

Economic Growth And Environment

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Abstract:

The economic growth and environment are interconnected. Economic activities impact the environment through resource depletion, waste disposal and pollution while environmental degradation can hinder economic growth by limiting resources, increasing cost and affecting human life. The environment provides resources to the economy while also acting as a sink for pollutants and wastes. Natural resources are used as inputs, but their extraction and utilization frequently result in various environmental issues. Poor environment in turn has an impact on economic growth and well-being through limiting the number and quality of resources available or due to health issues, among other things. Environmental policies have the capacity to reduce the harmful impact of the economic activities on environment and vice versa. This paper highlights the complex relationship between economic growth and environment and throws light on the consequences of economic growth on environment.

Key Words: Economic growth, environment, pollution.

Introduction:

The term economic growth and economic development are of great importance in the context of economic progress of a country. Economic growth refers to long-term increase in income and output. It implies to that value which becomes possible as a result of increase in production of goods and services while their prices remain constant. Real growth means increase in the flow of goods and services in the economy or per capita increase in availability of goods and services in the country. According to prof. Salvatore, "Economic growth has been defined as the process whereby a country's real per capita gross national product or income increases over a sustained period of time through continuing increase in per capita productivity".

Environment means 'to surround'. It refers to the group of all those conditions and influences which have a bearing on life and because of which it becomes possible to grow and survive. According to Environment Protection Act, 1986, Environment includes water, air and land, as well as the inter-relationships that exist among and between these elements and human beings, other living creatures, plants, microorganisms and property. In these days, environment has emerged as an important part of economics. Classical economists neither analyzed the

impacts of economic activities such as production and consumption on natural environment nor brought the environmental concerns arise out of economic activities into the mainstream of economic theory. During 1950's and 1960's economists started talking about the environmental concerns of increasing economic activities. But presently the study of economics cannot be completed without studying environmental concerns. The impact of economic activities on environment can be assessed by analyzing the extent of externality, pollution, exhaustion, depletion etc. that the society is bearing.

Objectives of the study:

There are various objectives of the study which are as follows: -

- To understand the meaning of economic growth and environment.
- To understand the relationship between economic growth and environment.
- To study the impact of economic growth on environment.
- To analyze the changes in environment due to increase in economic activities.

Research Methodology:

This study is based on secondary data collected via journals, newspapers, articles, government publications and websites etc. This study highlights the relationship of economic growth and

environment. It shows the impact of increasing economic activities on environment.

Literature Review:

Gene M., Grossman, Alan B Krueger(1994)

Economic Growth and the Environment

Using data from the Global Environmental Monitoring System, the article investigates the link between environmental indicators of a country's per capita income. According to the study, there is no indication of a consistent decrease in environmental quality with economic expansion, instead economic expansion causes a period of deterioration followed by a period of improvement. The tipping points for various pollutants vary but they occur before a country's per capita income hits \$8000.

Ian Hodge (1995). Economic Growth and the Environment

In 1798, Thomas Malthus' Essay on Population drew attention to the importance of the environment as a restriction on economic expansion. It contended that population expansion is eventually restricted by the supply of arable land and food production's inability to keep up with population increase. Inadequate planning for population increase can result in declining real wages, starvation, sickness and a population decline to subsistence levels.

David, Glover(1999). Economic Growth and the Environment

The study conducts a literature analysis on economic development and the environment, exploring the causes of environmental deterioration and contrasting optimists and pessimists' opinions on viability of sustained economic expansion. According to optimists, rising scarcity of environmental products may encourage conservation solutions and technical innovation, but pessimists feel that these answers will be insufficient in the absence of steps to limit the global economy's growth. The study recognises the need of dealing with sustainability in development economics, as well as the need to account for the hidden negative consequences of environmental harm in econometrics.

De, Bruyn., M, Sander (2000).Economic Growth and The Environment: An Emprical Analysis

The research examines the link between economic growth and environmental quality, arguing that economic expansion does not destroy the

environment. The study analyses numerous ideas about this link and experimentally evaluates them for a variety of environmental pressure indicators. The result of the experiments point to the adoption of other estimate methods, which can change conclusions concerning the link between economic growth and environment. The article also delves into the mechanisms driving pollution reduction in industrialised nations.

Karl- Goran, Maler. (2013). Economic Growth and the Environment

The study delves into the notion of economic growth and its environmental impact as well as the importance of environmental resources in economic growth. The study examines the conceptual underpinning of green accounting using measurements reported in national income and product accounts, such as gross domestic product and net national product.

Impact Of Economic Growth On Environment

Economic growth is the gradual increase in a country's output often expressed as a percentage change in Gross Domestic Product (GDP). It implies higher quality of life, higher level of income, reduction in poverty, increase in employment and development of infrastructure etc. There are various factors which influence economic growth are investment, labour force, technological progress, political stability, natural resources, human resources etc. Natural resources are essential inputs of production but it leads to pollution and other pressure on environment. Natural resources are limited. So excessive usage of natural resources has its impact on environment.

Positive Impact:

- Economic growth can bring environmental benefits under specific conditions that align economic development with sustainable practices, technological advancements and policy measures. The positive impact of economic growth is as follows:
- Environmental Innovation: Economic growth may stimulate the development of technologies such as renewable energy sources which can reduce environmental impacts.
- Promote Renewable Energy Resources: Economic growth can provide the necessary

financial resources to invest in clean, technologies that reduce emissions, manage waste and conserve natural resources. For example, with more funds, countries and businesses can invest in renewable energy resources like wind, solar and hydro which reduce dependency on fuels.

