 billion by 2000.

Table No. 7

<table>
<thead>
<tr>
<th>Year</th>
<th>Population in billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>2.500</td>
</tr>
<tr>
<td>1960</td>
<td>3.027</td>
</tr>
<tr>
<td>1970</td>
<td>3.678</td>
</tr>
<tr>
<td>1974</td>
<td>3.890</td>
</tr>
<tr>
<td>1975</td>
<td>4.107</td>
</tr>
</tbody>
</table>

Table Contd....
<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>4.478</td>
</tr>
<tr>
<td>1981</td>
<td>4.577</td>
</tr>
<tr>
<td>1982</td>
<td>4.640</td>
</tr>
<tr>
<td>1983</td>
<td>4.722</td>
</tr>
<tr>
<td>1986</td>
<td>4.942</td>
</tr>
<tr>
<td>1988</td>
<td>5.128</td>
</tr>
<tr>
<td>1989**</td>
<td>5.234</td>
</tr>
<tr>
<td>2000</td>
<td>6.620</td>
</tr>
<tr>
<td>2025***</td>
<td>10.910</td>
</tr>
</tbody>
</table>

Source:


The daily increase in world's population has been estimated at 223,285 or 155 per minute. It was estimated that 286 were born and 114 died every minute in 1977-78. Projection of population for year 2000 depend on the acceptance of how people respond to family planning methods to reduce population growth. It is estimated that the birth rate which was 30.4 per 1000 persons in 1975, came down to 28.0 per 1000 in 1987 and is expected to go
down to 25.6 per 1000 in 2000. Similarly, the death rate which was 12.3 per 1000 in 1975 came down to 10.0 per 1000 persons in 1987 and expected to go down 9.1 per 1000 persons in 2000. The rate of annual increase will accordingly come down from 1.8 per cent in 1975 to 1.7 per cent in 2000.

The real problem, however, lies in relationship between the rate at which the population grows and the rate at which other factors increase, such as food production, availability of new jobs, houses, schools, hospitals and other necessities. If, for example, the growth of population is faster than the food production, the amount of food available per person will evidently decrease. This is a major problem. As the growth of most of the resource is slower than that of the population, the standard of living of people decline.

The world can be divided into three categories on the basis of the population growth rate. There are countries which have a higher growth rate than the world average, then there are countries with a zero growth rate. There are also countries with a negative growth rate.

Most population in the world seems to have passed through three phases of population growth.
The first phase which may be called the old equilibrium is apparently over in the majority of countries. It was characterised by high birth rates as well as high death rates which implied a more or less stable population. The second phase i.e. the period of rapid population growth is characterised by a steep fall in death rates while birth rates show no sign of decline, this results in a population explosion. Most of the developing countries are at present, passing through this
phase. The third phase, i.e. desired equilibrium is characterised by low birth rate and low death rates causing only marginal increase in population. This is also called Zero population growth, when birth rates will equal death rates. A few developed countries have reached a stage where couples replace themselves by having just two children. Some developing countries seem to be approaching the desired third phase. "The population growth of the Republic of Korea in 1960 was 2.9 per cent which dropped to 2.2 per cent in 1969 and 2 per cent in 1973. In Singapore, the population growth was 3.4 per cent in 1960 and it dropped to 2.5 per cent in 1965 and 2.2 per cent in 1973. These are instances of two small countries. In a big country like China has shown a remarkable performance. The growth rate was 2 per cent in 1953 and was brought down to 1.7 per cent in 1973." The situation in the majority of other developing countries is quite different. The estimated rate of population growth in India, the Philippines, Indonesia, Malaysia, Pakistan, Bangladesh, Thailand etc. is very high.

**Demographic Situation in Asia**

Asia the largest continent extends over nearly one third (1/3) of the land surface of the earth. The population in most of the Asian countries is growing
rapidly. Total land Area of Asia is 4399000 squares kilometers that is 18 per cent of the total land area of the world. Total population here is 1,3,130,000 that is 60.3 per cent of the total world population. At the present rate of increase, it will have 60 per cent of the world population by the year 2000. In Asia agriculture is the main source of livelihood and employment. 40 per cent of its population is under 15 years of age. It means a very high per centage of the population is in the reproductive age group. Thus the core of the crisis of population problem lies in Asia.

The (World Bank Report) showed that 'Asia, which accounts for about 58 to 60 per cent of the World population was growing by 55 million people annually and this rate was likely to slow down to about 45 million by the year 2000.'^{13}

There is a ray of hope in Asia. The World's populous nation, the people's Republic of China, seems to have made considerable headway in reducing its rate of population growth to less than 1.4 per cent per annum, which is a remarkable acheivement. Japan, too, must be excluded from the general statement about Asia. In fact Japan is now closed together with Israel, as a developed nation.
Most of the Asian Governments face increasing problems of land hunger, under employment and unemployment, increasing inequalities of Income and increasing urban growth. Increasing population has resulted in imbalance between population and resources. The problem of imbalance is not only of the high dense populated countries but also of the other countries with a zero or countries with a negative growth rate. The stability in the growth rate of population has resulted in longer life expectancy and created imbalance between the young and the old. The need, therefore, is not to reduce the population but to have a balance growth of population - a balance between dependent and independent and between the young and the old. More attention should be given to quality rather than quantity.

**CONCEPTS OF POPULATION EDUCATION**

The concept of Population Education is of recent origin. It is an educational responsibility to contemplate the economic, social and political issues related to the demographic aspects. It has been observed that number of new educational processes to meet its various objectives have been evolved such as environmental education, sex education, moral education, social education and health and physical education etc.
Simultaneously we have come across a new and important fields of education as population education, which is one of the latest dimensions of knowledge.

