



Report on the

Natural Capital Accounting and Valuation of Ecosystem Services Project National Stakeholder Workshop in South Africa to develop a programme of work for ecosystem accounting in South Africa

Table of Contents

Background	2
Agenda	3
Summary of workshop proceedings	4
Welcome, introductions and workshop purpose	4
What do we mean by Natural Capital Accounting and ecosystem accounting, and why is it useful?	5
What work has been done so far?.....	7
Introduction to the global NCA&VES project and pilot countries.....	8
New NCA projects in South Africa	8
Address by the Ambassador of the EU to South Africa.....	9
Proposed NCA priorities for the next two years.....	9
Carnival break-away	11
Wrap up	15
Conclusions and way forward	15
Appendices	17
Appendix A. List of workshop attendees.....	17

Background

1. Natural Capital Accounting (NCA) is a growing field of work globally and in South Africa. NCA includes accounting for environmental assets such as water, minerals and energy, with the System of Environmental-Economic Accounting (SEEA) adopted by the UN Statistical Commission as an international statistical standard for these accounts. A more recent aspect of NCA is ecosystem accounting, which focuses on accounting for ecosystem assets and ecosystem services. International standards for ecosystem accounting, based on the SEEA, are in the process of being developed.
2. In 2014-15, South Africa participated as one of seven countries¹ in a global project on piloting ecosystem accounting. The project, Advancing Experimental Ecosystem Accounting, was led by the United Nations Statistics Division (UNSD) and United Nations Environment (UN Environment), with funding from the Government of Norway. Statistics South Africa (Stats SA), the South African National Biodiversity Institute (SANBI) and the Council for Scientific and Industrial Research (CSIR) led the project in South Africa, in close collaboration with relevant national and provincial departments and agencies. The project produced two sets of pilot ecosystem accounts: National River Ecosystem Accounts, together with the Department of Water and Sanitation (DWS); and Land and Ecosystem Accounts for KwaZulu-Natal, together with KZN Ezemvelo Wildlife.
3. Building on this pilot project, South Africa is now one of five countries² participating in a further international project on ecosystem accounting. The Natural Capital Accounting and Valuation of Ecosystem Services project is led by the UNSD and UN Environment, with funding from the European Union. Stats SA and SANBI are co-leading the project nationally and will work closely with a range of national and sub-national stakeholders to further develop ecosystem accounts for South Africa. This project provides the opportunity to build on the lessons from the 2014-15 pilot accounts, to convene a National Forum on Natural Capital Accounting, and to develop a National Strategy for Natural Capital Accounting that will take this work forward.
4. The global project partners undertook an initial mission to South Africa in September 2017, including a high-level inception workshop with national partners.
5. The National Stakeholder Workshop held on 19 March 2018 was the first national stakeholder workshop for the two-year Natural Capital Accounting and Valuation of Ecosystem Services project. The objective of the workshop was to inform stakeholders of the project and to elicit feedback towards developing a programme of work for ecosystem accounting in South Africa for the next 17 months. Over the course of this project, there will be further workshops and opportunities for participation and involvement in this evolving body of work and knowledge.

¹ Along with Bhutan, Chile, Indonesia, Mauritius, Mexico, Vietnam.

² Along with Brazil, China, India and Mexico.

Agenda

Workshop held on 19 March 2018, 9.30 for 10am – 3.30pm at the Milk Plum Restaurant in the Pretoria National Botanical Garden.

Chair: Kristal Maze (SANBI) & Gerhardt Boucher (Stats SA)

09:30	TEA	
10:00	Welcome	Stats SA, SANBI, DEA
10:15	Introductions and purpose of the workshop	Gerhardt Boucher (Stats SA)
10.45	What do we mean by Natural Capital Accounting and ecosystem accounting, and why is it useful?	Mandy Driver (SANBI)
11.00	What work has been done so far? <ul style="list-style-type: none"> - Environmental accounts by Stats SA - Ecosystem accounts - Ecosystem valuation 	Robert Parry (Stats SA) Mandy Driver (SANBI) Jane Turpie (Anchor Environmental)
11.20	Introduction to the global NCA&VES project and pilot countries	Kavita Sharma (UN Environment)
11:30	TEA	
	Introduction of the EU Ambassador	Moshibudi Rampedi (SANBI CEO)
12.00	Address by the Ambassador of the EU to South Africa	Marcus Cornaro (EU Delegation to SA)
12:15	New NCA projects in South Africa Proposed NCA priorities for the next two years	Aimee Ginsburg (Benefits SE) Mandy Driver
13:00	LUNCH	
13.45	Introduction to carnival break-away	Aimee Ginsburg
14:00	Carnival break-away: <ol style="list-style-type: none"> 1. Priority accounts and their uses, for next 2 years and longer term – matching supply and demand 2. Related projects and initiatives 3. Stakeholder engagement: Who needs to know about this work and how should/can we get them involved? 4. How can we make the case for accounts and communicate them effectively? 5. Scenario analysis 	Everyone
15:00	Quick report backs from Carnival Wrap up	Facilitators Mandy Driver

