Short notes on Testing Selected SDG Indicators Using SEEA EEA

1 Introduction

The objective of the indicator workstream for the Natural Capital Accounting and Valuation of Ecosystem Services (NCAVES) project is to develop a systematic and consistent approach on the use of SEEA accounts to derive sustainable development indicators for national and global reporting purpose. By demonstrating the usefulness of the SEEA accounts to derive policy relevant indicators, this workstream contributes to the mainstreaming of the use of ecosystem accounts in national and local level policy-planning and implementation.

As part of the NCAVES project activities, countries are encouraged to undertake pilot testing of a selected set of SDG indicators using the SEEA EEA. To date, the following two working documents have been draft to provide guidance in this area.

- *An assessment report "Assessing the linkages between global indicator initiatives, SEEA Modules and the SDG Targets"* [1] that review the linkage of SEEA with various global indicator initiatives assessment
- A guidance document *"Using the SEEA EEA for Calculating Selected SDG Indicators"* that provides an overview of the steps required to implement a national programme of work for indicators, and method notes on compiling SEEA EEA accounts for specific SDG indicators

The assessment report identified that ecosystem extent is a key determinant in a number of the SDG indicators. This is because it is relatively easy to measure and provides a good indicator for wider sustainable development concerns. For example, extent of freshwater ecosystems is a good proxy for water provisioning services. Forest extent is a good proxy for conservation of forest biodiversity and the delivery of forest ecosystem services.

From this assessment, four SDG indicators have been identified as priorities for testing their calculation using the SEEA. All of these indicators draw completely (or substantially) on information in the SEEA EEA ecosystem extent accounts. They comprise:

- **SDG Indicator 15.1.1** – Forest area as a proportion of total land area.
- **SDG Indicator 6.6.1** – Change in the extent of water-related ecosystems over time.
- **SDG Indicator 11.7.1** – Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities.
- **SDG Indicator 15.3.1** - Proportion of land that is degraded over total land area.

Method notes in the guidance document provide an overview of how to compile a set of SEEA EEA accounts to support the calculation of these four SDG indicators (provided alongside this testing note). The method notes are intended to provide suitable accounting structures to organize information, and a broad overview of associated measurement approaches and data sources to compile relevant accounts and calculate the indicators.

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[1] https://seea.un.org/sites/seea.un.org/files/seea_global_indicator_review_methodological_note_post_workshop_0.pdf

This short note is intended to support the NCAVES pilot countries in testing these method notes to the degree possible, given the different accounts each country is producing. The objective of the testing process is to better understand the feasibility of implementing the method notes and identify the key issues associated with such implementation. Ultimately, the aim is to capture lessons learned and best practices for compilation. This will allow the method notes to be imporved and support other countries interested in implementing them to calculated the SDG Indicators, including providing case study examples.

2 General testing approach

The general testing approach is grounded in the compilation of ecosystem extent accounts, supplemented by additional data where necessary. The method notes use the IUCN Global Ecosystem Typology to provide concrete ecosystem extent account examples and how they can be used to support the SDG indicators calculation. However, it is anticipated that countries will choose appropriate national ecosystem typologies for testing based on their national circumstances. As such, there is no need to align these national ecosystem typologies to the IUCN Global Ecosystem Typology when implementing the testing approach.

The testing approach is set out in three parts, reflecting the increasing complexity and specificity of calculating each of the four SDG Indicators. SDG indicator 15.3.1 is most complex, given that it requires calculations of three sub-indicators and their integration in a spatially consistent fashion. Please provide testing results and summarise your feedback from testing the method notes in a short report, covering all indicators tested by the 30th September 2020.

2.1 Testing SDG indicators 15.1.1 and 6.6.1.

It is anticipated that all countries will be able to test the calculation of these two indicators.

1) **Identify current indicator reporting processes.** Please contact the national focal point for both SDG Indicators and find out how the indicator is currently reported on. Specifically:
    - **a.** Which institution reports on the indicator?
    - **b.** How is it calculated (i.e., is the national version different from the global)?
    - **c.** What national data is used?
    - **d.** What global data is used?
    - **e.** What data processing is employed? (e.g., global platforms such as the freshwater ecosystems explorer, https://www.sdg661.app/, national data infrastructures, spreadsheet analysis, GIS tools, etc.)
2) **Identify forest and water related ecosystem types.** Based on the national classification for ecosystems that is being used for SEEA ecosystem accounting, please indicate which types were identified for reporting on forest and water-related ecosystems.
3) **Quantify the extent** based on your most recent ecosystem extent account. If this is not possible, explain why not.
4) **Calculate the SDG 15.1.1 and 6.6.1 indicators** using the information in the ecosystem extent accounts and the equations set out in the method notes. Please pay attention to how 'Total land area' for SDG 15.1.1 is calculated. Please identify any barriers or issues encountered when calculating these indicators.

