ECLAC

Economic Commission for Latin America and the Caribbean

Joint Meeting OAS/ECLAC on Statistical Matters

Santiago, Chile, 11-14 October 1994

PROGRAMME OF INTERNATIONAL STATISTICAL WORK FOR LATIN AMERICA AND THE CARIBBEAN, 1995-1996

SUBPROGRAMME 2: ACTIVITIES IN THE FIELD OF ENVIRONMENT STATISTICS AND INDICATORS */

*/ This document was prepared by the Division of Statistics and Projections of ECLAC. It has not been submitted for editorial revision 94-9-1257
Integrated presentation

The subprogramme presented in this document forms part of a proposed programme of international statistical work for Latin America and the Caribbean, 1995-1996, which ECLAC is submitting to the Joint OAS/ECLAC Meeting on Statistical Matters, for consideration by the participants.

This is the first time that a proposed programme of this nature has been prepared. This is called an integrated presentation, in so far as it assigns specific responsibilities to different countries and international organizations for carrying out statistical activities in Latin America and the Caribbean during the 1995-1996 period. The countries and entities involved in the programme have not been consulted in all cases, since this is the first time such a mechanism has been used. However, it is expected that the details will be worked out at the meeting and that all involved will agree on an integrated programme for submission to the following meeting.

The subprogrammes are presented in four separate documents, with the following titles:

Subprogramme 1: Adaptation and production of basic statistics in the framework of a regional strategy for the implementation of the System of National Accounts 1993

Subprogramme 2: Environmental statistics and indicators

Subprogramme 3: Social and poverty indicators

Subprogramme 4: Dissemination of statistical information

Each subprogramme has been divided into a certain number of programme elements, which can be described as follows: i) Objectives: a broad outline of what the execution of each subprogramme is expected to achieve; ii) activities and agencies: description of the main activities, identifying as far as possible the countries or entities that will execute them; iii) meetings in the next two years: tentative purpose, place and date of each meeting; iv) expected output: specific results expected by the countries.

<table>
<thead>
<tr>
<th>Subprogramme</th>
<th>Programme element</th>
</tr>
</thead>
</table>
| **Subprogramme 1:** Adaptation and production of basic statistics in the framework of a regional strategy for the implementation of the System of National Accounts 1993 (SNA 1993) | 1.1 Provision of access to technical documentation in Spanish to those responsible for implementing SNA 1993 and to Spanish-speaking producers of basic statistics.  
1.2 Dissemination of international recommendations concerning SNA 1993 and the production of basic statistics, and support for countries of the region in adopting them.  
1.3 Training of national accounts experts and producers of basic statistics.  
1.4 Improvement and extension of the production of basic statistics for the implementation of SNA 1993. |
| **Subprogramme 2:** Environmental statistics and indicators | 2.1 Diagnostic analysis of the status of environmental statistics and indicators in the countries of the region.  
2.2 Transference of international experiences, training and cooperation in statistics and environmental indicators. |
| **Subprogramme 3:** Social indicators and poverty surveys | 3.1 Improvement of household surveys.  
3.2 Use of household survey data.  
3.3 Construction and use of databases from population and housing censuses taken around 1990. |
| **Subprogramme 4:** Dissemination of statistical information | 4.1 Policies, strategies and institutional organization for disseminating statistical data.  
4.2 New technologies and services for data dissemination using remote network connection.  
4.3 Platforms and recording media in the dissemination of statistical data. |
Contents

Background ................................................................. 1

Activities in the field of environment statistics and indicators ............ 1

At the international level .............................................. 1

At the regional level .................................................... 2

At the national level .................................................... 2

SUBPROGRAMME 2: ENVIRONMENT STATISTICS AND INDICATORS .... 3

Rationale ................................................................. 3

Objectives ............................................................... 3

Programme element 2.1: Diagnostic analysis of the situation of environment statistics and indicators ......................... 4

Activities and means .................................................. 4

Expected output ....................................................... 5

Meetings in the next two years ....................................... 5

Possible participating organizations ................................ 5

Programme element 2.2: Transfer of international experience, training and cooperation in environment statistics and indicators .......... 5

Activities and means .................................................. 5

Expected output ....................................................... 6

Meetings in the next two years ....................................... 6

Possible participating organizations ................................ 6
BACKGROUND

