# Natural Capital Accounting National NCA Forum 2022

# 18-19 October 2022 Statistics South Africa Auditorium













# Background to this document

Statistics South Africa (Stats SA), in partnership with the South African National Biodiversity Institute (SANBI), the Department of Forestry, Fishery and the Environment (DFFE) and the Water Research Commission (WRC) hosted the second in-person Natural Capital Accounting Forum from 18 to 19 October 2022. The event brought together a wide range of experts to share knowledge, experiences and ideas on a range of topics.

Technical presentations covered the sessions that include "Better Africa and Better World", "Water is life – water-related accounts", "Ecosystem accounts", "Thematic accounts and other emerging areas" and the "Further shaping the future of NCA in South Africa". The forum also included robust discussion on data sharing, methodology, collaboration, capacity building, and how NCA can feed into policy decisions. The event gathered 91 public and private sector participants representing 25 institutions involved across the NCA value chain.

The objectives of the National NCA Forum were to:

- 1. Share progress on the implementation of the National NCA Strategy;
- 2. Engage in detail on data, account compilation and interpretation of accounts for particular uses, including policy applications;
- 3. Learn from regional and global updates on natural capital accounting; and
- 4. Identify emerging opportunities for collaboration and priorities going forward.

Stats SA and SANBI appreciate the support provided by:

- Individuals from a range of institutions who supported the successful execution of the Forum through planning, chairing, making presentations, facilitation, note-taking, photography, communications and media liaison, coordination and catering, printing and registration, setup lighting and other support.
- Participants of the workshop for their active and engaged participation.
- The Ecological Infrastructure for Water Security (EI4WS) Project, which is funded by the Global Environment Facility (GEF), implemented by the Development Bank of Southern Africa (DBSA) and executed by SANBI in partnership with a range of private and public partners. The project supported through facilitation and presentations, and sponsored the attendance of Ms Christine Magu, Senior Statistician and SEEA Team Lead from the Kenyan National Bureau of Statistics (KNBS).



# Table of Contents

Background to this document	2
Programme	
Day 1 – 18 October 2022	
Session 1. Opening ceremony	
Session 2. Better Africa, Better World	
Session 3. Water is life – water-related accounts	10
Day 2 – 19 October 2022	12
Session 4. Ecosystem accounts	12
Session 5. Thematic accounts and other emerging areas	13
Session 6. Further shaping the future of NCA in South Africa	

# Programme

Day 1 – Tuesday 18 October 2022		
9:30	Registration with tea and coffee	
10:30	Session 1. Opening ceremony	Programme Director: Tracy Daniels Stats SA Director of Stakeholder Relations
	Welcome and remarks on National NCA Strategy	Risenga Maluleke, Statistician General
	Remarks from DFFE DG	Nomfundo Tshabalala, DFFE Director General
	Remarks from DFFE DDG	Deshni Pillay, SANBI Chief Director
	Youth in NCA	Mookho Makayane & Luvuyo Kani, SANBI
	Participant engagement: How are you involved?	
11:45	Session 2. Better Africa, Better World	Chair: Tracy Daniels
	Africa NCA Community of Practice	Peter Katanisa, World Bank & Africa NCA CoP
	Implementation and capacity building for NCA globally	Christine Magu, KNBS & UNCEEA
	Participant engagement: Connecting to global and regional networks	
12:20	Group photograph	All
12:30	LUNCH	
13:30	Session 3. Water is life – water-related accounts	Chair: Wandile Nomquphu, WRC
	National Water Accounts: past, present and future	Robert Parry, Stats SA
	Accounts for SWSAs, 1990 to 2020: quick overview	Luvuyo Kani, SANBI
	Catchment-level water resource accounts: quick overview	Aimee Ginsburg, SANBI
	Ecosystem accounts for water-related ecological infrastructure in two demonstration catchments	Patrick O'Farrell, Zebra Studies
	Participant engagement in activated pods	
15:30	Close and Tea break	

