Policy Applications of Ecosystem Services Valuations

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TEEB Approach: Valuation & its Operating Spaces

- Recognizing value
- Demonstrating value
- Capturing value
- Regional Plans
- Legislations
- Certification
- PA Evaluation
- PES

Norms, Regulations & Policies
Economic Mechanisms
Markets

Ch.3
Ch.4
Ch.5
Example: Integrating ecosystem services into land use plans in Baoxing County, Sichuan, China

REGIONAL LAND PLANS

An ecosystem service mapping and modeling tool (**InVEST**) used to plan development zones that avoid areas of high ecosystem service provision and conservation importance.

Developments were reconsidered by local government officials during the making of the next **Baoxing County Land Use Master Plan 2010** where mapping had highlighted that activities were planned in areas of several critical ecosystem services.
Example: Tubbataha Marine Park, Philippines
UNESCO World Heritage site, contains 396 species of corals & has higher species diversity per square metre than the Great Barrier Reef

LEGISLATION
After 1998 Bleaching – Stakeholders meeting

“No-take” areas agreed, & later, President passed the Tubbataha Reefs Natural Park Act in 2010 (10 mile buffer zone around the no-take marine reserve) thus increasing Park by 200%

- 10% annual increase in live coral cover.
- Fish biomass is four-folds better than the average healthy reef
Example: Kampala Wetland

Services provided by the Nakivubo swamp include natural water purification and treatment & supporting small-scale income activities of slum dwellers.

PA EVALUATION

Ecosystems services provided by the swamp equal USD 1 million - 1.75 million / year.

If the swamp is converted then additional investment into a sewage treatment plant would be required with running costs of over USD 2 million / year.

(Nakivubo designated a part of the city’s greenbelt zone)
Examples: ‘Satoyama’ Landscapes
75 - 100% reduction in pesticides, traditional winter flooding rice farming adopted, & White Stork rice & other certified products sold at a “premium”

Konotori no Mai / Flying Oriental White Stork

PES
2003 - 2007: farmers paid 40,000 JYen per 1,000m² of rice paddies. Currently granted 7,000 JYen per 1,000m² by Toyo-oka City

CERTIFICATION
Rice sold at 23% higher rate for reduced pesticide use, and 54% more for organic farming

- White Stork habitat increased from 0.7 ha in 2003 to 212.3 ha
- Extinct in 1971, now has over 40 breeding pairs
- 1 billion JPY annually in tourism, & municipal income raised by 1.4%
TEEB case studies on the Environmental Atlas
http://www.eea.europa.eu/atlas
Community forest management is a successful avenue to provide health and family planning services as well as relieving environmental pressure in the Khata area of the Terai region in Nepal.

Community forest management in Nepal

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Further case detail can be downloaded from http://www.eea.europa.eu/atlas.
Implementing a TEEB Approach: Six-Step Assessment

Six steps for effectively appraising ecosystem services

This approach is not a fixed recipe. It is intended to guide policymakers in designing their own processes:

1. Specify and agree policy issues with stakeholders
2. Identify which ecosystem services are most relevant
3. Define the information needs and select appropriate methods
4. Assess ecosystem services
5. Identify and appraise policy options
6. Assess distributional impacts of policy options
Some “policy” fabrics for our “valuations” velcro…

- Fisheries (MPAs and restocking…)
- Agriculture (Soil fertility; Soil erosion…)
- Forestry (REDD+; NTFP; freshwater & nutrients…)
- Freshwater …
- Health ..
- Cities …
- Etc etc …
Thank You!

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