



System of  
Environmental  
Economic  
Accounting

# Session 5: Presentation on the Guidance on Biophysical Modelling for Ecosystem Accounting

Marko Javorsek, United Nations Statistics Division

Global NCA Policy Forum, 18-19 November 2019

Kampala, Uganda



# Ecosystem accounting manuals under development


- Developed under the NCAVES project
  - > Workstream on developing methods and guidance
- Deliverables on:
  - > Guidelines for biophysical modeling
  - > Guidelines for valuation
  - > Guidelines on scenario analysis
- Value proposition / niche:
  - > Lots of manuals exist, but few (if any) cater to principles + needs of accounting
  - > Provide easy entry points (e.g. “how to go about measuring / valuing ES x, y”)
  - > Be consistent with and support implementation of revised SEEA EEA
- Editorial boards have been established, if you would like to participate, reach out to [seea@un.org](mailto:seea@un.org)

# Process

- Editorial board:
  - > Chair: Rosimeiry Portela/Daniel Juhn (Conservation International)
  - > Editor: Stephanie Tomscha (Victoria University Wellington)
  - > Members: Glenn Marie Lange (World Bank), Justin Johnson (University of Minnesota), Ken Bagstad (USGS), Francois Soulard (Stats Canada), Michael Bordt(UNESCAP), Bethanna Jackson (VUW), Lars Hein (WUR), Bram Edens (UNSD - Project management / secretariat)
- Consultation process
  - > Under the remit of SEEA EEA Technical Committee
- Audience: statisticians / policy makers with interest to compile accounts
- Time frame: first full draft Dec. 2019; Final draft April 2020
- If you would like to contribute/ be involved, reach out to [seea@un.org](mailto:seea@un.org)

# Scope


1) How can we **use** biophysical modeling to produce extent, condition, and ecosystem service accounts?



2) How do we ensure reporting produced from biophysical modeling is **accurate**?



3) What is the **future** of biophysical modeling of ecosystem services?



4) How can organizations **get started** with biophysical modeling for compiling accounts?

# Tiered approach

## Tier 3

Ecosystem services modelled with regional data or direct surveys, better validation, and best available tools

## Tier 2

Ecosystem services modelled from national datasets customized for national contexts, some validation

## Tier 1

Ecosystem services modelled from global datasets with no or little user input data

- Recognizing that **countries differ** in terms of data availability, technical capacity and resources
- Higher tiers will also **increase in spatial resolution**



# Guideline outline

- Introduction
- Overview of modeling
  - > Approaches and techniques
  - > Platforms and tools (e.g. InVEST, ARIES etc.)
  - > Cartography essentials
- Modeling for extent accounts
- Modeling for condition accounts
- Modeling ecosystem services (for selection of 10-15 main ES)
  - > Tiers + country examples
- Accuracy / uncertainty
- How to get started
- Applications
- Overview of available global data sources (-> living document)

# THANK YOU

[seea@un.org](mailto:seea@un.org) / <https://seea.un.org/>

