UNIT 8 POPULATION EDUCATION

Structure

8.1 Introduction
8.2 Objectives
8.3 Population Education in Schools
  8.3.1 What is Population Education?
  8.3.2 Education: A Force for Change
  8.3.3 The Phases of Population Education Programme
  8.3.4 Achievement and Experiences at the State Level
8.4 Major Thrust of Population Education
  8.4.1 The Integration of New Population and Development Concerns
  8.4.2 Education in Adolescence Reproductive and Sexual Health (ARSH)
  8.4.3 HIV/AIDS, Drug Abuse to be Part of School Curriculum
  8.4.4 Gender Issues
  8.4.5 Family: Its Changing Structure and Role
  8.4.6 Tribal Communities, Hill Area Population, Displaced and Migrants and Urbanisation
  8.4.7 Teacher Education
  8.4.8 Skill Development in Adolescent Education
8.5 The Broad Approaches
  8.5.1 Curricular Approach
  8.5.2 Co-curricular Approach
8.6 Strategies for Imparting Population Education
  8.6.1 Action – Intensive Strategies
  8.6.2 Problem – Specific Strategies
8.7 Let Us Sum Up
8.8 Glossary
8.9 Answers to Check Your Progress

8.1 INTRODUCTION

The nucleus of economic and social development is to improve the quality of lives of people, so that they could be assets to the society by making themselves productive. India was the first country in the world to launch a national programme in 1952, emphasising family planning with a view to reducing birth rates “to stabilise the population at the level consistent with the requirement of national economy”. After 1952, sharp declines in the death rates were, however, not accompanied by similar drop in birth rates. The National Health Policy, 1983 stated that replacement levels of total fertility rate (TFR: average number of children born to a woman during her life time) should be achieved by the year 2000.

In the backdrop of the above, population of India has already crossed 1 million (100 crore) mark in 2000. Some basic information may make the matter more clear. India has 16 per cent of global population and 2.4 percent of globe’s land area. If
current trend of population growth continues, India may overtake China in 2045, to become the most populous country in the world. While global population has increased threefold during this century, from 2 billion to 6 billion, the population of India has increased nearly five times from 238 million (23 crore) to one billion (100 crore) in the same period. Stabilising population is an essential requirement for promoting sustainable development with more equitable distribution.

8.2 OBJECTIVES

After studying this unit, you should be able to:

- explain the concept of population education;
- describe the major thrust areas of population education;
- highlight the temporal variations in objectives of population education;
- pinpoint the broad approaches of population education;
- implement important strategies on population education; and
- organise different activities for inculcating ARSH-related skills among students.

8.3 POPULATION EDUCATION IN SCHOOLS

8.3.1 What is Population Education?

It is generally agreed that population education is the process of helping people understand the nature, causes and the implications of population processes, families, communities and nations. It focuses on the family and individual decisions influencing population change at the micro level, as well as on broad demographic level.

Interpretations of the meaning of population education vary, perhaps too widely, from culture to culture. To be relevant to learners' needs, population education must take cultural differences into account.

The problem is compounded by the complexity of population education, which draws from a number of old concepts that are more established in the psyche of a group, and by the fact that the concepts of population education are imbedded into various subject areas, instead of being taught as a distinct subject.

It is sometimes assumed, mistakenly, that population education deals exclusively with demography or macro-level population issues. Another incorrect assumption is that preventing adolescent pregnancy is its only goal.

Tomorrow's leaders, in both the public and private sectors, will be product of today's schools; it is important to them to understand how population affects local and national welfare and development. Most of the children now in schools will one day be parents; how soon this will occur depends upon a number of factors, including how long they will remain in schools and what they learn while they are there.

The educators should offer learners a balanced population education programme that draws its knowledge from four principal sources of information - social demography, family life, environment and human sexuality.
8.3.2 Education: A Force for Change

Education is considered to be a potent force to change and modify the class and character of a society. Civilisations have been transformed and totally changed by conquests through education.

