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BIG DATA
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Informing Climate Change and
Sustainable Development Policies
with Integrated Data

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Introduction of the project and piloting SEEA ocean accounts in two Caribbean SIDS

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System of
Environmental
Economic
Accounting

Overall project introduction



United Nations

Project “Evidence-based Climate Action through Artificial Intelligence and Data Innovation for Caribbean SIDS ”

- Supporting countries in strengthening the institutional and technical capacity to leverage new data sources, AI, and data science, directly contributing to the monitoring and mitigation of climate impacts in the target countries
- Work with 4 Caribbean SIDS (TBD)
- Duration: 2025-2028
- Implementing entities: DESA/Statistics Division and UNCTAD/Statistics Service
- Project partners: ECLAC, FAO, IMO, UN Tourism and the Resident Coordinator Offices (TBD)

Project objectives

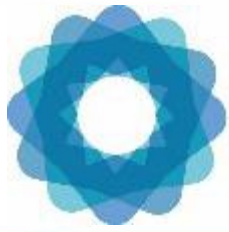
- The project will aim to **enhance the statistical and analytical capacities** of selected Caribbean nations in utilizing data science and AI in combination with novel and national sources for the timely monitoring of **maritime transport, tourism, trade, fisheries and ecosystem services** related to the coastal areas and the analysis of their CO2 emissions, as well as the associated **environmental-economic accounts**, to formulate and promote evidence-based national and regional **climate change and trade policies**.
- Two objectives:
 - > Reinforce the statistical and analytical capacities for monitoring of:
 - **maritime transport, trade, fisheries and related CO2 and other GHG emissions**
 - **contribution of the marine and coastal ecosystems to the blue economy**
 - > Enhance the analytical and evidence-based policy formulation capacities of the target countries

Outcomes and outputs (1)

1. Strengthen capacity of 2 countries to compile **ocean accounts related to coastal ecosystems** based on the SEEA:
 - a. Two national stakeholder workshops and technical capacity missions
 - b. Training materials, of e-learning courses and one regional in-person training on the SEEA methodology and ARIES for SEEA
2. Strengthen capacity of 2 countries to produce statistics on **maritime transport, trade, and fishery and their CO2 emissions**:
 - a. Two national stakeholder workshops and technical capacity missions
 - b. Desk study on methods for the use of AIS data in combination with national sources
 - c. Training materials, of e-learning courses and guidance materials on methods for the compilation of carbon footprint statistics for maritime transport and fishery
 - d. Dissemination and visualization platform and organization of one regional dissemination workshop

Outcomes and outputs (2)

3. Enhance analytical capacity of national authorities to **formulate evidence-based policies**:
 - a. Cross-country analytical diagnostic study on the sources and levels of CO₂ and other GHG emissions
 - b. Cross-country road map setting out relevant policy recommendations for decarbonizing the maritime transport sector and the fisheries value chains
 - c. Four national stakeholder workshops and technical capacity missions to share knowledge, resources, lessons learned
 - d. One regional lessons-learned workshop