Summary of workshop proceedings

Welcome, introductions and workshop purpose

6. **Kristal Maze (SANBI Chief Director: Biodiversity Planning and Policy)** opened the workshop at 10:00. Pleased to co-host this meeting with Stats SA. This relationship with Stats SA goes back nearly 5 years and we see this project as an important way to further strengthen our working relationship. She welcomes Lidia Affonso and Ellen Pedersen from EU Delegation to South Africa, and Kavita Sharma from the UNE, as representatives of the team leading the global NCA&VES project. She gave apologies from the UNSD members of the team. She commented on the wide representation of stakeholders in the room, including from all three tiers of government, private sector, research institutions and non-governmental organisations. Many were involved in earlier engagements and their continued commitment to building on this important body of work was appreciated. New stakeholders in the room were also welcomed. Excited to be having this stakeholder workshop, as the next step towards expanding the set of ecosystem accounts in South Africa. This work is fundamental to repositioning ecosystems as underpinning economic and social development.
7. **Wadzi Mandivenyi (DEA Chief Director: Biodiversity Specialist Monitoring and Services)** opened on behalf of the Department of Environmental Affairs (with apologies of her Deputy Director-General (DDG) mentioning that South Africa, as party to the Convention of Biological Diversity (CBD), is a leading country in achieving Aichi Targets. In particular, South Africa is contributing to global progress on Aichi Target 2: By 2020, at the latest, biodiversity values... are being incorporated into national accounting, as appropriate, and reporting systems. She looks forward to the outputs of the NCA&VES project and integrating the work into national and local development and poverty reduction strategies and planning processes – with strategic priorities being integration into the next phase of the NDP and MTSF. She emphasized the importance of inclusivity – bringing stakeholders along, developing accounts acceptable and accessible to as many as possible, and enriching the outputs through an inclusive process.
8. **Gerhardt Bouwer (Stats SA Chief Director: Economic Analysis)** welcomed on behalf of Stats SA, with apologies from Joe de Beer (Stats SA DDG: Economic Statistics). He acknowledged the process and work it has taken up to this point to get this project to this stage. He then took delegates through the purpose of the meeting:
 - a. Why do we need ecosystem accounts? For those new to ecosystem accounting, a brief introduction, including the relevance of ecosystem accounts for policy and decision-making.
 - b. What do we have thus far? An overview of South Africa's ecosystem accounting and other environmental accounting work to date.
 - c. What still needs to be done? Broad plans going forward, including the Natural Capital Accounting and Valuation of Ecosystem Services projects, as well as other related projects.
 - d. How do we go forward? And who is involved? An initial programme of work for the next two years will be presented for discussion, feedback and input.

9. Each stakeholder was invited to introduce themselves with their name, organisation and position, and one sentence on why you came to this workshop. This took about 20 minutes. It was seen as worthwhile for understanding the different interests in the room and recognising the good breadth of stakeholders from over 30 organisations. There were 71 workshop participants (list of workshop attendees provided in Appendix A).



Figure 1. The National NCA Stakeholder Workshop in South Africa held at Milkplum Venue in the Pretoria National Botanic Gardens (Pretoria, South Africa) convened 71 participants from over 30 organisations.

What do we mean by Natural Capital Accounting and ecosystem accounting, and why is it useful?

10. **Mandy Driver (SANBI Director: Biodiversity Policy Advice)** gave a presentation (1_Mandy_National Stakeholder Workshop 19 March 2018 Intro to Eco Accounting, Mandy Driver.pdf) giving some background to the emergence of a system for national accounts (SNA) in the US in response to the Great Depression, which ultimately led to a now globally used standard System of National Accounts (SNA) that is essential for government and private sector to understand what is happening in the economy. She explained how Natural Capital Accounting (NCA) responded to acknowledged limitations of SNA with a System of Environmental-Economic Accounting (SEEA) as a subset of NCA being developed in the 1990's.

One aspect of SEEA is Experimental Ecosystem Accounting (EEA), and has proved more complex which is why it remains 'experimental'.

11. Mandy emphasized that the NCA&VES project focuses on ecosystem accounting (EA) as one aspect of NCA. She explained that ecosystem accounts: are inherently spatial; distinguish between ecosystem assets and services; and can be explained as a series of broad steps that involve accounting for ecosystems (a) in physical terms before the accounts are put (b) in monetary terms.