8.3.3 The Phases of Population Education Programme

During the first phase, Population Education, teacher training, preparation of guidelines, teaching aids, etc. were completed. During the second phase, the programme was extended to secondary and higher secondary stages of school education. It is during the second phase that population education was introduced in the curriculum in 1986. During next two phases, the consolidation of policies and programmes were implemented.

During the fourth phase from 1998 to 2002, the NPP, 2000 was announced, and it redefined population issues. This development introduced certain crucial elements in the National Population Education programme framework, such as reproductive health and adolescents as an important under-served group.

8.3.4 Achievements and Experiences at the State Level

In this State, the project had been taken up in the year 1983-84 and the first phase was completed in the year 1985-86. During the next phase, the programme was extended to secondary and higher secondary schools. The implementation of the Population Education Programme in the State is done by the Population Education Cell of the State Council of Educational Research and Training.

8.4 MAJOR THRUST OF POPULATION EDUCATION

8.4.1 The Integration of New Population and Development Concerns

Out of the experiences gained during the implementation of NPEP at the national as well as at state levels, an yawning gap was identified between the existing conceptual framework and the required exercises that have to be done to streamline the population, especially after the recommendations of the International Conference on Population and Development (ICPD), Cairo, 1994. It resulted in a paradigm shift in population education programme from the demographic or population control approach to broader and sustainable development approach.

8.4.2 Education in Adolescence Reproductive and Sexual Health (ARSH)

Adolescents represent about one fifth of India's population. The needs of adolescents, including unwanted pregnancies and sexually transmitted diseases (STDs), have not been specifically addressed to in the past. Programmes should encourage delayed marriage and child-bearing, and education of adolescents about the consequences of unprotected sex. Reproductive health services for adolescent girls and boys are especially significant in rural India, where adolescent marriage and pregnancy is widely prevalent.

8.4.3 HIV/AIDS, Drug Abuse to be Part of School Curriculum

The emergence of human immunodeficiency virus (HIV) and acquired immune deficiency syndrome (AIDS) poses a challenge to educators, in view of its global
importance and the complexities of dealing with it in the classroom is emphasised in the next Unit. In South Africa for example, HIV/AIDS has been officially declared a national disaster with close to 1800 teachers dying annually as a result of Aids related diseases. The impact of HIV in South Africa’s schools has transformed children into orphans and into dropouts. It is making life difficult for children who can now no longer access adequate nutrition, basic healthcare, housing and clothing. These children are becoming heads of households, due largely to death of their parents as a result of Aids. A decline in School enrolment is one of the most visible effects of HIV/AIDS epidemic, which may escalate as good elementary education ranks amongst the most effective and cost effective means of preventing HIV. Some of the major impact of HIV/AIDS are:

- The removal of children from School to care for parents and sick family members.
- Aids related infertility and a decline in birth rate, leading to fewer children.
- More children are themselves infected and either do not live long enough to start school or do not survive the years of schooling.
- Teacher absenteeism fro class during the period the period of sickness, or to take care of an infected relative.
- The deaths arising from HIV/AIDS related cases is especially devastating the rural and remote areas where schools depend heavily on one or two teachers. Moreover, skilled teachers willing to teach in remote areas are not easily replaceable.

8.4.4 Gender Issues

Population education should not only teach gender issues; it should also help students (especially older ones) to form positive attitudes and values regarding gender. Inclusion of the following concepts and approaches in the school curricula will foster positive attitudes and encourage students to think about gender issues:

a) Fairness, or equitable treatment of male and female, should be stressed
b) Harmful stereotypes of both sexes should be exposed
c) Girls have a right to know about the implications of early pregnancy for their future. Boy and girls both need to know how to avoid early pregnancy and to behave responsibly.
d) Analysis of gender roles should be encouraged, including not only occupational roles, but also domestic roles

8.4.5 Family: Its Changing Structure and Role

a) Family Planning: Inclusion of family planning in the curriculum of school population education allows young people to reflect on the implications of family planning and un-spaced births. Of course, not all family planning issues are appropriate for school children. Just, as in other content areas, priorities have to be set. The following four segments may be safely included in the population education programme:

- Becoming pregnant before age 18 or after age 35, increases the health risks for both mother and child
**The risk of death of young children is increased by about 50 per cent if the interval between births is less than two years.**

**Having more than four children increases the health risks of pregnancy and childbirth.** With the 16 per cent of world population, India account for over 20 per cent of the world's maternal deaths. The maternal mortality ratio, defined as the number of maternal deaths per 100,000 live births, is incredibly high at 408 per 100,000 live births for our country (1977), which is unacceptable when compared to indices elsewhere in Asia. This maternal mortality rate in Sri Lanka is 30, China 115, Thailand 200, Pakistan 340, Indonesia 390, Bangladesh 850 and Nepal 1500.

If we take the cases of maternal mortality ratio of various states of the Indian Union, it is 87 in Kerala, 451 in Bihar, 498 in Madhya Pradesh, 607 in Rajasthan, 707 in Uttar Pradesh and 739 in Orissa.

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b) **Family Size:** While family-size is not the first consideration of an educator, it deserves some considerations in the school curricula. The family-size decisions of today's teenagers and their children will determine whether, or how soon, the world's population will double again.

**Sex Ratio:** India shares a distinctive feature of South Asian and Chinese populations as regard the sex ratio, with a century's old deficit of females. The (female to male) sex ratio has been steadily declining. From 1901 to 1991, the sex ratio has declined from 972 to 927. This is largely attributed to the son preference, discrimination against the girl child, leading to lower female literacy, female foeticide, higher fertility and higher mortality levels for females, in all age groups up to 45 years of age.

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### 8.4.6 Tribal Communities, Hill Area Population, Displaced and Migrants and Urbanisation

In general, population in remote and low density areas do not have adequate access to affordable health care services. Tribal population often have high levels of morbidity arising from poor nutrition, particularly in situations where they are involuntarily displaced and resettled. Frequently, they have low levels of literacy, coupled with high infant, child and maternal mortality. These facts are closely associated with the majority of the tribal population of this State, which constitutes 32 per cent of total population. The development in hill areas have been taken over by the Tripura Tribal Area Autonomous District Council (TTAADC), but their intermingling with the total population has to be ensured for integrated development of the State.

All great products have their some by-products. With the development of industries and commerce, the process of urbanisation was speeded up, and as its by-product the slums were created around big cities and industrial organisation. Nearly 100 million people live in urban slums, with little or no basic facilities. These facts should be made available through the school curriculum to sensitise the students with a view to preparing them to take up these, when they would function as adults in the society.

### 3.4.7 Teacher Education

One of the most important contributions population education can make to an education system is the introduction of more effective, participatory methods of teaching. These teaching techniques have to be applied in teacher training, rather than simply explained
in lectures; and practised under supervision. In the process, the prospective teachers may be helped in clarifying their own values on population education.

Up to now, teacher training objectives have not included modifications of teachers’ own family planning behaviours. Large number of teachers being trained in population education is in the reproductive age group and has a need for family planning information, which could be addressed by including the relevant information in the teacher training modules, both pre-service and in-service. Following are several key issues:

- Whether all teachers who teach the relevant subjects should receive training in population education, or whether it might be better to be selective in some instances.
- In the cascade or tier approach, traditionally favoured by population educators, a central nucleus of trainers (key resource persons) trains a second layer which, in turn, trains a third, and so on. This approach has a serious weakness in the loss of content that occurs with the involvement of each new tier of trainers. Knowledge held by the core trainers may not reach the classroom teachers after being filtered through distance methods.
- A face-to-face approach, while costly, may be more practical solution, when used in combination with correspondence or distance learning.
- Printed and audio-visual materials can be used to introduce potentially-sensitive ideas tactfully and gradually.
- Teacher training activities should be scheduled to follow the production of teaching materials, so that teachers are trained using the same materials they will later use in the classroom.

### 8.4.8 Skill Development in Adolescent Education

Skill is the practical aspect of learning. When we use some learning in our daily life situation for solution of some problems and when such use become very frequent and with great precision, we call it skill. What is taught in the classroom within a syllabus, should not remain as a theoretical knowledge only, rather, the adolescents should apply that knowledge in their daily life situation.

