



System of
Environmental
Economic
Accounting

SEEA Ecosystem Accounting: state of play of revision

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Presentation for UNCEEA

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Overall process



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Governance and co-ordination

- SEEA EEA Technical Committee (TC) extended to form the Editorial Board – regular monthly meetings since September 2019
- Five working groups covering: (i) spatial units; (ii) ecosystem condition; (iii) ecosystem services concepts; (iv) individual ES; and (v) valuation and accounting
- Recently formed Technical group on biodiversity and Group on indicators – the latter met for the first time in Sept 2020
- Small, short term, editorial support groups convened on specific issues in drafting chapters and discussion papers and to considering specific issues/topics
- Virtual Forum of Experts organized in 4 online sessions between June and November 2020
- Ongoing engagement with many fora incl. London Group (virtual meetings held)
- Ongoing testing and feedback from wide range of projects including NCAVES, INCA and MAIA
- Testing and production in many countries and locations

Timing of steps

- 2017: UNSC and UNCEEA endorsement to embark on revision given high policy interest and high speed of development (experimentation and testing)
- 2018: Establish research agenda and working groups
- 2018 – 2020: Discussion papers presented to various forums, meetings, workshops and expert review processes (>100 experts involved in drafting and >500 experts involved in review)
- 2019 – 2020: Draft chapters reviewed by TC, working groups and selected experts
- March-August 2020: Global consultation (1st round) on core chapters (3-11)
- June-September 2020: Review feedback – redraft chapters
- October-November: Global consultation (2nd round) on complete draft
- December-January 2021: Finalise draft for UNSC



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Current outline of chapters



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Chapter outline (1)

- Section A: Introduction & overview
 - > Chapter 1: Introduction
 - > Chapter 2: Overview of the ecosystem accounting framework
- Section B: Accounting for ecosystem extent and condition
 - > Chapter 3: Spatial units for ecosystem accounting
 - > Chapter 4: Accounting for ecosystem extent
 - > Chapter 5: Accounting for ecosystem condition
- Section C: Accounting for ecosystem services
 - > Chapter 6: Ecosystem services concepts for accounting
 - > Chapter 7: Accounting for ecosystem services in physical terms

Chapter outline (2)

- Section D: Monetary valuation and integrated accounting for ecosystem services and assets
 - > Chapter 8: Principles of monetary valuation for ecosystem accounting
 - > Chapter 9: Accounting for ecosystem services in monetary terms
 - > Chapter 10: Accounting for ecosystem assets in monetary terms
 - > Chapter 11: Integrated and extended accounting for ecosystem services and assets
- Section E: Complementary valuations, thematic accounting and indicators
 - > Chapter 12: Complementary approaches to valuation
 - > Chapter 13: Accounting for specific environmental themes
 - > Chapter 14: Indicators and combined presentations

Revision governance structure

UN Committee of Experts on Environmental-Economic Accounting (UNCEEA)

Chair: Bert Kroese, Statistics Netherlands



SEEA EEA Technical Committee / Editorial Board

Chair: Anton Steurer, Eurostat

WG1: Spatial units

Chair: Sjoerd Schenau, Statistics Netherlands

Finalized discussion papers:

- DP1.1: An ecosystem type classification for the SEEA EEA
- DP1.2: Treatment of ecosystems assets in urban areas
- DP1.3: Treatment of the atmosphere and oceans in the SEEA EEA
- Background paper 1: to discussion paper 1.1 on option 3
- Background paper 2: A review of existing classifications

WG2: Ecosystem condition

Chair: Joachim Maes, EU JRC

Finalized discussion papers:

- DP2.1: Purpose and role of ecosystem condition accounts
- DP2.2: Review of ecosystem condition accounting case studies: Lessons learned and options for developing condition accounts
- DP2.3: Proposed typology of condition variables for ecosystem accounting and criteria for selection of condition variables
- Online supplement to Discussion paper 2.2

WG3: Ecosystem services

Chair: Lars Hein, Wageningen University

Discussion papers under development:

- DP3.1: Proposed concepts, definitions and terminology for ecosystem services for the revised SEEA EEA
- DP3.2: Initial list of ecosystem services for SEEA EEA and selected treatments

WG4: Individual ecosystem services

Chair: Rocky Harris, DEFRA, UK

Finalized discussion papers:

- Towards a definition and classification of terrestrial provisioning services related to crop cultivation and forestry
- Biomass from Fisheries: Provisioning Services and Benefits
- Soil retention (regulating) ecosystem services
- Research paper on air filtration ecosystem services
- Accounting for the water purification ecosystem service
- Defining and valuing carbon related services
- Water flow regulation for mitigating river and coastal flooding
- Water Supply Services: Biophysical Modeling and Economic Valuation in Ecosystem Accounting
- Recreation services from ecosystems
- Research paper on habitat and biodiversity related ecosystem services

WG5: Valuation

Chair: Juha Siikamaki, IUCN

Discussion papers under development:

- DP5.1: Defining exchange and welfare values, articulating institutional arrangements and establishing the valuation context for ecosystem accounting
- DP5.2: A framework for the valuation of ecosystem asset
- DP5.3: Accounting treatments when integrating ecosystem accounts in the SNA
- DP5.4: Recording degradation in ecosystem accounts
- DP5.5: Ecosystem disservices and externalities
- Background paper: Exchange values and welfare values in the SEEA EEA

Subgroup on accounting for biodiversity

Chair: Rosimeiry Portela & Trond Larsen, Conservation International

Review of chapters to ensure biodiversity is adequately represented

Paper on accounting for biological diversity (to be published soon)

Working group on SEEA EA indicators

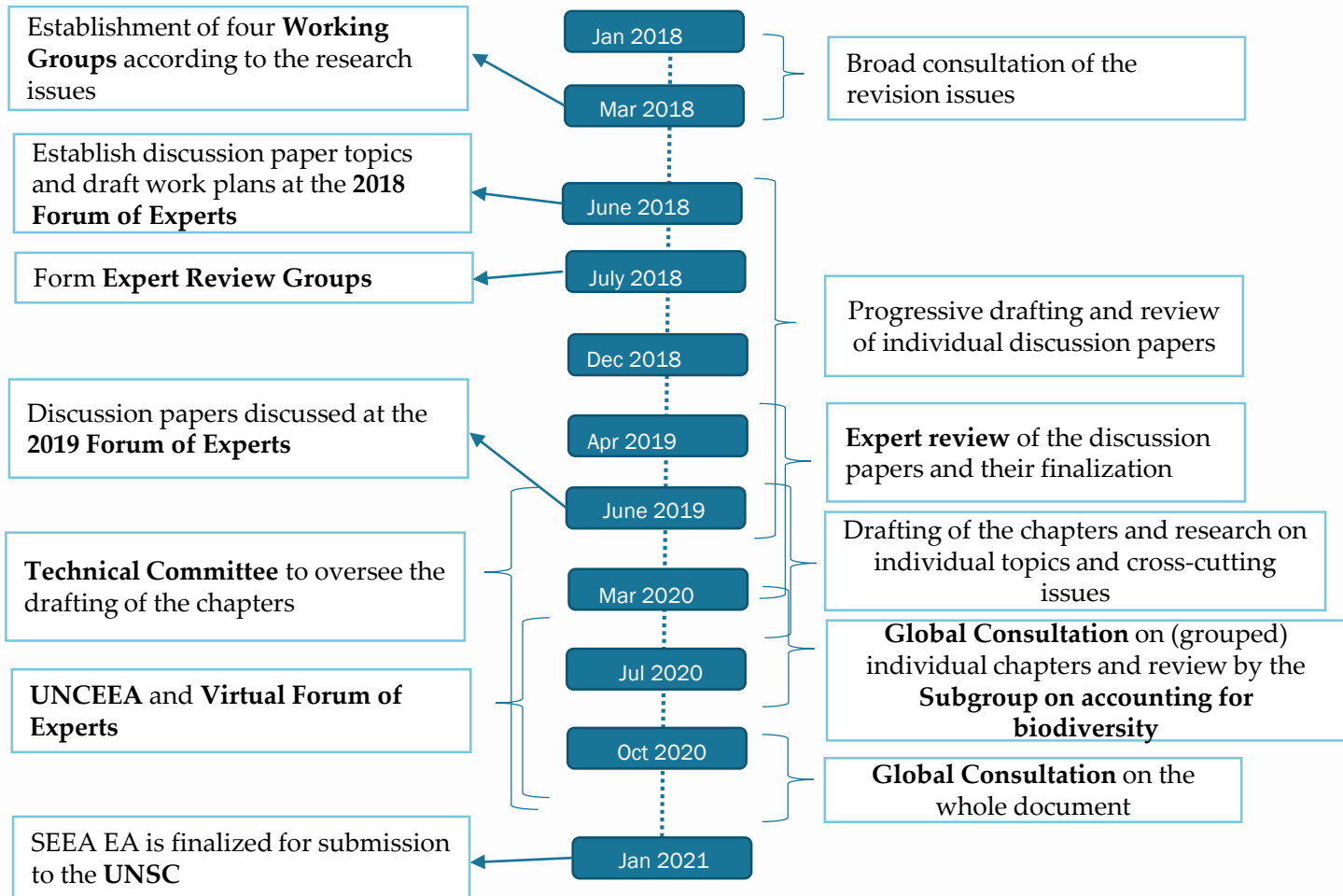
Chair: Bhanumati, MOSPI, India

Support the SEEA EEA revision process and in particular the drafting of Chapter 14 on indicators

