



Natural Capital Accounting

Measuring our natural assets for sustainable development

There is growing recognition that environmental information needs to be brought into national statistical systems alongside traditional economic information and demographic information. Natural Capital Accounting (NCA) uses an internationally agreed accounting system to measure a country's natural assets and resources, such as ecosystems, land and water, and track their state over time. This gives decision-makers a clearer picture of the extent and condition of a country's natural assets and the benefits that flow from them, providing evidence of the many links between the economy, people and the environment. South Africa, as a country with abundant natural assets and resources, is at the forefront of implementation in this emerging field.



Statistics South Africa
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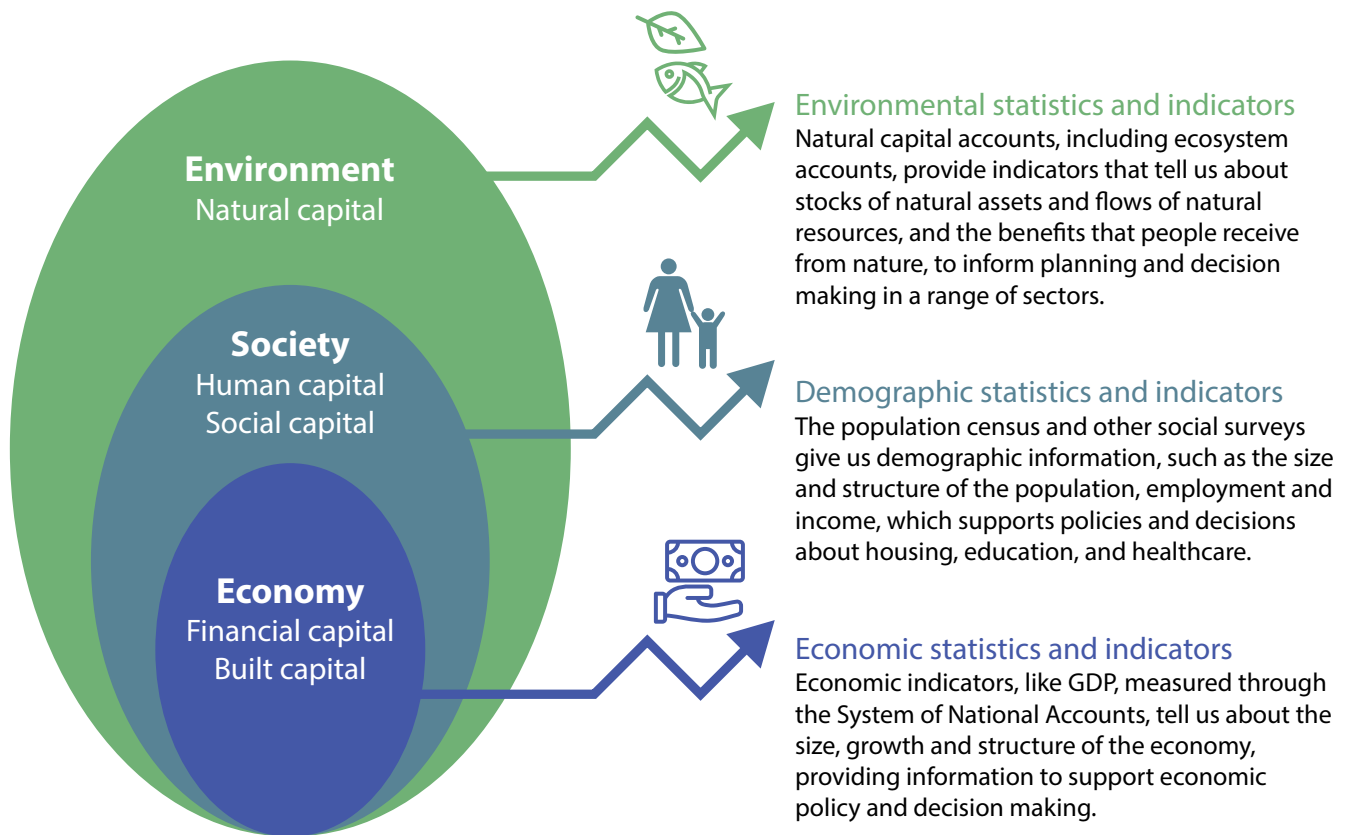
Why Natural Capital Accounting?

NCA is about moving closer to the ideal of an integrated approach to policy and decision-making, in which the interdependencies between the economy, society and the environment are more readily considered. For this, we need an integrated measurement system.

