



A NEWSLETTER of the
United Nations Statistical Division (UNSD)

Issue 1

January - June 1995

EDITORIAL

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ENVSTATS has been the secret password to my computer. It's no secret any more, and indeed our newsletter is to reveal to you our current and planned activities, our successes and failures, our questions and possible answers. It is also a means of disseminating information on international events in the field of environment statistics.

The newsletter on environment statistics evolved from the fourth meeting of the Intergovernmental Working Group on the Advancement of Environment Statistics. The Working Group represents statisticians from all over the world; they believed that the time has come to improve communication in a multi-disciplinary field of applied statistics that involves a large variety of data producers and users at national, local and international levels.

The present first issue of ENVSTATS is a modest beginning. We will try to keep you informed about:

- * *what* are the activities of UNSD and collaborating organizations in the areas of environmental statistics, indicators and accounting;
- * *what* are the main results of these activities;
- * *who* are the main players - people/organizations - in these areas;
- * *when and where* major events - conferences, workshops, seminars - take place, and what are their objectives and outcomes.

Also, we want to give you an opportunity to present your *point of view* about controversial issues in an area that does not lack in opinions, beliefs, arguments and counter-arguments.

This issue of ENVSTATS provides an overview of UNSD's current work on the concepts, methods, frameworks and systems of environmental statistics, indicators and accounting, as well as on country projects to test and apply these methodologies. The current proliferation of international meetings and workshops in these areas is reflected in the *when and where* section. The *point of view* column lists a number of questions on which you are invited to give us your opinion. We will attempt to present your views in the next issue of ENVSTATS.

ENVSTATS is, of course, still very experimental in nature. We therefore count on and look forward to your reactions, comments and contributions; they will help us to improve on outlay and contents.

Finally, I would like to acknowledge the enthusiastic cooperation of my colleagues - introduced to you in the *who* section - and of Arik Bartelmus who contributed the illustrations. I wish ENVSTATS a long and productive life!

WHAT?



Environment Statistics

In the field of environment statistics, international effort initially sought to develop a system of environment statistics, parallel to those in the economic and socio-demographic fields, namely the System of National Accounts (SNA) and the System of Social and Demographic Statistics (SSDS). However, as in the case of SSDS, the absence of a common *numéraire* and of a generally accepted theory led to the abandonment of the system approach in favor of a *Framework for the Development of Environment Statistics* (FDES) issued by the then United Nations Statistical Office in 1984. The FDES relates "information categories", representing a sequence of action, impact and reaction, to "environmental components" of flora, fauna, atmosphere, water, land/soil and human settlements.

Based on the FDES, more detailed methodologies were developed in technical reports on *Concepts and Methods of Environment Statistics: Human Settlements Statistics* (1988) and *Concepts and Methods of Environment Statistics: Statistics of the Natural Environment* (1991). These reports describe detailed sets of statistical variables and facilitate the identification and selection of statistical series for national and international environmental data collection.

Environmental Indicators and Indicators of Sustainable Development

The long lists of statistical variables in the above technical reports were found to be "overwhelming" by many countries, especially those with limited statistical capabilities. UNSD collaborated therefore with the Inter-governmental Working Group on the Advancement of Environment Statistics in developing a set of high-priority environmental indicators.

At the same time, the United Nations Conference on Environment and Development (UNCED), requested countries and international organizations to develop the concept of indicators of sustainable development. In response, UNSD proposed a draft "Framework for Indicators for Sustainable Development" (FISD) (1994) which combines the concerns of potential data users, as reflected in Agenda 21, with the framework for environmental data production, the FDES.

Various efforts of obtaining a common framework and agreed lists of indicators of sustainable development are underway. UNSD has worked closely in this regard with the United Nations Department for Policy Coordination and Sustainable Development (DPCSD) in preparing a widely accepted set of indicators of sustainable development. With the help of the Inter-governmental Working Group, UNSD has established a list of "environmental indicators" which represents a sub-set of the broader list of sustainable development indicators. Selected indicators of this sub-set will be compiled from national statistical services in the near future.

Environmental (Green) Accounting

National accounts have been criticized for neglecting the costs of new scarcities of natural resources, on one hand, and of the degradation of environmental quality (mainly from pollution), on the other hand. In the absence of international consensus on how to incorporate environmental assets and the costs and benefits of their use into the SNA, UNSD developed a System of Integrated Environmental and Economic Accounting (SEEA) as a "satellite system" to the SNA. The SEEA and its concepts and methods were issued as a handbook of *Integrated Environmental and Economic Accounting* (1993). It is expected that further research, especially on questions of valuation, and experiences with the implementation of the SEEA will lead to further revision of the handbook.

