UNIT 6: POPULATION EDUCATION CURRICULUM AT PRIMARY AND SECONDARY LEVELS OF EDUCATION

UNIT STRUCTURE

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6.1 LEARNING OBJECTIVES

After going through this unit, you will be able to-

- define the population education curriculum in primary and secondary level of education;
- identify the objectives of population education at primary level and

secondary level;

- indicate the different reasons for introducing population education from the primary to secondary levels of education;
- explain the different components of population education at primary and secondary levels of education;
- analyse the problems of introducing population education in the curriculum of primary level; and
- discuss the integration of population concepts with different subjects of secondary education.

6.2 INTRODUCTION

Population education curriculum is the sum total of all the programmes and experiences which are provided by an educational institution for achieving the educational objectives of population education for that particular stage of education. Primary education is imparted at the childhood stage which is the period of consolidation. As the students of this stage are small and growing, curriculum of population education should be arranged according to their age, need, interest, growth and development. Likewise, secondary education is the second formal stage of education and after this stage maximum number of people left the formal education and enters in their family life. So, imparting population education in the secondary stage of education is very important for this group of people. We shall, here, discuss population education in primary and secondary levels of education; objectives of population education at both level, different reasons of introducing population education from the primary to secondary levels of education and different components of population education at both the levels of school education. We shall also discuss the integration of population concepts with different subjects of secondary education.

6.3 POPULATION EDUCATION AND PRIMARY LEVEL OF EDUCATION

Generally primary education comprises of the children of age group

6-11 years. This age is most crucial for development of values and attitudes. Though attitudes and values developed at this stage change in future but the primary pattern continues. At this stage, the child is exposed to his local surroundings; therefore, while framing objectives of population education, characteristics of children of this group should be kept in mind.

Regarding curriculum of population education of primary level, T. B. Mehta and B. S. Parakh opined that it should be possible at this stage to give very simple ideas regarding family size and happy family life. The ideas like 'a small family is a happy family' are to be concentrated upon. If we provide basic needs like food, cloth and shelter to every individual in such a large country like ours, we shall exhaust our limited resources. This is to be drilled in the minds of children.

6.4 OBJECTIVES OF POPULATION EDUCATION AT PRIMARY LEVEL EDUCATION

Considering the characteristics of children of primary level, following objectives of population education at primary level are framed.

- To develop awareness about the increasing population in family and locality.
- To develop understanding about the relationship between small family and happy family.
- To develop awareness about the problems created by population growth.
- To develop awareness about the responsibilities of children towards family.
- To develop understanding about the relationship between:
  - (i) Population growth and standard of living.
  - (ii) Population growth and economic development.
  - (iii) Population growth and environment.
  - (iv) Population growth and health and nutrition of the family and local people.
- To develop ability among students to collect relevant data regarding population of family, neighbourhood and village.

- To develop understanding of basic needs of human being.
- To develop understanding of increase population and reducing facilities caused by population growth.
- To provide basic knowledge about reproduction process of living beings.
- To develop sound habits among students regarding health and hygiene.
- To develop understanding about nutritious food.
- To develop understanding about the effects of population growth.
- To develop understanding about the remedial measures of population growth.
- To develop awareness about the rights and duties of a good citizen.
- To develop rational attitude among children.
- To develop understanding about the basic rights of the child.



CHECK YOUR PROGRESS

Q 1: Mention the view of Mehta and Parakh regarding curriculum of population education at primary level.

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Q 2: Write two objectives of population education at primary level of education.

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6.5 REASONS OF INTRODUCING POPULATION EDUCATION FROM THE PRIMARY LEVEL OF EDUCATION

There are different arguments in favour of introducing population education at primary stage of education. Some of them are mentioned below:

- **Large number of Students:** A large number of students (almost all) are enrolled in primary school to acquire compulsory fundamental

education of their life. If basic concepts of population education are included in the curriculum of primary education, then it is very beneficial for the young child to learn something about population education. At this level, different important attitude towards life and social values are also formed among children. Again, it is generally observed that after pursuing primary education, most of the students do not complete their secondary education due to different socio-personal problems. So, it is better to provide them opportunities to acquire something about population education at primary level.