Day 2 – Wednesday 19 October 2022		
8:30	Registration and coffee	
9:00	Welcome and reflection on Day 1	Programme Director
9:15	Session 4. Ecosystem accounts	Chair: Sieraag de Klerk, Stats SA
9:20	What are ecosystem accounts?	Mandy Driver, SANBI
9:25	Marine ecosystem accounts: update on progress	Prideel Majiedt, SANBI
9:40	Ecosystem service accounts for KwaZulu-Natal: quick overview	Jane Turpie, Anchor Environmental
10:00	Computer Automated Land Cover and land cover change products and their applications	Zak Oumar, DFFE
10:20	Participant engagement	
10:30	Tea break	
11:00	Session 5. Thematic accounts and other emerging areas	Chair: Sydney Nkosi, DFFE
11:05	Biodiversity Economy Satellite Account & Biodiversity Tourism Estimates	Riaan Grobler, Stats SA
11:25	Accounts for protected areas, 1900 to 2020: quick overview	Nokuthula Mahlangu, SANBI
11:40	Ocean Accounts for Ocean Governance – System Mapping Beyond GDP	Ken Findlay, Cape Peninsular University of Technology
12:00	Integration and support of INTERACT Bio through NCA	Ursula Wellman, ICLEI
12:10	Elephants, Economics and ENCORE	Thomas van Viegan, EARTH.INC / Natural Capital Finance Alliance
12:30	Participant engagement	
12:40	Lunch	
13:30	Session 6. Further shaping the future of NCA in South Africa	Chair: Rudzani Mashangu, DPME
13:35	Environmental data ecosystem to support the future of NCA	Sieraag de Klerk, Stats SA
14:00	Panel discussion: Further shaping the future of NCA in South Africa - for better South Africa, better Africa and better World	Facilitator: Deshni Pillay, SANBI Panellists: Saphira Patel, DBSA Henry Roman, DSI Georgina Ryan, National Treasury Mandy Driver, SANBI
15:10	Participant engagement: Feedback on the Forum	
15:25	Closing remarks	Joe de Beer, Stats SA
15:30	Close	

## Day 1 – 18 October 2022

#### Session 1. Opening ceremony

The second in-person National NCA Forum was opened with a welcome and remarks from **Mr Risenga Maluleke**, Statistician General.



Mr Maluleke welcomed all guests to the Stats SA Auditorium. His remarks provided a brief overview of NCA in South Africa and highlight the National NCA Strategy that was published by Stats SA in June 2021. Mr Maluleke explained why he is excited about natural capital accounting, saying that just like "at sunset, we look to the birds to know where it is safe to rest for the night, we need to look to nature" in our decision-making. This requires we work as inter-disciplinary teams, ecologists, statisticians, economists and others. Mr Maluleke emphasized Stats SA's independence as important, just as he emphasized the importance of the bigger picture of how Stats SA supports NCA with other departments and role players. We need to pull

together to compile natural capital accounts and use information from them to find solutions to the challenges we face. He wished delegates well in deliberations.

The programme director, **Ms Tracy Daniels** (Stats SA Director of Stakeholder Relations), then invited the Director General from the Department of Forestry, Fisheries and the Environment, **Ms Nomfundo Tshabalala**, to give remarks from the Department.

Ms Tshabalala, thanked the Statistician General for the warm welcome at this event, and welcomes Stats SA's leadership in the space of NCA. She emphasized, like Mr Maluleke had, that we need credible and robust environmental statistics, statistics that are needed by policy- and decision-makers in the Department. South Africa has globally exceptional biodiversity and ecosystems that provide a wide array of benefits to the economy, society and human wellbeing, she said. NCA provides a practical tool to measure how nature supports people and the economy. The partnership that exists with Stats SA on NCA is about pulling together, in a consistent way,

to provide good, reliable and comparable statistics on this rich natural heritage that can also be integrated with socio-economic statistics.



NCA provides a practical tool to measure how nature supports people and the economy.



