Country context

The Philippines is an archipelagic country in Southeast Asia, in the western Pacific Ocean. The country’s watersheds provide essential services, including clean drinking water, water for irrigation and energy production, and flood mitigation. Water quality in the country has declined due to sediment and nutrient pollution issues, and landscape degradation is widespread, driven by deforestation, unregulated development, and unsustainable farming practices – exacerbated by rugged, geologically unstable terrain, monsoons, extreme weather, and climate change. Significant efforts are being made to guide sustainable development and protection of critical ecosystems, through the Ecosystems Research and Development Bureau (ERDB). ERDB is the principal research arm of the Department of Environmental and Natural Resources (DENR), and it is providing technical guidance for watershed managers developing Integrated Watershed Management Plans (IWMPs). The Philippines has piloted several ecosystem accounts and is now requiring a national system of natural capital accounting.

What will this pilot project do?

DENR, through ERDB, has proposed an enhancement to its existing IWMP management approach that incorporates ecosystem service assessment and valuation. This pilot project will focus on training regional and national watershed managers to model and map the critical ecosystem services provided by watersheds. The pilot will also incorporate ecosystem services valuation — aligned with the United Nations System of Environmental Economic Accounting (UN SEEA) framework — to calculate benefits and the net-present value (NPV) of the identified watershed management interventions. This will help DENR with investment prioritization and policy planning. This will feed into a larger, two-year project led by the DENR to create a workflow that uses natural capital assessments and accounting to inform enhanced-IWMPs for watersheds nationally.

Key steps

- **Provide in-depth training** between April-July 2024 to support DENR and regional watershed office staff to map, model, and value the baseline supply of select services in two watersheds
- **Contribute to DENR documentation** to develop a workflow for applying ecosystem service valuation approaches at a national scale
- **Provide guidance and technical support** for valuing watershed ecosystem services in the UN-SEEA framework
- **Co-develop a roadmap for DENR** to (a) characterize watersheds and their values; (b) set quantitative targets for ecosystem service enhancement; (c) prioritize watersheds for IWM implementation; (d) track progress of the IWM program towards achieving quantitative targets; and (d) adaptively manage the IWM program

*Note that this is an iterative process and the specifics of the project may evolve.*
DENR-ERDB has mandate to create masterplan for water resources; recent legislation mandating natural capital accounting.

DENR-ERDB; Regional Watershed Management Offices; Asian Development Bank (ADB); NatCap-Stanford.

Training program to support DENR staff in assessing key ecosystem services in pilot watersheds, calculating value of selected services, and identifying pathways for using results to improve watershed management.

The Philippines has a replicable workflow for enhanced-IWMP that uses NCAA to help direct and prioritize management interventions; core DENR and regional field office staff are trained in tools and approaches.

The Philippines is routinely able to prioritize effective watershed management interventions using natural capital approaches, to achieve more sustainable outcomes for the country.

For more information, please visit the project page: bit.ly/peopleplanetprosperity. Please contact naturalcapitalproject@stanford.edu with questions about this project!