There is growing recognition that environmental and social information needs to be brought into national accounting frameworks alongside traditional economic 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 contributing to developing and formalising this emerging field.
NCA is about moving closer to the ideal of an integrated approach to policy and decision-making, in which the inter-dependencies between the economy, society and the environment are more readily considered. For this, we need an integrated measurement system.

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.

Environmental statistics and indicators
Natural capital accounts, including ecosystem accounts, provide indicators that tell us about the state of natural assets and resources and the benefits that people receive from nature, to inform planning and decision making in a range of sectors.

Demographic statistics and indicators
The population census and other social surveys give us demographic information, such as the size and structure of the population, employment and income, which supports policies and decisions about housing, education, and healthcare.

Economic statistics and indicators
Economic indicators, like GDP, measured through the System of National Accounts, tell us about the size, growth and structure of the economy, providing information to support economic policy and decision making.

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 developed by the United Nations Statistics Division.

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 marine environment, 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.
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 under-invest in maintaining and restoring this precious resource. NCA focused specifically on ecological infrastructure assets 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 ecosystem accounts is helping to refine the SEEA Experimental Ecosystem Accounting (SEEA-EEA) guidelines.

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.

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 Experimental Ecosystem Accounting, which provides a spatially explicit accounting approach to the measurement of ecosystems. SEEA Experimental Ecosystem Accounting is being revised, with formal adoption by the UN Statistical Commission expected in 2021.
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.

For more information:
http://www.statssa.gov.za/?page_id=5992
http://nca.sanbi.org.za/

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