System of Environmental Economic Accounting

# Expert Meeting on SEEA indicators for SDGs and Post-2020 Agenda for Biodiversity

## Meeting report

**Tuesday 12th – Thursday 14th February 2019**

**Cambridge, UK**

UN environment WCMC 40 years

United Nations

## Summary

The Expert Meeting on SEEA indicators for SDGs and Post-2020 Agenda for Biodiversity, was jointly organised by the United Nations Statistics Division (UNSD) and the UN Environment World Conservation Monitoring Centre (UNEP-WCMC) in collaboration with the Secretariat of the Convention on Biological Diversity (CBD). It brought together over 40 experts on natural capital accounting, measurement of ecosystems and biodiversity and indicators from government agencies, international and regional organisations, intergovernmental-bodies and research institutions. The meeting was organised as part of the Natural Capital Accounting and Valuation of Ecosystem Services (NCAVES) project, funded by the European Union and implemented by UNSD and UN Environment.

The Expert Meeting was organised to discuss how indicators derived from the System of Environmental-Economic Accounting (SEEA), specifically the Ecosystem Accounts, can support the Post-2020 Biodiversity Framework. It provided an opportunity to develop methodological sheets on SEEA indicators related to land degradation, freshwater ecosystems, urban ecosystems and protected areas that would serve as the basis for testing and experimentation in the project countries. The meeting also discussed the working document entitled *Assessing the linkages between global indicator initiatives, SEEA Modules and the SDG Targets*. This provided an analysis of existing indicators initiatives and how the SEEA EEA can inform the compilation of the indicators.

The meeting identified several initiatives that will be undertaken in 2019 and 2020 to contribute to the Post-2020 biodiversity agenda. It noted the importance of developing a common message to be used by participants in the meeting, for promoting the use of the SEEA as an integrated framework, for the derivation of indicators in the context of the Post-2020 process. Several engagement opportunities were identified, and joint actions to further mainstream natural capital accounting in policies proposed. In the short term, the UN Statistical Commission and the IAEG SDG Meeting in March provided an opportunity to promote the SEEA and its role in the 2020 review of the SDGs. To provide a common message to the Post-2020 process, UNSD will share a short response to the summary paper prepared by CBD in response to the call for contributions by 15th April. Meeting participants could also use some of the text in the response as input in their institutions' response to the CBD summary document.

Looking to the future, participants highlighted the opportunity for the SEEA to support coordinated and integrated approaches to attaining SDGs and wider commitments. Meeting participants, including representatives from Multilateral Environmental Agreements, indicated a willingness to explore these possibilities further in future discussions.

# Contents

# 1 Introduction

This meeting forms part of the EU funded project Natural Capital Accounting and Ecosystem Service Valuation (NCAVES) (https://seea.un.org/home/Natural-Capital-Accounting-Project). This project is being implemented by the United Nations Statistics Division (UNSD) and the United Nations Environment Programme (UN Environment) in collaboration with the Secretariat of the Convention on Biological Diversity (CBD). The project aims to assist five partner countries, namely Brazil, China, India, Mexico and South Africa, in the implementation of the System of Environmental-Economic Accounting Experimental Ecosystem Accounting (SEEA EEA) and its mainstreaming into policy and decision making. The project also aims to advance the research agenda on environmental economic accounting at a global level, learning from the experience in countries. In this context, the aim of the meeting was to discuss the analysis of various indicators initiatives and their link to the SEEA and develop a set of metadata sheets for selected indicators linked to the SDG indicators, which will be tested in countries. The meeting also provided an opportunity to discuss how the SEEA can also potentially support indicators, including those that go beyond the existing indicators initiatives as part of the discussion of the Post-2020 Biodiversity Agenda.

The three-day meeting was organised as a series of plenary presentations, break-out activities and discussions in small groups. An overview of these activities and discussions is provided here.

The full agenda, background documents are available from the meeting website (https://seea.un.org/events/expert-meeting-seea-indicators-sdgs-and-post-2020-agenda).

# 2 Day 1 – Tuesday 12th February 2019

## 2.1 Opening, Welcome and Meeting objectives

Opening remarks were provided by UNSD, UNEP, UNEP-WCMC and the European Commission. These provided the context and set the scene for the meeting. The meeting objectives were:

- To discuss how the SEEA-relevant indicators can support the Post-2020 Biodiversity Framework
- To build consensus around a set of priority SEEA relevant indicators for SDG targets and Post-2020 Agenda, for testing in the case study countries of the SEEA-EEA
- To develop a methodological approach for calculating priority SEEA-relevant indicators using SEEA modules relevant to ecosystems
- To explore and identify indicators not included in the existing framework, that can be derived from the SEEA in support of the Post-2020 Biodiversity Framework

*Photo 1: Opening remarks on behalf of the European Commission*

## 2.2 Session 1: Overview of the SEEA and global indicators assessment findings

Session 1 provided an overview of the SEEA, the NCAVES project and the global indicator assessment. The following presentations were delivered:

- Introduction to the SEEA Experimental Ecosystem Accounting, Alessandra Alfieri, UNSD

