



System of
Environmental
Economic
Accounting

SEEA ECOSYSTEM ACCOUNTING AND ITS IMPLEMENTATION STRATEGY

Alessandra Alfieri, Chief Environmental Economic Accounts Section
United Nations Statistics Division

Advancing Earth Observation for Ecosystem Accounting,
28 November – 1 December 2022



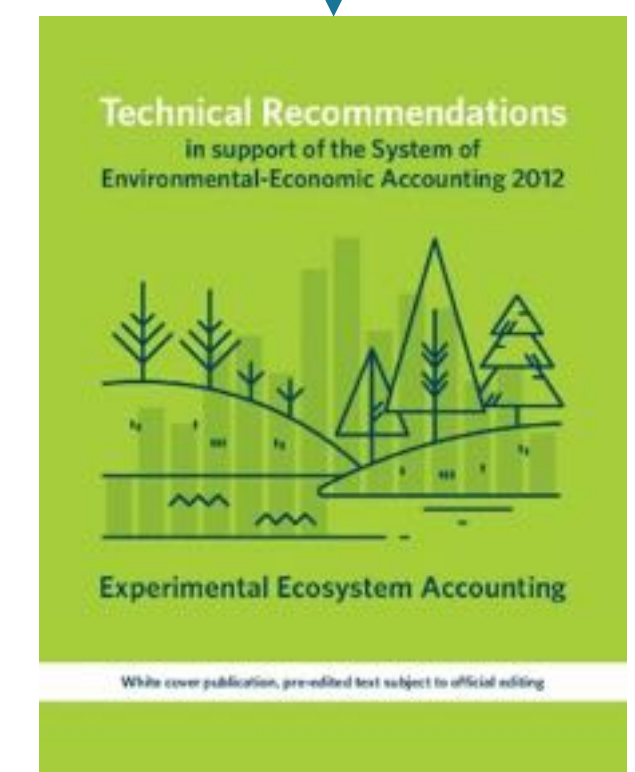
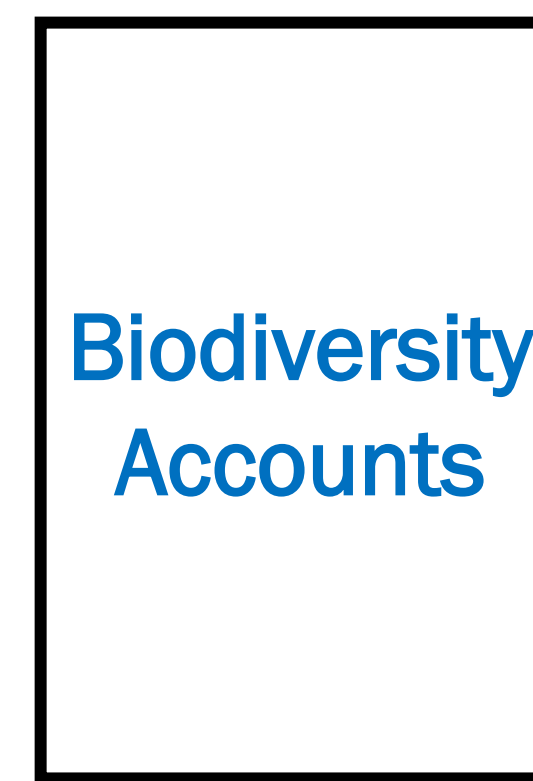
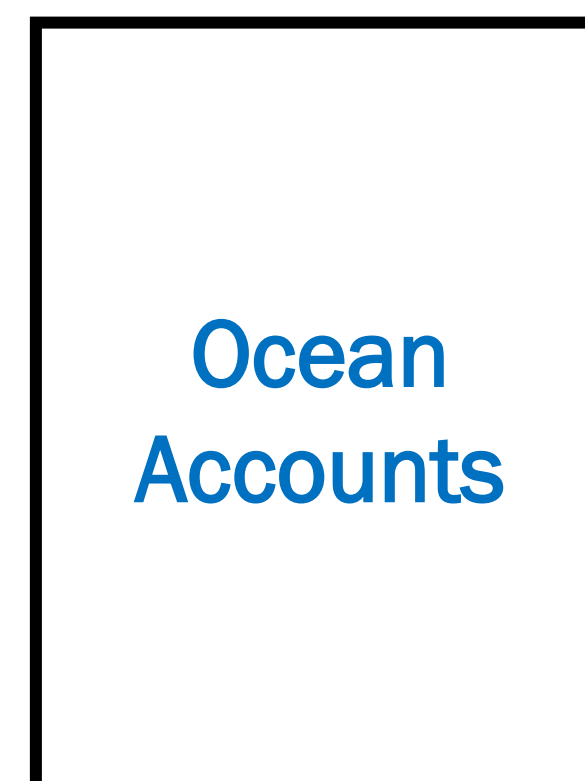
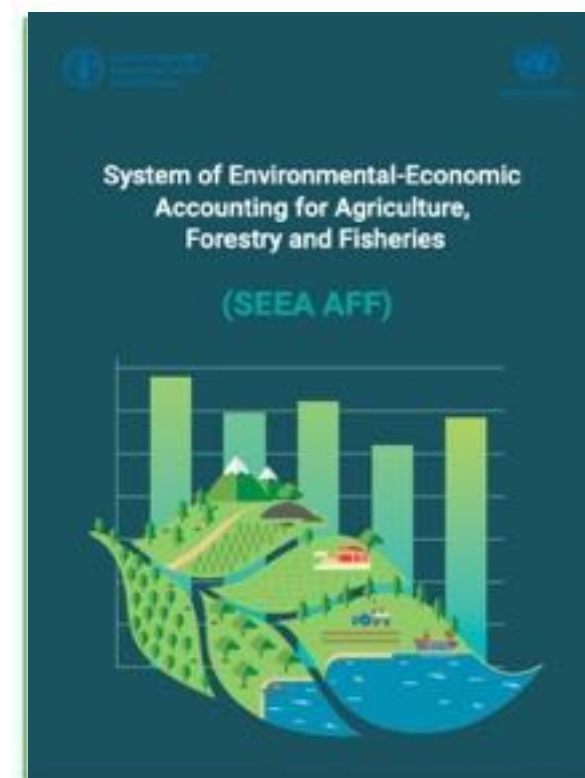
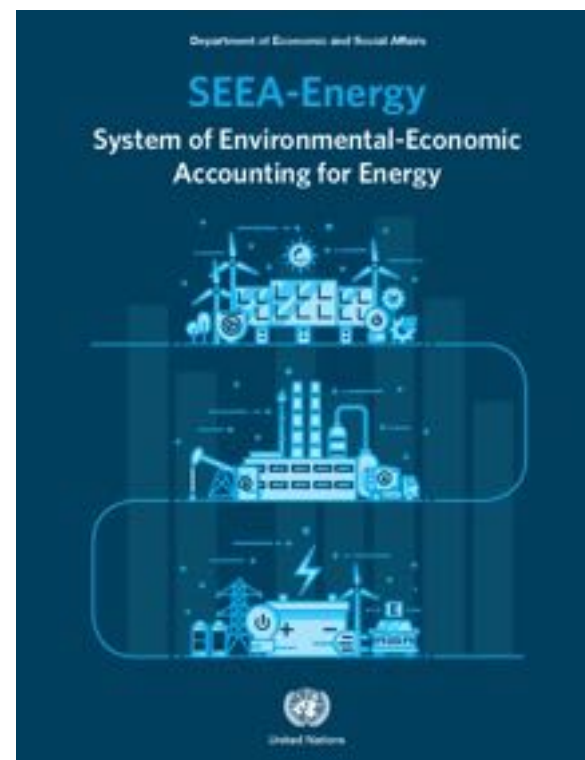
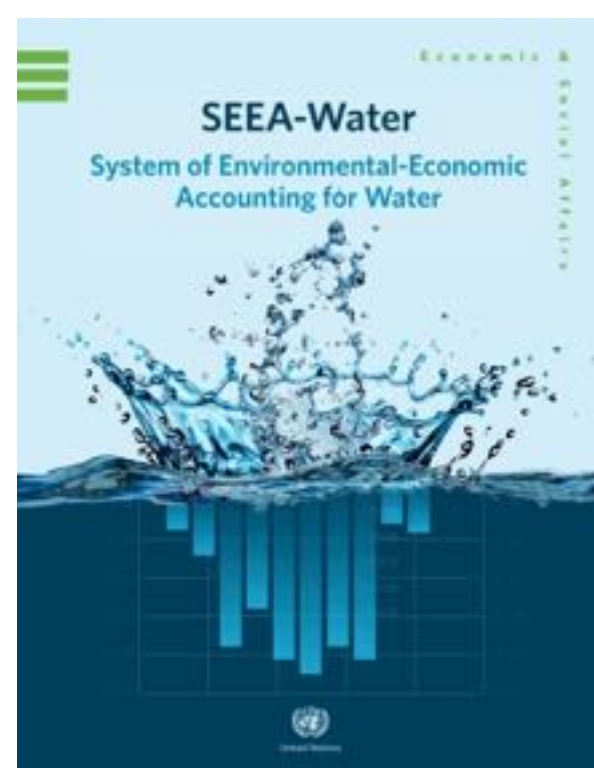
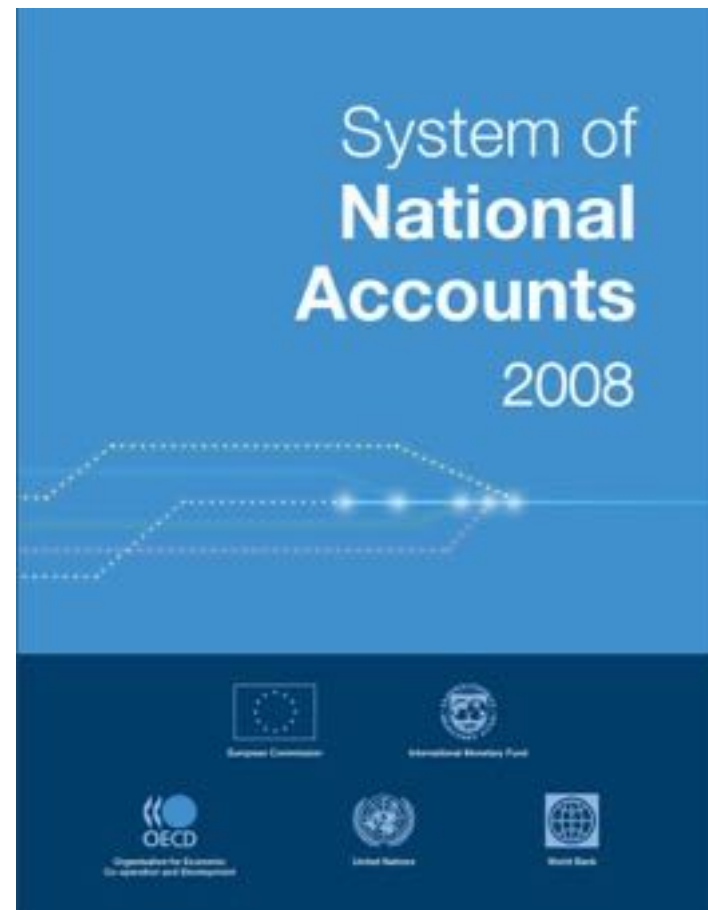
United Nations

