

Forest Accounting for Development

Capturing the Value of Forests Using Natural Capital Accounting



For many countries, forests are closely linked to economic growth and well-being. Although there is information about the economic value of commercial timber, many other contributions of forest accounts may be underestimated or invisible because they have no market price. They could also be missing entirely from national accounts, our primary source of information about the economy. Forests contribute to livelihood of rural populations; they are used for tourism and recreation; and they provide valuable services by protecting watersheds, and storing carbon.

Forest Accounts provide a framework to capture the value of all the economic contributions of forests and how they are linked to the economy.



WAVES is a World Bank-led global partnership to mainstream natural capital accounting into a country's development planning and national accounting systems. For many **WAVES** partners and core implementing countries, forests are an important component of natural capital. They are constructing forest accounts to help them manage this rich resource that underpins their economic development.

The challenge

In national accounts (with GDP as the main indicator), cultivated and natural forests are treated differently. For cultivated forests, national accounts record income from timber production as well as changes in forest stocks. This means that if income occurs because of deforestation, it is offset by the value of decreasing stock. However, for natural forests, only income from timber production is accounted for in GDP, but any corresponding depletion of forest stocks is not captured. As a result, a country could deplete forest stocks and still see a rise in GDP, sending misleading economic signals.

Many of the non-market services from forests are attributed to other sectors of the economy or omitted. The value of forest services provided as intermediate inputs to other sectors, such as livestock grazing or tourism, are attributed to the using sector, not to forestry, thereby underestimating the economic value of forests. Ecosystem services like carbon storage are not represented at all.

Forest Accounts Are Now Possible

For several years, there was no agreement on the methodology for calculating the value of goods and services provided by forests. There is now an internationally approved methodology to do systematic forest accounting: the UN Statistical Commission's System of Environmental-Economic Accounting 2012 (SEEA) Central Framework as well as the SEEA Experimental Ecosystem Accounting.

The SEEA provides methodology for building forest asset accounts as well as flow accounts for timber and non-timber forest products as an extension of the System of National Accounts (SNA). Forest ecosystem services can be captured in both physical and monetary terms.

The SEEA expands the asset boundary of the SNA to include both cultivated and natural forests. In addition, SEEA flow accounts for forest goods and services are integrated with the national income accounts.



WAVES at Work

Several WAVES core implementing countries—Colombia, Costa Rica, Guatemala, and the Philippines—are constructing forest accounts at national and regional levels.

To support work on forest accounts, WAVES is developing guidelines and training material that will focus on policy applications of forest accounts. It will address challenges on data availability and provide guidance on how to link the forestry sector to other parts of the economy.

A series of workshops over the next few years will provide technical training for countries at different stages in the development of forest accounts. These workshops will bring together key stakeholders to establish a vibrant community of practice around the theme of forest accounts.

The WAVES Policy and Technical Experts Committee helps develop and test methodologies for ecosystem accounting, working closely with partners from UN agencies, national governmental agencies, academic institutions, and nongovernmental organizations. This group has been working on forest-related ecosystem services and the findings will contribute to strengthening the guidelines.



Informing Policy through Forest Accounting



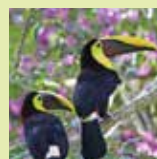
Guatemala is one of the world's most biologically diverse countries. In recent years, deforestation rates have increased at alarming rates. Of the trees being harvested in the country, more than 96 percent of the harvest is not controlled. By examining the flow of economic benefits from timber and non-timber resources, policy makers are designing mechanisms to discourage illegal logging and to provide incentives to diversify fuel sources for cooking by the rural poor.



Colombia needs to protect its dense forests and the rich biodiversity that they support. By constructing forest accounts to quantify forest assets and forest products for each watershed, the country will have better information on supply and demand of timber resources. Colombia will be able to design policy mechanisms to provide incentives for sustainable forest management.



Only 19 percent of the land in the **Philippines** remains forested. Forest accounts are being developed for mangroves to provide important information about coastal protection, carbon sequestration, and provisioning services that mangroves provide. These data will help to inform a national development plan that emphasizes the reforestation of mangroves to provide essential coastal services to the country's inhabitants.



With ambitious goals associated with green growth, **Costa Rica** wants to ensure that the benefits from forest ecosystems will continue to be a source of wealth for the country. The forest accounts are being constructed to ensure that Costa Rica has better analytical and decision-making tools to inform policy decisions on sustainable forest management, including the REDD+ strategy.

More on WAVES

A number of WAVES core implementing countries have prioritized forest accounts because economic activity and livelihoods in the countries depend on forest resources. By fully accounting for forest resources and related ecosystem services, countries will have accurate and timely information for sustainable management of forests. They have asked for further guidance on how to construct and subsequently use the accounts as a tool for policy making.

WAVES is working on the following broad objectives:

- Providing technical support, training, and capacity building on a global scale
- Compiling a body of evidence about the policy uses of NCA
- Communicating what works

WAVES, with its many partners, will continue to move toward the goal of better decisions for development using natural capital accounting.

WAVES core implementing countries include Botswana, Colombia, Costa Rica, Guatemala, Indonesia, Madagascar, the Philippines, and Rwanda—which are all working to establish natural capital accounts. Partners also include countries like Australia, Denmark, France, Germany, Japan, the Netherlands, Norway, Spain, Switzerland, and the United Kingdom, that have valuable lessons to share. UN agencies—UNEP, UNDP, and the UN Statistical Commission—are helping to implement natural capital accounting and review scientific methods and evidence.

Making WAVES

If you are interested in sharing your experience in forest accounting, or in learning more about how to implement it, we would love to hear from you. Please contact waves@worldbank.org.

Find out more about WAVES at www.wavespartnership.org.

