

CES Seminar

Seminar “Challenges in implementing the system of environmental-economic accounting (SEEA) and measuring sustainable development in follow up to Rio+20”

Session 2: Key challenges in implementing SEEA

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Context of the session

The UN Statistical Commission (UNSC) adopted the SEEA Central Framework as a statistical standard in February 2012. The implementation strategy presented to the UNSC in February/March 2013 reflects the need for regional and sub-regional coordination and advocates that the accounts should be implemented flexibly and incrementally, giving full consideration to national circumstances and requirements. Introduction to the session is the summary of the implementation strategy. The main topics for the session were derived from 3 invited (Mexico, OECD, and the Netherlands) and 4 supporting papers (Australia, United Kingdom and Sweden & Australia).

Introduction

The development of SEEA has been driven by the need to have more complete information on economy and the environment and to better understand the interactions between them. The reason was the growing realisation that the economic prosperity is limited with available natural resources. And that the society needs the information about the contribution of environment and its capacity to provide services for the present and future generations.

In the response the statistical community has developed the SEEA Central Framework. The first version was presented at the World Conference on the Sustainable Development in 1993 – it was issued as work in progress, recognising that conceptual discussion as well as testing of methodologies needed to continue.

On the basis of the practical experience in implementation and through other methodological developments, the revised SEEA 2003 made a considerable step towards harmonising concepts and definitions.

From that time the SEEA Central Framework was gradually developed and was adopted as an international statistical standard by the United Nations Statistical Commission in February 2012.

The UNSC recognised that the next challenge would be the implementation of SEEA CF. So in 2012 it urged the Committee of Experts on Environmental-Economic Accounting to draft an implementation strategy, which was presented to and accepted by the Statistical Commission in February 2013.

If we summarize the implementation strategy in a word cloud we can see that the key message of SEEA implementation strategy is to allow for a flexible and modular approach which gives full consideration to national circumstances and requirements. The strategy takes as its point of departure the recognition that countries differ in terms of their specific environmental-economic policy issues and their level of statistical development. Accordingly, countries may select the accounts they want to implement over the short to medium-term based on the most pressing policy demands.

The flexible approach consists of four phases: first phase is the establishment of institutional mechanism that will drive the implementation, second is self-assessment phase, third phase data quality assessment and fourth phase strategic development plan. The strategy proposes also the activities and mechanisms to facilitate and stimulate the implementation process.

The implementation strategy is available on the website with the documents for the forty-fourth session of the Statistical Commission, New York 26th February to 1st March 2013

The **main part of the presentation** is summary of the experiences with SEEA implementation from different perspectives derived from 7 papers received for this session.

The invited papers contributed Mexico, the Netherlands and OECD; further four supporting papers Australia, United Kingdom, Azerbaijan and Australia and Sweden jointly.

Invited papers:

- Implementation of the SEEA: Mexico's experience (Mexico)
- The Green Growth initiative and the SEEA Central Framework (OECD)
- Implementation of the SEEA Central Framework in the Netherlands (Netherlands)

Supporting papers:

- Implementing the SEEA in Australia: estimates and issues (Australia)
- Natural capital and ecosystem accounting in the United Kingdom (United Kingdom)
- Analysis of market-based instruments for the environment - extensions, applications and techniques (Australia and Sweden)
- Introducing of the System of Environmental and Economic Accounting, the perspective of Azerbaijan (Azerbaijan)

The main findings and emphasis from the received papers are:

1. Key drivers for SEEA implementation.
2. Co-operation on national and international level.
3. Data availability and quality.
4. Prioritization.

5. Usefulness and communication of SEEA.
6. Success factors for implementation

They are explained in more detail in the continuation.

Key drivers for the SEEA implementation

The message from all papers is that implementation should be a demand-driven process.

The main drivers could be various;

It is clear that the most pressing policy needs should be developed first – some of them became a part of the legislation on national and international level already.