- **Minimum Benefits to the Dropouts:** As compared to secondary level in education, drop-out rate is low in primary level. The people who drop-out from schooling after primary education are benefitted from the population education programme included in primary level. This education will help them to understand the dreadful effect of population growth on the quality of life.
- **Easy to Include:** It is very easy to include the contents of population education in the curriculum of primary education. It is easy because there is no diversity in the curriculum of primary education in a same classroom. Again, over burden of contents are not there in the curriculum of primary education, so it is very easier to include.
- **Ground for Attaining Large Objectives:** Primary education is termed as a ground for attaining large objectives of population education. In this regard, Dr. Adlefson viewed that students on the elementary level, starting from 7 to 8 years of age, can be made understand the pattern of population growth in their own country with particular attention given on birth and death rates and the rates of population growth. Again Prof. Jaya Suriya opined that the most important objectives to prepare the ground for the attainment of large objectives may be achieved at the elementary or the primary level. According to him, the population knowledge to be imparted to the children of primary level should be limited to some important facts related to population.
- **Right Time for Right Ideas:** Primary education is the right time or period to get right ideas of population education. Very simple ideas

like family size and norms of happy family life are given at primary level. Again, the idea of 'small family is a happy family' should be taught by the teacher to the students of primary education. Again students must be differentiated the benefits of small family and large family.

- **Children-the Future Citizen:** Today's **c**hildren of primary schools are the future responsible citizen of our country. For making them responsible as future citizen, importance should be given on providing knowledge of different issues of our country. One such issue is population related problems of our country. So, it is needed to provide them knowledge of population education from the very beginning of their formal education.
- **Less Burden of Examination:** In primary level of education, burden of examination is less as compared to other levels of education. So, it will be very easy to infuse small topics of information about population education through different subjects like languages and social studies. This requires an imagination and understanding on the part of teachers of primary schools. Teachers should also try to touch population related concepts while teaching science, mathematics etc.
- **Base of the Educational Ladder:** Primary level of education is known as a base of whole educational ladder. Educationists across the globe agree to introduce population education in the curriculum of schools, colleges and other educational institutions. As primary education is treated as base, so it is the best stage of education to start population education in the curriculum with great hope and expectations.
- **Sowing the Seeds of Disaffection:** Contents of population education of primary level create such attitude among little children that develop a sense of disaffection for their parents and others who are responsible for population growth of their particular families. In this stage, it is likely to be presented in an over-simplified manner that could sow the seeds of disaffection among children.

6.6 CURRICULUM OF POPULATION EDUCATION AT PRIMARY LEVEL

Primary education is known as first formal education of individual's life. The age group of children in this education comprises 6 to 13/14 years. So, while constructing curriculum for this group of children, special care should be taken. In this regard, special importance is given on interest, attitude, need, aspiration, growth and development of the children. Following aspects are included in the curriculum of population education for primary stage of education.

1. Social Life

- Social causes arise from population growth.
- Population growth and superstitious belief.
- Population growth and standard of living.
- Population growth and social disharmony.
- Beggar problem of India in relation to population growth.
- Population growth and lack of discipline.
- Social problems caused by early marriage.
- Impact of rapid growth of population on socio-economic life of individual.

2. Economic Life

- Food problems created by population growth.
- Population growth and less per capita income.
- Unemployment problem created by population growth.
- Less availability of consumer goods due to population growth.
- Employment problems of women due to population growth.
- Scarcity of means and larger demand of people.

3. Environment

- Air pollution created from population explosion.
- Water pollution created from population explosion.
- Soil pollution created from population explosion.
- Noise pollution created from population explosion.
- Natural hazards and calamities created from population

explosion.

- Population growth and its pressure on soil, water, air and noise pollution, deforestation, soil erosion and threat to wildlife.

4. Family Life

- Role of parents in family life.
- Population growth and marriage.
- Population growth and remarriage.
- Population growth and universality of marriage.
- Population growth and belief on wrong notions like 'child is the gift of God'.
- Family tensions created by population growth.
- Lack of love, care and affection due to population growth.
- Population growth and low standard of living.
- Gender equality in family and follow the notion like 'girls are as important as boys'.
- Small family norm for better quality of life.