Members of the extended Technical Committee [AL=area lead]

1	Australia	Jonathon Khoo / Steven May / Peter Meadows
2	Canada	Francois Soulard
3	India	Bhanumati
4	Netherlands	Sjoerd Schenau (AL)
5	South Africa	Gerhardt Boucher
6	United Kingdom	Rocky Harris (AL)
7	EEA	Jan-Erik Petersen
8	ESCAP	Michael Bordt
9	Eurostat	Anton Steurer (Chair)
10	FAO	Francesco Tubiello
11	IUCN	Juha Siikamaki (AL)
12	JRC	Joachim Maes (AL)
13	OECD	Peter van de Ven
14	Wageningen University	Lars Hein (AL)
15	World Bank	Raffaello Cervigni / Glenn-Marie Lange / Sofia Ahlroth / Juan-Pablo Castañeda / Stefano Pagiola
16	IMF	James Tebrake
17	Conservation International	Rosimeiry Portela
18	UNSD (Secretariat)	Alessandra Alfieri / Jessica Chan / Julian Chow / Bram Edens / Marko Javorsek

The revision process: overall timeline



Encouragement for implementation

- A number of documents and initiatives are being prepared to support the implementation:
 - > Guidelines on biophysical modelling
 - > Guidelines on valuation
 - > Data solutions: ARIES for the SEEA
- Several activities are aligned around the SEEA EA being a “standard”, such as EU directive, link to business, indicators initiatives, etc.



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Engagement and finalization



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Ongoing global level engagement

- SEEA Community
 - > Expert forums, London Group
- Global Indicator initiatives
 - > SDG, CBD, UNCCD
- Global data and accounting initiatives
 - > NCAVES, ARIES, MAIA, ESA, NASA, EO4EA, SNA revision (AEG meetings); Global Ocean Accounts Partnership
- Other engagement
 - > IUCN World Congress, IPBES values assessment, Dasgupta review, wealth accounting (incl WAVES); Corporate accounting & Capitals Coalition; Postponed Yale conference with leading economists; GEP project with NatCap - Stanford

SEEA EA Implementation



Map from article in *Science* “Progress in natural capital accounting for ecosystems” *Science* 31 Jan 2020, Vol. 367, Issue 6477, pp. 514-515. Note additional countries depending on criteria used would include Austria, Belgium, Brazil, Bulgaria, Czechia, France, Germany, Ireland, Portugal, Russia, Sweden and others. Note also the existence of EU wide accounts.

Steps to finalize the revised SEEA EEA

- **Oct - 30 Nov:** 2nd round of Global Consultation on complete draft
- **16 & 18 Nov:** UNCEEA extraordinary meeting
- **1-11 Dec:** analysis of the comments received
- **16 Dec:** meeting of the Technical Committee to review changes to be made
- **Dec – 15 Jan 2021:** Revised draft of SEEA EA incorporating comments from the global consultation
- **20 Jan:** meeting of the Technical Committee to review the final draft
- **End Jan:** UNCEEA to review the final document and sign off on the submission to the UNSC
- **End Jan:** Final draft to be submitted to the UNSC together with a summary of the comments received and how they have been addressed
- **March 2021:** UNSC

Key issues at stake

- **Revision marks very significant progress for the area for statistics. The process already has very positive spillover effects.**
- **Title: to drop 'experimental'** (only handbook that had this)
- **Valuation** (=putting money values on ecosystem services flows and on ecosystem assets). Approach to align with national accounts principles (exchange values) now much more widely accepted. Of the 61 comments received only 5 were not in favour and after consultation with the 5, they seem to come from different perspectives. Some of these perspectives have been included in Chapter 12 and include welfare measures and different institutional frameworks. However, practical challenges are significant.
- **To make the document an international standard of some kind.** An international document is not legally binding but is an influential reference and accelerator enabling shared learning, efficient production and better access to funding but there are risks of being called to deliver. We need to remember the difference between concepts and practically implemented estimates. An estimate based on a standard can be labelled provisional.



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Thank you



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