

Environmental Management and E-Waste Management

Dr. Devendra R. Bhagat

Principal, Shri Kisanrao Khobragade Shikshan Mahavidyalaya,
Armori., Dist. Gadchiroli (M.S.-India)

Abstract:

Environment is derived as the Complex step of physical, biological, geographical, social, cultural and political conditions which surround an individual or Organism or by ultimately determines its form and nature of survival. The world environment is derived from an old French world environment encircle. The real world everything that affects an Organism during its lifetime reach collectively known as eight environment

Key word : Environmental Scientists, Economists, E-Waste, Politicians, Sociologists

Introduction:

Environment nurtures man by providing him all that to fulfil his basic needs of life. Man was living along with other creatures on the earth as a part of nature. This role of man continued for a pretty long period. Slowly the role started changing man through that he is the only master of all resources on the earth. First exploitation and then over exploitation of the resources has now caused serious problems for man. The natural balance of number of environmental systems is disturbed and has given a threat to the mankind. I need of social awareness regarding protection of environment was greatly built. The outcome of the entire exercise was to start the courses on environmental science and management studies from school, college and in universities level.

Environmental Management :

Environment is the basis of the entire living world, which has been helpful in its emergence and development since ancient times and future development also depends on it. For this reason, man continues to pave the way for his development by continuously using the environment; sometimes he adjusts the environment and sometimes he exploits it.

This sequence has been going on continuously but the disruption occurs when we start destroying the basic elements of the environment or polluting them. As a result, the components of the environment are not able to perform their natural functions and the ecological balance is disrupted and as a result humans have to face many disasters. The existence of not only humans but also animals, birds and plants becomes endangered. Today the entire world is in crisis due to excessive exploitation of the environment

and this crisis is deepening. This is the reason why today in the world there is continuous discussion on the issues of environmental crisis, environmental degradation, water, air, land, noise, radioactive pollution, natural disasters, destruction of living beings, holes in the ozone layer, increase in temperature etc. Happening. Scientists, politicians, economists, sociologists etc. are all warning about the environmental crisis. Many people have a pessimistic view on this. According to him, this crisis will increase further and will even end human civilization.

This danger cannot be denied, but instead of being afraid of it, there is a need to eliminate or reduce it and keeping this fact in view, the ideology has not only gained strength but substantial work is also being done everywhere in this direction. That is environmental management i.e. proper use of the environment, proper management so that it becomes maximum useful for human beings and least polluted and the ecological cycle continues forever. The general definition of environmental management is Under environmental management, it is necessary to use limited resources and change priorities through planning, analysis, evaluation and appropriate decisions so that they can be useful in real life. In the present circumstances, environmental management is the only way by which the environmental crisis can be controlled. Environmental management is a vast subject. Here a brief discussion of some of its facts is being presented which will act as a guide in this direction.

Environmental Management - Need and Scope:

Environmental management is a complex process which varies from person to person, community to community and state to state, because the nature of the environment is different and the ratio of its various components varies from place to place. While man has progressed through continuous use of the environment, he has also increased his environmental knowledge considerably and today he has become capable of understanding the natural and biological interrelationships in detail. Along with this, it has started making maximum use of the environment, as a result it is affecting not only the entire living world but also the components of the environment and due to disruption in their natural processes, natural disasters are becoming prevalent on the one hand. On the other hand, humans are suffering from many mental and physical diseases, many species of animals and plants are becoming extinct, the crisis of depletion of resources is deepening day by day. Therefore, the need for environmental management is the primary need today, through which not only rational use of resources can be made but also regional needs can be fulfilled and harmony can be established in environmental activities and consumption can be limited if necessary. The basic objective of environmental management is rational use of natural resources, protection of physical and mental health, providing new direction to economic values and providing pure environment. This work is not possible alone or by one organization but only collectively.

