

● **What is meant by environmental education? Suggest different ways to create environmental awareness among the secondary school students.**

OR

What are the different ways to propagate environmental awareness among adults? Explain.

Ans: Meaning of environmental education

Environmental education is a new area of study of the discipline of education. It is a new concept introduced in the educational system which is virtually a source of concern for educators, students as well as policy makers. It can be considered as a process of recognizing the value and conceptions of protection

and conservation of environment. According to environmental specialists any solution to the problem and crisis of environment is called environmental education which aims at developing an awareness and understanding of environmental problems and protection of environment among the people of the society. It helps in developing skills and attitudes needed to play a productive role in the society.

Environmental Education and Awareness

Environmental education should not be limited to the classroom only and it should engage people from all sections. Environmental education should be an essential part of the socio-economic development that can lead to equal opportunity and an enhanced worth of life for all. Environmental education deals with 'biophysical environments along with their social, cultural, economic and political aspects. Hence environmental education should extend front increasing awareness through communication to improve the individual's skill to actions that can lead to sustainable environment.

To create awareness on environmental aspects, communication campaigns should be planned along with developing messages and producing suitable resources and media to reach the audience. The aim of environmental awareness should focus on creating awareness in people about specific issues related to their environmental settings including living and non-living elements, e.g., land, soil, plants, animals, air, water and other humans in addition to awareness of the social and economic surroundings, and the impacts of our connections to them.

Environmental Awareness and the Community

In order to understand the environmental consequences and its effects on the community, education and public awareness should become an integral part of sustainable development programmes.

If the community member doesn't have awareness it may lead to the degradation of the environment. The empowerment of the people in the community on environmental issues not only enriches them with the environmental issues but it also helps them in realizing their faulty actions and the strategies to be adopted to conserve and protect the surrounding environment.

The community should be able to recognize the environmental problems and values and its effects on the socio-economic development and on the quality of the life of the people. This can be achieved through personally examining the environmental settings surrounding the community. Hence creating awareness and participation is fundamental to achieve sustainable development. “

Attitude and Behaviour

Attitudes and behaviour have their roots in poverty which go along with urbanization, unemployment and population growth. The basic points of Maslow's hierarchy of needs will be suitable here. Any individual will think about the issues which are beyond their existence only when their basic needs are fulfilled (food, shelter, water). In the implementation of environmental education programmes, a holistic approach should be followed; with an emphasis that healthy environment is a basic necessity.

Communication Strategies for Environmental Awareness and Attitudinal Change

Communication strategies for environmental awareness include preparing messages, resources and media to reach the public. Though the two disciplines are interlinked in communication campaign on environmental education, the process should not be confused. The behaviour of the people can be modified by awareness and changes in behaviour through communication campaigns. However, they cannot achieve the wider educational vision.

Environment and Attitude Change

Schultz (2000) believes that people's attitudes towards the environment and the type of concern they develop towards the environment, are associated with the degree to which they view themselves as interconnected with nature. People's attitude towards the environment relies on the importance that a person places on oneself, other people, and the natural environment. We can say that the attitude of the individual towards environment is based on his or her principles which will have varied value orientations and that eventually will have diverse attitudes towards the environment.

Forming Environmental Attitudes

According to Newhouse (1990), environmental attitudes are formed as a result of life experiences and not necessarily due to educational programmes designed to change attitudes. Attitudes can also be formed due to life experiences that include initial predisposition to certain behaviour together with further activities concerning that behaviour. Information is another factor which may lead to attitude change.

Strategies to Raise Environmental Awareness in the Community

Environmental awareness in the community can be promoted through strategies involving communication with community members and other related stakeholders to encourage neighbourhood environmental projects and initiatives, mobilizing the students' awareness and capabilities, recommending monetary assistance via grants, schemes for projects / initiatives that elevate community awareness and that support positive advantage on their local environment. Awareness can be developed by spreading enlightening resources and fact sheets to safeguard water, prevention, garbage disposal, climate change and biodiversity. Sustaining environmental programmes and competition, environmental talks and information, seminars that

aim on the community can be organized for creating environmental awareness. Strengthening the Environment Public Awareness includes raising environmental awareness among policy makers; providing environmental information through existing mass media; strengthening the capacity of journalists; encouragement of the private sector in the development of environmental programme development. Private companies must be encouraged to have environmental education programmes as a component of company policy.