Ms Deshni Pillay, SANBI Chief Director on Biodiversity Information and Policy Advice spoke next on behalf of the SANBI CEO Mr Shonisani Munzhedzi. Ms Pillay explained SANBI's role as a technical partner to Stats SA in compiling natural capital accounts, in particular ecosystem accounts. The same foundational science that underpins the National Biodiversity Assessment is also essential for producing ecosystem accounts. This includes maps and classifications of all South Africa's different ecosystem types, across the freshwater, terrestrial, estuarine and marine realms. Ms Pillay acknowledged that people often think of accounts in terms of Rands and cents. She explained however, that accounting is

not always about money! In fact, most of our natural capital accounts are measured in biophysical terms, such as the number of hectares of an ecosystem type, amount of water produced by a catchment, or volume of fish harvested. These physical values are very powerful in their own right, and we need to be cautious about attempts to translate them into monetary values.

Last but far from least, Mr Luvuyo Kani, Ms Mookho Makayane, and Mr Phumlani Zuma (in absentia) (pictured left to right), NCA interns at SANBI, gave a perspective from youth in NCA. NCA is a new frontier for all of us. They emphasized the skills that young people have to offer to strengthen and evolve NCA in South Africa. Giving examples of ways in which they had done this, they called for more room for youth like them in the NCA space to be created, including creating exciting career opportunities for them. "Because young minds are inquisitive minds", Mr Kani



explained, "youth coming into the NCA space compels the NCA community to get clearer about what we are doing and why. It inspires co-creation from a fresh perspective." Ms Makayane highlighted with pride that "With the NCA work we're doing, we feel like we're a part of the people making change for future generations". They reminded us that the stakes are high for future generations, and the youth are ready to be part of the solutions.

This Forum plays a key role in further developing the relationships and collaboration that are so central



to taking this work forward. Mentimeter was used as a tool to engage interactively with delegates at the end of each session. Ms Aimee Ginsburg, NCA Project Manager at SANBI, played the role of the Mentimeter fairy to lead delegates through a series of questions (see the Mentimeter Results Report for all questions and responses). Nearly 75% of respondents were involved in NCA in some way. The majority of respondents had used information from natural capital accounts and all respondents saw themselves as either co-producers of accounts, users of information or providers of data for current or future accounts. Delegates were also asked which goal in the National NCA Strategy they related to most.

#### Session 2. Better Africa, Better World

#### Africa NCA Community of Practice

Ms Ginsburg (SANBI) presented on behalf of **Mr Peter Katanisa** (World Bank & Africa NCA CoP) (insert in photo) on the "Africa NCA Community of Practice". The presentation covered the purpose, structure

and governance of the African NCA Community of Practice (COP), and laid out the expected outcomes of the COP. These include increase cooperation and support between countries, strengthened capacity of governments to use NCA in decision-making, and strengthened technical capacity for developing and use NCA in Africa. The African NCA COP started with a workshop where attendees wanted to keep in touch in this new area of work. First as a WhatsApp group, it launched formally in 2020. The structure now involves two committees and a common space of engagement. A steering committee meets quarterly. As of last year, the membership was just over 480 individuals from 48 countries across Africa and 14



organisations that support the CoP. The Africa NCA COP is working to sustain gains made thus far towards: stronger coordination; more South-South knowledge exchanges; deeper engagement of country focal points; holding the first African NCA policy forum; delivery of regular webinars, training sessions and communication; and development of a sustainable strategy for the CoP.

### Implementation and capacity building for NCA globally

Ms Christine Magu (Kenyan National Bureau of Statistics & UNCEEA) presented on the "Global



Implementation and Capacity Building". Ms Magu provided a brief overview of what NCA is and how it related to the System of Environmental-Economic Accounting (SEEA) covering the SEEA Central Framework that measures the environment and its relationship with the economy, and the SEEA Ecosystem Accounts that accounts for ecosystem assets and ecosystem services. She explained how the United Nation Committee of Experts of Environmental Accounting (UNCEEA) is an intergovernmental body that provides vision, coordination, prioritization and direction to environmental economic accounting and supporting statistics. UNCEEA seeks to advance implementation of the SEEA in all countries, working through five working groups: (A) coordination and communication; (B)

methodological development; (C) development of global databases; (D) implementation and statistical capacity development; and (E) business accounting. Ms Magu co-chairs Area D, which works to coordinate capacity building, implements a global assessment of SEEA implementation, maintains list of country focal points and consultants to support implementation, and is updating an implementation guide and diagnostic tool. In 2021, the global assessment determined that 37 countries compiled at least one SEEA Ecosystem Account but only 6 of these countries were in Africa.