5. Health

- Different diseases and population growth.
- Poor quality medical facilities due to population growth.
- Shortage of medicine due to over population.
- Shortage of doctors due to over population.
- Cleanliness, safe drinking water, balanced diet health facilities.
- Healthy mother, healthy child need and to have a fewer children.

6. Nutrition

- Low quality of food due to population growth.
- Population growth and adulteration.
- Lack of nutritious food due to population growth.
- Population growth and hunger.

7. Educational Life

- Population growth and poor quality of education.
- Overcrowded classroom due to population growth.
- Shortage of schools and colleges created by population growth.
- Shortage of efficient teachers due to population growth.

8. Demographic Implication

- Population dynamics.
- Size, structure and composition of population at local and national level.
- Population growth- causes and consequences.
- Impact of migration to rural and urban areas.

All these contents of the above mentioned aspects should be included in the curriculum for providing knowledge of population education to young children. Students of primary level of education will be benefitted by applying the knowledge of population education in their future life.

Population education is integrated with different subjects of primary school. Such as:

(i) Languages: In the form of stories, essays and poems in the mother tongue, regional and national language.

(ii) Social Studies: Statistics on population and impact of population on socio-economic development can be discussed.

(iii) Mathematics: With the help of percentage and graphical representations students can be made aware of population growth.

(iv) Science: Problems of fertility, reproduction, family planning and hygiene problems due to over population can be taught.

6.7 PROBLEMS OF INTRODUCING POPULATION EDUCATION IN THE CURRICULUM OF PRIMARY LEVEL

There are different problems faced by educators while introducing population education in the curriculum of primary level. These problems are mentioned below:

- It is very difficult to introduce several concepts of population education at this stage.
- At this stage, concept of population education may suffer from over-simplification on account of the age and low intellectual level of the students.

- There is no evidence that an early exposure of population education would affect decision-making and reproductive behaviour of the individual in later life. A large number of students leave before finishing their elementary schooling and the gap in terms of years between their exposure of population education when they are in school and their reaching the reproductive age is so wide that there is no guarantee that they will vote for a small family.
- Significance of small family norms is not understood by children at the primary level of education.



CHECK YOUR PROGRESS

Q 3: Why is population education very easier to include in the curriculum of primary education?

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Q 4: Write the contents of family life in the curriculum of primary education.

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Q 5: Mention two problems of introducing population education in the curriculum of primary level.

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6.8 POPULATION EDUCATION AND SECONDARY LEVEL OF EDUCATION

Generally, the students of secondary stage of education are adolescents. This is the most crucial period of human life. Students of this stage are more mature and grown up. The population education curriculum at the secondary stage should be arranged and constructed according to the growth and development, age, maturation and interest of the learners. While framing the curriculum a number of points will have to be taken into

consideration as the period of adolescence starts at this stage. During this time, children pass through a critical and transitional period. Thus, guidance and counselling from the teachers and parents are always needed when imparting population education. The curriculum of population education of secondary education is not only important for teachers but also for learners and parents. It removes the confusion between population education and sex education, population education and family planning education.

Regarding inclusion of population education in the curriculum of secondary education, T. S. Mehta and B. S. Parakh viewed that population education will have to be undertaken in subject areas like Geography, Civics, Social Studies, General science and Biology. Manuals on population education can also be prepared. Specific teaching units can be put in manuals focussed on population dynamics and its various social, political, economic repercussions. Graphics can also be made of use. Films can also be shown to class X and XII students. Students of secondary stage will appreciate all these.

6.9 OBJECTIVES OF POPULATION EDUCATION AT SECONDARY LEVEL

Curriculum of population education of secondary stage is based on the specific objectives of population education of this particular stage. These are mentioned below:

- To develop an understanding of population situation of the country, in specific and the world in general.
- To develop understanding of implication of rapid population growth and
  - Natural resources.
  - Basic needs.
  - Essential social services.
  - Environment.
  - Health and education.
- To develop understanding of the relationship between population and socio-economic development.
- To develop appreciation of small family norms.

