



Development and implementation activities for the SEEA-Agriculture

Background

The development of a *System of Environmental-Economic Accounting for Agriculture, Forestry and Fisheries* (SEEA-Agriculture) was first proposed by the FAO in 2010 and promptly endorsed by the *UN Committee of Experts on Environmental-Economic Accounting* (UNCREE). The SEEA-Agriculture extends and applies standard accounting rules of the *System of Environmental-Economic Accounting Central Framework (SEEA-CF)* and the *System of National Accounts (SNA)*, aimed at integrating economic and environmental information relevant to agricultural activities. In particular, the SEEA-Agriculture provides a number of accounting tables covering a range of data domains relevant to agriculture, forestry and fisheries activities, which can be easily integrated into combined presentations, as a basis for the measurement of meaningful, coherent and comparable agri-environmental and other indicators.

Substantive work on the construction of the SEEA-Agriculture commenced at FAO in June 2013, by designing the accounting tables and by assessing the related data availability within FAO databases, including FAOSTAT. The feasibility of compiling the accounts and the relevance of the information was tested and further refined via specific engagement with four pilot countries: Australia, Canada, Guatemala and Indonesia.

Based on these lines of work, a draft SEEA-Agriculture was elaborated and discussed internally within FAO.

This SEEA-Agriculture draft was presented and discussed at a small *Expert Group Meeting* (EGM), held in Rome on October 7-8, 2014. The meeting involved representatives from SEEA pilot countries, as well as relevant experts from Eurostat, OECD, UNSD, and FAO¹.

¹List of participants: Airlanga Buyung (BPS Statistics, Indonesia); Augustan (BPPT Centre for Natural Resource Accounting, Indonesia); Silvia Cerilli (ESS, FAO); Sangita Dubey (ESS, FAO); Carola Fabi (ESS, FAO); Karen Franken (NRL, FAO); Julien Hardelin (OCDE); Ivo Havinga (UNSD); Cindy Lecavalier (Statistics Canada); Mark Lound (Australian Bureau of Statistics); Robert Mayo (AGP, FAO); Carl Obst (ESS, FAO); Daniela Ottaviani (FIPS, FAO); Bianca Papi (ESS, FAO); Josef Schmidhuber (ESS, FAO); Johan Selenius

The EGM highlighted that initial activities in SEEA-Agriculture test countries had generated productive cross-agency engagement, with various departments and technical agencies becoming engaged as a result in discussions on national statistical systems.

The EGM concluded that the SEEA-Agriculture framework, in providing a strong as well as practical basis for building enhanced national statistical systems bringing together relevant economic and environmental accounts, may provide a robust basis for the development of indicators under the Post-2015 Sustainable Development Goals process, providing a transparent framework to define and measure sustainability of natural resources.

The work on the development of the SEEA-Agriculture has been funded by the *Global Strategy to Improve Agricultural and Rural Statistics* (GSARS) as part of their research program. Hence the SEEA-Agriculture draft was subsequently discussed by the *Global Strategy's Scientific Advisory Committee*, at their meeting in November 2014. The involvement of GSARS is in line with its own mandate towards improving the measurement of the links between agricultural activity and the environment.

Based on the above processes, an updated SEEA-Agriculture draft was submitted for initial global consultation in December 2014, concluding at the end of January, 2015. Constructive feedback was received from more than 30 experts in National Statistical Offices and international agencies on the scope, coverage and content of the SEEA-Agriculture.

Following the initial global consultation, the SEEA-Agriculture was presented as a background document at the meeting of the *United Nations Statistical Commission* (UNSC) in March 2015, together with a summary of the comments received. A side-event to the UNSC was also held in March 2015 with country presentations from Indonesia and Canada and a presentation on the potential connections to the SDG process from the FAO.

Finalisation of SEEA-Agriculture

A updated draft of the SEEA-Agriculture that takes into account the feedback from countries during the initial global consultation will be released in July 2015 by the Global Strategy as part of their ongoing release of technical papers that have been developed as part of the program. It is not intended that this draft be regard as a final product and rather it presents material for ongoing discussion.