The history of the realisation of the potential role that education can play in the context of population phenomenon, dates back only to the beginning of the second half of the century. In India this realisation came in the later part of 1960s and National Seminar of Population Education held in August, 1969, recommended for the introduction of Population Education in the Education System of the country. The World Population Conference held at Bucharest in 1974 also stated that educational institutions in all countries should be encouraged to expand their curricula to include a study of population dynamics and policies, including, where appropriate, family life, responsible parenthood and the relation of population dynamics to socio-economic development and international relations. There are several valid and plausible reasons for advocating introduction of Population Education in all educational settings. Notwithstanding the differences in views regarding the impact of population change on the development process of a country or the world at large, it is almost universally realised that the problems the nations are facing, have population component. It is also generally accepted that
the role of the population component is viewed differently at individual, community and national levels.

The term Population Education is very often used interchangably with expressions such as family planning, birth control, population literacy, demography, and sex education. In fact, Population Education is much broader concept which emphasises the development of proper attitude towards population problems, and capacity to take knowledgeable and rational decisions in this regard. Population Education is also called education for population awareness. As it is a new area, it is still, for the most part, a concept and generalisation which are in the process of being given definition, shape, a context, a structure, and a validity for being brought within the purview of formal teaching.

Several experts have attempted definitions of Population Education but a universally accepted definition is yet to be found. Taylor stresses the motivational relationship between a Population Education programme and the practice of family planning. Population Education has double task. It is both motivational (trying to encourage people to adopt family planning) and it is instructional (teaching people the facts about the population problem, its probable consequences and what the possible alternative are).
Simons seems to stress the cognitive as well as the affective aspects of Population Education. "Population Education is a promising means of diffusing information about population problems more pervasively through the channels ordinarily to family planning programme. But it is also important to produce desired changes in attitude behaviours and values in the next generation."^14

The definition given by Population Education Bureau is that Population Education seeks "to bring about a realisation of the individual, family, social and environmental effects of the explosive increase in human population, the rapid shifts in concentration and distribution of people, the implications of changing age and other demographic patterns, and the conceivable options that may be open to mankind to cope with consequent problems."^15

Viderman defines Population Education" as the process by which the student investigates and explores the nature and meaning of population process, population characteristics and changes for himself, his family, for society and for the world." V.K.R.V. Rao views that Population Education should not be treated merely as a quantitative phenomenon or just an essay in numbers. It is the quality of the population that is most relevant both as a factor of growth and an end product of growth.
and numbers have to be treated in terms of the effect they have in quality either by way of deterioration or improvement." Population Education therefore is essentially related to human resources development. Thus Population Education is not only concerned with population awareness but also with developing values and attitudes so that both the quality and quantity are taken care of.\textsuperscript{17}

The above definitions cannot be said to be complete. It is difficult to reduce the content and objectives of such a broad field of learning into a concise definition. However, those who have tried to define Population Education have done so by laying some emphasis on some of the aspects of the subject. Thus in the above definitions, it can be seen that no reference has been made to the goals of teaching Population Education.

A major useful definition was produced at UNESCO Asian Regional Workshop on Population and Family Education held in Bangkok in September-October, 1970. The definition evolved was that the "Population Education is an educational programme which provides for a study of the population situation in the family, community, nation and world, with the purpose of developing in the students rational and responsible attitudes and behaviour towards that situation."\textsuperscript{18} This may be taken as a standard
definition of Population Education not because it comes from an international agency like UNESCO but as it encompasses in a nutshell the objectives content and goals of Population Education.

Burleson has conceived of Population Education as Population awareness. In his view "Population Education is an exploration of knowledge and attitudes about population, the family and sex. It includes population awareness, family living, reproduction education and basic values. Education can modify the problem arousing a population awareness among teachers and students."\(^{19}\)

Population Education is essential for the reconstruction or reconstructing our modern, rapidly changing society. In India it was Prof. Sloan Wayland of Columbia University, who gave concrete shape to the notion of Population Education. Prof. Sloan Wayland is regarded to be the father of Population Education all over the world and visited India in 1965 at the invitation of the Government of India. He explained the meaning of Population Education in the following terms:

"Regardless of the term used, we are concerned about the inclusion in the formal education system of instructional setting in which young people will come to understand the circumstances which have led to the adoption of family planning as public policy and to
understand that for the family and the nation, family planning is possible and desirable. This would include an understanding of the relationship of population dynamics to economic and social development of the country and the implications of family size for the quality of life of the individual family. The particular instructional activities at any given school level and in any particular subject field would, of course, be devised in a manner which would be pedagogically sound and appropriate for the particular society.

Clarifying the concept of Population Education, Prof. Wayland observes that "Population Education is a different kind of activity from family planning. It is essentially an educational response to a felt need for a problem, a major concern of very great magnitude. The problem before the educators is not to indoctrinate children but to help them systematically to understand the problem within their mental framework. We want to help them to understand their family circumstances, the consequences of belonging to a big family and a small family, the economic well being of their own families and ultimately the relationship of their would be actions to the welfare of the nations as a whole."
This appears to be a complete exposition of the concept and scope of Population Education in today's context. Better quality of life for the individual, family and the nation is, therefore, the main strain of the above statement of Dr. Wayland. He not only gave the nomenclature to the Population Education but also stated that the public policy on family planning, the desirability of family planning etc. should be comprehended under the counselling system in formal education. At the same time he advocated that studies should be conducted into the economic and social development of education, size of the family, and the dynamism of the qualities of a nuclear family. Hence it is necessary to develop a special method of education at the school level under the linguistic provisions in a particular society.

In nutshell we can say that Population Education deals with various demographic aspects such as composition and structure of population, sex ratio, population dynamics and social, political and economic implications of population trends. Education in population dynamics is not propaganda of family planning but it is for promoting a set ideas of it is a way of conveying knowledge and creating awareness which will help in course of time, to bring about new attitudes and behaviour patterns towards
small family. The main aim of Population Education is to help promote well being and a higher quality of life, not for a few or for a privileged, but for all humanity. And in that sense it is a subject that has relevance in our country, whether it faces a population explosion or not. Further this new field of education is of great relevance to all the countries of the world whether they are fully developed or are in the process of their development.