■ **How environmental awareness can be developed through education? Explain.**

Ans: Environment education should strive to change the environmental behaviour of the people by increasing knowledge on environment. Thinking and approach of the people towards the environment determines their attitudes towards it. The aim of environmental education strives to change the outlook of people towards environment rather than creating awareness for solving environmental issues.

Role of Education in Promoting Environmental Awareness

Education helps to change the beliefs and attitudes; however, it cannot change ethics or values. Education that leads to attitudes that contradicts with the people's ethics and values will not work. To have a safe environment if some people have to make sacrifices on financial security, food, or spending time with their families then those people who value those things highly reject it. But the message that doesn't require the people to reorganize their values will be easily accepted. Hence, the educational efforts which are against the ethics of the people will not succeed.

Education, including formal education, public consciousness and guidance should be recognized as a process by which human beings and societies can reach their full potential. Education is significant for promoting sustainable development and improving

the attitude of the people towards on environment and developmental issues. To be effectual, education should deal with the interface of both physical, biological and socio-economic environment and human development. It should be incorporated in all disciplines, and should make use of both formal and non-formal methods and effective means of communication.

Education that is needed for sustainable environment should enable people to understand the interdependence of life on ecological aspects, and the repercussions of their actions and decisions. It helps in increasing people's awareness of the economic, political, social, cultural, technological and environmental forces which impede sustainable development; Education develops people's awareness, competence, attitudes and values, enabling them to be effectively involved in sustainable development at local, national and international level, and to work towards a more equitable and sustainable future.

Though education can bring change in the behaviour there are limitations on what it can achieve. In the short run educational approaches work only when the barriers to action are internal to the individual. Education is effective mainly with 'cheap and easily practicable behaviours. Such actions help, however, more permanent actions will have greater damage. If high cost is involved in protecting the environment there is no proof that that education alone will help to do so.

Educational programmes are more successful when they are planned according to psychological values of communication and when they openly concentrate on the relations between attitudes and actions. Even when people are being asked to act according to their attitudes, and inclined to use information, it is essential to make special efforts to get their attention and involve the recipients of the information. The external barriers such as cost, and accessibility keeps educational programmes from

reaching their goals. Education works greatest when combined with extra strategies of interventions. Hence education and other measures can proceed in synergy. The effects of both collectively are greater than from their separate effects.

Though public awareness on environmental issues is increasing, shortage of enough environmental knowledge can be an obstacle for achieving a sustainable future for mankind at both international and neighborhood levels. Hence education for environmental awareness should include,

- Knowing about the relationship between mankind and the environment, the need for natural, social and economic systems for sustainable development.
- Appreciation of the desires and right of prospective generations.
- Approving the importance of multiplicity.
- Accepting the value of life, fairness and justice issues related with the sustainable development process.
- An understanding of the earth's carrying capacity.
- Appreciation of the need for preventative measures.

Both formal and non-formal forms of education are essential in altering people's attitudes so that they have the aptitude to review and concentrate on their sustainable development issues. It is also significant for achieving ecological and moral understanding, principles and attitudes, skills and actions reliable with sustainable development and for successful participation of the people in decision-making.

● **Short note "Role of NGO's in promoting environmental awareness."**

Ans: Role of Non-Government Organizations (NGO's)

The role of NGO's in creating public awareness on environmental safety is recognized universally. A number of steps have been taken by NGO's to promote debate about environmental issues.

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Many NGO's are involved in advocacy and awareness, especially in promoting concepts such as sustainable environment, natural resource management and the renovation of ecosystem. Non-governmental organizations can also interact with the government about local environmental issues as they normally deal with the grassroots problems. They can also sensitize the policy-makers about the local needs and resources. They can operate both as an 'action group' or a 'pressure group'. NGO's by creating environmental issues can also organize public actions for safeguarding environment. They can also update the policy-makers about the interests of both the deprived and the ecosystems. NGO's can also play a significant role in providing training facilities, both at community and government levels. They can also be actively involved in research and publication on environment and development associated issues. It is essential to uphold and support authentic, small, community level NGO's in different parts of the country which can present much needed institutional support precise to the local needs.

NGO's are also concerned about organizing environmental awareness programmes in fact-finding and investigation, filing public interest litigations, novelty and experimenting in new areas, providing knowledge and policy study, providing accurate and consistent information with a system of skilled professional team, passing pertinent information to the community and governmental agencies and unity and assistance to environmental protectors.

