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EDITORIAL

by

Peter Bartelmus

Chief, Environment, Energy and Industry Statistics Branch



Turbulent times in the United Nations have had their effects on the environment statistics programme of UNSD. The current issue of ENVSTATS thus covers a full year - an opportunity not only for looking back but also ahead. We are in good company: the Global Forum in Rio (+5), the Commission on Sustainable Development (CSD) and a special session of the General Assembly have taken stock, or will do so soon, of achievements and failures in implementing the Earth Summit's Agenda 21. UNSD did its best to follow-up on the recommendations of the Rio Summit, facing increasing resource constraints and dissent about concepts and methods in a new area of applied statistics. The following reviews briefly our contributions over the past five years, with an indication of future plans.

Environmental indicators and accounting - review and outlook

It is the merit of the Rio Summit, indeed a most august assembly of data users, to have drawn hitherto languishing environment statistics into the limelight of policy needs and use. It did so by separating monetary valuations of the environment in "green" national accounts (ch. 8 of Agenda 21), with a good distance of 32 chapters, from non-monetary or physical indicators of sustainable development (ch. 40 of Agenda 21). This reflects a widespread dichotomy in environmental data development. On the one hand, environmental economists and accountants attempted to incorporate environmental impacts of natural resource depletion and environmental degradation as "cost" into the national accounts and models of environment-economy interaction. On the other hand, many environmentalists considered "pricing the priceless environment" as a form of "colonization" by economists who treat a national heritage like a commodity; the development of physical indicators of environmental effects is their answer. UNSD has pursued both avenues of (a) indicator development and (b) integrated environmental and economic accounting.

The Statistical Commission of the United Nations approved a first international compilation of *environmental indicators* from national statistical offices, and we are now elaborating the questionnaires for such an effort. First results are expected to be published in 1999. After issuing guidelines on concepts and methods of environment statistics, containing an unwieldy large number of statistical "variables", a more selective approach is taken now in preparing a manual of environmental "indicators". Some of this work has found its way into a broader list of "indicators for sustainable development", presented by the Department for Policy Coordination and Sustainable Development to the user community of the CSD. It appears now that data users are quite impatient to obtain indicators capable of monitoring progress in the implementation of Agenda 21. On the other hand, data producers are concerned about the proliferation of indicators and indices of and for sustainable development which may lack rigour in definition, classification and hence comparability (see also *POINT OF VIEW*).

In the area of *environmental accounting*, UNSD followed the recommendation of Agenda 21 and issued a handbook on "Integrated Environmental and Economic Accounting". The approach was to expand the world-wide adopted System of National Accounts (SNA) into a "satellite" System of integrated Environmental and Economic Accounts (SEEA). The idea was to achieve maximum consistency with conventional economic indicators. Numerous case studies in developing and industrialized countries confirmed the feasibility and usefulness of this approach. However, there is still considerable controversy about concepts and methods, notably on the valuation of non-market activities and phenomena. UNSD adopted, therefore, a two-pronged approach of consensus building on commonly used methodologies, and further research and experimentation on controversial issues. The results are



- ➔ (a) an operational "hands-on" manual on the implementation of the more practical elements of the SEEA, to be issued by the end of the year and (b) cooperation with expert groups of national accountants (in particular the so-called London Group) in the revision of the SEEA, probably around the year 2000.

We did not succeed, however, in linking unequivocally the two basic approaches to data development and use - an issue of great concern to the Statistical Commission at its latest session in February this year. Much of the answer might come from the user community, deciding what combination of monetary and physical data and aggregates is required for policy formulation and monitoring. Hopefully, the above-mentioned conferences of CSD and General Assembly will provide again some impetus to answering this question.

WHAT?



Environment Statistics

A *Glossary of Environment Statistics* has been issued by UNSD. It is a quick reference tool that identifies key terms used in the fields of environmental statistics, indicators of sustainable development and integrated

environmental and economic accounting. The glossary is a first attempt at presenting concepts and definitions for these rapidly developing new areas of applied statistics. It includes approximately 1200 self-contained definitions referring to environmental elements of air/climate, land, soil, water and ecosystems. It also covers related socioeconomic concerns such as natural resource use, waste management, public health, human settlements and the effects of natural disasters. The glossary should appeal not only to environmental statisticians, but also to data users such as environmental managers and policy analysts looking for operational concepts and definitions.