- To acquire knowledge about different basic demographic concepts like mortality, fertility, migration, urbanisation, density etc.
- To acquaint with the knowledge of social and national development programmes and its impact on society.
- To impart students' family life education.
- To provide knowledge about human reproductive system and basic concepts of sex education.
- To provide knowledge of the population policies and programmes of the country.
- To develop logical thinking and rational attitude regarding sex equality, human rights, equality of life, small family, etc.
- To provide education about rights and duties of a citizen.
- To develop ability among students of secondary stage to collect data of population, income, natural resources, etc.
- To develop ability among students of secondary stage to present facts and express views on population issues.
- To develop ability among students of secondary stage to collect information about quality of food, general health, scientific facts and causes of population growth.
- To develop skills among students to minimise the population related problems in the society.



CHECK YOUR PROGRESS

Q 6: Mention the view of Mehta and Parakh regarding curriculum of population education at secondary level.

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Q 7: Write two objectives of population education at primary level of education.

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6.10 NEED OF POPULATION EDUCATION AT SECONDARY LEVEL OF EDUCATION

Secondary stage of education is an important stage of education as the learners are normally adolescents. Sexual development is an important developmental characteristic of this stage. Students of this stage also entered into their puberty period. So it is very necessary to impart population education in secondary stage. The reasons for including population education in curriculum of secondary education are as follows:

- **Bring Freshness to the Knowledge of Adolescents:** All the students of secondary education normally belong to the age group of 15 to 18 years. They are very near to their reproductive age and this is considered as the threshold of adulthood. After 3 to 4-year gap, they will enter to adult stage. The impact of population education at this stage will make their knowledge more applicable in later life of practical situation.
- **Transitional Period of Human Life:** Adolescence stage is termed as a transitional period of human life. In this stage, adolescents experience the feeling of sexual development. Various types of sexual abnormalities are found among youths in this stage. Main reason for all these abnormalities is nothing but the lack of knowledge of population education. Therefore, guidance and counselling on sex education is necessary to provide at this transitional period of life through population education.
- **Future Leader of Society:** Students of secondary education are the future leader of society. Again they are middle level leader whether in town or village while pursuing secondary education. They can influence the masses to a considerable extent. Their knowledge on population helps them in transmitting the knowledge on population growth to the masses.
- **Easy to Prepare:** As compared to primary level of education, it is easy to prepare the curricular material at secondary level because students of this stage are advanced in terms of age and have broader

experiences. They can easily understand the fundamental relationship between population growth and other variables related to it. Therefore, not only in our country but also the globe as a whole need to prepare varied programmes of population education for the students of secondary level.

- **Well Equipped Teacher:** Academically and professionally the teachers of secondary schools are better equipped as compared to teachers of primary level education. They have diversified knowledge particularly required for secondary education. Because of well-equipped teachers, it is easy to include population education contents in the curriculum of secondary education.
- **Easy to Teach and Explain:** As the students of secondary education are more mature and have better comprehension level, it is easy to discuss with them about different population related problems. It is not possible to include some topics in the population education curriculum of primary education like physiology of human reproduction, structure and functions of sex glands. Controversial topics of population education can be included in the programme at secondary stage because students can learn better in this stage. It is also easier to explain them the implications of population education at the micro level and at the macro level.
- **Possible to Impart Quick and Accurate Education:** At the secondary level, population education programme can be imparted more quickly and accurately because number of students in secondary schools are less and well qualified and trained teachers are there. As the students of this stage do not develop critical thinking, so they should be encouraged to synthesise what they have learnt and to apply knowledge in day-to-day life.
- **Easy to Evaluate:** In the secondary level education, it is easy to evaluate the population education programme. As the students are matured enough and teachers are professionally trained, it is not a problem to evaluate the population education programme.

6.11 CURRICULUM OF POPULATION EDUCATION AT SECONDARY LEVEL

While constructing the curriculum for the students of secondary level, main focus is to be given on age, maturity, psychological and emotional development of the students. Imparting population education at this stage of education is very important but proper care should be taken while including contents of population education in the curriculum. Proper guidance of teachers and parents are required for balance growth of students while acquiring knowledge of population education. Following aspects are included in the curriculum of population education for secondary stage of education.

1. Social Life

- Different types of marriage and its necessity.
- Effect of divorce.
- Orthodoxy of prejudices and social tradition.
- Relationship between population growth and social disharmony.
- Role of women in social as well as national development.
- Influence of population growth in quality of life.
- Interrelationship between various aspects of marriage and quality of life.

