
QUICK READS

NATURAL CAPITAL ACCOUNTING

SYNOPSIS

Natural capital accounting is a method of accounting that aims to apply the traditional economic method of measuring stocks and flows to the natural world. This enables Natural Capital Accounts (NCAs) to be integrated with the long-established System of National Accounts (SNA). Together, NCAs and SNAs can provide a more accurate picture of prosperity and well-being than the commonly-used GDP metric (Gross Domestic Product).

The first efforts to develop accounts that would bring nature into the international accounting framework arose after the Earth Summit in Rio de Janeiro in 1992, and have been in development since. The main method used at the national level is the System of Environmental-Economic Accounting, referred to as the SEEA. In a landmark move for natural capital accounting, the SEEA was officially adopted by the United Nations in 2021.

Approaches have also been developed for businesses and organisations to prepare natural capital accounts and link those with their financial accounts, such as Corporate Natural Capital Accounting.

KEY POINTS

- One of the major shortcomings of national income and/or financial accounts is that they do not reflect trends in environmental quality or degradation, or changes in stocks and flows of and/or from natural capital assets;
- The United Nations Statistics Division is progressing the System of Environmental and Economic Accounting (SEEA). It has two key elements: the SEEA-Central Framework (CF, accounts for flows of environmental products and residuals, expenditure and stocks of resources) and SEEA-Experimental Ecosystem Accounting (EEA, deals with spatial data on natural capital – extent, condition and ecosystem services and benefits);
- Other approaches have developed to suit the needs of businesses and organisations to link natural capital to financial accounts (Corporate Natural Capital Accounting);
- At the EU level, NCA approaches began with the EU MAES (Mapping and Assessment of Ecosystem Services) and is ongoing with the EU INCA (Integrated Natural Capital Accounting) project;
- The use of NCA is being explored to develop better indicators of welfare and sustainability.

CONSENSUS

- The general consensus is that natural capital accounting is essential in achieving sustainable development.
- Different approaches have been developed for different users, with varying degrees of reporting and/or responsibility, but the main approaches require an understanding of flows of environmental



goods and dependencies on natural capital.

- The SEEA-CF is used widely in European Countries since 2011. The SEEA-EEA remains on a trial basis with some countries progressing and informing refinement of the SEEA-EEA method (e.g. the UK & Netherlands).
- Spatial data is a key requirement for SEEA-EEA and certain other accounts (e.g. land accounts). Mapping natural capital assets either via land cover and/or knowledge of the habitats requires similar basic steps: 1) mapping the extent of natural capital assets; 2) developing indicators of asset condition; 3) identifying ecosystem services flowing from the natural capital assets and; 4) linking them to benefits and/or beneficiaries (human benefit).
- The condition of the asset is critical for the flow of services and this requires knowledge of the biophysical character and capacity of the ecosystems present.
- Classification systems for ecosystem services have been developed to standardise approaches with the main method being the CICES (Common International Classification of Ecosystem Services).
- Valuation of the flow of ecosystem services can be carried out either by monetary or physical methods, and this provides the baseline for future mapping and investment in the natural capital asset(s).

POINTS OF DIVERGENCE

- Natural capital accounting is still in development as different users inevitably have a different focus: public and private sectors are the most divergent.
- Within the natural capital accounting community, there are initiatives

to align approaches and ensure common and consistent terminology and classification of assets, ecosystem services, benefits and valuation methods.

- The main approaches are all based on the SEEA methods and developed at the UN level, EU level (EU MAES, EU INCA) and country level (Ireland MAES project). Considerable work has also been done by the Office of National Statistics in the UK.
- At the business level, the Natural Capital Coalition is the main platform for business and the Coalition has developed the Natural Capital Protocol (a framework with associated tools and methods) as a guide for businesses to take natural capital accounting and/or assessments into consideration.

BIG QUESTIONS

- How can we develop classification systems for natural capital assets?
- How can we identify and develop indicators for asset condition?
- How can we define valuation methods?
- Are there appropriate experts available to assist with or lead this work?
- How can we link with other indicators of sustainability?
- How can we adapt the approach for regional and specific issues?