Figure 2.3: Broad steps in ecosystem accounting

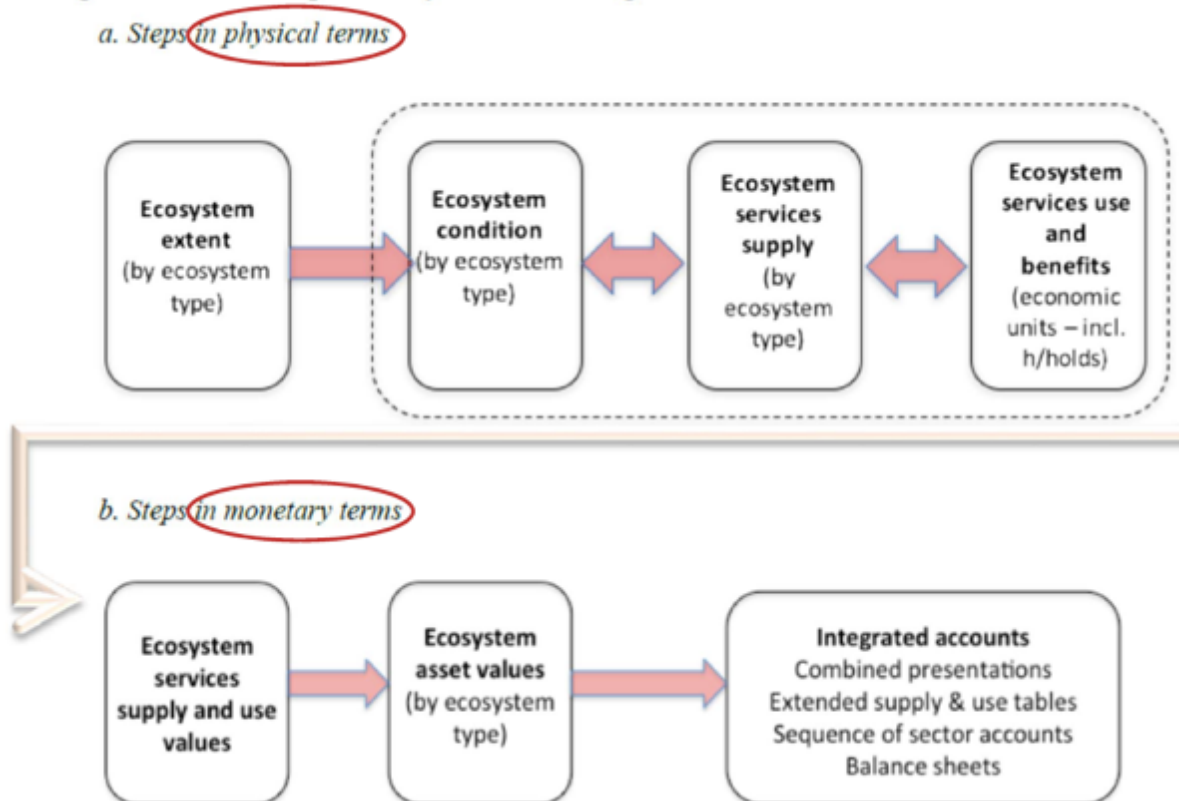


Figure 2. Broad steps of ecosystem accounting as per the United Nations (2017) Technical Recommendations for Experimental Ecosystem Accounting.

12. She emphasized that physical accounts of ecosystems can be tremendously powerful in their own right. The opportunity to translate ecosystem information into an accounting framework will bring about consistency in approach, concepts and definitions. At the same time, there is scope for flexibility of data inputs. Do not have to have perfect science to develop ecosystem accounts. She gave the example of the KZN land and ecosystem accounts developed in the ANCA pilot project in which accounts helped to illustrate and communicate patterns of rapidly changing land cover and land use change as well as identify which ecosystem types were most at risk.
13. Mandy ran through examples of promising policy applications for ecosystem accounts, such as:
 - a. Spatial planning at any administrative level from national to local enabling assessment of trade-offs between different land uses and their impacts.

- b. Water security e.g. accounts for ecological infrastructure assets such as Strategic Water Source Areas.
- c. Identifying priorities for and tracking return on investment in ecosystem restoration.
- d. Headline indicators for ecosystems – as a counterpart to GDP at the national level and for reporting on the SDGs.

What work has been done so far?

14. **Robert Parry (Stats SA)** outlined the environmental accounts developed thus far by Stats SA (2a_EEA Work programme-19March.pdf). Stats SA has been building up NCA for many years:

- a. Water accounts for South Africa:
 - i. First developed as environmental economic accounts for Water SA in 2000 (http://www.statssa.gov.za/?page_id=1854&PPN=Report-04-05-01) and then again in 2002 (http://www.statssa.gov.za/?page_id=1854&PPN=DiscussWaterAcc) following the System of Environmental-Economic Accounts (SEEA) guidelines³.
 - ii. Then developed again in 2007 (http://www.statssa.gov.za/?page_id=1854&PPN=D0405.1) following System of Environmental-Economic Accounts for Water (SEEA-Water) guidance (UN 2007⁴).
 - iii. Updated water accounts are in the process of being finalised.
- b. Energy accounts for SA (http://www.statssa.gov.za/?page_id=1854&PPN=D04051.1&SCH=5148).
- c. Mineral accounts for SA (http://www.statssa.gov.za/?page_id=1854&PPN=D0405.2&SCH=5482).
- d. Fishery accounts for SA (http://www.statssa.gov.za/?page_id=1854&PPN=D0405.0&SCH=5463).
- a. These are combined annually into an environmental economic accounts compendium (http://www.statssa.gov.za/?page_id=1854&PPN=Report-04-05-20&SCH=7007).

