

Economic Planning in India: Overview & Challenges

Environment and Development

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1. Learning Outcomes

After studying this module, you shall be able to

- Know what Environment means in the context of Economics
- Learn about various international agreements on Environment & Economics
- Identify challenges to Sustainable Development
- Evaluate the situation of various countries in respect of environment & development
- Analyze the strategy towards Sustainable Development

2. Introduction

Nothing exists in vacuum. Environment is the totality of what happens around us. It is constituted by animate and inanimate, natural and artificial forces. The environment provides conditions for growth, as well as for deterioration.

By reacting constantly to the environment all creatures and all things affect it just as it affects them.

Environment is a wider term than Nature. While nature would include only elements like soil, water, plants, birds, animals and people, environment includes man-made elements like buildings, townships, and infrastructure and communication systems.

In fact, the word environment is used in very many ways. Business Environment refers to the competitive conditions among producers. Galactic Environment refers to conditions between stars in the sky! Natural Environment refers to all gifts of nature and “environmentalists” say that human beings must live in harmony with the environment, and even protect it.

The environment contains Renewable and Non-renewable natural resources. Renewable natural resources (e.g., wood) more grow naturally when used. Non-renewable natural resources (e.g., minerals like coal) do not. Both are matters of concern in today’s rapidly growing world.

3. Relationship between Economic Development and Environment

3.1 UN concern in Stockholm 1972

With the intention of guiding the people of the world regarding the conservation and enhancement of human resources, United Nations Conference was conducted on human environment in 1972 at Stockholm. Among many other valuable principles, it proclaimed the following three:

It is these three principles that developed into the present concern for Environment in relation to

3.2 The Millennium Goals

In 2000 there was the Millennium Summit of the United Nations at New York which included the goal (the 7th goal or target) : “ To ensure environmental sustainability”. This was spelt out in terms of four separate targets:

India as, one of the 189 dignitaries at the Summit, also became committed to the goal.

4. Sustainable Development 4.1.1 Concept of Sustainable Development

The term ‘Sustainable Development’ was first coined in 1980 by the International Union for the Conservation of Nature, 1980, when together with the United Nations Environment Programme and the World Wide Fund for Nature) , the IUCN collaborated with UNESCO to publish a World Conservation Strategy.

They became widely used after it was used by the Brundtland Commission in its 1987 report “Our Common Future”. It defines the sustainable development as: "development that fulfil the present needs without compromising the needs of future generations." (Brundtland Commission (1987).

Sustainable development means development without undermining the sustainability of natural resources. If people exceed it, the system breaks down. Excessive use combined with pollution of natural resources exhausts the economy in the long run. Future generations find their inheritance is depleted.

Economic Development thus has to proceed in a judicious manner. It is not enough to have a high rate of growth of GDP (PPP or not), or a high Literacy and Enrolment, or even high Life Expectancy. Development has to be not only human but Sustainable.

Sustainable Human Development is nothing but freedoms of people to make efforts in order to avoid the serious problem of compromising for future generation.

4.1.2 Criticism of the concept To a few, the concept of Sustainable Development is essentially flawed because it “implies the postponement rather than the elimination of doom” (‘The Dilemma of ‘Water Resources Development’, Ramaswamy R.Iyer. p 42 of Water Resources Sustainable Livelihoods and EcoSystem Services Ed. Kanchan Chopra, CHHRao and R Sengupta). Tolstoy, Thoreau, Gandhi ji and Rabindranath Tagore have experimented. Perhaps a return to the pristine surroundings of primitive life can save the doom from falling. But that being a practical absurdity, India has to go along the lines of Sustainable Development.

4.2 Challenges to Sustainable Development Population

The rapid growth of population is a major challenge for the sustainable development. Because it creates shortages of drinking water, arable land for food production, housing, education and other infrastructural facilities.

Poverty and Inequality have a destructive effect on the ecosystems. They necessitate the growth of food production the expense of nature and cause biodiversity loss.

The shortage of drinking water in many regions of the world is itself a threat to sustainable development. The way it looks, by 2025, every second person will suffer from water shortage.