The Need for Natural Capital Accounting

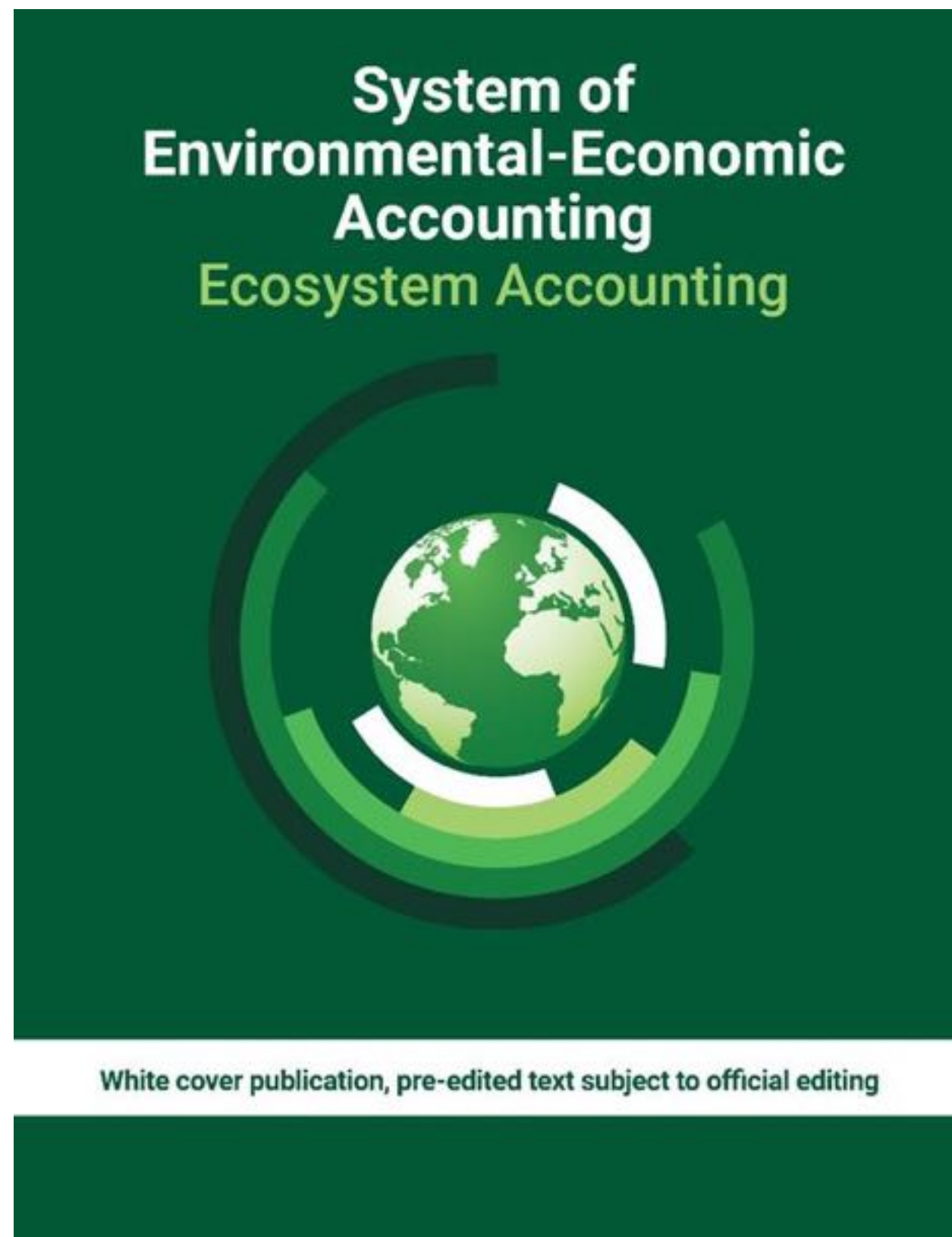
- Nature and the services it provides support almost every aspect of human well-being
- But headline indicators like GDP, the unemployment rate and inflation do not capture the full economic contributions of nature
- Traditional accounts don't help us understand how the depletion of natural resources and degradation of the environment affect the economy and wellbeing
- The System of Environmental Economic Accounts (SEEA) fills that gap.
- SEEA integrates information on the economy and the environment showing their interrelationship complementing the System of National Accounts



