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FAO Perspectives on Implementation of the SEEA

A discussion of the link between SEEA and Governance

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FAO Perspectives on Implementation of the SEEA

A discussion of the link between SEEA and Governance

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FAO Perspectives on Implementation of the SEEA

Introduction

1. The opening paragraph of the System of Environmental-Economic Accounting 2012 Central Framework defines the SEEA as "a multipurpose conceptual framework that describes the interactions between the economy and the environment, and the stocks and changes in stocks of environmental assets" (SEEA CF, para 1.1).

2. The framework described in the SEEA follows an accounting logic and at its heart it is a tool for the organization of information from a wide variety of sources. The drawing together of different information usually found in multiple agencies and organisations is the main driver behind the general advice on implementation of the SEEA that countries establish appropriate institutional arrangements. These arrangements are needed such that the compilation of SEEA based accounts can become an ongoing process which in turn provides a foundation for the use of SEEA based data for policy and analytical purposes. From this perspective implementation of the SEEA may act as a catalyst for forming connections between agencies and organisations who are working towards integrated solutions across economic and environmental domains.

3. At the same time, there are many efforts that are aimed at integrating work across different domains spurred on by different motivations than information and accounting. These include work on sustainable development and green economy, work on the food-water-energy nexus, and, from a statistical perspective, work on improved statistical co-ordination and data management. The recent experience at FAO suggests that these types of initiatives, which are focused on co-ordination and integration can provide fertile ground for the promotion of the SEEA, and hence there may be a symbiotic relationship between improving and broadening institutional arrangements and the implementation of the SEEA – i.e. both can support each other.

4. This paper demonstrates the nature of this link between SEEA and Governance by describing a range of developments and activities at FAO, in particular the project to develop a SEEA for Agriculture (SEEA Agri). The paper commences with a summary of the SEEA Agri project and then highlights the connections between this project and other developments, with a focus on this link between SEEA and Governance.

Summary of progress on the SEEA Agri project

Background

5. Work on SEEA Agri was first proposed in 2010 and endorsed by the UN Committee of Experts on Environmental-Economic Accounting (UNCEEA) at that time. The SEEA Agri sits within the broader SEEA work and can be considered an application of the principles and accounting standards described in the SEEA Central Framework. Direct work on the design of the components of the SEEA Agri commenced in June 2013 and has continued steadily since that time.

6. The scope of SEEA Agri covers agricultural, forestry and fishing activity and the design of the relevant accounts reflects an application of the tables and accounts of the SEEA Central Framework to the organization of data on these activities. A central aspect of the work has been the use of many separate statistical datasets (e.g. agricultural production, fertilizer production and use, land use, water statistics, energy and emissions statistics, and others) within an accounting framework.

Main developments to date

7. Papers describing the SEEA Agri design approach have been presented to the 26th FAO-OEA/CIE-IICA working group on agricultural and livestock statistics for Latin America and the Caribbean (June 2013), the 19th meeting of the London Group (November 2013), the Sixth International Conference on Agricultural Statistics (October 2013), the 23rd African Commission on Agricultural Statistics (December 2013), and the 25th Asia and Pacific Commission on Agricultural Statistics (February 2014). The SEEA Agri concept has been well received and there is strong interest in the development of the associated data and indicators.

8. Prototype accounts (asset accounts and supply and use tables) have been designed in 7 out of 9 main data domains[1]. The design of the accounts reflects a combination of the structure of accounts from the SEEA Central Framework and the available information on agriculture, forestry and fishing activities in the FAO datasets. The table designs are thus an application of the concepts in the SEEA Central Framework.

9. Work has commenced to develop a database based on the structure of the prototype accounts using available FAO data and covering all countries. This work is advancing well and a review of data coverage and quality is ongoing.

10. Initial country level testing of the accounts is underway with two countries, Canada and Australia, leading the way following their offers of assistance at the London Group meetings. In addition, proof of concept testing has been initiated in Indonesia and Guatemala in recent months.

11. Finally, discussion on the derivation of agri-environmental indicators from SEEA Agri has commenced with an initial joint FAO, OECD, Eurostat meeting held in March, 2014.

Next steps on SEEA Agri

12. Work will continue on refining the prototype accounts taking into consideration the feedback from countries and discussion on potential indicators. An updated set of tables will be completed by mid 2014.

13. Associated with the development of tables, drafting will commence on a SEEA Agri document with the intention that this document focus on a description of the tables and associated compilation issues, as well as the connection to policy analysis and indicators.

14. Proposals for possible agri-environmental indicators that can be derived from a SEEA Agri data set will be made with the aim of developing a set of indicators to inform on the topic of "sustainable agricultural production".

15. Population of the SEEA Agri database within FAO will continue, and these data will be used to test the derivation of selected indicators. A report on data coverage and quality will also be prepared.