2. Economic Life

- Relationship between population growth and per capita income.
- Interrelationship between population growth and economic life.
- Influence of population growth on demand and supply.
- Influence of population growth on price rise.
- Interrelationship between population growth and national income.
- Effect of population growth on unemployment and under-employment.
- Population growth and lack of industrialization.
- Interrelationship between population growth and labour supply.
- Sustaining economic growth and status of women.

3. Environment

- Effect of population growth on environmental pollution like water, air, noise, soil etc.
- Adulteration of food materials.
- Control of environmental pollution.
- Effects of environmental pollution on human life.
- Better environment for better living.
- Interrelationship between women and environmental issues.

4. Sex Life

- Introduction of sex education
- Concept of sex deviations.
- Basic information of HIV/AIDS and its causes, symptoms and prevention for better life.
- Sex mechanism.
- Concept of human reproduction in relation with physiology and related hygiene.
- Structure, types and functions of different human glands.
- Basic knowledge about different sexual diseases like HIV, AIDS etc.

5. Demographic Implication

- Influence of population growth on mortality, fertility and age structure.
- Population policy for population control.
- Relationship of population growth with birth rate and death rate.
- Family planning methods for population control.
- Estimation of World population in general and population of India in particular.
- Population growth in developed and developing regions of the World.
- Occupational structure of India.
- Pattern and level of using natural resources.
- Estimation of unemployed youths in India.

6. Family Life

- Family: its basic concepts and different types.
- Pros and cons of joint family and nuclear family.
- Origin of the family system.
- Comparative analysis of the effect of small family and large family.
- Government benefits for green card holders.

7. Health

- Development of different diseases due to population growth.
- Poor quality medical facilities due to population growth.
- Maternal health and unscientific family planning.
- Child's ill health due to unwanted pregnancy.

All these contents of the above mentioned aspects should be included in the curriculum for providing knowledge of population education to youth. Students of secondary level of education will be benefitted by applying the knowledge of population education in their future life.

6.12 INTEGRATING POPULATION CONCEPTS THROUGH DIFFERENT SUBJECTS OF SECONDARY SCHOOLS

In secondary stage of education, population education is not treated as a separate subject. It should be integrated with different school subjects. Social sciences including History, Civics, Economics and Geography are compulsory and widely read subjects up to secondary level of schooling. Therefore, population education can be easily and effectively imparted through these subjects in an integrated manner. For example:

1) History:

- Population growth and its effect on industrial revolution.
- Growth of population and urbanisation in pre-independence India.
- Impact of population growth on occupation in the British period and in post-independence period.
- Expansion of agriculture in ancient India.

- Socio-economic conditions of modern India.

2) Civics:

- Population growth and its effect on demands and tension.
- Rapid population growth and socio-political and economic problems.
- Great influx of unskilled and skilled labour.
- Population growth and shortfall of amenities.
- Barriers of population control like social customs, traditions, superstition etc.
- Comparison of population of different regions.

3) Economics:

- Population growth, economic growth, standard of living and economic productivity.
- Optimum utilisation of human resources.
- Population control and better quality of life.
- Habits of balanced savings developed by population education.
- Population growth and national income.
- Population growth, poverty and migration.

4) Geography:

- Influence of climate on population growth.
- Reason of high density and low density of population.
- Population growth and its burden on natural resources of a country.
- Impact of growing population on land holdings.
- Comparison of population growth of different countries and its land areas.
- Causes of natural calamities, their relationship with population growth.

Apart from social science, population education is also imparted through different subjects of secondary education. Mathematics, Languages, Science, Biology and Home Sciences are different subjects of secondary education curriculum through which population education is imparted. For example:

5) Mathematics:

- Simple addition, subtraction, multiplication and division of population data.
- Calculation of percentage changes in population.
- Calculation of growth rate, birth rate and death rate.
- Projection of population on the basis of annual or decadal growth rate.
- Calculation of population density,
- Calculation of ratios, like land-people ratio, rural-urban population, literate-illiterate population, male-female population etc.
- Graphical representation of total population, birth rates, death rates, growth rates, etc.
- Making diagrams to show the population composition.

