
ORIGINAL ARTICLE



ENVIRONMENTAL DEGRADATION LEADS TO DEPLETION OF FOREST

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ABSTRACT

Ecological debasement is a procedure through which the common habitat is undermined somehow or another, lessening natural decent variety and the general strength of the earth. Simple damage is also a common issue. Clear cutting, unsustainable development, and erosion are all forms of environmental damage. Degradation usually means that carrying capacity is reduced by some natural or human phenomenon. Moreover, the rising human population has resulted in a dramatic increase in the demand for a variety of resources. Many of these resources come from forest based industries, which depend on the Himalayan forests, along with other forests, for their raw materials. For this reason, forests are being cut down unscrupulously in many areas. Over the past several decades, the ever increasing population and decreasing vegetative cover has brought an unprecedented pressure on the trees may lead to depletion of forests that remain. Standing trees were felled for fuelwood wherever available, and when these too became scarce, people uprooted the stumps of old trees and took them away for burning in the rural hearths. The impact of environmental disasters can be devastating on the social, economic, and environmental systems of a country or region as well as the global ecosystem such as the depletion of forests.

KEY WORDS: Natural Degradation, Depletion of Forests – Water Pollution – Air Pollution and Loss of Biodiversity.

INTRODUCTION

Ecological debasement is a procedure through which the regular habitat is undermined here and there, lessening organic assorted variety and the general strength of the earth. This procedure can be totally normal in beginning, or it very well may be quickened or brought about by human exercises. Numerous worldwide associations perceive natural debasement as one of the significant dangers confronting the planet, since people have just been given one

Earth to work with, and if the earth turns out to be hopelessly bargained. It could mean the finish of human presence.

There are a number of ways in which environmental degradation can work. In a classic case, resources simply become depleted. Air, water, and soil are all resources which are vulnerable to depletion through overuse, as are natural resources like minerals and oil deposits. Habitat pressures which force animals into a small area can also contribute to resource depletion. as the animals consume a high volume of material in a small area.

Pollution is another cause of environmental degradation. When the environment becomes polluted, it means that toxic substances have rendered it unhealthy. Pollution can come from a variety of sources, including vehicle emissions, agricultural runoff, accidental chemical release from factories, and poorly-managed harvesting of natural resources. In some cases, pollution may be reversible with costly environmental remediation measures, and in other instances, it may take decades or even centuries for the environment to cope with the pollution.

Simple damage is also a common issue. Clear cutting, unsustainable development, and erosion are all forms of environmental damage. If the damage is extensive, the environment may not be able to reach a state of balance on its own, and the problem could become compounded. Erosion as a result of bad agricultural practices. for example. can strip the earth of its valuable topsoil, leaving coarse, useless soils behind. This infamously occurred in North America dust Bowl the Dust Bowl of the 1930s, in which drought, poor farming practices, and severe weather led to a widespread stripping, of fertile topsoil from farmlands.

DEFINITION OF ENVIRONMENT DEGRADATION

The formal definition - is arrived at by conferences involving different disciplines. The definitions reflect discussions about data and compromises concerning the effects of monitoring or enforcing various definitions. "Degradation" as a concept invokes the ecological concept of "carrying capacity." Carrying capacity is the ability of an environment to sustain the resource demands of a species or a community without losing its ability to regenerate the resource. Degradation usually means that carrying capacity is reduced by some natural or human phenomenon.

The assertion that the environment is being degraded or that a species is a "weed" contains an hypothesis that can be tested, if carefully stated and studied in a relevant context.

Example: Environmental Protection Agency - Biological Criteria for Coral Reef Ecosystem Assessment

- Presence of human fecal waste/pollution (commonly assessed by nitrogen isotope ratios in tissues of reef organisms)
- Dying native species (change of community structure, especially for the soft bottom dwellers)
- invading species - weeds in the broad sense of intrusion, replacement of native species (change of community structure).