- Natural Capital Accounting and Valuation of Ecosystem Services (NCAVES) project, Julian Chow, UNSD
- Assessing the linkages between global indicators, the SEEA & the SDGs, Steven King, UNEP-WCMC (See Photo 2)

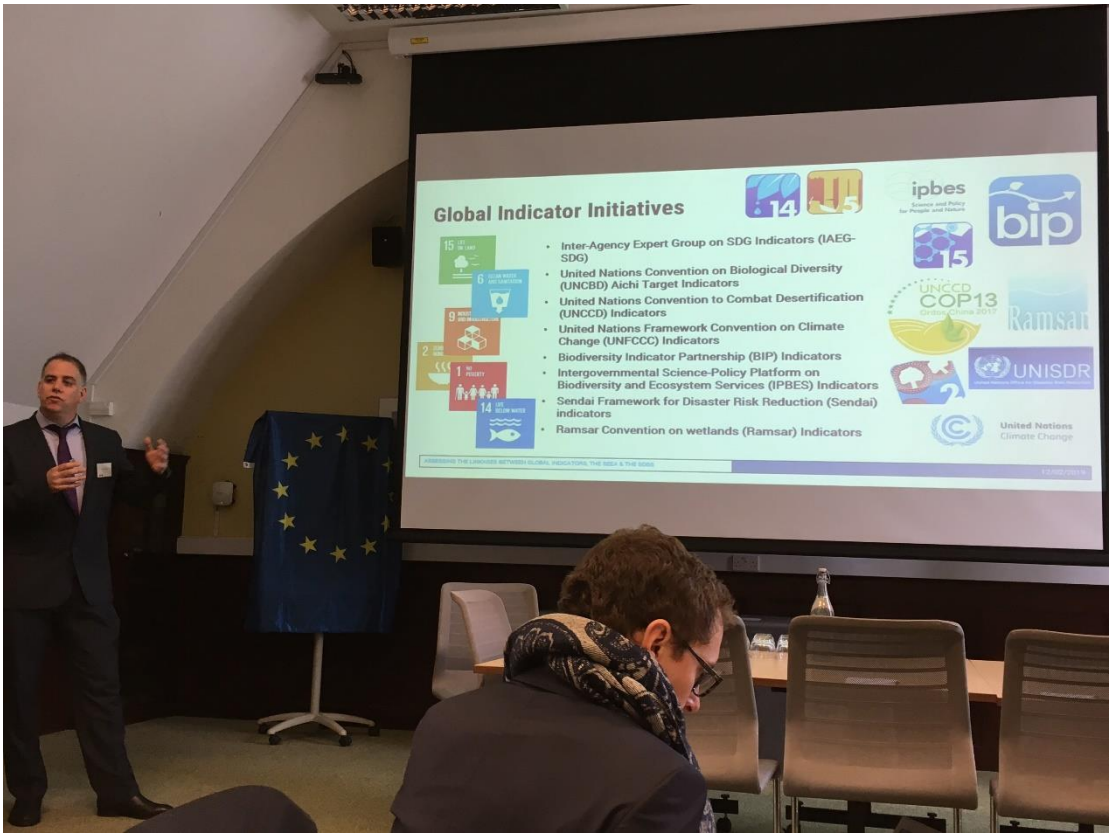


*Photo 2: Presentation on assessing the linkages between global indicators the SEEA & the SDGs*

The following points emerged from the discussions during the session:

- Importance of cooperative working between the United Nations Conventions (UNCBD, UNFCCC, UNCCD) and the various policy related initiatives (e.g. SDGs, NBSAPs, Ramsar Convention, TEEB, IPBES, BIOFIN, WAVES, etc.), to ensure efficiencies and reduction in countries reporting burdens. In this context the SEEA provides an umbrella framework that can support the reporting.
- Need to understand the different aspects of the SEEA framework, including flexibility in implementation and accounting structure. Flexibility in implementation is important, so that countries can choose to compile selected accounts and to measure specific ecosystems, depending on policy priorities and data availability. The accounting structure and the associated definitions and classifications inherent to the SEEA provide a well-defined measurement framework, which require harmonisation of data and methodologies. While this may require additional work to harmonise the data and methodology, the benefit will result in data which is consistent over time and comparable across countries, and compiled according to statistical standards.

- Features of the SEEA include having a standard for data and classifications for ecosystem extent, condition and ecosystem services.
- Need to recognise the role of data providers in filling data gaps, and mobilising datasets that could be used as sources to compile the SEEA accounts. This is particularly relevant to earth observation data and big data that can provide an initial source to compile the accounts. Furthermore, there is a need to be aware of different methodological frameworks, and how they relate to the SEEA. This will help in communicating the usefulness of the SEEA, and in building bridges with the various frameworks.