**IMPORTANCE OF POPULATION EDUCATION**

Why should we have population education? The answer is obvious. Today, population is increasing at such a alarming rate that material resources (Food, Clothing, Housing) look scarce keeping in view the intensity and size of the population. In order to face and overcome these conditions, educationists and demographers have come to feel that the problem must be given the form of a revolution in ideas. This implies that the problem of population must be integrated with education. Now it has been universally recognised that education in the population dynamics is quite necessary for a well rounded system of Education, the aim of which is to prepare young people for adults role in future.

Population problem is a social problem with cultural, economic and political implications. Population
growth has obviously its impact on the social, economic and educational development of the country. Perhaps our country will be one of the worst afflicted country to this colossal dragon of population explosion. This global catastrophe is threatening the whole human race. According to 1981 census Indias' population was 683.8 million roughly 1/7 of the total world population and according to recent censes of 1991, it has reached 844 millions. At this rate of population growth, it is feared that our population would reach more than one billion by the end of century. The rapid population growth leads to many social problems. Social development of a nation depends on the national planning for it. All plannings fail to attain the desired goals with the enormous and unhindered growth of population. The population pressure is felt every where now in the streets, in the buses and trains, in cinema halls and theatres, in perks and other places of public gatherings. Swollen cities, unemployment, heavy internal migration etc. are the result of demographic pressures on social life.

Similarly population growth leads to many economics evils that our country is facing. The economic upliftment of the country can take place when population control is
more effective. The impact of population pressure on educational sector is in no way less serious. "In the developing countries with 2/3 of world people and some of the highest rates of population growth, there are insufficient schools, text books and teachers for children reaching school age, not enough vocational training places, shortage of jobs for the untrained and unschooled young adults. Population growth is hampering the attainment of the constitutional provision of making education free and compulsory up to the age of 14. Thus the realisation of national goals is becoming difficult due to lack in proper education of population situation. The future also appears to be gloomy.

Something needs to be done quickly and effectively to save the situation. The younger generation should be made aware of the problem fully and explained the imminent dangers. A planned adult life is must for the young for which they should be provided proper Population Education. Population Education can help in to bring about the right attitude in young people, who are yet to enter the fertility age groups. 'Catch them young' is the slogan. In a country like ours where the population increase is reaching almost the level of explosion, top priority should be given to Population Education. It has been recognised by family planning experts in most of the
countries that it is a difficult task to make the adult eligible couples to adopt small family norms, because they are slow to learn as the idea of small family has reached them in their adulthood when their attitudes and beliefs had acquired some rigidity. Therefore, the investments made on family planning programmes are not so rewarding as compared to the investment made on population Education. To make permanent impression on the minds of children, it is necessary to make them understand the population issues while they are young. It is the proper time to develop healthy attitudes towards the population situations so that they may react favourably towards family limitations when the time for such decisions on their part comes. In this context Harold Howe States, "Population Education is a moulder of attitudes and creator of predepositions favourably to the planned families of reduced size. Once the ground work of receptive attitudes has been created, the direct means of birth control and family planning education become more relevant to the individual and more likely to be used by him."  

Thus population acts a supplementary to the family planning programme. The younger generation should be fully informed enough exposed to hazards of future. They should be equipped through proper education for a planned living in their adulthood so that they can face the greatest challenge of time and avoids facing dooms.
METHODS OF POPULATION EDUCATION

There is hardly any doubt about the relevance and the urgency of the introduction of population Education programme in the schools. This has been strongly advocated both at national and international levels in various seminars and conferences held within the last two decades. This need not however, be done by adding Population Education as an independent subject at school level taught by a specialist with the help of text books on the subject. To avoid undue heaviness on the cognitive load, it is commonly accepted that Population Education can be integrated with the existing curriculum of school. This integrated approach was forcefully recommended by the National Seminar on Population Education, held in Bombay, in August, 1969 and also by the Regional Seminar on Population Education held at Bangkok under the auspices of UNESCO in September-October, 1970. They have urged to make Population Education an important aspects of national educational planning. For a national plan of introducing Population oriented Education, it would be necessary to have a built-in-strategy for reaching the various target group. The identified target groups for population Education may be students of schools, college and other educational institutions; those who have left schools or have not received any education;
those who are related to imparting training to teachers, teachers themselves and those who impart education through training, counselling and guidance.

Education undoubtedly is one such measure which could be harnessed to the difficult task of social change and could involve this big chunk of the population. Education has, therefore, to play a vital role. To bring into the notice of the students, the danger of population explosion in the country and to make them aware of its possible consequences on the socio-economic development of the nation, it is essential to introduce population Education in the school curriculum. For all developed, developing countries the basic challenge today is to design a development strategy that will provide relatively with a minimum level of resource consumption. The Population Education programme, therefore, be presented in a global framework but with a regional, national and local relevance.

For teaching a subject, there are two approaches; 1. Intellectual approach. 2. Operational approach. The intellectual approach related to theoretical or conceptual methods. It deals with ideal concepts, analyses and interpretations. The operational approach relates to practical or operational methods. It involves development of techniques skills, habits and actions. Dr.B.P.Lulla
argues for adoption of operational approach to teaching of Population Education. He is of the opinion that "the operational approach is essential to the Population Education programme in India, as it is intended precisely to bring about a swift change in the behaviour of future citizens and poor country like India cannot afford to wait and to have an elaborate long term and expensive system for new task of utmost priority."\textsuperscript{23}

In order to reach largest number of people, Population Education should become an integral part of education at all levels of education and methods of teaching/imparting Population Education may be followed differently in the different stages for different target groups.

