

# Accounting for Climate and Biodiversity using SEEA – Overview of the NCAVES project

Julian Chow
United Nations Statistics Division



## Natural Capital Accounting and Valuation of Ecosystem Services (NCAVES)

- European Union funded project to pilot ecosystem accounts in five mega-biodiverse countries
- Project goals
  - Improving measurement of natural biotic resources, ecosystems and their services at the national and sub-national level
  - Mainstreaming biodiversity and ecosystems in policy-planning and implementation
  - Contributing to the development of internationally agreed methodology and its use in partner countries.











# 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





### Adoption of SEEA Ecosystem Accounting at UNSC

- ☐ A major milestone on accounting for biodiversity and climate change is the adoption of the revised SEEA Ecosystem Accounting in March 2021 by the UN Statistical Commission as:
  - The first international statistical standard to measure ecosystems, their condition and services (Chapter 1-7 physical accounts)
  - International recognized statistical priniciples and recommendations on monetary accounts and valuation of ecosystem services and assets (Chapters 8-11 on monetary valuation
- □ NCAVES project has contributed to SEEA Ecosystem Accounting through methodological development and pilot testing
- ☐ Important contributions by India, for example in the following areas
  - Condition accounts
  - Carbon retention approach
  - SEEA indicators



#### **NCAVES** in India

- ☐ Very successful: several publications with wide range of ecosystem accounts at national level
  - Annual SEEA reports from 2018 onwards features various thematic areas on natural resources, ecosystem, biodiversity and other cross-cutting areas.
  - First NCAVES India project report released in 2021
- ☐ NCAVES India National Forum, January 20201
- Development of NCA strategy in consultation with stakeholders (to be released)
- ☐ Pilot ecosystem accounts at sub-national level
  - In the State of Karnataka, a suite of ecosystem accounts is being developed led by the Indian Institute of Science assessing a range of ecosystem services.
  - The state of Karnataka has been identified in a landscape assessment (See: <a href="https://seea.un.org/sites/seea.un.org/files/india\_assessment\_2019.pdf">https://seea.un.org/sites/seea.un.org/files/india\_assessment\_2019.pdf</a> pages 55/56 ): due to a. good data availability, strong technical capacity within local research institutes, and policy interest in using an accounting approach.
  - The idea of the subnational pilot was to pilot more in depth study (as India such a large country), and assess how such an approach could be scaled up across other states
- ☐ More information at <a href="https://seea.un.org/content/natural-capital-accounting-and-valuation-ecosystem-services-india">https://seea.un.org/content/natural-capital-accounting-and-valuation-ecosystem-services-india</a>



#### **Accounting for Climate and Biodiversity**

- ☐ International mandate SEEA to account for climate and biodiversity
  - Adoption of the resolution "Accounting for biodiversity: encompassing ecosystems, species and genetic diversity" (WCC-2020-Res-057-EN), as part of the IUCN World Congress 2020.
     https://portals.iucn.org/library/sites/library/files/resrecfiles/WCC 2020 RES 057 EN.pdf
  - Adoption of the SEEA Ecosystem Accounting at the 52th session of the UN Statistical Commission
     <a href="https://unstats.un.org/unsd/statcom/52nd-session/documents/decisions/Draft-Decisions-Final-10March2021.pdf">https://unstats.un.org/unsd/statcom/52nd-session/documents/decisions/Draft-Decisions-Final-10March2021.pdf</a>
  - SEEA is considered as one of the measurement framework for the Post-2020 Global Biodiversity Framework

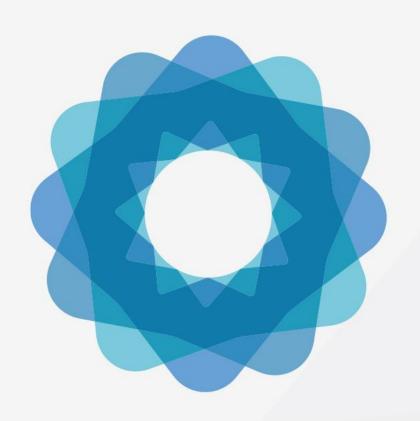
https://www.cbd.int/doc/c/d716/da69/5e81c8e0faca1db1dd145a59/wg2020-03-03-add1-en.pdf.

- ☐ Biodiversity means climate
  - SEEA Ecosystem Accounting: Chapter 13 / thematic accounts, includes a section on Climate change. For example carbon account.
  - Karnataka has also assessed global climate regulation services (carbon sequestration and storage) using the SEEA approach



## SEEA-related climate indicators in the post-2020 global biodiversity framework

Proposed goal or target	Proposed idicators
Goal B. Nature's contributions to people have been valued, maintained or enhanced through conservation and sustainable use supporting the global development agenda for the benefit of all.	B.0.1 National environmental economic accounts of ecosystem services*
Target 8. Minimize the impact of climate change on biodiversity, contribute to mitigation and adaptation through ecosystem-based approaches, contributing at least 10 GtCO2e per year to global mitigation efforts, and ensure that all mitigation and adaptation efforts avoid negative impacts on biodiversity	8.0.1 National greenhouse gas inventories from land use and land use change
Target 11. Maintain and enhance nature's contributions to regulation of air quality, quality and quantity of water, and protection from hazards and extreme events for all people	11.0.1 National environmental-economic accounts of regulation of air quality, quality and quantity of water, and protection from hazards and extreme events for all people, from ecosystems



System of Environmental Economic Accounting