SNA and SEEA – statistical standards



The SEEA Ecosystem Accounting



The UN Statistical Commission in March 2021:

- Agreed to remove “Experimental” from the times
- Adopted Chapters 1-7 describing the framework and the physical flow accounts as a statistical standard
- Recognized Chapters 8-11 as internationally recognized Statistical principles and recommendations for the valuation of ecosystem services and assets
- Noted Chapters 12-14 describing applications and extensions
- Encouraged countries to implement the SEEA EA

In March 2022:

- Adopted the implementation strategy of the SEEA EA

Two sides of the SEEA

Measures environmental assets and individual resources and how the economy used them




Timber **Water** **Fish**

Soil **Minerals**

The left side of the SEEA is represented by a green hexagon. It features a central text box describing its focus on environmental assets and individual resources. To the left is the cover of the 'System of Environmental-Economic Accounting 2012 Central Framework'. Below the text are five icons: timber logs, a water drop, fish, soil with a plant, and minerals with a pickaxe.

Measures ecosystems and the services they provide to economic and human activity

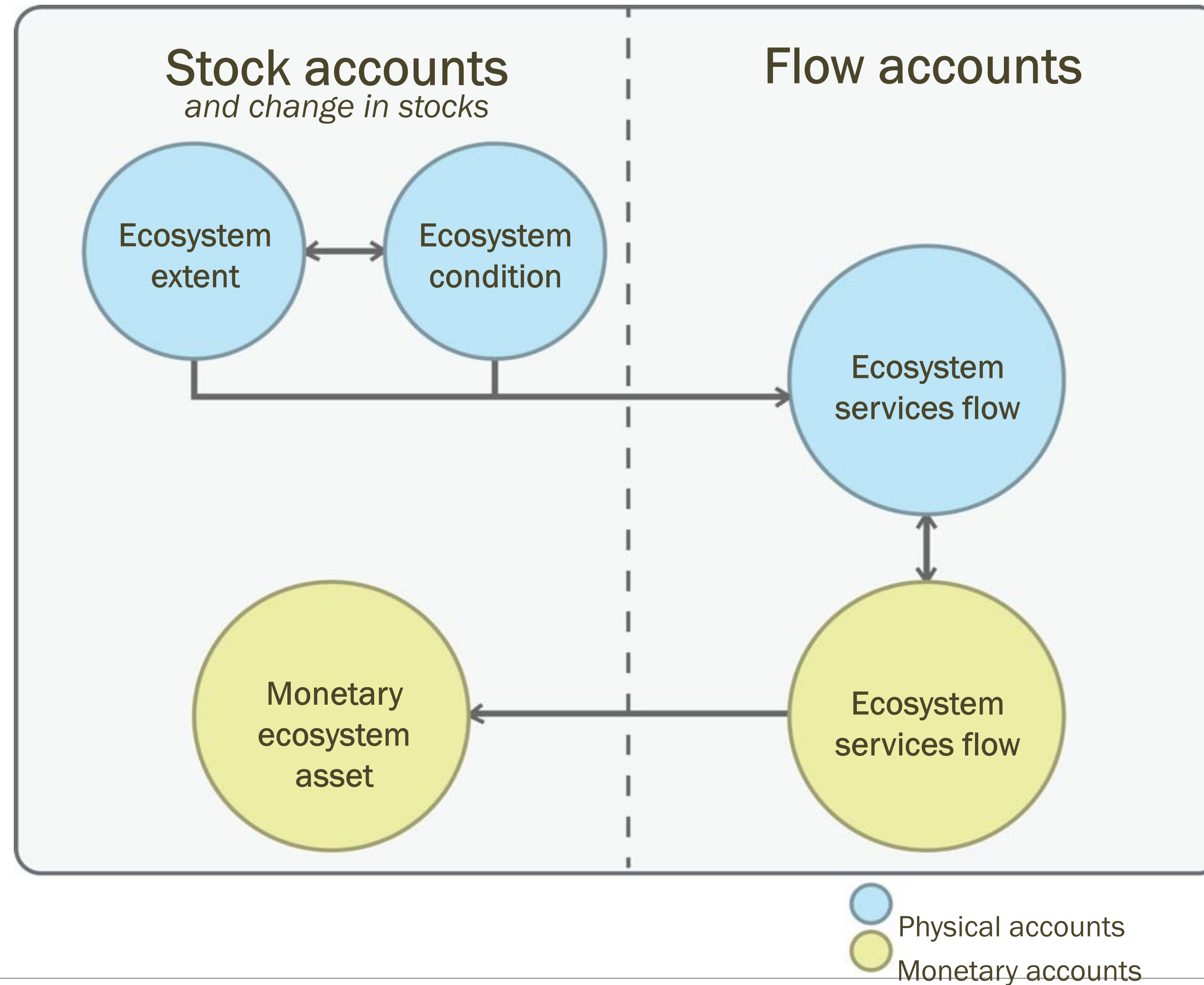


Forests **Rivers** **Coral reef**

Wetlands

The right side of the SEEA is represented by a light green hexagon. It features a central text box describing its focus on ecosystems and the services they provide. To the left is the cover of the 'System of Environmental-Economic Accounting 2012 Environmental Ecosystem Accounting'. Below the text are four icons: a forest, a river, a coral reef, and wetlands.

