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# ENVIRONMENTAL ECONOMIC ACCOUNTS IN INDIA: ROADMAP TO FUTURE 2022-2026

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#### Abstract

"Saving our planet, lifting people out of poverty, advancing economic growth... these are the same fight. We must connect the dots between climate change, water scarcity, energy shortage, global health, food security and women empowerment. Solution to one problem must be solution for all." Ban Ki-moon

Today saving the planet is our priority to fix all the problems that emerged due to environmental degradation. Environmental degradation act as a driver and a consequence of disaster. It reduces the capacity of the environment to meet the economic, social and ecological demands. The need of the hour is to maintain the environmental budget for sustainable development. This paper is an effort to analyze the various aspects of Indian Environmental Accounting and roadmap to the future of Environment Economic Accounts.

#### Keywords

Environmental Accounting, Environmental-Economic Accounts, Environment degradation, Sustainable Development

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#### Introduction

The deteriorating environmental health is rendering huge economic loss and posing serious attention for all policymakers, academicians and scientists and people to save the environment and humanity. Environmental issues are neither confined to any country not it is limited to the developing or developed country. United Nations and other global institutions have been paying attention to environmental management for decades. It has been realized that the sustainability of development depends considerably upon the management of the environment. Thus expenditure on environment management today is in fact a compulsory investment for as a future United Nations has initiated several measures to coordinate the development of environmental policy by keeping the global environment under review and bringing emerging issues to the attention of the government and international communities for action. The UN General assembly in its 70th session adopted an agenda, 'Transforming the world: 2030 Agenda for Sustainable

Development' which includes 17 goals referred to as Sustainable Development Goal or SDGs and 169 targets. The idea behind this is that development must be sustainable; it must take into account not only the social and economic effects but also environmental consequences. This paper is a step regarding the contexts of India's Future Roadmap to fit in the existing framework or to design its own keeping the International standards intact.

## **Objective of The Study**

The objective of the study is to explore the various initiatives at national level for the formulation of a framework for Environmental-Economic Accounting and India's strategy towards future prospects and challenges . The study will also cover India's initiatives to cope with the System of Environmental-Economic Accounting (SEEA) Framework of Environmental-Economic Accounting.

## Scope of The Study

Environmental Accounting is a new branch as well as a concept of accounting. In the present day context, everybody's concerns over the environment have created a pressure on the governmentsto ensure environmental disclosure in their annual report, But most of the countries are reportedly is not concerned about environmental Accounting. Most of the countries are facing problems in establishing a standard. Further, no International Standards are universally accepted because of regional diversity, pattern of use of natural resources and state of development in various countries. The study can be used by governments, academicians and policymakers for further analysis. Environmental Economic Accounts in India: Roadmap to Future 2022-2026 Dr. Meenu Chaudhary, Dr. Monika Khanna

#### **Limitation of Study**

• Data is collected by secondary sources thus limitations of the secondary data exist which can make differences in conclusions.

• As a new field of study literature and data is not optimally available.

• Although frameworks have been developed by international institutions but the practical feasibility is yet to be established.

• There is a problem in the universal application of the Accounting methods due to regional diversity in the natural resources of different countries.

• Change in the economic, social, political and technological environment can impact the findings of the study.

• The study is based on historical data , thus future uncertainties can impact the effectiveness of the study

## Methodology

The source of data collected under the study is from secondary sources. Most of the data is collected from reports of the Ministry of statistics and Programs Implementation and from EnviStat India 2021. The study is carried out by analysis of various components of the Environmental Accounting, the gap between theory and practical applicability of International framework in the Indian context.

## Literature Review

Baricz, R., &Róth (2016) "Environmental accounting" is more than accounting for environmental advantages and expenses. It is accounting for any expenses and advantages that arise from changes to a firm's products or processes, where the change additionally includes a change in environmental effects. Improved accounting for non-environmental expenses and advantages, for example, input prices, consumer requests, and so on can prompt changes in basic leadership that have environmental results. A fruitful environmental accounting framework ought to have a technique for accounting for full environmental expenses and ought to integrate environmental expenses into capital planning, cost designation, process/ product structure and other forward-looking choices. Most corporate information and choice frameworks don't currently support such proactive and prospective basic leadership. This is the thing that environmental accounting sets to accomplish. Environmental accounting (EA) is seen by corporate managers and environmental supporters alike as a necessary supplement to improve environmental basic leadership inside the private sector. Whether the objective is pollution prevention or some broader thought of "corporate maintainability," there is a widespread conviction that sound environmental accounting will help firms recognize and actualize financially desirable environmental advancements.