# Session 3. Water is life – water-related accounts National Water Accounts: Past, Present and Future

Mr Robert Parry, Stats SA Deputy Director: Environmental-Economic Accounting, presented on the "National Water Accounts: Past, Present and Future". Water accounts have been produced by Stats SA since 2002, starting with regional accounts and expanding the geographic coverage to national level accounts using data mining of existing data, and collaborations with the Water Research Commission (WRC). These accounts provide very important and useful information, for example, the National Water Accounts 2018, showed that irrigated agriculture was the largest total user of water, followed by households and then the mining sector. They also indicated that expenditure on water purchases was less than 3.3% across all industry sectors, which the report notes is small



for a sector of such strategic importance. Mr Parry presented progress on current efforts to update the National Water Accounts, including building new relationships with data providers and the implementation of a Technical Working Group for these accounts. Future work will focus on finalising the data that will be used to update the National Water Account, validation through workshops, and ensuring regular meetings of the Technical Working Group.

#### Accounts for SWSAs: in production



Mr Kani, SANBI NCA intern presented on the "Accounts for Strategic Water Source Areas (SWSA), 1990 to 2020" which are currently in development. SWSAs represent the 10% of land that provides 50% of South Africa's water supply supporting half the population and two thirds of the economy. The focus of the accounts is on the SWSAs for surface water, and does not include SWSAs for groundwater, mentioned Mr Kani. SWSAs are a national ecological infrastructure asset, and the accounts include land accounts and accounts for protected areas in SWSAs between 1990 and 2020. Indicators that can be drawn from the accounts include extent, proportion and change in extent of different land cover classes in SWSAs, size of land-based protected area estate in SWSAs, proportion of

SWSAs protected, and change in size and composition of the protected area estate. The accounts are compiled for all SWSAs combined, and for each of the 22 SWSAs for surface water. The accounts are produced through the GEF-funded Ecological Infrastructure for Water Security (EI4WS) Project, and

SANBI as the technical leads convene a Technical Working Group with Stats SA, DFFE and DWS. The expected publication of these accounts is by March 2023.

Ecological infrastructure refers to naturally functioning ecosystems that generate or deliver valuable services to people and the economy

#### Catchment-level water resource accounts: quick overview



Ms Ginsburg presented on "Catchment-level water resource accounts: a quick overview" on behalf of David Clark from the Centre for Water Resources Research at the University of KwaZulu-Natal. Water resource accounts are an analytical framework within which stocks, flows and consumption of water are quantified within a defined spatial and temporal domain. They are different from national water accounts, in that they are physical accounts at catchment scale, and with a land and water management emphasis they provided a more detailed and holistic picture of water resources than traditional engineering view. This captures where water inflows come from (precipitation, streamflow, groundwater and transfers),

how water is used and/or lost (depletions from evatranspiration, outflows of streamflow, groundwater or transfers), and how it is stored and/or transferred between catchments. The accounts are another set of accounts produced as part of the EI4WS project, which is a five year multistakeholder project aimed at unlocking development finance to secure ecological infrastructure for water security in two critical catchments (Berg-Breede and Greater uMngeni). Information from Water Resource Accounts can be used to support integrated water resource management at catchment level, to inform policy such as catchment management strategies, and as a source of physical information for monitoring and indicator reporting.

# Ecosystem accounts for water-related ecological infrastructure in two demonstration catchments

Mr Patrick O'Farrell (Zebra Studios and consultant to SANBI) presented on the "Ecosystem accounts for water-related ecological infrastructure in two demonstration catchments". Mr O'Farrell explained that ecological infrastructure refers to naturally functioning ecosystems that generate or deliver valuable services to people and the economy. Water-related ecological infrastructure include wetlands, rivers and riparian areas. Ecosystem accounts (extent and condition) for wetlands, rivers and riparian areas have been piloted through the EI4WS project. These are all in biophysical terms and the approach is in line with the SEEA Ecosystem Accounts. These are pilot accounts that will inform the application of this method in



other catchments or nationally and thus will present an opportunity to draw out lessons learnt and recommendations for future work.

