

GDP looks at only one part of economic performance — income — but says nothing about wealth and assets that underlie this income. For example, when a country exploits its minerals, it is actually depleting wealth. The same holds true for over-exploiting fisheries or degrading water resources. These declining assets are invisible in GDP and so, are not measured.

Wealth accounting, including natural capital accounting (NCA), is needed to sustain growth. Long-term development is a process of accumulation and sound management of a portfolio of assets — manufactured capital, natural capital, and human and social capital. As Nobel Laureate Joseph Stiglitz has noted, a private company is judged by both its income and balance sheet, but most countries only compile an income statement (GDP) and know very little about the national balance sheet.

The other major limitation of GDP is the limited representation of natural capital. The full contribution of natural capital like forests, wetlands, and agricultural land does not show up. Forestry is an example – timber resources are counted in national accounts but the other services of forests, like carbon sequestration and air filtration are ignored. So, GDP can give misleading signals about the economic performance and well-being of a country.

Partly as a result, ecosystems are deteriorating worldwide, and with them, the capacity to support human well-being and sustainable economic growth.

The concept of accounting for natural capital has been around for more than 30 years. A major step towards achieving this vision came with the adoption by the UN Statistical Commission of the System for Environmental and Economic Accounts (SEEA) in 2012. This provides an internationally-agreed method to account for material natural resources like minerals, timber and fisheries.

## Strategy

Our goal is a world where measuring and valuing the environment leads to better decisions for development. We believe incorporating natural capital into national accounts can support better decisions.

More than 30 countries and many middle-income countries have already started to implement the SEEA. Now, many countries want

## (i) What is natural capital accounting?

Natural capital accounting integrates natural resources and economic analysis, providing a broader picture of development progress than standard measures such as GDP. Natural capital accounts are a set of objective data showing how natural resources contribute to the economy and how the economy affects natural resources.

They can provide detailed statistics for better management of the economy, like accounts for the sectoral inputs of water and energy, and outputs of pollution that are needed to model green growth scenarios. Land and water accounts can help countries interested in increasing hydropower capacity to assess the value of competing land uses and the optimal way to meet this goal. Natural capital accounts can help countries rich in biodiversity design a management strategy that maximizes the contribution to economic growth while balancing tradeoffs among ecotourism, agriculture, subsistence livelihoods and other ecosystem services like flood protection and groundwater recharge.

James Cantrell / World Bank (Original Photo by Action Sports Photography)



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to take NCA beyond the SEEA-approved material resources like timber to include ecosystem services and other natural resources that are not traded or marketed, and so are harder to measure. That includes the "regulating" services of ecosystems like forests for sediment control and wetlands for reducing the impacts of floods.

The World Bank Group leads a partnership to advance natural capital accounting internationally. The Wealth Accounting and the Valuation of Ecosystem Services (WAVES) partnership aims to promote sustainable development by ensuring that natural resources are mainstreamed into development planning and national economic accounts. WAVES has the following objectives:

- Help countries adopt and implement accounts that are relevant for policies and compile a body of experience.
- Develop an ecosystem accounting methodology.
- Establish a global platform for training and knowledge sharing.
- Build international consensus around natural capital accounting.

Since WAVES was launched at the 2010 Convention on Biological Diversity meeting, Botswana, Colombia, Costa Rica, Guatemala, Indonesia, Madagascar, Rwanda, and the Philippines have embarked on programs for natural capital accounting endorsed at the highest level of their governments, with extensive technical support from WAVES. These countries have established national steering committees, carried out extensive stakeholder consultations, identified policy priorities and designed work plans for implementation. The countries' work plans include compiling accounts for natural resources like timber, water, and minerals, following the SEEA Central Framework, as well as experimental accounts for ecosystems like watersheds and mangroves.

Since Rio+20, 70 countries have supported a communiqué that calls on governments, the UN system, international financial institutions and other international organizations to strengthen the implementation of natural capital accounting.

## **Results**

From a baseline in 2010 when NCA was mostly limited to high-income countries, WAVES has

demonstrated that it is possible to do accounts in middle-income and data-poor countries as well as use it to inform national development plans and policies. In part because of WAVES pioneering work and its extensive engagement on the global stage, our partner agencies have started new initiatives on NCA, a number of middle-income countries have launched their own initiatives, and there is much broader public support for NCA.

In the first five WAVES countries, governments have set up dedicated units in key agencies to implement NCA with committed staff. NCA is included in the National Development Plans or National strategies on climate change in Botswana, Colombia, Indonesia, Madagascar, and the Philippines.

Accounts are now being used for planning on how to manage natural resources.

- Botswana: Water accounts are identified as a key tool for water sector reforms. Mineral accounts there are helping develop a fiscal rule on management of mineral revenues, a major component of GDP and government revenue.
- Guatemala: Forest accounts have documented the extent of uncontrolled logging, leading to a National Strategy for Production and Use of Fuelwood.
- Colombia: Accounts for Lake Tota are being used as a management tool to help in the allocation of water to competing users.
- Philippines: Water accounts for Lake Laguna (Metro Manila area) will inform water pricing, and broader ecosystem accounts will inform upstream land use management for water quality.

WAVES is working with partners to help develop methodology for ecosystem accounting, the experimental component of the SEEA. WAVES is leading an iterative process of field testing that has clarified key conceptual issues, and provided guidance for implementation, providing input to the next revision of the SEEA. Standardized training on ecosystem accounting is helping countries implement it faster.

WAVES has provided language for NCA that is widely used by the global community. The newsletter and website document NCA activities, not just in WAVES but also from partners.