In the Primary stage of Education the descriptive technique can be conveniently adopted. In the Upper Primary stage of Education, both the descriptive and analytical techniques may be followed. In the Secondary stage of Education the analytical and applied technique may also be introduced through talks, demonstrations, films shows etc.

Our formal system suffers from several limitations as it is rigid in structure and can shoulder only a limited responsibility of developing population literacy. Our formal school system reaches only a portion of the
population in school age. In fact, a major portion is left out which is rather a crucial segment. By and large, it includes the poor sections of the society, girls and women, people living in slum areas and rural areas, which suffer due to lack of facilities of formal education. J.E.Jayasuria argues, "From the point of view an immediate influence on reproductive behaviour, the target group that is most crucial for a programme of population Education consists of out of school youth and adults, who are at the threshold of or in the midst of their reproductive behaviour. While it must be recognised that they are a most elusive group of reach, it is essential they should be reached, and a comprehensive programme of Population Education has to take account of them, not only now but in the future as well."²⁴

The major problem therefore, is to reach these critical target groups through non-formal programme. In this voluntary agencies, adult education centres, non-formal education centres and mass media can play a very important role, their services should be utilised to the fullest measure. To the extent the out of school youth and adults might belong to organised groups such as youth clubs, labour unions, Farmers' unions, women's unions, Panchayat, GramSabhas, etc., they could be reached more
successfully than those who do not have any such affiliations. Of course, the major burden will have to be shared by agencies handling mass media of communications via Radio and Television. The slant of this programme again would be on education and not propaganda. Proper content of the programme and training of the personnel involved shall have to be worked out carefully.

The third target group is preparation of teachers at all levels. No educational programme, no educational innovation can succeed unless the teachers are prepared for it. They are, by and large, a conservative lot, not very eager to change and leave the traditional course. The foremost task is to equip them of the utility of the programme and to provide them equipment to handle the new area of curriculum in the form of teaching methods. The Population Education programme service UNESCO, Bangkok and the NCERT has initiated in this direction. They have prepared content material, teaching methods and teaching strategies, reading material, books curriculum for various levels of education, for various target groups, models and Audio visual material, which can help bring about the programme objectives of increasing the students as well as teachers knowledge, attitude, behaviour and skill in Population Education. A number of teaching methodologies
have been proposed. Value clarification, Games and role playing, discovery or Inquiry Oriented Approach, self instructional approach, teaching through Audio-visuals aids, computer assisted method and other general methods.

The methodologies and techniques mentioned above are not new but these dynamic methods of education provide interesting variations, when used in the classroom and also provide supplementary means of enriching classroom experiences. The relations for playing importance on teaching methods in Population Education is that the way in which a child learns about population may be just as important as what he learns about. With the old traditional methods child learns or expands his horizon of knowledge in a limited way, but dynamic method will not only expand his population knowledge but also make him better able to investigate and act on other problems he will face in life.

CONTENTS OF POPULATION EDUCATION

Population Education is a new area and in order to find out what should be the content of Population Education we have to tread a new group keeping in view our cultural background and present needs and future aspirations. The specific form which the content of
Population Education may take in a particular country depends to a large extent upon consideration of national population policy and characteristics of the education system of that country.

Broadly speaking curriculum of any population programme includes the nature, causes of Population growth, determinants and consequences of population growth, both at micro and macro levels, the nature and dynamics of the reproductive process and possibilities of planning family size and population growth. To this may be added to one more element like sex education in population education programme.

The Asian Regional Workshop 1970 and National Seminar held at Bombay in 1969, considered the determinants, socio-economics and consequences of population growth as the basis of Population Education Curriculum.

The determinants and causes of population growth are an important factor which should be known to the students in order to make them understand the different aspects of the Population Problem. That factors that motivate the people towards their population decision should be clearly known. They should have made to understand, what is the cause of development of large families? The norms of the society of their personal
decisions. As we know in many societies a social norm exist tending to favour the development of large families. Other causes of population growth may be economic conditions, superstitions or religious beliefs. To attempt to change such norms without trying to understand the roots of the factors may not be successful.

Consequences of Population growth is also equally important element of Population Education programmes the world over. This factor directly affects both the individual and the nation. It is readily understood and can be studied at the micro level and macro levels. Consequences of rapid population growth on economics and social development, employment opportunities, food, health nutrition, housing, education should become the vital component of Population Education. Ecological Consequences environmental population endangering balance in nature are also equally important.

The Population Education should also include the static and dynamic description of population situation at micro and macro levels. It serves as a link between the determinents and consequences.

In order to assess changes in fertility and migration behaviour and in order to predict their consequences, it is necessary to be able to measure their changes. The students need to be acquainted with the
basic demographic tools; census reports and other population data, birth rate, death rate, etc. to understand the present situations with reference to the past, so that they could have some idea of future. They will be able to understand the meaning of population explosion in true perspective if they would be in a position to analyse local, national and world wide trends of population growth.

The above mentioned contents of Population Education are more or less universally accepted but when the question imparting sex education component in Population comes up the educationalists are not in total agreement. In fact, it is very much clear that there is a overlapping between the two. In sex education the stress is one prevention of sexual diseases and promoting family planning, while population education aims at qualitative development of human population.

The NCERT with the active assistance of UNESCO Regional Office, Bangkok and with the co-operation of NIEPA (National Institute of Education Planning and Administration) a sister organisation of NCERT has developed curriculum, instructional materials and textual lessons in Population Education and also incorporated them in the NCERT text books on selected school subject.
Curriculum and learning material in population Education for non-formal sector have been prepared at the national level as well as in the states. Besides this Radio and T.V. scripts in English as well as in Hindi have been prepared and circulated in the states for their adaptation. In the Sixth Five Year Plan activities of Population Education were confined to the I to X Class mainly. In the Seventh Five Year Plan they were extended upto 42 level stage. In-fact, this stage of children of age group 16-18 is highly significant as they are almost in the reproductive age group and like to enter matrimonial relations shortly.

