



System of
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Economic
Accounting

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Area B2: SEEA Experimental Ecosystem Accounting

Establishing SEEA EEA as a statistical standard

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The SEEA Experimental Ecosystem Accounting (SEEA EEA) was endorsed in 2013 by the United Nations Statistical Commission. The SEEA EEA 2013 reflected the state of the art in ecosystem accounting. Since 2013 there has been a lot of experimentation and engagement with the broader community. The demand for an agreed framework for ecosystem accounting led to the decision of the UNSC in 2017 to support a revision of the SEEA EEA with the objective of reaching an agreement on concepts and methods and the ambition to elevate the SEEA EEA to a statistical standard. This note considers the motivation, potential, challenges and pathways for establishing SEEA EEA as a statistical standard at the UNSC meeting in March 2021.

Motivation

The uptake of SEEA EEA since its release in 2013 has been exceptional. Pilots are underway in a wide range of countries, there is support from multiple international initiatives, and willingness from various community to align their efforts, including developing of databases in line with the SEEA EEA. The SEEA EEA seems to have filled a vacuum of establishing an organizing framework for information on ecosystems using agreed concepts and methodologies which allows integration of information from different sources adding values to the individual data sets. Ecosystem accounts is considered highly policy relevant in many contexts. While this work might be suitably supported in a technical sense without a statistical standard there are some specific reasons why adoption as a standard would make a credible difference:

- It would embed a common language around the discussion of ecosystems and biodiversity from a measurement perspective
- It would help reduce drift in the application of ecosystem accounting related approaches which without a standard can rationalize variations at low cost
- It can serve as a catalyst to integrate data sources, especially global geo-spatial data sources
- It can demonstrate the potential of harmonized techniques to the corporate sector where work on natural capital accounting is relatively more diverse. This in turn can serve to put in place the micro-macro data linkages that are inherent to any statistical system.

Overall, we are at a unique point in the development process where the injection of an agreed standard could play a foundational role in advancing the measurement of environmental-economic connections. Establishing SEEA EEA as a statistical standard would highlight to other sectors and disciplines the potential for statisticians to play a key role in addressing the reality of environmental decline. The time is right to have a statistical standard for measuring ecosystems. 2020 is an important year: the SDG indicators are being reviewed, the Conference of Parties (COP) on Biodiversity will agree on the Post 2020 Biodiversity Framework and the COP on climate change will also come up with important changes. The statistical community has an important role to play in the development of measurement frameworks supporting these policy initiatives. The SEEA EEA is increasingly being recognized as playing an important role in the development of indicators and mainstreaming of biodiversity and ecosystems into policy.

Potential

The question of what constitutes a statistical standard in terms of technical advance is difficult to answer. Clearly no statistical standard can be considered the final word, the System of National Accounts has been revised multiple times over 70 years. The SEEA EEA 2021 will not be the last word in the measurement of ecosystem accounting but will provide a solid basis for implementation which all communities can use to further develop and experiment. There is an opportunity now to leverage the demand for information on the environment and the experience and knowledge of the various community and steer it towards an agreed framework which can support further development. The ambition of elevating the SEEA EEA to a statistical standard is in line with the current thinking of adopting an agile approach to the development of standards. The statistical community needs to be responsive and develop agreed methodologies, which will be further developed in time. The SEEA EEA will provide the NSO with a tool to play the role of data steward coordinating and leveraging on the expertise of different communities to develop an integrated information system on the environment for which there is high demand. The possible revision of the SEEA CF and integration into a single SEEA provides an opportunity to further update the ecosystem accounts concepts, if needed, within a reasonable time frame.

The key issue is therefore to what extent are the concepts and definitions widely agreed and measurable, accepting that improvements will be made progressively over time. Two key advances have occurred since the release of SEEA EEA in 2013. First, there has been extensive testing of the ecosystem accounting framework with now more than 30 countries have testing and implementation activity, including a wide array of developed and developing countries. The approach is also being applied in multiple research projects and by environmental NGOs and at corporate level. All progress to date demonstrates that measurement is feasible – the recent release of national level accounts for all ecosystem accounts for Guatemala from the 1990s to 2016 is proof of this.