Country projects

In collaboration with the World Bank, United Nations Development Programme (UNDP) and United Nations Environment Programme (UNEP), UNSD has carried out several country projects on the implementation of the SEEA. In Mexico, Papua New Guinea and Thailand pilot studies were undertaken to test initial methodologies. After publication of the handbook of *Integrated Environmental and Economic Accounting*, further projects on the implementation of the SEEA were carried out by the Republic of Korea, Indonesia, Colombia, Ghana and the Philippines. The Korean study has been completed, and an analytical report will be prepared shortly. The remaining countries are at the physical data collection stage and are expected to complete their projects in the first quarter of 1996. The Philippines is also planning to undertake a regional (sub-national) environmental accounting project.

UNSD has also assisted the Institut National de la Statistique of Côte d'Ivoire in establishing an environment statistics programme.

WHO?



The following staff members of UNSD are currently involved in work on environment statistics:

Peter Bartelmus is the Chief of the Environment, Energy and Industry Statistics Branch. He holds a doctorate in economics from Heidelberg University (Germany). He has been working on environmental and economic statistics in the Federal Statistical Office of Germany, the East African Community, UNEP and UNSD (since 1981). His main research interest is the interface between statistics, statistical analysis and policy formulation in the area of sustainable development. He is the author of numerous publications in these areas.

Giovanni Carissimo has recently assumed the position of Chief of the Environment Statistics Section. He holds a doctorate in statistics and demography from the University of Rome (Italy). He has been working on various assignments on statistics in the Food and Agriculture Organization (FAO), the Economic Commission for Europe (ECE), the United Nations Centre for Human Settlements

WHEN AND WHERE?



(HABITAT) and, since 1978, in UNSD. He has initially designed and organized a methodological program for the development of environment statistics and, as Chief of the Technical Cooperation Services Section, has undertaken numerous missions in developing countries to assist and advise governments in the field of statistics, statistical organization and informatics.

Donald Shih has joined the Environment Statistics Section since last December. Prior to his current assignment, he was involved in various areas of statistics, such as national accounts and the International Comparison Programme in UNSD. He is responsible for the finalization of a *Glossary of Terms of Environment Statistics*, and in drafting reports for UN meetings and other conferences. His main interest is the methodological development of environmental and economic accounting.

Reena Shah has worked as a statistician in the Environment Statistics Section since 1989. Her main area of work has been in the methodological development of environment statistics. More recently she has worked on the concepts and methods of environmental indicators, and is responsible for the development of a questionnaire for international indicator compilation.

Alessandra Alfieri is a statistician in the Environment Statistics Section. She is currently writing her Ph.D. dissertation in statistics. She has worked in EUROSTAT and the World Bank. Her main area of work is the development of concepts and methods of environmental accounting and implementation of country projects on the SEEA in the Republic of Korea, Indonesia, Ghana and the Philippines.

Kathleen Suite is the editor of ENVSTATS. She also collaborated in the preparation of the *Glossary of Terms of Environment Statistics*, and the *Directory of Environmental Data*. Prior to her assignment to the Environment Statistics Section, she worked as a Statistics Assistant in the Trade and Transport Statistics Branch.

The secretaries of the Branch and the Environment Statistics Section are, respectively, **Rebecca Musgrave** and **Ella Price**.

Jan van Tongeren is the Interregional Advisor on Macro-accounting for Analysis and Policy-Making (formerly Chief of the National Accounts and Statistical Classifications Branch). In his capacity as Branch Chief, he has collaborated with Mr. Stahmer of the Federal Statistical Office of Germany and Peter Bartelmus in the preparation of the United Nations Handbook on *Integrated Environmental and Economic Accounting*. He also participated in the implementation of integrated accounting projects in Mexico, Colombia and the Republic of Korea.

Staff from other organizations and projects will be introduced in the next issue of ENVSTATS.

Workshop on Indicators of Sustainable Development (Ghent, 9-11 January 1995) - organized by the Governments of Belgium and Costa Rica, UNEP and the Scientific Committee on Problems of the Environment (SCOPE). The workshop

confirmed the usefulness of indicators of sustainable development and emphasized the need to take economic, social, environmental and institutional aspects into account in developing frameworks and common methodologies. UNSD made a presentation on "Economic Indicators of Sustainability: Approaches, Limitation, and Use".

ESCAP Seminar on Environment Statistics (Jakarta, 23-27 January 1995) - organized by ESCAP in conjunction with the Central Bureau of Statistics of Indonesia. The seminar is part of the ESCAP project to establish and improve systems of environmental data collection, through case-studies and the development of an operational handbook on environment statistics.