Besides the coverage of secondary Education level, attempts have been made to introduce Population in the training institutes of elementary, secondary Education teachers and instructors of non-formal and adult education centres in the Sixth and Seventh Five Year Plans. Development of material in Population Education for the instructors and training them to use this material, both the aspects were kept in mind. Besides face to face training of population education to the educator, now it is possible for us to develop means for distance learning of training them in Population Education as we have overcome the resistance and a favourable climate has been created in the course of time of 20 years. This method is
bound to prove economical as compared to face to face training and our large number of teacher population can be benefited.

Curriculum development, development of T.V. and Radio lessons, Research activities, co-curricular activities, development of kits consisting of non-projected aids were the other activities adopted by the Seventh Five Year Plan to expand Population Education. Many Indian educationists are in favour of some sort of sex education apart without introducing instructions in the available practice of birth control may be useful. In order to give a nomenclature adequate to the coverage and content of this area of study Wayland suggested the use of the terms 'National and family population education and in short Population Education. Prof. T.S.Mehta emphasize that the human physiology and reproduction, contraception and social interactions associated with human sexuality should be included in Population Education. In India human reproduction has been a part of biology course for many years. Thus, it can be safely introduced in school curricula without any controversy.

Smt.Wadia has summarised the content of Population Education as follows:

a) Demographic trends, their determinants and consequences.
b) Social and Economic development, trends and facts and figures.

c) Ecological factors and human population growth.

d) Social community and family organisations.

e) Reproduction in plants, animals and humans.

f) Family and inter-personal relationships.

g) Family size norms as related to above.

h) Basic values and quality of life for human progress.

The above context of population calculation should be looked upon as a measure for bringing about the desired changes in attitudes, behaviour patterns and social values in young generation to make them regular acceptors of family planning programme, upon the occasion arises for happier and healthier life for all. Having fixed the content of Population Education, the next step is to join out in what way and what level of educational ladder the content of this new field can be introduced. At the Regional Workshop, it was unanimous consensus that elements of population should eventually be incorporated into all levels of school system. The report also added that priority level was upper primary or elementary level. If we want to cover the largest possible number of children, then Population Education should be introduced
into the lower classes of primary school. It is at this stage that important attitudes towards life and values are formed and they can be better influenced because of their tender minds, assumes a special significance. Population Education at secondary level is also equally important. As secondary school pupils are nearer to their reproductive decisions. It has children of age group around 16-17. They are therefore on the threshold of their reproductive field which they will enter within couple of years. The impact of any population programme will be more fresh on them than in case of primary school pupils. If the pupils have been previously exposed to population education at the primary level then the new exposure at the secondary school stage will deepen the insights they have gained in the primary classes. The student at the secondary and higher secondary stage should not only develop critical thinking on population issues but should be encouraged to synthesize what they have learned and to apply the knowledge to the real world.

Introduction of population studies at College levels too deserves greater attention on the grounds that the students at this stage are fully developed, both physically and mentally and are already on the threshold or hardly a few year after they would make decisions regarding marriage and reproduction. Thus they are the
priority target group for any population education programme. It is at this stage, if conditions permit, that some idea family planning methods may safely be introduced in the content of Population Education.

ORGANISING CURRICULUM OF POPULATION EDUCATION

The next question before us is that having fixed the content of Population Education, in what way these educational experiences will be effectively organised in the curriculum. Asian Regional Seminar/workshop on Population and Family Education has suggested a number of different ways of adding Population material to the existing curriculum.

The first suggested way is single course on Population Education or it will be given the status of separate subject, which consists in developing a term/a semester or a year course based only on population. It will enable one to study the subject in depth. But at the same time, this will be another additional burden in school curriculum and there also would be problem of finding trained teachers specialised in this field. Moreover, there will be practical difficulty of introducing it in primary and lower secondary levels.

The second alternative can be unit in a subject area. A series of related concepts may be woven into
instructional scheme spread over in 2-3 units in different school subjects. But for this pattern we have to change our school curriculum and train our teachers accordingly, which is a difficult task.

Permission or infusion method is another method suggested by National Seminar on Population Education, 1969, held at Bombay. Population Education should be infused with the curriculum of different areas of study like social studies, Health Education, Mathematics, languages etc. at school and college level. This system will work effectively on all levels of school curriculum. If this approach is accepted it is necessary first of all to conduct a status study of the existing curriculum to find out in the relevant curricular areas-plug points for injecting population materials. The subjects where we can easily find such plug points can be social studies, Economics, Geography, Biology and languages. But the problem is this that for injecting population material we have to exclude some area of human knowledge of that area.

Viederma suggests, "the curriculum offers certain degree of flexibility, this feature of the curriculum should be made use of with necessary constraints. We have to take the precaution that material introduced should take the form of a natural integration not in the form of unnatural manner."
For organising curriculum a mixed approach can be followed. It should be noted that in spite of many inherent advantages that this technique offers, it is difficult, time consuming and expensive to alter so many curricular. This is because, the status study of the curriculum finding the 'plug points through which population materials can be introduced and the department at which they may be introduced at each possible level are greatly laborious task and time-consuming for the curriculum planners.

**CORRELATING SCHOOL SUBJECTS WITH POPULATION EDUCATION**

The problem is accepted from all corners that there is no scope of introducing Population Education in school education as a separate subject. It is to be integrated with other subjects of the curricula. This has to be achieved through deliberate planning of curriculum and relevant syllabi of the school subjects. Some examples are given below:

Languages: The language text books in Mothertongue, Regional language, Hindi and English may contain articles on Population Education in a language and content suitable at the age group on some topics as follows:

Stories representing the problems of larger families or indicating the happiness of small families,

Social Studies: Social studies may contain lessons on impact of population explosion on the socio-economic development of the nations and the deteriorating social life in the developed and developing countries at relevant places. They may contain some population statistics, demography or population dynamics, various social ills such as poverty, indebtedness, illiteracy, litigation, adolescent, delinquency, corruption as the consequences of population growth.

