



Mainstreaming Nature in Policy and Investment Decisions

Pilot Project Fact Sheet People's Republic of China

Baseline assessment of ecosystem services in the South Dongting Lake region to support creation of a Gross Ecosystem Product (GEP) account



Country context

The People's Republic of China (PRC)'s natural environment has been subjected to severe and widespread degradation resulting from rapid economic growth. In response, policymakers have undertaken a range of ambitious initiatives to protect and revitalize ecosystems. **Gross Ecosystem Product (GEP)** is one such initiative, led by the Chinese Academy of Sciences and the Natural Capital Project. GEP is a development indicator that measures the aggregate value of final ecosystem services produced in a given area (e.g., a unified economic account based on assessments of a variety of services). The PRC is the first country to officially adopt GEP, with the national government publishing guidelines and hundreds of local governments implementing it in diverse contexts. Dongting Lake, located primarily in Hunan Province, is one of the country's largest freshwater lakes, and its watershed is a critical component of the Yangtze River Basin. The southern boundaries of the lake abut a rapidly growing urban area, while the northern parts are adjacent to large swathes of cropland. Dongting Lake and its wetlands are also a major migratory bird habitat and was one of the country's highest priority wetlands identified through the Asian Development Bank (ADB)'s flagship Regional Flyway Initiative. The Dongting Lake region is therefore an important nexus of biodiversity, agriculture, and urbanization.

What will this pilot project do?

This project will provide a GEP accounting supplement to a larger Global Environment Facility-funded initiative. This is in the context of a proposed ADB sovereign loan, up for approval in 2024: the **Hunan South Dongting Lake Wetland Ecological Restoration and Sustainable Development Project**. This pilot will help value and protect terrestrial ecosystem services in this critical watershed so they can provide migratory bird habitat and support rural economic development. The new GEP account will support spatial planning for protected areas; eco-compensation (i.e., payment for ecosystem services) for local land stewards (primarily farmers); and performance evaluation for local administrators and for land-use projects.

Note that this is an iterative process and the specifics of the project may evolve.

Key steps

Produce a baseline ecosystem services assessment of the South Dongting Lake project area — including prices for various ecosystem goods and services.

Create a GEP account for the South Dongting Lake project area, including a template for how the account can be updated going forward.

Propose policy and investment recommendations for South Dongting Lake.

Train local researchers, students, and technical experts in participating local agencies



Key Collaborators

Yuanjiang Municipal Government
South Dongting Lake Nature Reserve Administration
Professor Ziyang ZOU of Hunan Normal University (consultant)



Project-at-a-glance

South Dongting Lake region GEP account

Type of policy or finance mechanism this will inform:	Spatial planning for protected areas; eco-compensation (i.e., payment for ecosystem services); administrator performance evaluation
Planned methods for natural capital approach:	Baseline ecosystem services assessment (including mapping); economic valuation; aggregation into GEP accounts
Key issues to be addressed:	Terrestrial
Geographic scale:	Watershed
Ecosystem services to be assessed:	<p>Material services: crop, forestry, fishery production</p> <p>Regulating services: water retention, soil retention, flood mitigation, air purification, water purification, carbon sequestration, local climate regulation</p> <p>Non-material services: eco-tourism</p>

Pathway to impact



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



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