Inter-governmental Working Group on the Advancement of Environment Statistics (Stockholm, 6-10 February 1995) - fourth meeting organized by UNSD and Statistics Sweden. The meeting agreed on a list of environmental indicators for collection from national statistical services by UNSD. UNSD staff presented papers on "Environmental Indicators - Methodological Development and Compilation" (in collaboration with Statistics Sweden); "Data Systems for Sustainable Development - Diversities, Links and Commonalities"; "Integrated Environmental and Economic Accounting - Data Requirements" and "Draft Glossary of Terms of Environmental Statistics and Accounting".

Expert Group Meeting on Indicators for Sustainable Development (New York, 14-15 February 1995) - organized by DPCSD to discuss and reach consensus on a working list of indicators for sustainable development and to draft a programme of work for submission to the Commission on Sustainable Development.

Twenty-eighth session of the Statistical Commission (New York, 27 February-3 March 1995). The Commission approved the proposal of the Inter-governmental Working Group that UNSD carry out an international compilation of environmental indicators from national statistical services.

National Accounts and the Environment (Washington, D.C., 15-17 March 1995). The second meeting of the "London Group" was organized by the Bureau of Economic Analysis (BEA). The discussion focused on issues of monetary valuation, and physical indicators for environmental accounting. UNSD staff presented the following papers: "Valuation of Environment and Natural Resources - Some Unresolved Issues"; "Data Systems for Sustainable Development" and "An Analytical Approach to the Calculation of Green GDP".

Third Session of the Commission on Sustainable Development (New York, 11-28 April 1995). The conference, inter alia, urged UNSD and other national and international organizations to cooperate in the development of indicators of sustainable development, approved a programme of work on the development of indicators of sustainable development, and welcomed the international compilation

of environmental indicators approved by the Statistical Commission at its twenty-eighth session.

Macroeconomics and the Environment (Washington, D.C., 10-11 May 1995). The seminar was organized by the IMF with the objective to analyze the relationships between macroeconomic policy and conditions and the environment, and to draw conclusions for IMF involvement in this area. UNSD presented a paper on "Integrated Environmental and Economic Accounting - A Framework for Assessing the Interrelationships between the Environment and the Macroeconomy".

Taking Nature into Account (Brussels, 31 May-1 June 1995). The conference was organized by World Wide Fund for Nature (WWF), the Club of Rome and the European Parliament. The Action Plan of the Conference calls for concerted global action to implant a new Nature-adjusted SNA.

Workshop on Environmental and Natural Resources Accounting for Islamic Countries (Ankara, 12-14 June 1995). The workshop was organized by UNEP and the Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRTCIC). The objective of the workshop was to familiarize data users and producers in Islamic countries with concepts, methods and uses of environmental accounting.

Colloquium on Information and Environmental Indicators for Latin America and the Caribbean (Santiago, 27-29 June 1995). The conference was organized by the Economic Commission for Latin America and the Caribbean (ECLAC) and the government of France. The meeting discussed, inter alia, the most important priority areas with regard to the production of environmental indicators, the question of data limitations and availability, and the definition of a framework for cooperation for the development of environmental indicators to be used for decision-making.

Planned meetings

Second Expert Group Meeting on Indicators of Sustainable Development (DPCSD) (New York, 25-26 July 1995).

Accounting for the Future (World Bank, WWF and others, Washington, D. C., 3 October 1995).

World Energy Council 16th Congress (Tokyo, 8-13 October 1995).

SCOPE Workshop on Indicators of Sustainable Development (Germany, November 1995).

Expert Working Group on Environmental and Natural Resource Accounting (UNEP, Nairobi, 20-22 November 1995).

International Association for Research in Income and Wealth (IARIW) Special Conference on Environmental Accounting (Tokyo, 5-8 March 1996).

National Accounts and the Environment (third meeting of the "London Group", Stockholm, May 1996).

POINT OF VIEW



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

You are invited to give us your opinion on concerns, technical questions, approaches and uses of environment statistics. Such issues could include:

- * frameworks for environmental and sustainable development indicators;
- * lists of environmental and sustainable development indicators, prepared by UNSD, OECD, DPCSD, World Bank and others;
- * short-cut methods of adjusting saving and GNP to compile a "green GNP" and "genuine savings", proposed by the World Bank;
- * physical environmental indicators in national accounts;
- * alternative valuations of environmental assets, and costs and benefits of their use.

This issue of ENVSTATS was produced by the Environment Statistics Section of the United Nations Statistical Division (UNSD). The views expressed here do not necessarily reflect those of the United Nations. Your comments and contributions for inclusion in future issues should be sent to **ENVSTATS**, DC2 - 1638, Two United Nations Plaza, New York, New York 10017. Tel: (1-212) 963 4847. Fax: (1-212) 963 9851. E-mail: suite@un.org