

SEEA AGRICULTURE FORESTRY AND FISHERIES (SEEA AFF)

LINKAGES TO FORESTRY

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of the United Nations



System of
Environmental
Economic
Accounting



OUTLINE

- **SEEA Overview**
- **Applications to Forests: Flow and Asset Accounts; Carbon Emissions**
- **Conclusions**

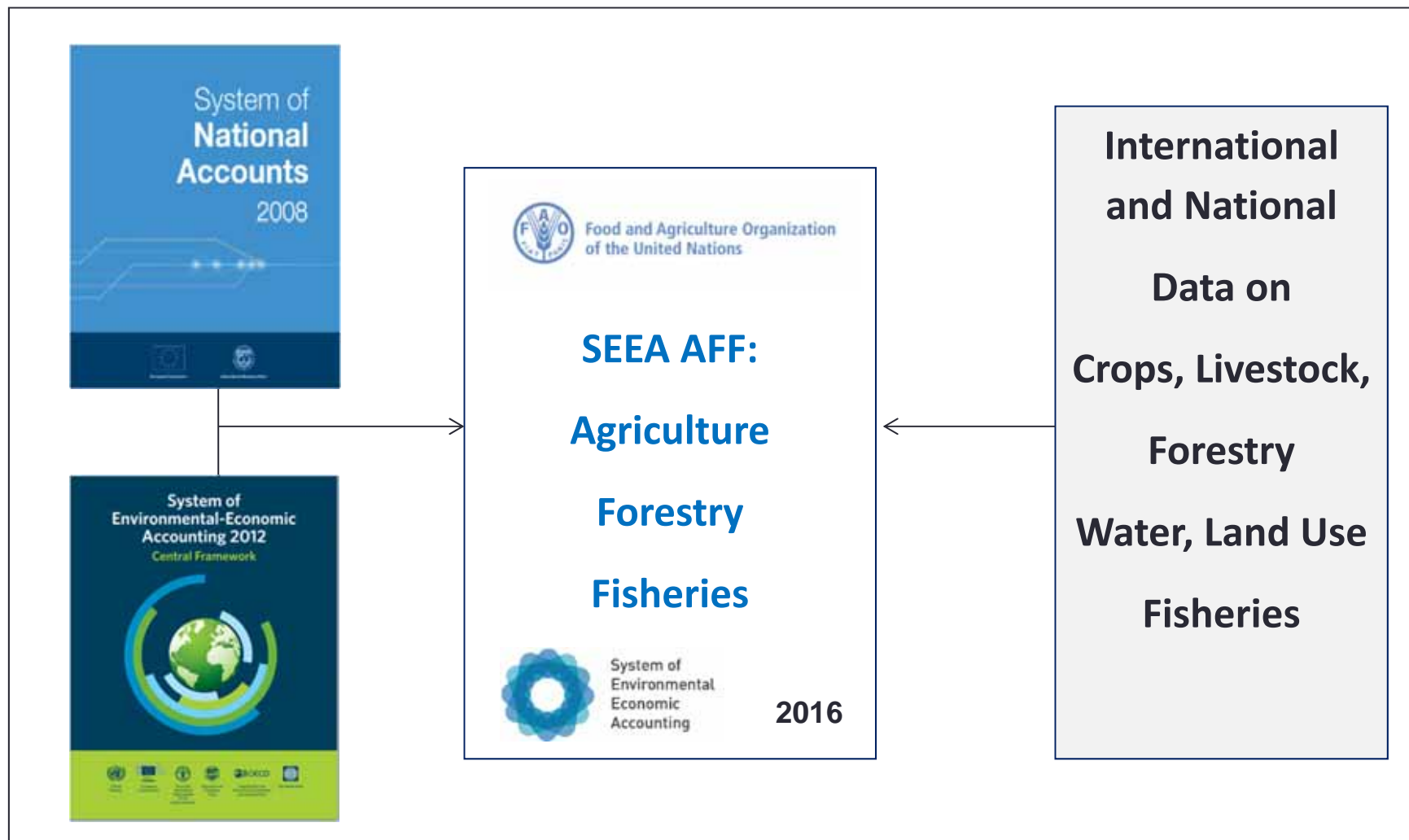


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System of Environmental Economic Accounts



