



INTOSAI
Working Group
on Environmental
Auditing

Environmental Accounting

Green Economy Hub '23-25



Environmental Accounting

Green Economy Hub '23-25

Why environmental accounting matters

Since the 1992 Rio de Janeiro “Earth Summit”, governments have recognised the need to develop ways to better account for the value of nature in decision-making, alongside economic and social considerations. The [2021 Dasgupta Review of the Economics of Biodiversity](#) argued that ‘nature needs to enter economic and finance decision-making in the same way buildings, machines, roads and skills do’, and that inclusive measures of wealth, beyond Gross Domestic Product (GDP), are needed to judge whether economic development is sustainable.

“Nature needs to enter economic and finance decision-making

Environmental Accounting frameworks can be applied to further understand the value of nature from a national level down to an organisational-level, or to appraising or evaluating individual projects. At the national level, the key framework that countries are adopting is the [UN System of Environmental-Economic Accounting](#) (UN-SEEA). The 2023 Global Assessment of Environmental-Economic Accounting undertaken by the UN statistics Division found that 90 countries are currently implementing some or all of UN-SEEA. The survey of INTOSAI members in Autumn 2023 found that 22% (13 of 59) respondents had carried out work related to environmental accounting.

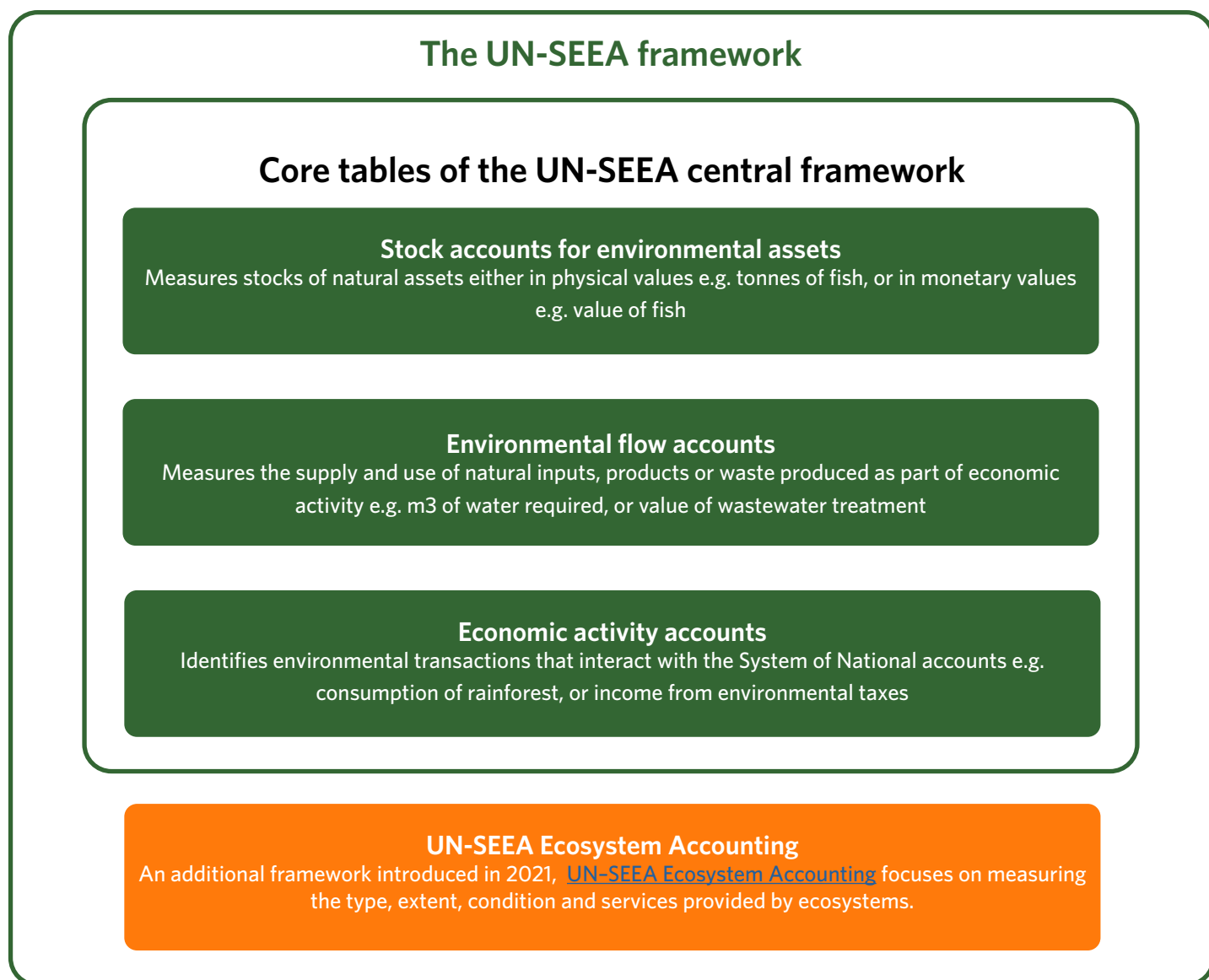
Key framework: United Nations System of Environmental-Economic Accounting (UN-SEEA)

