



System of  
Environmental  
Economic  
Accounting

## **2019 Forum of Experts in SEEA Experimental Ecosystem Accounting, 26-27 June 2019, Glen Cove, NY**

### *Session paper*

*7a: Advances in scenario modelling using ecosystem accounts*

### **Session concept note**

*Prepared by: William Speller (UN Environment) and Julian Chow (UNSD)*

Version: 13 June 2019

All documents related to the Forum of Experts can be found on the event website at:  
<https://seea.un.org/events/2019-forum-experts-seea-experimental-ecosystem-accounting>

*Disclaimer:*

This paper has been prepared by the authors listed below as part of the work on the SEEA EEA Revision coordinated by the United Nations Statistics Division and in preparation for the 2019 Forum of Experts in SEEA Experimental Ecosystem Accounting, 26-27 June 2019, Glen Cove, NY. The views expressed in this paper do not necessarily represent the views of the United Nations.



United Nations



**THE WORLD BANK**  
IBRD • IDA



---

## Session 7a

### Advances in Scenario Modelling using Ecosystem Accounting

**Date: Thursday, 27 June 2019**

**Time: 13:00 – 14.30**

**Venue: Embassy room**

---

The objective of the research agenda/work stream on scenario modelling analysis, in the context of the SEEA EEA revision process, is to develop a systematic and consistent approach to inform/influence the selection or adaptation of an environmental policy using ecosystem accounts based on the SEEA EEA, and thus leading to the establishment of policy environment such that change agents use the evidence and information provided by the SEEA EEA as an input to determining their behaviours. By demonstrating the usefulness of the ecosystem extent, condition and services accounts under different policy scenarios, this work stream contributes to the mainstreaming of the use of environmental and ecosystem accounts in (sub-) national level policy-planning and implementation.

As part of the Natural Capital Accounting and Valuation of Ecosystem Services (NCA&VES) project, scenario analysis work is to be undertaken in each of the five project countries: China, India, Brazil, Mexico and South Africa. The process and results of scenario analysis work in each country will inform the development of international guidelines on use of ecosystem accounts in policy scenario analysis in the context of the SEEA-EEA. The development of international guidelines will inform the conduct of scenario analysis at the country level and support the SEEA EEA revision process.

The objective of the session is to present the ongoing advances in scenario modelling of data to support the development of applications that use ecosystem accounting information. A range of examples of tools and/or case studies will be presented here.

In the context of the SEEA EEA revision process, the methodology underpinning scenario modelling could also support the quantification of the ecosystem services for which measurement and valuation requires some assumption as to what would have been the case if the ecosystem had not been present, i.e. the counterfactual. While the focus of this session will be on policy scenario and a more detailed discussion on counterfactual will take place under another session organized by Working Group 3, a presentation of this subject will be made in the session to highlight the possibility in expanding the scenario modelling techniques in measuring ecosystem services.