An Inverted U-shaped Relationship between Environmental Degradation and Income.

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Abstract -
Economic growth is the increase in per capita availability of goods and services. Production of goods and services requires many inputs or resources from nature or the ecosystem: amines, water, air, solar energy, trees, animals, minerals, fossil fuels, metals, etc. In addition, many wastes—in solid, liquid, and air forms—are generated in the process of producing goods and services. All these waste materials are released into the environment. That is, sustainable economic growth requires greater availability of environmental goods and services, as this is affected by a growing population as well as other factors such as per capita income. Considering the limited capacity of the earth, it is not possible to achieve sustainable economic growth and maintain the quality of the environment at the same time.

It is necessary to explore the flow of environmental inputs into an economy to understand the ripple effect of various economic and environmental policies and their social benefits. A common method for understanding the flow of such environmental and other inputs is to use exchange tables. Sustained economic growth requires increased consumption of environmental goods and services, and such growth is influenced by population size as well as many other factors such as per capita income. Given the limited capacity of the planet Earth, it is not possible to sustain economic growth indefinitely while maintaining the quality of the environment.

Keywords in Research Paper: Environment, Economy, Environmental Degradation, Resource Depletion, Sustainable Development, Per Capita Income, Development Kuznets Curve.

Introduction –

An economy can be conceptualized as a collection of economic, social, institutional, legal, and technological structures through which individuals in society seek to increase their material and spiritual well-being. The two basic functions of any economy are consumption and production. The normal environment, counting characteristic assets, performs two vital capacities within the setting of financial development, to be specific (a) giving crude materials for generation forms and (b) depleting squander items created as a result of generation and utilization forms.

Any economy exists within the natural environment and is surrounded by that environment. The economy and the environment are interdependent and interact with each other, to understand the root causes of environmental problems and find solutions to them; a student of environmental economics needs to understand the interdependence and interaction between these two systems and their consequences.

For centuries, the environment has provided us with clean air to breathe, clean water to drink, food to eat, and many other goods and facilities that we need without question. However, since the last century, there has been a big difference in this situation. The environment can no longer supply our growing demands and after wasting natural resources for so long, man has come to realize that the resources available in the environment are scarce and exhaustible.

Objectives of the Research Paper –

The researcher has formulated the following objectives of his research paper.
1. Studying the relationship between the economy and the environment.
2. Studying the Environmental Curve.
3. To study the relationship between environmental quality degradation and development.

Research Methodology –

The type of research presented is descriptive and exploratory.

Data / Fact Collection –

Primary and secondary information is mainly used for fact collection. Facts are very important in any research. Secondary sources have been used for the present thesis. References, books, magazines, newspapers, internet have been used in this. Published information is used for research essays.

## Environmental Kuznets Curve Theory –

The Environmental Kuznets Curve theory (Environmental Kuznets Curve / EKC) suggests that there is an inverted U-shaped relationship between the quality of the environment (measured based on some standard of environmental quality) and per capita income. This means that initially when per capita

income is low Then the environmental degradation also decreases, and as the per capita income increases, the environmental degradation also increases, but after a while, if the per capita income increases further, this degradation starts decreasing again.

'Environmental Kuznets Curve' is named after Simon Kuznets (1955). Kuznets theorized that a measure of inequality between the distribution of income and the proportion of income can be represented by an inverted U-shaped curve. Many scholars have interpreted this theory to mean that the environmental degradation caused by early economic growth can be remedied by further economic growth over time and that environmental quality can be further improved by continued economic growth. However many scholars have criticized this theory on empirical as well as theoretical basis. But overall the general opinion is that this principle does not apply to all economic indicators but only to a few indicators and not all environmental problems will be solved by economic growth alone. This principle is best applied to air pollution and water pollution.