Activities in the field of environment statistics and indicators

At the international level

The most active international organizations in this field are: the United Nations Economic Commission for Europe (ECE), the United Nations Statistical Division (UNSTAT), the Statistical Office of the European Communities (EUROSTAT), the Food and Agriculture Organization of the United Nations (FAO), the Organisation for Economic Cooperation and Development (OECD), and the United Nations Environment Programme (UNEP).¹

With respect to the development of concepts and methods, ECE and EUROSTAT have developed the "European system for the collection of economic information on the environment" (S.E.R.I.E.E.). They have also prepared a draft of the "Single European Standard Statistical Classification of Environmental Protection Activities".²

With respect to environmental indicators, UNSTAT is preparing a draft Framework for Indicators of Sustainable Development (FISD), which will be published in 1994; EUROSTAT is developing an environmental index (EXTASY); OECD is working on a core set of indicators based on the pressure-stress-response approach, which is useful for describing the main trends in human pressure on the environment and the reaction of the environment to such pressure; the World Bank is preparing an Environmentally Sustainable Development (ESD) Sustainability Matrix; lastly, UNEP is developing indexes on environment and sustainable development.

The Inter-Governmental Task Force for Progress in Environment Statistics, at its third session, held in Wiesbaden, Germany, from 14 to 18 December 1992, presented some results of the joint experience of developed and developing countries in executing certain projects. Worthy of mention among such projects is the one carried out by Mexico and Norway on "Air pollution and energy statistics"; Mexico presented a report on the "inventory of air pollutant emissions in Mexico, 1985-1990". In conclusion, it pointed out that, despite the differences between the two countries, the project was a success. Mexico expressed its interest in continuing the collaboration between the two countries.

The purpose of the above paragraphs is only to illustrate some of the activities of international organizations deeply involved in the field of environment statistics. UNSTAT is preparing a complete report on this matter, based on a special survey, which will be available in the last quarter of 1994.

¹ See document LC/R. 1432 (Sem. 80/4).
² See document LC/R. 1431 (Sem. 80/3).
According to the information that ECLAC has to date, technical cooperation in the field of environment statistics and indicators has come mostly from the United Nations through UNSTAT. However, there is more cooperation with respect to environmental accounts, since besides UNSTAT there are the European Union, through EUROSTAT, and bodies like the United Nations Development Programme (UNDP) and UNEP.

At the regional level

At the regional level there have been few activities in the field of environment statistics and indicators. Only since August 1994 has UNEP, with the collaboration of ECLAC, begun to execute a project on environmental indicators to support sustainable development policies.

That project is at the stage of the selection of the indicators and the definition of the methodology for collecting and organizing data. The next step will be to gather and analyse the information selected that is available in countries. The project will produce the first report on a set of sustainable development indicators in the region.

Even though it dealt with environmental and natural resources accounts, mention must be made of the seminar held by the Inter-American Statistical Training Center (CIENES) of the Organization of American States (OAS). The seminar had two major themes: fundamental aspects of "environmental economics" and "satellite environmental accounts and the United Nations System of National Accounts 1993". The seminar was held from 30 May to 10 June 1994 in Santiago, Chile, with participants representing 11 Central and South American countries.

At the national level

Activities at the national level in the field of environment statistics and indicators have mostly revolved around estimates of the satellite accounts of the System of National Accounts 1993 (SNA 1993). Two pilot studies were carried out in the region during the 1990-1991 period. The first was in Costa Rica, with the participation of ECLAC and UNSTAT and co-sponsored by the World Resources Institute (WRI); and the second in Mexico, with the support of the World Bank. Both studies revealed a lack of basic statistics for a sustained study of the issues; they concluded, however, that it was feasible to implement environmental and economic accounting without incurring excessive costs.

In 1992, Colombia established the Inter-Agency Committee on Environmental Accounts (CICA). The primary function of CICA is to develop a methodology for managing data that meets the following objectives: (i) to provide a System of Environmental Accounts (SEA) that includes environmental information expressible in accounting terms at the national and territorial (regional and local) levels; (ii) to promote the integration of SEA into the country’s system of national accounts and the systems of regional economic accounts that are in the process of being formulated; (iii) to promote the integration of SEA into the System of Environmental Data (SED) and into territorial data systems; and (iv) to formulate monitoring indicators that coordinate environmental variables with other kinds of social and economic variables, both national and of the different territories and regions of the country.
The Central Bank of Chile is executing a project, with the collaboration of ECLAC, to prepare satellite environmental accounts to be incorporated in SNA 1993. The concrete results are still not known, but one of the crucial problems being faced is the implementation of methods to valuate natural resources. Along these same lines, Brazil is carrying out a project, financed by the World Bank, to place monetary values on the impact of GDP growth on the environment.

