Capacity Building Activities for Environmental-Economic Accounting at Statistics Canada

Introduction

This paper provides a brief overview of Statistics Canada's activities in the domain of capacity building for environmental-economic accounting. It responds to a request to discuss this issue at the 20th meeting of the London Group in New Delhi, India from October 15-17, 2014.

The paper will cover the main issues in terms of capacity building to produce and use environmental accounts, steps taken to address those issues domestically, work done internationally in this domain, and possibilities to work more effectively in this regard with other countries.

Main issues

Capacity building can be looked at from two main dimensions: the capacity of staff to produce desired outputs and the capacity of users to understand and make proper use of those outputs. From the perspective of producing environmental-economic accounts, capacity building faces constraints related to staffing and links with potential data users. The use of environmental-economic accounts faces constraints related to knowledge and understanding of the accounts and the SEEA. Education related to environmental-economic accounting touches on both the use and production aspects of capacity building.

Staffing

Many of the recruitment and competitive processes at Statistics Canada are generic and tend to be geared to the traditional subject-matter areas of a typical national statistics office (NSO), namely economics, sociology, survey methodology, and data collection and processing. The educational and experience background of students in environmental studies often do not fall within the screening criteria for NSO recruitment processes and as a result it is possible that NSOs miss good candidates for the environmental-economic accounting programme. To remedy this, the environment accounts programme actively participates in recruitment processes and human resource planning discussions to ensure that screening criteria are set so that those with appropriate backgrounds (e.g. GIS, environmental studies, etc.) have the opportunity to participate in Statistics Canada's recruitment processes.

Links with other government departments and other data users

Establishing strong working relationships with key policy departments is an important input in capacity building. First, it can lead to increased funding for NSOs and second, these key policy departments are also often suppliers of key information need to compile the environment accounts. To help foster this engagement, Statistics Canada has initiated a process to encourage inter-departmental dialogue on data gaps and data coherence. This is in its initial phases, but is based on the successful model used for the

Measuring Ecosystem Goods and Services project that saw the cooperation of several departments in the production of the experimental ecosystem accounts summarised in the 2013 edition of *Human Activity and the Environment (http://www5.statcan.gc.ca/olc-cel/olc.action?lang=en&ObjId=16-201-X201300011875&ObjType=47).*

Building relationships and learning the needs of data users outside of the federal departments is also of importance. A prominent and recent example of how to encourage these relationships is the Chief Statistician's *Talking Stats* discussion series, which started in 2013. This consists of a series of meetings staged in different cities, where the Chief Statistician makes a presentation on a specific topic. A panel of experts then comments on Statistics Canada's work and their data needs. A session on environment statistics took place on October 2 in Vancouver British Columbia, and was used as a way to present and discuss the analytical possibilities of the accounts with a knowledgeable and engaged audience.

The policy environment

A supportive policy environment is helpful to building capacity for the production of environmental-economic accounts. Much of the development of the environmental accounting programme in Canada can be attributed to *The Green Plan* in 1990 and further investments through the *Canadian Environmental Sustainability Indicators* in 2003. These policy directions yielded important sources of funding that allowed for the expansion and development of the environment accounts programme into new accounts and survey products. Policy direction is an exogenous factor in the capacity building process; nevertheless it is of fundamental importance and deserves some mention. To the extent that the SEEA has become an international statistical standard and the fact that it is seen as a relevant framework for Sustainable Development Goals, Green Growth, and other work, it provides a basic platform from which information can be generated to support policy goals domestically and internationally. This status and context is helpful for capacity building and can be encouraged through further harmonisation of these efforts internationally.

Knowledge of the availability and uses of the accounts

For researchers and analysts to use the accounts, they have to know they exist and how to use them and link them to other frameworks such as the national accounts. To do this, Statistics Canada exploits the standard dissemination vehicles for releasing data to the public. In addition, brief feature articles on various survey products and other outputs are published in a dedicated publication called EnviroStats (http://www5.statcan.gc.ca/olc-cel/olc.action?lang=en&ObjId=16-002-X&ObjType=2). The environment accounts programme is also currently engaged in a project to update the metadata associated with the accounts, and to rethink the dissemination process in an effort to increase the profile of the analysis derived from the accounts and make it more dynamic (many of the ideas for which have been gleaned from Australian, Dutch, and other publications from our colleagues in the London Group). The interdepartmental discussions mentioned above are also part of this popularisation process.

Education and training

Another way to promote the environmental accounts is through the educational system. This both educates the next generation of Canadians in the area of the environment and may encourage students to continue studies in this domain. The *Human Activity and the Environment* publication has been used

to promote this through the development of teacher's kits that provide lesson plans linking environmental accounts and survey data to school curriculum requirements (e.g. http://www.statcan.gc.ca/pub/16-507-x/16-507-x2014001-eng.htm).

Statistics Canada provides training for employees once they begin their careers in this field. Recruits receive some background in environmental-economic accounts during their required *Business and Economic Statistics Training* course. A more in-depth training module is being planned for the System of National Accounts training course currently under development. In addition, informal sessions are available to further the knowledge of this work through the divisional Concepts, Sources, and Methods meeting that allows for the exchange of information and ideas in this area. Finally, at the international level, Statistics Canada has provided assistance to the UN Training the Trainers module for the SEEA, and participated in joint SEEA/SNA seminars to further knowledge of this domain abroad. In addition, our work with the government of China on the SIMPII project had an environmental component and provided technical assistance in both the development of their accounting framework and the production of surveys and stock and flow accounts.[1]

Working better together

Statistics Canada supports the collaboration on environmental-economic accounting and capacity building at the international level. Through participation in UNSD initiatives, UNCEEA, the OECD Working Party on Environmental Information, various technical groups and task forces, the Council of European Statisticians, the London and Oslo Groups, etc. our expertise is both shared and improved. Supporting more formal methods of training and staff exchange would clearly be beneficial, and Statistics Canada management through our International Cooperation Division, is willing to be part of those discussions moving forward.[2] In addition, sharing of experience and project plans and implementation with regard to technical assistance would also be a beneficial way to make optimal use of the resources that are being devoted to this work.

[1] The objective of the Environmental Statistics Project of the Statistical Information Management Program II (SIMP II) was to assist the National Bureau of Statistics (NBS) and other relevant Chinese government agencies to 1) enhance China's existing environmental statistics programs and 2) establish and develop NBS's environmental accounting program.
The accounts component led to the development of a conceptual framework for environmental accounts suited to China's conditions but consistent with international standards. A strategic plan for the implementation of this framework identified roles for NBS and key line agencies in developing the environmental accounts. The development of pilot environmental accounts in priority areas (mineral resources, energy resources and pollution emissions) was accomplished at the national level and for two provinces, Chongqing and Xinjiang. Various valuation methodologies and data integration and analysis techniques were employed to compile, test and publish these new accounts. The adoption and use of a standard metadata template permitted the compilation of metadata for datasets and to conduct a data gaps analysis.
In the end, the project supported the production of 22 natural resource stock accounts and 6 flow accounts.

[2] International Cooperation Division can be reached at international@statcan.gc.ca.