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As indicated by the US EPA (1995) Green Accounting or Environmental Accounting is characterized as: "Recognizing and estimating the expenses of environmental materials and exercises and utilizing this data for environmental management choices. This definition was created by the global consensus of the gathering individuals, speaking to 30 countries. As indicated by them, Environmental accounting includes the recognizable proof, accumulation, investigation and the utilization of two kinds of data for basic leadership: 1. Physical data on the utilization, stream of vitality, water and materials (counting squanders) and 2. Monetary data on condition-related costs, income and investment funds. In reality, environmental accounting ranges from a straightforward change of existing accounting frameworks to an increasingly coordinated environmental accounting practice that joins both the conventional, physical and monetary data frameworks.

Intergenerational well-being is dependent on the stocks of capital assets, considered as wealth, available in an economy. Wealth comprises produced capital, human capital, and natural capital (Dasgupta 2012a, 2012b).

Iyyanki V. Muralikrishna, Valli Manickam, in Environmental Management, 2017 Environmental accounting, also called green accounting, refers to modification of the System of National Accounts to incorporate the use or depletion of natural resources. Environmental accounting is a vital tool to assist in the management of environmental and operational costs of natural resources. Valuation of natural resources is an essential input into both social cost-benefit analysis and some approaches to environmental accounting. In this chapter, the natural accounts tables, physical input-output tables, and material flow accounts methodologies are discussed and will help readers to be able to carry out natural resource accounting for important sectors like forests, water, and ecosystem services.

### The Study

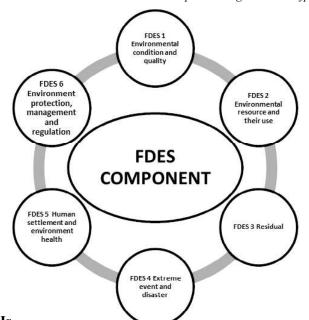
In India initiatives for Environmental Accounting were taken by constituting a Technical working group on National Resource Accounting (NRA) in 1997 by the Ministry of Statistics and Programme Implementation. Studies were conducted by the group and the findings generated much discussion among the academicians and the official system. To bring out sector-specific uniform methodologies for National Resource Accounting MoSPI conducted state-level studies on Natural resources. But the results were not concretized to due to a lack of comparability in methods and definitions used. Another significant initiative was TEEB Indian (The Economics of Ecosystems and Biodiversity) implemented under the Indo-German Biodiversity program. TEEB India initiative was started in 2011 and it carried out 12 pilot studies on three ecosystems (forests, inland wetlands and coastal and marine ecosystems). It demonstrated a practical approach for improving conservation, planning and policymaking.

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Department of Science and Ministry of Environment, Forest and Climate change also undertook some subject-specific studies under various missions and schemes. The government of India also conducted a macroeconomic analysis of the cost of land degradation in India. This study was carried out in six states of India i.e. Gujarat, Madhya Pradesh, Uttarakhand, Andhra Pradesh, Uttar Pradesh and Rajasthan. The study assessed the land degradation in the country and the economic impact associated with it. India also participated in BIOFIN, which aims to develop a methodology for quantifying the biodiversity finance gap at the national level, improving cost-effectiveness through mainstreaming biodiversity into national development and sectoral planning and developing comprehensive national resource mobilizing strategies. One of the important milestones in the development of the Indian Green National Account was the constitution of a high-level Expert Group under the chairmanship of Prof. ParthaDasgupta, Prof. Frank Ramsey Emeritus of Economics, University of Cambridge, the United Kingdom in 2011. The Expert Group submitted its report titled "Green National Account in India-A Framework" in 2013 and it recommended collation of the accounts envisioned in the System of Environmental-Economic Accounting (SEEA).

The System of Environmental-Economic Accounting(SEEA) is a framework to integrate economic and environmental data. It aims at a comprehensive and multipurpose view of the interrelationship between the economy and the environment and the stocks and changes in the stock of environmental assets. It contains the internationally agreed standards, concept, definitions and classification is accounting rules and table for producing internationally comparable statistics and accounts the system of environmental-economic accounting framework follows a similar accounting structure as the system of national account the framework use concept definition classification consistent with S any system of national account in order to facilitate the integration of environmental and economic statistics the SEEA is a multipurpose system that generates a wide range of statistics accounts an indicator with many different potential analytical applications it is a flexible system that can be adapted to countries priorities and policy needs while at the same time providing a common framework concept terms of definitions, methods and valuation.SEEA is a guide to integrating economic environmental and social data into a single coherent framework of holistic decision making.