The role of administration, social institutions and every individual is important in this. If we want to purify the environment and keep it clean and healthy in the future, then we will have to pay proper attention to its management. The major points related to environmental management:

- (i) To protect various components of the environment from being polluted,
- (ii) Protection of humans from environmental pollution,
- (iii) Conservation of endangered species,
- (iv) To coordinate environmental management among various government & non-government organizations.
- (v) Analyzing development plans from the environmental impact point of view.
- (vi) To provide cooperation in national and regional policy making related to environment,
- (vii) To make arrangements for continuous review to maintain the quality of the environment,
- (viii) Mobilizing adequate human and institutional resources for environmental protection and management,
- (ix) To awaken environmental consciousness and arrange for environmental education,
- (x) Continuously checking and improving the results of the measures taken for management,
- (xi) Preparing draft for environmental planning.
- (xii) To save it from degradation by doing research on various aspects of the environment etc.

In fact, environmental management is the national need of the present era, not only of our country but of the entire world. Therefore, it is necessary to pay proper attention to this. Integrated management of various components of the environment should be done on the basis of geo-ecological systems.

Environmental Management- Importance and Solution:

Under environmental management, although the entire environment is kept in view, some aspects are given special attention. These are those aspects which control the ecosystem and which have a direct impact on humans and which influence social and economic development. Generally the major aspects of environmental management are as follows:

i. Environmental awareness and consciousness :

- (a) Sources of environmental awareness and consciousness
- (b) Level of environmental awareness
- (c) Role of environmental awareness in environmental planning, environmental education & training

ii. Environmental education and training :

- (a) Environmental education at home, school, college, university level
- (b) Environmental education through mass media
- (c) Environmental research and training

iii. Resource Management :

- (a) Classification of natural resources
- (b) Survey and evaluation of ecological resources
- (c) Conservation of energy, minerals, soil, forest and water resources.
- (d) Proper use of human resources

iv. Environmental impact assessment :

- (a) Evaluation of current environmental conditions
- (b) Evaluation of the impact of industrial and technological development on the environment
- (c) Evaluation of measures taken for environmental balance
- (d) Development of ecological technology

v. Control of environmental degradation and pollution :

- (a) To purify the degraded environment again
- (b) Pollution control
- (c) To keep constant vigilance and vigilance
- (d) To arrange for advance notice of natural disasters or to reduce the damage caused by them. In

brief the major dimensions of environmental management are:

- (i) Environmental awareness and consciousness
- (ii) Environmental detection
- (iii) Technical project and production management
- (iv) Management based on scientific efficiency,
- (v) Political system
- (vi) To provide adequate institutional and other resources.

There are two approaches to environmental management:

- (i) Conservation approach and
- (ii) Protective approach

The first i.e. conservation approach teaches man to be in harmony with the environment, that he should not interfere with the activities of nature and adjust with it. But this is not completely possible because development takes place through the use of nature and development has an impact on nature.

According to the second approach, it is necessary to conserve nature rather than exploit it indiscriminately. In other words, development without destruction is necessary. The environment can be saved only by proper use and conservation of resources. For environmental management, it is necessary to pay attention to its expansive nature or regional nature, that is, the unit where this work is to be carried out should be determined as.

- (i) Local management, (ii) Regional management, (iii) National management

(iv) Worldwide or international management

New direction can be given to development through proper management. This development needs to be balanced and coordinated. Environmental management is a necessity of the present era, a brief discussion of the management of its major components will be a guide in this direction.

Environmental Monitoring and Mapping:

Monitoring means continuous inspection, testing or review through which the level of environmental pollution is checked and efforts are made to improve it. Monitoring is mainly done on the facts related to pollution control and its level, in which air pollution, water pollution, noise pollution, radioactive pollution etc. can be continuously monitored. Environmental experts have set standards for the tolerance of humans and other living beings; pollution more than that is harmful for the living world.