SEEA Ecosystem Accounting - Core Accounts



The SEEA supports multiple ongoing initiatives



Growing interest in Natural Capital Accounting

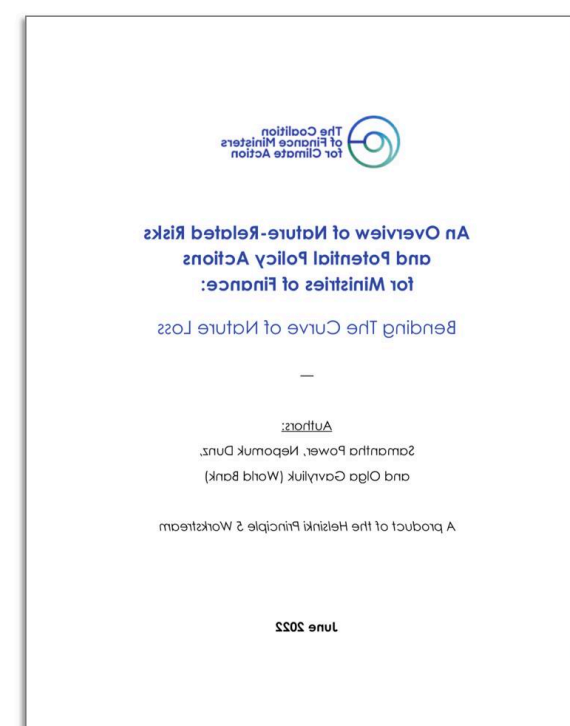


“a historic step towards transforming the way how we view and value nature” – António Guterres, UN Secretary General

“this new statistical framework moves beyond GDP and takes better account of biodiversity and ecosystems in national economic planning” – Frans Timmermans, Vice-President of the European Commission



“Committed to further mainstreaming biodiversity in decision-making, we will ensure implementation of the System of Environmental Economic Accounting (SEEA), ..., a regular and institutionalised compilation of accounts, will use related indicators for policy and decision-making, and provide international support for further development and implementation of SEEA-EA” - The G7 climate, energy and environment ministers – Communique 27 May 2022



MoFs can manage nature-related risk developing and applying valuation, metrics, and decision support tools (e.g., through implementing or supporting natural capital accounting (NCA), developing alternatives to gross domestic product (GDP), and developing nature loss scenarios



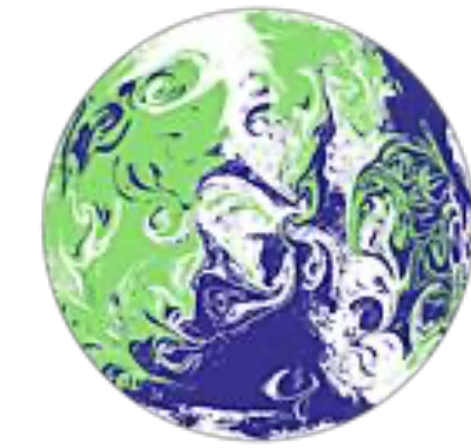
System of
Environmental
Economic
Accounting

Global implementation strategy for SEEA



United Nations

SEEA EA Global Implementation Strategy



UN CLIMATE
CHANGE
CONFERENCE
UK 2021

IN PARTNERSHIP WITH ITALY

Overall objective: scale up the uptake of the SEEA Ecosystem Accounting

Target: at least 60 countries implement at least one account of the SEEA EA by 2025

Specific objectives:

- Regular production of selected ecosystem accounts, starting from ecosystem extent accounts to ecosystem condition and ecosystem services in physical and monetary terms;
- Mainstreaming biodiversity and ecosystems into (sub)national policies;