15. **Mandy summarised the ecosystem accounts** that have been developed thus far (2b_National Stakeholder Workshop 19 March 2018 Eco Accounting work in SA to date, Mandy Driver.pdf):

- a. Two sets of pilot ecosystem accounts (available at <http://biodiversityadvisor.sanbi.org/planning-and-assessment/experimental-ecosystem-accounting/>):

³ United Nations Statistics Division (UNSD), 2003. System of Environmental-Economic Accounting 2003: Handbook on integrated environmental and economic accounting. UNSD, New York. Available at <https://unstats.un.org/unsd/envaccounting/seea2003.pdf>. Later updated: United Nations, 2014. System of Environmental-Economic Accounting 2012 – Central Framework. New York. Available at <https://seea.un.org/content/seea-central-framework>.

⁴ United Nations Statistics Division (UNSD), 2007. System of Environmental Economic Accounting for Water (SEEW), 2007. System of Environmental-Economic Accounting for Water. UNSD. New York. Available at <https://seea.un.org/content/water>.

- iv. National River Ecosystem Accounts;
 - v. Land and Ecosystem Accounts for KwaZulu-Natal.
- b. Catchment level water resources accounts using a different water accounting framework because SEEA-Water does not allow for detailed spatial disaggregation.
16. **Jane Turpie (Anchor Environmental Consultants)** summarised progress and challenges with valuation of ecosystem services in South Africa to date (2c_Jane_Valuation - progress and challenges.pdf). Based on their research, there is huge variation in effort in doing valuation studies, in scale of studies done and in methods and measures of value. Anchor Environmental are working on an up-to-date database of all valuation studies in SA. Stakeholders were asked to contribute to this by sending valuation studies⁵ to Gwyneth Letley at gwyn@anchorenvironmental.co.za.
17. Questions:
- a. **Have the water and energy accounts developed by Stats SA been used for policy applications?** Robert said that the energy accounts have not been used as much as would have liked. The new water accounts are still being finalised. Previous one was not really used so they are working hard to make it more useful this time around.
 - b. **Graph on valuation studies – are the studies done influenced by what data is available, or where the interest lies (skewed by what data is available and data to measure regulating services)?** Jane says a combination of both.

Introduction to the global NCA&VES project and pilot countries

18. **Kavita Sharma (UN Environment)** provided an overview of the Global NCA&VES project, of which South Africa is one of the pilot countries (3_Kavita_SEEA_PPT_SouthAfrica_V3.pdf). She emphasized the importance of the partnership approach with all countries at the same table. National representatives from all countries are involved in the development of standards and practical guidelines. The diversity of focus across the different countries involved provides a rich information base to inform the guidelines being developed. She reflected on challenges and opportunities observed thus far and that SA is unique in the close working relationship between Stats SA and SANBI. A national statistical office owning this data is considered powerful.



Figure 3. Kavita Sharma (UN Environment)

New NCA projects in South Africa

19. **Aimee Ginsburg (Benefits SE)**, supporting SANBI in the implementation of the NCA&VES project, presented on the two new NCA projects in South Africa:
- a. The NCA&VES Project in SA, being implemented over 20 months (Jan 2018 to Aug 2019).

⁵ Information being gathered includes: the full reference for the study, a list of services valued and the types of methods used in valuation, the location of the study.

- b. The NCA component in the GEF-funded Biodiversity and Water Security Project being implemented from Jan 2018 to Dec 2023.

These projects will seek to connect with other big multi-party projects with global funding, such as but not limited to the second phase of BIOFIN, the Partnership for Action the Green Economy (PAGE), and the Gaborone Declaration for Sustainability in Africa (GDSA). This will be done during the development of the National Strategy for Advancing Environmental-Economic Accounting, which is an output of the NCA&VES Project.

Address by the Ambassador of the EU to South Africa

20. **The SANBI CEO, Dr. Moshibudi Rampedi**, welcomed the Ambassador of the EU to South Africa. South Africa is a megadiverse country with a wealth of ecosystem assets, and ecosystem accounting is seen as an important tool for their effective management in support of the country's sustainable development agenda. In the same way that national accounts help to manage the national economy effectively, natural capital accounts can help to manage our natural resources sustainably. Support and funding provided by the EU for this work enables South Africa to boost our work on ecosystem accounting tremendously, for national benefit. She expressed the desire and intention to contribute to the global research agenda on ecosystem accounting. SANBI's mandate includes monitoring and reporting on the state of ecosystems – which provides a foundation for ecosystem accounts.

21. **The Ambassador, Marcus Cornaro**, was pleased to be at the venue and the event. He said that SA's environmental legislation stands out globally. He said that SA's accurate and specific data provides a strong basis for analysing and interpreting the value of ecosystems. Only by taking into account the contribution to society of flows and services of goods flowing directly from ecosystems can we demonstrate its value. As a decision-maker, he had no doubt in the value of accounts as a key information source. This was part of the reason for why the EU has invested in this. He made the link between the EU and Wealth Accounting and the Valuation of Ecosystem Services (WAVES) programme – drawing from the combined experience, and in partnership, there is opportunity to improve approaches towards accurately accounting for ecosystems and their contribution to economic growth. He emphasized the dependency on each organisation to strengthen and anchor ecological and economic aspects as dynamic parts of this work to provide important economic data.