## 2.3 Session 2: Post-2020 Biodiversity Framework, Post-2020 planning and facilitated discussions

This session featured a keynote on the current developments of Post-2020 Biodiversity Framework, reflections from France and China, Post-2020 planning and discussions on opportunities for the international community to support the process. The following presentations were delivered:

- Process towards the development of the Post-2020 global biodiversity framework Markus Lehman, CBD Secretariat
- Towards a new global framework on biodiversity, Yann Kervinio, Ministère de la transition écologique et solidaire, France
- CBD CoP 15 in China, ZHU Chunquan, IUCN China
- Developing targets and indicators for the Post-2020 biodiversity framework: Lessons learnt from the Biodiversity Indicators Partnership, Anna Chenery, BIP Secretariat, UNEP-WCMC

The following key issues were identified during the discussion in this session:

- There is an opportunity for the SEEA to support the CBD process by identifying indicators, in addition to those already identified by the CBD background paper, that are needed to monitor progress in the implementation Post-2020.
- There is already acceptance that indicators need to be developed at the same time as targets for the Post-2020 Agenda, so when targets are identified possible / available baselines and indicators can be proposed.
- The SEEA is particularly relevant to inform the discussion on mainstreaming, as it provides the enabling mechanism for institutional cooperation and the development of indicators. It was suggested that voluntary national biodiversity commitment by countries should make use of a common framework such as SEEA.
- There is potential for the SEEA to be considered in the Post-2020 CBD capacity-building strategy, in particular with regard to developing input data and indicators
- The SEEA has a potential role in generating so-called apex indicators. While apex indicators, such as the 2 degrees increase in temperature for climate change, are a useful way to communicate, there is a need for an underlying information system to support decision making and understand the impacts of actions.
- The 15$^{th}$ April deadline for comments of the Post-2020 Agenda consultations was identified as a key entry point for the outcomes from this meeting.

- The CBD website for the Post-2020 process was highlighted for identifying future entry points www.cbd.int/post2020
- The need to keep coordinated with corporate and business accounting was highlighted and discussed. A strategy is needed for this.

## 2.4 Session 3: Global indicator initiatives

Session 3 focused on the forward-looking plans by various indicator initiatives for informing sustainable development generally, and in the context of the Post-2020 Biodiversity Framework. The session discussed entry points for promoting indicators derived from the SEEA, plans of various initiatives and suggested possibilities of engagement. The following presentations were delivered:

- Introduction to the Land Degradation Neutrality (LDN), and its indicators, now and the future [presented remotely], Barron Orr, United Nations Convention to Combat Desertification (UNCCD)
- Biodiversity observations for decision-making: From data to decision, Mike Gill, GEO BON
- OECD data and indicators to inform SDGs and the Post-2020 biodiversity framework, Katia Karousakis, OECD Environment Directorate

The discussions within this session identified the following points:

- It was suggested to further explore how global initiatives (such as GEOBON) could provide support data for the SEEA framework, and in turn how information generated from the SEEA could support the monitoring of global indicator initiatives (such as the LDN).
- It was noted that it was important to align the indicators of the various initiatives with the SEEA. In particular, for the indicator of land cover (a sub-indicator of the SDG indicator on land degradation), it would be useful to allow countries to compile land cover data based on the 6 UNFCCC classes as well as the SEEA classes, although this may require additional work.
- The need for an integrated approach and for indicators to be relevant at national and sub-national scales was highlighted.
- Although, each agency/country has its own process for engagement with the Post-2020 negotiations, it was considered useful to develop a common message that could be used by all parties in their own contributions. Special attention should be paid to the following:
    - Specific entry points (response to discussion paper and future documents, participation in regional and thematic consultations, participation in the Open-Ended Working Group (OEWG) etc.).
    - Identify parties that participate in the negotiations and in this context also support the NCAVES project partner countries. These may play an important role in the negotiations in advancing the SEEA in the Post-2020 biodiversity framework discussions.

## 2.5 Session 4: Break-out session - Priority SEEA relevant indicator sets

The aim of this break-out session was to firstly discuss the global indicators which SEEA can support the production of listed in the global indicator review. And secondly, to identify other indicators or themes not currently included in the report where SEEA could play a role. Specifically, these indicators were discussed in the context of the SDGs and the Post-2020 Biodiversity Framework or were identified as priorities.

Participants worked in 4 groups and discussed indicators and themes they felt would support the Post-2020 Agenda and SDGs, and how these could be aligned with the SEEA. Both the extent of water-related ecosystems and land degradation where not discussed in this session, as they had been identified through the assessment as two priority areas, and has dedicated groups to discuss further on Day 2. Each group had to respond to the following set of questions:

1. What is the indicator for?
    a. Description of the subject; concept; phenomena etc.
    b. Definition of the indicator
2. How will the indicator be used?
    a. Are there any policy questions to answer – general (e.g. State of Environment report) to specific (e.g. SMART targets)
    b. Are there any assessments the indicator will inform?
    c. Are there any other decisions or processes the indicator will support?
3. What thematic data is needed to develop the indicator, and from which SEEA Accounts?
4. Are there any other important data characteristics? E.g. Spatial and temporal resolution, accessibility, units of measurement

## 2.6 Session 5: Exploring relevant SEEA indicators (reporting back from Session 4)

Each of the 4 groups selected the indicators they felt had most promise to address the aims of the meeting. These were the following:

Yellow group:

1. Enhanced Living Planet Index (LPI)
2. Disaggregation of Red List Index (RLI) to incorporate extinction species/ecosystem collapse/species habitat index
3. Integrated pressure index for ecosystems

Red group:

1. Ecosystem condition indicator
2. Land cover classification (to incorporate land management changes)
3. Protected area coverage (incorporating connectivity and effectiveness)

Green group:

1. Ecosystem account for urban areas and open spaces
2. Water quality account (terrestrial and marine combined)
3. Enabling mechanism index (tool for tracking expenditure on biodiversity on biodiversity, including restoration)

Blue group:

1. Natural capital index (extent and condition)
2. Management intensity for ecosystems

All participants were then allocated 2 votes to cast their preferred indicator from all the groups. The results of the vote are shown in *Figure 1*. The indicators urban areas and open spaces (16 votes) and natural capital index (13 votes) came first and second. However, after a discussion within the meeting organisation committee, it was established that the natural capital index would require compiling both ecosystem extent and condition accounts for multiple ecosystems. The score from these ecosystems would need to be aggregated together, to provide an overall index for the ecosystem assets (or natural capital). To develop such an index would require extensive time to think through the technicalities. It was recognised that the protected area coverage indicator (which came third, with 12 votes), would be more appropriate to investigate further instead within the timeframe of the meeting. The protected area coverage indicator would be more focused, and more suitable to explore the methodology within the meeting timespan.

Therefore, the 2 indicators highlighted in red, urban areas and open spaces and protected area coverage, were taken forward to explore in further detail at the subsequent break-out sessions on the second and third days of the meeting.

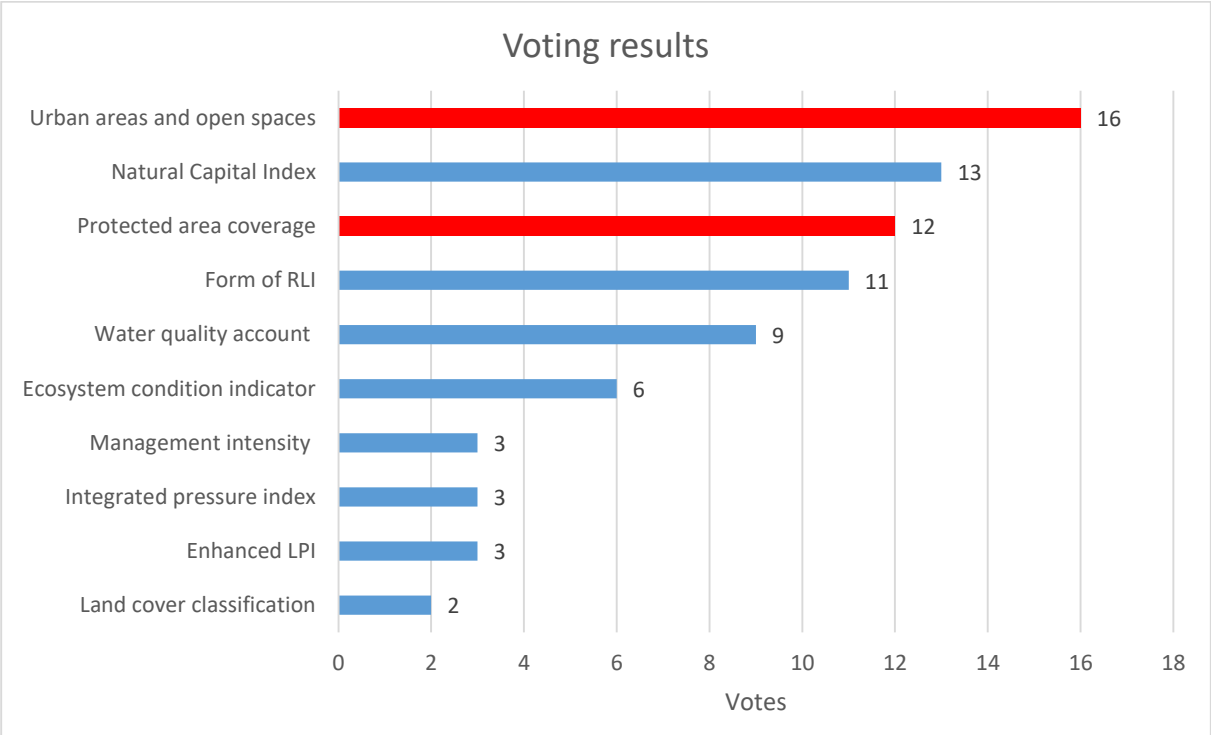


*Figure 1: Results of participant votes*

# 3 Day 2 – Wednesday 13th February 2019

## 3.1 Session 6: National indicator initiatives

The session featured presentations from the Secretariat of the United Nations Framework on Climate Change (UNFCCC) on relevant indicators and reporting processes, and the national indicator initiatives and enabling factors to make the proposed global indicator set relevant at the country level. In addition, the Ramsar Secretariat also addressed the meeting during the plenary discussions on the needs of the convention.