(EUROSTAT); Sachiko Tsuji (FIPS, FAO); Francesco Tubiello (NRC, FAO); Renato Vargas (SEGEPLAN, Department of Planning, Guatemala).

Using this draft as a base the FAO will work towards finalising the SEEA-Agriculture during the course of 2015. This work will have two areas of focus. The first is the resolution of various technical matters that emerged from the global consultation process. Proposals to deal with these matters have been incorporated into the current draft but require further discussion among relevant experts.

Second, it is intended to develop much further the content of Chapter 5 concerning implementation of SEEA-Agriculture. In particular, building on the decadal experience of the international climate processes, in relation to the development of guidelines for national greenhouse gas inventories, as well as considering approaches to the improvement in national accounting methods, the updated SEEA-Agriculture intends to introduce the concept of ‘*Tiers*’ in relation to the construction of statistical tables and their analysis.

With this approach, SEEA-Agriculture implementation in member countries can proceed gradually, based on the current status of national statistical processes, through the use of readily available national agriculture statistics. A basic, Tier 1, approach provides a reference starting point for data and methods, in the first instance using the official national statistics communicated by countries to FAO via FAOSTAT, to fill basic SEEA-Agriculture combined presentations. These presentations can be used to promote discussion on the usefulness of SEEA-Agriculture within policy agencies and on the feasibility of compiling the SEEA-Agriculture base accounts with statisticians. Through the identification of policy priorities and data gaps countries may then build towards Tier 2 and Tier 3 SEEA-Agriculture through increasingly advanced data and methods.

A Tiered SEEA-Agriculture approach allows any developing member country, irrespective of its level of statistical capacity, to begin implementing basic SEEA-Agriculture analyses, using as default the set of national agricultural, forestry, fisheries and other statistics readily available at FAO, for instance via FAOSTAT, and other relevant international databases. Such default information and the set of associated preliminary indicators available through combined tables, can subsequently be used to inform dedicated capacity development, i.e., as a base for a constructive agency dialogue on enhanced national statistical systems, needed to address nationally relevant issues.

Once countries become capable of implementing higher Tier SEEA-Agriculture analyses—as well as in countries that already possess that capability—the SEEA-Agriculture Tier 1 approach provides for a standard reference for domestic and international quality assessment and quality control (QA/QC) processes that are transparent, comparable, complete, coherent and accurate.

A draft of the SEEA-Agriculture that incorporates these two developments (i.e. the resolution of technical matters and the explanation of the Tiered approach to implementation) will be completed by the end of September 2015. It is proposed that this draft is subject to a second round of global consultation from early October to mid November 2015 with a final version completed by end 2015 for submission as a background document to the March 2016 UNSC meeting.

To support the final stages of review it is also proposed that an Editorial Board (following the model used for the volumes of SEEA 2012) be established such that feedback from consultation during the next six months can be appropriately considered and reflected in the final document.

Implementation of SEEA-Agriculture

Overall, the planned SEEA-Agriculture implementation activity is based on experience of relevant agencies such as UNSD, UNEP and FAO, concerning the SEEA CF and relevant SEEA satellites (e.g., SEEA Water, SEEA Energy). SEEA-Agriculture implementation also benefits naturally from the large body of additional experience on capacity development for agriculture statistics matured at FAO, in the context of other relevant international processes, including regional statistical commissions, the international climate processes, and significantly, the current work in support of the post-2015 Sustainable Development Goals (SDGs). The latter is particularly relevant, as it has been suggested by multiple stakeholders, and including within the UNSC, that the SEEA CF and thus SEEA-Agriculture could provide a reference framework to help define relevant indicators needed to monitor progress on SDG targets.

The SEEA-Agriculture is furthermore a specific theme within FAO's Inter-Departmental Working Group on Climate Change (IDWG-CC) activities.