## Day 2 – 19 October 2022

Session 4. Ecosystem accounts What is ecosystem accounting?



Ms Amanda Driver, SANBI Senior Biodiversity Policy Advisor, who is Chair of the UNCEEA Area B on methodological development of the SEEA Ecosystem Accounts, presented on "What is ecosystem accounting?". Ecosystem accounts is one component of NCA and includes ecosystem asset accounts and ecosystem service accounts. Taking an accounting approach to measurement means focusing on stocks and flows accounting for what has happened (backward-looking), structured tables with entries that balance, applying consistent concepts and definitions, and hierarchical classification systems. She mentioned that South Africa has its own National Ecosystem Classification System, which was developed by SANBI in

collaboration with partners and adopted by Stats SA as a standard in 2021. Ms Driver gave a brief overview of the ecosystem accounts in South Africa to date, which include: National River Ecosystem Accounts; Experimental Ecosystem Accounts for Estuaries; Land and Terrestrial Ecosystem Accounts, 1990 to 2014; experimental ecosystem service accounts for KwaZulu-Natal; and accounts underway for water-related ecological infrastructure assets and marine ecosystem asset accounts. She also highlighted thematic accounts, which have a specific policy relevance, namely the Accounts for Protected Areas, 1900 to 2020 and the upcoming Accounts for Strategic Water Source Areas, 1990 to 2020. She explained that thematic accounts are accounts that pull together several accounts that relate to a single theme.

#### Marine Ecosystem Extent Accounts: Progress to date

Ms Prideel Majiedt, SANBI Marine Research and Policy Advisor, presented on "Marine Ecosystem Extent Accounts: Progress to Date". The policy context for marine ecosystem accounts includes Operation Phakisa Lab, which is focused on increasing the contribution of our Oceans Economy to realise the goals set out in the 2030 National Development Plan, and Marine Spatial Planning. Ms Majiedt sees NCA as a tool that we can use to measure impacts of decisions not just on biodiversity, but also on the benefits that we derive from marine biodiversity. She went through the technical details involved in compiling marine ecosystem accounts, including



delineating the ecosystem accounting area and sub-accounting areas, and marine ecosystem classification and mapping, including of novel ecosystem types such as artificial shorelines, submerged artificial structures and marine aquafarms. Next steps involve engagement with data custodians to refined anthropogenic ecosystem types.

#### Ecosystem service accounts for KwaZulu-Natal: quick overview



Ms Jane Turpie from Anchor Environmental Consultants presented on "Pilot ecosystem service accounts: KwaZulu-Natal". Ecosystem service accounts measure ecosystem services flows in physical & monetary terms, summarised by biome of a range of provisioning, cultural and regulating services in 2005 and 2011. The accounts were produced as part of the Natural Capital Accounting and Valuation of Ecosystem Services (NCAVES) Project. She presented a snapshot of results and highlighted lessons learned including the need for more primary research to fill gaps and the importance of expertinformed interpretation of the results. Posing the question as to whether monetary ecosystem service accounts send the right

message or not, she highlighted several key points that need to be kept in mind, such as that it is important to understand that they give aggregate and average values and not marginal values.

### Computer Automated Land Cover and land cover change products and their applications

**Dr. Zakariyyaa Oumar**, DFFE Chief GIS Professional, presented on the "Computer Automated Land Cover and land cover change products and their applications". Biennial land cover data updates are now being produced by the DFFE, which have application for NCA. The data are freely available and provide a time series of land cover from 2018 that is comparable with the National Land Cover for 1990 and 2014. The presentation included technical details of the computer automated land cover and its classification, and examples of overall land cover change results. Dr. Oumar presentation also touched on carbon tracking of soil organic carbon and total ecosystem



organic carbon. Discussion following this presentation highlighted the importance of appropriate interpretation of change results. DFFE intend to compile biennial land cover change summaries for policy makers.