SEEA Overview

- The SEEA is a new statistical standard developed to better understand the linkages between economy and environment
- SEEA AFF focuses on the specific interactions of economy and environment across ISIC A activities, **Agriculture, Forestry and Fishing**
- Developed by **FAO** since 2013, in coordination with **UNSD, OECD, EUROSTAT, World Bank** and other partners
- Endorsed by the UN Committee of Experts on Environmental Economic Accounting (UNSC) in Jun 2016

SEEA AFF AND FORESTS

Ten primary data domains (Supply-Use and Asset Accounts):

1	Agricultural products and related environmental assets
2	Forestry products and related environmental assets
3	Fisheries products and related environmental assets
4	Water resources
5	Energy
6	Air Emissions
7	Fertilizers, nutrient flows and pesticides
8	Land
9	Soil resources
10	Other economic data

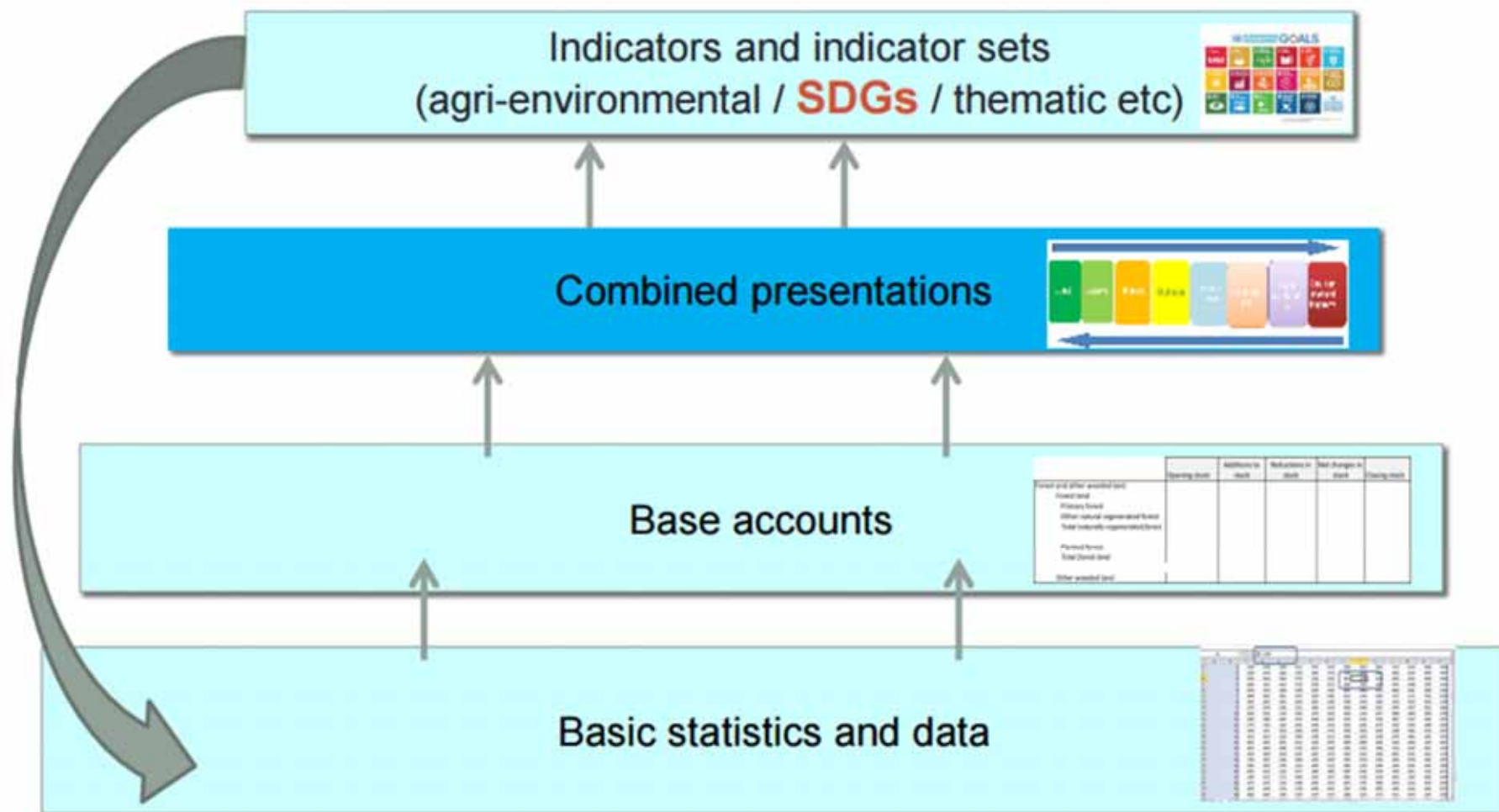


Forests and forestry in SEEA-AFF:

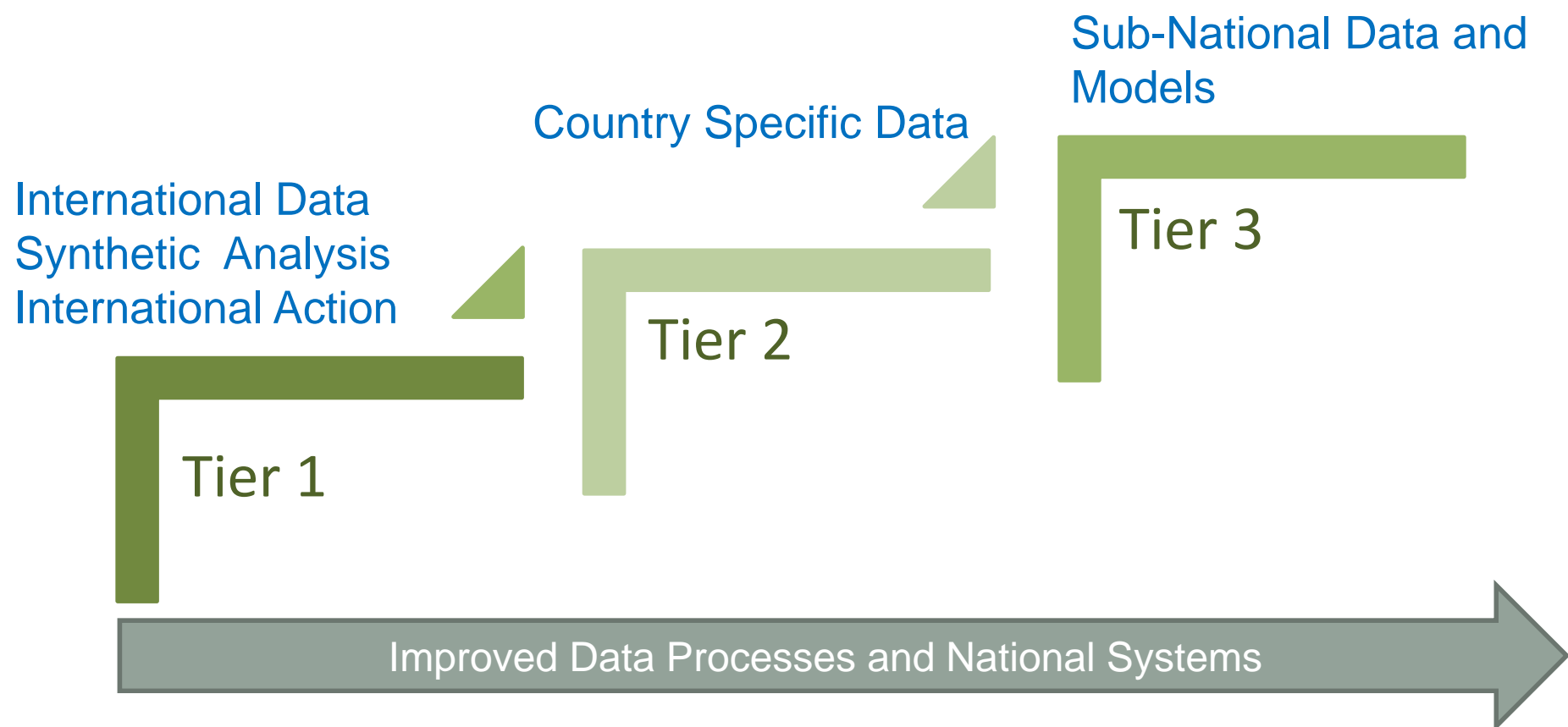
Kind of account	Item	SEEA-AFF	
		Table	Unit
FLOWS	MSUT of products	3.10	«currency»
	VA and other economic aggregates	3.11	
	PSUT for timber	3.5	m3
ASSETS	Land	3.6	ha
	Timber	3.7	m3



