The World Bank's Work on Statistics for Green Growth

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World Bank's Ongoing Work on Statistics for Green Growth (1)

- Program on Adjusted Net Savings (or, Genuine Savings) and Comprehensive Wealth Accounting for past 15 years

- Work on Comprehensive Wealth rooted in concept that "green growth", i.e., sustainable growth, is a process of building wealth and managing a diverse portfolio of assets:

  ◦ Produced capital

  ◦ Natural capital (subsoil assets, agr land, forests, protected areas)

  ◦ Human and social capital

World Bank's Ongoing Work on Statistics for Green Growth (2)

Adjusted Net Savings (ANS) is calculated *annually*, available online and in annual publications

Genuine Saving Rates in EAP, ECA and SAR
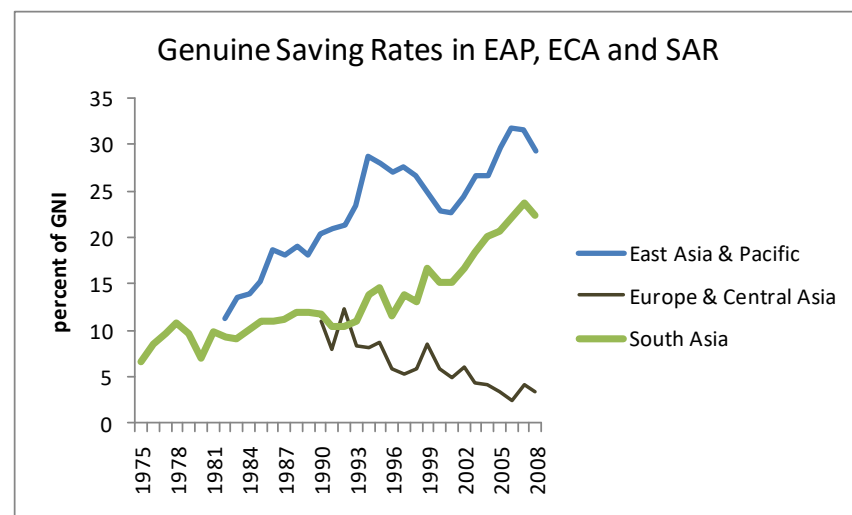
- *Little Green Data Book* (started in 2000)
  - Adjusted Net Savings, Adjusted Net National Income
- *World Development Indicators*
  - Resource Rents, Adjusted Net Savings, and Adjusted Net National Income

World Bank's Ongoing Work on Statistics for Green Growth (3)

Comprehensive Wealth Accounts
updated less frequently, data available for years: 1995, 2000, 2005

Flagship Reports:
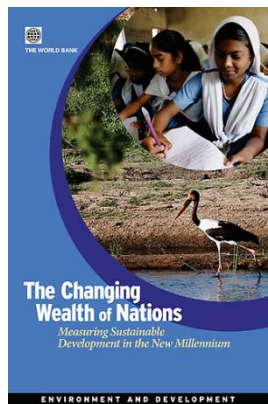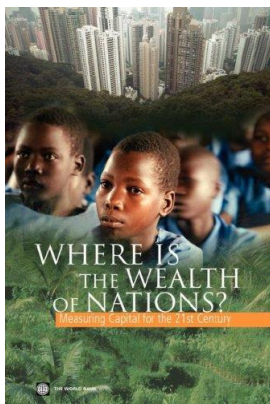
- *Where is the Wealth of Nations? Measuring Capital for the 21st Century (2006)*

- *The Changing Wealth of Nations Measuring Sustainable Development in the New Millennium (2011)*

Going forward,
after 15 years of work, the World
Bank started a new Global
Partnership:

**Wealth Accounting and
Valuation of Ecosystem
Services (WAVES)**

Long-term growth depends on the wealth of a nation, including natural capital

WAVES **Conceptual framework** for sustainable development:

Comprehensive Wealth Approach (e.g., Arrow et al., Dasgupta & Maler, Hamilton & Clemmens)

WAVES **Methodological framework** for implementation: UN's System of Environmental and Economic Accounting (SEEA), developed over past 20+yrs.