Session 5. Thematic accounts and other emerging areas

Biodiversity Economy Satellite Account & Biodiversity Tourism Estimates



Mr Riaan Grobler, Stats SA Director of Environmental Economic Accounting, presented on "Biodiversity Economy Satellite Account & Biodiversity Tourism Estimates". He provided progress and the way forward for both the Experimental Biodiversity-Based Tourism Estimates (BTE) and the Experimental Biodiversity Economy Satellite Account (BESA). Mr Grobler explained that the BTE is the same as the Statistical framework for Measuring Sustainable Tourism (SF-MSTY), which measures the tourism sector as an amalgamation of industries such as transportation, accommodation, food and beverage services, recreation and entertainment, travel

agencies, etc. Biodiversity-based tourism is tourism that involves the use or enjoyment of biodiversity assets. It occurs in or with one or more natural ecosystems and/or with one or more indigenous species. Progress is being made on both these accounts. Mr Grobler also introduced the Biodiversity Economy Satellite Account (BESA), covering why we should measure the biodiversity economy. South Africa has a wealth of biodiversity assets and ecological infrastructure that can contribute to inclusive growth and development. The BESA can help to make the case for investment in biodiversity. At the moment, defining the biodiversity economy is not straightforward, and there is no international consensus on a definition. South Africa has developed a conceptual framework for the biodiversity economy and biodiversity related products. The BESA is under development and progress was reported.

#### Accounts for protected areas, 1900 to 2020: quick overview

Ms Nokuthula Mahlangu, SANBI Senior GIS Specialist in Ecosystem Accounting, presented on "Accounts for Protected Areas, 1900 to 2020: quick overview". Ms Mahlangu explained that accounts for protected areas organise biophysical data, summarising the historical changes in the land-based protected area estate on South Africa's mainland tracking the expansion of the protected area estate over the period 1900 to 2020. Compiled at the national level, for provinces and for biomes, the accounts are disaggregated by types of protected areas as per the Protected Areas Act. By presenting information in a consistent, standardise accounting format, the accounts provide a range of indicators that are relevant to



policy. Ms Mahlangu showed an example of what an account table looks like and the key indicators drawn from these accounts, highlighting how these indicators have been visualised in graphs and, because the accounts are spatially explicit, they can also be visualised in maps. She concluded by saying that the accounts provide evidence to inform planning and decision-making related to protected areas and provided directions for future work to further enhance NCA offering.

#### Ocean Accounts for Ocean Governance – System Mapping Beyond GDP



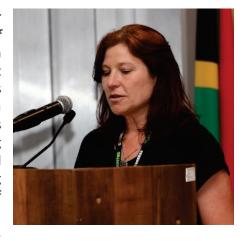
**Prof. Ken Findlay**, from the Global Ocean Accounts Partnership (GOAP) Africa Community of Practice Centre for Sustainable Oceans, Cape Peninsula University of Technology (CPUT), presented on "Ocean Accounts for Ocean Governance – System Mapping Beyond GDP". Prof. Findly introduced ocean governance, change and values and explained that oceans accounting is an approach of integrating records of economic activities, social conditions, and environmental characteristics relating to ocean, ocean resource uses and the marine and maritime domains on a regular basis using both international statistical standards and novel approaches. He spoke about the valuation processes for ocean governance which has often

centred on the gross value add derived contribution of ocean industry sectors to Gross Domestic Product (GDP) that exclude aspects of natural (non-produced) capital and associated sustainability of resource uses, inclusivity and social equity or the anthropogenic "externality" or residual pressures of production or consumption activities by sector. Ocean accounts organise ocean social, environmental, economic data into a common framework aligned to national accounts, thereby providing countries

with the means to go beyond GDP, in measuring progress towards ocean economy growth inclusivity and sustainability, and a common information infrastructure for ocean development policy, marine spatial planning, environmental management, and international reporting. Ocean Accounting can have important applications in Marine Spatial Planning (MSP), Integrated Coastal and Ocean Management, and in Blue Economy Advancement and Ocean Sustainable Development.

