



Region

Asia

Natural Capital

The Philippine archipelago is rich in biodiversity, coastal and marine resources, minerals, timber and other forest products. This natural resource wealth underpins the livelihoods of farmers and fishermen and provides an important social safety net for the rural communities, especially during times of crisis. Responsible management of natural capital is also critical to ensure future profit streams for private enterprises in the tourism, agriculture and fisheries, and mining sectors, as well as revenues to local and national governments.

Critical Decision

Despite sustained levels of growth over the last few years, the Philippines still suffers from relatively high levels of poverty. Keen to promote a growth path that is both sustainable and inclusive, the Philippines has identified several options for development, including nature-based tourism and the expansion of agriculture and responsible mining. How can the country optimize the utilization of its natural resources to achieve these goals, especially when faced with a rising incidence and severity of natural disasters and a growing population?

How will WAVES help?

WAVES will help the Philippines measure the country's natural resources and evaluate how these can be used equitably and sustainably. WAVES will provide key decision makers with scientific-based evidence and information to assess the social, economic and environmental trade-offs of different resource-use scenarios and their implications on the achievement of sustainable development.

PHILIPPINES

Natural capital accounting as a planning tool



Photo Courtesy of Mark Anthony Salvador, LLDA

The Philippines is an archipelago of more than 7,000 islands in Southeast Asia with rich natural resources that make up an estimated 36 percent of the nation's wealth.

In recent years, increased investor confidence, accelerated economic activity, and a consistent growth in GDP has made the Philippines one of the fastest growing economies in Asia. Parallel to this growth, rapid urbanization, climate change and non-judicious use of natural resources pose risks to the country's progress and sustained economic prosperity.

The scientific and evidence-based information provided by WAVES will help the government develop policies in support of the Philippines' medium-term development plans and help effectively manage the often competing and overlapping claims on the country's natural resources.

Making WAVES in the Philippines

Phil-WAVES builds on the past efforts of the Philippines being among the few countries that implemented Natural Capital Accounting (NCA) during the 1990s.

Four priority areas for natural capital accounting have been identified:

Mineral Accounts

The accounts will generate different scenarios of mineral wealth and manage trade-offs of land uses and resource use.

Mangrove Accounts

The accounts will assess the current state of mangroves and their contribution to economic growth and climate change resilience, both nationally and as part of the Southern Palawan ecosystem account.

Accounts Being Developed

Mineral accounts at the national level, mangrove accounts at both national level and at pilot sites, ecosystem accounts at two sites – Southern Palawan and the Laguna de Bay

WAVES lead government agency

National Economic and Development Authority (NEDA)

Country Steering Committee

The Phil-WAVES Steering Committee (PWSC) is composed of representatives from the: NEDA (chair), Department of Budget and Management (DBM) – designated as vice-chair, Department of Finance (DOF), Department of Environment and Natural Resources (DENR), Department of Agriculture (DA), Philippine Statistics Authority (PSA), Climate Change Commission (CCC), Office of the Presidential Adviser for Environmental Protection (OPAEP) and the Union of Local Authorities of the Philippines (ULAP).

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Resources

WAVES Website: www.wavespartnership.org

WAVES 2015 Annual Report:
www.wavespartnership.org/sites/waves/files/images/WAVES_AR_2015.pdf

Ecosystem Accounting in the Philippines:
www.wavespartnership.org/waves-listens-and-consults-ecosystem-accounting-philippines

WAVES

Wealth Accounting and the Valuation of Ecosystem Services (WAVES) is a global partnership led by the World Bank that aims to promote sustainable development by ensuring that the national accounts used to measure and plan for economic growth include the value of natural resources.

Ecosystem Accounts at Southern Palawan

The ecosystem accounts are expected to provide the necessary information to effectively manage the competing uses in the natural resource rich Southern Palawan which is home to a number of indigenous tribes and three large protected areas. The area has potential for ecotourism, agriculture and mining.

Ecosystem Accounts at Laguna Lake Basin

The Laguna Lake Basin is home to one-fifth of the country's population who rely on the lake for water, food, energy, recreation and livelihoods.

Ecosystem accounts are expected to provide decision makers with the necessary data and analysis to ensure sustainable and inclusive economic development.

The Story so Far

In the last quarter of 2015, the Phil-WAVES completed the development of nine (9) ecosystem accounts for Southern Palawan and Laguna de Bay.

Southern Palawan

The Southern Palawan ecosystem accounts were developed in various scopes (i.e. Pulot watershed, municipality of Sofronio Espanola and entire Southern Palawan). It includes (i) a land account containing land cover and changes; (ii) forest and carbon accounts showing the sequestration and capture of carbon; (iii) an ecosystem condition account, an ecosystem service supply and use account and (iv) an ecosystem asset account providing detailed physical and monetary information on the ecosystem services particularly erosion control of upland forests, water regulation by upland forests and the contribution of the ecosystem to various agricultural activities and fisheries.

Key findings: (i) the deforestation rate in Southern Palawan was reduced and potentially reversed; (ii) forests of Southern Palawan are an important carbon sink; (iii) Pulot watershed plays a key role in regulating water flow and supply for crop production; and (iv) there was a dramatic decline in the key coastal ecosystems: mangrove forests, and coastal reefs.

Laguna de Bay

Two areas were considered in the development of the accounts in Laguna Lake: Laguna de Bay Region and Laguna de Bay Basin. The accounts developed include (i) a land account containing land cover and changes for the period 2003-2010; (ii) a water account providing information on water quantity aspects;

(iii) an ecosystem condition account indicating various terrestrial and water quality indicators, changes in lake bathymetry and sediment loading; and (iv) an ecosystem services supply and use account indicating the flow of ecosystem services in particular fishery production, water supply, flood retention and soil erosion regulation.

Key findings: (i) land conversion due to urban sprawl and rapid industrial development is causing a decline in forest cover and affecting agriculture production; (ii) increase in soil erosion from the watershed has changed the bathymetry of the lake; (iii) pollution coming from domestic, industrial and agricultural/forest wastes contribute to the degradation of the water quality; and (iv) Laguna Lake can still sustain fisheries production but is threatened by pollution.

Mineral Accounts

The Philippine Statistics Authority (PSA) completed the preliminary physical and monetary mineral asset accounts for gold, copper, nickel, and chromium in 2015. The PSA conducted a series of validation work in close coordination with Mines and Geosciences Bureau (MGB).

Mangrove Accounts

The mangrove scoping study conducted by the PSA and NEDA was completed in September 2015. The proposed mangrove accounts that can be developed include: (i) national scope - mangrove extent and hazards; and (ii) pilot sites – mangrove associated product (fish production), biomass and carbon sequestration, and ecotourism.

Trainings and Workshops

The estimation of the accounts was supported by technical guidance and expertise of consultants and experts from the World Bank, the Australian Bureau of Statistics and Wageningen University. Training on modelling tools, valuation concepts and application, and policy analysis were provided to the implementing agencies. Additional trainings and workshops on the valuation of ecosystem services and policy analysis were also done.

Donor Support

The ABS and the Australian Government Department of Foreign Affairs and Trade (DFAT) have provide technical support and training, The European Space Agency (ESA) provided satellite imagery and analysis for the two ecosystem accounts.