



Advancing the System of Environmental-Economic Accounting Project (AEEA)

Research Agenda

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Economic Accounting (UNCEEA)

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Objective

- Update the committee on:
 - Progress on the research agenda in the AEEA
 - Outcomes from the Expert Forum
- The Committee will discuss further work being proposed for the research agenda
 - Section 4 in background paper



Outline

- AEEA project overview
- Background technical papers
- SEEA EEA – Technical Guidance
- Expert forum overview
- Expert forum outcomes – proposed research agenda
- Discussion



AEEA Project Overview

- Seven country assessments and national programs of work
 - SA, Bhutan, Indonesia, Mexico, Chile, Mauritius, Vietnam
- Communication materials
- SEEA – Implementation Strategy
- Training materials
 - Country and regional training
- Technical development – research agenda



AEEA Training materials

- **Three levels:**
 - Level 0 - All participants – general introduction to concepts
 - Level 1 - Focus on compiling accounts
 - Level 2 – working with data and country examples
- **Testing of training**
 - National training has been delivered to most countries (range from 2-4 days)
 - Two regional training workshops
 - Very broad audience – over 4 days



AEEA Training Modules

- **Introduction to SEEA;**
- **Classifications and data sources in ecosystem accounting**
- **Key concepts**
- **Spatial units**
- **Ecosystem condition**
- **Biodiversity**
- **Ecosystem extent**
- **Carbon accounts**
- **Water accounts**
- **Generation of ecosystem services**
- **Biophysical modelling**
- **Diagnostic tool for scoping the experimental accounts**



AEEA Training

- **Challenges**
 - Lack of expert capacity to delivery training
 - Level 0 – well developed
 - Level 1 & 2 – further work is needed
- **Opportunities**
 - Very high demand and very well received
 - Train the trainers – resources?
 - Critical mass is needed – a community of practitioners



AEEA – Technical Papers

1. Functional approach to ecosystem accounting (March 2015)
2. Land accounts and ecosystem extent (March 2015)
3. Land and ecosystem condition and capacity (Jan 2015)
4. Water and ecosystem accounting (Dec 2014)
5. Carbon and ecosystem accounting (Dec 2014)
6. Linkages between ecosystems asset and service accounts (Dec 2014)
7. Compilation of data, tools and methods (Dec 2014)
8. Spatial units, scaling and aggregation (Jan 2015)
9. Guidelines for biophysical modelling and mapping (Dec 2014)
10. Experimental Biodiversity Accounting within the SEEA EEA framework (June 2015)*



AEEA Technical Guidance

1. Introduction
2. Main aspects of ecosystem accounting
3. Spatial units for ecosystem accounting
4. Ecosystem accounts
5. Accounting for flows of ecosystem services
6. Accounting for ecosystem assets
7. Thematic accounts
8. Valuation in ecosystem accounting
9. Integrating ecosystem accounting with stand economic data



AEEA Technical Guidance - Observations

- Clarity of terms – units, accounts
- Much closer links to ecological principles
- Ecosystem units built on ecological foundations
- Stronger links back to SEEA CF land accounts
- Deeper consideration of ecosystem services
 - Supply and use account
- Deeper understanding of the links to geospatial data and analysis
- Clarity on basic steps for the implementation of ecosystem accounts
 - Logic framework provided linking the accounts



System of Environmental-Economic Accounting

United Nations Statistics Division

	AEEA technical paper	Training modules developed (levels 0, 1 and 2)	Included in generic Technical Guide	FORUM review
A. Spatial units, land	√	√ (0, 1, 2)	√	√
- Land accounts and ecosystem extent (assets)	√	√ (0, 1, 2)	√	
B. Methods for measuring ecosystem services and condition	√		√	√
- Ecosystem function and links to assets and services	√		√	√
- Ecosystem condition	√	√ (0, 1, 2)	√	
- Classification of ecosystem services	√	√ (0,1)	√	√
- Biophysical modelling	√	√		√
- Linkages between assets and services	√		√	√
- Carbon accounts	√	√ (0, 1, 2)		
- Water accounts	√	√ (0, 1, 2)		
- Biodiversity	√	√		
C. Accounting structure	√	√	√	√
D. Linking with socio-economic accounts (geospatial methods)	√	√	√	√
E. Valuation methods	√	√	√	√



AEEA Expert Forum

- Four issues were addressed, in accordance with the research agenda priorities:
 - Ecosystem accounting units – discussion of approaches and methods
 - Ecosystem service classification and links to ecosystem function and condition
 - Measurement and modelling of ecosystem condition, function and service
 - Structure of Ecosystem accounts – compilation of accounting outputs and tables



AEEA Expert Forum

- Session overview
- Overview presentation
- 4-5 presentations on the topic by forum attendees
- A series of questions were then posed and discussed in working groups
 - Refinement of the questions and focus
 - Additional areas for consideration
 - Links between topics
- At the end of the forum there were summary presentations and broad discussions on the way forward



AEEA Expert Forum – Outcomes

- **Common definitions and classifications**
 - built on sound ecological science that incorporates the function and structure of ecosystems and links with condition and capacity issues
- **Ecosystem assets and services**
 - promote the harmonization and inter-operability between SEEA EEA, CICES and FECS
 - UNSD in collaboration with US EPA and EEA to develop a paper to progress harmonisation
 - Link to CPC and ISIC with the possibility to cross-link between the classified items.



AEEA Expert Forum – Outcomes

- Land and ecosystem extent accounts
 - Examine global land cover nomenclatures and link to ongoing big data projects in collaboration with the Group on Earth Observations (GEO)
- Modelling and measuring techniques for ecosystem assets and services
 - review of appropriate modelling techniques in accordance with accounting criteria
 - UNSD will continue this work in the latter half of 2015 as part of the AEEA project



AEEA Expert Forum – Outcomes

- Mechanisms for moving forward
 - Establish a technical committee on the SEEA Experimental Ecosystem Accounting
 - The technical committee will be used as the mechanism for broader consultation and familiarisation to test and extend the new concepts and methods that result from work on the research agenda



Discussion

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