The pilot countries (Brazil, China, India, Mexico and South Africa) shared progress on the emerging initiatives and indicators they are currently using. The following presentations were delivered:

- Update on relevant activities under the UNFCCC process, Livia Hollins, UNFCCC Secretariat
- The role of the Brazilian Institute of Geography and Statistics (IBGE) to produce Sustainable Development Goals indicators, Paula Suélen Correa de Medeiros, IBGE
- Monitoring of environment related Sustainable Development Goals in India, Aastha Dwivedi, Ministry of Environment, Forest and Climate Change, Government of India
- SDG National Indicator Framework (NIF) and an attempt to create linkages with SEEA, Krishna Kumar Tiwari, Ministry of Statistics & Programme Implementation, Government of India
- National progress on SDG indicators reporting and SEEA: Mexico, José Luis Ornelas de Anda, National Institute of Statistics and Geography (INEGI), Mexico (See Photo 3)
- National indicator initiatives in South Africa: Links to SEEA and SDGs, Mandy Driver, the South African National Biodiversity Institute (SANBI)

The discussions within this session identified the following points:

- The UNFCCC highlighted:
    - Countries are responsible for selecting their own indicators to track progress towards their nationally determined contributions under the Paris agreement on an annual basis, but these may be qualitative or quantitative.
    - Under the UNFCCC, countries also agree to periodically undertake a stock take of implementation of the agreement that will in form a global stock take – first scheduled for 2023, then every 5 years.
    - The UNFCCC has an adaptation committee – this is reviewing how countries can take integrated approaches to the SDGs / SENDAI / UNFCCC.
- The Ramsar Convention is the custodian, jointly with UNEP, for those indicators in goal 6 of the SDG indicator framework related to wetlands. The indicator is based on inventories of wetlands – it should be noted that Ramsar has different classifications of wetlands, freshwater, marine, artificial, and coastal from the SEEA. The Ramsar Secretariat is open to exploring how SEEA can be utilized to generate the indicator and encouraged a broader promotion of the SEEA within the IAEG SDG.
- The assessment undertaken by countries to examine the linkage between national indicator initiatives and SEEA conducted by the NCAVES partner countries, indicate

many SDG indicators as well as other national indicators with potential links to the SEEA are available. For example, 46 and 54 national indicators were identified to be SEEA relevant by India and Mexico respectively. It was suggested that SEEA has a role in the production of these indicators, and such possibility could be further explored to examine how SEEA can support their generation.

- The enabling factor and the barrier to make the global indicators to be relevant at the national level were presented by countries. A common conclusion is the need of capacity development and technical assistance to support the in-country production on indicators. It was also highlighted that the non-standardisation of indicators, where the definition and concept kept changing, creates barrier and confusion for countries in implementing the indicator framework. International agencies should be aware of this issue when developing indicator framework.
- There is some resistance of using the SEEA for deriving indicators that countries have been compiling over many years using established methodologies and available data, which may not be fully consistent with the SEEA.
- Importance of clear indicator design, and to communicate how indicators can fit into the policy cycle.


*Photo 3: National progress on SDG indicators reporting and SEEA, Mexico*

## 3.2 Session 7: Break-out session – Review of methodological sheets for selected indicators

Participants were allocated to a group to discuss a specific indicator, which was assigned to that group:

- SDG 6.6.1a and SDG 6.6.1b – Change in the extent of water-related ecosystems over time
- SDG 15.3.1 – Proportion of land that is degraded over total land area
- Indicator for urban area and open spaces in the context of SDG 11.7.1 – (Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities)
- Forward looking indicators for Protected Areas – Moving beyond extent to include indicators for connectivity and representivity of Protected Area networks and effectiveness of Protected Area management.

The objective of the session was to use the existing SDG Indicator metadata sheets as a template for a SEEA based methodology. The template covered the following:

- Concepts and definitions
    - Define the indicator and create a glossary of important terms
    - Describe any concepts that underpin the indicator
    - Provide a detailed rationale for why the indicator is needed
    - Identify any limitations and any useful research questions
- SEEA based methodology
    - Describe a SEEA based computational method
    - Identify the required accounts
    - Outline the accounting structure, items and units required
    - Summarise how the accounts will be calculated
    - Consider possibilities for disaggregation to sub-national scale, and aggregations to global scale
- Highlight any issues and questions, that need to be addressed
    - Identify how missing values will be addressed
    - Describe where discrepancies between countries may arise
- Data sources
    - Describe the data, units of measurement, and where the data is obtained from
- Data availability
    - Describe how much of the data is likely to be currently available in countries, and where global data will need to be disaggregated
    - Describe the accessibility of the data
    - Describe possible time series and temporal resolutions for calculating the indicators
- References
    - Collate website links to relevant methodological documents
- Related SDG targets
    - Relevant SDG target indicator name and number

## 3.3 Session 8: Forward looking indicators for sustainable development and ecosystem services

This session aimed to examine the demands, possibilities and entry points, and the role of SEEA for indicators that measure ecosystem services and inform on maintaining safe operating spaces for environmental-economic development. The following presentations were delivered:

- Role of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), Hien T Ngo, IPBES Secretariat
- Towards ecosystem indicators that maintain a 'Safe Operating Space' for humanity, Sarah Cornell, Stockholm Resilience Centre
- Gross Ecosystem Product (GEP), ZHU Chunquan, IUCN China (see Photo 2)
- Tracking progress in improving well-being from the natural capital environment – where do natural capital accounts fit in? Rocky Harris, Department for Environment Food & Rural Affairs (Defra)


*Photo 4: Gross Ecosystem Product Presentation*

The discussions within this session identified the following points:

- The analysis undertaken by the presenters demonstrated linkage between SEEA and SDG and other indicators.

