

Environmental Education

~~What is the meaning and concept of Swachh Bharat Abhiyan?~~

Ans:- **Introduction :-** Swachh Bharat Abhiyan is started by the government to make India a completely clean India. Clean India was a dream seen by the Mahatma Gandhi regarding which he said that, "Sanitation is more important than Independence". During his time he was well aware of the poor and dirty condition of the country that's why he made various efforts to complete his dream however could not be successful. As he dreamt of clean India a day, he said that both cleanliness and sanitation are integral parts of healthy and peaceful living. Unfortunately, India became lack of cleanliness and sanitation even after 67 years of independence. According to the statistics, it has been that only few percentage of total population have access to the toilets. It is a programme run by the government to seriously work to fulfill the vision of Father of Nation (Rajiv) by calling the people from all walks of life to make it successfully globally.

This mission has to be completed by 150th birth anniversary of Bapu (2nd October of 2019) in next five years (from the launch date). It is urged by the government to people to spend their only 100 hours of the year towards cleanliness in their surrounding areas or other places of India to really make it a successful campaign. There are various implementation policies and mechanisms for the programme including three important phases such as Planning phase,

implementation phase and sustainability phase.

### Meaning Swachh Bharat Abhiyan :-

Swachh Bharat Abhiyan is a national cleanliness campaign established by the Government of India. This campaign is covering 4041 statutory towns in order to clean roads, streets and infrastructure of the India. It is a mass movement has run to create a clean India by 2019. It is a step ahead to Mahatma Gandhi's dream of Swachh Bharat for healthy and prosperous life. This mission was launched on 2nd of October 2014, (145<sup>th</sup> birth anniversary of Bapu) by targeting 100% completeness in 2019 On 150<sup>th</sup> birth anniversary of Bapu. The mission has been implemented to cover all the rural and urban areas of the India under the ministry of Urban Development and Ministry of Drinking water and sanitation accordingly.

The first cleanliness drive (on 25<sup>th</sup> of September 2014) of this mission was started by the Indian Prime Minister, Narendra Modi earlier to his lunch. This mission has targeted to solve solve the sanitation problems as well as better waste management all over the India by creating Sanitation facilities to all.

### Concept of Swachh Bharat Abhiyan :-

It means "Clean India". The campaign aims to accomplish the vision of clean India by 2nd October 2019. We need it because cleanliness is neat Godliness. If everyone sweeps their own door, their neighbourhood, the world becomes a clean

Pure and healthy place for all. It is the responsibility of every citizen to participate in the campaign to make India clean.

"A clean India would be the best tribute India could pay to Mahatma Gandhi on his 150<sup>th</sup> birth anniversary in 2019," said Shri Narendra Modi as he launched the Swachh Bharat Mission at Rajpath in New Delhi. On 2nd October 2014, Swachh Bharat Mission was launched throughout the length and breadth of the country as a national movement.

Swachh Bharat Abhiyan aims movement across the nation, the prime minister said. People should neither litter nor let others litter. He gave the Mantra of "Na gandagi karonge, Na karne dunga". Shri Narendra Modi also invited nine people to join the cleanliness drive and requested each of them to draw nine more into the initiative.

By inviting people to participate in the drive, the Swachh Bharat Abhiyan has turned into a National Movement.

## ACTIVITY - 2

Q. Explain the aim and objectives of environmental education?

Ans → UNESCO had highlighted the following aims of environmental education :-

The aim of environmental education is clearly to show the economic, social, political and ecological, interdependence of the modern world in which decisions and actions by different countries can have international repercussion. Environmental education should in this regard help to develop a sense of responsibility and solidarity among countries and regions as the foundation for a new international order which will guarantee the conservation and improvement of environment.

The main aim of environmental education at the grassroot level is to succeed in making individual and communities understand the complex nature of the natural and the built environments. Further to acquire the knowledge, values, attitudes, and practical skills to participate in a responsible and effective way in anticipating and solving social problems and in the management of the quality of the environment. Therefore necessary steps for environmental education are :-

- (a) Awareness
- (b) Knowledge
- (c) Attitude building for motivating to protect environment
- (d) Evaluation of environmental measures and
- (e) Skill and capacity building.