UN-SEEA is a conceptual framework that integrates economic and environmental data. It can be used to produce National Environmental Accounts that give a view of a country’s stocks of natural resources, how these change over time, and of the services those resources provide to the economy.

UN-SEEA is designed to be relevant to all countries, regardless of their level of economic development or of the composition of their natural environment. UN-SEEA uses internationally agreed concepts, definitions, classifications, accounting rules and tables. It shares definitions and concepts with the System of National Accounts so can be used to integrate environmental data with established national economic reporting.

Figure 1

The basic structure of UN-SEEA accounts



Notes

1. The UN-SEEA website includes useful training materials, including [e-learning modules](#) and [implementation guidance](#).

Source: National Audit Office summary of UN-SEEA framework as set out in the United Nations e-learning resources.

Environmental accounting at a national, regional, organisation or project level

UNSEEA is aimed towards using environmental accounting at the national level. There are a wide range of other environmental accounting frameworks or methodological approaches that governments can use to integrate environmental and economic/financial data into decision making at the organisational and project level (Figure 2). SAIs may choose to use data from a range of frameworks depending on what is available in their country, and on whether they are examining the effectiveness of their government's approach at a national, regional or project/programme level.

Figure 2

Comparison of commonly used environmental accounting concepts and frameworks

Framework or concept	Scope and purpose	Level of application & Examples
UN SEEA	International statistical framework developed by the United Nations to integrate environmental and economic data. UN-SEEA is designed to be used at the level of the UN System of National Accounts.	National level <i>Brazilian Institute of Geography and Statistics: Environmental Economic Accounts</i>
Natural capital accounts	Natural capital accounts are used to value the stock of natural assets and the services they provide. Natural capital accounts can be prepared at the national level – for example, as a subset of UNSEEA – but can also be prepared at a regional or local level using different methodology.	Place-based accounts at a national, regional, or local level <i>UK Natural Capital Accounts 2023</i> <i>UK Natural Capital Register and Accounts Tool</i>
Public sector sustainability reporting	Often mandatory process where parts of government disclose information about their environmental and social performance. This information is often presented alongside organisational financial reporting.	Organisational level <i>UK 2023-24 Sustainability Reporting Guidance</i>
Taskforce on Nature-related Financial Disclosures (TNFD)	TNFD intends to deliver a risk management and disclosure framework for organisations to report and act on evolving nature-related risks and opportunities. TNFD is in the early stages of introduction to private sector corporate reporting and operates as a risk management-framework for organisations' exposure to nature-related risks.	Organisational level <i>TNFD early adopter - BBC</i>
Project/programme appraisal and evaluation	Methodology used to help policy makers performing cost/benefit analysis to include the value of natural capital. This can inform decisions about which projects should go ahead and help policy-makers understand the impacts of projects and programmes on the natural environment.	Project/Programme level <i>UK Guidance on Enabling a Natural Capital Approach</i>

Notes

1. This table focuses on approaches to integrating environmental and economic/financial information. Policy-makers may also have dedicated frameworks for monitoring the state of the natural environment. For example, the UK government has developed a set of environmental metrics, called an "Outcome Indicator Framework" to give an overview of its environmental progress.

Source: National Audit Office analysis of frameworks that aim to integrate environmental and economic data.



Photo: Ivo de Rooij. Getty Images. Stockphoto. Part of The Iguazu Falls seen from the Argentinian National Park

Ways that SAIs might engage with environmental accounting

The project team gathered case studies of how SAIs have engaged with or evaluated their government's use of environmental accounting. The case studies are summarised in figure 3. SAIs engaged with environmental accounting in the following ways:

- a) Evaluating how well environmental-economic data is prepared and used by government; or
- b) Using existing environmental accounting data to inform their performance audit; or
- c) Developing the methodology for government to use UN-SEEA, where this is within their remit and they hold the relevant expertise; or
- d) Taking a convening and influencing role within government to improve awareness of environmental accounting and influence improvements in reporting.

