



EFFECTS OF ENVIRONMENTAL DEGRADATION ON HUMAN DEVELOPMENT..

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The issue of environmental degradation has been present since the dawn of human civilization, yet for an extended period, environmental concerns were largely ignored. In 1972, the United Nations Conference on the Human Environment (UNCHD) held its first international meeting in Stockholm, during which an "Action Plan for Human Development" was established. The World Commission on Environment and Development (WCED) later advocated for the concept of "sustainable development" in a 1987 report, defining it as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." The Rio declaration on Environment and Development, held from 3 to 14 June 1992, provided further refinement of these concepts. As a result, environmental issues, once overlooked, have now become significant global concerns integrated into development strategies worldwide. Environmental issues that lead to degradation are multifaceted, with problem severity varying based on the specific issue. While some issues are local, others are global in nature. Climate change is an example of a global problem.

Environmental issues such as depletion of the ozone layer, loss of biodiversity, and extinction of endangered species are global in nature, necessitating international cooperation for their resolution. In contrast, problems like land degradation, water pollution, and vehicular and air pollution are local and require policies at the national and regional level. Environmental degradation arises primarily from the excessive extraction of natural resources, which is often deemed a means for development. This deterioration in environmental quality manifests in the form of ambient concentrations of pollutants and the effects of improper land use and natural disasters (OECD). The causes of environmental degradation are many, but it often results from the uncontrolled and rapid extraction of natural resources. The growing trends of industrialization, population growth, and economic development, along with unbridled urbanization, are the leading drivers of environmental degradation. This degradation can occur naturally or be caused by human activities, such as habitat destruction, biodiversity loss, or resource depletion. Ultimately, environmental degradation harms the environment and its inhabitants,

The need for sustainable development practices is emphasized, given the different levels of environmental degradation - local, regional, and global. Various social, economic, and institutional factors contribute to environmental degradation, including population growth, poverty, and urbanization. The Ministry of Environment and Forest (MOEF) bears the responsibility of protecting, conserving, and developing the environment in India. The Environment (Protection) Act, 1986, Forest (Conservation) Act, 1980, and the Wildlife (Protection) Act, 1972, are some of the critical pieces of legislation governing environmental management in India.

Both local and global environmental problems disproportionately affect poor people. Local environmental concerns, such as water pollution and contamination, air pollution, waste disposal, deforestation, and soil degradation, have a direct impact on human beings. Water and waste-related illnesses are increasing, with the poorest people being the most vulnerable. Water pollution and contamination, air pollution, domestic solid waste, industrial hazardous waste, soil degradation and desertification, deforestation, and loss of biodiversity, are some of the local environmental concerns that contribute to environmental degradation.

Water pollution and contamination affect people globally, but the most significant impact on human well-being is in developing countries, particularly in the poorest regions. About 29% and 43% of people in developing and underdeveloped countries, respectively, lack access to safe water, while 58% and 68% lack access to basic sanitation. Air pollution, caused by industrial emissions, vehicle exhausts, and fuel burning, causes over 2.7 million deaths every year. According to the World Health Organization (WHO), deaths from indoor and outdoor pollution in India are over 1000. Deaths from indoor pollution in rural areas are higher than in urban regions in India. The amount of domestic solid waste continues to increase, both in absolute terms and per capita.

In developing countries, up to half of the waste generated remains uncollected. The degradation of the environment is further exacerbated by industrial hazardous waste such as toxic effluents from mines, chemical manufacturers, pulp and paper plants, and leather-tanning factories. The Bhopal disaster in India is a prime example of the catastrophic effects of such waste, resulting in the deaths of over 8,000 individuals and further impacting the lives of over 50,000 more due to lethal gases from the Union Carbide factory.

Soil degradation and desertification are increasingly prevalent issues in Asia and Africa, disproportionately affecting the poor. According to the MA report, nearly one-third of the global population, primarily the poor, depend directly on their ability to grow, gather, or catch food.