To order copies:

The *Glossary of Environment Statistics* is available for \$25.00 (Sales No.E.96.XVII.12) from United Nations Publications, Two UN Plaza, Room DC2-853, New York, NY 10017, USA, Tel: (1-800) 253 9646 or (1-212) 963 8302, Fax: (1-212) 963 3489, E-mail: publications@un.org; or Palais des Nations, CH-1211 Geneva 10, Switzerland, Tel: 41-22-917-2614, Fax: 41-22-917-0027, E-mail: unpubli@unog.ch, Internet: <http://www.un.org/Publications>.

Statistical Commission (29th session)

The Statistical Commission held its twenty-ninth session in New York from 11 to 14 February 1997. The Commission discussed the report of the Task Force on Environment Statistics, and a note on high-priority programmes and activities in environment statistics. The Commission:

- * stressed that future work of the Task Force should focus on improved coordination of its programmes and activities;
- * considered basic environment statistics to be of highest priority, followed by environmental indicators and environmental accounting;
- * stressed the need for developing closer linkage between environmental indicators and environmental accounting;
- * welcomed collaboration between UNSD and the London

Group on the revision of the System of integrated Environmental and Economic Accounting (SEEA); and

- * endorsed the establishment of a bulletin board for sharing information on technical cooperation activities in the areas of environmental statistics and accounting.

Environmental Accounting

An *operational manual* on the implementation of the SEEA is being prepared by the Nairobi Group. The Group held its second meeting in November 1996, at the Centro Agronómico Tropical de Investigación y Enseñanza (CATIE) in Turrialba, Costa Rica. The Group reviewed a first draft of the manual and agreed on its structure, contributions by the participants and a work schedule. The final draft is envisaged to be completed by the end of June 1997 and will be circulated to experts in the field for comments. The manual is expected to be published by the United Nations by the end of 1997.

User-friendly software for the implementation of the SEEA will be developed by UNSD and the Fondazioni ENI Enrico Mattei. The software is to provide a step-by-step guided compilation of "worksheets" presented in the manual. The diskette will be included in the manual.

The *proceedings of the Special Conference* of the International Association for Research in Income and Wealth (IARIW) on "Integrated Environmental and Economic Accounting in Theory and Practice" (Tokyo, 5 - 8 March 1996) were issued and can be obtained from the Economic Research Institute, Economic Planning Agency, Government of Japan. Edited and updated selected contributions to the conference will be published later this year by Kluwer Academic Publishers.

Country Projects

The pilot project on the implementation of the SEEA in *Ghana* has been completed. The project was executed by the Ghana Statistical Service with technical assistance from the UNSD and the Overseas Development Administration of the United Kingdom.

A popular analytical report on the results of the pilot compilation of the SEEA in the *Republic of Korea* will be finalized by mid-year.

In the *Philippines*, preliminary results of the compilation of the SEEA, covering the asset accounts for fish, forest and mineral resources were published jointly by the Department of Environment and Natural Resources (DENR), United Nations Development Programme (UNDP) and National Economic and Development Authority (NEDA). The project was executed by the National Statistical Coordination Board (NSCB) with the substantive support of UNSD. Further accounts for degradation of the environment

WHEN AND WHERE?



➔ have now been compiled, and a regional (sub-national) environmental accounting project (for the province of *Cebu*) will be launched in June 1997.

Training

The *Munich Centre for Advanced Training* in applied statistics for developing countries was founded in 1972 jointly by the Federal Republic of Germany, the Commission of the European Communities and the European Centre for Training Economic Statisticians from Developing Countries. Over 1000 statisticians, mainly from African, Caribbean and Pacific countries, have taken the opportunity for advanced training at the Munich Centre.

The Centre is for the first time offering a course in the environmental field, entitled "Statistics for Environmental Policy" from 10 March to 20 June 1997. UNSD has been involved in both the conception of this course and in the provision of two lecturers to cover the topics of "quantitative aspects of sustainable development" and "environmental indicators".

The subjects covered by the course include:

- * quantitative aspects of sustainable development;
- * use of microcomputing for environment statistics;
- * monitoring and data;
- * geographical information systems;
- * selected areas of environment statistics: land use, energy and materials, environmental impacts of industry, demographic pressures, water and air;
- * environmental and sustainable development indicators;
- * environmental accounting, including natural resource accounting;
- * environmental modelling.