- There is a lot of potential for the SEEA to contribute to the various initiatives being undertaken at the global and national levels. There is increasingly an agreement that indicators should be derived from an integrated information system, moving away from a silo approach. Also, while apex indicators may be useful for communication purposes, it is important that a dashboard of indicators is developed to provide a holistic picture of the relationships between the environment and socio-economic conditions.
- Different international agencies have different policy objectives and entry points, which often need data developed for specific purposes. It would be useful to develop a common message and work closer together in setting priorities and sharing data, to avoid duplication of efforts.
- Indicator gaps exist – there are currently demands for ecosystem benefits relevant indicators
- It was identified that Chapter 3 of the upcoming IPBES global assessment is on SDGs, which will be a key resource for analyzing the use of multiple indicators. Chapter 5 concentrates on scenarios, and this may assist in discussions about use values of indicators and accounts. These chapters should be reviewed when they become available and possibly contribute to the development of the guidelines on modelling using SEEA accounts that is currently being developed as part of the NCAVES project.
- When reflecting on the nature of the forward-looking indicator, it was pointed out that there is a demand for the service type indicators that provide a measure on the ecosystem services and their contribution to human activity.
- The GEP presentation provides a case study on how an apex indicator can be produced based on the measure of individual ecosystem services.
- It was also suggested while an aggregation measure could provide useful insight, policy makers are more interested in identifying where ecosystem services are being generated, by what ecosystems and who benefits from them.

## 3.4 Session 9: Break-out session continued

Participants continued to work in groups to further develop the methodology for their chosen indicator.

# 4 Day 3 – Thursday 14th February 2019

## 4.1 Session 10: Database for indicators

This session featured presentations on the existing international databases/datasets that provide underlying data for the proposed indicator sets, lessons, opportunities and experiences. The following presentations were delivered:

- SDGs and Global data: Some examples and recommendations, François Soulard, Statistics Canada
- The Mediterranean Wetlands Observatory: Wetlands monitoring using spatial indicators derived from EO data (SDG 6.6.1), Anis Guelmami, Tour du Valat
- Tales of data processing from the frontline – SDG 15.3.1, Ichsani Wheeler, OpenGeoHub.org, Wageningen University & Research; David Summers, University of Adelaide, Terrestrial Ecosystem Research Network
- Role of PBL Netherlands Environmental Assessment Agency, Stefan van der Esch, PBL Netherlands Environmental Assessment Agency
- The Norwegian Nature Index and Assessment of Ecological Condition, Erik Framstad, Norwegian Institute for Nature Research (NINA)

The discussions within this session identified the following key points:

- Various global datasets were presented, and could be further explored to examine their suitability to support the development of global databases, in support of the SEEA.
- Guidance is needed on how global datasets can be used for compiling SEEA accounts, if national data is not available. Global data is useful as a starting point for countries that are data poor, but should be complemented with national data. This national data provides higher granularity, and could be used to validate and improve on the global data.
- For global data, considerations should also be given to how regional adjustments can be made.
- It is important to employ a data quality framework for the SEEA. Key features of this framework are: Relevance; accuracy; timeliness; accessibility and interpretability. This is to ensure that the data and accounting outputs are widely understood, are accepted with confidence and serve to support a wide range of policy and decision-making contexts. An example was shown by Statistics Canada, and provided a useful framework for assessing the suitability of data for national statistics, key issues are discussed below.
    - Interoperability of data and statistics was identified as an important concern. It is essential to be able to translate information to inform on multiple relevant reporting commitments.
    - Practical challenges exist with respect to ground-truthing earth observation data, especially in wetlands where access to water is encompassed in political debate and it is essentially this debate is informed by accurate data.
    - Need to understand the importance of potential wider policy effects of the SEEA, and how SEEA data can be linked to financial instruments and impacts on jobs and livelihoods.

- It was stressed that data needs to be fit for purpose. The importance of data validation and communication was highlighted, especially for policy making. There is a need to ensure data and accounts are understood and matched with the cycles of relevant decision making processes.

## 4.2 Session 11: Break-out session – Review of methodological sheet for selected indicators

Each group continued the development and review of the methodological notes, and presented their results at the end of the session. Summary of the key points is below and full meta data sheets will be developed and available through the SEEA website that will build on the bullet points below.

**Indicator 15.3.1: Proportion of land that is degraded over total land area**

- Concepts and definitions remain the same as current
- Alignment with SEEA broken down by the 3 sub-indicators
  - Land cover change flows – derived from SEEA land cover accounts, supported by translation tables for flows indicative of degradation. Similarity between SEEA-MODIS derived land cover classes and IPCC, and other national land cover classes. This will support UNCCD multiple uses.
  - Land productivity dynamics – derived from the SEEA ecosystem condition account. Use default Annual Net Primary Productivity (ANPP). Aspirational links to ecosystem service accounts
  - Below ground carbon – derived from SEEA ecosystem condition accounts; above ground carbon – derived from thematic carbon accounts.