CAUSES OF ENVIRONMENTAL DEGRADATION

1. **Overview of the Causes of Environmental Degradation: Market and Policy Failures**
2. **Property Rights**
3. **Public Goods**
4. **Externalities**
5. **Imperfect market structures and power**
6. **Divergence of social and private discount rates**
7. **Policy Failure**
8. **Poverty Environment Links**

EFFECTS OF ENVIRONMENTAL DEGRADATION

a. Water pollution and water scarcity: As per the estimation of UN, more than two million deaths and billions of illnesses a year are attributable to water pollution. Water scarcity compounds these health problems. Productivity is affected by the costs of providing safe water, by constraints on economic activity caused by water shortages, and by the adverse effects of water pollution and shortages on other environmental resources such as, declining fisheries and aquifer depletion leading to irreversible compaction.

b. Air pollution: As per the estimation of UN, urban air pollution is responsible for 300,000-700,000 deaths annually and creates chronic health problems for many more people. Restrictions on vehicles and industrial activity during critical periods affect productivity, as does the effect of acid rain on forests and water bodies.

c. Solid and hazardous wastes: Diseases are spread by uncollected garbage and blocked drains; the health risks from hazardous wastes are typically more localized, but often acute. Wastes affect productivity through the pollution of groundwater resources.

d. Soil degradation: Depleted soils increase the risks of malnutrition for farmers. Productivity losses on tropical soils are estimated to be in the range of 0.5-1.5 per cent of GNP, while secondary productivity losses are due to siltation of reservoirs, transportation channels and other hydrologic investments.

e. Deforestation: Death and disease can result from the localized flooding caused by deforestation. Loss of sustainable logging potential and of erosion prevention, watershed stability and carbon sequestration provided by forests are among the productivity impacts of deforestation.

f. Loss of biodiversity: The extinction of plant and animal species will potentially affect the development of new drugs; it will reduce ecosystem adaptability and lead to the loss of genetic resources.

g. Atmospheric changes: Ozone depletion is responsible for perhaps 300,000 additional cases of skin cancer a year and 1.7 million cases of cataracts. Global warming may lead to increase in the risk of climatic natural disasters. Productivity impacts may include sea-rise damage to coastal investments, regional changes in agricultural productivity and disruption of the marine food chain.

ENVIRONMENTAL DEGRADATION AND DEPLETION OF FORESTS:

The Himalayas are known for their tremendous biodiversity. The variety of vegetation found in the region, from tropical rainforests to alpine and sub-alpine forests, is truly breathtaking. However, due to the growing human population, forests are being affected in many ways. Forest lands are being cut down rapidly in many areas to provide new locations for human habitation.

Moreover, the rising human population has resulted in a dramatic increase in the demand for a variety of resources. Many of these resources come from forest based industries, which depend on the Himalayan forests, along with other forests, for their raw materials. For this reason, forests are being cut down unscrupulously in many areas. Tropical forests provide timber. Forests in the middle altitudes are also cut as the wood serves a variety of purposes. In higher altitudes, coniferous forests are felled to obtain softwood, which is used for making furniture, sports goods and newsprint.

In addition, forests are still used in many areas for providing firewood to the villagers. In fact, almost the entire energy needs of these areas are met from fuelwood obtained from the felling of trees growing in the forests and near the agricultural field. Moreover, the trees and shrubs are used as fodder for the domestic animals reared by the mountain people. In some areas, the age-old practise of shifting cultivation still exists. Here, a patch of forest land is burnt and cleared. The land is intensely cultivated for the next few years, until it loses fertility. Then, the land is abandoned, and a new patch of forest land is cleared. Earlier, the forests would rapidly grow back in the area that had been cleared. But today, the extraordinary demands put on the forest lands mean that these forests no longer stand the chance of growing back in the cleared areas.

This problem is particularly severe in the cold desert regions. Nature has not bestowed these regions with a rich vegetative cover primarily due to the harsh environmental conditions like the severe cold, short growing season, high altitude and fragile soil. However, the little forests that these regions have are also used for many purposes. The result -- lands that were once thickly forested today stand devoid of any vegetative cover.

Over the past several decades, the ever increasing population and decreasing vegetative cover has brought an unprecedented pressure on the trees may lead to depletion of forests that remain. Standing trees were felled for fuelwood wherever available, and when these too became scarce, people uprooted the stumps of old trees and took them away for burning in the rural hearths.

Today, forests have reduced drastically or completely vanished from many parts of the Himalayas. People in their eighties or seventies recollect that there once stood forests where now lie barren wastelands, capable of supporting only a meagre growth of grass.

Forest degradation also leads to a variety of other problems, including soil erosion and landslides.

WOODLAND (CONSERVATION) ACT, 1980 WITH AMENDMENTS MADE IN 1988:

An Act to accommodate the preservation of woods and for issues associated therewith or auxiliary or accidental thereto.

Be it established by Parliament in the Thirty-first Year of the Republic of India as pursues:-

1. Short title, degree and initiation.

(1) This Act might be known as the Forest (Conservation) Act, 1980.

(2) It reaches out to the entire of India with the exception of the State of Jammu and Kashmir.

(3) It will be regarded to have come into power on the 25th day of October, 1980.

