



Need For Decoupling

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This article is based on **“Two big ideas towards green growth: The only viable path to development left to us”** which was published on 14/01/2020 in The Times of India. It talks about maintaining economic development while reducing resource use and associated environmental impacts.

Natural resources form the backbone of any economic development. India, as one of the fastest-growing economies, has increased its material consumption to six times, from 1.18 billion tonnes (BT) in 1970 to 7 BT in 2015 and it is expected to reach 15 BT by 2030.

This material consumption is to further increase in order to provide for economic growth, increasing population, rapid urbanization and growing aspirations of people.

However, this economic growth has been coupled with the inherent cost of the natural environment. As we are hitting the limits of every possible material resource, it is clear that the linear model of ‘produce, consume and discard’ needs rejuvenation.

Thus, there is a **need for decoupling** i.e., maintaining economic development while reducing resource use and associated environmental impacts.

Ways to Achieve this Decoupling

Resource Efficiency

- Enhancing resource efficiency and promoting the use of secondary raw materials has emerged as a strategy for ensuring potential trade-off between growth and resource constraints.

- According to **The Energy and Resources Institute (TERI)**, if the **6R principles of a circular economy**, ie reduce, reuse, recycle, redesign, remanufacture, refurbish are applied, it can bring down steel and aluminium scrap imports to zero.
Not only will this cut down India's import bill, but it will also lead to new enterprises carrying out new activities, and will also generate additional employment.
- In this context, the government has drafted a **national resource efficiency policy, 2019**.

Waste Management

- Every effort has to be made to ensure as **little waste is generated** as possible.
- The process of production and consumption must be innovated to convert waste into a variety of useful products. **This is called upcycling.**
For example: In Delhi, construction waste and road dust are converted into interlocking tiles.
- Further, it will result in a huge reduction in millions of tonnes of slag and solid waste generation and CO2 emissions.

Renewable Energy

- India has targeted installing of 175 gigawatts (GW) of renewable energy by 2022.
- Non-fossil fuel electricity (produced from hydro, wind, solar and nuclear sources) is likely to account for 45% of the electricity mix in India by 2030.
- Today, businesses are investing in renewable energy because it is economically attractive; **solar electricity** at about Rs 2.50/ kWh is the cheapest electricity available in India.

Associated Challenges

- India has a low recycling rate, 20-25% compared to 50% in developed countries.
- Though solar energy is the cheapest, the challenge is to bring down the price of energy storage.
- Also, Photovoltaic (PV) panel used in solar energy produces a lot of e-waste.

Way Forward

- Easy financing instruments need to be explored by banking and non-banking financial institutions for promoting investment in formal recycling setups. A **cluster-based approach** could be considered by bringing different players.
- **Upcycling plants** are currently not cost-effective, therefore there is a need for new business models for their success. And many such new ideas need to be supported in every sphere of the economy.

- The waste generated from solar PV should be treated as **e-waste** to provide a legal mechanism for solar PV waste management.
- To enhance reuse of construction and demolition waste, it will require developing codes and standards for quality of secondary raw materials produced from reprocessing of wastes.

In this context, public procurement of materials for civil construction from recycled materials can be formulated.

- Achieving this decoupling will help to achieve, global commitment to sustainable development by 2030.

Since the 1950s the global consumption of natural resources has skyrocketed, both in magnitude and in the range of resources used. Closely coupled with emissions of greenhouse gases, land consumption, pollution of environmental media, and degradation of ecosystems, as well as with economic development, increasing resource use is a key issue to be addressed in order to keep the planet Earth in a safe and just operating space.

Drishti Mains Question

Treating waste as a resource and the design of a circular economy have been identified as key approaches for resource efficiency. Discuss.