Mathematics: Correlating Population Education and Mathematics is very convenient. Problems relating to, population growth in cities under percentages, family members versus consumption of consumable articles under direct and indirect proportions, drawing of paragraphs etc., scarcity of natural resources, pollution etc. can be dealt with in the curricula of Mathematics.

Science and Health Education: With these subjects also correlation of Population Education is feasible. In science specially in Biology, problems relating to fertility, reproduction, family spacing of child birth, birth control devices etc. can be presented.
DEVELOPMENT PROGRAMME OF POPULATION EDUCATION

Population Education programme at Govt. and national level has started only from the year 1969 as a result of the National Seminar on Population Education held at Bombay in same year. The new concept of population Education in India was explained by Prof. Sloan wayland of Teacher's College Columbia in 1965, when he visited India at the invitation of Indian Government. He suggested three kinds of general strategies for the introduction of Population Education in schools. They are incremental patterns, A System-wide Approach, the Sequential Approach. Under incremental pattern a programme is first introduced in a few selected schools on try out basis. After that it can be extended to more and more places. In A System-wide approach it is introduced through out the education system after the necessary preliminary work is over. In the sequential Approach, the focus of attention is initially on one level of education system and in course of time the programme is introduced in sequence up or down in education ladder. Thus the starting point may be primary level or college level. India started, some combination of the three strategies depending mostly on the availability of resources,
existence of personnel trained for the purpose, structure of education system, national policy on education adopted by the country.

It was the National Seminar in 1969 that the objectives of the programme were laid down and a Population Cell at the NCERT New Delhi was recommended. The NCERT was given the responsibility of introducing Population Education in the Country with the active co-operation of State Department of Education. NCERT developed curriculum, instructional material; and textual subjects ad incorporated them in its text books. The NCERT held a conference on Population Education in New Delhi in 1977. The efforts were made at national and state levels to develop population education programmes. However, there was a wide gap between these development efforts and its actual extension to school in the states. An action plan on Population Education to bridge this gap with active assistance of UNESCO Regional Office, Bankok was also prepared. This plan was drafted for one year and discussed at the highest level where representatives of various central ministries and national agencies in the field of education were present. Planning Commission of the Government of India was also involved. As a result a comprehensive National Population Education project was
launched and United Nations Funds for Population Activities (UNFPA) also expressed its interest and willingness to contribute necessary funds. Simultaneously the Central Health Education Bureau (CHEB) developed a population Education guide for secondary school teachers in October, 1970. It also organised a workshop of Instructional Materials on Population Education in February, 1971 and workshop on Health and Population Education in Schools during Aug. - Sept. 1971. M.S University of Baroda and the Baroda community development service in Sept., 1969 organised a workshop for educating teachers and principals of secondary schools. In May, 1970 and October 1970, the All India Federation of Education Association (AIFEA) organised another workshop and four day seminar with the collaboration of Regional College of Education Bhopal. The workshop was for preparation Instructional material and development of a methodology for the teaching Population Education in teachers colleges and four day Seminar was sponsored for elementary school teachers.

Four regional workshops-cum-seminars were organised in early summer of 1979. Out of thirty one states and union territories, twenty six participated in the workshops and UNESCO and UNFPA contributed $5,32,620 for
the National project. During 1980, the project was implemented in the nine states and one Union territory, whereas seven and one union territory followed suit in the Phase-II from 1981. Originally the project was planned for three years and to be implemented in three phases, but later on it was made a part of entire Sixth Five Year Plan and its duration was extended upto March, 1985. In the third phases the programme was to be launched in five states and five union territories, taking the total number of states and union territories to 28 under National Population Education project in Sixth Five Year Plan, the project covered the target group of classes I to X, age group 6-16 in the schools. In the area of teacher Education, it has introduced population education course in the secondary teachers training colleges. In the non-formal Sector its activities remained confined to the development of sample instructional materials for the use of instructors in the non-formal centres.

In the next five year plan, 1986-1990, scope of Population Education was extended upto +2 stage. In fact this age group of 16-18 is highly significant as they are not almost in the reproductive age group and like to enter matrimonial relations shortly. In the Sixth Five Year Plan, stress on the teacher Education was on primary and
secondary school teachers. In the Seventh Five Year Plan, it included teachers of +2 stage and also preservice elementary/primary teacher training which had not received the due attention. Besides this, Seventh Five Year Plan gave more comprehensive treatment for development of materials for the non-formal sector that the Sixth Five Year Plan. In the earlier plan it had been tried to cover a large number of teachers mainly through face to face training. Later on, mass media communications such as Radio and Television were utilized to spread the message of Population Education and it covered 70 per cent of the country's population. These Radio and T.V. programmes proved very useful for training additional number of teachers than to be covered through face to face training. In the Seventh Five Year Plan besides the development of T.V. & Radio lessons for teachers and students to teach Population Education, Board of Secondary Education, Text Book corporation of Bureau etc. were involved for curriculum development for population Education and Research Activities were encouraged.

The U.G.C. has also now accepted and operationalised in its policy frame the role of extension work as a third dimension equal in importance to research and teaching. The conference of Vice-Chancellor in May,
1984 also stressed that the University system should absorb the concept of Population Education. The U.G.C. envisages the active involvement of the entire massive infrastructure of 139 Universities and over 5000 colleges for inculcating understanding of Population Education issue among students and to the wider community through their extension work. Population Education activities are being undertaken through Department/Centres of Adult continuing Education and Extension in University/Colleges. The UGC-UNFPA Project seeks to set up 12 Population Education Resource Centre (PERCS) in University/DACCEE/CACEE in a phased manner with at least one of their specializing in programmes for women and another for rural population.