6) Languages:

- Poems on small family, population explosion, importance of education, women education, health and hygiene habits etc.
- Essays on population growth, family planning programmes, literacy, human rights, small families, housing problems, environmental pollution etc.
- Family drama showing comparison of small family and large family.
- Auto biographies and biographies of national leaders and their views on population issues.
- Stories highlighting the problems of large families, unemployment, illiteracy, status of women in society, effects of superstition, taboos, traditions and customs, population density etc.

7) Science:

- Energy, renewable and non-renewable resources, traditional and non-traditional uses and abuses of nuclear energy.
- Recyclable and non-recyclable matter.
- Measures of controlling environmental pollution.

- Qualities of good drinking water and its purification.
- Use of various chemicals to create healthy and hygienic living conditions.
- Threats due to excessive use of fertilizers and pesticides etc.

8) Biology:

- Observation of plants, animals and human life.
- Factors affecting growth of population like climate, food supply and environment.
- Reproduction in plants, animals and man.
- Life cycle of human being.
- Food habits of man.
- Different stages of human evolution.
- Green plants and their importance for mankind.

9) Home Science:

- Personal health and hygiene.
- Communicable disease- its causes, prevention and cure.
- Human physiology.
- Child care and child welfare.
- First aid.
- Nutrition and balance diet.
- Small family vs. large family.
- Family budget.
- Social responsibilities.
- Standard of living etc.

The above discussion leads to the conclusion that population education issues can be integrated with various subjects of the present curriculum of secondary schools.



CHECK YOUR PROGRESS

Q 8: Why is population education important in secondary stage? Write two points.

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Q 9: Write the contents of sex life in the curriculum of secondary education.

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Q 10: Write the contents of languages as an integrated subject of population education for secondary level.

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6.13 LET US SUM UP

- Population education curriculum is the sum total of all the programmes and experiences which are provided by an educational institution for achieving the educational objectives of population education for that particular stage of education.
- Regarding curriculum of population education of primary level, T. B. Mehta and B. S. Parakh opined that it should be possible at this stage to give very simple ideas regarding family size and happy family life.
- Main objectives of population education at primary education are to create awareness among the young children about the increasing population in family and locality, relationship between small family and happy family, problems created by population growth and responsibilities of children towards family.
- There is a famous saying that 'Well begun is half done'. Primary education is the first formal education for all people around the globe. If population education is imparted at primary level, then it creates awareness among the child about population from the very beginning of their life.
- If basic concepts of population education are included in the curriculum of primary education, then it is very beneficial for the

young child to learn something about population education.

- Primary education is the right time or period to get right ideas of population education. Very simple ideas like family size and norms of happy family life are given at primary level.
- While constructing curriculum for primary level children, special care should be taken. In this regard, special importance is given on interest, attitude, need, aspiration, growth and development of the children.
- Different aspects included in the curriculum of primary education are social life, economic life, environment, family life, health, nutrition, educational life and demographic implication.
- At the primary stage of education, concept of population education may suffer from over-simplification on account of the age and low intellectual level of the students.
- For making aware of our younger generation about the ill effect of population explosion, population education should be provided to them in their education especially secondary education.
- The population education curriculum at the secondary stage should be arranged and constructed according to the growth and development, age, maturation and interest of the learners.
- The curriculum of population education of secondary education is not only important for teachers but also for learners and parents also. It removes the confusion between population education and sex education, population education and family planning education.
- One main objective of population education at secondary level is to develop understanding of the relationship between population and socio-economic development and to develop appreciation of small family norms.
- Various types of sexual abnormalities are found among youths in this stage. Main reason for all these abnormalities is nothing but the lack of knowledge of population education. Therefore, guidance and counselling on sex education is necessary to provide at this transitional period of life through population education.

- Controversial topics of population education can be included in the programme at secondary stage because students can learn better in this stage. It is also easier to explain to them the implications of the population education at the micro level and at the macro level.
- Social sciences including History, Civics, Economics and Geography are compulsory and widely read subjects up to secondary level of schooling. Therefore, population education can be easily and effectively imparted through these subjects in an integrated manner.



6.14 FURTHER READING

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