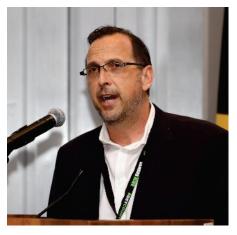
### Integration and support of INTERACT Bio through NCA

Ms Ursula Wellman, from ICLEI – Local Governments for Sustainability, presented on "Integration and support of INTERACT Bio through NCA". INTERACT-Bio is a Global South project that aims to improve the utilisation and management of nature within fast-growing cities and the regions surrounding them. It aims to provide expanding urban communities in the Global South with nature-based solutions and associated long-term benefits. INTERACT-Bio is being implemented on three levels: city-region, national level, and global level. Ms Wellman presented a case study mapping natural assets in Tanzania to provide a thematic atlas of nature's benefits to Dar es Salaam city-region. In South Africa, INTERACT-Bio has four coal municipalities: Waterberg,



Umkhanyakude, Cape Agulhas and Overstrand. INTERACT-Bio could benefit from and support the use of information from natural capital accounts as evidence for policy and decision-making. This is particularly important given increasing recognition of the benefits that ecosystems and ecological infrastructure provide to society.

#### Elephants, Economics and ENCORE



Mr Thomas van Viegan, from EARTH.INC / Natural Capital Finance Alliance presented on "Elephants, Economics and ENCORE". Mr van Viegan started off by highlighting that while being preoccupied and distracted by climate change over that past couple of decades we have failed to notice the 'proverbial' elephant in the room, which is nature. During the last decade nature and biodiversity loss has gone from being predominately a medium to long term concern to being an everyday reality. He presented that more than 50% of the global economy relies on biodiversity, about USD 44 trillion, while the Global Futures Initiative estimates a business-asusual scenario will see biodiversity loss cause financial losses of USD 10 trillion between 2011 and 2050. Mr van Viegan said

that understanding and redirecting global capital flows responsibly, is becoming increasingly important to investors, bankers, asset managers and insurers in realising nature-related risks, impacts, dependencies and opportunities to various asset classes. ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure) is a tool that assists business to better visualise the impact of environmental change on the economy, providing insight into the dependency and impact on nature, and how these might represent a business risk. ENCORE is linked into the Task Force on Nature-related Financial Disclosures (TNFD) in furthering the mainstreaming of biodiversity in business, and aims to redirect flows of finance at scale towards nature-positive outcomes.

#### Session 6. Further shaping the future of NCA in South Africa

The final session opened with a presentation by **Mr Sieraag de Klerk**, Chief Director: Data and Information Management at Stats SA on the "Environmental data ecosystem to support the future of NCA". This thought-provoking presentation presented the development of statistics from NCA as requiring what is essentially a complex system on multiple players that needs coordination. Stats SA have recognised that they are but one player in the coordination of statistics and must work with other role players in the environmental data ecosystem. Mr de Klerk emphasized that for the data ecosystem to function efficiently and to produce what is needed, one has to



coordinate beyond individual products. He posed a range of interesting questions to the delegates about this system, about understanding the data ecosystem, the actors and the energy flows between actors in the ecosystem. "Artificial ecosystems are not self-organizing", he said. We need to acknowledge this and put attention to coordination of statistics and standards that meet the shared vision and objective NCA (rather than the publication of accounts becoming an end in itself).



Ms Rudzani Mashangu, from Department of Planning, Monitoring and Environment (DPME) picked up on the points made by Mr de Klerk on NCA contributing to indicators that government reports on and emphasized the importance of these in shaping government priorities and reflecting on progress. Ms Mashangu then invited inputs from the audience. Mr Ahmed Khan (DFFE) also emphasized the bigger ecosystem that NCA fits into, and the importance of that for providing context and relevance. Mr van Viegan (EARTH.INC / Natural Capital Finance Alliance) added that there are likely private sector actors who may collaborate in NCA. Ms Driver (SANBI) proposed that headline water indicators could be extracted

from water accounts.

The final movement of the Forum was a panel discussion facilitated by Ms Pillay (far right of photo below) with panellists pictured from left to right: **Mr Henry Roman** from the Department of Science and Innovation (DSI), **Ms Saphira Patel** from the Development Bank of Southern Africa (DBSA), Ms Driver from SANBI, and **Ms Georgina Ryan** from National Treasury.