The UNFPA has agreed to assist the UGC for strengthening the Population Education activities during 1986 to 1990. The UGC schemes for institution of Population Education clubs needs to be expended in its coverage in the coming places with a view to involving all institutions of higher education. The concept of the Population Education Club as a co-curricular activity first for the institutional youth and through them in the community needs to be detailed in terms of its structure, composition of membership, activities in the college and the community, its co-ordination with various development department, etc.
STATEMENT OF THE PRESENT PROBLEM:

World wide interest in the problem arising from rapid population growth has now become a major concern of everybody and especially of those persons, who are interested in the field of education. The problem of the study is:

"A Comparative Study of the Attitudes towards Population Education by three referents—Demographers, Teachers and Parents."

Research is sine-quo-non of progress in any of human endeavour. Its contribution lies in generating a body of knowledge for designing functionality effective programme of action, in searching solutions to the professional problems encountered in implementing the design programmes and in stimulating innovations. The research, whatever be its long term perspective or immediate focus, in ultimate analysis, enriches the operating area. Any country desirous of improving its system or programme undertakes a search into what it has? What it needs to have? And how the gaps could be bridged?

With the increasing concern of every educated citizen in the country, with the growing number and higher growth rates of population, it has become necessary to impart knowledge about population phenomenon to our young-
generation. Efforts are being made on every international and National levels to instill in children and youth a predilection for small family. With this, population education is now gaining momentum in our country. For this it is necessary to measure attitudes of individuals towards population education. Thus the researcher decided to undertake a survey of the attitudes of 'Teachers', 'Parents' and 'Demographers' belonging to the State of Haryana which is also one of the thickly populated states of India. The Teachers, Parents and demographers are important components of any educational programme like population education. So it was thought necessary to know the attitudes of these in order to seek their cooperation. Thus the aim of the study is to measure the attitudes of the above three referents as regard to population matters and to devise ways and means of introducing population education in the formal school system. Population growth is a social problem and its repercussions are felt by all the members of the society. Therefore, it is expected that the school being a social institution, it should carry on the responsibility through the teachers to educate the rising generation on population issues. Hence in the present study, teachers' views have been taken into consideration. Similarly, parents of primary, middle, high
school and, students of higher education are taken to know whether they are informed about the areas of population education, do they favour the introduction of population education at school level or college level? The objective of inclusion of Demographers in the study is to know their attitudes towards population education. Their opinions and views are valuable for the development of population education as they are well aware of population phenomenon and deal with population size, its distribution and its impact on the society.

Population education is still in its infancy. It is still in the process of introduction in the formal education system of our country particularly at school and college levels. Therefore, there is a great need to ensure over-all clarity in regard to its ultimate goal. The basic goal of population education is to bring about an improvement in the quality of life at family and community levels. Population education cannot be imparted to them in an effective manner unless the students are really aware of the consequences of population problem, which they have to face on micro level of the family and whether they are capable enough to establish a link between the standard of living they enjoy and the number of members of their families and take this analogy on macro level of the society.
Study of population education is important not only for controlling increasing population of the country, but also for creating healthy attitude towards various aspects of population education. At present population education is usually misunderstood as education of family planning. Our society does not allow sex education so freely and, therefore, it does not foster the healthy attitude towards sex. It is now essential for creating healthy attitudes to check growing numbers. This can be done if we know exactly the attitude of the people towards various aspects of population education. It is with this view that present study has been undertaken.

1) How the school teachers, parents and Demographers of Haryana perceive the socio-economic consequences of rapid population growth in the country?

2) Whether they have liking for small families?

3) Whether the parents teachers and Demographers are aware of the new areas of education 'population education'?

4) Whether these three groups are in favour of inclusion of population education in the school curriculum?

The main objective of present study is to seek answers to the above questions from teachers parents and demographers of Haryana by judging their views through an
'Attitude Scale, constructed by researcher herself. It was felt that unless we know the opinions of the above categories about the population situations and population education, no programme of population education can be successful. The Parents, Teachers and Demographers are the main components taken in this regard. The proposed study is important because it will enable the educationists, sociologists, economists, planner and the government to know what action should be taken hereafter for inculcating healthy attitudes towards population education. It is in this light that curriculum of population education should be prepared to be introduced at various levels of learning.

DEFINITIONS OF THE TERM USED

Population Education

Population Education is a new concept still without an adequate definition though many attempts have been made to define population education. However, by population education we mean, a process of developing an awareness and understanding of population education as well as developing rational attitude and behaviour towards that situation for the improvement of quality of life for the individual, the family, the community, the nation and the world. We can say it is an educational programme designed
to study the population situation, human reproduction and family planning and their impact on quality of life.

Population Education is not only population studies as population studies are more academic and research oriented but it covers the body of knowledge, concept and theories which describe an attempts to explain relationship with the social, cultural, economic political and biological environment. The demography, population studies provide source of content for population education programmes. Hence it is an educational programme designed to make learners understand the inter-relationship among population change or situation, development and aspects of quality of human life. It is future oriented, problem centred and value laden and to enable the learner to make sound decision for action about population issues. It may include family planning and sex education also. It is motivational and instructional as well.

The Attitude

The term attitude like most abstract terms in English language has more meaning. Derived from the Latin Word Aptus,' it has, on one hand, the significance of fitness or connotes a subjective or mental state of preparation for action. Herber spencer was one of the earliest psychologists to employ this term. On the other
hand attitude is an effective by product of an individual's experience and has its base in inner urges, acquired habits and environmental influences by which an individual is surrounded. In other words attitudes is a result of personal desires and group stimulations. It is the part of an individual's personality. But an individual is affected by the attitude and behaviour of the group or groups with which he is associated.