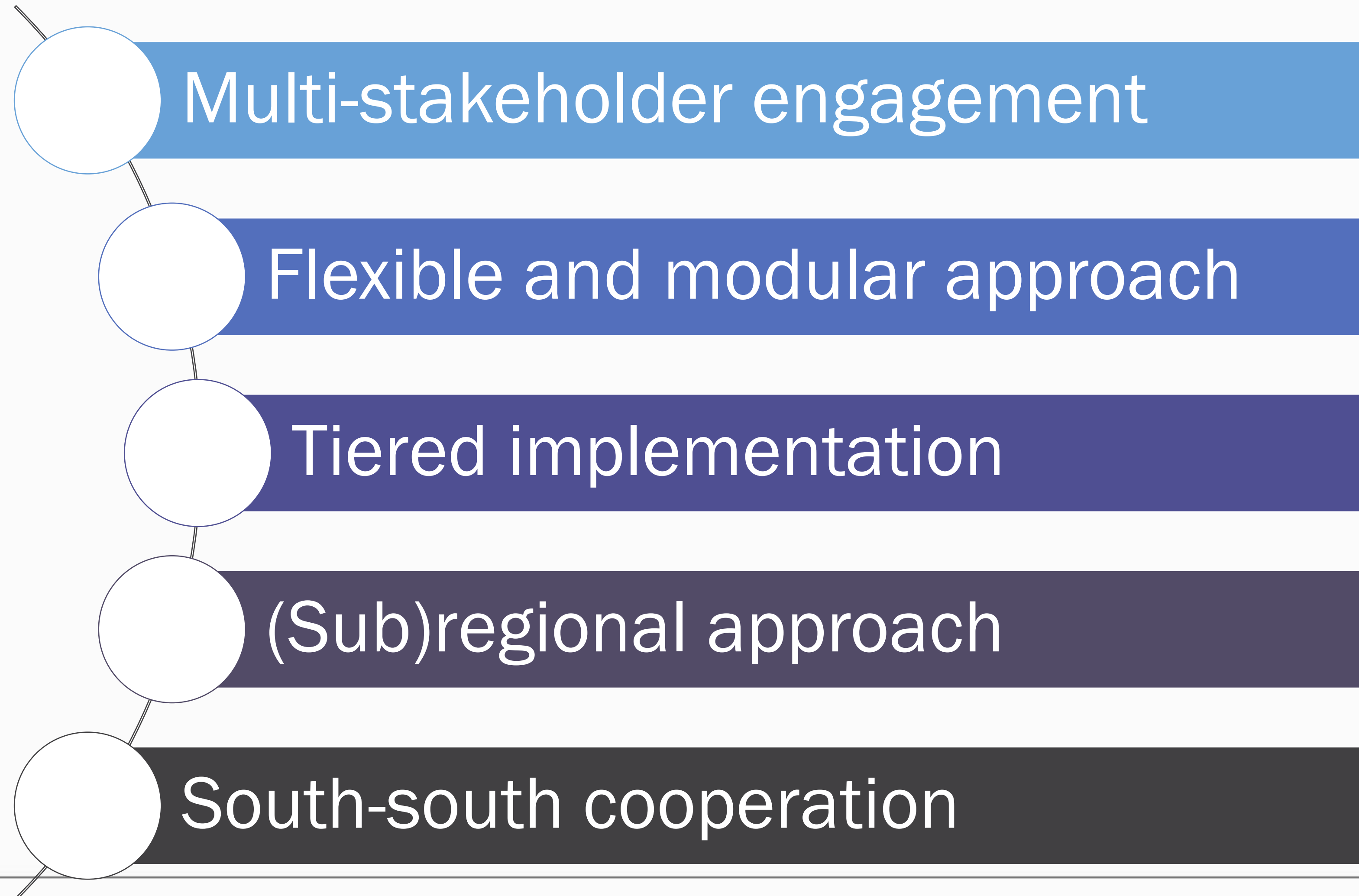
Convention on
Biological Diversity



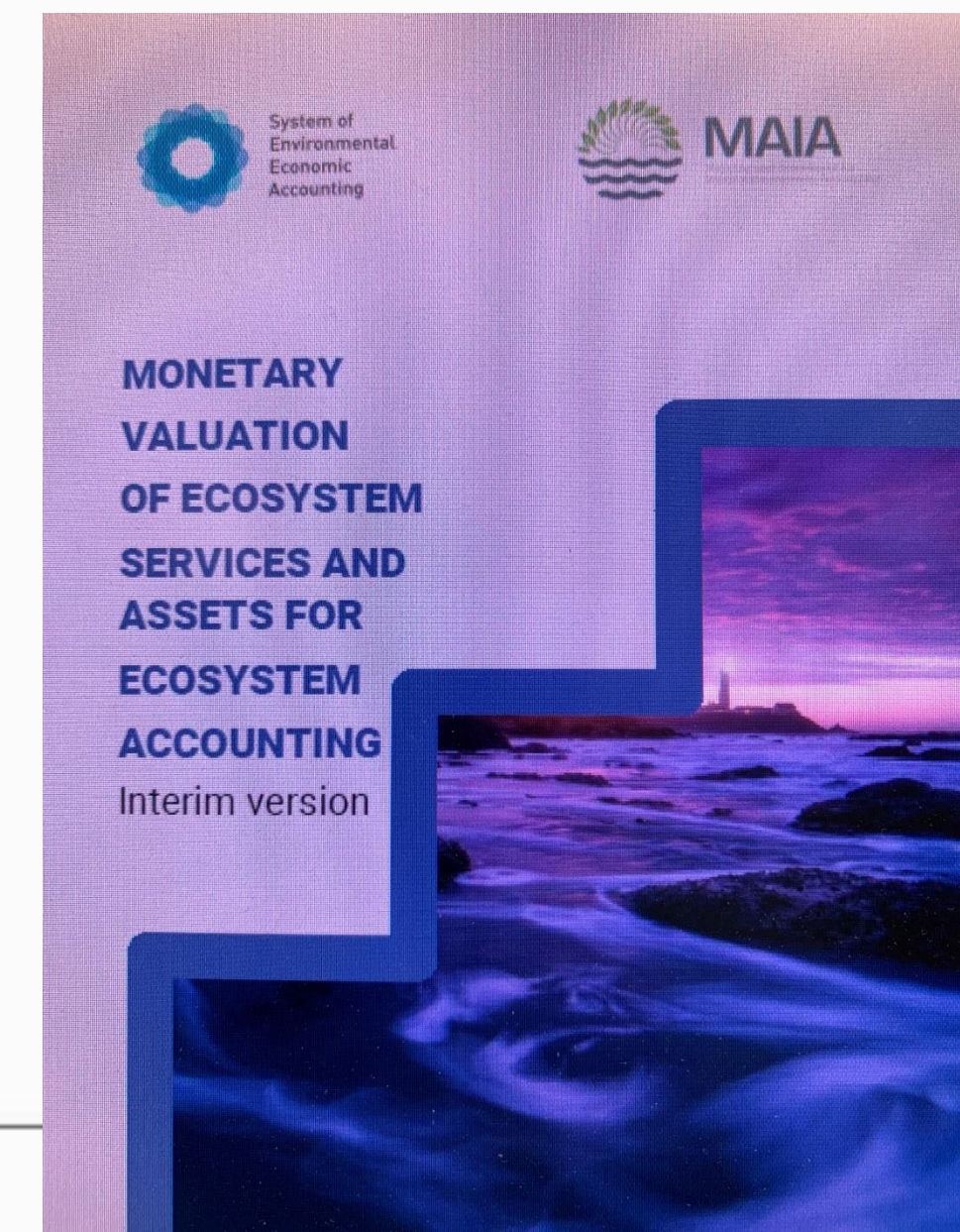
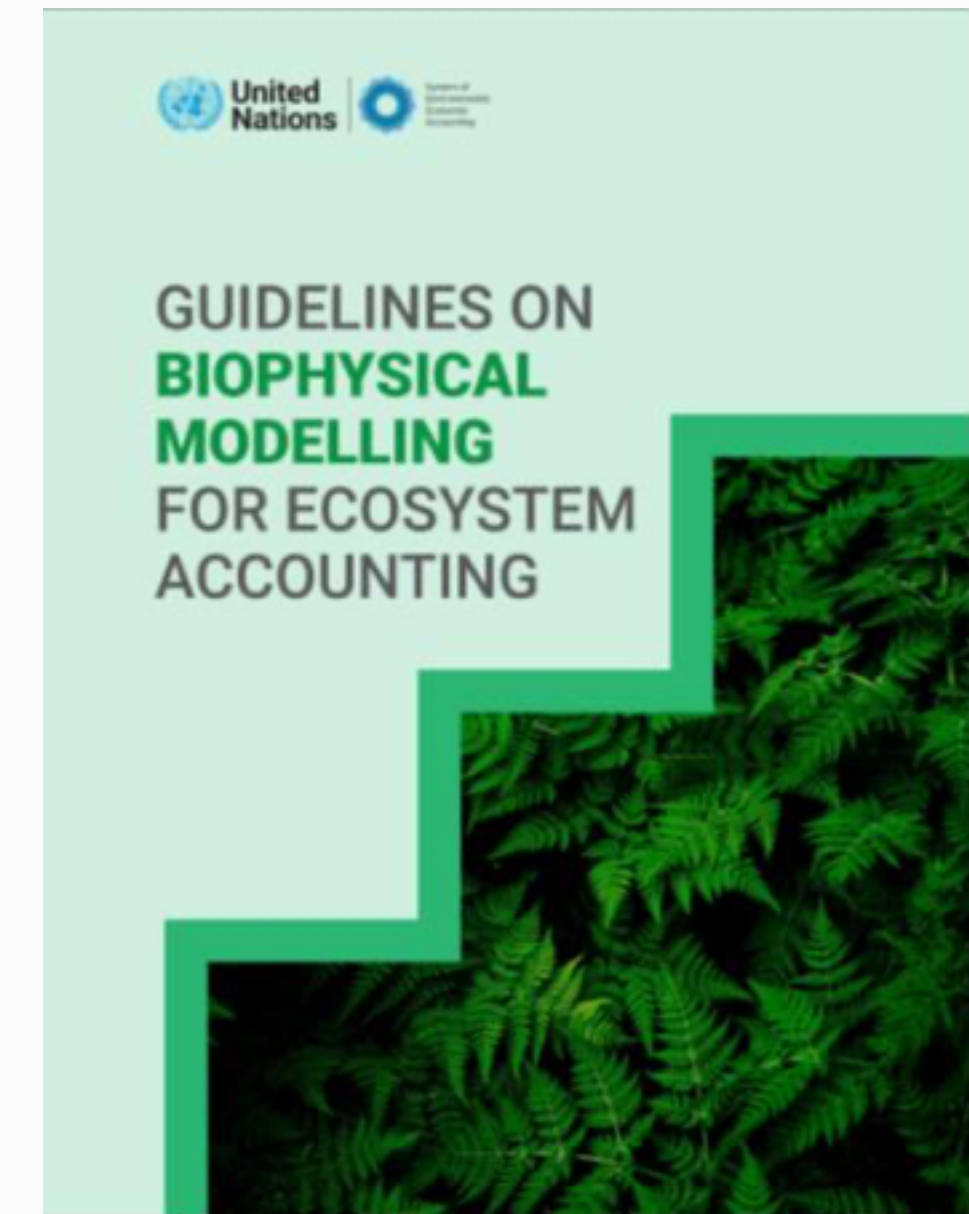
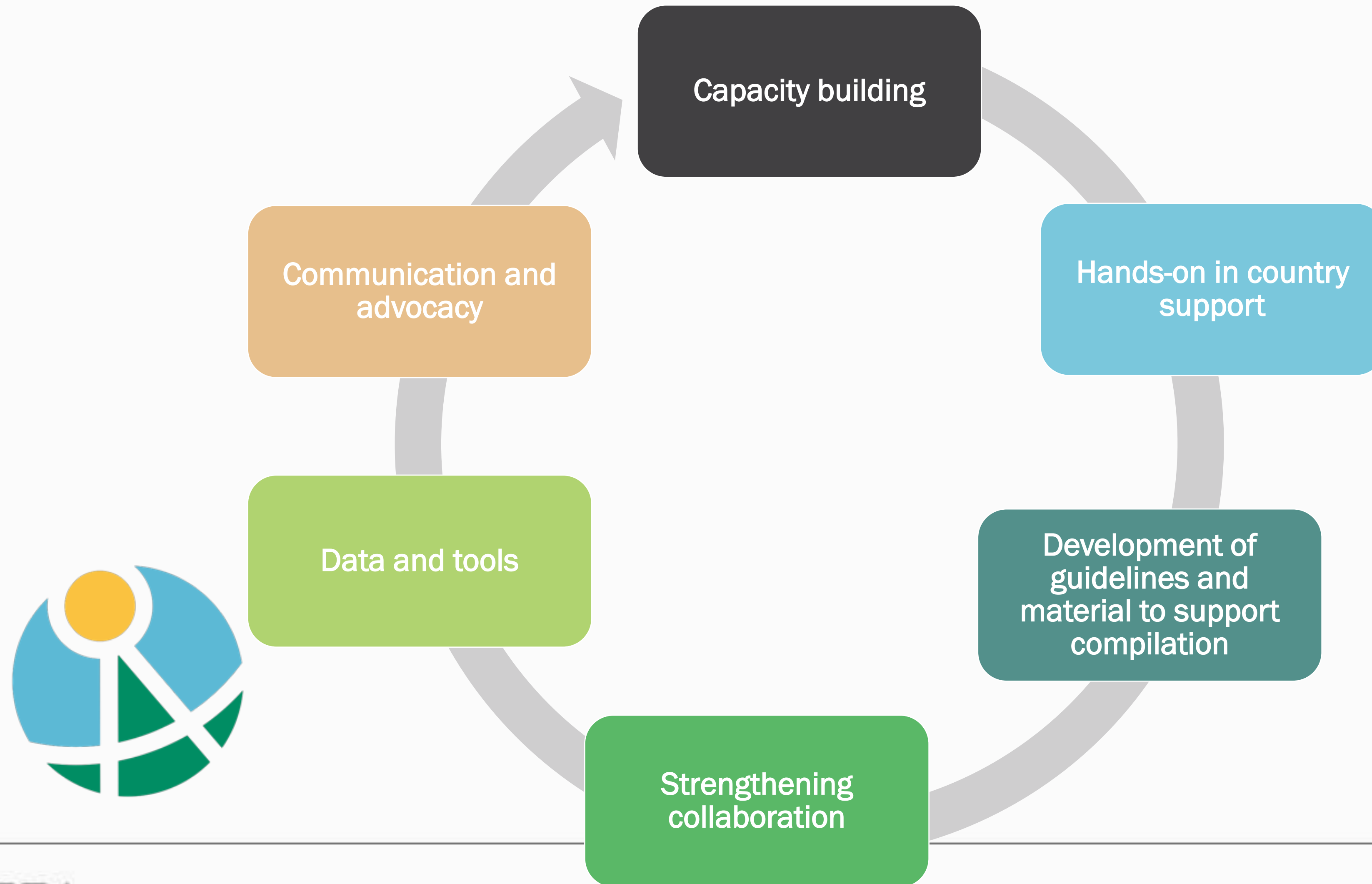
UNITED NATIONS DECADE ON
**ECOSYSTEM
RESTORATION**
2021-2030