**Indicator 6.6.1: Change in the extent of water-related ecosystems over time**

- Ecosystem condition accounts – water quality indicators (physico-chemical and biological); Basin characteristics; Biodiversity
- Physical flow accounts – e.g. basin area, flow/run-off, precipitation, evapotranspiration
- Pressure accounts – hydrological indicators by water basin (e.g. water footprint – water used to produce goods and services); resource extraction (e.g. fishing), land use (e.g. urbanisation)
- Ecosystem services accounts – e.g. provisioning (e.g. water abstraction), regulating/supporting (e.g. flood control), cultural (e.g. recreation).

**Indicator for urban areas and open spaces in the context of SDG 11.7.1: Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities**

- The break-out group focused on the blue green spaces in cities and urban areas, as such areas support many ecosystem services, the value of which will vary according to size, accessibility, location, condition
- The 2 definitions for an indicator for these areas (within the larger scope of SDG 11.7.1 were explored:

    - Proportion of population (and its characteristics) living within an urban area ((define area)) with access ((define access)) to public blue-green space" (day 1)
    - Average share of the built-up area of cities that is Blue Green space for public use for all, by income distribution, by sub-municipal area (day 2)
- The proposal was to calculate indicators using the SEEA extent, condition and service accounts (data sources include LULUCF, citizen science and socio-economic data)
- Urban accounts would need to be created first based on SEEA, then indicator disaggregated by different demographical category after.

**Protected Area (PA) indicator:**

- Proposal to be made up of a suite of indicators: total extent of PA, representivity index, connectivity index, management effectiveness index. Scope for these to be aggregated to form a composite indicator, however the usefulness of outputs is questioned
- Use PARC: Protected Area Representativeness and Connectedness (PARC) Index, using MODIS data
- Management Effectiveness can be measured through data derived from the World Database of Protected Areas (WDPA) which is currently in development
- SEEA Ecosystem extent, condition and service accounts could be used, alongside the potential development of a tourism account.

# 5 Conclusion and way forward

UNEP-WCMC and UNSD thanked all participants for their contributions towards an excellent and productive meeting. The meeting identified the SEEA as a coherent framework to support the indicator process and provided participants with an overview of how the SEEA can be integrated into indicator development to support the Post-2020 Agenda for Biodiversity, and case study examples of how these can be applied nationally.

The final session of the final day of the meeting summarised immediate next steps and focussed on identifying potential opportunities to influence the uptake of the SEEA, particularly in the context of the Post-2020 agenda.

In terms of immediate next steps, the following were outlined:

1. Respondents to provide feedback on global indicators report by 22nd March 2019 using the template provided
2. UNSD and UNEP-WCMC to upload all presentations to the meeting website and distribute participants list with email addresses
3. UNSD and UNEP-WCMC to continue to work on metadata sheets for aligning the SEEA with the four selected indicators. This will be shared with participants in advance of the SEEA Expert Forum in June 2019
4. Recommendation to advocate the use of SEEA for the indicator framework at various events

The discussions on the way forward included:

- The SEEA provides consistent definitions and classifications, as well as methodologies for the development of databases agreed internationally. It can provide an incentive for countries to develop systematic data collection and data sharing agreements, among different organisations. This will help to support the development of indicators, as well as evidence-based decision making. The SEEA has a lot of offer to the indicator community, as it provides an agreed framework for their derivation. More work needs to be carried out to mainstream the SEEA into the different policy and indicator processes. To contribute to the discussion of the Post-2020 Biodiversity framework, a submission is suggested to be made by the 15th April deadline for the consultations on the Post-2020 Agenda
    - The discussion document is available at https://www.cbd.int/doc/c/d431/b38f/3d580bb73e7c2b5aaa286310/post2020-prep-01-01-en.pdf
    - Agreed that UNSD to write a couple of paragraphs on how the SEEA (with emphasis on the outcomes from the meeting) can contribute to the delivery of indicators. Discussions suggested this should be quite generic to raise the SEEA profile, with the opportunity to be more specific going forward
- IAEG SDG Meeting in March, Beirut – 25 to 28th March was identified as an important meeting. The Ramsar Secretariat had earlier in the week highlighted the need to break down the silos between the different conventions and polices to

streamline the reporting burden that countries face, and avoid repetition and getting this tabled for discussion.

- The NCAVES pilot countries representatives are recommended to reach out to their national CBD representatives to highlight the work of SEEA and promote it to the CBD.
- Another way to influence the process would be to encourage countries to make recommendations to the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) to include the SEEA as part of the Post-2020 process.
- Promote communication of the opportunities SEEA provides, in regards to reporting to the biodiversity related and Rio conventions.
- The first order draft of the IPBES 'Values methodological assessment' report will be available in May for review. This is an opportunity to provide comments to reflect the current work that is being undertaken in the context of the SEEA EEA revision.

