



# DEPLETION OF NATURAL RESOURCES AND ITS IMPACT ON INDIAN ECONOMIC DEVELOPMENT

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## ABSTRACT

*Resources depletion refers to the situation where the consumption of natural resources is faster than it can be replenished. The natural resources of a nation can be divided as renewable resources and non renewable resources. The natural resources contribute at large to the economic development of a nation. Current patterns of energy and natural resource use, agricultural practices and urbanization appear to be largely unsustainable and require urgent remediation. The consumption pattern of natural resources did not seem to be justifiable which can have economic downfalls for the nation. Population explosion is acting as a catalyst for resources depletion. Consumption pattern is not addressed will lead to irreversible climate and decreased productivity. In order to achieve economic growth developing countries are abusing their lands on the grounds of economic interests. Whether is in the form of air and water pollution, deforestation and soil erosion or the extraction of natural resources itself, the fact is that developing countries are currently accounting for remarkable depletion of natural resources. It seems evident that much of the economic growth activities enforced by governments, accounts for significant resources depletion. In this context, the present paper makes an attempt to study the theoretical concept of natural resources in India, to understand the importance of natural resources and to give suggestions to manage available resources productively.*

**KEYWORD:** - *Depletion, Natural Resources, Economic Development*

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## INTRODUCTION

Natural resources are raw materials extracted from the earth. They are useful in many different ways for its diversified opportunity of benefit and profit for economic development. Examples of natural resources are mineral, oil, waterways, land, timber, diamonds, coals, coltan and genetic. Majority of developing countries, distributions of natural resources vary from one geographic location to another. The variability of location has caused greed and grievances in economic development. This was attributed to more risk of conflict, weak governance, and poor economic performance.

## STATUS OF NATURAL RESOURCE IN INDIA

- India is gifted with various types of natural Resources such as fertile soil, forests, minerals and water. These resources are unevenly distributed. The Indian continent covers a multitude of biotic and abiotic resource.
- As India has rapid population growth therefore there is overconsumption of resources, such as uncontrolled logging or overfishing and many valuable natural resources are rapidly being exhausted.
- India has huge watered fertile lands. In the sedimentary soil of the Northern Great Plains of the Sutlej-Ganga plains and Brahmaputra Valley wheat, rice, maize, sugarcane, jute, cotton, rapeseed, mustard, sesame, linseed, are grown in plentiful. India's land area includes regions with high rainfall to dry deserts, Coastline to Alpine regions.
- India also has a variety of natural vegetation since the country has a varied relief and climate. These forests are narrowed to the plateaus and hilly mountainous areas. India has a great variety of wildlife.
- There are many national parks and hundreds of wild life sanctuaries. Around 24.5 percent of the total geographical area include Forests(IFSR 2019), Because India's whether conditions are changing frequently and differences in altitude, different types of Forest are present in India including Tropical, Swamps, Mangrove and Alpine.
- Variety of forest vegetation is large. Forests are the main source of Fire woods, Paper, Spices, Drugs, Herbs, Gums and more. Forests have great contribution to nation's GDP.



- India has more marine and inland water resources. Reports signify that India has an 8129 km long coastline. Inland fishery is performed in Rivers, Reservoirs and Lakes. Reports of EIA estimate indicated that in Indian rivers more than 400 species of fish are found and many species are economically important.

## OBJECTIVES OF THE STUDY

1. To study the theoretical concept of natural resources in India
2. To understand the importance of natural resources.
3. To give suggestions to manage available resources productively.

## NATURAL RESOURCES

These are the resources that are found in the environment and are developed without the intervention of humans. Common examples of natural resources include air, sunlight, water, soil, stone, plants, animals, and fossil fuels.

The natural resources are naturally occurring materials that are useful to man or could be useful under conceivable technological, economic or social circumstances or supplies drawn from the earth supplies such as food, building and clothing materials, fertilizers, metals, water, and geothermal power. For a long time, natural resources were the domain of the natural sciences.

### Renewable

Renewable resources are the ones that are consistently available regardless of their use. They can be fairly recovered or replaced after utilization. Examples include vegetation, water, and air. Animals can also be categorized as renewable resources because they can be reared and bred to reproduce offspring to substitute the older animals.

As much as these resources are renewable, it may take tens to hundreds of years to replace them. The renewable raw materials that come from living things namely animals and trees are termed as organic renewable resources while those that come from non-living things such as sun, water and wind are termed as inorganic renewable resources.