Approach and main principles



Activities in support of the implementation



E-learning course on SEEA EA – available at seea.un.org

UNBigDataLearning UNGP LMS English (en) Julian Chow

SEEA EA (EN)

- Participants
- Competencies
- Grades
- Module 1 - Key concepts in Ecosystem Accounting
- Module 2 - Accounting for Ecosystem Extent
- Module 3 - Accounting for Ecosystem Condition
- Module 4 - Accounting for Ecosystem Services
- Module 5 - Valuation of Ecosystem Services and Ecosystem Assets
- Module 6 - Guidelines on Biophysical Modelling
- Module 7 - Compiling SDG indicators using SEEA EA
- Module 8 - Scenario Analysis and the SEEA

SEEA - Ecosystem Accounting (English) - NEW

Home / My courses / SEEA EA (EN) [Turn editing on](#)

Overview

This e-Learning course introduces the **System of Environmental Economic Accounting--Ecosystem Accounting (SEEA Ecosystem Accounting)**, the international statistical standard for organizing data about ecosystems, measuring ecosystem services, tracking changes in ecosystem assets, and linking this information to economic and other human activity. This is a new course as of May 2022, following the SEEA Ecosystem Accounting standard that was adopted by the UN Statistical Commission in March 2021.

Learning objectives: This course provides an overview of ecosystem accounting including details on, among others, spatial units, ecosystem condition, ecosystem services, valuation of ecosystem services, scenario analysis and compilation of indicators. By the end of the course, participants will be expected to:

1. Have a general understanding of the accounts presented in the SEEA EA and their relevance in policy;
2. Understand how spatial units of ecosystem types can be delineated and are used in accounting for compiling ecosystem extent accounts;
3. Understand the concepts and the general approach for the measurement of ecosystem condition and ecosystem services;
4. Describe how biophysical modelling can be applied for ecosystem accounting; and
5. Describe the purpose and approaches to the valuation of ecosystem services and ecosystem assets.

Target public: Target participants are staff of national statistical offices, line ministries, other agencies working on issues related to the environment and those interested in learning more about the SEEA Ecosystem Accounting.

Course length: The course is expected to take about 20 hours over the 8 modules. It is recommended that the learner follows one module per week, over an 8 week period.