Previous discussions in plenary and within the breakout groups had also identified some relevant next steps. These included:

- The CBD Open Ended Working Group (OEWG) was identified earlier in the meeting as a key entry point for the SEEA. This is an important event to raise the profile of the SEEA, and build support for it in the Post-2020 context. This group will be meeting late summer, as soon as the meeting is confirmed it will be published in CBD website: https://www.cbd.int/post2020
- Consideration of other key messages regarding the use of SEEA
    - SEEA as an important driver for promoting coherence and synergy in use of data and indicators, at both national and international levels across different conventions, as well as the mainstreaming agenda.
- Reflection on whether the necessary communications materials and strategies are in place to ensure that the SEEA is seen as a credible and necessary approach. This requires short, targeted communication materials to engage stakeholders.
- Aligning interests: How can we both serve the SEEA and benefit from engaging in different international processes?
    - The emphasis is more on systematic data collection – not indicators per se. Could there be some articulation from the indicator community on data gaps, and where the SEEA could fill these. Potential for Post-2020 contribution?
- The message to CBD for April 15th is recommended to be of a technical nature as opposed to political, to allow maximum buy-in and support from Parties and other stakeholders.
- The UNFCCC have an adaptation committee – this is reviewing how countries can take integrated approaches to the SDGs / SENDAI / UNFCCC. There could be an opportunity for the SEEA to contribute to this process in the UNFCCC, and the other conventions. UNCDD also indicated they were open to these kind of discussions.

# Appendix A: Participants list

| Name | Affiliation | Break-out group |
|---|---|---|
| **Aastha Dwivedi** | Ministry of Environment, Forest and Climate Change, Government of India | SDG 6.6.1 |
| **Adrien Comte** | University of Brest | SDG 6.6.1 |
| **Alessandra Alfieri** | UNSD | Protected Areas |
| **Anis Guelmami** | Tour du Valat | SDG 6.6.1 |
| **Anna Chenery** | UNEP-WCMC | N/A |
| **Bridget Emmett** | Centre for Ecology and Hydrology | SDG 15.3.1 |
| **Chunquan Zhu** | IUCN China Office | Urban Green Blue Space |
| **Claire Brown** | UNEP-WCMC | SDG 6.6.1 |
| **David Summers** | University of Adelaide | SDG 15.3.1 |
| **Erik Framstad** | The Norwegian Institute for Nature Research (NINA) | Protected Areas |
| **Francois Soulard** | Statistics Canada | Urban Green Blue Space |
| **Gerhardt Bouwer** | Statistics South Africa (Stats SA) | SDG 6.6.1 |
| **Hien T. Ngo** | Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) | Protected Areas |
| **Hilary Allison** | UNEP-WCMC | N/A |
| **Ilse Geijzendorffer** | Tour du Valat | Protected Areas |
| **Ichsani Wheeler** | Environmetrix | SDG 15.3.1 |
| **Jakub Wejchert** | DG Environment, European Commission | Urban Green Blue Space |
| **James Vause** | UNEP-WCMC | Protected Areas |
| **Jerry Harrison** | UNEP-WCMC | N/A |
| **Jonathan Loh** | University of Kent | SDG 6.6.1 |
| **José Luis Ornelas de Anda** | National Institute of Statistics and Geography (INEGI), Mexico | SDG 6.6.1 |
| **Julian Chow** | UNSD | Urban Green Blue Space |
| **Katherine Moul** | UNEP-WCMC | Urban Green Blue Space |
| **Katia Karousakis** | OECD | Urban Green Blue Space |
| **Krishna Kumar Tiwari** | Ministry of Statistics and Programme Implementation, India | SDG 15.3.1 |
| **Lisa Waselikowski** | Eurostat | SDG 15.3.1 |

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| **Livia Hollins** | Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC) | Urban Green Blue Space |
| **Mandy Driver** | South African National Biodiversity Institute (SANBI) | Protected Areas |
| **Maria Rivera** | Ramsar Convention Secretariat | SDG 6.6.1 |
| **Markus Lehman** | Convention of Biological Diversity (CBD) Secretariat | Protected Areas / Urban Green Blue Space |
| **Mike Gill** | Group on Earth Observations - Biodiversity Observation Network (GEO BON) | Protected Areas |
| **Natasha Ali** | IUCN Cambridge Office | N/A |
| **Paula Suélen Corrêa de Medeiros** | Brazilian Institute of Geography and Statistics (IBGE) | Protected Areas |
| **Rocky Harris** | UK Department for Environment, Food & Rural Affairs (DEFRA) | Urban Green Blue Space |
| **Salman Hussain** | TEEB Office, UN Environment | SDG 15.3.1 |
| **Sarah Cornell** | Stockholm Resilience Centre | Protected Areas |
| **Sediqa Khatieb** | South African National Biodiversity Institute (SANBI) | SDG 6.6.1 |
| **Stefan van der Esch** | Netherlands Environmental Assessment Agency (PBL) | SDG 15.3.1 |
| **Steven King** | UNEP-WCMC | SDG 15.3.1 |
| **Trond Larsen** | Conservation International | Protected Areas |
| **Tshifhiwa Munyai** | South African Department of Environmental Affairs (DEA) | Protected Areas |
| **Wadzi Mandivenyi** | South African Department of Environmental Affairs (DEA) | SDG 15.3.1 |
| **William Speller** | Ecosystems Division, UN Environment | SDG 6.6.1 |
| **Yann Kervinio** | Ministère de la transition écologique et solidaire, France | SDG 15.3.1 |