Overview of timber and forest accounts

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Let's recall the framework



Transboundary Environmental Flows



Lets first review some terms

Environmental assets are the naturally occurring living and non-living components of the Earth, together constituting the biophysical environment, which may provide benefits to humanity.

Classification of environmental assets in the SEEA Central Framework

1	Mineral and energy resources					
1.1	Oil resources					
1.2	Natural gas resources					
1.3	Coal and peat resources					
1.4	Non-metallic mineral resources (excluding coal and peat resources)					
1.5	Metallic mineral resources					
2	Land					
3	Soil resources					
4	Timber resources					
4.1	Cultivated timber resources					
4.2	Natural timber resources					
5	Aquatic resources					
5.1	Cultivated aquatic resources					
5.2	Natural aquatic resources					
6	Other biological resources (excluding timber resources and aquatic resources)					
7	Water resources					
7.1	Surface water					
7.2	Groundwater					
7.3	Soil water					



Lets first define some terms

Land is a unique environmental asset that delineates the space in which economic activities and environmental processes take place and within which environmental assets and economic assets are located.

- Land cover refers to the observed physical and biological cover of the Earth's surface and includes natural vegetation and abiotic (non-living) surfaces.
- Land use reflects both (a) the activities undertaken and (b) the institutional arrangements put in place for a given area for the purposes of economic production, or the maintenance and restoration of environmental functions

Based on above what can we say about forests and forestry?

Land cover classification

Land cover classification

Category Artificial surfaces (including urban and associated areas) Herbaceous crops 3 Woody crops Multiple or layered crops Grassland Tree-covered areas Mangroves Shrub-covered areas 8 Shrubs and/or herbaceous vegetation, aquatic or regularly flooded Sparsely natural vegetated areas 10 Terrestrial barren land 11 Permanent snow and glaciers 12 Inland water bodies 13 Coastal water bodies and intertidal areas 14



Land use classification

Land use classification

1	Land
1.1	Agriculture
1.2	Forestry
1.3	Land used for aquaculture
1.4	Use of built-up and related areas
1.5	Land used for maintenance and restoration of environmental functions
1.6	Other uses of land n.e.c.
1.7	Land not in use
2	Inland waters
2.1	Inland waters used for aquaculture or holding facilities
2.2	Inland waters used for maintenance and restoration of environmental functions
2.3	Other uses of inland waters n.e.c.
2.4	Inland waters not in use



Accounting for forests and other wooded land

Physical asset account for forest and other wooded land (hectares)

	Type of forest and other wooded land				
	Primary forest	Other naturally regenerated forest	Planted forest	Other wooded land	Total
Opening stock of forest and other wooded land	20	100	150	130	400
Additions to stock					
Afforestation		2	5		7
Natural expansion		3			3
Total additions to stock		5	5		10
Reductions in stock					
Deforestation	2	10		5	17
Natural regression				3	3
Total reductions in stock	2	10	0	8	20
Closing stock of forest and other wooded land	18	95	155	122	390



Accounting for timber

Timber resources are defined by the volume of trees, living or dead, and include all trees regardless of diameter, tops of stems, large branches and dead trees lying on the ground that can still be used for timber or fuel.

- Cultivated versus natural timber resouces.
- Not only forest land but also orchards...



Accounting for timber

Physical asset account for timber resources (thousands of cubic metres over bark)

	Type of timber resource			
	Cultivated timber resources	Natural timber resources		
		Available for wood supply	Not available for wood supply	
Opening stock of timber resources	8 400	8 000	1 600	
Additions to stock				
Natural growth	1 200	1 100	20	
Reclassifications	50	150		
Total additions to stock	1 250	1 250	20	
Reductions in stock				
Removals	1 300	1 000		
Felling residues	170	120		
Natural losses	30	30	20	
Catastrophic losses				
Reclassifications	150		150	
Total reductions in stock	1 650	1 150	170	
Closing stock of timber resources	8 000	8 100	1 450	
Supplementary information				
Fellings	1 250	1 050		



- *What information from the accounts would be useful to have?
- *What about other services we get from forests?