Natural Capital Accounting is a practical tool to measure how nature supports people and the economy

Just as we have a system of national (economic) accounts to measure the Gross Domestic Product (GDP) and other indicators to track the performance of the economy, and the population census to track progress in social outcomes, we also need a system to track the natural environment. This will tell us how the natural environment is improving or declining and what that means for people and the economy.

The use of an accounting framework to organise environmental information allows us to make links with the System of National Accounts (SNA) from which indicators such as the GDP are drawn.



Accounting frameworks have proven ability to provide systematic, reliable and comparable measurement of stocks and flows. In the case of NCA, the stocks and flows are of individual environmental assets or resources (such as water, minerals, energy, timber, fish), as well as ecosystem

assets and ecosystem services in the terrestrial, freshwater and marine realms. The measurement framework for NCA is the System of Environmental-Economic Accounting (SEEA), which is a global standard adopted by the United Nations Statistical Commission.

The value of ecosystems

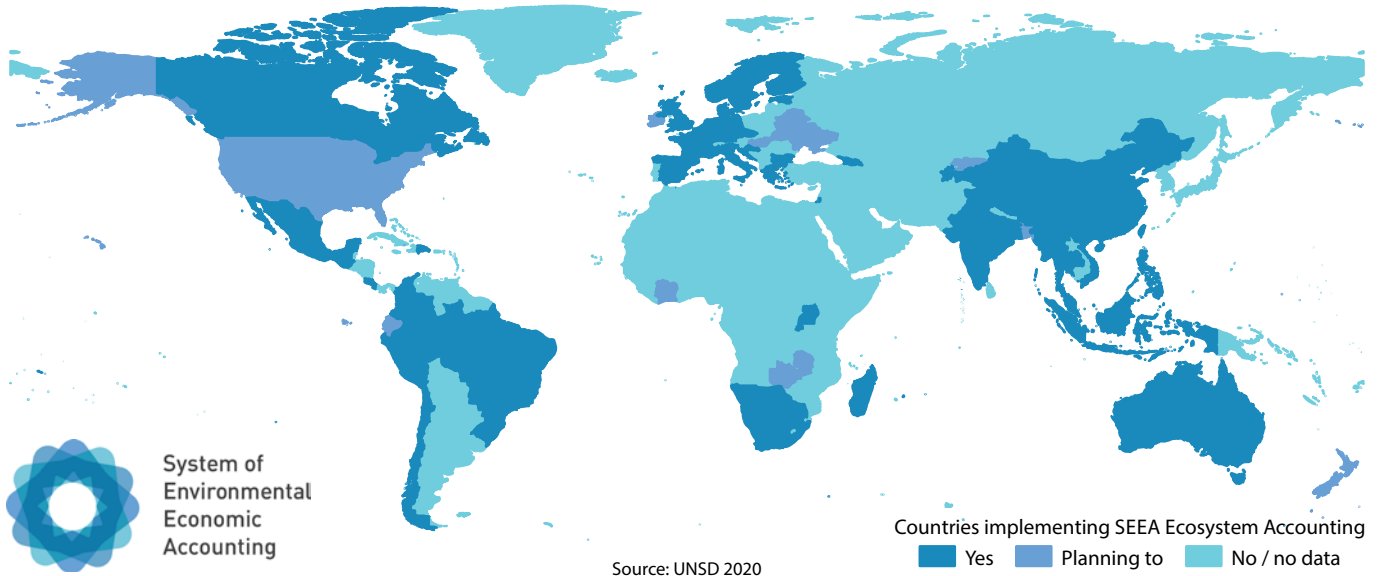
Using accounts to quantify natural capital and its benefits is always done in biophysical terms, such as the extent of an ecosystem remaining in natural condition, amount of water produced by a catchment, volume of fish harvested from the ocean, or number of people visiting protected areas. Where it is useful and appropriate, this may be translated into monetary values, but often that is not necessary. There are many examples of things that are important to society that are measured in non-monetary terms, like literacy rates, unemployment levels or life expectancy. The same is true for ecosystems – their importance and value to society can be captured in a range of statistics and indicators, many of which are non-monetary.