In short, economic growth and natural resource planning are interrelated in two main ways:
1. Up to a certain level of resource utilization there is no exchange relationship between development and the services provided by the resource (reciprocity).
2. If the economic development process continues beyond this level, it begins to adversely affect one or more functions of the natural environment—e.g. Inputs (raw materials) required for economic production, capacity to digest wastes or supply of other facilities, etc. A key concept is the ability of natural resources to perform multiple functions in such a context of exchange.
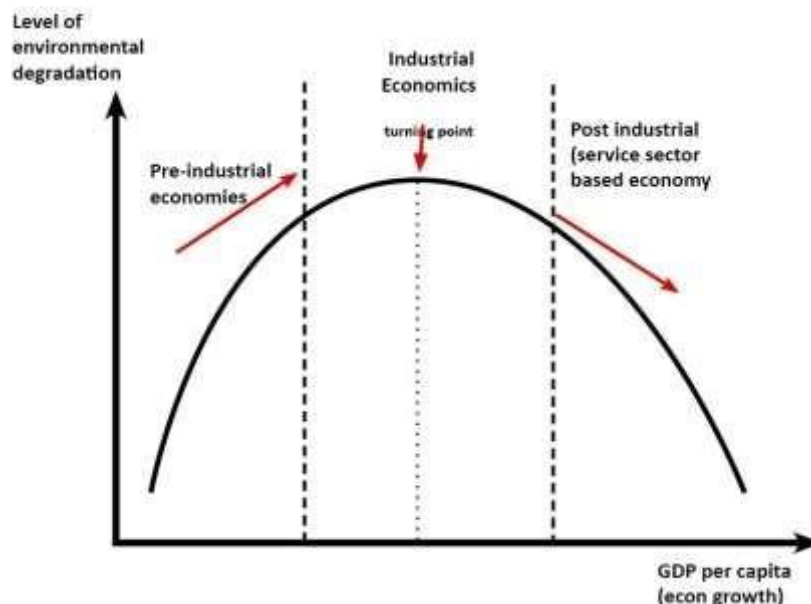
In the Indian context, we can say that the Kuznets theory holds to some extent in the sense that commercialization of agriculture, urbanization, and industrialization has led to a moderate increase in per capita income while air pollution and water pollution have also increased. We have not yet reached a stage of economic growth where people have enough per capita income to adopt eco-friendly lifestyles. India's environmental woes are partly due to extreme poverty and partly due to the unnecessary wastage of natural resources, especially by the affluent class of collective accumulation of resources. Environmental degradation caused by poverty includes (a) increased domestic pollution from the use of biomass for fuel, (b) water pollution, and (e) soil erosion; Environmental degradation due to affluence includes: (a) pollution of rivers and lakes due to toxic effluents released from industries and factories, (b) air pollution from vehicles, and (e) deforestation due to commercial deforestation and illegal logging. Biodiversity loss due to poaching, and economic expansion without recognizing the value of the environment is the root cause of these problems and the solution is to create an awareness of the scarcity of environmental resources in the decision-making process. Development or not, rapid population growth will make it increasingly difficult to tackle many environmental problems. There is an urgent need for proactive policy interventions and public awareness to reduce environmental degradation in India.

It is not a new thing that economic growth has adverse effects on the environment, it has been going on for a long time, but today's world is different. Many people in the developed countries of the world, having reached the highest level of material comforts, are now asking the question: What is the use

of this great material prosperity if the natural ecosystem that nourishes us is to be massively disturbed? A more fundamental problem is that the economic, demographic, and technological developments currently taking place around the world have resulted in the associated environmental problems also taking on a monstrous and pernicious form. Environmental impacts that were initially localized are now widespread and the cycle is irreversible.

Many people think that 'economics' only refers to the flow of money in the economy, but when we think about money, it is not about unethical economics, nor is it about minimizing the importance of the environment. On the contrary, it can also be said that by thinking from an economic point of view, many powerful environmental tools can be created and with their help, the environment can be further conserved and protected. It is obvious that there is no denying that an environmental ethical issue has arisen. For example we can now say that it is not desirable to drain wetlands or cut down forests. But it is not enough to argue on moral grounds alone to protect the environment. We think that an argument based on economics is often more effective; In particular, as is often the case, conflicts arise between what is in the interest of nature and the pursuit of rights such as economic development or food and shelter.

Summary:

The nature of the relationship between environmental quality and economic growth can be explained by several paradigms, including the 'Environmental Kuznets Curve' (EKC) theory. According to this theory, there is an inverted U-shaped relationship between the two factors of environmental quality degradation and per capita development. This means that initially when per capita income is low, environmental degradation is limited, but as per capita income increases, environmental degradation also increases, and after a certain point, environmental degradation decreases again with increasing per capita income. In the Indian context, this principle applies to some extent.

Environmental degradation in India is partly due to extreme poverty and partly due to the wastage of natural resources, and widespread property resources. The entire world is currently on a path of economic development that is not environmentally sustainable. It is reflected in increasing air and water pollution, land degradation, and food shortages in many parts of the world. All these indicators of loss of sustainability underscore the need for radical changes in traditional economic planning and policy-making. It can generally be said that a new paradigm of sustainable development has emerged given such threats to sustainability.

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