Economic and Social Council

Economic Commission for Europe

Conference of European Statisticians

Sixty-first plenary session
Geneva, 10-12 June 2013
Item 3(b) of the provisional agenda
Key challenges in implementing the System of Environmental-Economic Accounting

Introducing the System of Environmental and Economic Accounting, the perspective of Azerbaijan

Note by State Statistical Committee of Azerbaijan

Summary

This paper describes the activities planned in Azerbaijan for the implementation of the System of Environmental and Economic Accounting. The development needs are reflected in the "State Program on development of official statistics in 2013-2017 in the Republic of Azerbaijan". In particular, it makes a provision for the development of the measurement of non-produced, non-financial assets, development and introduction of balance sheets, a scorecard of "green economy" indicators, satellite accounts on energy and indicators for the improvement of environmental performance.

Today the environmental statistics and national accounts of Azerbaijan function in two parallel streams that do not cross or interact as in most countries. Introducing the System of Environmental and Economic Accounting causes a huge work load for the statistical office. But the work will be important for analyzing the development of the national economy and welfare of the population taking into account sustainability.

I. Introduction

1.   The measurement of the interaction between of environmental and economic development adds significant value to policy making that aims to support sustainable economic development and welfare of the population. These policies deal with the use of natural resources for production and consumption, waste treatment, as well as maintaining favorable conditions for human life.

2.   It is obvious that the production of goods and services is impossible without natural resources, and resource deterioration and waste generation is the result of production. However, until quite recently, the environment factor largely was ignored in national accounts worldwide. There were some obvious reasons for this initial omission. Firstly, it was thought that human activity has a local impact on nature and this impact is reversible. Secondly, accounting for the contribution of the environment to economic development and welfare of the population was considered to be a huge task that would require solving difficult methodological problems and launching expensive and extensive new data collections.

3.   However, views have changed somewhat. It is clear today that anthropogenic activity has wide ranging impacts as natural systems and functions are interconnected. All countries, at different stages of economic development, suffer from some degree of depletion of natural resources and degradation of the environment. It is obvious that, without the mutually agreed, quantitative, and well-structured system of indicators reflecting economic and environmental changes, it would be difficult to estimate the damage to the environment caused by economic activity. The introduction of the Integrated Environmental and Economic Accounts System is urgently needed for addressing these concerns.

II. Measurement of sustainable development and the System of Environmental-Economic Accounting

4.   Many of the problems connected with resource depletion and degradation of the environment are reflected in the concept of sustainable development. The process of economic growth, in line with the concept, is considered sustainable if it is sustainable both from an economic and environmental standpoint. Economic sustainability requires the ability for a long-term positive growth of consumption per capita, and environmental sustainability, on the other hand, the ability to maintain in the long-term the minimum stock of natural resources (and contribute to the quality of environment).

5.   At the same time, considering the economic aspect, sustainability includes also justice in the distribution of resources between generations and minimization of negative effects to the well-being of future generations. The environmental aspect emphasizes preservation and rational use of natural resources, combating deforestation and soil erosion as well as protection of ocean resources and stocks of fresh water. One of the important environmental aspects is waste disposal.

6.   The three approaches for measurement of sustainable development are well-known – "Three pillars", "Environmental" and "Capital" approach. When considering these approaches, it is clear that the System of Environmental-Economic Accounting (SEEA) can be used at least as a partial basis for measurement of sustainable development in all three

approaches and it is most useful with regard to studying sustainable development from the capital approach of sustainability.

III. The System of Environmental-Economic Accounting

7.   The system of environment statistics comprises quite extensive and internally well-coordinated statistical data characterizing the state of environment, existence and quality of natural resources and the interaction of people and environment. However, the current environment statistics do not provide a link between environmental and economic data, unlike SEEA.

8.   SEEA is an integrated system of accounts in which there is coherence between the set of accounts with regard to concepts, methods, definitions and classifications applied. Moreover, SEEA enables achieving data coherent in time. One of its main advantages is the provision of comparable time series, which are necessary for policy making.

9.   One more important distinction between statistics of environment and SEEA is the compatibility of SEEA with economic information of the System of National Accounts (SNA). This increases the value of environmental and economic information as it facilitates analysis across statistical domains.

10.   Nevertheless, SEEA depends on source data coming from environment statistics. These statistical data have to be easily available in the format permitting their entry into the SEEA framework. To this end, SEEA can serve as a leading tool for the development of a system of environmental information that is more compatible with economic statistics.

IV. Strategy for introduction of the System of Environmental-Economic Accounting

11.   The strategy developed for the global and regional implementation of SEEA is briefly described in the reports of the UN Committee of Experts on Environmental-Economic Accounting, which were presented at the 43rd and 44th sessions of the United Nations Statistical Commission. The reports suggest a minimum set of main accounts to be introduced by the countries at the initial stages of work. These accounts should provide an introduction to the full system, starting with simplified tables consisting of - at the elementary level - summary indicators, for example, water consumption in national economy as a whole. More disaggregated data for example by types of economic activity could be added later.