16. A small Expert Group Meeting will be held in early October to discuss the findings and materials developed, including a draft SEEA Agri document.

[1] The nine SEEA Agri data domains are Agricultural production (crops, livestock, non-food crops); Forestry; Fisheries; Water; Energy and GHG emissions; Fertilizers and pesticides; Land use and land cover; Soil; Economic data (e.g. data on value of output, value added, employment, cost of production).

17. As a contribution to the Global Strategy for the Improvement of Agricultural Statistics, a discussion paper will be completed on the use of the SEEA Agri framework as a conceptual basis for determining the core data set for agricultural statistics, particularly from an environmental perspective.

Examples of the links between Governance and the SEEA

18. This section provides descriptions of developments within and connected to FAO that cover both improved statistical co-ordination and governance catalyzed by the SEEA, and improved governance supporting the implementation of the SEEA. In most cases, once a link between governance and SEEA has been observed it may be difficult to rationalize which aspect may have been the larger contributing factor. And indeed, in practice it matters little.

Global Strategy to Improve Agricultural and Rural Statistics

19. A key aspect of the Global Strategy to Improve Agricultural and Rural Statistics (GS) project is to improve the measurement of the links between agricultural activity (including forestry and fishing) and the environment. In this context, the broad GS project supports the development of a System of Environmental-Economic Accounting for Agriculture (SEEA Agri). The fact that the SEEA Agri work is resourced within the Global Strategy to Improve Agricultural and Rural Statistics recognizes the important connection between statistics (both environment and economic) and accounting frameworks.

20. A particular aspect of the connection between the SEEA Agri and the GS relates to the development of a core or minimum set of agricultural statistics in the GS. In concept this set is intended to cover economic, environmental and social aspects of agriculture and rural statistics. While work on defining this set within the GS continues, it has also been recognized that SEEA Agri may provide a stronger conceptual basis for determining the minimum set particularly with regard to defining the statistical requirements in the environmental-economic space. A discussion paper on the potential of the SEEA Agri to provide such a conceptual base will be developed in the second half of 2014.

FAO Strategic Objective 2

21. In recent years the entire work program of the FAO has been reshaped to align with five strategic objectives seen as fundamental to the future direction of the organization. Each strategic objective has a set of goals and actions and associated indicators of progress. Strategic Objective 2 aims to “increase and improve the provision of goods and services from agriculture, forestry and fisheries in a sustainable manner”. Given the focus of SEEA Agri is precisely in this area, recent discussion has seen the implementation of the SEEA Agri become one indicator of progress towards this Strategic Objective. The catalyzing and supporting connections between governance and the SEEA are very clear in this instance.

Organisation of statistical operations within FAO

22. FAO’s work in the collection and dissemination of statistical information on food and agriculture covers almost all sectors from agriculture, livestock, forestry, fisheries to land and water.

23. The statistical system of FAO is decentralized across a number of statistical units, where each technical department carries out its own statistical programme of work, and maintains ownership of data.

24. During 2012, there were two major changes to existing FAO statistics governance mechanisms in order to improve inter-Divisional coordination and to promote better cooperation with regional offices, namely the creation of the position of Chief Statistician, and the establishment of an Inter-Departmental Working Group on Statistics. In this context, the Chief Statistician ensures stronger governance of the FAO statistical systems by fostering the consistency of the overall FAO Statistical Programme, guaranteeing statistical excellence through the implementation of statistical standards, quality assurance mechanisms and best practices, and by strengthening FAO presence in statistical discussions at global level.

25. With the establishment of the Inter-Departmental Working Group on FAO Statistics, progress in encouraging corporate statistical coordination has also been strengthened by the work on SEEA Agri which, from a statistical framework perspective, places all of the relevant data in context, and provides a means by which practical steps towards integration and harmonization may be determined.

26. Indeed cross-divisional work in this area has recently been fostered by the IDWG, which has identified SEEA implementation as a priority area of work for 2014. Subsequently, a dedicated sub-group has been formed to focus on this. Membership is open to all IDWG members and their colleagues. This group will meet regularly throughout 2014, and report to the IDWG on progress made, as well to seek technical advice, approval and endorsement, where applicable.

27. This will further cement efforts to improve cross-divisional cooperation, and also promote strengthened corporate statistical governance in the context of the SEEA framework.

International governance mechanisms for agricultural statistics

28. In line with the developments in governance within FAO and aligned with the ambitions of the GS, progress in being made in clarifying and improving the existing global mechanisms for the governance of agricultural statistics. These mechanisms include APCAS, AFCAS, IICA, and the IAGFS.

29. Given the breadth and connection of these mechanisms and forums and their initial support for SEEA Agri, it is likely that they can help to influence the implementation of the SEEA Agri at country level.

