

Environment - Economy Linkages

3. All economic activities either affect or are affected by natural and environmental resources. Activities such as extraction, processing, manufacture, transport, consumption and disposal change the stock of natural resources, add stress to the environmental systems and introduce wastes to environmental media. Moreover, economic activities today affect the stock of natural resources available for the future and have inter-temporal welfare effects. From this perspective, the productivity of an economic system depends in part on the supply and quality of natural and environmental resources.

4. Natural and environmental resources have three economic roles : waste disposal services, related to the environment's assimilative capacity; natural resource inputs into production; and directly consumed life support services and aesthetic amenities. The natural and environmental resource input function is central to understanding the relationship between economic growth and environment. Water, soil, air, biological, forest and fisheries resources are productive assets, whose quality helps determine the productivity of the economy. Focusing on this role of environment as a producer good highlights the direct effect environmental problems have on economic growth. Thus, economic management impacts on the environment and the environmental quality impacts on the efficient working of the economy. Environmental degradation imposes costs on the economy which results in output and human capital losses.

5. Lost labour productivity resulting from ill health, foregone crop output due to soil degradation and erosion, lost fisheries output and tourism receipts from coastal erosion or lost soil productivity from deforestation can be some of the manifestations of such reduced output. Moreover, a growing body of epidemiological studies suggest that air and water pollution are taking a heavy toll, particularly of people in the developing world, through ill health and

premature mortality. The impact of water and air pollution is particularly adverse to the younger, the very aged and poor. Pollution control, is thus linked to sustainable development and not a "luxury good" to be afforded after the development process has taken off.

Need for Sustainable Development

6. Economic development without environmental considerations can cause serious environmental damage in turn impairing the quality of life of present and future generations. Sustainable development attempts to strike a balance between the demands of the economic development and the need for protection of the environment. It seeks to combine the elements of economic efficiency, intergenerational equity, social concerns and environmental protection. Although, the term 'sustainable development' has many interpretations, it generally refers to non declining human wellbeing over time. Sustainable development was defined by the 1987 Brundtland Commission as the meeting of "the needs of the present without compromising the ability of future generations to meet their own needs."

7. The concept of sustainable development aims at maximising the net benefits of economic activities, subject to maintaining the stock of productive assets (physical, human and environmental) over time and providing a social safety net to meet the basic needs of the poor. Whereas some analysts support a "strong sustainability" rule which requires a separate preservation of each category of critical asset, assuming these to be complements rather than substitutes, others have argued in favour of "weak sustainability" which seeks to maintain the aggregate monetary value of the total stock of assets, assuming a high degree of substitutability among the various asset types. Sustainable development, therefore, attempts to accelerate development in an environmentally responsible manner keeping in mind the intergenerational equity requirements.