12.   The required minimum set of accounts has to be closely linked with the calculation of indicators. The main indicators could be simplified and cover main issues of importance. Accounts of water resources, energy accounts, and accounts of emissions to atmosphere are considered as priority areas; however, other questions can be more important for some countries.

V. Modular approach to introducing the System of Environmental-Economic Accounting

13.   A modular approach, proposed for the introduction of SEEA, consists of four stages. At the first stage, the focus is the establishment of appropriate national institutional arrangements in view of agreed policy priorities that determine the scope and detail of the accounts and tables, which will drive and support the implementation strategy. One of the

important aims of the first stage is to achieve commitment for maintaining the work program over time.

14.   The second stage includes carrying out a self-assessment in order to define which accounts can be introduced and what main sources of data are required for that purpose. At the third stage, the quality of the basic data needed for the compilation of accounts is assessed. The fourth stage consists of drafting a strategic development plan for environmental accounting, which includes prioritizing the types of accounts and measures for improvement of basic data.

15.   After establishment of priorities, the core set of tables and accounts from which indicators may be calculated is used. The political commitment, exploring and identifying data sources and establishment of appropriate national institutional conditions are among the most important questions related to the process of introduction of SEEA in Azerbaijan.

VI.   Current situation of the environmental and economic accounts in Azerbaijan

16.   Today the environmental statistics and national accounts of the State Statistical Committee of Azerbaijan function in two parallel streams – that do not cross or interact. As in other countries, SSC is faced with a huge work load to introduce SEEA. But it will be important for analysis of the development of the national economy and welfare of the population, taking into account sustainability.

17.   Various statistical data sets on environment are developed and published by the SSC. The current environmental statistics correspond to the international statistical standards and practice. Data are developed with the use of international classifications such as "classification on environmental activity and expenses" (CEPA 2000), "statistical classification of waste" (EWC-Stat Rev.3) and "the statistical classification of economic activities" (NACE rev2.).

18.   The introduction of SNA 93 was started in 1996. At present, the full set of Financial Accounts is being compiled and published in line with the SNA.

19.   A system of "supply and use" (SUT) and "input-output" tables are compiled in the SSC of Azerbaijan since 2001, every five years. Currently, annual "supply and use" tables are under development.

20.   Since the end of 2008, the SSC of Azerbaijan has started preparing for the introduction of the 2008 SNA. In April 2009, "Plan of actions on data improvement of statistics of national accounts in 2009-2011" was approved. The SSC prepared methodological notes for implementation of this plan. A study group on stocks of non-produced assets, comprised of representatives of the appropriate ministries and government departments was established. To effectively continue improvement of national accounts and the implementation of the 2008 SNA, the remaining key activities were included in the "State Program on development of official statistics in 2013-2017 in the Republic of Azerbaijan". The consultations and international programs on technical assistance have provided SSC with important support. Moreover, learning from the experience of other European countries in bilateral cooperation, for instance under the Technical Assistance Information and Exchange Instrument (TAIEX) etc. has proven useful.

VII.   Challenges and further work on improving   the set of indicators on environmental-economic accounting

21.   The activities planned in order to develop certain components of SEEA are reflected in the "State Program on development of official statistics in 2013-2017 in the Republic of Azerbaijan". In particular, it provides for the development of the measurement of non-produced, non-financial assets, development and introduction of balance sheets, a scorecard of "green economy" indicators, satellite accounts on energy, indicators for the improvement of environmental performance etc.

22.   The following steps are needed in the introduction of SEEA in Azerbaijan:

(a)   To identify demand and define the priorities for developing integrated environmental and economic accounting;

(b)   To define a set, details and scope of accounts to be developed in the SEEA central framework;

(c)   To study and select the sources of information and methods for calculation of indicators;

(d)   To establish the necessary infrastructure and develop tools to collect and process the statistical information;

(e)   To adapt the structure of "supply and use" tables for the purposes of compiling SEEA.

VIII.   Conclusion

23.   During the last 30-40 years, environmentalists around the world have made increasing efforts to attract attention to the irreparable environmental damage brought about by economic production. In this context, it seems paradoxical that the words "ecology" and "economy" have the same root «οἶκος», which translates from Greek as "home" or "dwelling".

24.   The term "Ecology" was coined in 1866 by the German natural scientist and philosopher Ernst Heinrich Haeckel. Its direct translation means "science of home". The term "economy" has more ancient roots and literally means "rules of family life" or "rules of farm management". "Economy" is first mentioned in a scientific work by Xenophon in 4th century B.C. In his work, Xenophon determines it as a "natural science", which at the time referred to studying and using the laws of nature without considering the laws introduced by man, thus excluding human influence. The main function of the economy was to provide goods needed for human life and activities without which the society cannot develop.

25.   We hope that introduction of the System of Integrated Environmental and Economic Accounting – in other words improvement and development of statistical data which reflects the interconnections of production activities and the ecosystem – will help to improve the balance with human activities and direct them to sustainable development path for the benefit of humanity and our shared home.