There are many opinions about attitude but it can be defined as a periodical measure of one's own mental state. Attitude is a concept of belief. Any person may have beliefs about a particular thing whether it is right or wrong. It is favourable or unfavourable, it should be accepted or rejected. It generally implies a personality disposition or derive which determines behaviour towards opinions and beliefs about a certain type of person, object, situation, institution or concept. After our attitudes are adopted readymade as it were, from our parents, teachers or friends though usually modified by our own experiences.

Many psychologists have defined attitude in different ways: Allport (1935), Stephens (1951), Marria (1951), Guitford (1954), Rommers (1955), Edward (1957), Nunally (1959), Russell (1959), Preeman (1963) Spinner
Thurstone and Chave define attitude: "Attitude means the sum total of man's inclination and feelings, prejudice or bias, preconceived notions, ideas, fears, threats and convictions about any specific topic." 

Thurstone defines an attitude "as the degree of positive or negative effect associated with some psychological object." He further described a psychological object. A psychological object means any symbol, phrase, slogan, person, institution, ideal or idea, towards which people can differ with respect to positive or negative effect.

The definition of an attitude used for this investigation is Thurstone's definition. All these beliefs, favourableness and acceptance are the expressions of an attitude.

On the basis of above definitions three general orientations seem to have emerged.

1. Attitudes as emotional stereotypes.
2. Attitudes as product of intellectualisation or cognition.
3. Attitude as behaviour determinants -
A pioneer definition was given by Thurstone when he described as generalised reactions for or against specific psychological objects.

The examination of various definitions also reveals that attitude is by and large concerned with the feeling aspect. Therefore, attitudes towards population Education should be defined as the degree of positive or negative effect associated with Population Education. Attitude is by and large, a feeling aspect and hence it could be expressed in terms of positive or negative direction.

Demographers

Since demography deals with population size and its distribution, the demographers in India generally used to be persons with formal training in population statistics. However, the persons with formal training in Economics, Geography, Sociology, Commerce and Education can be considered demographer as they study demography in their Masters Programme. Other than these, people working in the population cells and census offices at district headquarters are taken for the data collection. Demographers from Rohtak, Sonepat Rewari and Bhiwani have been included in the study. Demographers, it is presumed, know better population situation in the country as well in the world than any one else in the society.
Parents

Parents in the study are persons who have a child or children in middle and secondary school or in a college in above mentioned four districts of Haryana. They are the important components of the society and it is necessary to know the attitude of these persons whether they are in favour of introducing Population Education at school level or not.

Teachers

They are the persons teaching in middle and secondary schools of four districts of Haryana. Their opinion is valuable because they know better the mental level of the children and what is good or bad for them.

OBJECTIVES OF THE STUDY

1. To study the attitude towards population education of the Demographers males and females.
2. To study the attitude towards population education of the Teachers males and females.
3. To study the attitude towards population education of the Parents males and females.
4. To find out and compare the attitude of Demographer and Teachers towards population education.
5. To find out and compare the attitude of Demographer and Parents towards population education.
6. To find out and compare the attitude of Teachers and Parents towards population education.
7. To find out the extent of relationship between qualifications and attitudes of Demographers, Teachers and Parents towards population.

**HYPOTHESES**

Hypotheses has a very important place in research although it occupies a small space in the body of a thesis. Hypothesis is a statement temporally accepted as true in the light of what is at time known about a phenomenon and it is employed as a basis for action in the search for new truth. It is a tentative supposition or provisional guess which seems to explain the situation under observation. A hypothesis looks forward; it is a proposition which can be put to a test to determine its validity. It may prove to be correct or incorrect. It is almost impossible for a researcher not to have one or more hypotheses before proceeding with his work. If the researcher is not capable of formulating hypotheses about the problem, the researcher may not be ready to undertake its investigation. The aimless collection of data is not likely to lead the investigator anywhere.
Thus investigator has the following hypotheses to provide direction to research, to place the research to clear specific goals to serve these hypothesis as a framework for drawing conclusions, interpretation of data in the light of tentative proposition or provisional guess. It provides the outline for starting conclusions in a meaningful way. In the present study null hypotheses are formed as under:

1. There is no significant difference in the attitude towards population education by male and female 'Demographers'.

2. There is no significant difference in attitude towards population education by male and female 'Teachers'.

3. There is no significant difference in the attitude towards population by male and female 'Parents'.

4. There is no significant difference in the attitude of 'Demographers' and 'Teachers' towards population education.

5. There is no significant difference in the attitude of 'Demographers' and 'Parents' towards population education.

6. There is no significant difference in the Attitude of 'Teachers' and 'Parents' towards population education.
7. There is no significant relationship between qualifications and attitudes of demographers, 'Teachers' and 'Parents' towards population education.

DELIMITATIONS OF THE STUDY

Taking into consideration the constraints of time and resources, the study has been delimited with respect of its area, design, methodology, sample, tools and techniques employed for investigation. The limitations are mentioned as under:

1. The study has been confined to the demographers, parents and teachers of four district headquarters of Haryana State, Rohtak, Rewari, Sonepat and Bhiwani. Therefore, the study is basically confined to the urban areas.

2. In the sample, people having qualifications of graduation level or above were only taken and under graduates were not made part of the sample.

3. As regards sample of parents two categories are formed, graduates and post graduates. Similarly Teachers of secondary and higher secondary classes are categorised in the sample. Among the demographers
sample is limited to the people of Economics, Geography, Sociology, Education and Commerce disciplines and workers of family planning centres, those related with population field and working in the population calls in the four sample cities have been taken.
REFERENCES


16. Ibid., p. 252.

17. Ibid., p. 252.


19. Ibid.


21. Ibid.


30. Ibid.