Feasibility studies of the national implementation of SEEA-Agriculture were conducted in 2014 in four pilot countries, namely Canada, Australia, Indonesia and Guatemala. In each, linkages with National Statistical Offices were established and missions conducted in Guatemala and Indonesia. National SEEA-Agriculture focal points were identified and the feasibility of compiling SEEA-Agriculture accounting tables was assessed. An additional pilot country for additional feasibility piloting, is currently being planned in Kenya. The new

pilot will focus on the feasibility of the proposed SEEA-Agriculture Tiered approach to implementation. Findings will be collected into a set of lessons learned and practical recommendations, to be published in parallel with the final SEEA-Agriculture. Additional piloting with practical implementations of Tier 1 SEEA-Agriculture activities are planned for 2016, in coordination with existing and planned UNSD SEEA activities.

Developing implementation support material

The planned SEEA-Agriculture implementation will put an emphasis on progressive phases through implementation of successive tiers, depending on national capacity. Practical guidelines for country work will focus on work starting with a tier 1 approach, providing direct linkages with available FAO statistical information, as a base for further national-level analysis and identification of steps needed to proceed to higher Tier SEEA-Agriculture implementation. Progress at national level will in turn benefit the international process, insofar as improved national statistics lead to improved quality and coverage of FAO databases, including FAOSTAT.

To this end, a first set of generic guidelines for Tier 1 SEEA-Agriculture implementation, to be followed by more detailed guidelines for national work, will be included in Ch. 5 of the SEEA-Agriculture Draft for Global Consultation. Support material will include a Global Combined presentation that can be filled with available FAOSTAT data as a default.

In the development of materials to support implementation of SEEA-Agriculture, close links will be made to existing and developing SEEA guidance including SEEA Technical Notes and the SEEA Implementation Guide, and also guidance on accounting for agriculture, forestry and fisheries that has been developed by relevant international agencies.

Research and Outreach

The work on SEEA-Agriculture has encouraged connections to a range of measurement and analytical initiatives. While continuing to develop the link with the Global Footprint Network²; and monitoring relevant research work performed by other agencies such as the

² The **Global Footprint Network** was founded in 2003 and is an independent think tank based in the United States, Belgium and Switzerland. Global Footprint Network develops and promotes tools for advancing sustainability, including the Ecological Footprint and bio-capacity, which measure the amount of resources we use and how much we have. These tools aim at bringing ecological limits to the centers of decision-making.

TEEB for Agriculture & Food study, led by the UNEP TEEB Office;³ the SEEA-Agriculture project is also planning to develop its own areas of research, with a special focus on land cover, land use and soil data analysis. Preliminary assessment on SEEA-Agriculture and accounting for soil resources were undertaken in 2014 and additional work on these topics is planned in 2016.

Progress on SEEA-Agriculture at FAO is being regularly communicated, in addition to UNSD and UNSC, to other relevant processes, including ICAS, the London City Group, UNECE, OECD.

Conclusions

The long-term ambition of the project at country level is not only to sensitize on environmental statistics and SNA accounting system, but to realize a process of capacity building and strengthen collaboration among the FAO and the country, the real owner of information and knowledge. The SEEA-Agriculture aims to utilise this national data and to establish a stable flow of information sharing with the country. The experience matured to date through the four pilot case studies suggests that such goals are possible. SEEA-Agriculture is in fact adopting a flexible and modular approach, allowing to NSOs to compile and share information and data that are both nationally relevant and embedded in an internationally comparable framework.

Improved agricultural statistics, including cross-linkages facilitating analyses with relevant economic and environmental variables are necessary to facilitate analysis towards more effective rural development and food security policies.

³ **UNEP TEEB for Agriculture & Food** is a project seeking to bring together economists, business leaders, agriculturalists and experts in biodiversity and ecosystems to provide a comprehensive economic evaluation of the 'eco-agri-food systems' complex, and demonstrate that the economic environment in which farmers operate is distorted by significant both negative and positive, and a lack of awareness of dependency on natural capital.