## Features of Environmental Education (EE)

1. Is a learning process that expands individuals' information and mindfulness about nature's domain and related difficulties, creates the vital abilities and mastery to address the difficulties, instilled confidence and stewardship and cultivates demeanor inspirations and responsibilities to settle on educated choices and make dependable moves in the field that they are working with.
2. Is an inter-disciplinary field that integrates fields such as biology, ecology, earth science, geography, atmospheric science and mathematics; because understanding how environment works and keeping it healthy require knowledge and skills from many disciplines.
3. Includes all efforts to make general public aware of knowledge of the environment and environmental challenges through print materials, media, brochures, bulletins, videos or other media techniques.
4. Leads to responsible individual and group actions.
5. Provides information about specific environmental concerns or problems to the general public instead of specific group, religion or community.
6. Work to help you think critically, so that you aren't sitting there trying to fit everything into a neat little box.
7. Involved students in different data-gathering techniques that help them to observe, analyze, predict and interpret data about environmental issues.

8. Is study centered, promotes higher level thinking skills and relevant to students everyday lives.
9. Allows people to discuss about complex environmental problems that have no simple answers.
10. Is a process in which individuals gain information, environmental awareness and acquire knowledge & skills, values, experiences and determination which can help them to solve different environmental problems.
- Guiding Principles of Environmental Education

These are as follows

Resource principles :-

- (a) Resource demands long-term planning & we need to achieve truly sustainable development.
- (b) Rational utilization of renewable source is a sensible way of preserving the resources while obtaining maximum benefits from it.
- (c) A mode of life heavily dependent upon rapidly diminishing non-renewable energy sources (e.g. fossil fuel) is unstable.

Soil principles :-

- (a) The protection of soils and the maintenance of sustainable agriculture are essential factors in to the survival of civilizations and settlements.
- (b) Soil erosion is the irreversible loss of essential resources and must be prevented.

### 3. Wild life protection principles:-

- (a) Wild life population is important aesthetically, biologically and economically.
- (b) Nature reserves and other protected areas are of value in protecting endangered species because they preserve their habitats.

### 4. Environmental Management Principles:-

- (a) Sound environmental management is beneficial to both man and environment
- (b) Management of natural resources should be done in rational manner.
- (c) Elimination of wastes through recycling and the development of clean.

### 5. Other principles:-

- (a) The relations between humans and their environment are mediated by their culture etc.
- (b) Cultural, historical and architectural heritage are much in need of protection.

## ACTIVITIES

Identify the functions carried out by DED in environment protection.

- We have a wide range of function of environmental management and our primary responsibilities includes
- Environmental licensing.
- Enforcement of environmental law
- Environmental planning, education and guidance.
- Monitoring, analyzing and reporting on the environment
- Regulating world's green house gas emissions.
- Environmental research development
- Strategic environmental assessment
- Waste Management
- Radiological protection.

Characteristics of environmental management



Environmental management supports sustainable development



Environmental management demands the multi-disciplinary approach. It deals with a world affected by humans.



Environmental management has to integrate different development view points.



Environmental management seeks to integrate natural and social science.



Environmental management can extend from short-term to long-term and from local to international.

## Environmental management: its characteristics

Environmental management is the process of allocating natural and man-made resources so as to make optimum use of the environment in satisfying not only the present basic human needs but of the coming generation also.

Thus management employs an element of conscious choice from a variety of alternative proposals and furthermore that such a choice involves purposeful commitment to recognized and desired objectives.

Environmental management is not merely a management of environment but it is essentially the management of various activities with into licensable constraints imposed by the environment itself and with full consideration of ecological factors. Thus, it involves environmental planning, conservation of resources, environmental status, evaluation, and environmental legislation and administration.

The focus of environmental management is on implementation, monitoring and auditing in practice and coping with real world issues. Rather than theoretical planning. A close integration with environmental planning is desirable.

Thus, as stated earlier environmental management is held to study dedicated to understanding human-environment interactions and the application of science and common sense to solving problems.

Characteristics features of environmental management are:

1. It deals with a world affected by humans.
2. It supports sustainable development.
3. It demands a multidisciplinary approach.

