



EVS 101 LESSON 2. Public Awareness And Challenges Ahead

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Subject Environment Science

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NEED FOR PUBLIC AWARENESS

- The need of the hour is to make the public aware of the consequences of the environmental degradation,
- if not corrected and reformative measures undertaken, would result in the extinction of life.
- It is also necessary to face the various environmental challenges and to act accordingly to make the acts eco-friendly. The major challenges ahead are the following:

1. Population Explosion:

- A population of over thousands of millions is growing at 2.11 per cent every year.
- Over 17 million people are added each year. India accounts for 16 % of the world population, but with only 2.4 per cent of the land area.

- This makes considerable pressure on the natural resources and reduces the gains of development. Hence, the greatest challenge before us is to limit the population growth.
- Although the population control does automatically lead to development,
- yet the development leads to a decrease in population growth rates. For this development to be happened, knowledge of the women is essential.
- The future population growth has to be linked to the resource base in order to have sustainable development.

Poverty alleviation:

- India has often been described a rich land with poor people. The poverty and environmental degradation are inter-dependent.
- The vast majority of our people are directly dependent on the natural resources of the country for their basic needs of food, fuel, fodder and shelter.
- About 65 % of Indians are poor and about 40% of our people are still below the poverty line. Environment degradation has adversely affected the poor who depend upon the natural resources of their immediate surroundings.
- Thus, the challenge of poverty and the challenge of environment degradation are two facets of the same challenge. The population growth is essentially a function of poverty.

Agricultural Growth

- The people must be acquainted with the methods to sustain and increase agricultural growth without damaging the environment.
- Fertilizers and pesticides are causing major threats to the environment in the form of soil and water pollution.
- It is evident that it is very difficult that these chemicals will be kept out of soil, water and food chain if they are extensively and continuously used in crop production. Highly intensive agriculture has caused soil salinity and damage to the physical structure of soil.

4. Protecting Ground water from pollution:

- The need of the hour is to restore the water quality of our rivers and other water bodies as lakes and to avoid the groundwater pollution.
- Finding suitable strategies for consecration of water, provision of safe drinking water and keeping water bodies clean which are difficult challenges ahead.
- Rain water harvesting and water management can help to an extent in this regard.

5. Development and Forests

- Vast areas of forests in many states are now converted as agricultural lands for growing hilly vegetables and plantation crops and mining.
- These areas are to be brought back under forest cover. The tribal communities inhabiting forests respects the trees and birds and animal that gives them sustenance.
- We must recognise the role of these people in restoring and conserving forests. The modern knowledge and skills of the forest department should be integrated with the traditional knowledge and experience of the local communities.
- The strategies for the joint management of forests by the government officials and tribal people should be evolved in a well planned way to implement afforestation.

6. Degradation of Land

- At present out of the total 329 mha of land, only 266 mha possess any potential for production. Of this, 143 mha is agricultural land and 85 mha suffers from varying degrees of soil degradation. Of the remaining 123 mha, 40 mha are completely unproductive. The remaining 83 mha is classified as forest land, of which over half is denuded to various degrees.
- Nearly 406 million head of livestock have to be supported on 13 mha, or less than 4 per cent of the land classified as pasture land, most of which is overgrazed.
- Thus, out of 226 mha, about 175 mha or 66 per cent is degraded to varying degrees. Water and wind erosion causes further degradation of almost 150 mha This degradation is to be avoided.

7. Reduction of Genetic Diversity

- Immediate measures to conserve genetic diversity need to be taken at the earliest. At present most wild genetic stocks have been disappearing from nature.
- The protected areas network like sanctuaries, national parks, biosphere reserves are isolating populations. Remedial steps are to be taken to check decreasing genetic diversity.

8. Evil Consequences of Urbanisation

- Nearly 27 per cent Indians live in urban areas. Urbanisation and industrialisation has given birth to a great number of environmental problems that need urgent attention.
- Over 30 percent of urban Indians live in slums. Out of India's 3,245 towns and cities, only 21 have partial or full sewerage and treatment facilities. Hence, coping with rapid urbanization is a major challenge.

9. Air and water Pollution

- Majority of our industrial plants are using outdated treatment technologies and makeshift facilities devoid of any provision of treating their wastes.
- A great number of cities and industrial areas that have been identified as the worst in terms of air and water pollution.
- There are Acts and legislature in the country, but their implementation is not so easy. The reason is their implementation needs great resources, technical expertise, political and social will and first of all enforcement.

References

- Lecture was prepared using following reference
- ecoursesonline.iasri.res.in/mod/page/view.php?id=128612