Other countries of the region are also developing environment statistics, indicators and accounts; however, information about those efforts is unavailable at the moment. Therefore, in order to implement regional cooperation programmes, a detailed survey will have to be taken as part of programme element 2.2, which is presented below.

**SUBPROGRAMME 2: ENVIRONMENT STATISTICS AND INDICATORS**

**Rationale**

The national accounting statistics and indicators used until now do not provide a realistic picture of the creation of wealth through human activity, since they do not consider the use of natural resources, and therefore exclude the costs of changes in the quality of the environment and the exhaustion of natural resources.

There is a consensus, therefore, that the traditional indicators of the SNA are inadequate for orienting and supporting so-called sustainable development policies. The lack of suitable environment statistics and indicators is a factor that leads to an incomplete view of the misuse and degradation of natural resources and of the environment. It should be mentioned in this regard that natural resources are still the basis for the economic growth of the region, so accounts of those resources to be incorporated into SNA 1993 and statistics and indicators to support sustainable development policies are of fundamental importance.

Likewise, the existence of environmental data from different sources calls for an urgent effort to coordinate and harmonize methods of collecting, compiling, classifying and disseminating data.

**Objectives**

The general objective is to introduce into the region integrated environmental data systems, compatible with the methods and standards for measuring their components that are being adopted at the international level.

Considering the meagre development of environment statistics and indicators in the countries of the region, at least two major specific objectives must be pursued: (a) to analyse
the present situation, taking into consideration institutional and legal aspects, the dispersion of
data sources and the heterogeneous nature of measurements of environmental variables; and (b)
to enhance national capacities for developing environment statistics, through the following
activities: (i) training of countries' technicians in conceptual and methodological aspects of
measuring variables and in institutional organization required for the implementation of an
integrated environmental data system to support the execution of policies in this area; (ii)
transfer of successful experience at the international level in areas considered priorities by
countries and the region; (iii) regional cooperation, both horizontal and from other international
sources.

Programme element 2.1: Diagnostic analysis of the situation of environment statistics
and indicators

Very few countries of the region have a complete listing of institutions and the kind of
environment statistics and indicators they produce. Normally, this information is generated by
different bodies in a dispersed fashion, with little or no coordination. There are even cases
where statistics and indicators are produced for specific purposes, but not published.

The purpose of the diagnostic analysis is to provide national authorities with the most
complete information possible about the present state of environment statistics and indicators --
information consolidated in institutional terms and covering specific statistical areas of the
environment.

Activities and means

This task should be carried out basically at the country level. However, that does not
preclude international cooperation for specific activities.

This diagnostic analysis will require centralizing tasks to some extent and suitable inter-
agency coordination. It would therefore be appropriate for national statistical offices to convene
an inter-agency meeting on environment statistics, so that this work can be done jointly and in
a coordinated fashion.

In order to implement a diagnostic analysis with a minimum of homogeneity of criteria
and applied standards, UNSTAT has developed a computer program to identify the data needed
and the institutions that produce such data. Colombia has used this program and its experience
could be valuable for cases in which, for example, special adjustments are needed to make it
compatible with the situation in other countries. In any case, the program is available to the
countries that need it.

Under the project mentioned above, which will be executed by UNEP in collaboration
with ECLAC, a diagnostic analysis of the situation of environment statistics and indicators at
the regional level will be prepared. Consequently, it would be useful to investigate the projects
scope and coordinate activities in order to avoid duplicating efforts.
Expected output

Country-level diagnostic analyses of the situation of environment statistics and indicators, with two-fold usefulness. First, as an instrument for providing the bases for national programmes for statistical development in this area; second, to assess the regional situation in an area which, owing to its importance at the world level, is conducive to international cooperation.

Meetings in the next two years

National inter-agency meetings, to define the terms of reference of the diagnostic analysis. Place: each country; date: period between November 1994 and January 1995.