Ms Pillay started out by asking the panellists to reflect on what stood out for them. Ms Ryan raised that the statistic of expenditure on water purchases being only 3% across all industry sectors was significant to her because it evoked a question about the asset base. She tried to translate that into economic terms — what it might mean for economic growth, especially what is the risk of the underlying asset base not being able to function if we do not invest in it. A question stood out for Saphira, do we have the right partnerships to value natural capital effectively and sufficiently enough to be used to inform what the DBSA are making decisions about. Investing in ecological infrastructure needs to be part of the investments in built infrastructure that the DBSA does. For Henry, how the systems of government work together to combine environmental, social and economic information to inform decision-making was of interest. Henry mentioned the National Policy Data Observatory. Ms Driver also reflected on the importance of coordinating the system and not just the products, and that one of the biggest risks is perhaps not allocating sufficient resources for coordinating the system. She was also impressed by the suite of water-related accounts that have been possible through layered investments of the WRC.

How we make NCA more accessible to policy and decision-making, and interpreting results to make it more relevant stood out from the conversation. Ms Pillay followed this by asking panellists what opportunities stood out to them or for their organisations. Ms Patel highlighted that DBSA play a key role in municipal spaces, which are important for service delivery to millions. There could be an opportunity for NCA to provide information to support climate resilient municipalities, improve planning and service delivery. Henry spoke about the DSI's New Decadal Plan that highlights adaptation and nature-based solutions to increase resilience. He proposed that NCA could make more impact if it can make the importance on investing in nature as obvious to policy makers as it is to us. Ms Driver suggested that there is an opportunity, through SANBI's ongoing technical support of ecosystem accounts, to expand this with other African countries. She said it stood out to her from Ms Magu's presentation that only 6 countries in Africa are currently doing SEEA Ecosystem Accounts. Ms Ryan, we need to translate and understand each other in technical terms to strengthen the integration of information from accounts in the policy space.

Ms Pillay then opened the discussion to comments from the audience. Ms Magu reflected on what she saw in the South African NCA community of practice including that in her opinion there is a need for inclusion of more accounts in monetary terms. She also shared an example from Kenya where although the national statistical office (NSO) had produced energy accounts, National Treasury and the Ministry of Energy where not using them. The solution was to spend more time understanding the Ministry of Energy and National Treasury needs and then have individuals come from each entity to spend a month with the NSO to understand the energy accounts fully. Once that happened, the demand for and utilisation of the accounts was huge. **Ms Sarah Polonsky** (DFFE) emphasized the need to continue to build on conversations between Stats SA, DFFE and DWS to continue to build new language and understanding of data, information and interpretation across silos.

Panellists were asked to reflect in their closing comments on what they see as some of the challenges. Challenges included the need to institutionalise the production of accounts so that there is an ongoing and regular compilation of all the accounts over time. It is the time series of data that becomes more and more useful to decision-making. We need to be thinking about how we deepen the technical and

coordination skills and how we build that in youth, dedicating resources to capacity building. Also raised was importance of coordinating ourselves to achieve our goals, having conversations across departments, and ensuring decision-makers understand the information available. Building the capacity in people other than those sitting at the National NCA Forum, such as in your average banker or decision-maker, to use information from accounts.

The National NCA Forum was closed with closing remarks and thanks from **Mr Joe de Beer**, Deputy Director General for Economic Statistics at Stats SA. Mr de Beer left the delegates



with the following key thoughts. Firstly he urged all of those present at the Forum to read through the National NCA Strategy again as we might think about things differently. The strategy is not set in stone, and we need to get a discussion on where the strategy can be enhanced. We should think about how the strategy can be improved and built upon. Secondly he reminded us of the Statistician General's presentation with the slide showing the three concentric circles. We can think about; economy = prosperity, society = people, environment = planet. For the next NCA Forum we can draw links between the NCA and SDG goals as this can only strengthen the position of the work that we do here. And lastly he urged the delegates to start using the NCA, and please contact Stats SA and tell us where we've gone wrong as we are open to constructive feedback. This will enable us to help each other fix and improve any issues.