4. It has to integrate different development viewpoints.
5. It concerns with short-term and long-term planning as well as from local to global scale and.
6. It seeks to integrate natural and social science, policy making and planning.

During the last three decades too much awareness has been developed regarding environmental protection and quality of life. The dictionary of environment is renewed regularly with new terminologies like clean technology, environmental auditing, environmental resource conservation etc. addng.

But all these aspects have been converged when the wider concept of environmental management had been emerged and also accepted as a tool for sustainable development. Environmental management as defined in Goudie (1994), "provides resources from bienvironmental systems of the planet but simultaneously tries to refine, sanative life-supporting ecosystems. It is therefore an attempt to harmonise and balance the varied enterprises for its own benefits".

Time has now come when our policy makers as well as society should aim to protect conserve and regulate the development in such a way that it will not create any adverse effect on ecosystem and needs of the people can also be fulfilled.

Throughout the world, particularly in developing countries, there are an urgent need for the management of the total environment.

In brief , environmental management is necessary for environmental planning which implies the optimal utilization of earth's resources and preservation of the quality of environment for the healthy growth of society.

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable development is a vision and a way of thinking and acting so that we can secure the resource and environment for our future generation. We can improve sustainable development by involving citizens and stakeholders.

The conceptual meaning of sustainable development is not to create an obstacle in development process but this concept belongs to how we utilize our resources so that an inter-relationship can be established among present and future generation. To attain sustainable development many probable strategies can be adopted.

Using appropriate technology is one which is locally adaptable, ecofriendly, resource efficient and culturally suitable. It mostly involves local resources and local labor. Technology transfer must be informed by an understanding of its implication on the social, economic and environmental contexts of the receiving societies.

Technology may be usable by and beneficial to local people. Where possible existing local

technologies must be upgraded and adapted to make them more efficient and useful. Such local adoptions should also lead to the upgradation of local technical skills. Local innovations and capacity building for developing and managing locally relevant and appropriate technologies must be encouraged and supported.

#### i) Reduce, Reuse and Recycle Approach,

The 3R-approach advocating minimization of resources reusing them again and again instead of passing it on to the waste stream and recycling the materials goes long way in achieving the goals of sustainability. It reduces pressure on our resources as well as reduces waste generation and pollution.

#### ii) Fostering Environmental Awareness

Making environmental education the center of all learning process will greatly help in changing the thinking patterns and attitude of people towards our earth and the environment. Introducing subject right from the school stage will inculcate a feeling of belongingness to earth in small children. "Earth thinking" will gradually get incorporated in our thinking and action which will greatly help in transforming our lifestyles to sustainable ones.

#### iii) Resource Conservation

Any system can sustain a limited number of organisms on a long term basis which is known as its carrying capacity. In case of human beings, the

carrying capacity concept becomes all the more complex. It is because unlike other animals, human beings not only need food to live but need so many other things to maintain the quality of life. Sustainability of a system depends largely upon the carrying capacity of the system. If the carrying capacity of a system is crossed (say by over exploitation of a resource), environmental degradation starts and continues till it reaches a point of no return.

Supporting capacity i.e. the capacity to regenerate.

ii) Accumulative capacity i.e. the capacity to tolerate different stresses.

Inorder to attain sustainability, it is very important to utilize the resources based upon the above two properties of the system. Consumption should not exceed regeneration and changes should not be allowed to occur beyond the tolerance capacity of the system.

The paramount importance of educating in effecting social change is recognized. Main stream education must now be realigned to promote awareness, attitudes, concerns and skills that will lead to sustainable development.

Basic education which promotes functional literacy, livelihood skills, understanding of the immediate environment and values of responsible citizenship is a precondition for sustainable

development. Such education must be available to every child as a fundamental right, without discrimination on the basis of economic class, geographical location or cultural identity.

The empowerment of women and girls must be supported by actions to improve their access to basic and higher education, training and capacity building. Collaboration and partnership between among scientists, government and all stakeholders on scientific research and development and its widespread application need to be improved.

vii) Improving living conditions, health, culture and economic prospects.