System of
Environmental
Economic
Accounting

Compilation of SEEA ocean accounts for coastal ecosystems in 2 countries



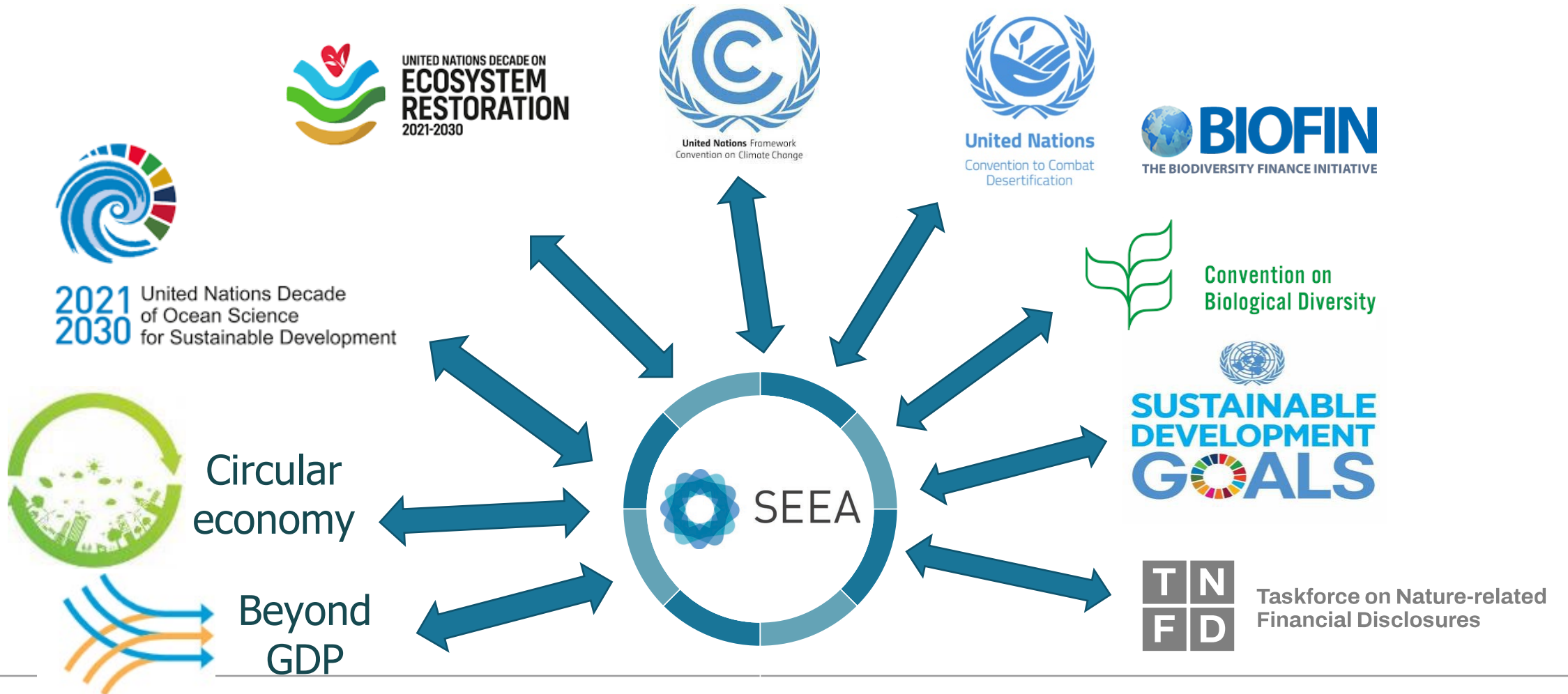
United Nations

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



The SEEA supports multiple ongoing initiatives



The SEEA as a unifying framework

- SEEA accounts integrate numerous data sources, combining economic information with environmental information on areas such as
 - Energy
 - Air emissions
 - Agriculture and forestry
 - Ecosystems and many more
- These data sources are combined to produce an integrated set of accounts and develop policy relevant indicators



SEEA – statistical standard for the environment



Adopted in 2012



Adopted in 2021



Brings together environmental and economic data using the same accounting principles of the SNA