Statistical initiatives linked to SEEA Agri

30. A number of statistical initiatives have recently commenced, which can be linked to both the changes in governance within FAO noted above and the coverage of the SEEA Agri. These initiatives include:

    - The development of the FAO Global Land Cover Share database which uses the SEEA land cover classification as a means to compare land cover data across countries.
    - Planning for the 2020 Agricultural Census where the SEEA classification of land use is being applied in the design phase.
    - the Fisheries Department aims to create a more aggregated level of analysis for fisheries data combining data from across a number of datasets. This work is driven by the general intent of the SEEA Agri to provide a relatively high-level

dataset that can identify larger tradeoffs between agricultural, forestry and fishing activities and hence give a sense of policy direction.

- Although initiated separately, work on the development of a global database estimating greenhouse gas emissions from agricultural activities, has many synergies with the SEEA Agri approach, particularly in the way in which the GHG project has sourced data from multiple collections and modeled results to national levels (?).
- Another separate project, is the development of estimates of cost of production for different production approaches – for example, comparing intensive and extensive pig meat production. In concept, this work could sit within the broader SEEA Agri framework and potentially be expanded to take a more extended production function into consideration, for example with regard to water use, emissions and land use.

Development of indicator sets

31. Increasingly the development of indicator sets is considered an important aspect of governance, through their support of measurable targets and ongoing monitoring. However, often indicator sets have been developed without sufficient consideration of the conceptual basis for the indicators, or the feasibility of their measurement. This situation is starting to change. At the same time, it should be recognized that explicit inclusion of indicators in policy monitoring frameworks gives important support to statistical work and the underlying conceptual frameworks.

32. Links between SEEA Agri and indicator sets are currently playing out in two areas. Most directly, the work on SEEA Agri includes assessment of the indicators that may be derived from a SEEA Agri dataset. This area of work is intended to ensure that links can be made between the SEEA Agri and policy work, and that priority areas of the SEEA Agri can be identified.

33. The second area of indicator work is as part of the broader Post-2015 Development Agenda and the framing of Sustainable Development Goals and related indicators. While discussions on the SDGs are not finalized, it seems clear that food security will be an important theme and in this regard the SEEA Agri may be able to support the definition and measurement of relevant indicators. More broadly, it is recognized in the SDG process that the use of statistical frameworks to underpin indicator sets is a desirable objective and thus, in this case, the direction of governance supports the implementation of SEEA and SEEA Agri.

SEEA Agri work at a country level

34. As noted earlier in this paper, as part of the development phase of SEEA Agri it is proposed to engage a small number of countries to consider (i) the initial concepts and designs in their own circumstances and provide feedback on the design of the tables and accounts, (ii) the potential to populate the tables with nationally available data, and (iii) the usefulness for policy of bringing together various data within an accounting framework.

35. The consideration of SEEA Agri by pilot countries is not intended to suggest that a country must or will adopt the SEEA Agri framework within its own statistical practice or that a long term allocation of resources must be initiated. Rather, at this stage, the intention is to obtain feedback to help better understand the issues around agricultural data at the national level and ensure that any final designs and recommendations take such issues into account. This is particularly so in relation to the potential uses of the data.

36. Four countries have been willing to be involved in the pilot testing, Australian, Canada, Guatemala and Indonesia. Feedback from the countries is expected through June and July. To date the engagement with the countries has been positive and the FAO is very appreciative of their involvement.

37. Given that the countries are still to provide their feedback more formally, no definitive summary of the pilot testing can yet be provided. At the same time, in the context of this paper a few initial observations are relevant.

    - The focus on agriculture has provided a different perspective on the potential role of the SEEA framework and facilitated engagement in countries between stakeholders that had not previously occurred.
    - There is a significant amount of data on agriculture in countries that may be leveraged and utilized within an accounting framework and on the whole the countries seemed able to populate many of the various data domains of the SEEA Agri.
    - In three of the countries, reviews of agricultural statistics had been underway and in this context it seemed that the SEEA Agri may be able to play a role in the discussions.
    - The cross-cutting nature of SEEA Agri in terms of covering both physical and monetary data might open doors to better engagement between economists and scientists working in these fields.

Conclusions

38. There remains work to do to complete the development of the SEEA Agri framework in and of itself. This work is due for completion by the end of 2014. However, it is clear that the development process since June 2013 has not been isolated. Indeed, the discussions that have taken place over that time within the FAO and externally, have highlighted the real potential for strong connections to be made between SEEA and governance initiatives.

39. This paper has outlined a range of examples that show the nature of the relationship between SEEA and governance. The examples highlight that SEEA can be a powerful tool toward integration and that establishing sound governance arrangements is instrumental in establishing SEEA in practice. The FAO looks forward to keeping UNCEEA members informed of developments in SEEA Agri and related initiatives.