



System of
Environmental
Economic
Accounting

EEA Revision Cross-cutting issues: Connection between ecosystem accounts

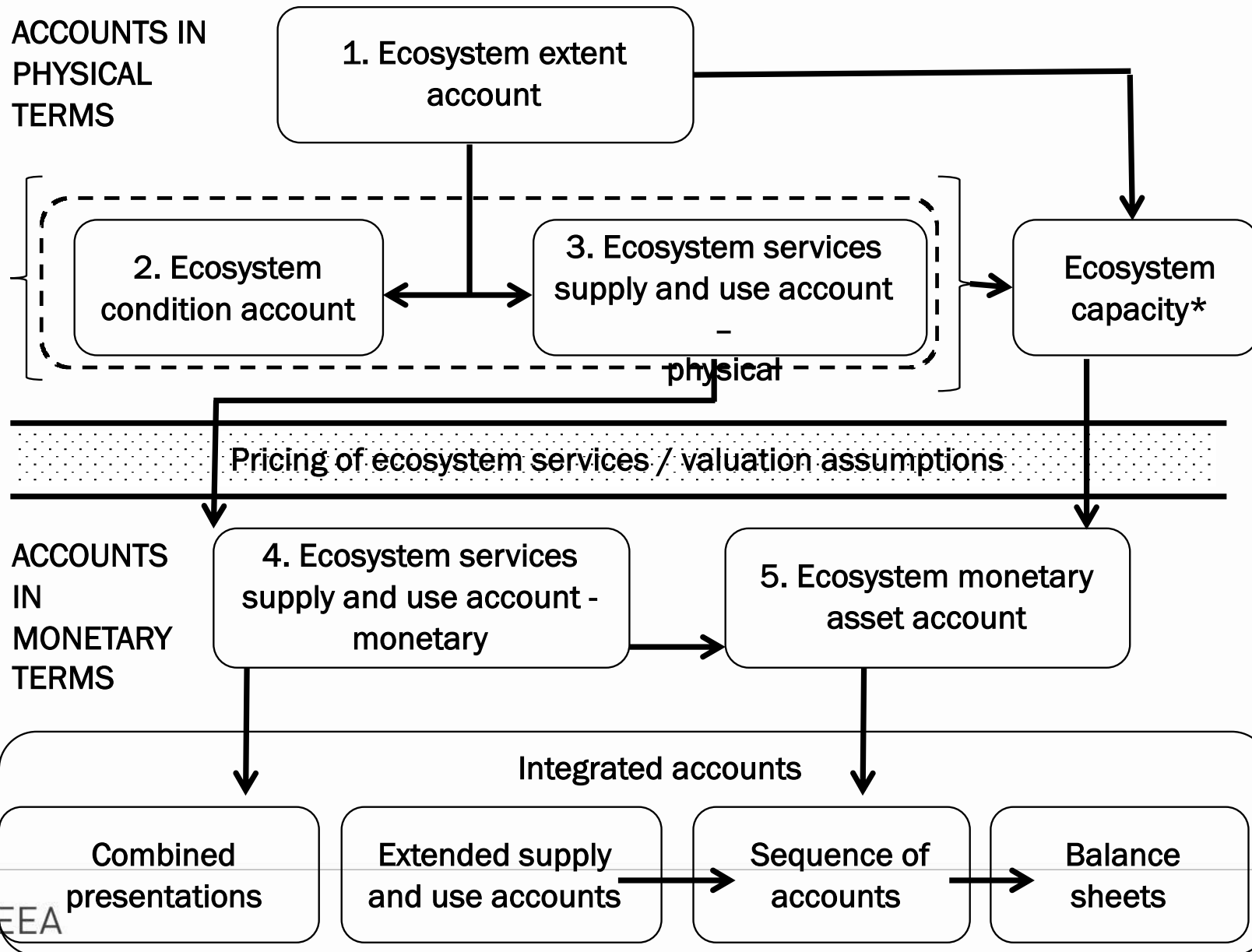
2019 Forum of Experts: Technical Expert Meeting on SEEA Experimental
Ecosystem Accounting