SEEA AFF COMBINED PRESENTATIONS



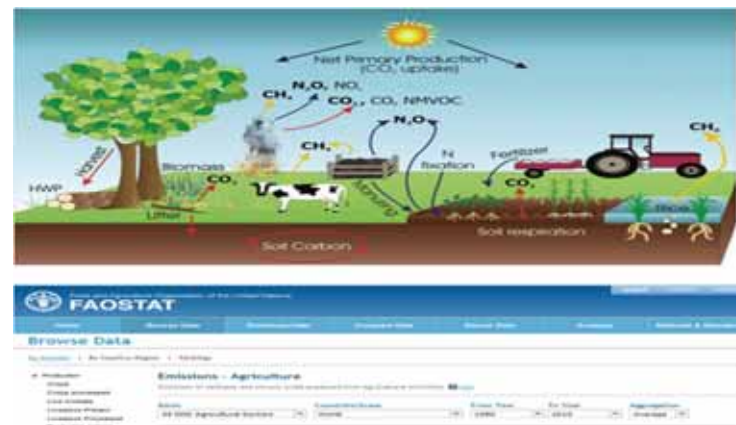
SEEA AFF Country Implementation: Tiered Approach



Carbon Accounting: Air Emissions Accounts

- SEEA AFF Air Emissions Account describe GHG emissions from economic activities:

- A01 *Crops and Livestock*
- A02 *Forestry*
- A03 *Fishing*



- The accounts are easily mapped onto the Land Use, Land Use Change and Forestry (LULUCF) of National GHG Inventories

SEEA and IPCC/UNFCCC Reporting

- UNFCCC is an established process linked to International Climate Policy since 1992, with internationally approved technical guidelines for reporting (IPCC)
- Data available from dozens of Countries, with historical time series 1990-present

Results : ISIC A01

Type of substance	AGRICULTURE, FORESTRY AND FISHING ACTIVITIES (ISIC A)												Total	
	Crop and animal production, hunting and related service activities (ISIC A01)									Forestry and logging activities (ISIC A02)		aquaculture activities (ISIC A03)		
	Manure Applied to Soil	Crop Residues	Burning Crop Residues	Synthetic Fertilizers	Cultivation of Organic Soil	Rice Cultivation	Manure Management	Manure left on Pasture	Enteric Fermentation	Other Cropland and Grassland Management	Energy Consumption	Forest Land Management	Energy Consumption	Energy Consumption
Greenhouse Gases														
Carbon Dioxide														
Methane														
Nitrous oxide														
Total GHG in CO2eq														
Other Air Pollutants														

Crop and animal production, hunting and related service activities (ISIC A01) ←

Syntetic Fertilizers

Manure Applied to Soil

Burning Biomass

Crop Residues left on soils

Manure left on Pasture

Enteric Fermentation

Manure Management

Rice Cultivation

Drainage and Cultivation of Organic Soils

Forest Conversion to Cropland and Grassland

Fuel Combustion



Results : ISIC A02

Type of substance	AGRICULTURE, FORESTRY AND FISHING ACTIVITIES (ISIC A)												Total	
	Crop and animal production, hunting and related service activities (ISIC A01)										Forestry and logging activities (ISIC A02)			Other agriculture activities (ISIC A03)
	Manure Applied to Soil	Crop Residues	Burning Crop Residues	Synthetic Fertilizers	Cultivation of Organic Soil	Rice Cultivation	Manure Management	Manure left on Pasture	Enteric Fermentation	Other Cropland and Grassland Management	Energy Consumption	Forest Land Management		Energy Consumption
Greenhouse Gases														
Carbon Dioxide														
Methane														
Nitrous oxide														
Total GHG in CO ₂ eq														
Other Air Pollutants														
Dinitrogen oxide														
Hydrofluorocarbons														
Perfluorocarbons														
Sulphur hexafluoride														
Carbon monoxide														
Non-methane volatile organic compounds														
Soil														
Ammonia														
Nitric oxide														
Particulate matter														
Other air pollutants														
GHG														
CO ₂														
CH ₄														
N ₂ O														
GHG														
Other GHG														
Sheep and Goats														
Pigs														
Other livestock														



Forestry and logging activities (ISIC A02) ←

Forest Land Management Fuel Combustion Fires

Conclusions

- The System of Environmental-Economic Accounts offers an analysis framework to link forest statistics across relevant environmental and socio-economic variables, in support of integrated analyses of sustainability
- Opportunities to use international as well as national statistics; include national carbon accounting in a manner consistent with climate reporting
- Ongoing capacity development activities in countries with FAO member countries and international programmes

Thank you!

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<http://www.fao.org/economic/ess/agri-environment/en/>



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