Using the SEEA for Monitoring and Informing the Global Biodiversity Framework in Canada: The importance of inter-institutional collaboration

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Presentation outline

- 1. Overview of SEEA in Canada
- 2. Collaboration Principles for Environmental Accounting
- 3. Collaboration and the Global Biodiversity Framework
- 4. Why is SEEA useful for the GBF

Overview of SEEA at Statistics Canada



Accounting program

- Natural resource asset accounts
- Physical flow accounts GHG, water, energy, plastics
- Physical flows by final demand
- Environmental tax statistics
- Environmental and clean technology products economic account
- Ecosystem accounts extent, condition and services
- Satellite accounts linkages (e.g. tourism, housing, infrastructure, and natural resources)

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Survey programs

- Water Agriculture, Industrial use, Drinking water
- Households and Environment
- Farm Management
- Environmental Goods and Services
- Environmental Protection Expenditures
- Solid Waste
- ...

For more information:

Statistics Stati

Methodological Guide: Canadian System of Environmental-Economic Accounting (statcan.gc.ca)

- **1. Capitalize on external collaboration** with key federal departments and other organizations to fully leverage existing external datasets, platforms and respond to policy needs (inter-institutional collaboration)
- **2.** Leverage existing NSO capacity to maximize analytical output, including the full leveraging of existing initiatives and data sets (intra-institutional collaboration)
- 3. Avoid duplication of workstreams but maximize the benefits of overlaps



1. Capitalize on external collaboration with key federal departments and other organizations to fully leverage existing external datasets, platforms and respond to policy needs (inter-institutional collaboration)

Inter-Institutional collaboration is key because

- 1. Some accounts rely on externally produced data sets
 - E.g. Natural Asset Account for Subsoil Assets, Physical Flow Account for Plastic Material
- 2. Some accounts benefit on the coordination of communications to the public
 - e.g. Physical Flow Accounts for GHG
- 3. Many accounts rely on collaboration to develop measurement concepts and methods, as well as data sources.
- 4. Etc.



2. Leverage existing NSO capacity to maximize analytical output, including the full leveraging of existing initiatives and data sets (intra-institutional collaboration)

Intra-Institutional collaboration is also key because

- 1. Some accounts rely on a variety of techniques to model or analyse externally produced data, and therefore benefit from various expertise available elsewhere in the organization
- 2. Some accounts rely on the survey results and other data sources from the NSO
 - e.g. Environmental and Clean Technology Products Economic Account, Physical flow account for energy use, etc)

• Etc.



3. Avoid duplication of workstreams but maximize the benefits of overlaps

In order to achieve this, collaboration is a required investment because:

- 1. The inter- and intra-institutional collaboration is required in order to minimize duplication, maximize overlap and ensure that the account are produced as efficiently as possible, with the maximum pickup by all stakeholders
- 2. Applying this principle fosters the sharing of information on lessons learned, methodological development, new data, etc, which benefits everyone.

3. Etc.



Collaboration Principles for SEEA: In practice in Canada

Inter-institutional

- . Environment and Climate Canada
- Agriculture and Agri-Food Canada
- . Natural Resources Canada
- . Fisheries and Oceans Canada
- . Federal Geospatial Platform
- . Open Science Data Platform
- Academic Institutions
- Non-Government Organizations (NGOs)
- . Convention on Biological Diversity (CBD)
- . United Nations Statistics Division (UNSD)
- . Global Ocean Accounts Partnership (GOAP)

Intra-institutional

- Statistical Geomatics
- Informatic Technologies
- Communications
- Dissemination
- Center for Indigenous Statistics

Canada

- Data Science
- Data Analytics
- Census of Population
- Etc.



Etc.

Collaboration and the Global Biodiversity Framework: Targets

StatCan Co-lead

- Target 11. Ecosystem Services and Functions
- Target 14. Mainstreaming of Biodiversity Values

StatCan Supports

- Target 1. Land- and Sea-Use Change
- Target 2. Ecosystem Restoration
- Target 3. Protected and Conserved Areas
- Target 8. Climate Change and Biodiversity
- Target 12. Urban Green and Blue Spaces
- Target 16. Sustainable Consumption
- Target 21. Knowledge Sharing

Target 11:

Last Thursday, April 11, we released a tabulation on ecosystem services that includes data from several other stakeholders:

- Department of Fisheries and Oceans
- StatCan Agriculture Division
- Natural Resources Canada National Forestry database

Target 14

The Mainstreaming Target has no accepted headline indicator. However, the number of biodiversity-related data tables, and the count of references in the literature, in policies, and in the media is a good indication of the mainstreaming of biodiversity values.



Collaboration and the Global Biodiversity Framework: Goals

- Goal A: The integrity, connectivity and resilience of all ecosystems are maintained, enhanced, or restored, substantially increasing the area of natural ecosystems by 2050
 - A.2 Extent of Natural/seminatural ecosystems
 - Closely tied to the SEEA EA extent and condition accounts

- Goal B: Biodiversity is sustainably used and managed and nature's contributions to people, including ecosystem functions and services, are valued, maintained and enhanced
 - B.1 Ecosystem Services

Closely tied to the SEEA EA Services and benefits accounts



Why is SEEA useful for the GBF

- 1. Encourages consistency in concepts and terminology
 - Nationally, between ministries, agencies, academic and research institutions and other, but also internationally between countries
- 2. Support the integration with other socio-economic data
 - The National Statistical Office produces its own data, but the National Statistical System gathers many of the relevant datasets
- 3. Encourages international collaboration
 - Sharing best practices, methodologies, and data standards for SEEA implementation, fostering a
 global community of practice and advancing the development of environmental accounting
 worldwide.
- 4. Fosters capacity building
 - By sharing best practice with NSO worldwide
 - By involving stakeholders, including policymakers, statisticians, researchers, and practitioners, in understanding and utilizing the SEEA framework





Thank you