Figure 4. Ambassador of the EU to South Africa Marcus Cornaro and SANBI CEO Dr. Moshibudi Rampedi

Proposed NCA priorities for the next two years

22. **Mandy Driver (SANBI)** highlighted the national policy priorities in SA from the National Development Plan:

- a. Eliminate poverty and reduce inequality by 2030.
- b. Medium Term Strategic Framework priorities include:
 - vi. Job creation
 - vii. Economic infrastructure
 - viii. Rural development and food security
 - ix. Protecting and enhancing environmental assets and natural resources.
- c. Current issues: water security and land reform.

Mandy listed examples of policy processes that could be informed by ecosystem accounts (5_Mandy Driver_Proposed programme of work (NCA Stakeholder Workshop 19 March 2018).pdf):

- a. National Spatial Development Framework (NSDF) (DPME)
- b. National Water & Sanitation Master Plan (DWS)
- c. Roll out of SPLUMA (DRDLR, municipalities)
- d. Preservation and Development of Agricultural Land (DAFF)
- e. Implementation of the National Biodiversity Economy Strategy, including wildlife economy aspects (DEA)
- f. Implementation of National Protected Area Expansion Strategy (DEA)
- g. Useful tool for proposed single Catchment Management Agency and proposed Natural Resource Management Agency.

Ecosystem accounts can provide “dynamic information for economic decision-making” (Marcus Cornaro) – this is what we are trying to show the accounts will provide.

23. She listed the priority ecosystem accounts informed by the National workshop held as part of the ANCA project in November 2014 and the inception mission for NCA&VES project in Sept 2017:

- a. There is a proposed core set of accounts:
 - i. National land and ecosystem accounts
 - ii. Full suite of ecosystem accounts for KZN.
- b. A list of possible additional accounts:
 - i. National ecosystem extent and condition accounts in other realms (e.g. marine realm, wetlands)
 - ii. Protected area accounts
 - iii. Species accounts (e.g. species in trade and species that are hunted)
 - iv. Possible longer term accounts
 - v. Environmental Protection Expenditure accounts (link with BIOFIN)
 - vi. Carbon accounts.

She also covered the data underpinnings and challenges that remain. A break-away session after lunch is designed to get stakeholder input towards prioritising additional accounts to be done.

24. Mandy also touched on the institutional arrangements needed to support NCA and the production of ecosystem accounts in South Africa. Embedding capacity for producing

ecosystem accounts in government is a goal of the project as part of the National Statistical System. Towards this an annual national forum will be held and an inter-governmental structure on environmental accounting may be needed.

Carnival break-away

Participants were invited to join one of five groups, each focusing on a particular topic. Participants were free to circulate between groups or to devote their time to a single group, depending on their interest and expertise. Each group was facilitated by two people. At the end of the carnival break-away session, stakeholders gathered in plenary again and facilitators provided a brief summary of discussions:

25. **Group 1: Priority accounts and their uses, for next 2 years and longer term – matching supply and demand, facilitated by Mandy Driver and Brenda Mphakane (Stats SA).** The group focused on the suggested priority accounts presented earlier, adding to these and voting (using stickers) for priority accounts. The ‘winning’ accounts (based on the number of votes by stakeholders) were:

- a. Protected area accounts (9 votes)
- b. KZN full suite of ecosystem accounts (8 votes)
- c. National ecosystem extent and condition in other realms e.g. marine or wetland (7 votes)
- d. Detailed account for one or more strategic water sources areas (6 votes)
- e. Environmental protection expenditure accounts (5 votes)
- f. National land and ecosystem accounts (5 votes)
- g. City/metro accounts (4 votes)
- h. Carbon accounts (4 votes).

The facilitators also captured discussion on what information from the accounts would be most useful and what would/could make ecosystem accounts even more useful. Stakeholder inputs on what key indicators could come out of these accounts was also gathered to the extent that this was made.



Figure 5. Mandy Driver of SANBI (centre) facilitating Group 1 break-away group

26. **Group 2: Related projects and initiatives, facilitated by Riaan Grobler (Stats SA) and Mukondi Masithi (Department of Planning Monitoring & Evaluation),** presented a summary of related initiatives that the project team should be aware of:

- a. BIOFIN (DEA)
- b. Accounting Standard on Natural Resources (Accounting Standard Board)
- c. Updating of national land cover by DEA (DRDLR, DAFF, SDG link; Marlene Moodley & Semoli Bulelwa)
- d. Rural development and land reform
- e. National Planning Commission is interested in the National Water Security Framework and how the work we do in EU and GEF6 links to this (Commissioner Percy Sechemane / Mukondi Masithi) and pathways for just transition to more environmental sustainability and climate resilience (Commissioner Tasneem Essop / Mukondi Masithi)
- f. Provincial, district and local government bioregional plans and climate action plans.