Disease, Malnutrition and Lack of Medical Facilities is also an obstacle in sustainable development. In many cases, deaths in developing countries are avoidable. In coming years more attention and money should be directed to struggle against diseases. The imminent task is to reduce the death rate by two-thirds among children under five years of age and the death rate of young mothers by 75% by 2015.

Deforestation due to the development of agriculture and increase of urbanization is a massive problem before sustainable development. The expansion of agricultural sector is the main reason for reduction of world's forests. In the coming years, the most important thing is recovery and management of the forests.

The Rising Consumption of Energy and of Petrol is a further problem. This is emphasized by the Kyoto Protocol (1997) to the UNFCCC, an international organization that provides guidelines to industrialized countries to ensure reduction in emission of greenhouse gases.

4.3 A measure of Sustainable Development -the Ecological footprint

This is a measure of human demand on the Earth's ecosystem and accounts for bio-capacity. For 2007, it was estimated that the ecological services used by humanity 1.5 times quickly as Earth can renew them.

Source: www.iisd.org/sd

The United Nations Conference on Sustainable Development (UNCSD), or Earth Summit 2012, was the third international conference on sustainable development.

According to data, in 2006 Cuba was the only nation in the world that met the World Wide Fund for Nature's definition of sustainable development, with an ecological footprint of less than 1.8 hectares per capita, i.e. 1.5 hectares, and a Human Development Index of over 0.8, i.e. 0.855.

In 2007, the world-average ecological footprint was 2.7 gh/per person (18.0 billion in total). With a world-average biocapacity of 1.8 gh/per person (12 billion in total), this results in ecological deficit of 0.9 gh/per person (6 billion in total).

In 2007, the USA had an Economic Footprint of 8.00 gh/per person and a biocapacity of 3.87 gh/person such that the Ecological Deficit/Remainder came out to be (-) 4.13.

Canada had an Economic Footprint of 7.01 gh/ per person and a biocapacity of 14.92 gh/person such that the Ecological Deficit/Remainder came out to be 7.91, a big plus! In 2003 India's per person

Ecological Footprint was 0.75 gh/per person biocapacity was 0.4global hectares, implying an ecobiological deficit of (-) 3.5.By 2007 this deficit had increased. In 2007 India had an Ecological Footprint of 0.91 and a biocapacity of 0.51 gh/person, making the deficit (-).40.

The Republic of Congo in 2007 had an Ecological Footprint of 0.96 and a biocapacity per person of 13.27, making the Ecological Deficit to be 12.31.

Data source : www.footprintnetwork.org/download.php?id=504

4. Strategy for Sustainable Development

India needs to evolve an effective strategy for Sustainable Development on the following lines:

- Judicious use of natural resources like trees and minerals, remembering the needs of future generations
- All possible attempt to replenish Renewable resources (e.g., by planting trees)
- Minimize pollution of air, water etc
- Using of Environmental friendly Sources of Energy, such as LPG and CNG which are eco-friendly fuel can reduce the greenhouse gases from the earth. Delhi Transport Corporation's initiative to CNG Buses in Delhi is the one such effort to reduce CO₂ and other harmful gases
- Ensure strict control and watch with respect to environment hazards such as happened in the Bhopal Gas Tragedy.
- Revive ethnic Indian systems of irrigation and waterways
- Implement Integrated Rural Development Programmes can reduce the pressure on urban areas and the associated pollution.
- Focus on renewable sources of energy like the sun and the wind for energy needs. Tropical countries like India can easily convert Sun light into solar energy and electricity and so create an atmosphere for green development.
- Stimulate organic farming and recycling wastes.
- Sustainable development is a visionary approach towards the future. It will not be brought about by merely policies. It requires the spreading of awareness of the need to conserve the natural assets for inter-generational equity.

. 5. Summary

- Environment is the totality of the animate and inanimate, natural and artificial forces that exist around an economy.
- Various international meetings have focused on the relationship of Environment and Economic Development.
- Two landmarks are Brundtland Commission in its 1987 and Millennium Summit of the United Nations at New York in 2000.

- Sustainable Development means development that fulfills the present needs without compromising the needs of future generations. It can be measured with the help of ecological footprint
- Sustainable Development has many challenges, e.g., depletion of natural resources and pollution. Major efforts are required in order to restraint this exploitation.