WAVES expands on Comprehensive Wealth in several ways

- **More useful for policy analysis**—go beyond the 'scorekeeping' function of accounts--macroeconomic indicators like ANS-- to the detailed statistics, both physical and monetary, that are needed for management.

- **Focus on natural capital**—environmental accounting (SEEA)— where a lot of progress has been made and the policy need for these accounts is greatest

  World Bank's recent report on wealth indicates that natural capital is especially important in low income countries, averaging 36% of wealth and in some resource-rich countries more than 50%

- Support implementation of SEEA core environmental accounts, but attempt to cover the 'missing' natural capital—**ecosystems and ecosystem services**

Components and Structure of WAVES

Major Components

1. Implementation of environmental accounting, physical and monetary, in 6-10 countries:

   Colombia, Botswana, Madagascar, Philippines, India, Costa Rica (possibly Namibia and countries of Greater Mekong Sub-region, Vietnam)

   Australia, Norway, UK, Canada

2. Incorporate environmental accounts in policy analysis and development planning

3. Contribute to methodology for ecosystem accounting for the revised SEEA

4. Promote adoption of natural capital accounting beyond the pilot countries

5 year program, $15 million—

- currently we are in 1-year Preparation phase through Dec 31, 2011
- full implementation in 2012-2015

WAVES in pilot countries

- Ensure that the 'core' environmental accounts (those proposed as a statistical standard next year) are in place

- Expand to ecosystem accounts, i.e.,
  - National accounts data for a geographic area defined by an ecosystem concept rather than administrative or political boundary, e.g., watershed
  - include some of the 'regulating' services identified by the Millennium Ecosystem Assessment-- that are largely already in national accounts, but not explicit, such as hydrological services of forests

- Accounts need to be
  - based on physical accounts for land
  - spatially explicit
  - Monetary accounts need to use appropriate valuation methodology
  - include distribution of benefits to different stakeholder groups

- Take a scenario approach to asset accounts—that require projections about the future state of natural capital and its economic value—considering the stocks and their value under alternative futures, such as climate change or alternative management regimes

Ecosystem Accounting: *Key Challenges*

A Policy and Technical Experts Committee will be established to address the following issues:

- Scaling up: ecosystem services are often very site-specific, how do we generalize/scale up from local case studies of ecosystem services and their value to the regional or national level?
- Dealing with thresholds and irreversibilities
- Treatment of public lands and global commons

- Ability to implement:
  - Assessment of our ability to (credibly) measure and value ecosystem services
  - Assessment of the availability of data to measure and value ecosystem services

- Compile evidence of the policy relevance of environmental/ecosystem accounts

WAVES Partnership

Partnership includes:

UNEP, UNDP, UNCEEA, other UN agencies, governments, NGOs, academic institutions, others

Annual Partnership meetings for training, sharing experiences, presenting new developments in environmental accounting and policy applications

—**open to all** organizations that are interested and have something to contribute, including other countries that may not be supported by WAVES, but are doing work on environmental accounting

Website: www.worldbank.org/programs/waves

We will be developing a new website to support partnership activities

Future Work for World Bank

In addition to WAVES country-level work, we would like to begin the following work on Comprehensive Wealth Accounting and ANS over the next 5 years:

- **Include missing natural capital:** Beginning with fisheries and water (at least physical measures of resources and depletion)

- **Parallel Physical Accounts:** Recognizing limitations to Comprehensive Wealth Accounts, we will additionally explore the use of appropriate physical accounts.

- **Platform for interacting with countries and agencies in order to improve the quality and timeliness of the WB database**. While a useful conceptual demonstration, the data are often not adequate for decision-making at the country level.

  Next stage:

  - Incorporate asset accounting done by national statistical offices
  - Undertake a new benchmarking exercise for other countries
  - Develop better methods for updating ANS and Wealth Accounts.