Not only this, but monitoring also reveals the speed at which pollution is increasing. With this, those areas can also be detected where the amount of pollution is high. Therefore, one aspect of environmental pollution is monitoring, which requires experts who can measure and analyze it. There are five categories of monitoring systems:

(i) Mechanical method:

Under this, physical characteristics are measured with various instruments.

Some instruments are:

- (a) Sound level meter, (b) Geiger counter, (c) Thermometer, (d) Oxygen meter, (e) Hydrometer, (f) Chlorimeter

(ii) Mechanical methods for chemical analysis:

Under this, chemical analysis is done with various instruments in laboratories.

Some of the methods used for environmental analysis are:

- (a) Atomic Absorption Spectroscopy, (b) Infra-Red Spectro Photometry, (c) Gas-Chromatography

(iii) Wet method for chemical analysis:

The methods used under this are:

1. Volumetric Analysis., 2. Gravimetric Analysis., 3. Colorimetric Analysis.

(iv) Biological method of monitoring:

Under this, the bacteria that affect the quality of the environment are analyzed and their harmfulness is determined.

(v) Hybrid method:

Under this, the level of pollution is determined through a complex process using two or more of the methods mentioned above.

Monitoring is a continuous process because the amount of pollution in the environment keeps changing due to human activities. For this purpose, efforts are made to improve its quality by determining the level and analyzing it according to the endurance level.

One geographical aspect of environmental management is the creation of environmental maps i.e. environmental mapping. Through this, especially those areas which are suffering from environmental degradation and pollution can be displayed on the maps.

In these areas, high, medium and low effective areas can be displayed. Satellite pictures and imagery have a substantial contribution in environmental maps. Using cartography in foreign countries, environmental maps have been given a very useful form.

Keeping in view its usefulness, a commission of the International Geography Organization was formed on 'Environmental Maps and Atlases'. National Atlas and Thematic Map Organization is also active in this direction. Some aspects of environmental maps are:

(i) Urban Environment Map, (ii) State wise environmental map, (iii) Maps of pollution affected areas, (iv) Environmental perception map, (v) Map of areas affected by environmental disasters such as floods, droughts, sea storms etc. (vi) Barren land map, (vii) Land use map, (viii) Maps of forest areas, (ix) Geomorphological maps, (x) Detailed maps of water pollution, land pollution, air pollution etc., (xi) Maps etc. for environmental planning.

At present, maps, graphs, diagrams etc. have become increasingly prevalent in environmental management. In this work, the role of “Geographic Information System” is very important which can be made available through ‘Internet’. It is clear from the above description that the solution to environmental problems lies in its proper management. There is no need to be afraid of environmental problems, especially pollution, but there is a need to be alert and aware about it. Technological development has given rise to many environmental problems and their solution is possible only through technological and technological development. Along with this, we will also have to study the regional culture and civilization minutely and see how humans have been progressing in harmony with nature for thousands of years.

It is not meaningful to deny ancient methods, but by converting them into modern environment, many environmental problems can be solved. Environmental management is not only the work of government institutions, but voluntary organizations and every person of the society will have to become a partner in this work, only then the environment can be prevented from getting polluted and the future of the world can be made safe by keeping the ecosystem balanced.

E-waste Management:-

Globalization and modern technology have created many problems. One of them is an important and urgent problem. E-waste is computer monitors, keyboards, mice, damaged mobile parts, dead electronic devices, televisions, electronic toys, dead cells. This is the preliminary information. What exactly is e-waste? How is it produced? What are its sources? Common citizens do not know the answers to many such questions. They don't even know how to break it down. E-waste is the waste generated from unusable electronic items. Mobile and technology revolution has made e-waste a household issue. Everything from mobile phones and computers to watches and broken radios are included in e-waste. When all these things are broken, they are given in scrap. But no one knows what happens to these things after they are scrapped.