The course is conducted in English and is directed to persons in charge of compiling environmental information, either in statistical offices or in institutions responsible for environmental policy.

Call for Papers

The Natural Resources Forum is a United Nations journal, which focuses on the sustainable development and management of the water, energy and mineral resources of developing countries. It examines the economic, financial, legal and environmental aspects of natural resource development.

The *Forum* welcomes contributions, especially in the environmental and related socioeconomic fields, focusing on applied studies rather than abstract modeling.

For more information and sample copies please contact: Marcia Brewster, Editor-in-Chief, Natural Resources Forum, Room DC1-822, United Nations, New York, N.Y. 10017, USA. Tel: (212) 963-8590, 963-8781. Fax: (212) 963-4340, 963-1270. E-mail: brewster@un.org or douglas@un.org.

ESCAP Seminar on Environmental and Resource Accounting (Seoul, 27 - 31 May 1996). The Seminar, hosted by the Korea Environmental Technology Research Institute (KETRI), reviewed the final results of a Netherlands-sponsored ESCAP project on integrated environmental and economic accounting. The project

consisted of five country studies in Guam, India, the Republic of Korea, the Philippines and Iran.

Seminar on Statistical Aspects of Sustainable Development (Munich, Germany, 1 - 10 July 1996). The meeting, held at the Munich Centre for Advanced Training in applied statistics for developing countries, comprised primarily of directors of African national statistical services and of three national environmental agencies. The overall importance of training and technical cooperation in both environmental indicators and in indicators of sustainable development was stressed.

UNSD mission on the implementation of the SEEA in the Philippines (Manila, 9 - 13 September 1996). The mission's goal was: a) to review progress made on implementation of the SEEA; b) to advise about valuation of environmental assets and their use and c) to draft a collaborative research programme on policy analysis of the accounting results and the application of the SEEA at the regional (subnational) level.

Second meeting of the Nairobi Group on environmental accounting (Turrialba, Costa Rica, 1 - 3 November 1996) (see page 2, Environmental Accounting).

UNDP Environmental Focal Point Workshop for Latin America (Isla Margarita, Venezuela, 18 - 20 November 1996). The objectives of the workshop were the development of an integrated vision of the instruments to address sustainable (human) development, the specification of the requirements for programming Global Environmental Facility (GEF) projects and the assessment of lessons learned from GEF project implementation.

Munich Centre for Advanced Training (see above, Training).

Forthcoming meetings and conferences

Training Course on Environmentally Sustainable Development for Asia-Pacific Region (Bombay, 7 - 18 April 1997).

Fourth Annual London Group Meeting on Natural Resource and Environmental Accounting (Ottawa, 17 - 20 June 1997).

International Conference on Integrating Environment and Economy - Accounting, Policy, Business (Novgorod, Russia, 30 June - 4 July 1997).

Fifth Session of the Commission on Sustainable Development (New York, 8 - 25 April 1997).

"Earth Summit +5": Special Session of the United Nations General Assembly to Review and Appraise the Implementation of Agenda 21 (New York, 23 - 27 June 1997).

POINT OF VIEW



(Opinions stated here present personal views and not necessarily those of the affiliated organizations).

Indices of the environment and sustainable development

by *Peter Bartelmus and Reena Shah, UNSD*

There has been a proliferation of highly aggregated indicators and indices, purporting to measure “sustainable economic welfare”, “human development”, “the wealth of nations” or “genuine progress”. They reflect an attempt to reduce “information overload”, a recurrent complaint by decision makers looking for nutshell information on complex interactions between environment and society. Frequently, these indices are compiled outside standard data systems. The question is, therefore, whether their underlying data comply with national and international statistical standards. Furthermore, combining of indicators into compound indices requires the application of weights which reflect the relative importance of individual indicators. Both indicator selection and weighting may thus impair the validity and comparability of the indices.

envstats is produced by the Environment Statistics Section of the United Nations Statistics Division (UNSD). The views expressed here do not necessarily reflect those of the United Nations.

Comments and contributions for inclusion in future issues should be

sent to **Kathleen Suite, envstats**, DC2 - 1638,

2 United Nations Plaza, New York, New York 10017.

Tel: (1-212) 963 4847. Fax: (1-212) 963 0623.

E-mail: suite@un.org