Figure 6. From left, Mukondi Masithi (Department of Planning, Monitoring and Evaluation) and Riaan Grobler (Stats SA) facilitating Group 2 break-away group

27. **Group 3: Stakeholder engagement (towards a stakeholder engagement strategy and plan), facilitated by Aimee Ginsburg (Benefits SE) and Santhuri Naidoo (DEA),** presented summarised feedback:

- a. Stakeholder engagement needs to be informed by the intention of interventions and how finance is made available for management and conservation biodiversity (what are the important assets, what are the primary drivers of threat, who has the greatest influence over these, and then strategize to engage with them/how to engage/intervene using information from accounts).
 - i. BIG PRIZE – is to get the minister of finance to mention these indicators. Make a strategic choice about what to focus on in 20 months – choose a province/ or a catchment.
 - ii. Opportunity: the provincial Spatial Development Framework (SDF) in KZN which is being developed in the next 2 years (Office of Premier and CoGTA)

- iii. Water, mining and tourism sectors all operate on national level, benefit from natural and near natural conditions, are land hungry and have a long term planning horizon.
- b. Stakeholder engagement will also be influenced by the selection of accounts, but gaps in terms of stakeholder representation at this workshop were highlighted along the lines of those representing rural development and land reform, large land owners (e.g. ZZ2, Tongaat Huwlett, Mondi), local government and business. Shelley Lizzio (Endangered Wildlife Trust/National Biodiversity and Business Network (NBBN)) suggest that business are also interested in finer scale information on physical accounts and that interested parties might include NBBN, National Business Initiative (NBI), Nedbank and Anglo (just committed to net positive impact).
- c. It was suggested that there is opportunity in developing accounts at different scales (including very local scale e.g. Mpopomeni using citizen science) and that starting small might be effective in reaching influential decision-makers or land holders if strategically identified. For example, if we are able to demonstrate how accounts influence decision-making, how we are responding to the information that accounts provide (e.g. that natural rivers are in decline by 10%), then we can make the case for their impact, use and uptake.
- d. People are still struggling to engage with what NCAs are. There is a need to help people digest accounts.
- e. Project updates to stakeholders every 6 months were agreed to be acceptable rather than more frequently. Updates should preferably link to key milestones rather than be done for their own sake.



Figure 7. From right, Aimee Ginsburg (Benefits SE) and Santhuri Naidoo (Department of Environmental Affairs) facilitating break-away group 3.

28. Group 4: How can we make the case for accounts and communicate them effectively?, facilitated by Sieraag de Klerk (Stats SA) and Zamanguni Mncwabe (DWS). Zama fed back the thinking that there needs to be a qualified, quantified, evidence, and value based business case on accounts. This presentation/ proposition would be made to principals to garner executive management support in selected organisations. Given that there are three spheres

of government an approach that could be adopted would be to conceptualise this approach at each sphere of government i.e. National Level, Provincial Level and Local Level. Once a business case and value proposition has been made on natural capital accounts and measurable indicators at all level have been quantified and qualified. Indicators and targets will need to be expressed/ included in strategic documents (Strategic Plans, Provincial Plans, and IDP's) of departments and agencies. This assures that the objectives of accounts will stay in the government agenda. So a case has been made, how it is communicated across all affected and interested sectors. Using currently existing platforms such as MINMEC and MINTEC at national level and Mayoral Committees at local level, the business case of accounts can be presented. And with ideal buy in within these structures, champions would be identified and elected (with sufficient capacity to talk to the business case). At implementation level (Provincial and Local), information could be distributed, disseminated and discussed through war rooms, forums, media releases, and awareness campaigns.



Figure 8. Standing from left, Sieraag de Klerk (Stats SA) and Zamanguni Mncwabe (Department of Water and Sanitation) facilitating break-away group 4.

29. **Group 5: Scenario analysis, facilitated by Jane Turpie (Anchor Environmental) and Kavita Sharma, summarised their conversation.** They decided that scenarios could focus on management interventions needed, rather than a pathways analysis, and/or could focus on land use planning scenario analysis. Key issues identified included: population densification in peri-urban areas; water quality; land degradation through poor farming practices, bush encroachment and invasive alien plants. There are also lots of land use planning scenarios in KZN for scenario analysis on pre- and post- policy application – e.g. expansion of protected areas; buffers around sensitive ecological areas; reallocation of water use and amounts. The need to look at equity and social justice was emphasized. Find tipping points/thresholds for water use and environmental flows.



Figure 9. Standing from right, Kavita Sharma (UN Environment) and Jane Turpie (Anchor Environmental) facilitation break-away group 5.

