



Forests are the Best-Case Studies for Economic Excellence

The ecosystem of India's forests has a lot to teach the nation's economy. An ecosystem includes both the economy and the forest. While the economy is a man-made system with the flow of money, supply chain, and distribution, the forest is a natural ecosystem with fundamental functions like energy flow and food web.

Necessity of Resilience and Flow

The ecology must have energy flow in order to survive. The economy is built on the flow of money. Both in the forest ecosystem and economy one element is related to other elements. The economy as a whole suffers when one sector flounders. As the flow of money in the economy climbs, inflation rises as well. An ecosystem's main quality is resilience. The more resilient an ecosystem is, the further it will grow. The capacity of an ecosystem to survive in an ecological disturbance while preserving its fundamental cycles of food and energy is the resilience of the ecosystem. The more diverse the economy and forest, the more stable it will be.

Economic resilience expands to include three key characteristics in the context of economic development: the capacity to swiftly bounce back from shocks, to absorb shocks, and to completely avoid shocks. A supply chain in an economy is a network of companies and individuals involved in the production and distribution of goods and services. Producers, vendors, warehouses, shipping firms, distribution hubs, and merchants are all included. Product creation, marketing, operations, distribution, financing, and customer support are some of its core responsibilities. In ecology, productivity refers to the speed at which an ecosystem produces biomass. It is often referred to as the energy that plants store during photosynthesis. By subtracting the energy lost via respiration from gross primary production, net primary productivity is calculated. The economy's Net Domestic Production (NDP) is derived by subtracting depreciation from its Gross Domestic Product (GDP).

Diversity in Economy

A more diverse ecosystem is a more stable ecosystem because a more diverse ecosystem provides availability of more food chains which culminates into the food web. A food web provides more stability to an ecosystem. A diversified economy has several options to sustain its supply chain and demand. Diversification of the economy is a critical aspect in economic growth, and it encompasses broadening a country's production and trading infrastructure. The world's poorest nations have the most concentrated economic structures, owing to the fact that many of them are small or geographically isolated, landlocked, and/or primarily reliant on primary agriculture or resources. This raises concerns about sensitivity to sector-specific shocks, such as weather-related disasters in agriculture or rapid price shocks in minerals. The Indian economy is highly diversified by the virtue of its different economic sectors. The manufacturing sector is regarded as the backbone of economic progress. Industrial growth is a prerequisite for eliminating unemployment and poverty in our country. It also attempted to reduce regional inequities by building enterprises in tribal and underserved regions. The services sector accounts for more than half of India's GDP. In India, the services sector has received most of the FDI. The largest, fastest growing, and most productive sector in India is the service sector. It continued to rank among the top ten trading nations for commercial services in 2019. Agriculture is critical to the Indian economy. Agriculture supports more than 70% of rural households. Agriculture is a significant sector of the Indian economy, accounting for around 17% of total GDP. About 58% of the population is employed in the agricultural sector. Tribal economy is a key element for classifying Scheduled Tribes in India. The dominant economic activity of the

tribes is hunting, fishing, food gathering, shifting cultivation, Sedentary cultivation and animal husbandry.

Mutual Symbiosis

In a biological ecosystem, symbiosis fosters reciprocal dependence of one species of flora or fauna on other species of flora and fauna. Both species coexist in harmony with one another and in accordance with the needs of others. Industrial symbiosis is the economic process through which the byproducts or wastes of one industry or industrial process are utilized as raw materials for another. This concept fosters the **development of a circular economy** and allows for the more sustainable usage of materials. The objective of industrial symbiosis is to create a network of linked systems that function similarly to biological ecosystems in that materials and energy are continually recycled without waste.

A forest ecosystem has two basic components which are known as biotic and abiotic components. Interaction of the biotic and abiotic components of the forest is a main feature of the forest ecosystem for its survival. **Macroeconomy and Microeconomy** are the two fundamental parts of an economy. Both parts of the economy used to interact with each other and support the economy to survive and proliferate.

Invasion by Other Economies

When items are sold overseas at a lower price than they would be sold domestically, after deducting variances for shipping costs, tariffs, and other cost considerations, this practice is known as "**dumping**". This practice of dumping by foreign nations impacted the domestic industries negatively. Low price products are dumped in foreign nations just to get an edge over the foreign nations market. This practice negatively impacted the domestic economy as in biological ecosystems invasive or alien species of flora or fauna impacted negatively to the endemic species. An invasive species is secreting such chemicals which can destroy the entire population of the pre-existing species. Invasive species are acting like predators in an ecosystem. Dumping of low-price products is also acting like a predator for the native economy. Predatory pricing is the practice of a company purposely lowering prices to drive away rivals. By removing the rivals, the business is getting one step closer to a monopoly, a privileged position of market domination.

Technology

The traditional role of chemistry in converting resources into products that, in many cases, created waste and harmed the environment is giving way to a new role in developing new methods for resource recovery and recycling processes for the efficient use of resources and utilization of waste materials as green resources. The solution to issues with the economic system or the forest ecology is technology. Without technological advancement, it is difficult to predict how quickly the economy will grow. Without technical development, we would not be able to maintain our forests or control pollution. With the help of high-quality seed varieties brought about by technological innovation, India saw a "green revolution" that finally sparked economic growth and allowed the country to become self-sufficient in terms of agricultural production.

The methods used to protect the economy and the forest should be equal. In essence, sustainable development promotes justice in economic growth and environmental conservation, and it is urgently needed on both a national and global scale. The preservation of natural resources and the control of economic woes are **crucial** for the existence of the human species. The continual flow of energy and money supply is a vital necessity. The solution to issues relating to both the economy and the ecosystem is technology. Both the economy and the forest are necessary for human life. Forest and economy both elements complement one another, and numerous of their elements coexist and are kept in balance with one another.

