Research Paper

Geography



Impact of Society on Environment

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Society & Environment are interrelated. But this relationship changed through time with development of society and the dimension of the environment. Most of the environmental problems are society induced, so we have to check the degradation of environment.

KEYWORDS

Landscape, Hostile, Migrate, Deforestation, Natural Resources, Pollution, Depletion, Disaster, Anthropogenic, Exploit, Shifting Agriculture

Environment is the source of life on Earth. It determines the existence, growth & development of mankind and all its activities. Human environment is the Earth we live: Air, soil, minerals, rocks and water as well as all its living organisms such as animals and plants. Environment is of two types viz., Physical and Socio-cultural or Man-made.

There has been a growing interest among common people, planners and researchers about the impact of society on environment. Environment is resource field which is continuously changed by life and, in turn, changes life. In this way, relationship between environment and society has been a focal theme in Geography. This relationship changed through time with the development of society and the dimension of environment. In the beginning of the process of evolution of society, physical elements of the planet earth formed the environment. As the society became socially, economically and technology advanced, man broadened his environment by creating his own environment through his skill and design to have better food, shelter and comfort. Thus relationship between environment and society can be perceived and evaluated in number of ways and approaches.

In fact, society has been an ecological dominant since the emergence of man on earth. Society, in other words has been interacting with its physical environment right from the primeval stage of human development. With the advance in science and technology, the frontiers of knowledge have expanded beyond the cosmic space and the environment of earth has been transformed beyond recognition. People in their increasing numbers and technological skills have placed their imprints upon the natural landscape and environment.

Environment and society are closely related and interdependent. Society plays important role in the natural environmental system in different capacities. The role of most primitive society in the functions of natural environmental system was fundamentally that of user of resources. Thus, society played the role of a factor of environment. But as the skill and technology developed, society's role towards natural environment also changed progressively such as from user through modifier and changer to destroyer of environment.

So, it is the technology which has drastically changed the environment and society relationship from prehistoric period to the present most advanced industrial period. In fact, the industrial and scientific evolution has led to rapid changes in our environment. It may also be stressed that religious ideas and materialistic outlook of society has also played significant roles in changing environment and society relationship, on a large scale. Thus, if we look at the historical progression of envi-

ronment and society relationship, it becomes clear that purely natural relationship between society and environment during prehistoric period has changed to hostile relationship between the two.

The Industrial Revolution brought environmental changes not only in Europe and Asia but also transformed tremendously the environment in America, Africa and Australia. It was between 1850 and 1920 when large number of Europeans migrated to North America, Australia and they also colonized Africa. The Europeans did large scale deforestation in these continents for the spread of agriculture. The deforestation policy and the development and expansion of agriculture resulted into significant environmental change.

Different social groups and the social structures like industrial, agricultural, political, cultural, religious etc. have evolved and developed during various stages of development of human society. These social structures represent man's accumulated cultural resources based on natural environment. If the natural environment helped in the development of different structures of society, then the existence and quality of environment rest on the responses of these social structures. Since the dawn of the industrial revolution in 1860, society has emerged the most powerful environmental process spearheaded by modern technologies. Now society is capable of modifying the basic composition of the environment at a scale detrimental not only to all biota but also to his own existence. Phenomenal increase in human population in the last century has put enormous pressure on natural resources. This has resulted into accelerated rate of rapacious exploitation of natural resources. The development of modern technologies and increased economic functions of the society have modified a few of the components of the environment to such an extent that the adverse effects on the environment cannot be set right by self-regulating mechanisms of the environment.

The lowering of environmental quality caused by human activities at local level is generally called pollution. Sometimes the effects of human activities are so immense that the environment is degraded at global level as well. The depletion of ozone layer by human actions and increase of greenhouse effect of the atmosphere due to increase in concentration of carbon dioxide in the atmosphere may change the radiation balance of the earth. The natural holocaust disaster may change the global environment within the shortest time scale.

Since the realization of environmental degradation and pollution it has now become of global concern. Now it is not only desirable but is also necessary for environmental geographers to formulate a comprehensive environmental management

programme. Anthropogenic source of pollution which is created by society is varied and is the main culprit of environmental pollution. This anthropogenic source of pollution include industrial source, urban source, agricultural source and population source. Most of the pollutants come from industrial and urban sectors. Industrial source contribute gaseous pollutants and urban source of pollution contribute sewage water, solid waste, gaseous exhausts, liquid affluent etc.