In many countries there could be more than one driver; for example in Mexico the precondition to even start the compilation of environmental accounts was the progress in the development of national accounts; but the real driver was the knowledge of environmental pressures resulting from economic activities which was recognised as an important one also in Azerbaijan and many other countries. The important incentive to facilitate the implementation could be the international collaborative mechanism; in case of Mexico cooperation with UNSC and WB and in case of Azerbaijan technical assistance.

One of the key issues could be also a need for consistent national environmental information base; in case of Australia the government decided to develop a National Plan for Environmental Information as an initial step towards improved monitoring of the state's land, ocean, air and water resources.

Another example is a direct and well-articulated demand from national policy and decision makers in the Netherlands, which resulted in Dutch water accounts and economic radar of the sustainable energy sector.

Also a special research programmes for sustainable development and green growth could contribute to the development of environmental accounts.

The important aspect of the thesis that the implementation should be a demand-driven process is that interest and involvement of policymakers could help to focus the research program and to create extra capacity for further research.

Co-operation on national level...

It is clear that for the successful implementation of environmental accounts good organisation and cooperation is needed.

In many countries the national statistical office is responsible for the compilation of environmental accounts. When placing within national accounts unit one of the main advantages is the knowledge of SNA concepts, a full consistency between national accounts

and environmental accounts data. A direct access and knowledge of these data facilitate the work process and data from environmental accounts may directly contribute to the improvement of national accounts.

What is also important is good harmonisation and communication with other departments where main data sources are produced.

The integrated nature of the environmental accounting requires staff with a unique combination of skills: statistics, economy, mathematics, environment, national accounts, and so on. With the scarce resources it is not easy to group all those skills within one unit - that is why it is not the most important in which unit the environmental accounting is placed but to assure the exchange of information and knowledge between them.

Since the implementation should be a demand- driven process it is essential that NSIs are in frequent and direct contact with policymakers of the relevant ministries, with national research institutes and other stakeholders.

... and international level

A good cooperation on national level is important but the collaboration among various national and international statistical agencies can support and improve a cost-effective implementation of environmental accounts. This collaboration can take a number of forms:

exchange of ideas and materials,

international meetings and workshops, the use of electronic forums,

the city groups, such as London Group which provide a forum for review, comparison and discussion of work towards development of environmental accounts

the joint development of standards and guidelines

temporary appointment of skilled staff from partner agencies and targeted international aid

The lessons learned from the experiences of other individuals and organisations can be invaluable in advancing your own program. For example, the ABS developed its Energy Account, Australia prior to the finalisation of the SEEA Central Framework and prior to the development of a SEEA module specific to energy. In the absence of any official international guidelines on the production of energy accounts, a report of the Dutch experience in developing these accounts became a valuable resource for the ABS to clarify key concepts underpinning energy accounts and to identify appropriate publication outputs.

The consultations and international programs on technical assistance have provided SSC (Azerbaijan) with important support. Moreover, learning from the experience of other European countries in bilateral cooperation has proven very useful for Azerbaijan.

Also in Mexico, as already mentioned at the beginning, one of the key drivers was international collaborative mechanism; the commitment of the United Nations and the World Bank, together with INEGI has greatly supported the completion of the first environmental accounts.

Data availability and quality

In essence, compiling environmental accounts is about integrating various data sources such as environmental statistics, energy statistics and economic statistics. An important requirement for the compilation of environmental accounts is the availability of good basic data. Data collection is costly in terms of human resources but also in terms of response burden. The data requirements of environmental accounts need to be carefully considered as NSIs face budget restrictions and constraints in terms of response burden.

Some of data are available from databases from within the NSIs, while others originate from external sources. Modifying the existing data instead of starting a new collection has many benefits - besides the obvious one - cost benefit, this approach improves also the cooperation and relations between organisations and through the work process also the coherence of source data.

Data providers need to be involved at an early stage of the implementation process in order to adapt the structure of data sources if necessary.

