Environmental-Economic Accounting

Lessons Learned

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Outline

- Country Experiences’ Review
- Key Impediments
- Building blocks
Components

1. Natural resource asset accounts
2. Material flow and pollution accounts
3. Environmental protection and resource management expenditures
4. Environmentally adjusted macroeconomic aggregates
Review: Modules compiled by countries surveyed by UNSTAT

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<tr>
<th>Developed Regions</th>
<th>Number of countries</th>
<th>Percentage of countries</th>
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EPEA = envl protection expenditures;       PSUT = physical supply and use table;
MFA material flow accounts
Review: scope

- Half of 99 countries surveyed by UNSTAT compile Environmental –Economic accounts.
- None implemented all components of SEEA.
- Commonly compiled:
  - Developed countries: energy & emissions, environmental protection and waste accounts.
  - Developing countries: water, energy and emissions, minerals, forests,
- More physical accounts than monetary accounts.
Review: scope

- Valuation for depletion and degradation, pollution damage, etc. is not widely implemented.
- No developed country compiles the monetary macroeconomic indicators described in SEEA.
- Only Australia and Canada compile the monetary macroeconomic indicators with natural capital in annual Balance Sheets (with total national wealth).
- The World Bank: Adjusted Net Savings (or Genuine Savings)
Review: implementation and funding

- Mostly country level
  - few regional: EU; Eastern and Southern Africa

- Developed countries
  - Implementation most extensive in EU member countries, Norway, Canada, Australia and New Zealand.
  - Largely self-funded with the exception of Eurostat funding environmental accounting in selected EU member countries.
Review: implementation and funding

- Developing countries
  - Relatively few, even on a one-off basis;
  - Fewer on a permanent, self-funded basis
  - Most are funded by international agencies, bilateral donors, and NGOs
  - Rely much on technical cooperation for training and expertise.
Review: institutions and policy uses

- Usually located in one institution:
  - econ statistics agency more than environment agency
  - supported by advisory groups
  - choice of lead agency is crucial with limited staff

- Specific components used by line ministries and agencies for planning and policy analysis
  - integration of EA data with macroeconomic planning tools: Norway, Sweden
  - water act in Australia
  - carbon footprint and sustainable consumption in UK.
Key impeding factors to EA

General

- Lack of international endorsement and clear guidelines for valuation
- Insufficient cross-country avenues for training and exchange
- Incomplete ‘umbrella framework’ on environmental accounts and environmental statistics

Specific to developing countries

- Lack of legal framework, institutional set-up and political space
- Limited data, skills and resources
- Institutional leadership unable to promote policy use by other ministries.
- Concern that EA delivers only ‘bad news’
- Lack of support and technical cooperation
Key impeding factors and prospects

- Most developing countries: novelty of the tool, lack of expertise in environmental economics and, weak traditions of using data and indicators to guide policy decisions deter policy use.

- Exceptions where previous experience exists that would enable updated SEEA, wealth accounting and valuation of ecosystems:
  - Mexico, Colombia, Peru, Brazil
  - South Africa, Uganda, Ghana
  - India
  - Indonesia, Philippines (ten years experience, but hibernated during last years), China

- Building blocks for wealth accounting, valuation of ecosystem services and policy uses: institutional set-up; skills; data; collaborators; political space
Building blocks: Mexico

- Initial work with the World Bank; continuing uptake of information from the London group and the regional bodies (on environment statistics; ECLAC) by INEGI
- Green net national product since the mid-eighties;
- Green GDP in the National Development Plan (NDP) 2001-2006
- Satellite accounts national accounts and economics statistics agencies with technical inputs from other agencies (e.g., SEMERNAT, Water Commission)
- Environment statistics program is linked with EA program
- No apparent competition among implementing bodies
- Continued without external funding
Building blocks: Colombia

- Since early 1990’s with collaboration among statistics (DANE), government agencies, and academe with support from UNSTAT
- Information associated with environmental accounts has been an essential input to formulating and monitoring public policy, design of environmental competitiveness indicators and economy-environment models including climate impacts
- Provided assistance to Venezuela, Peru and Bolivia on government environmental protection expenditure
- Significant contribution to the development of environment statistics
  - used own resources for current effort
Building blocks: Participatory Processes in Uganda and Madagascar

Uganda:
- Uganda CEA is carrying out valuation of some ecosystem services and WAVES will build on that.
- National workshop planned for July/August to establish lead agency, national committee, identify natural capital priorities, and other activities of preparation phase

Madagascar
- Two workshops held and an interim Technical Working Group set up to guide a data assessment by consultants.
- National workshop planned for August/September to establish lead agency, national committee, identify natural capital priorities, and other activities of preparation phase
Building blocks: Philippines

- Learning from experience:
  - ENRAP’s comprehensive approach (Peskin framework), welfare – oriented measure
    - Enabled policy-reforms, e.g.: development of user fees; resource rent appropriation; Clean Air Act trade liberalization and growth alternatives; options for reducing air pollution;
    - Many, in collaboration with other initiatives
  - But with consumers surplus, + and – adjustments, ENRAP adjusted GDP was not statistically different from the original and disappointed the economic planning body which at that time was fixated with a green GDP.
Building blocks: Philippines

- ENRAP’s technical support enabled NSCB ‘s initial work on SEEA
- Despite eventual competition between the two initiatives, with legal support and government funding (but only to DENR) after end of ENRAP.
- Changes in government: subsequent decline in political & budget support, brain drain; but latent capacity exists.
- Continuing collaboration: macroeconomists, env’il economists, scientists; ES valuation work by think tanks.
- Country Environmental Analysis (2009); other initiatives