Wrap up

30. Participants were invited to make any final contributions, suggest things that had been overlooked or needed more attention:
 - a. Flora Mokgohloa (DEA): important to have clear links between ecosystem accounts and their policy application/relevance.
 - b. Boyd Escott (Ezemvelo): touched on mesozones, scale and resolution of planning units – comparison in future needs a consistent set of spatial units.
 - c. Elsona Van Huyssteen (CSIR): Emphasizes that we must not get lost in the detail of what we can or cannot do but rather focus on thinking about what we want to use accounts for. Showcase what accounts can be used for. We need quick wins to demonstrate products and policy applications in a concrete way.
 - d. Municipalities need accounts with indicators that feeds into national indicators and inform detail on the ground.
31. As part of the way forward, stakeholders will be sent the attendance register and pdfs of presentations. A workshop report will follow. Stakeholders were asked to please let the project team know if there are other people / organisations to add and nominate a focal point within each organisation as a primary point for communication about the project.
32. In closing, thanks were given by Gerhardt Bouwer.

Conclusions and way forward

33. The National Stakeholder Workshop for the Natural Capital Accounting and Valuation of Ecosystem Services Project in South Africa builds on the engagement with stakeholders that

began in the Advancing Natural Capital Accounting (or ANCA) Project⁶ in South Africa (which took place mid-2014 to mid-2016). The focus of stakeholder engagement was, and remains, both on informing and building support for a national programme of work to take environmental accounting and ecosystem accounting forward in South Africa, and on obtaining input from stakeholders into the work undertaken at each stage.

34. The National Stakeholder Workshop for the Natural Capital Accounting and Valuation of Ecosystem Services Project in South Africa provided an important moment in this project for stakeholders to influence the selection of accounts that will guide a programme of work for ecosystem accounting as part of the EU-funded project as well as a National Strategy for Advancing Environmental-Economic Accounting.
35. The outputs and information from the National Stakeholder Workshop were to be taken into consideration in a meeting of the NCA&VES project team and members of a technical reference group the day following the workshop. The purpose of that meeting was take the outputs and information from the National Stakeholder Workshop into account in developing a draft programme of work for the EU-funded NCA&VES project. Discussions were to include:
 - a. A review of available resources: across the organisations involved in NCA work and through current and future projects with an NCA focus.
 - b. Selection of accounts to be developed in the EU-funded NCA&VES project: selected from the list of accounts prioritised through the National Stakeholder Workshop, and based on discussions among technical experts on existing data infrastructure, data and other challenges in developing accounts, key informants or partners to include in their development, gaps to be addressed, and next steps in terms of developing a scope of work and methodology for developing the selected accounts.
 - c. Developing Terms of Reference for NCA specialists to develop selected accounts and structuring set of work packages and work teams to support and work with NCA specialists.

Building on the National Stakeholder Workshop and this project technical meeting, as well as additional work undertaken to address gaps or follow up with other technical experts, a programme of work will be developed by May 2018.

36. Stakeholders can expect to hear from the project team about the national NCA forum, training events and a bi-annual NCA update.

⁶ Also referred to in some of the global project documents as Advancing SEEA Experimental Ecosystem Accounting Project.

Appendices

Appendix A. List of workshop attendees

#	NAME	ORGANISATION	EMAIL ADDRESS:
1	Kevin Coldrey	Anchor Environmental	kevin@anchorenvironmental.co.za
2	Gwyneth Letley	Anchor Environmental	gwyn@anchorenvironmental.co.za
3	Jane Turpie	Anchor Environmental	jane@anchorenvironmental.co.za
4	Aimee Ginsburg	Benefits SE	aimee.elsa@gmail.com
5	Damien Jourdain	Centre for Environmental Economics and Policy in Africa	damien.jourdain@cirad.fr
6	Alize le Roux	Council for Scientific and Industrial Research	ALeroux1@csir.co.za
7	Patrick O'Farrell	Council for Scientific and Industrial Research	POFarrell@csir.co.za
8	Elsona Van Huyssteen	Council for Scientific and Industrial Research	EvHuyssteen@csir.co.za
9	Ambassador Marcus Cornaro	Delegation of the European Union to the Republic of South Africa	
10	Ellen Pedersen	Delegation of the European Union to the Republic of South Africa	
11	Lidia Afonso	Delegation of the European Union to the Republic of South Africa	Lidia.AFONSO-GALLEGOS@eeas.europa.eu
12	Phyllistas Mmakola	Department of Agriculture, Forestry and Fisheries	PhyllistasM@daff.gov.za
13	William Nlako	Department of Agriculture, Forestry and Fisheries	williamnlako@daff.gov.za
14	Mpume Ntlokwana	Department of Agriculture, Forestry and Fisheries	MpumeN@daff.gov.za
15	Ivan Riggs	Department of Agriculture, Forestry and Fisheries	IvanR@daff.gov.za
16	Nandipha Bhengu	Department of Environmental Affairs	nbhengu@environment.gov.za
17	Peter Lukey	Department of Environmental Affairs	Plukey@environment.gov.za
18	Wadzi Mandivenyi	Department of Environmental Affairs	WMandivenyi@environment.gov.za
19	Flora Mokgohloa	Department of Environmental Affairs	Fmokgohloa@environment.gov.za floramokgohloa@gmail.com
20	Santhuri Naidoo	Department of Environmental Affairs	SNaidoo@environment.gov.za
21	Lufuno Ndlovu	Department of Environmental Affairs	Indlovu@environment.gov.za
22	Malebogo Khwinana	Department of Planning Monitoring & Evaluation	Malebogo.Khwinana@dpme.gov.za
23	John Kruger	Department of Planning Monitoring & Evaluation	John.Kruger@dpme.gov.za
24	Rudzani Mashangu	Department of Planning Monitoring & Evaluation	Rudzani.mashangu@dpme.gov.za
25	Mukondi Masithi	Department of Planning Monitoring & Evaluation	Mukondi@dpme.gov.za