Credibility, reliability, replicability of data



Consistency over time and space



Common language between different communities



Breaks down silos and fosters collaboration

One Environment: Two Perspectives



CENTRAL FRAMEWORK *Assets*



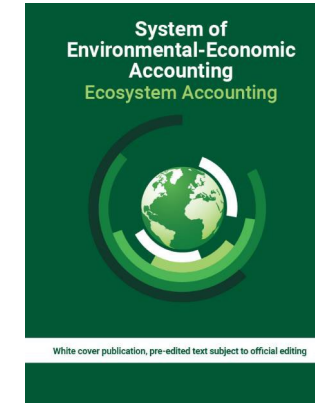
Timber



Water



Fish



ECOSYSTEM ACCOUNTING *Services*



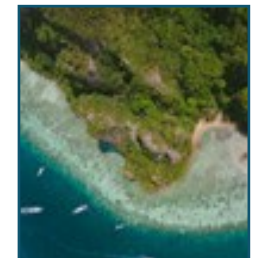
Forests

e.g. flood control



Rivers

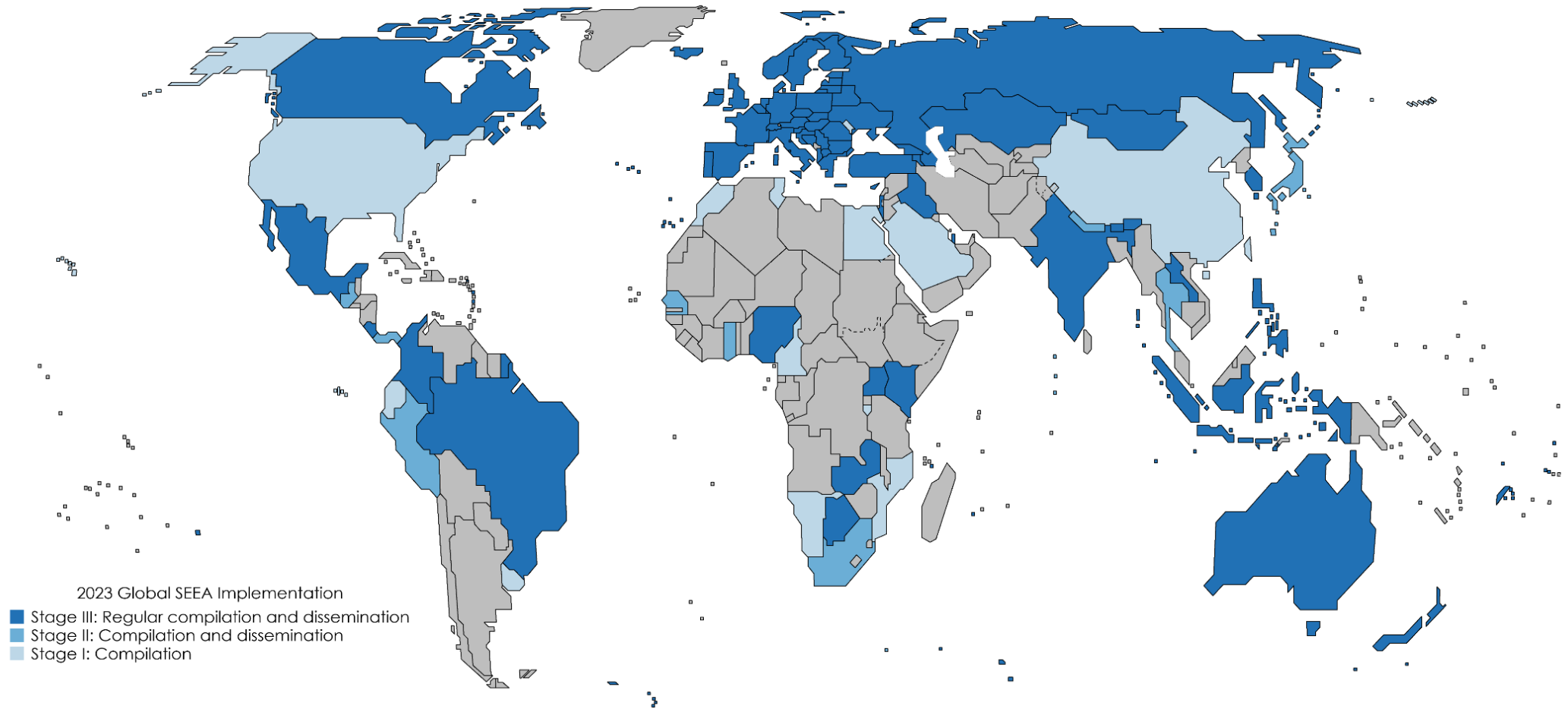
e.g. water purification



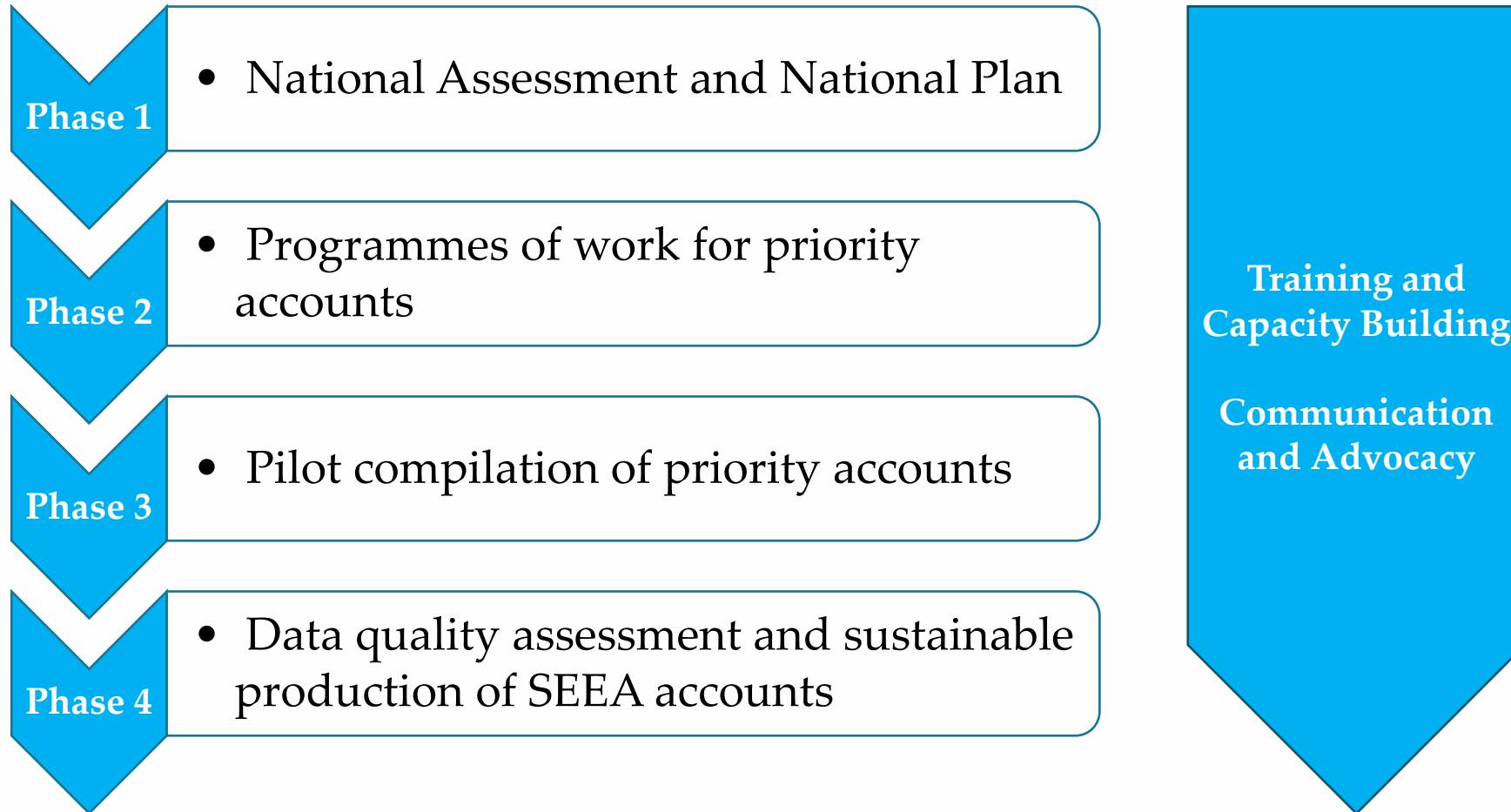
Coasts

e.g. recreation

SEEA implementation



Approach to national implementation on the SEEA



Proposed project activities in each country

- **Assessment of national policy needs and data availability** related to compilation of ocean accounts and coastal ecosystems
- Organization of a **national stakeholder engagement and hands-on training workshop**
 - > Establishment of a **national technical committee** consisting of relevant national agencies
 - > **Advocacy** among the national stakeholders
 - > Provide hands-on **technical assistance** and training on ocean accounts and ARIES for SEEA
- **Piloting** of compilation of one ocean account
 - > Assessment of data sources available
 - > Work with an expert/consultant in regular meetings
- Organization of a **national validation/dissemination workshop**
 - > Validation of the results with the stakeholders and public dissemination of the results
- **Institutionalization** of the accounting process

Project sustainability on the long term

- Sustainable production and application of environmental-economic accounts and indicators
- Formalizing the inter-agency platforms among stakeholders for data sharing and production of results
- Continued international support
- Mainstreaming the SEEA in the regular production process of the statistical system
- Use of accounts in evidence-based decision making

THANK YOU

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