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United Nations

Linking the accounts



Extent account

		Proxy ecosystem type (based on land cover)															
		Artificial surfaces	Herbaceous crops	Woody crops	Multiple or layered crops	Grassland	Tree-covered areas	Mangroves	Shrub-covered areas	Regularly flooded areas	Sparse natural vegetated areas	Terrestrial barren land	Permanent snow and glaciers	Inland water bodies	Coastal water and inter-tidal areas	Sea and marine areas	TOTAL
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Opening extent																	
Additions to extent																	
Managed expansion																	
Natural expansion																	
Upward reappraisals																	
Reductions in extent																	
Managed regression																	
Natural regression																	
Downward reappraisals																	
Net change in extent																	
Closing extent																	

Condition account

		Proxy ecosystem type (based on land cover)														
		Artificial surfaces	Herbaceous crops	Woody crops	Multiple or layered crops	Grassland	Tree-covered areas	Mangroves	Shrub-covered areas	Regularly flooded areas	Sparse natural vegetated areas	Terrestrial barren land	Permanent snow and glaciers	Inland water bodies	Coastal water and inter-tidal areas	Sea and marine areas
Example indicators of condition		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Vegetation (e.g. native cover)	Opening condition															
	Closing condition															
Water quality (e.g. turbidity, pH)	Opening condition															
	Closing condition															
Soil (e.g. erosion, pH, nutrients)	Opening condition															
	Closing condition															
Carbon (e.g. net primary productivity)	Opening condition															
	Closing condition															
Biodiversity (e.g. species richness)	Opening condition															
	Closing condition															
Habitats (e.g. fragmentation)	Opening condition															
	Closing condition															
Overall index of condition	Opening condition															
	Closing condition															

ES supply and use account

ECOSYSTEM SERVICES SUPPLY TABLE																								
	Measurement Units	Type of economic unit						Proxy ecosystem type (based on land cover)																
		Agriculture, forestry and fisheries	Electricity, gas supply	Water collection, treatment and supply	Other industries	Governments	Households	Accumulation	Rest of the world - Imports	1 Artificial surfaces	2 Herbaceous crops	3 Woody crops	4 Multiple or layered crops	5 Grassland	6 Tree-covered areas	7 Mangroves	8 Shrub-covered areas	9 Regularly flooded areas	10 Sparse natural vegetated areas	11 Terrestrial barren land	12 Permanent snow and glaciers	13 Inland water bodies	14 Coastal water and inter-tidal areas	15 Sea and marine areas
Ecosystem services																								
Provisioning services																								
Biomass accumulation																								
- Timber																								
- Crops																								
- Grass / fodder																								
- Fish																								
Water abstraction																								
Regulating services																								
Carbon sequestration																								
Water regulation																								
Water purification																								
Air filtration																								
Nutrient/waste remediation																								
Pest & disease control																								
Soil retention																								
Cultural services																								
Enabling tourism and recreation																								
Enabling nature based education and research																								
Enabling nature based religious and spiritual experiences																								
Products																								

ECOSYSTEM SERVICES USE TABLE																								
	Measurement Units	Type of economic unit						Proxy ecosystem type (based on land cover)																
		Agriculture, forestry and fisheries	Electricity, gas supply	Water collection, treatment and supply	Other industries	Governments	Households	Accumulation	Rest of the world - Exports	1 Artificial surfaces	2 Herbaceous crops	3 Woody crops	4 Multiple or layered crops	5 Grassland	6 Tree-covered areas	7 Mangroves	8 Shrub-covered areas	9 Regularly flooded areas	10 Sparse natural vegetated areas	11 Terrestrial barren land	12 Permanent snow and glaciers	13 Inland water bodies	14 Coastal water and inter-tidal areas	15 Sea and marine areas
Ecosystem services (detail corresponding to supply table)																								
Provisioning services																								
Regulating services																								
Cultural services																								
Products																								

Ecosystem monetary asset account

	Proxy ecosystem type (based on land cover)															
	Artificial surfaces	Herbaceous crops	Woody crops	Multiple or layered crops	Grassland	Tree-covered areas	Mangroves	Shrub-covered areas	Regularly flooded areas	Sparse natural vegetated areas	Terrestrial barren land	Permanent snow and glaciers	Inland water bodies	Coastal water and inter-tidal areas	Sea and marine areas	TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Opening stock of ecosystem assets																
Additions to stock																
Reductions in stock																
Revaluations																
Closing stock of ecosystem assets																