5) **Aligning the SEEA and SDG indicators,** please review the definition of forest and water-related ecosystems set out at the beginning of the method notes. Please identify any national ecosystem types where alignment with this definition is unclear. Please review the bridging tables proposed in the method note to help achieve an alignment between the SEEA ecosystem extent account information and these definitions. If possible please create a bridging table for each indicator, if not please identify the main barriers to doing so.
6) **Identify any other issues you encountered**
7) **Identify and key lessons learned and specific recommendations on how the method notes could be improved in light of this.**
8) **Provide a summary** of testing results with feedback on the above in the short report covering all indicators tested.

2.2 Testing SDG indicator 11.7.1.

Countries interested in implementing urban ecosystem extent accounts are encouraged to test the calculation of this indicator.

1) **Identify current indicator reporting processes.** Please contact the national focal point for the SDG Indicator and find out how the indicator is currently reported on. Specifically:
    a. Which institution reports on the indicator?
    b. How is it calculated (i.e., is the national version different from the global)?
    c. What national data is used?
    d. What global data is used?
    e. What data processing is employed? (e.g., global platforms, national data infrastructures, spreadsheet analysis, GIS tools, etc.)
2) **Defining an urban ecosystem accounting area.** Please summarize the process and data employed in defining the boundary for the urban ecosystem accounting area and how you are organizing spatial data in this area.
3) **The typology for urban ecosystem assets.** Please summarize the ecosystem typology you have applied for compiling urban ecosystem extent accounts and how it aligns to that set out in the method note. Please also summarize the reasons for your choice of typology.
4) **Calculate the SDG 11.7.1 indicator** using the information in the urban ecosystem extent accounts and the two equations set out in the method note. Please identify any barriers or issues encountered when calculating this indicator, and provide feedback on the two calculation methods.
5) **Aligning the SEEA and SDG indicators,** please review the bridging table proposed in the method note to help achieve an alignment between the SEEA urban ecosystem extent account information and the definition of open space under SDG 11.7.1. Do you think such a table is required for your situation? Please summarize why or why not such a table is required, for instance have you included fringe areas in your accounting area or open spaces >200 ha?
6) **Identify any other issues you encountered**
7) **Identify and key lessons learned and specific recommendations on how the method notes could be improved in light of this.**
8) **Provide a summary** of testing results with feedback on the above in the short report covering all indicators tested exercise.

2.3 Testing SDG indicator 15.3.1.

Countries interested in accounting for land degradation are encouraged to test the calculation of this indicator.

1) **Identify current indicator reporting processes.** Please contact the national focal point for the SDG Indicator and find out how the indicator is currently reported on. Specifically:
    a. Which institution reports on the indicator?
    b. How is it calculated (i.e., is the national version different from the global)?
    c. What national data is used?
    d. What global data is used?
    e. What data processing is employed? (e.g., global platforms such as trends.earth, national data infrastructures, spreadsheet analysis, GIS tools, etc.)
2) **Measuring the land cover change sub-indicator.** Please confirm the ecosystem changes you have identified as indicative of degradation or improvement from a land degradation perspective and the reasons for your choice. Are there any significant issues calculating this indicator using the ecosystem change matrix that can be produced when compiling the ecosystem extent accounts?
3) **Measuring the ecosystem condition sub-indicators.** Please summarize the process and data employed in measuring the land productivity and carbon stock sub-indicators. Have you used these data to inform ecosystem condition accounts? What are the key barriers to regular measurement of these condition indicators? How do you propose to integrate this information with information on land cover cahnge?
4) **Compiling the land degradation summary table.** Is it possible to compile the land degradation summary table using the information on the three land degradation sub-indicators you have organized?
5) **Calculate the SDG 15.3.1 indicator** set out in the method note using the information in the land degradation summary table or organized via your accounts or supporting data infrastructure. Please identify any barriers or issues encountered when calculating this indicator. Is land degradation summary table helpful for calculation or presentation? Did you calculate the indicator without compiling this land degradation summary table?
6) **Summarise data used:** National data used is ideal, please describe any national data sources and where global data has been used to plug gaps.
7) **Identify any other issues you encountered**
8) **Identify and key lessons learned and specific recommendations on how the method notes could be improved in light of this.**
9) **Provide a summary** of testing results with feedback on the above in the short report covering all indicators tested.