26	Zamanguni Mncwabe	Department of Water and Sanitation	mncwabez@dws.gov.za
27	Shelley Lizzio	Endangered Wildlife Trust/National Biodiversity and Business Network	shelleyl@ewt.org.za
29	Natasha Govender	Ethekwini	Natasha.Govender@durban.gov.za
30	Boyd Escott	Ezemvelo	Boyd.Escott@kznwildlife.com
31	Debbie Jewitt	Ezemvelo	Debbie.Jewitt@kznwildlife.com
32	Simangele Sithole	Ezemvelo	Simangele.Sithole@kznwildlife.com
33	Happy Khumalo	Gauteng Dept of Agriculture and Rural Development	happy.khumalo@gauteng.gov.za
34	Stephen Veldsman	Gauteng Dept of Agriculture and Rural Development	stephan.veldsman@gauteng.gov.za
35	Mark Thompson	GeoTerralmage	mark.thompson@geoterraimage.com
36	Duncan Hay	Institute of Natural Resources NPC	DHay@inr.org.za
37	Melisa Mavhenge	International Union for Conservation of Nature	Melisa.Mavhenge@iucn.org
38	Jen Newenham	Kruger to Canyons Biosphere Reserve	ecologist@kruger2canyons.org
39	Wehncke van der Merwe	Kruger to Canyons Biosphere Reserve	bufferzone@kruger2canyons.org
40	Willem Prinsloo	Mogale's Gate	Willem.Prinsloo@standardbank.co.za
41	Andrea Wolfaardt	National Treasury	andrea.wolfaardt@treasury.gov.za
42	Marius Erasmus	Office the Auditor-General of South Africa	Marius@agsa.co.za
43	Jackie Crafford	Prime Africa Consultants	j.crafford@primeafrica.net
44	Dineo Maila	Prime Africa Consultants	d.maila@primeafrica.net
45	Joe Mulders	Prime Africa Consultants	j.mulders@primeafrica.net
46	Warrick Stewart	Resilience Environmental Advice	warrick@resilience-advice.co.za
47	Claire Ntshane	SANParks	Claire.Ntshane@sanparks.org
48	Kristal Maze	South African Institute of Chartered Accountants	k.maze@sanbi.org.za
49	Loshni Naidoo	South African Institute of Chartered Accountants	loshnin@saica.co.za
50	Mandy Driver	South African National Biodiversity Institute	M.Driver@sanbi.org.za
51	Michele Pfab	South African National Biodiversity Institute	M.Pfab@sanbi.org.za
52	Domitilla Raimondo	South African National Biodiversity Institute	D.Raimondo@sanbi.org.za
53	Alan Smith	South African National Biodiversity Institute	A.Smith@sanbi.org.za
54	Mahlodi Tau	South African National Biodiversity Institute	M.Tau@sanbi.org.za
55	Rob Anderson	Statistics South Africa	RobA@statssa.gov.za
56	Gerhardt Bower	Statistics South Africa	GerhardB@statssa.gov.za

57	Andre Brand	Statistics South Africa	AndreB@statssa.gov.za
58	Sabelo Cele	Statistics South Africa	sabeloc@statssa.gov.za
59	Sieraag De Klerk	Statistics South Africa	sieraagdk@statssa.gov.za
60	Abdool Gaffar	Statistics South Africa	AbdoolG@statssa.gov.za
61	Riaan Grobler	Statistics South Africa	RiaanG@statssa.gov.za
62	Nomfundo Gumede	Statistics South Africa	nomfundomo@statssa.gov.za
63	Brenda Mphakane	Statistics South Africa	BrendaT@statssa.gov.za
64	Robert Parry	Statistics South Africa	robertp@statssa.gov.za
65	Kevin Parry	Statistics South Africa	kevinp@statssa.gov.za
66	Janice Golding	United Nations Development Programme	janice.golding@undp.org
67	Kavita Sharma	United Nations Environment	kavita.sharma@un.org
68	David Clark	University of Kwazulu-Natal	clarkd@ukzn.ac.za
69	Prof. Graham Jewitt	University of Kwazulu-Natal	JewittG@ukzn.ac.za
70	Eric Mungatana	University of Pretoria	ericmungatana@up.ac.za
71	Bonani Madikizela	Water Research Commission	bonanim@wrc.org.za