Modern economic and technological activities of society have disturbed the harmonious relationships between the environment and society. This harmonious relationship can be achieved through check on destructive activities of society, conservation, protection, regulations and regeneration of nature. If the natural resources are exploited, some environmental problems are bound to crop up. Most prominent of which is climate change. Climate change affects agriculture and food production in complex ways. It also affects food production directly through changes in agro-ecological conditions and indirectly by affecting growth and distribution of incomes.

In temperate latitudes, higher temperatures are expected to bring predominantly benefits to agriculture. With change in climate, semi arid and arid pastures are likely to see reduced livestock productivity and increased livestock mortality. In drier areas, climate models predict increased evapotranspiration and lower soil moisture levels. As a result some cultivated areas may become unsuitable for cropping and some tropical grassland may become increasingly arid. Thus globally, higher yields in temperate regions could offset lower yield in tropical regions.

Hence socio-economic development of a nation is possible without causing injury to some of the components of the environment. Conservation of resources and control of pollution are the pre-requisites for environmental planning. Society must always has been concerned with their environment since it is its immediate surroundings that provides the vital resources which are necessary for survival. During the past two or three million years, the major agents of environmental change have been climate and the society. All natural systems are in a state of dynamic equilibrium. Most environmental systems have both resilience and resistance to change. This change is gradual and imperceptible.

For example, it is only in the late eighties that the ravages of 'acid rain' in Scandinavian lake have been recognized. Mining also results into a widespread change in soil, aquatic and atmospheric quality at distance. Of particular significance is the use of fossil fuels in mineral processing. The use of fossil fuels is increasing CO concentrations that are affecting climatic change. The emission of nitrous and sulfurous gases into the atmosphere and their subsequent deposition is one of the main causes of terrestrial and aquatic acidification. In some cases, this later has degraded aquatic ecosystems and rendered water supplies unpatable. Other contaminants are also contributing to environmental change via air pollution and may also be threat to social health.

In order to meet the growing needs of society, energy consumption has also increased markedly during the 20th and 21st century. Today, carbon dioxide emissions from social sources –

mostly from the burning of fossil fuels – averages more than 7 billion metric tones of carbon per year and have altered the dynamics of the world's climatic system. Worldwide, motor vehicles have real environmental and economic costs. Now it is well established fact that due to growing use of vehicles, the concentration of carbon dioxide, nitrous oxide, ozone and CFCs has increased. These gases absorb infrared radiations. Undoubtedly carbon dioxide is the most abundant greenhouse gas. Moreover, there is increase in concentration of Methane in atmosphere, which is an active heat trapper. It is estimated that by 2030 A.D., the effect of methane in global warming will be just as significant as extra carbon dioxide produced.

Society has tried to exploit the resources of Biosphere and in this attempt disturbed the eco system. Plants and animals have been introduced to new areas. Their fast growth has changed the environment of the new area drastically. Deforestation for cultivation has changed the habitat of the organisms living in the forest. It has resulted in soil-erosion. Excessive cultivation, over grazing and shifting agriculture has increased the rate of soil erosion. Irrigation Projects in dry areas have resulted into salinization of soil and spread of water-borne diseases. In recent years, environmental pollution and presence of chemicals in the air, water and food has damaged human health.

Interference of society has led to the deterioration of natural resources at such an alarming rate that there will be serious shortage of these resources in the near future. The hunting of animals has led to the extinction of certain species. Over-exploitation has caused a serious shortage. For example, mineral oil will not last long. Thus, it is clear that most of the environmental problems are society induced. Hence, their solutions also be in its hands. If we want the survival of human race, we have to check the degradation of our environment. Society will have to live in harmony with the environment so that ecological balance is not disturbed.

SUMMARY

Society is an integral part of environment. Society influences its environment with the help of skill, knowledge, science and technology. In this attempt, it has tried to exploit the resources of Biosphere and has disturbed the eco-system of the environment. Careless use of the resources may destroy them to such an extent that they may not be available to mankind. If we want the survival of human race, we have to check the degradation of our environment so that ecological balance is not disturbed.