ECLAC will follow up the development of these diagnostic analyses. To the extent that the experience gained warrants it, ECLAC will study consider convening a meeting as a basis for preparing a regional diagnostic analysis. Place: Santiago, Chile; date: to be determined.

Possible participating organizations

Organizations of the countries involved, UNDP, through possible support for national projects, UNEP, UNSTAT and ECLAC.

Programme element 2.2: Transfer of international experience, training and cooperation in environment statistics and indicators

Developing an integrated system of environment statistics and indicators in the region undoubtedly requires the support of countries and organizations that have experience in an area which, at least at the quantitative level, is in an incipient stage.

As noted above, very few countries of the region have made significant progress in this field; moreover, their efforts have mainly been focused on estimating certain environmental accounts or specific aspects which they try to link to economic growth and its impact on the environment.

This programme element seeks, in general terms, to take advantage of the experience of countries that have executed projects on concrete issues of great interest to the countries of the region, to train national experts, and to define areas for international technical and financial cooperation. The objective of this is to enhance national capabilities for carrying out integrated environment statistics programmes.

Activities and means

A regional survey at the country level needs to be taken to see what is being done with regard to environment statistics, particularly with the support of shared experience, training and
international cooperation. UNSTAT, with the collaboration of ECLAC, will take such a survey to collect useful information for assessing the situation of environment statistics and possibly the need for training and international cooperation.

UNSTAT has training materials available and would be able to participate in projects in this field. However, it would need the support of EUROSTAT, OECD, the Institute of Statistics and Economic Studies (INSEE) of France, and offices of countries of the region with experience in training, as well as collaboration with ECLAC.

With respect to the transfer of positive experience in environment statistics, as a first step UNSTAT could provide prototypes of projects executed in Colombia, Ghana, Indonesia and Korea to countries that need them; it could also collaborate in preparing projects. Brazil, Colombia, and Mexico, for example, could make specific contributions based on their respective experience in executing projects.

Lastly, the need for international technical and financial cooperation should be assessed on the basis of the diagnostic analysis proposed in programme element 2.1, the above-mentioned survey, and the priorities given by national authorities to specific areas, although not necessarily in that order. In this context, ECLAC will explore potential sources of funding, particularly for specific areas of regional cooperation.

**Expected output**

A survey, at the country level, of activities in the field of environment statistics, particularly activities supported by the sharing of experience, training and international cooperation.

The implementation of an integrated programme of environment statistics, at the country level.

**Meetings in the next two years**

Regional training workshops or courses on environment statistics. The places and dates would be determined as the activities proposed in this programme element are carried out.

**Possible participating organizations**

EUROSTAT, INSEE, OECD, UNDP, UNSTAT and ECLAC.
## SUBPROGRAMME 2: ENVIRONMENT STATISTICS AND INDICATORS

<table>
<thead>
<tr>
<th>Programme element</th>
<th>Substantive action by ECLAC</th>
<th>Major coordination required</th>
<th>Expected output</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Diagnostic analysis of the situation of environment statistics.</td>
<td>- Follow-up on the preparation of country-level diagnostic analyses.</td>
<td>Countries involved UNSTAT</td>
<td>Diagnostic analyses as bases for formulating national environment statistics programmes</td>
</tr>
<tr>
<td></td>
<td>- Possible organization of a meeting to prepare a regional diagnostic analysis</td>
<td>UNDP, UNSTAT</td>
<td>Assessment of the regional situation in this field and determination of cooperation activities.</td>
</tr>
<tr>
<td>2.2 Transfer of international experience, training and cooperation in environment statistics</td>
<td>- Collaborate with UNSTAT on a regional survey of activities in the field of environment statistics</td>
<td>UNSTAT</td>
<td>A survey of country-level activities in the environment statistics field</td>
</tr>
<tr>
<td></td>
<td>- Support the transfer of international experience and training</td>
<td>UNSTAT</td>
<td>Start-up of an integrated environment statistics programme at the country level</td>
</tr>
<tr>
<td></td>
<td>- Explore possible sources of international cooperation</td>
<td>EUROSTAT, INSEE, UNDP, OECD, UNSTAT</td>
<td>Securement of required technical and financial cooperation</td>
</tr>
</tbody>
</table>