Natural Capital Accounting in South Africa

One of South Africa's natural assets is abundant ecological infrastructure – the naturally functioning ecosystems that generate and deliver valuable services and benefits to people. The value of this ecological infrastructure is often not captured in market transactions or in conventional infrastructure financing decisions, leading society to underinvest in maintaining and restoring this precious resource. NCA focused specifically on ecological infrastructure assets

South Africa is at the forefront of a global movement on Natural Capital Accounting

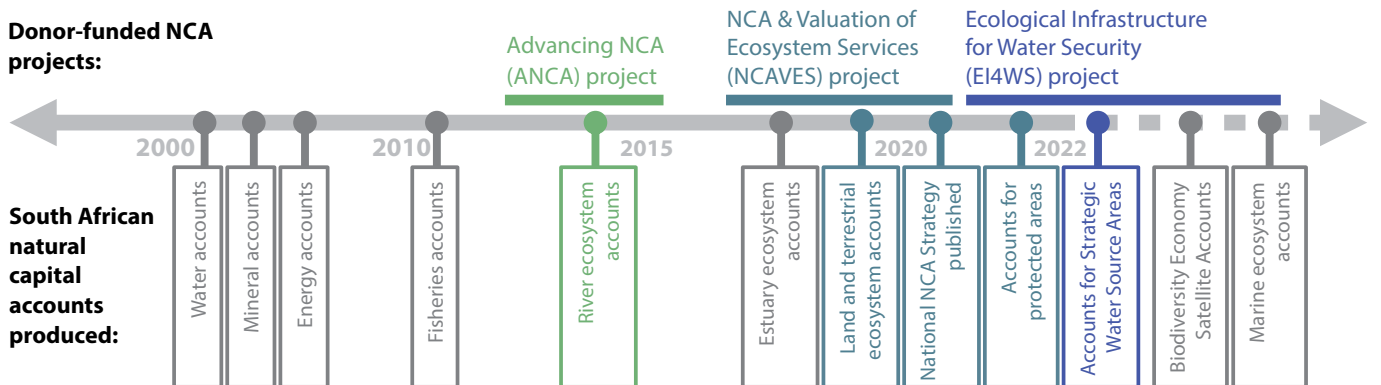
could help to change this, by revealing the contribution of these assets to people and the economy, and systematically tracking this over time.



South Africa has invested over decades in spatial assessment and planning for ecosystems, for example by mapping and classifying different ecosystem types and gathering information about their ecological condition. This provides a strong foundation for South Africa to produce natural capital accounts and to test globally emerging methodological approaches. As a pilot country in global NCA projects, South Africa's experience in developing eco-

system accounts contributed to the development of SEEA Ecosystem Accounting.

A ten-year National Strategy for NCA has been developed, led by Statistics South Africa in partnership with SANBI and other stakeholders, to ensure that NCA is taken forward through both government- and donor-funded investments.



South Africa's NCA journey started with water accounts produced by Stats SA in 2000 and expanded to include a range of environmental assets. Ecosystem accounting began with accounts for rivers in 2015.

The **System of Environmental-Economic Accounting (SEEA)** provides the measurement framework for Natural Capital Accounting. The SEEA Central Framework deals with accounts for individual environmental assets, such as water, minerals, timber and fisheries. It is complemented by SEEA Ecosystem Accounting, which provides a spatially explicit accounting approach to the measurement of ecosystems. SEEA Ecosystem Accounting was adopted by the UN Statistical Commission in March 2021.

How does NCA provide evidence for decision making?

NCA provides consistent, comparable information from one time period to another – suitable for deriving indicators, trend analysis, and integrated planning and assessment. It is a robust source of statistical information that adds to the evidence available to policy and decision-makers.

Natural Capital Accounting helps us to make better choices and decisions for a sustainable South African future



Land-use, water, and marine spatial planning

NCA can provide information to support land-use planning, water resource planning and marine spatial planning. Accounts can be produced at multiple scales, providing information about change in ecosystem extent and condition relevant to planners and decision-makers across realms from national to local level.



Investing in ecological infrastructure

NCA could be used to show the return on investments in ecological infrastructure, by accounting for the extent and condition of ecological infrastructure assets (such as wetlands and critical catchments), expenditure on management and restoration efforts, jobs created and ecosystem services delivered.



Collaboration and partnerships

Developing natural capital accounts is often inter-disciplinary, bringing together expertise from different organisations and sectors. In this way, NCA can help to build bridges and encourage collaboration between non-traditional partners.



International reporting

Applying a rigorous, internationally accepted methodology, NCA can provide national-level environmental indicators for country reporting on international resolutions and agreements, such as the UN's Sustainable Development Goals (SDGs) and targets for the Convention on Biodiversity (CBD).

Natural Capital Accounting adds to the richness of evidence available to decision makers by providing credible information about the extent and condition of the country's natural capital.



National monitoring and evaluation

NCA can provide information to monitor and assess the state of the environment, as well as contribute to evaluation of the performance of government programmes and progress towards achieving national development goals.

For more information:

http://www.statssa.gov.za/?page_id=5992
<http://nca.sanbi.org.za/>

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