

Natural capital accounting

The importance of valuing natural capital

Water, clean air and the natural resources which provide food, shelter and other resources are essential for life. However, these are absent from traditional measures of national productivity (i.e. GDP). Natural capital accounting provides a mechanism for not bringing specific natural resources.

What is natural capital?

- Natural resources are raw materials occurring in nature that can be used for economic production or consumption.
- They are subdivided into four categories: mineral and energy resources, soil resources, water resources and biological resources.
- Natural capitals are natural assets in their role of providing natural resource inputs and environmental services for economic production.
- Natural capital is generally considered to comprise three principal categories: natural resource stocks, land and ecosystems.

What is natural capital?

Natural Capital

Sub-soil assets:

(geological resources)

Minerals, earth elements, fossil fuels, gravel, salts, etc.

Non-renewable & depletable

Abiotic flows:

(linked to geophysical cycles)

Solar, wind, hydro, geothermal, etc.

Renewable & nondepletable

Ecosystem Capital:

(linked to ecological systems and processes)

Ecosystems as assets:

Structure and condition

Ecosystems service flows:

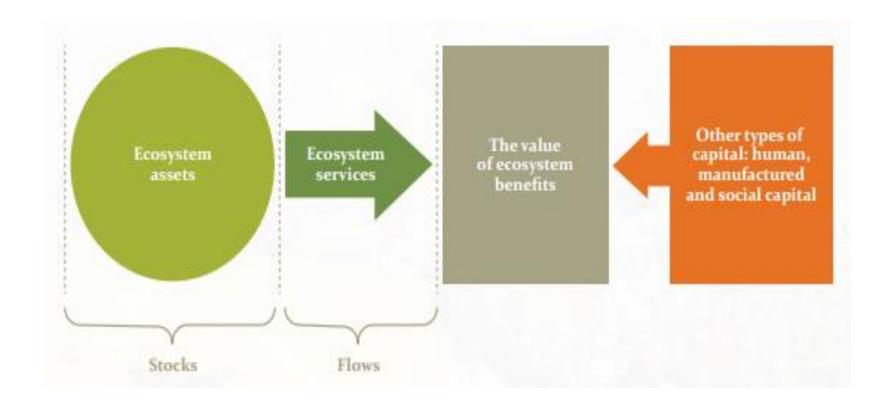
- Provisioning
- Regulation & maintenance
- Cultural services

Renewable & depletable

What is natural capital accounting?

- Noted in the 2030 Agenda and in United Nations
 Environment Assembly resolution 2/13, which stated "to
 ensure that the contributions of natural capital to
 sustainable economic growth, maintenance and
 improvement of social capital and human well-being are
 quantified and integrated into development and business
 practice".
- Natural capital accounting at the national level is consistent with the SEEA. However, it can also account for a particular ecosystem or location, and valuation is typically included in the natural capital accounting.
- Much of the work in UN Environment is under The Economics of Ecosystems and Biodiversity (TEEB) programme.

Approach



Valuation approaches

- Direct market valuation approaches: These include market price- based approaches; cost- based approaches and production function approaches. All these approaches use data from actual markets;
- Revealed preference approaches: Economic agents "reveal" their preferences through their choices. These include travel cost method and hedonic pricing;
- Stated preference approaches: Simulated markets where values are sought for changes in provision or policy. These include contingent valuation method; choice experiments and group valuation.

How to engage in natural capital accounting?

- UN Environment has a large support programme for countries interested in this area of work.
- The Global Environment Facility has identified natural capital as a future impact programme.
- The WorldBank WAVES and the UNSD SEEA team are also highly engaged in this area of work.\

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Thank you

Jillian Campbell, UN Environment