The Ministry of Statistics and Program Implementation, has the mandate to compile and release publications of environment statistics published EnviStat-India in the prescribed framework of FDES 2013. Subsequently, with the increasing demand to account for the countries natural resources, a supplement on the accounts was also released in 2018.



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#### **Road Map of Ir**

• Continue improving the quality, including timeliness of the current Indian environmental accounts;

• Better communicate the relevance and content of environmental accounts and address user needs;

• Enhance the scope of environmental accounts with emerging areas;

• Production of a longer time series to help identify trends and allow data analysis, with improved timeliness of results;

• Increased collaboration with other agencies and institutions – like data sources, line Ministries, nodal agencies identified for various MEAs, academia and research organizations - to leverage on the complementary know-how e.g. about assessment frameworks and modeling;

• Standardization of concepts, definitions and models in sync with the international frameworks and classifications and compilation of spatially harmonized maps and accounts in line with these standards;

• Gradual strengthening and standardization of the database at the national and sub-national level so that they are at par with the SEEA standards;

• Development of action plan for regular remote sensing-based monitoring of land cover with proper validation of the techniques, like the methods used for generation of information, spatial resolution, digital/visual analysis and time interval;

• Adoption of a system of quality assurance for the disseminated statistics;

• Environmental accounts can be linked to scheme budgets and several policy interventions, including those designed for performance monitoring. It is imperative to communicate the relevance and content of environmental accounts to inspire better recognition of the value of nature and its ecosystem services in policymaking;

• Maintain communication and dialogue with key users, in particular with policymakers, but also with media and stakeholders - to listen to their needs and priorities, explain the accounts, develop policy-relevant indicators and support them with data analysis;

• Present the accounts as an integrated information system, rather than as a series of separate topical datasets in publications or databases;

• Develop clear and accessible dissemination products, including guidance on the reliability and robustness of the estimates, wherever applicable;

• Enhance communication through a variety of dissemination tools adapted to the different types of users: websites with text and data, brochures, analytical reports, maps, explanatory notes and handbooks, press releases, press conferences, Data User Seminars/Webinars;

• The possible linkages of accounts with on-going activities/schemes/ initiatives/policies of the Government; for instance, linkage of Integrated Coastal Zone Management with ocean accounts or 'Energy accounts' with the emission inventory presented in India's Biennial Update Report (BUR) to the UNFCCC;

• Improved Coverage of Accounts;

• Development of action plan for regular remote sensing-based monitoring of land cover with proper validation of the techniques, like the methods used for generation of information;

• The Government of India has taken several policy measures to move away from unsustainable levels of resource use and decouple economic growth from environmental degradation. India has supported the calls for urgent action made through the Climate Accord, CBD commitments and the SDG framework to address these concerns and has gone a step further in making commitments far exceeding the expectations.

• This Strategy document is envisaged to be a guidance tool that is selfevolving in nature.

In the above context, India has prepared its Environmental-Economic Accounts with the following assets-



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#### Conclusion

Accounting itself is dynamic in nature, integration of accounting with the Environment makes it more complex. It is an ever-evolving concept that changes with the social, economic, political and legal environment. Further, the need of the hour is to manage the natural environment sustainably. Initiatives have been taken nationally and internationally by various organizations. India is also evolving a certain framework for Environmental Accounting. Concept paper on Natural Resource Accounting in India an initiative of the Government Accounting Standard Advisory Board is a significant step in the development of Natural Assets Accounts of various natural resources. Ministry of Statistics and Programme Implementation is continuously working on providing data related to natural resources in Envisat. This data is used by various agencies to analyze and contribute to the development of the accounting framework of Natural Resources. Policymakers are facing challenges in identifying the authority to manage and monitor online information from the private sector, mandating the reporting requirements by the private sector as to the use of resources, water, and release of effluents/residuals. How to decide the Periodicity of the Asset Accounts of Water, Land and Forest resources to be decided and how to map the periodicity of data management with the requirement of Asset Accounts. Most importantly, the agency which would prepare the Asset Accounts in respect of the resources at national level.

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