



## Green GDP

This editorial is based on [The building blocks for working out green GDP](#) which was published in The Hindu Business Line on 01/06/2023. It talks about Green GDP and Green National Account and their significance and challenges.

**Prelims:** [GDP](#), [Green GDP](#), [Green National Account](#), [Sustainable Development Goals](#)

**Mains:** Green GDP and Green Accounts: Significance, Challenges and Way Forward

Growing environmental concerns have resulted in the demand for green national accounts that highlight the stock of environmental wealth, and its use and depletion by a society in its conventional national accounts.

Green GDP should account for both **environmentally beneficial and harmful products** and their **social value**. It also proposes a classification of products based on their environmental impact and a method of data collection and analysis using the **Supply and Use tables** of the Ministry of Statistics and Programme Implementation (MoSPI).

Incorporation of green accounts in conventional GDP requires expansion of the definition of production, consumption, and wealth. Both environmentally beneficial and harmful products must be accounted for in the national accounts. The social value of such products must be integrated with related economic activities.

### What are Green GDP and Green National Account?

- Green GDP and Green National Account are concepts that try to measure the economic performance of a country while taking into account the environmental costs and benefits.
- **Green GDP:** [Green GDP](#) is an indicator that subtracts the **cost of natural resource depletion and environmental degradation** from the conventional GDP of a country. It is also known as **environmentally adjusted domestic product**. Green GDP can show how sustainable a country's economic growth is and how it affects the wellbeing of its people.
- **Green National Account:** Green National Account is a framework that integrates environmental considerations into national accounting frameworks. It **aims to measure and account for the environmental costs and benefits associated with economic activities**. Green accounting methods attempt to capture the value of natural resources, the costs of pollution and environmental degradation, and the benefits of ecosystem services.

### What are some Examples of Environmental Costs and Benefits?

- **Environmental costs** refer to the negative impacts of economic activities on the environment, such as pollution, resource depletion, habitat destruction, climate change, and waste generation.
- **Environmental benefits**, on the other hand, are the positive outcomes of economic activities for the environment, including ecosystem services (such as food provision, water purification, and climate regulation), biodiversity conservation, renewable energy adoption, sustainable agriculture practices, and conservation and restoration efforts.

## What is the Significance of Green GDP?

- **Environmental Valuation:** Green GDP incorporates the valuation of natural resources and ecosystem services, which are typically externalities in traditional GDP calculations. By quantifying the economic value of these environmental factors, it provides a more accurate measure of the true costs and benefits of economic activities.
- **Sustainability:** Green GDP aligns with the concept of [Sustainable Development Goals](#) by explicitly considering environmental factors in economic assessments. It allows policymakers to better understand the trade-offs between economic growth and environmental sustainability, facilitating the formulation of more informed policies and strategies.
- **Policy Relevance:** By providing a comprehensive picture of economic performance, including the environmental dimension, green GDP helps policymakers prioritize and allocate resources effectively. It enables the identification of sectors and activities that have significant environmental impacts, guiding targeted interventions and regulations for achieving sustainable development goals.
- **Resource Management:** Green GDP highlights the depletion of natural resources and encourages their sustainable management. By recognizing the economic value of resources, it promotes their conservation and efficient use, leading to improved resource allocation and reduced environmental degradation.

## What are the Challenges in Implementing Green GDP?

- **Data Availability and Reliability:** Calculating green GDP is hard due to unreliable data on environmental costs, benefits, and natural resource value. Estimation involves assumptions and subjective judgments, affecting reliability and comparability.
- **Value Assignments:** Valuing environmental goods and services in monetary terms is a contentious issue. Critics argue that certain aspects of the environment, such as biodiversity or cultural heritage, have intrinsic value that cannot be adequately captured by economic valuation methods. The process of assigning economic values to the environment can be seen as oversimplifying and commodifying nature.
- **Complexity and Indicators:** Green GDP is a tough indicator to calculate because it includes social, economic, and environmental factors. There's no agreed-upon method for combining these factors, and choosing the right indicators is challenging.
- **Policy Implementation and Trade-offs:** Green GDP is useful, but it can be hard to turn it into policies. To make policies work, we need cooperation, political support, and to overcome obstacles. Also, balancing economic growth and environmental protection is tricky and varies by situation, so it's tough to make universal policies based only on green GDP.

## What should be the Way Forward for Implementing Green GDP?

The way forward for implementing green GDP is not clear-cut, but some possible steps are:

- **Developing and adopting a common framework and methodology** for measuring and valuing environmental costs and benefits, based on the best available scientific and economic knowledge. **Conduct pilot projects and case studies to test and refine** Green GDP methodologies.
- **Improving the availability and quality of data on environmental indicators**, such as emissions, resource use, ecosystem services, etc., and ensuring their consistency and

comparability across countries.

- **Promoting the awareness and understanding of green GDP among policy makers, businesses, and the public, and highlighting its advantages over conventional GDP as a measure of economic performance and social well-being.**
- **Encouraging the participation and collaboration of various stakeholders, such as governments, international organizations, civil society, academia, and the private sector, in the design and implementation of green GDP policies and initiatives.**
- **Addressing the trade-offs and conflicts that may arise from pursuing green GDP goals, such as balancing economic growth and environmental protection, ensuring equity and justice among different groups and regions.**

## Which Countries Use Green GDP?

- **China:** China planned to publish Green GDP statistics in 2004 but stopped after facing political and methodological challenges following a preliminary report that showed reduced GDP growth due to environmental costs.
- **USA:** The USA has developed a comprehensive system of environmental-economic accounts that provide various indicators of the interactions between the economy and the environment, environmental expenditures, and environmental taxes. However, the USA does not produce a single measure of green GDP.
- **Europe:** The EU has environmental-economic accounts but no green GDP measure. The EU requires member states to compile accounts covering emissions, taxes, materials, and protection expenditure, which can be used to derive green GDP or adjusted domestic product.
- **Sweden:** Sweden is one of the top performing countries in the **Global Green Economy Index**, which measures the green economy performance of 130 countries based on four dimensions: leadership and climate change, efficiency sectors, markets and investment, and environment and natural capital. Sweden has also developed a dashboard of indicators to monitor its progress towards green growth.
- **India: Green GDP is not officially measured or reported in India,** but some attempts have been made to estimate it by various researchers and institutions. According to a paper published by the Reserve Bank of India in October 2022, researchers estimated the green GDP of India to be somewhere around Rs 167 trillion for 2019. This implies a reduction of about 10% from the conventional GDP of Rs 185.8 trillion for the same year.

## What is Global Green Economy Index?

- The Global Green Economy Index (GGEI) is **published by Dual Citizen, a consultancy firm** that specializes in data-driven solutions for sustainability.
- The GGEI is a measure of the green economy performance of **160 countries** and how experts.
  - According to the latest report from 2022, **India ranks 60 out of 160 countries.**
- The GGEI covers **four dimensions:**
  - Climate Change & Social Equity
  - Sector Decarbonization
  - Markets & Investment
  - Environmental Health.
- The GGEI aims to provide a comprehensive and transparent measure of country sustainability performance and to inform policy making and investment decisions.

### ***Drishti Mains Question:***

Explain the concept of Green GDP and its benefits, challenges, and the way forward.