- **Increased Awareness and Demand for Sustainability:** As income rises, people may become more aware of environmental issues and demand sustainable products and practices, potentially driving companies to adopt green practices.
- **Economic Incentives for Environmental Protection:** The economic cost of environmental degradation such as reduced productivity due to pollution, can create incentives for businesses and government to invest in environmental protection.
- **Increased Resource Efficiency:** As economies expand, there may be a trend towards more efficient resource use. To remain competitive, industries may implement practices that limit waste and use of resources.
- **Investment in Environmental Protection:** As economies expand, government and corporations may devote greater money to environmental protection and conservation measures. Increased money may be used to support projects such as reforestation, wildlife protection and pollution management.
- ***Urban Green Development:** As economic expansion occurs, urban areas can invest in green infrastructure, such as parks, green buildings and public transit, which can reduce urban heat, improve air quality and decrease emissions from transportation.

Negative Impacts:

The relationship between economic growth and the environment is complex while economic growth can contribute to significant environmental problems. The negative impact of economic growth on environment are as follows:

- **Damage to Nature:** Increase in economic activities consequent upon economic growth can cause various types of pollution such as air pollution, water pollution, noise pollution and land pollution etc. The use of fossil fuels

can lead to immediate problems such as poor air quality etc. Air/ land/water pollution cause health problems and can damage the productivity of land and seas.

- **Pollution:** As economic activities increase, so does the volume of waste produced. Ineffective waste management and disposal can lead to pollution of soil, water and air. Industrial processes, transportation and agricultural activities associated with economic growth release various pollutants into the atmosphere causing pollution.
- **Global Warming and Threat to Climatic System:** economic growth can cause global warming which further leads to rising sea levels, volatile weather patterns and could cause significant economic costs. Climatic system may also be adversely affected by the pressure of growing population on this earth. As a result of it, ozone layer is being depleted and global environment warming up process is underway.
- **Soil Erosion:** Economic growth can lead to soil erosion due to increased demands for resources and infrastructure development, which often lead to land clearing, deforestation and unsustainable agricultural practices. These practices disrupt the soil's natural stability, making it more vulnerable to erosion by wind and water. While economic expansion can lead to investment in soil conservation, the initial impact of rapid development is often negative for soil health.
- **Depletion of Natural Resources:** As growth occurs, human activities are also growing at the same pace. As a result, pressure on environment has increased and natural resources are heading for depletion and it is difficult to find their substitutes e.g.- if oil reserves of the world get exhausted, the situation will go completely out of control of the world economy.
- **Desertification:** It is a serious aspect of degradation of environment. The main cause of desertification on a large scale are deforestation, soil erosion, water logging, salinisation of irrigated land and degradation of cultivable land. About 60% of world's

agriculture land is being afflicted with desertification in varying dimensions.

- **Generation of Waste:** As consumption increases, earth's resources have been exploited. Diverse kinds of harmful waste are generated. These wastes are adding to various types of pollution.
- **Deforestation:** Along with increase in growth rate, there is rise in deforestation process as well. Many factors account deforestation like fuel needs of poor, increasing need of land for cultivation, building of roads, dams houses, railway tracks and industrialisation. Deforestation has affected environment adversely.
- **Land Degradation:** It is caused by the use of chemical fertilisers and insecticides. Soil erosion, alkaline soil, water logging etc. all constitute land degradation. Cultivable land turns into waste land due to wrong ways of irrigation. As a result, productivity of land decreases and it degenerates into a barren land.
- **Rise in Consumerism:** As economic growth occurs, consumption of energy has been rising, pollutants in atmosphere and hydrosphere have also been rising, heaps of waste have been piling up. All these are having adverse effects on environment e.g. with use of coal for generation of electricity, the consequences that follow are: pollution, contamination of water, defacement of landscape, generation of waste and disruption of local ecological system.
- **Water Stress:** Economic expansion frequently raises demand for water which can result in over extraction of water resources, aquifer depletion and water shortage in some areas.
- **Emission of Greenhouse Gases:** Rapid economic expansion particularly in fossil-fuel- dependent industries can result in increasing greenhouse gas emissions contributing to volatile weather conditions.

Conclusion:

The relationship between economic growth and environment is complex while economic growth can contribute to significant environmental problems, it can also be a catalyst for positive changes if it is accompanied by policies and practices that prioritize sustainability and environmental protection. The important issue which has been addressed in environmental economics is the cause of degradation of environment. Increasing economic activities in terms of consumption, production, distribution and exchange is primarily responsible for environmental degradation. In order to achieve higher rate of growth, countries are exploiting the natural resources at a faster rate without thinking about future generations. Conversely, environmental degradation can negatively affect economic activities, productivity and overall wellbeing. This complex relationship of economic growth and environment needs a balanced approach that considers both economic development and environmental sustainability.

References:

1. Gene, M., Grossman, Alan, B., Kruger (1994). Economic growth and the environment. Research paper in economics
2. Ian, Hodge. (1995). Economic growth and the environment. 13-28. doi:10.1007/978-1-349-24172-9_2.
3. David, Glover (1999), Economic growth and the environment Canadian Journal of Development studies, 20(3):609-623. doi:10.1080/02255189.1999.9669857
4. De, Bruyn, M, Sander, (2000). Economic Growth and the Environment. An Empirical Analysis.
5. Karl-Goran, Maler (2013), Economic Growth And The Environment. 25-30. doi:10.17/cb09781139174329.010
6. <https://www.researchgate.net>
7. <https://www.nber.org>
8. <https://study.com>
9. <https://www.tutor2u.net>
10. <https://www.economicshelp.org>