Development should not focus just on one section of already affluent people. Rather it should include sharing of benefits between the rich and the poor. Tribal ethnic people and their cultural heritage should also be conserved. Strong community participation should be there in policy and practice. Population growth should be stabilized.

These are eight National Missions has taken objective to contribute to India's long term energy security as well as its ecological security. We are living in a world of rapidly depleting fossil fuel resources and access to conventional energy resources such as oil, gas, and coal is becoming increasingly constrained. The rapid development and deployment of renewable energy is imperative in this context and in view of high solar radiation over the country solar

energy provides a long term sustainable solution.

National Mission on Enhanced Energy Efficiency under the Ministry of Power, will target improvement in energy efficiency in buildings, management of solid waste and accelerating modal shift to mass transport.

The National Water Mission's main objective is conservation of water, minimizing wastage and ensuring its more equitable distribution both across and within states through integrated water resources development and management.

## ACTIVITY - 5

Q5. Write about 'Environmental education at secondary education level?

Ans. Environmental Education in the formal school curriculum has been influenced by two national policy documents. The national curriculum framework 2005 of the National Council of Educational Research and Training (NCERT) and the directive of the Supreme Court in response to a 1991 petition filed by Shri Me Mehta. The Supreme Court gave its final pronouncement on the matter of the writ petition in December 2010. The key document eliminating the way forward for EE in the formal school system as approved by the Supreme Court, is the Affidavit filed by the NCERT and which advocates the infusion approach. This means that an environment perspective is to be added to all subjects from Standard I to XII. The Supreme Court of India in December 2010 had conveyed its acceptance of the NCERT's Affidavit outlining the method of implementation of EE in India. Following the publication of the National Curriculum Framework 2005 and the Supreme Court ruling on Environment Education the NCERT suggests the following method of implementation of EE.

Classes

I and II

III to V

VI to X

XI to XII

Mode of Transcation ..

Through Activities.

Environmental Studies (EVS)

Infusion model

Project based study

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The national council of Educational training and Research (NCTE) has in the last two decades not only developed textbooks and teacher guides incorporating environmental concerns but also prepared guidelines for preparation of textbooks.

Considering the relevance of Environmental Education as per National curriculum framework 2005, the new syllabi proposed aim at generating among young learners an awareness of and sensitivity to the total environment in a holistic manner and the problems associated with it. It would also equip the future custodians of the earth with the requisite knowledge of the total environment, natural and social the problems associated with it and the necessary skills for solving these in a positive and sustainable manner.

The age of environmental education that focuses on fostering ownership, empowerment and active participation may have the potential to positively influence children in meeting the goals of sustainability and be a key contribution to educational form.

The important characteristics of Indian model have been discussed below:-

- I. Ease of Implementation - Required that more teachers be trained greater co-coordination of the curriculum necessary requires less formal content in the existing curriculum.

- II. Teacher Competencies :- Required that all teachers from all disciplines be competent to adapt and/or use EE material although perhaps not to the same depth as in single subject approaches.
- III. Demand of curriculum load :- May be effectively implemented with minimal demands on existing curricular load.
- IV. Ease of curriculum development :- Components must be effectively identified sequenced and accommodated by the existing curriculum.
- V. Evaluation : comprehensive evaluation difficult due to the number of variables involved.
- VI. Age level appropriateness :- Appropriate at all age levels with some exceptions at secondary and tertiary level.

The concepts EE have been provided in the text books of science and social science in the states of Rajasthan and MP. In Orissa, there are textbooks, namely science part-I (Physical science), science part-II (biological science) and geography. The environmental concepts both are at concrete and abstract level.

The concept covered are :-

- Bio sphere.
- Green house effect
- Ozone layer depletion
- Use of fertilizers and pesticides.
- Wildlife protection.
- Soil chemistry.
- Management of domestic and industrial waste.

- pollution noise , air, water and soil and control measures .
- Ecosystem
- Management of non-degradable substances .
- Edible and ornamental plants .
- sewage disposal and cleaning of rivers .
- Nuclear energy
- Radiation hazards
- Gas leak
- Wind power
- Bio-energy and
- Environmental laws and acts .
- Environmental concepts also extended to subject areas like languages and social sciences , which reinforce learning and internalization of all such concepts .

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