#### Check Your Progress

**Note:** a) Compare your answers with those given at the end of the Unit.

1. i) India is the first country in the world to take step to control population. (T/F)
   ii) World population increased four times in the 20th century. (T/F)
   iii) India’s population increased three times in the last century. (T/F)
   iv) India has 2.4% of world’s land and 16% of world’s population. (T/F)
   v) Population education is influenced by culture and society. (T/F)
   vi) Adolescent education was the main thrust in the second phase of NPEP. (T/F)
   vii) Population education started in Tripura in 1980. (T/F)
   viii) ICPD, 1994 brought a paradigm shift in population education. (T/F)
   ix) Adolescents represent one tenth of India’s population. (T/F)
   x) There is no gender disparity in India. (T/F)
8.5 THE BROAD APPROACHES

8.5.1 Curricular Approach

a) Population Education (PE) and Adolescent Education (AE) in the School Syllabus: It may be mentioned here that the school syllabus is under revision in the light of the recommendations of the Tripura Education Commission. There are many segments of the population and adolescent education that have been covered by the Commission’s recommendation under the caption “Art of Healthy and Productive Living”.

b) Population Education (PE) and Adolescent Education (AE) in Textbooks: In the light of the facts given in the above Para, new textbooks have to be written for all the subject areas from classes I to XII. While doing it, proper care shall be taken to enrich the textbooks with theme of population education related matters.

c) Population Education (PE) and Adolescent Education (AE) in Instructional Materials: The instructional materials are prepared to match the syllabi and textbooks. These materials are prepared by various agencies such as, the Board of Secondary Education, the SCERT, the DIETs and the Institute of Advanced Studies in Education (IASE) as well as Tripura University.

d) Population Education (PE) and Adolescent Education (AE) in Pre-service Teacher Education: The SCERT will take up the exercise of incorporating the population and adolescent education concerns in the syllabi of pre-service teacher training. The University is being approached to revise the B. Ed. and M. Ed. syllabi.

e) Population Education (PE) and Adolescent Education (AE) in In-service Teacher Education: The in-service teacher education is provided by three institutions in this state. They are IASE, TBSE, SCERT and DIETs. Different themes are taken up for in-service teacher education.

f) Population Education (PE) and Adolescent Education (AE) in Evaluation Process: It is a common knowledge that, these days, the process of evaluation determines the teaching in the classroom situation. The paper-setters will be sensitised through short training-cum-workshop programmes by the PEC, in which they will be encouraged to ask questions on the parts of syllabi that cover the population and adolescent education.

8.5.2 Co-curricular Approach

The co-curricular activities are those, which do not involve reading and writing. Curricular activities are related to cognition and co-curricular to affection and conation. As co-curricular activities are controlled by the affective and conative domains, they are very close to behaviour. It is the action that determines behaviour. The cognition or the knowledge, generally, remains as knowledge only. It is hardly translated into behaviour. But the skills learnt through co-curricular activities, which are in the form of actions, become part of our behaviour. In this background it is considered better to transact population and adolescent education with help of co-curricular activities.
Check Your Progress

Note: a) Compare your answers with those given at the end of the Unit.

2. Total fertility rate relates to:
   a) Fertility of a piece of land
   b) capacity to produce children by a woman during her life time
   c) ability to produce children by a man during his life time
   d) Fertility of human brain
   {Please tick the correct answer out of the four alternatives}

3. Point out the odd-man out:
   a) population,  b) family planning,  c) child mortality,
   d) chess, e) sex ratio.

4. Shifting cultivation in Tripura is associated with:
   a) Agriculture Department
   b) Horticulture Department
   c) Tribals
   d) Farmers of plain area
   {Please tick the correct answer out of the four alternatives}