### Non-Renewable

Non-renewable resources are the ones that cannot simply be substituted or recovered once they have been utilized or destroyed. Examples of such natural resources include fossil fuels and minerals. Minerals are categorized as non-renewable because, even though they take shape naturally through the rock cycle, their formation periods take thousands of years. Some animals mostly the endangered species are similarly regarded as non-renewable because they are at the verge of extinction.

It brings about the many reasons the endangered species have to be protected by all means. The non-renewable materials that come from living things such as fossil fuels are known as organic non-renewable resources while those that come from non-living things such as rocks and soil are referred to as inorganic non-renewable resources

## TYPES OF NATURAL RESOURCES

1. Land Resources
2. Forest Resources
3. Water Resources
4. Energy Resources

### (1) LAND RESOURCES

#### (a) Land as a Resource

Landforms such as hills, valleys, plains, river basins and wetlands include different resource generating areas that the people living in them depend on. Many traditional farming societies had ways of preserving areas from which they used resources. Eg. In the 'sacred groves' of the Western Ghats, requests to the spirit of the Grove for permission to cut a tree, or extract a resource, were accompanied by simple rituals. The outcome of a chance fall on one side or the other of a stone balanced on a rock gave or withheld permission. The request could not be repeated for a specified period.

If land is utilized carefully it can be considered a renewable resource. The roots of trees and grasses bind the soil. If forests are depleted, or grasslands overgrazed, the land becomes unproductive and wasteland is



formed. Intensive irrigation leads to water logging and salination, on which crops cannot grow. Land is also converted into a non-renewable resource when highly toxic industrial and nuclear wastes are dumped on it.

Land on earth is as finite as any of our other natural resources. While mankind has learnt to adapt his lifestyle to various ecosystems world over, he cannot live comfortably for instance on polar ice caps, on under the sea, or in space in the foreseeable future. Man needs land for building homes, cultivating food, maintaining pastures for domestic animals, developing industries to provide goods, and supporting the industry by creating towns and cities. Equally importantly, man needs to protect wilderness area in forests, grasslands, wetlands, mountains, coasts, etc. to protect our vitally valuable biodiversity.

Thus a rational use of land needs careful planning. One can develop most of these different types of land uses almost anywhere, but Protected Areas (National Park's and Wildlife Sanctuaries) can only be situated where some of the natural ecosystems are still undisturbed. These Protected Areas are important aspects of good land use planning.

#### **(b) Land Use Change**

The most damaging change in land use is demonstrated by the rapidity with which forests have vanished during recent times, both in India and in the rest of the world. Forests provide us with a variety of services. These include processes such as maintaining oxygen levels in the atmosphere, removal of carbon dioxide, control overwater regimes, and slowing down erosion and also produce products such as food, fuel, timber, fodder, medicinal plants, etc. In the long term, the loss of these is far greater than the short term gains produced by converting forested lands to other uses.

#### **(c) Land Degradation**

It is a process of deterioration of soil or loss of fertility. Due to increasing population, the demands for arable land for producing food, fibre and fuel wood is also increasing. Hence there is more and more pressure on the limited land resources which are getting degraded due to over-exploitation. Nearly 56% of total geographical area of the country is suffering due to land resource degradation. Out of 17-million-hectare canal irrigated area, 3.4 million hectares is suffering from water logging and salinity.

#### **(d) Soil Erosion**

The process of loss or removal of superficial layer of soil due to the action of wind, water and human factors. In other words, it can be defined as the movement of soil components, especially surface-litter and top soil from one place to another. It has been estimated that more than 5000 million tonnes topsoil is being eroded annually and 30% of total eroded mass is getting loosed to the sea.

### **(2) FOREST RESOURCES**

Forest is important renewable resources. Forest vary in composition and diversity and can contribute substantially to the economic development of any country. Plants along with trees cover large areas, produce variety of products and provide food for living organisms, and also important to save the environment.

It is estimated that about 30% of world area is covered by forest whereas 26% by pastures. Among all continents, Africa has largest forested area (33%) followed by Latin America (25%), whereas in North America forest cover is only 11%. Asia and former USSR has 14% area under forest. European countries have only 3% area under forest cover. India's Forest Cover accounts for 20.6% of the total geographical area of the country as of 2005.