But the challenge is not only the lack of data - also the excess of them could pose a problem. Many organisations currently collect environmental information, often with a particular scientific, regulatory or administrative purpose in mind. This results in highly fragmented sets of data which suffer from a range of problems. Accordingly, there is significant frustration when trying to articulate the state of the environment.

So it is important to assure the standard use of terminology, concepts, definitions classifications; the common use of them is essential to the usefulness of the SEEA; especially when SEEA is used for deriving indicators that monitor the interactions between the economy and the environment. Monetary and physical data can therefore be easily combined in a consistent format and can be used directly to calculate certain indicators.

Another challenge is how to select the source data for the accounting tables, how to evaluate the results and how to determine consistency and accuracy of the variables and the derived indicators.

As part of the quality control of the SEEA in Mexico INEGI uses a statistical tool. It enables them to avoid subjective judgments when variables are selected. In the process of reviewing and updating the information sources the compliance with international standards such as

the System of National Accounts (SNA), the Environmental protection expenditure accounts (SERIEE), and certainly the SEEA is verified. Mexico also took advantage of the Quality Control / Quality Assurance recommendations of the IPCC guidelines, meant for national inventories of greenhouse gases.

Further improvement of the quality of the accounts may arise from the timing. Producing environmental accounts on an irregular or infrequent basis is less efficient; it is in some respects cheaper but there are considerable start-up costs when running an irregular compilation, there is also a threat of loss of the key staff especially when having in mind the special mix of skills needed for environment accounts compilation;

An annual production cycle also improves the quality of the accounts because of the regular feedback from users. From the data users' perspective, the annual production of environmental accounts provides the confidence to build in these data into decision making processes, which is a key factor in the acceptance of environmental accounts.

It is clearly that it is important to be as open and transparent as possible about the accuracy and compatibility of valuations derived using different approaches and data sources. Especially when talking about the accounts in development such as ecosystems accounting. There is also a need to ensure that stakeholders have the same understanding of terms and concepts – in UK they are addressing this need through the publication of discussion papers which will set out the framework and some of the issues they are trying to resolve.

Prioritization

When facing limited resources on one hand and stakeholders expectations on the other the NSIs have two broad strategic possibilities: to produce the full range of accounts but to do so in a relatively superficial way; or to focus on accounts of greatest policy importance and to produce these in a way that meets the broader needs of decision makers.

The lessons learned show that it is better to take the second approach and to produce the quality environmental accounts on limited number of areas instead of starting and spreading the work over several different kinds of accounts.

Nevertheless it is important to maintain a longer term work plan agreed with the stakeholders covering other issues for possible future development.

In a tight financial climate, the ability of a statistical agency to secure external funding is likely to be critical to the success of its environmental accounts program. However, external funding will not be secured unless the accounts can be demonstrated to be useful.

There is little point in producing environmental accounts if the information they contain is not used. Which bring us to the usefulness and communication of SEEA.

Usefulness and communication of SEEA

The usefulness of SEEA is in addressing policy issues and analysing the economy and the environment, as well as making strategic development plans, public policy or international assessments of the environmental conditions of the country.

The conceptual framework of the OECD Green Growth Strategy and the one of the SEEA Central Framework are very similar; they both try to combine the economic sphere with environmentally related issues. As such, the SEEA provides an essential framework for research and statistical analysis related to the OECD Green Growth Strategy but also for measuring progress towards sustainable development.

A potential obstacle to the acceptance of environmental accounts is a failure of data users to understand the power of fully integrated environmental accounts information; so the communication is an important part of successful implementation of SEEA!

It could be done via dedicated webpages, easily accessible databases; since it is important to address all types of data users from policy makers to general public the specialised publications like the one from ABS Completing the picture and interactive tools such as Personal footprint calculator (the Netherlands) are very valuable.

Success factors for implementation

Instead or for the conclusion the success factors for SEEA implementation are listed.

First one is clear demand. For the successful work good communication and cooperation on all levels and reliable data sources are essential. Distinct priorities are needed in order to focus implementation. And last but not least education of users and communication of the results, because what is a point in producing environmental accounts if they are not understand and used.