5. Match the items of Column A with Column B

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
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</thead>
<tbody>
<tr>
<td>a) Cascade approach</td>
<td>a) The age bracket within which one can produce children</td>
</tr>
<tr>
<td>b) Face-to-face approach</td>
<td>b) Knowledge is transmitted through downward ladder system - a filtration theory</td>
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<tr>
<td>c) Distance learning</td>
<td>c) Transacting knowledge where teacher and taught both are present physically</td>
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<tr>
<td>d) Reproductive age</td>
<td>d) Knowledge obtained as a matter of chance</td>
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<tr>
<td>e) Curricular approach</td>
<td>e) Pleading to somebody for getting information</td>
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<tr>
<td>f) Information collected through correspondence and Media</td>
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<tr>
<td>g) Knowledge received through school textbooks and teachers</td>
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8.6 STRATEGIES FOR IMPARTING POPULATION EDUCATION

In order to achieve the objectives, certain strategies have to be adopted. Strategies are the blueprints of courses of action. In population and adolescence education, certain strategies have been suggested by the NPEP. In modern time, it is knowledge, which would take us on the right path. To achieve it, following areas may be concentrated upon:
The strategies have been broadly categorised between two major divisions - *action-intensive strategies* and *problem-specific strategies*. They are as follows:

### 8.6.1 Action – Intensive Strategies

Integration of new concerns of population and development in school syllabus and textbooks:

- **Sustainable development**: Here, by development we mean harmonious and integrated growth of both people and environment. In it, human population grows to the limit the natural environment remains at its existing level. In this reference, we may refer to the concept of *carrying capacity* of ecology. They all use natural resources for their food, cloth and shelter. They also use it for their further growth and development. It also presupposes a definite number of persons that a particular ecological system could support. *This number of people to be supported by the ecology is called the carrying capacity of that ecology.*

- **Gender equality and equity**: It means both male and female should be treated equal in all departments of life. For this purpose, proper attitude should be developed among students and also among general population including parents and teachers, so that they may open judicious channels for growth and development of female child.

- **Changing structure and role of family**: There has been a complete metamorphosis of structure and function of the social institution, family. It should be highlighted in the curriculum.

- **Under-served population group**: This group should be properly taken care of
  - *Adolescents*
  - *Elderly people*

- Adolescent education elements: It refers to various components that may have to be included in the education of adolescents under population education programme.
  - *Process of growing up*
  - *HIV/AIDS:*
  - *Drug abuse*

- Prioritisation of contents
- Ordering of concepts
- Positioning of contents
b) **Activities in tandem with syllabus revision of school and teacher education:**
As stated above, the strategy for population education is broadly divided into curricular and co-curricular areas. In curricular areas, the project activities and their various dimensions may have to be included in the curriculum.

c) **Organisation of co-curricular activities:**
- District-centred approach
- Focus on demographically critical areas
- Various kind of activities to be organised

**8.6.2 Problem - Specific Strategies**
In the above section the strategy concerning action has been explained. In those strategies it is action to be performed that has been highlighted. In this section, those strategies will be identified that will be taken up during population education which are directly related to some of the problems facing the society. Some of the characteristic strategies may be related to the following problems:

a) We shall study the problems of adolescents reproductive and sexual health in the next Unit together with the problems related to HIV/AIDS and Drug Abuse.

b) **Problem of Declining Child Sex Ratio:** The fascination for male child is still at top of parental desire. It has imbedded in our cultural ethos. The sex determination of foetus has disturbed the sex balance in many parts of the country. It is really a matter of concern. To make the adolescents (future parents) aware of this phenomenon, it will be made an integral part of the population education programme of the state.

c) **Problem of Sustainable Development:** In the earlier sections, the problem of sustainable development has been highlighted. It is needless to point out that 'development' presupposes 'growth' but 'with social justice'. 'Sustainable development' is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

d) **Problem of Urbanisation and Migration:** Urbanisation may be understood as the process of converting more areas into urban, moving towards the cities, opting for other occupations than agriculture, and the cumulative efforts put in this direction. It is characterised by not only change in occupation from agriculture to any other (non-agriculture) and changing the living pattern and behavioural responses accordingly. Urbanisation has assumed a global character.

