

A Brief Study on Cause and Effect of Environmental Pollution

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ABSTRACT - The foremost vital and problematic reason of the surrounding degradation and thence international environmental is that the reality of degrading the connection between man and environment thanks to several reasons like speedy rate of destruction of natural resources, technological development and industrial growth. Because of the surplus of monoxide or fluorocarbon gas there's a hole made within the layer as a result the ultraviolet illumination rays area unit coming back towards the planet cause many sorts of skin issues . Because of the surplus production of various industrial wastes, soil pollution and pollution area unit increasing tons that successively cause completely different health issues and our surroundings is begrime day by day. The buildup of inexperienced house gases can cause important changes within the weather patterns within the close to future resulting in heating. The destruction of layer and also the more warming of the planet surface threaten harmful consequences like eruption of cancerous and tropical diseases, disruption of oceans organic phenomenon, rising of ocean levels, submersion of the many islands, melting of tiny land-based glaciers, flooding in several low lying coastal areas and harvest loss etc. These area unit making fearful signals to shield the surroundings else everybody at risk.

Keywords: Green technology, Environmental pollution, Renewable energy

I. INTRODUCTION

The concept of environment is as old as the concept of the nature itself. It is a composite term referring to conditions in which organisms consisting of air, water, food, sunlight etc., thrive and become living sources of life for- all the living and non-living beings including plant life. The term also includes atmospheric temperature, wind and its velocity.

II. ENVIRONMENTAL POLLUTION

Before understanding what "Environmental Pollution" is it is equally necessary to-know what "pollution" is. The Royal Commission on Environmental Pollution in U.K. in its third report gave the following definition to the term "Pollution", namely: The introduction by man into the environment of substances or energy liable to cause hazards to human health, harm to living resources and ecological systems, damage to structure or amenity or interference with legitimate uses of the environment. Pollution occurs when there is the potential for harm[1]. Harm of man is not confined to physical injury but encompasses offence caused to any of his senses or harm to his property, therefore smells and noise which I may not cause injury can constitute pollution. Harm to living organisms can include harm to their health or interference with the ecological systems of which they form a part.

KINDS OF POLLUTION Environmental pollution may broadly be classified into: (1) Natural pollution;

(2) Man-made pollution. 1. Natural Pollution: Environment is polluted often by natural phenomenon, such as earthquakes, floods, drought, cyclones, etc. 2. Man-made Pollution: Human activities. The environmental pollution can also be classified further as, Air pollution, water pollution, land pollution, food pollution, noise pollution and radio-active pollution, etc.

III. FACTORS OF ENVIRONMENTAL PROBLEMS

The „environmental crisis“ is caused due to environment and ecological changes as a result of developmental process of the 'economic and technological man" of the present century. In fact if the present century is marked by socio-economic, scientific and technological development on the one hand, it is plagued by serious problems of environmental problems on the other hand. The environmental crisis arising out of the environmental deterioration caused by several forms of pollution, depletion of natural resources because of rapid rate of their exploitation and increasing dependence on energy consuming and ecologically damaging technologies, the loss of habitats due to industrial, urban and agricultural expansion, reduction and loss of ecological populations due to excessive use of toxic pesticides and herbicides and loss of several species of plants due to practice of monoculture removal of habitats through forest clearance has now become of global concern. The life of common man is being so rapidly adversely affected by environmental degradation caused by