Environmental Protection and Conservation Laws and Regulations in India:

- 1) Indian Forest Act -: 1927
- 2) Import and Export Control Act -: 1947
- 3) Mining and Mineral Resources Development Act -: 1957
- 4) Customs Act -: 1962
- 5.) Wild Life Protection Act - :1972
- 6) Central Pollution Control Board – 1974
- 7) Water pollution ban and regulation -: 1974 & 1977
- 8.) Forest Promotion Conservation Act :- 1980
- 9) Air pollution restrictions and rules -: 1981
- 10) Environment Protection Act -: 1982 & 1986
- 11.) Public Liability Insurance Act -: 1991
- 12) Environment Friendly Production Killing Strip Act -: 1991
- 13) National Environmental Appellate Authority Act -: 1997
- 14) Organic Waste Planning -: 1998
- 15) Production and Use of Plastics for Reuse Rules -: 1999
- 16) Municipal Solid Waste Management Rules -: 2000
- 17) Noise Pollution Act – 2000
- 18) Swamp Enhancement Program – 2002
- 19) Biodiversity Act -:2002
- 20) Tribal Tribes and Other Forest Dwellers Act -: 2006
- 21) National Wildlife Action National Environment Policy – 2006.
- 22) National Green Arbitration Act -: 2010
- 23) Plastic Waste Management Rules – 2011
- 24) E-Waste Control Act – 2011 & 2016

E-Waste Management Rules (2016) -

Inclusion of Producers, Distributors, Refurbishers and Producer Responsibility Organizations (PROs) as additional or enhanced stakeholders. Covering not only electronic goods but also parts, spare parts, consumables used in it. Including CFLs and other mercury lamps.

Responsibility of manufacturers to create electronic waste collection systems. Registration, Registration and Licensing of e-waste collection systems or organizations by the Ministry of Environment and preparing a list of such authorized organizations state wise. At the time of purchase of goods, the manufacturer or distributor will charge a certain amount as deposit from the customer and this will create an obligation to return the product to the manufacturer or distributor at the end of its useful life. The rule provides for refund of the respective deposit amount along with interest to the customer. Establishment of e-waste exchange system. According to the new rules, giving official or formal status to the waste collectors who are now included in the informal or unorganized sector, registering them, licensing them will also be done in the future and instructions to the state governments for that. The problem of e-waste is becoming more serious in Mumbai. Therefore, the Mumbai Municipal Corporation has tightened its belt to solve this problem. This effort of the Municipal Corporation has been greatly supported by 'Eco Recycling Limited' i.e. 'Ecorico', India's first commercial and BSE listed e-waste management company. This company has set up e-waste collection centers all over Mumbai. Environmental expert Laxmikant Deshpande informed that citizens have been appealed to deposit their e-waste in these centres. Information about where these centers are located has been given on the website of the Municipal Corporation of Mumbai.

Conclusion:-

Deliberate action with the goal of improving the quality of the environment and improving the condition of the environment due to human activities. Environmental degradation has threatened the survival of all living beings. Therefore, environmentalists, scholars, rulers, administrators, social and political activists are deliberating on these issues. It is from this that the concept of environmental management has come forward. Environmental management is a concept in the context of development and planning. The overall development of the society and the elimination of social and economic disparity by balanced use of natural resources are the objectives. At the same time, environmental management includes the control of reckless human activities, conservation of natural resources and principles laid down for solving environmental problems. An attempt is made to maintain the quality of the environment along with the social and economic development of human beings. Environmental management is a process of coordination between humans and nature. By that, an attempt is made to achieve human welfare by maintaining a pollution-free environment without disturbing the balance of the environment. The process of controlling environmental disasters is a

part of environmental management which uses the techniques of judicious use of resources based on planning, analysis and assessment.

Environmental management is not limited to a particular region or nation but is a global need. The goal of environmental management is to protect ecosystems and maintain the integrity of ecosystems for equitable use by human society in the future. Protection and prevention of environmental e-waste and awareness among people through various act/

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