Urbanisation is the result of migration from rural bases. The process of changing residence from one country to another, or from one part of a country to another part is called migration. The following are the consequences of migration:

i) Creation of slums
ii) Shortage of public transport system
iii) Non-availability of required infrastructure
iv) Lack of educational facilities
v) Degradation of health-related facilities
vi) Increase of population
vii) Increase in anti-social activities
viii) Dwindling law and order situation
ix) Increased political blackmailing
x) Increased danger to security - both internal and external

The students should be made aware of all these problems associated with urbanisation and migration through programmes of population education so that they may take appropriate stand when they become adults.

e) **Problems to Be Covered Through District-centred Approach:** The problems enumerated above are not conclusive. Many more problems may occupy the centre-stage, once the programme is in the execution stage. The conglomeration of problems requires to be sorted out in an integrated manner; and this cannot be done by taking one school as a unit, because a school is a fragment of a community in which it is situated. Therefore, we may have to take into consideration a bigger and harmonious unit to meet the challenges of the problems stated above. This unit could be, for all practical purposes, the district

f) **Focus on Covering Maximum Number of Schools:** It has been clear that the population education is being implemented through schools. The adolescents, the nucleus of the population education programme during the X Five Year Plan period, could be approached through schools. Thereby, it is pertinent to cover as many schools as possible in this programme.

g) **High Priority to Skill Development:** It is not the reading and passing the examinations that would bring behavioural changes; rather, it is developing appropriate skills that would bring behavioural changes in a person. With this chain in mind, it has been decided that through population education some essential skills have to be developed among adolescents in school system. The skills relating to the Adolescent Reproductive and Sexual Health (ARSH) are key to population education. These will be discussed in details in the next Unit.

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**Check Your Progress**

**Notes:**
- a) Write your answers in the space given below.
- b) Compare your answers with those given at the end of the Unit.

6. i) Integrated growth of both people and environment is called .................
   
   ii) All species depend for their survival on the ....................... around them.
   
   iii) During X Five Year Plan ......................... is the nucleus of PE.
   
   iv) Declining child-sex-ratio is a matter of ......................
   
   v) Creation of slums in big cities is the result of ....................... of population.
   
   vi) To check the flight of people to cities, it is necessary to strengthen the facilities in .................
   
   vii) The method in which students are directed to write their answers put it in a container or a box is called ......................
   
   viii) The method in which students, divided into two groups, put their views for “for” or “against” the motion, is called ......................
8.7 LET US SUM UP

In the unit, you have read about the relation between population and development of society and also about fast growing population of India. You have gone through the efforts done by the government in imparting knowledge and skills to students about various factors that are to be considered for stabilisation of population. Importance of adolescent education in the area of their reproductive sexual health has been emphasised. The major thrust areas and the corresponding strategies have been discussed. You have also gone through the role of teachers in tackling the population explosion. A section on teacher training gives you insight as to how can you act in a better way while dealing with students in the classroom situation. The emphasis has been laid on both curricular and co-curricular approaches in handling population growth. Several activities have been suggested that may be adopted by you for developing skills among your students so that they could act responsibly when they become adults.

8.8 GLOSSARY

Adolescence : The period of human life between the ages 11 and 18 years.
Ecology : Relation between plant and living creatures and their environment.
Carrying Capacity : The number of maximum people that can live in a particular geographical setting without damaging the existing natural resources.
Demography : Human habitat in a defined geographical boundary and with people of various dimensions.
Gender Disparity : Disparity in education, employment and other matters on the basis of sex of person.
Sex Ratio : Number of females per 1000 males.

8.9 ANSWERS TO CHECK YOUR PROGRESS

1) i) T
   ii) F
   iii) F
   iv) T
   v) T
   vi) F
   vii) F
   viii) T
   ix) F
   x) F
Population, Sexuality, Moral and Right to Education

2) b)
3) d)
4) c)
5) a : b
   b : c
   c : f
   d : a
   e : g
6) i) sustainable development
   ii) natural resources
   iii) adolescent education
   iv) concern
   v) migration
   vi) village/rural areas
   vii) c
   viii) Debate