### **(3) WATER RESOURCES**

Water is an indispensable resource for life on earth. Approximately 70.8 % surface of earth is covered with water in the form of oceans. Out of this, about 97% is not fit for human consumption, about 2% is locked as a glacier and only less than 1% available as fresh water that can be used for human consumption and other uses. Water is a very important source and essential for life because it has very unique characteristic such as

1. Water exists as liquid over a wide range of temperature 0-1000C with highest specific heat and latent heat of vaporization
2. Water is excellent solvent and act as carrier of nutrient and helps to distribute them to the cells in the body, regulates the body temperature and support structure and can dissolve various pollutant and can act as carrier of large number of microorganisms
3. It is responsible for hydrological cycle which acts as resource of water to the earth. It is estimated that about 1.4 inch thick layer of water evaporates and majority of water returns to earth through hydrological cycle.



Water is renewable, but its overuse and pollution make it unfit for use. Sewage, industrial use, chemicals, etc. pollute water with nitrates, metals, and pesticides.

#### **(4) ENERGY RESOURCES**

Energy Scenario Energy is a key input in the economic growth and there is a close link between the availability of energy and the future growth of a nation. Power generation and energy consumption are crucial to economic development.

In India, energy is consumed in a variety of forms such as fuel wood; animal waste and agricultural residues are the traditional sources of energy. These non-commercial fuels are gradually getting replaced by commercial fuels i.e. coal, petroleum products, natural gas and electricity.

Out of total energy, commercial fuels account for 60% where as the balance 40% is coming from non-commercial fuels. Of the total commercial energy produced in the form of power or electricity,

#### **IMPORTANCE OF NATURAL RESOURCES**

Natural resources are important because they contribute to the economy of the nation in which they exist. They also provide necessary supplies for humans to thrive. Natural resources in the United States that have a considerable impact on the nation's economy include the land, coastlines and water.

As of 2009, the U.S. coastlines have contributed billions of dollars and over two million jobs. Many of these jobs are in the areas of recreation and tourism. Additionally, coastlines in the country provide economic opportunity in the areas of transportation, construction, boating, shipping, and oil and drilling. Farmland provides a nation with fertile soil that is renewable and suitable for agricultural uses. Water present in rivers, streams and lakes is not only beneficial to farmland. It also provides energy and power, such as electricity, to buildings. Oil, gas and coal are all sources of fuel used in the transportation and heating industries.

Economic activity of any county is depends on the Manufacturing & Operational activities, these activities are purely depends on 5Ms. We can find the many counties with plenty of natural resource but belongs to under developed country; this is because of utilization of available resources. But one or the other day they will get strengthen.

Natural resources are available, in varying quantities, in all parts of the world. The natural availability of certain resources in a given region makes it easier for the people to acquire and use them. Otherwise, a country, where a certain natural resource is not available, has to depend on other countries, in order to acquire it, owing to which the former has to invest a lot of monetary resources in the trade.

#### **SUGGESTIONS**

To gain economic strength either the county should have abounded natural source or it should manage the available resources and effectively use the other countries resources,

- 1) The country which have plenty of natural resources but fails to use it efficiently, they can go with the countries which are good in efficient use of the same, which will helps both countries to grow.
- 2) As natural resources have direct impact on economy countries should plan to use the resources which are renewable and try to manage and develop the non-renewable sources.
- 3) As natural resources are over using international organizations and local governments should implement strict rules to avoid the same. Especially with respect to petroleum products and manufacturing of anti-environmental friendly goods. E.g. plastic and some chemical related items.
- 4) By implementing the strategies which are not effects on natural resources countries can become economically stronger. E.g. Tourism development

#### **CONCLUSION**

From the Theoretical Study on the availability of natural resource and economic development of the country, it is possible to conclude that the Economic strength of any country depends on the allocation of natural resource and how the country is efficient enough in using it. Finally it is possible to conclude that there is link between economic development and natural resources utilization. When the counties start effectively utilizing its available natural resources it is possible for substantial growth. Which countries are using all natural resources including solar energy as well they stand in the economic race as it is also any alternative sources of energy for various activities.



## REFERENCES

1. *Shamanth Kumar B U, "Impact of Natural Resources on Economic Development" International Journal of Business and Management Invention (IJBMI) Volume 6 Issue 12 December 2017 Page No 21-23*
2. *Amit K. Singh and Dr. Deepak Singh, "Natural Resources" Textbook for Environmental Studies Deshbandhu college new Delhi Page No.1-19*
3. *Ishwarmittal and Ravikumar Gupta, " Natural Resources Depletion and Economic Growth in Present Era", SOCH, Volume 10 No. 2 Page No. 24*
4. *www.google.com*