"Taking a convening and influencing role"

Figure 3

Summary of Environmental Accounting Case Studies

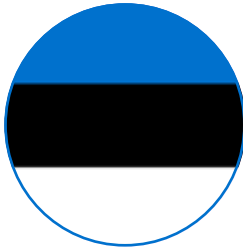
BRAZIL



SAI Brazil have conducted an audit to assess the Federal Government's actions towards the effective implementation of the System of Environmental Economic Accounts (SEEA) in Brazil. The audit examined the existing governance structures, the main actors involved, and the prevailing legal framework.

The audit revealed the absence of an adequate normative framework and an institutional structure to facilitate the implementation of the SEEA. Furthermore, the audit identified a lack of standardization and integration in the official statistical data related to the environment

ESTONIA



In 2022 NAO Estonia published a report on [environmentally harmful subsidies](#). Harmful subsidies are widespread, and the amount of environmentally harmful subsidies is considerable.

The report found that environmentally harmful subsidies have not been identified in Estonia, nor has their impact been assessed. No ministry or Government Office wanted to take a leading role in this area. NAO Estonia highlighted that methodologies have been developed to identify these subsidies and assess their impacts. For example, in Italy, Germany, Netherlands and Finland, the impact and financial volume of such subsidies have been assessed at the national level.

THE EUROPEAN COURT OF AUDIT



The ECA carried out [an audit in 2019](#) to assess how the European Commission managed the development of these accounts and whether they fulfil the needs of the EU policy makers.

Overall, the ECA report found that the European Commission did not set out a long-term perspective for European environmental economic accounts (EEEA) data needs for environmental policymaking and that EEEA modules were not used to their full potential for monitoring key environmental policies. The ECA also noted that the Commission implemented EEEA modules without a full cost benefit analysis.

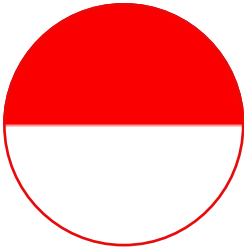
INDIA



SAI India has worked proactively to aid their government to develop Natural Resource Accounting (NRA). In June 2020, SAI India published a [Concept Paper](#) which set out a comprehensive plan commencing with accounting of the finite non-renewable resources and then gradually moving towards attaining other stages of the SEEA framework converging with the SDGs target of 2030.

This was completed by end of 2022 and compiled into [National Asset Accounts](#) covering 107 mineral and energy resources (40 major minerals, 63 minor minerals and four fossil fuels) released in October 2022.

INDONESIA



As part of the Audit of Renewable Energy Development in 2019, SAI Indonesia scrutinized the disclosure and utilization of geothermal potential in the Mineral Resources Accounts.

Their report indicates that the Mineral Resources Accounts lack clarity in informing about the limitations associated with exploiting geothermal potential. It highlights instances where geothermal resources are situated within conservation areas, rendering them inaccessible for exploitation. This oversight suggests a gap in the understanding of geothermal resource management. By overlooking such limitations, there's a risk of mismanagement and environmental harm.

THE MALDIVES



SAI Maldives undertook [a fact-finding exercise](#), meeting with stakeholders to understand their roles and the work they are carrying out on environmental accounting.

The consultations found that there had been efforts to develop environmental accounting in the Maldives, and that there was a roadmap to consolidate these efforts and develop environmental accounts at a national level. However, several challenges remain, including fragmentation of data, lack of systematic integration, resource constraints at relevant agencies and lack of strategic direction. This exercise has helped SAI Maldives to assess the progress of environmental accounting in the Maldives and determine what their role should be in the process.

THE UNITED KINGDOM



As part of a [2019 report](#) on the government's approach to monitoring the state of the natural environment, the UK NAO set out the purpose of the UK's National Environment Accounts and explored how government uses them.

Overall, the report found that the UK had a patchwork of environmental metric sets that did not clearly fit with government's overall ambitions or with each other. The NAO noted that while the UK's Office for National Statistics published a short annual bulletin to summarise key messages from the Environmental Accounts, there was no formal mechanism to review and act on the information in the Environmental Accounts as a whole.

THE UNITED STATES OF AMERICA



In June 2007, GAO and the National Academy of Sciences jointly convened a forum to discuss: (1) criteria to help in developing environmental accounts in the United States; (2) lessons learned from the international community; and (3) strategies for overcoming challenges to developing environmental accounts in the United States. The forum brought together a diverse array of experts, including representatives from government, the international community, nonprofit organizations, industry, and academia. After the forum, GAO and the National Academy of Sciences jointly issued a [report summarizing the ideas and themes](#) that emerged.

Project Lead

SAI UK

Project Group

SAIs of Brazil, India, Indonesia, Maldives, Poland, and Thailand

Quality Assurance Certificates are available on WGEA website.