Second, since 2013 there has been very effective engagement with the multiple communities and disciplines whose expertise is required to describe a technical document with the appropriate level of rigour. While the original broad framing of the 2013 version has not changed – there have been substantive advances in the inclusion of geospatial knowledge, ecological knowledge, ecosystem services modelling knowledge and environmental valuation knowledge which resulted in the development of the Technical Recommendations in support of the SEEA EEA which was issued in 2017. The engagement with these communities of expertise around the world continues to grow and serves as the key basis for confidence in the content of the revised SEEA EEA.

The revision process which commenced in early 2018 is now 18 months in with 18 months to go. Substantive progress has been made in all revision areas and while a range of complex issues remain the time available to work through these issues is twice as long as available for the drafting of the initial SEEA EEA. There remains time in the schedule for further research, testing of approaches and concepts and for an ongoing widening of the consultation process.

Overall, the goodwill towards the SEEA EEA is very high and given the strength of the conceptual and practical advances over the past 6 years there is every reason to grasp the opportunity to secure SEEA EEA as a statistical standard.

Challenges and risks

Notwithstanding the potential and motivation, challenges remain in advancing towards establishing a statistical standard. The reality is that finding common language across multiple disciplines is hard and that getting the right level of appreciation and understanding of the issues is required. While some of the disciplines being engaged with are well established – ecology, geography, environmental economic, accounting – the area of ecosystem services is newer and still working towards its schools of thought. Further, some of the technical questions that are emerging are longstanding, pre SEEA EEA issues, which the SEEA EEA revision process cannot be expected to resolve.

The revision process has provided an opportunity to bring all these community around the table and voice their views. It has been a learning opportunity from all sides. The next steps will be to make choices towards agreed definitions, classifications and methods which need to be motivated and explained to ensure that the various communities are on board towards achieving a common goal.

Related to these technical challenges, establishing a statistical standard requires “buy-in” and acceptance from the statistical community. While this is evident in some countries, it is less evident in others where concerns exist around the role of NSO in areas of measurement with which are not part of the traditional NSO suite of statistics. This is especially the case, in the context of geospatial information as well as valuation of ecosystem services and assets arises. Linked to achieving this buy-in is the capacity of technical and senior statisticians to allocate the time to engage with the material and gain comfort that those outside the NSO community have strong measurement and data capabilities that can be harnessed to support the provision of a more complete national picture and associated decision making.

Pathways

To advance towards a goal of establishing SEEA EEA as a statistical standard by 2021 several steps are clear. These are:

- To increase the clarity of understanding about the purpose in using a statistical and accounting approach to the measurement of the environment.
- To increase clarity on the intended measurement scope of the SEEA EEA. Much discussion with the various disciplines has opened up many potential measurement angles and, in the relatively short term, some clearer measurement boundaries, e.g. around the scope of valuation, need to be put in place with particular recognition of the genesis of the SEEA EEA in the principles of the SNA. These choices should be made pragmatically with a clear eye on the role of the NSO and the feasibility of measurement.
- To continue the open and inclusive engagement approach developed in the SEEA process over the past 10 years. Particular focus should be placed on engagement with the national accounting and wider statistical communities.
- To encourage testing of SEEA EEA principles, the sharing of experiences and to support the development of compilation guidance.
- To continue to deliver substantive content (discussion papers, testing reports, draft chapters) for discussion and review.

Overall, there is sufficient evidence of the demand for ecosystem accounting and its potential to support integrated policy and decision making. There is also clear evidence that the conceptual pieces from across the various disciplines are on the table for discussion and that the revision process to date is bearing fruit.

The pathway towards a statistical standard is linked to the methodological advances as well as other considerations including the role of the NSOs operating in the non-traditional space and playing the role of data stewards organizing existing data from various sources using quality standards. The SEEA EEA exemplifies this new role of NSOs that needs to innovate and work in partnerships with other government as well as non-governmental organizations and provide value by integrating information from different sources, including big data, to be better responsive to the policy demands.

Questions to the UNCEEA

- Do you agree with the analysis of the challenges and opportunities to elevate the SEEA EEA to a statistical standard?
- Are there additional activities we should undertake to achieve the ambition of elevating the SEEA EEA to a statistical standard?