Questions for discussion

- What is the common understanding of the breadth/coverage of SEEA EEA accounts?
 - > What should the coverage be?
 - > How should the connection to the thematic accounts be considered?
 - > Should we have separate chapters for thematic accounts in the revised SEEA EEA?
 - What are the key linkages/aspects that create the system of ecosystem accounts?
 - > What should be the link between condition and extent accounts?
 - > Which accounts apply at which scales?
 - What should be the nature and degree of integration with the SEEA Central Framework and the SNA?
 - What are the main barriers to developing a system of connected ecosystem accounts
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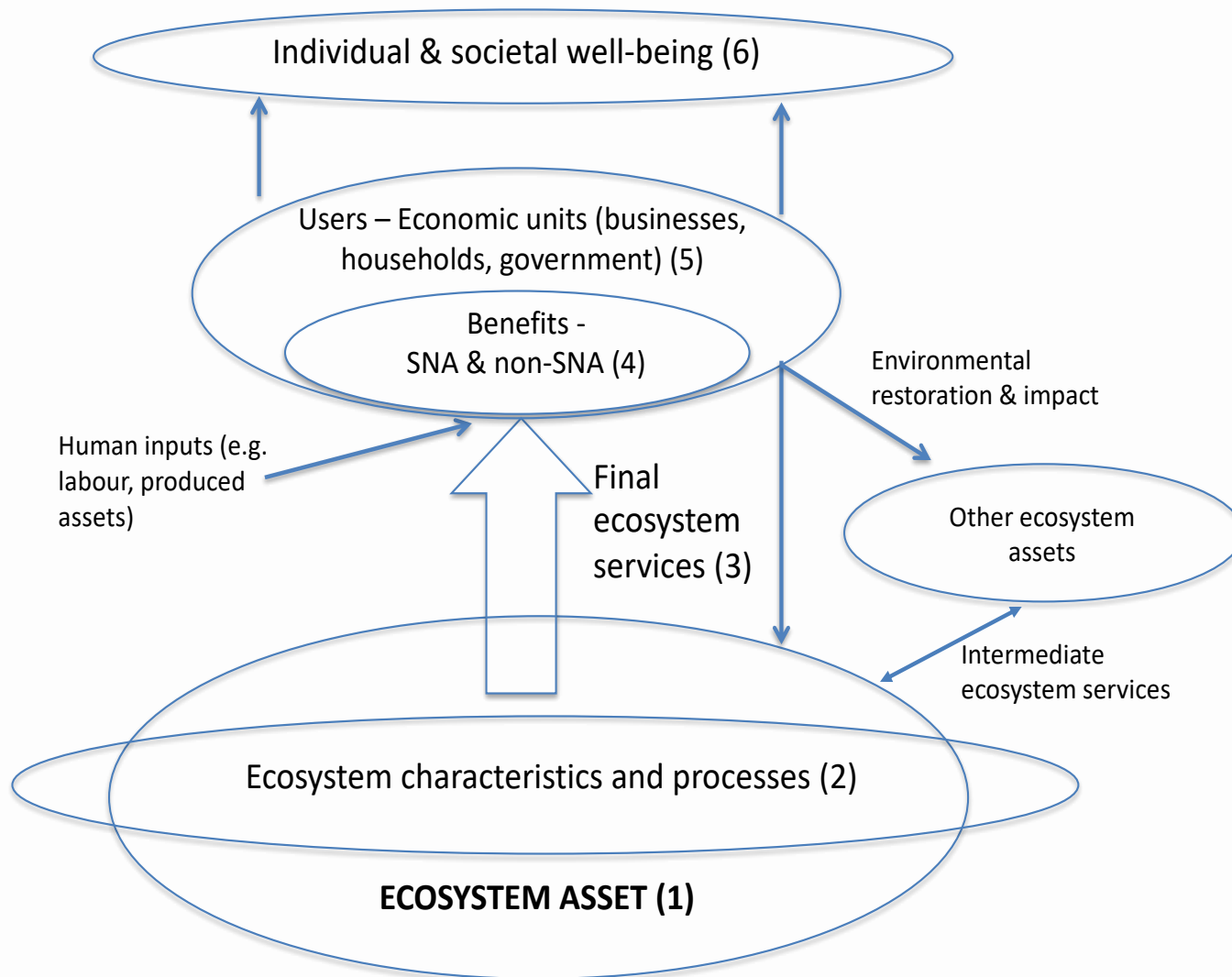
System of
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Accounting

Thank you



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Core ecosystem accounting model



Spatial units