The NGO's have played a significant role in taking initiatives for sustainable growth. NGO campaigns are the key drivers in inter-governmental dialogues, ranging from the regulation of hazardous wastes to prohibition on landmines and the abolition of slavery. Some of the environmental NGO's in India are successful the field of environment protection, conservation and sustainable development. The 'Chipko Movement' for

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preservation of trees by Dasholi Gram Swarajya Mandal in Ganeshwar and the 'Narmada Bachao Andolan' organized by Kalpavriksh, are some of the examples where NGO's have played a significant role in the society for protection of environment.

The Bombay Natural History Society (BNHS), the Worldwide Fund for Natural India (WWF, India), Kerala Sastra Sahitya Parishad centre for Science and Environment (CSE) and many other agencies are playing a major role in creating propagating environmental awareness through research as well as outreach work. CSE created awareness all over the country about the violation of permissible limits of pesticides in the Cola drinks. NGO's will have an important role to develop the patterns of growth and protecting the environment with a variety of news and actions made by the organization.

However, NGO's are facing certain challenges in disseminating knowledge on environment like shortage of trained personnel in the field of environment protection, lack of research and development facilities, financial constraints, lack of cooperation from the governmental agencies, difficulties in the mobility on account of lack of j transport facilities and environmental NGO's are facing integrity crisis with many j instances of misuse and scandals.

• **Short note "Role of media in environmental education."**

Ans: ROLE OF MEDIA IN ENVIRONMENTAL EDUCATION

The role of media in promoting environmental education is vital since the newspapers, magazines, radio, and television help people in achieving awareness. Awareness is an important process in environmental education. Through formal and non-formal education awareness about the interests of vulnerable communities can be improved. In a developing country like India,

environmental awareness can be created through elements like mass media, art, and traditional knowledge.

The media may play a major role in emphasizing on environmental issues such as sharing, governing power, lucidity, responsiveness, wider agreement, justice and comprehensiveness and answerability. It can promote superior environmental governance. The role of media is massive in meeting the necessities of the inclusive environment, and it can also operate:

- To transmit the thought and information and way of life from everyplace in the world
- To make sure the information and traditions sharing from the developed countries to the developing countries
- To persuade the people at all levels
- To reassign thoughts and culture resulting in a homogenization of commercial culture that threatens to disturb and modify the native values

Media can play a vital role to inform the masses on environmental issues through articles, environmental rallies, plantation campaigns, street plays, real eco-disaster stories and success stories of protection. In order to provide information on environmental issues to public we can see more environmental magazines, newsletters and journals, besides TV and radio programmes. Now-a-days, the programmes of radio and television consist of programmes on topics like science and natural world, plays, music and dance, besides diverse areas of concern. It has an enormous delivery time to reach audiences in homes, schools and public places.

Radio, Television, Print Media and Maps

The power of mass media to influence knowledge gain, public attitude and behaviour has been well recognized these days. Mass media (electronic and print media) are vital in creating environmental consciousness and in spreading information

amongst the people. Different information tools like radio, television and newspaper are spreading awareness related to climate change and environment protection among the people at a faster rate than personal contact. The production and distribution of printed materials such as book, magazines, newspaper and brochure may help in transfer of new information's and technologies whereas radio and television are the important tools for dissemination of quick information. Radio is even more popular among the poorest and distant communities. It is exceptionally good in disseminating messages to large audiences at cheaper prices. The information provided by the radio can highlight the issues thereby bringing positive and significant change in the people. The use of this media is very effective in producing an intellectual platform for the people. Creating sensitivity to the surrounding environment is very important as we depend on the nature to fulfill our needs.

Television can be used to improve many essential aspects of everyday life. In a country like India where there is a prevalence of high illiteracy media can play a critical role. Majority of the population feels that both radio and television as reliable and in promoting information. In India there are approximately 45 million television sets and they can act as influential means of providing information. A vast majority are having cable and satellite connections. Television has turned out to be a necessity even in poor communities. Television videos and serials can be a valuable source in the spreading environmental awareness amongst the people.

Q. **Write an essay on population and its impact on the quality of life.**

Or
How does population affect the quality of life? Discuss critically.

Ans: According to Felee and Perry, "Quality of life is defined as an overall general well-being that comprises objective descriptors and subjective evaluations of physical, material, social and emotional well-being together with the extent of personal development and purposeful activity, all weighted by a personal set of values.

Janse, "QOL is multidimensional in construct including physical, emotional, mental, and social and behaviour components.

Tartar et al, "A multi faceted construct that encompasses the behavioural and cognitive capacities, emotional well-being, and abilities requiring the performance of domestic, vocational and social roles.