man himself that there has been a marked growth of interest within the last decade in the quality of the environment, the disruption of the earth's natural ecosystems and the depletion of resources. The most striking reason of the environmental degradation and hence global environmental crisis is the fact of deteriorating relationship between man and environment because of rapid rate of exploitation of natural resources, technological development and industrial expansion. The rate of environmental change and resultant environmental degradation caused by human activities has been so fast and widespread. The impact of man on environment through his economic activities are varied and highly complex as the transformation or modification of the natural condition and process leads to a series of changes in the biotic and abiotic components of the environment. The impacts of man on environment fall into two categories (i) direct or intentional impacts and (ii) indirect or unintentional impacts, Direct or intentional impact of human activities are preplanned and premeditated because man is aware of the consequences, both positive and negative of any programme which is launched to change or modify the natural environment for economic development of the region concerned. The effects of anthropogenic changes in the environment are noticeable within short period and these effects are reversible. On the other hand the indirect impacts of human activities on the environment are not premeditated and preplanned and these impacts arise from those human activities which are directed to accelerate the pace of economic growth, especially industrial development [2]. The indirect impacts are experienced after long time when they become cumulative. These indirect effects of human economic activities may change the overall natural environmental system and the chain-effects sometimes degrade the environment to such an extent that this becomes suicidal for human beings.

IV. MAIN CAUSES OF ENVIRONMENTAL POLLUTION

The problem of environmental pollution, we face today, is a complex consequence of forces connected with various interrelating factors. There are clearly a number of divergent and conflicting views of what could be the basic factors underlying the environmental crisis. No single cause can be considered as the root cause of environmental impairment. However, the following causes could be pointed out as the generally underlying factors though each of these too could be operating simultaneously and their balance may vary from place to place and through time.

1. Population growth Modern thinkers consider that growth of population is the root cause for many

human problems. This observation also applies to environmental degradation. Increase in the population will have a multiplier effect requiring proportionate increase in all requirements necessary for the existence of human beings. Population growth requires abnormal exploitation of natural resources to provide day-to-day essential requirements of life. It results in migration of people and growth of urban areas, thereby inviting new problems of health, ecology and human sustenance.

2. Increased General Affluence and Economic Growth The affluence (i.e. material aspects of per capita consumption of goods and resources) is an important factor in man-resource- environment relationship. It is the increasing per capita demand of rich which is absorbing the growth in output of goods and services in the developed and developing countries and cause misuse or overuse and pollution of resources, for the affluence unmatched to the necessary resource consumption and not motivated by human requirements produce tendency to waste matter and energy. Surprisingly, affluence factor though, having a great impact on environment, is seldom talked about. On the other hand, poor and the poverty often get blamed for the destruction of environment. The notion that poverty or the poor destroy the environment most is but partially true.

3. Nature of Modern Technology The nature of productive technology in recent years is closely related to the environmental crisis. Commoner maintains that sweeping transformations of productive technology since World War II productive technologies with intense impacts on environment have displaced less destructive ones. This factor has been largely responsible for the generation of synthetic and non-biodegradable substances such as plastics, chemical nitrogen fertilizers, synthetic detergents, synthetic fibres, big cars, petrochemical and other environmentally injurious industries and 'disposable culture. Thus, environmental crisis is the inevitable result of a counter ecological pattern of productive growth. Ecologically benign technologies did and do exist but they are not utilized, for they are considered inconsistent with the short-term interests of private profit maximization[3]. Deforestation Forests are invaluable property of a nation because they provide raw materials to modern industries, timber for building purposes, habitats for numerous types of animals and micro-organisms. Good fertile and nutrient-rich soils having high content of organic matter, offer protection to soils by binding the soils through the network of their roots and by protecting the soils from direct impact of falling raindrops. They encourage and increase infiltration of rainwater and thus allow maximum recharge of groundwater resources, minimize surface run-off and hence reduce the frequency, intensity and