2. Confinement on the dereservation of timberlands or utilization of backwoods land for non-woods reason.

Despite anything contained in some other law for the present in power in a State, no State Government or other authority will make, aside from with the earlier endorsement of the Central Government, any request coordinating

(i) that any held woodland (inside the significance of the articulation "saved timberland" in any law until further notice in power in that State) or any segment thereof, will stop to be saved;

(ii) that any timberland land or any segment thereof might be utilized for any non-woodland reason;

(iii) that any backwoods land or any bit thereof might be relegated by method for rent or generally to any private individual or to any position, partnership, office or some other association not possessed, oversaw or constrained by Government;

(iv) that any woods land or any segment thereof might be cleared of trees which have developed normally in that land or bit. to utilize it for reforestation.

Clarification for the reason or this area, - non-woodland reason implies the separating or clearing of any timberland land or bit thereof for-

(a) the development of tea, espresso, flavors, elastic, palms, oil-bearing plants, plant harvests or restorative plants;

(b) any reason other than reforestation;

however, does exclude any work relating or subordinate to preservation, improvement and the executives of woods and untamed life, specifically, the foundation of registration, fire lines, remote interchanges and development of fencing, scaffolds and ducts, dams, waterholes, channel marks, limit imprints, pipelines or other like purposes.

3. Constitution of Advisory Committee.

The Central Government may comprise a Committee comprising of such number of people as it may deem fit to prompt that Government with respect to

- (i) the award of endorsement. under Section 2; and
- (ii) some other issue associated with the protection of backwoods which might be alluded to by the Central Government.

3 A. Penalty for contravention of the provisions of the Act.

Whoever contravenes or abets the contravention of any of the provisions of Section 2, shall be punishable with simple imprisonment for a period which may extend to fifteen days.

3 B. Offences by the Authorities and Government Departments.

(1) Where any offence under this Act has been committed -

(a) by any department of Government, the head of the department;

or

(b) by any authority, every person who, at the time the offence was committed, was directly in charge of, and was responsible to, the authority for the conduct of the business of the authority as well as the authority; shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly:

Provided that nothing contained in this sub-section shall render the head of the department or any person referred to in clause (b),

liable to any punishment if he proves that the offence was committed without his knowledge or that he exercised all due diligence to prevent the commission of such offence.

(2) Notwithstanding anything contained in sub-section (1), where an offence punishable under the Act has been committed by a department of Government or any authority referred to in clause (b) of sub-section (1) and it is proved that the offence has been committed with the consent or connivance of; or is attributable to any neglect on the part of any officer, other than the head of the department, or in the case of an authority, any person other than the persons referred to in clause (b) of sub-section (1), such officer or persons shall also be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

4. POWER TO MAKE RULES.

(1) The Central Government may, by notice in the Official Gazette, make rules for conveying the arrangements of this Act.

(2) Every standard made under this Act will be laid, when made, before each House of Parliament, while it is in session, for an absolute time of thirty days which might be contained in one session or in at least two progressive sessions, and if, before the expiry of the session promptly following the session or the progressive sessions aforementioned, the two Houses concur in making any adjustment in the standard or the two Houses concur that the standard ought not be made, the standard will from there on have impact just in such changed

structure or be of no impact, all things considered; along these lines, notwithstanding, that any such alteration or revocation will be without partiality to the legitimacy of anything recently done under that standard.

5. REPEAL AND SAVING.

(1) The Forest (Conservation) Ordinance, 1980 is hereby replaced.

(2) Notwithstanding such repeal, anything done or any action taken under the provisions of the said Ordinance shall be deemed to have been done or taken under the corresponding provisions of this Act.

CONCLUSION:

The impact of environmental disasters can be devastating on the social, economic, and environmental systems of a country or region as well as the global ecosystem such as the depletion of forests. The area under forest is declining in recent times because of the deforestation. The deforestation process may lead to various hazards that include soil erosion, global warming, scanty of rainfall, frequent droughts, and loss of wild life. So, the need of the hour is plant many new trees to keep the forest safe. Environmental disasters do not recognize man-made borders, and threaten the legacy left to future generations of a clean and supportive environment. Because of the interdependency of earth ecosystems international co-operation is paramount to prevent, and when disaster strikes, respond to relieve quickly and effectively the effects of environmental disasters. Thus, Governments, International organizations and communities must work together - at all levels - to lessen the risks associated with environmental degradation and its contributing factors, such as climate change, and ensure that vulnerable people are prepared to survive and adapt. At the same time, companies, organizations and individuals must also ensure that their work is environmentally friendly and sustainable.

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