This reflects the view that QOL refers to a subjective evaluation which is embedded in a cultural, social and environmental context. As such, QOL cannot simply be equated with the terms "health status," "life style," "life satisfaction", "mental state or "well-being" Rather it is a multidimensional concept incorporating the individuals' perception of these and other aspects of life.

Population and Quality of life can be reflected through certain aspects.

They are-

1. Population and economic development:

High population growth has an adverse effect on the economic development of a country. "Economic development" refers to a state where there is proper utilization of resources, where jobs and corporate investment create wealth that citizens can use to purchase goods and start new businesses and where the per capita income increases. Economic development allows the governments to achieve their mission in developing education, infrastructure, and citizen welfare and service delivery. Economic development therefore improves the quality of life.

2. Population and health care services:

A serious consequence of our population explosion is the rise of infections and chronic degenerative diseases. Though the incidence of many diseases like poliomyelitis, leprosy and neonatal tetanus has become remarkably reduced, some communicable diseases like tuberculosis, malaria, dengue fever, and viral hepatitis have increased manifold mainly due to substandard way of living, sewage and waste management system and weak public health services. In addition, there are problems like emergence of diseases like AIDS, cancer, diabetes etc. and this need a good and wide network of health service.

3. Population and environment:

The quality of human life greatly depends on the environment. An optimum population sustains the environment while overpopulation degrades it. The water sources, air, land, all get polluted. The "green house" effect probably started from the time of the Industrial Revolution and it has caused many natural disasters such as raising the earth's temperature, flood, heat waves etc. Desertification of once fertile land is caused by

overpopulation. A high population uses our country's forest resources and as it is more destroyed, there is not enough room for the flora and fauna species.

4. Population and social development:

Social development broadly means the expansion and development of human capabilities in any field, leading to fresh discoveries, improvement of existing activities and also the capacity for better results. Social development can be described as the process of organizing human activities to promote well being of the people. Social development includes individuals as well as group development. It includes satisfaction of the basic needs of people (food, shelter and clothing), education for all, positive inter-relations between people, political stability etc.

But when the population growth is very high, many social problems arise, when the people's needs and aspirations are not fulfilled as their demands are much more in proportion to supply. In our country millions of people are deprived from the basic needs and these results in all forms of social conflicts and tensions. Development of individuals and society is hampered and desperate people threaten the very foundation of the social system. The quality of life of people is lowered.

5. Population and nutrition:

Nutrition and population growth are intimately linked in several ways. Good nutrition reduces maternal, neonatal and child mortality. After birth, infants that receive good nutrition have better chances of survival while severely malnourished children are 8 times more likely to die than their well nourished counterparts. Demographic changes have an influence on people's nutritional status. Rising population threatens the availability of food in developing and underdeveloped countries. Population growth is very closely related to urbanization. In many urban areas and in the rural areas of developing countries,

malnutrition is very common. In many poor and congested urban areas diarrheal diseases and under nutrition are frequent because of poor food hygiene, inadequate water supplies and waste disposal, poor housing etc.

6. Population in relation to health status:

The concept of health - related quality of life encompasses those aspects of overall quality of life that can be clearly shown to affect health, either physical or mental.

To have sound mental health, it is important to have sound physical health. In India, due to population explosion, even today, about 42% of children, below the age of three are malnourished.

Though there is marked economic growth in India, yet it is lagging behind many developing countries in this respect. The infantile mortality rate has reduced considerably but in some remote areas, lack of trained health workers and awareness among people regarding immunization result in infantile mortality. Poor sanitation, polluted water and inadequate drinking water facilities affect the health of the people. This is more so in rural areas which support about 68% of the total population and it lowers the quality of life.

In the developed countries where there is optimum population, there is better health of the people and it reflects their positive mental health.

Q: Short note "population related policies and programme:

Or

Population related policies special reference to India:

Ans: Of particular importance, in the context of population policy, are the three components of population change - fertility, mortality and migration - because all demographic variables are influenced by them.

Mortality Influencing Policies

Policies relating to mortality obviously always aim at reducing mortality. After the Second World War, the World Health Organization introduced a dramatic concept of public health and resolved to eradicate disease. The result of population policies relating to health have resulted in unprecedented declines in mortality in developing countries irrespective of the level of their socio-economic development. In this regard, it is also significant that the final version of the controversial World Population Plan of Action, adopted at the United Nations World Population Conference in Bucharest in 1974, refers to only one targeted ideal - mortality.