dimension of floods. They help in increasing the precipitation; they are natural sink of carbon dioxide because they use carbon dioxide to prepare their food during the process of photosynthesis. They provide firewood to millions of people all over the world and food and shelter to innumerable humans and animals. In fact, forests are 'life line' of a nation because prosperity and welfare of the society directly depends on sound and healthy forest cover of a nation concerned. Forests are main component of the biotic components of the natural environmental system and the stability of the environment and ecological balance largely depend on the status of the forests of the region concerned. It is a matter of serious concern that the present economic man has forgotten the environment and ecological significance of natural vegetations mainly forests and grasslands and has destroyed the forests so rapidly and alarmingly that the forest areas at global, regional and local levels have so markedly decreased that several serious environmental problems such as accelerated rate of soil loss through rain splash, sheet wash, rill and gully erosion, increase in the frequency and dimension of floods, greater, incidence of drought due to decrease in precipitation etc. have plagued the modern human society. The major causes of deforestation at global and regional levels are conversion of forest land into agricultural land, shifting cultivation, transformation of forests into pastures, overgrazing, forest fires, lumbering, multipurpose river projects etc. Deforestation gives birth to several problems encompassing environmental degradation through accelerated rate of soil erosion, increase in the sediment load of the rivers, siltation or reservoirs and river beds, increase in the frequency and dimension of floods and droughts, changes in the pattern of distribution of precipitation, intensification of greenhouse effects increase in the destructive force of the atmospheric storms etc. economic loss through damages of agricultural crops due to increased incidence of floods and droughts, decrease in agricultural production of loss of fertile top soils, decrease in the supply of raw materials to the industries and building matters etc. Thus deforestation cause a chain effects which adversely affect the natural environment. Agricultural Development Agricultural development means expansion of agricultural land increase in agricultural productivity and net agricultural production. It is due to development of modern scientific techniques, advanced technologies, increased production and use of chemical fertilizers, expansion in irrigational facilities, development of highyielding varieties of seeds, etc. This has solved the problem of growing demand of food due to ever increasing world population on the one hand; it has also created or is creating hazardous environmental

problems of serious concern on the other hand. Thus modern economic and technological man is at the cross road of dangers in all directions. The agricultural development degrades the environment in a variety of ways, e.g. (i) through the application of chemical fertilizers and pesticides and insecticides, (ii) through the increase in irrigational facilities and amount of irrigation, (iii) by making changes in biological communities etc. Conversion of forests land into agricultural farms on sloppy ground accelerates rate of soil erosion. Increased in agricultural land at the cost of destruction of forest and consequent soil erosion, substantial increase in the productivity of land through the practice of intensive cultivation, increased use of machines and modern scientific techniques, application of chemical fertilities, pesticides, insecticides and herbicides, increase in the frequency and area of watering of agricultural fields, etc. All these processes and measures of increased agricultural development cause several serious environmental problems. It appears that the root cause of all these environmental problems arising out of agricultural development is the increase of human population at alarming rate. So the foremost step to be taken is to stop population growth because if population continues to grow agricultural development has to be maintained. 6. Industrial Development "Rapid Industrial Development has given economic prosperity to human society. It has also given new dimension to socio-economic structure and has provided material comfort to the people of industrially developed countries but it has also created many fold environmental problems. In fact, the glittering effects of industrialization have affected the mind of the general public that industrialisation is now being considered as the parameter of modernity and as a necessary element of socio-economic development of a nation. Rapid rate of industrialization resulted into rapid rate of exploitation of natural resources and increased industrial output.

V. CONCLUSION

The causes for environmental problems are many. The multiplicity of causes makes it difficult to clearly delineate the causes and consequences of environmental degradation in terms of simple one to one relationship. The causes and effects are often interwoven in complex webs of social, technological, environmental and political factors. However, some of the very common causes of environmental degradation which can be clearly pointed out are the population growth, the economic growth associated with the affluence factor and change of technology. Population is an important resource for development, yet it is a major cause of environmental degradation when it exceeds the

threshold limits of the support systems. The overriding impact of adverse demographic pressure ultimately falls on our resources and ecosystems. Combined with it the conditions of poverty and underdevelopment themselves create a situation where the people are forced to live in squalor and further degrade their environment. The process of development itself also leads to damage of the environment, if not properly managed. Associated with the rapid economic growth, the extravagant affluence consume far more resources and put far greater pressure on natural resources. The change of technology causes planned obsolescence causing the generation of more and more wastes which in turn prove ecologically harmful. Shortterm interests of private profit maximization, further, hamper the process of replacement of obsolete technologies by the ecologically benign technologies.

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