Deforestation is one of the most significant factors contributing to environmental degradation, with one-third of the world's forests having disappeared, and two-thirds of what remains having been altered. Although India managed to increase its forested area by over six million hectares in the 1980s, the loss of biodiversity remains a significant concern. The erosion of biodiversity has severe ecological consequences, such as the decline of shrimp farming, leading to increased mangrove area loss. Table 1 shows the relationship between mangrove loss and shrimp production.

Table 1: Relationship between Mangrove Loss and Shrimp Production

| Country | Mangrove area loss by 1989 (000 of hectares) | Shrimp production in 1995 (000 of tons) |
|------------|--|---|
| Thailand | 200 | 280 |
| Ecuador | 120 | 90 |
| Viet Nam | 67 | 37 |
| India | 35 | 96 |
| Bangladesh | 9 | 34 |

Source: Shiva 1997a

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Miller stated on the consideration of the law of the Conservation as “matter cannot be created or destroyed; it can only be changed from one form to another. Every waste material we believe we have managed is still with us in one form or another; there is no away”¹.

. In Ramcharitmanas² also described that chhiti, jal, pawak, gagan and sameer are the five fundamental elements from which our body is meant. In ancient Indian civilization and literature e.g. Vedas, Upanishads Smiritis and dharmas preach a worshipful attitude towards earth, sky, air, water, plants, trees, and animals and enshrine a respect for nature and environmental harmony and conservation. It regards sun, air, fire, river, earth and forests as god and goddesses³. Many animals, birds, trees and plants are associated with the names of gods and goddesses. This really shows the respect given to the civilization so that the human being respect the natural resources and don't degrade it. Under the auspices of the United Nations, the Millennium Ecosystem Assessment was conducted to assess the consequences of ecosystem change for human development and also to establish the action needed to enhance the conservation and sustainable use of ecosystems and their contribution to the human well-being on the scientific basis. Millennium Ecosystem Assessment (MA) finds four main findings.

These are as⁴

(a) Over the past 50 years, humans have changed ecosystems more rapidly and extensively than in any comparable period of time in human history, largely to meet rapidly growing demands for food, fresh water, timber, fiber and fuel. This has resulted in a substantial and largely irreversible loss in the diversity of life on earth.

(b) The changes that have been made to ecosystems have contributed to substantial net gains in human well-being and economic development, but these gains have been achieved at growing costs in the form of the degradation of many ecosystem services, increased risks of non-linear changes, and the exacerbation of poverty for some groups of people. These problems, unless addressed, will substantially diminish the benefits that future generations obtain from ecosystems.

(c) The degradation of ecosystem services could grow significantly worse during the first half of this century and is a barrier to achieving the Millennium development goals. (d) The challenge of reversing the degradation of ecosystems while meeting increasing demands for their services can be partially met under some scenarios that the Millennium Assessment considered, but these involve significant changes in policies, institutions, and practices that are not currently under way. From the above four findings it is evidently clear that how important role of human well-being with resource depletion or degradation. In Table 2 ecosystem services and constituent of wellbeing has been shown. In the figure it has been depicted the strength of linkages between the

The relationship between ecosystem services and human well-being is mediated by socioeconomic factors. The five dimensions of human well-being are basic material for a good life, freedom and choice, health, good social relations, and security. Ecosystem services consist of provisioning, regulating, and cultural services, as well as supporting services. Changes in these services affect human well-being, including its constituents. Freedom and choice also impact human well-being.

References:-

1. Miller, T.G (1992), living in the environment, 7th edn (Belmont, CA: Wadsworth publishing Company).
2. Ramcharitmanas is most popular epic for Hindu religion which is written by Goswami Tulsidas. Tulsidas mentioned that human body is made from five element (earth, water, fire, cloud and air), but modern scientist acclaimed that these are not a single element.
3. Taken from Sankar, U (2009)
4. These four measures were taken from the Millennium Ecosystem Assessment (2005), Ecosystems and human well-being: synthesis, island press, Washington D.C.

https://www.researchgate.net/publication/233893160_Impact_of_environmental_degradation_on_Human_development