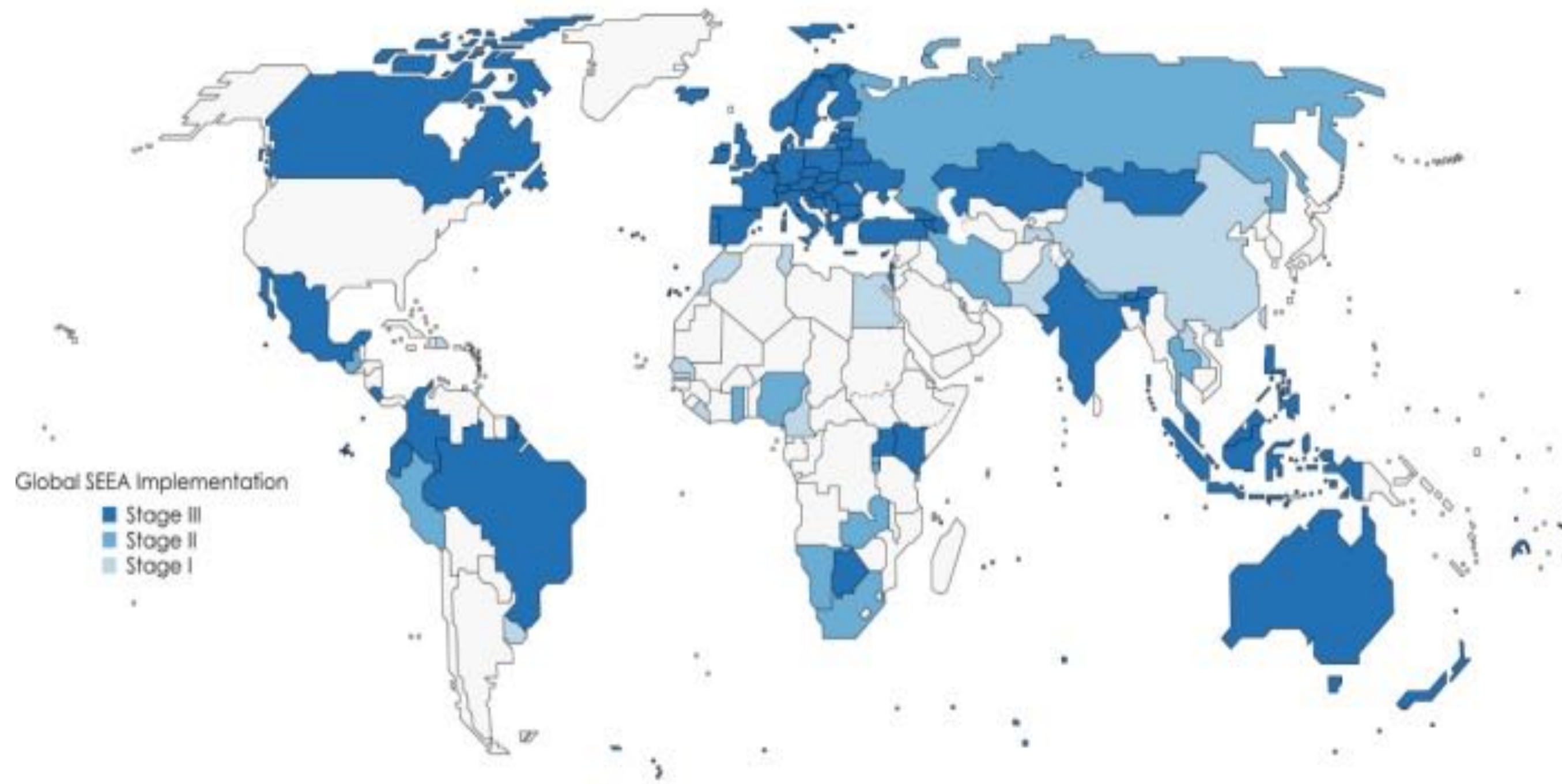
Module 1 - Key concepts in Ecosystem Accounting

Module 1

Module 2 - Accounting for Ecosystem Extent

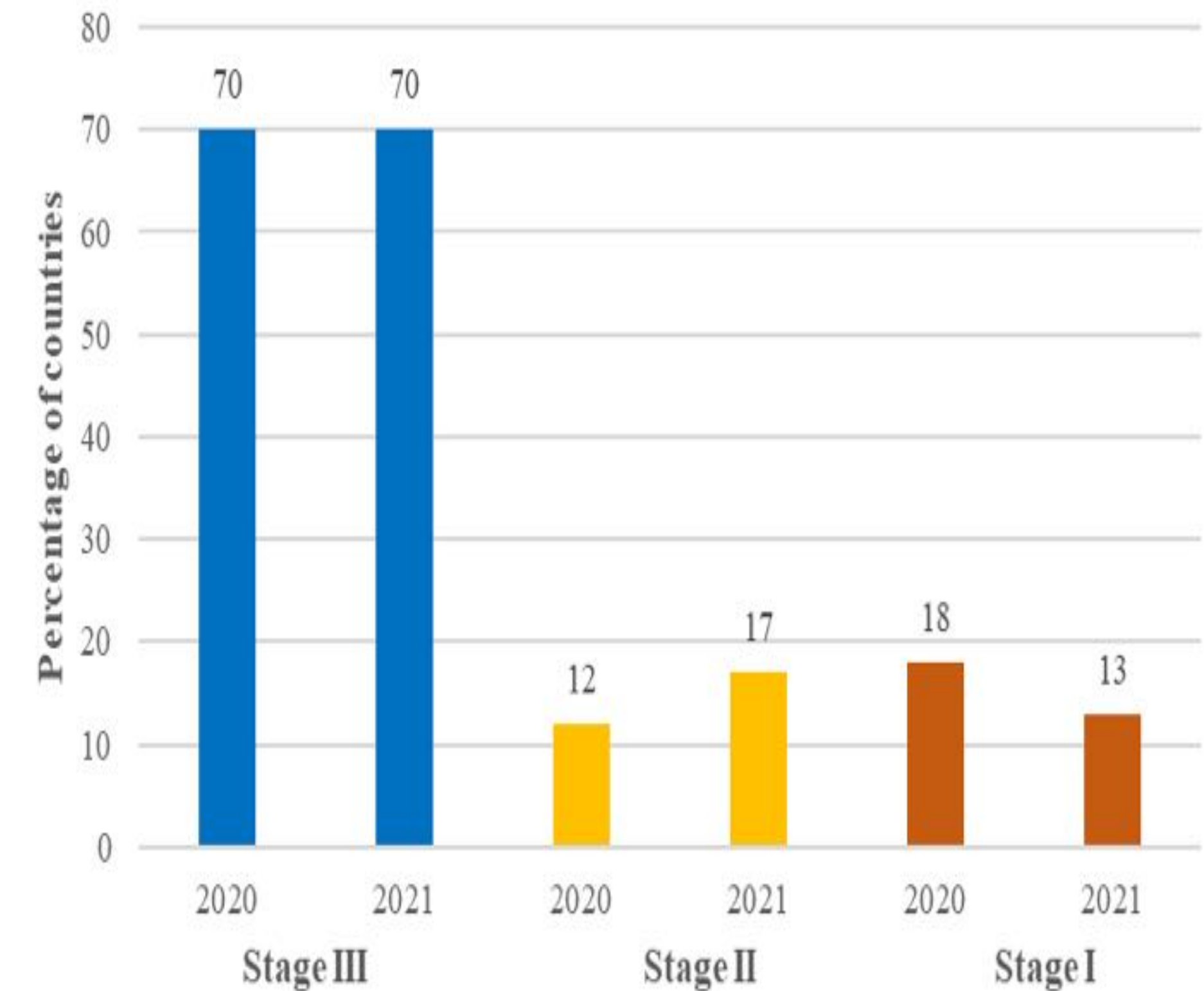
Module 2

SEEA Implementation



SEEA status of implementation 2021:

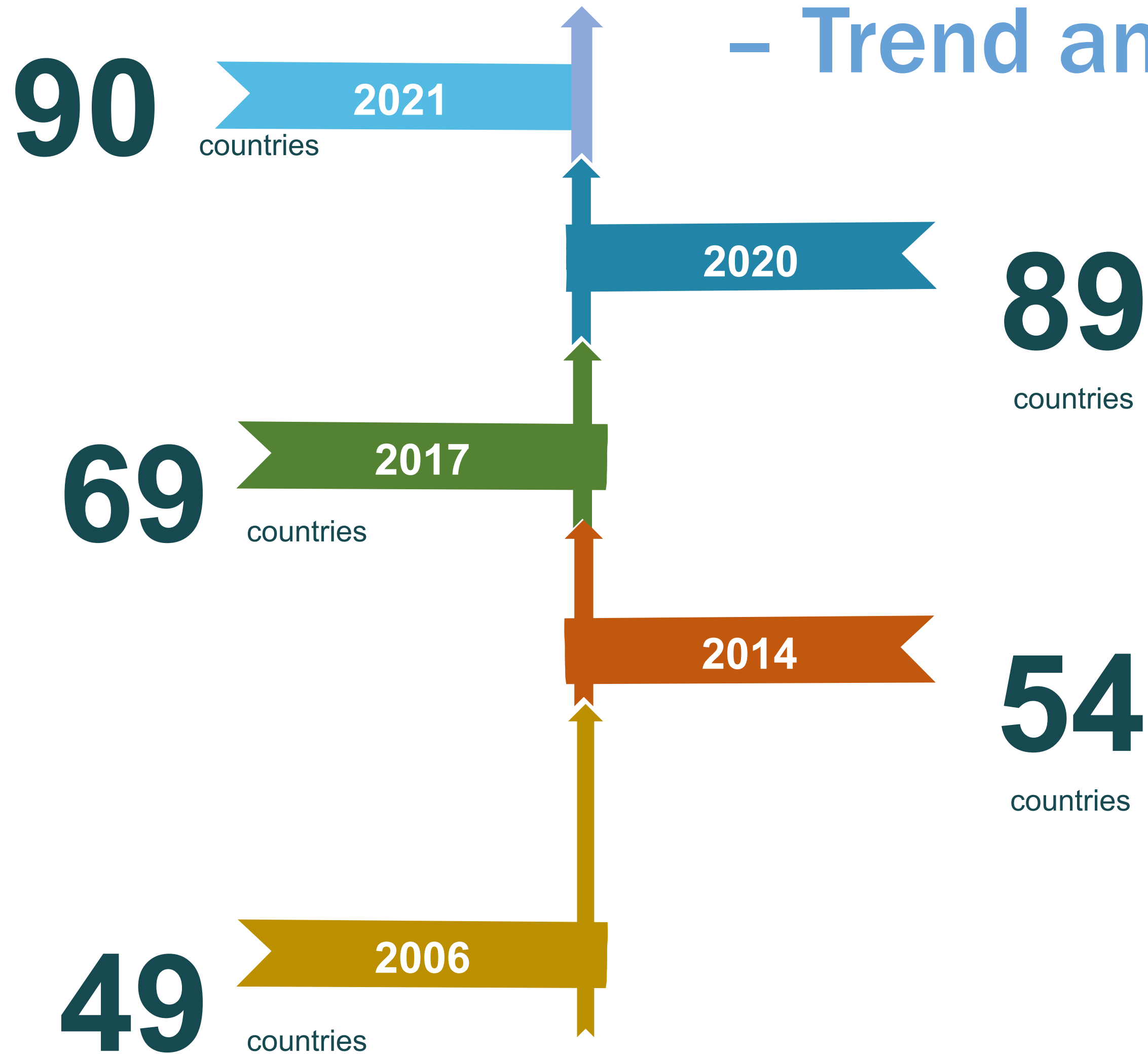
- 90 countries implementing the SEEA Central Framework*
- 37 countries compiling SEEA Ecosystem Accounts



Stage III: Regular compilation and dissemination
Stage II: Dissemination
Stage I: Compilation

Stages of SEEA Implementation

- Trend and geographical breakdowns

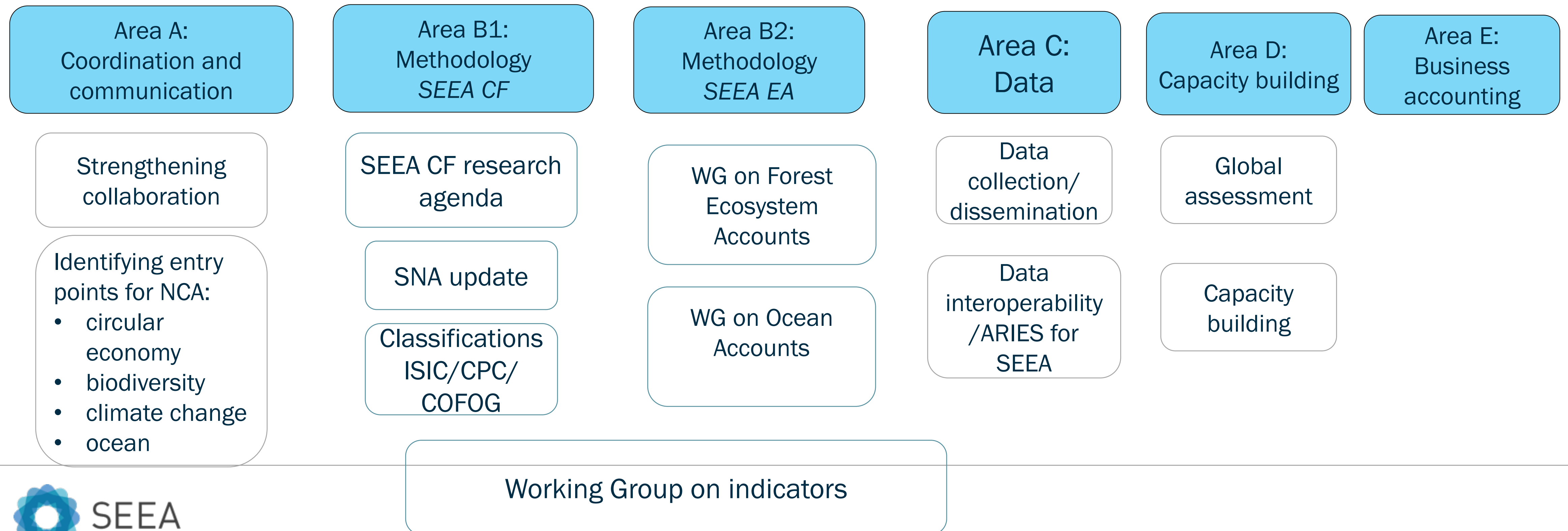


	Number of countries that compiled at least one account in the past five years (1)	Stage of implementation					
		Regular compilation and dissemination (Stage III)		Dissemination (Stage II)		Compilation (Stage I)	
		Number of countries (2)	Percentage of countries (2÷1)	Number of countries (3)	Percentage of countries (3÷1)	Number of countries (4)	Percentage of countries (4÷1)
All countries	89	62	70%	15	17%	12	13%
By geographical region:							
<i>Africa</i>	17	4	24%	7	41%	6	35%
<i>Central, Eastern, Southern and South-Eastern Asia</i>	14	7	50%	3	21%	4	29%
<i>Europe and Northern America</i>	38	36	95%	1	3%	1	3%
<i>Latin America and Caribbean</i>	8	5	63%	2	25%	1	12%
<i>Oceania</i>	5	4	80%	1	20%	0	0%
<i>Western Asia</i>	7	6	86%	1	14%	0	0%

SEEA - Governance mechanism

UN Committee of Expert on Environmental Economic Accounting (UNCEEA)

UNCEEA Bureau



Why SEEA?

- **Makes nature count** within economic planning and decision-making
- Develops a **common language** among disciplines that decision makers can relate to
- **Standardization is important** in order to obtain high-quality, and comparable statistics
- **SEEA catalyzes collaboration** due its multi-disciplinary nature between different stakeholders--statistical office and universities, line ministries, businesses, etc
- **Provides framework for deriving indicators** to support various monitoring and reporting frameworks such as post-2020 GBF, SDGs, climate change, green economy

THANK YOU

seea@un.org