

Interrelationship Between Man, Environment and Economic Growth

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SUMMARY

Humans depend on the environment for a variety of things, including food, water, fuel, medications, and construction materials. Science and technological advancements have made it easier for us to take advantage of the environment for our own gain, but we have also polluted the environment and damaged it. Environmental issues have a considerable negative effect on people's health and socioeconomic development, among other aspects of daily life. We will discuss the connections between people and the environment as well as how we use environmental resources in this study.

INTRODUCTION

Economic growth refers to the increase in the quantity and quality of goods and services produced and consumed by a society. However, measuring economic growth is challenging due to its complex nature. Some social and physical scientists argue that higher levels of economic activity require larger inputs of energy and material, leading to increased waste and waste generation. This can lead to environmental degradation and decline in human welfare, despite rising incomes. To save the environment and economic activity, economic growth must cease and transition to a steady-state economy. On the other hand, some argue that the fastest road to environmental improvement is along the path of economic growth, with higher incomes leading to increased demand for less material-intensive goods and services and improved environmental quality. The relationship between economic growth and environmental quality is not fixed along a country's development path, and it may change sign as people reach income levels where they demand more efficient infrastructure and a cleaner environment. The relationship between per capita income and environmental quality is tracked by the environmental Kuznets Curve theory. It contends that during the initial stages of GDP per capita expansion, environmental quality declines. But it starts to rise after a certain point.

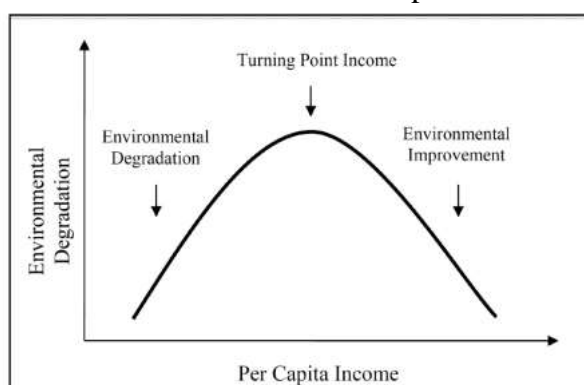


Figure 1: Environmental Kuznets Curve

Source: https://en.wikipedia.org/wiki/Kuznets_curve

Empirical Models of Environment and Growth

Empirical models of environment and growth often use single-equation specifications to relate an environmental impact indicator to income per capita. These models can use emissions, ambient concentrations, or composite indexes of environmental degradation. The common independent variable is income per capita, but some studies use income data converted into PPP or market exchange rates. The functional specification is usually quadratic, log-quadratic, or cubic income. These models can be a "black box" that obscures underlying determinants of environmental quality and limits their usefulness in policy formulation. Recent efforts to study the theoretical underpinnings of the environment income relationship have been limited, and a rigorous decomposition analysis is still lacking.

Human Activities Impact on the Environment

- Since the beginning of human history, humans and the environment have interacted. Both favourably and badly, humans influence their surroundings, and the environment has a variety of effects on how people live.
- The utilisation of resources and the generation of trash are the two fundamental interactions between people and their environment.
- Resources can be categorised as non-renewable (such as fossil fuels) or renewable (such as water).
- The extraction of natural resources from the Earth by humans is rising, which is leading to issues with over-exploitation, such as overfishing and deforestation.
- Water is utilised in agriculture, industry, and home settings. Due to an inadequate amount of water, several nations are categorised as "water stressed" or "water scarce."
- Human activity generates a wide variety of garbage that might harm the environment. For instance, e-waste from outdated electronic devices like mobile phones contains a number of harmful compounds that, if not properly disposed of, can damage groundwater, soil, and air.
- The primary economic activity is agriculture, which has a big influence on how resources are used, particularly water and soil. By releasing greenhouse gases into the atmosphere, like as methane from livestock, it also contributes to climate change.

Relationship between Environment and Economic Growth

Environmental degradation has resulted from the adoption of a development strategy in India and other developing nations that is primarily based on large-scale industrialization, energy-intensive technologies, and biochemically based agricultural technology while ignoring the indigenous development paradigm based on locally self-sufficient technologies.

Population and Environment:

Population growth may lead to environmental degradation, over-exploitation of natural resources like forests, water, fisheries, and minerals, and increased pressure on land. This leads to soil degradation, increased carbon dioxide emissions, and air pollution. Population growth also causes over-exploitation of land and water resources, causing loss of biodiversity and pressure on arable land. This threatens the sustainability of agriculture and food security, as the capacity to support human and animal populations has been exceeded in many parts of the world. Poverty and Environment: Poverty in developing countries is also said to be responsible for environmental degradation. Poor people rely on natural resources more than the rich. For survival the rural poor are forced to cut forests for timber and fuel as well as graze animals on pasture lands more than the reproductive capacity of these natural resources. Besides, when the cultivable land becomes short relative to population, the poor are forced to make their subsistence by cultivating fragile land on hills and mountains resulting in soil erosion on a large scale. It is in such environment that poverty becomes a vicious circle. Poverty leads to land degradation and land degradation accelerates the process of impoverishment because the poor people depend directly on exploitation of natural resources on which property rights are not properly assigned. Business and Natural Environment: Business firms are concerned with the decline and degradation of the natural environment, as they require resources like land, energy sources, wood, and water for their production. Although modern industries do not rely on natural resources as much as they did in the 19th century, they still require land for production and consume fossil fuels. This production leads to environmental degradation and pollution, causing significant health damage and social costs.

CONCLUSION

Without appropriate environmental protection, economic growth will be hampered, and environmental protection will fail without it. The natural resources of the planet set restrictions on economic expansion. These restrictions are subject to the degree of resource substitution, technological advancement, and structural modifications. Long-term goals of encouraging prosperity, reducing poverty, and safeguarding the environment may be mutually beneficial, but they are not necessarily compatible in the short term. Economic growth is therefore required to repair the environment because poverty is a key contributor to environmental deterioration. However, poorly managed economic expansion has the potential to further endanger the lives of the poor and harm the environment.

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