Migration Influencing Policies

Policies relating to migration are concerned with two aspects: internal migration, that is, migration within the country, and international migration, including both immigration and emigration. International migration is considered to be a constitutional privilege in most countries, and therefore, what national governments can do in this regard is only to encourage internal migration with regional differentials in density per square mile or kilometer. The most outstanding example of one such successful attempt is the transmigration scheme in Indonesia. Such attempts are not always successful because other considerations such as the nature of the terrain, the job opportunities available, the factor of cultural affinity, etc. - play an important role in determining internal migration.

Fertility Influencing Policies

Policies which aim at influencing fertility may be of two types: pro-natalist and anti-natalist.

1. Pro-Natalist Policies

Pro-natalist policies, in some form or other, have existed since ancient times. In modern times, several countries developed

population policy towards sustaining the birth rate. The Population Commission of 1935 recommended a flat rate of family allowance beginning with the first child, and supplementary aids in the form of marriage loans, maternal and child health centers, housing and fuel grants, free school meals, home help services, holiday travel for mothers and children and tax relief to couples with children.

2. Direct Anti-Natalist Policies

a) **Provision of Contraceptive Services:** It is expected that by providing such services and by conducting family planning educational programmes, individual couples would accept family planning, reduce fertility at the micro level and thus bring about a reduction in the birth rate.

b) **Liberalization of Abortion Laws:** The dramatic manner, in which Japan halved her birth rate in a decade (1948-1958), mainly through the use of abortion, has highlighted the demographic effectiveness of this method of controlling population growth.

c) **Raising Age of Marriage:** Age at marriage is known to influence the fertility performance of women, in the sense that if the age at marriage is low, women start having their children at an early age, and these children, in their turn, begin to procreate early. By raising the age at marriage, especially for women, we cut down their reproductive span and thus reduce fertility.

Indirect Anti-Natalist Policies

Anti-natalist policies can sometimes indirect, that is, they may not be directly aimed 'at reducing fertility as in the case of contraception, abortion and a higher age at marriage. But may act indirectly by influencing the acceptance of contraception' and abortion and bringing about a rise in the age at marriage.

Some of these approaches, called 'beyond Family Planning' by Bernard Berelson.

INDIA'S POPULATION POLICIES AND PROGRAMMES

While considering the population policy of India, it is necessary to concentrate on fertility as the single most important factor contributing to population change. Of the other two components of population change, mortality and migration, the latter does not warrant serious consideration in the context of the population policy of India.

Fertility-Influencing Policy

The British rulers of the country were not interested in formulating any population policy for India, nor were they in favour of the birth control movement. A section of the intellectual elite among the Indians showed some concern about the population issue during the period between the two World Wars, despite the fact that the pre-occupation of the general population was primarily with the independence movement.

Family Planning Programme

Since its inception in 1952, the family planning programme has undergone several revisions.

- **The Clinic Approach:** The family planning programme in India started with a very cautious approach. It is based on the assumption that those who need family planning would visit such clinics without any hesitation. Such an assumption, however, ruled out the need to reach out to people to educate them about the need for family planning.
- **The Extension Approach:** Later in the extension approach, influential formal and informal leaders in different sub-groups of the population are first identified and then encouraged to gain knowledge and to take interest in popularizing the acceptance of the small family size norm among their own group.

- **The Camp Approach:** In November-December 1970, a massive vasectomy camp was held in the Emakulum District of Kerala, where a total of 15,005 vasectomies were performed over a period of one month. This performance was repeated in July 1971 on a much larger scale, when 63,418 vasectomies were performed in a one-month period.
- **The Integrated Approach:** The principle of integration of family planning services with maternal and child health services have been accepted almost since the beginning of the family planning programme. With the appointment of multi-purpose workers, a new concept in the delivery of health nutrition and family planning been introduced.
- **India's National Population Policy:** One of the results of the World Population Conference was the declaration of the National Population Policy on April 16, 1976. After that there were some changes and new policy came in to existence.

National Population Policy 2000: The National Population Policy 2000 (NPP 2000) affirms the commitment of government towards voluntary and informed choice and consent of citizens while availing of reproductive healthcare services; and continuation of the target free approach in administering family planning services. The immediate objective of the NPP 2000 is to address the unmet needs for contraception; healthcare infrastructure; and health personnel; and to provide integrated service delivery for basic reproductive and child healthcare. The medium term objective is to bring the TFR to replacement levels by 2010; through vigorous implementation of inter-sectoral operational strategies. The long-term objective is to achieve a stable population by 2045; at a level consistent with the requirements of sustainable economic growth; social development and environmental protection.