

**FRAMEWORK FOR STRENGTHENING  
CAPACITY IN THE DEVELOPMENT AND  
INSTITUTIONALIZATION OF  
ENVIRONMENT STATISTICS IN THE  
ECOWAS REGION**

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# **I. INTRODUCTION**

## **OVERVIEW**

Environmental concerns have increasingly become the subject of mainstream socio-economic policies both at international and national levels. In the countries of the Economic Community of West African States (ECOWAS) region, water scarcity, water quality and land degradation are of primary concern, but air quality, waste management and biodiversity are also important issues. These environmental challenges cannot be met without the availability of scientifically reliable information obtained on the basis of knowledge of what is happening at the quantitative and qualitative level. In this regard, environment statistics is a basic tool to collect and organize environmental information and a prerequisite for environmental indicators, environmental accounting and national State of the Environment reports. To ensure sustainable development in the region, sound policy decisions must be made using timely and reliable information. A major difficulty in supporting informed decision-making and assessing the outcomes of such decisions has been the lack of basic environmental statistics and indicators. It is necessary to change this situation by setting up a framework for the production of reliable and timely environment statistics in order to guide the formulation of policies and decisions linked to these issues. Environment statistics is fundamental, therefore, for well informed policy formulation, decision-making and policy assessment at the regional and national levels.

## **STEPS TAKEN**

### **(i) Workshop on Environment Statistics**

As part of the UNSD/ECOWAS project on “Strengthening Statistical capacity-building in support of the Millennium Development Goals in the region of the Economic Community of West African States”, a Workshop on Environment Statistics was held in Dakar, Senegal from 28 February to 4 March 2005. The Workshop was organized by UNSD, in collaboration with the United Nations Environment Programme (UNEP), the Economic Commission for Africa (ECA) and ECOWAS. The 15 ECOWAS Member States were represented by participants from national statistical offices and environmental ministries/agencies who prepared joint country papers for the Workshop describing the situation of environment statistics in their country, and the availability and sources of environmental data.

The participants were trained on concepts and methods of environmental statistics and indicators, with a particular focus on the following topics: statistics on water resources, use, treatment and quality; statistics on air emissions and air quality; statistics on waste; and statistics on land use and land degradation. In addition, topics such as the institutionalization and the dissemination of environment statistics were also covered. The Workshop also provided a forum for exchange of information on the status of national environment statistics, as well as established a network of environmental statisticians in the region.

The participants expressed concern about environmental degradation in the ECOWAS region, especially in the areas of land, forest, biodiversity, water availability and quality, coastal and marine environment, waste management and air quality. They noted that good environmental data is a prerequisite for sound management of their country’s environment, thereby ensuring sustainable development and efficient use of scarce natural resources.

The Workshop was considered an important step for the improvement of environment statistics for the countries in the ECOWAS region. However, the participants believed that the actions necessary to develop environment statistics in the countries could not be initiated through

a single workshop. Considerable additional efforts would be needed to create the necessary capacity. Support from international organizations and donors would be needed for further capacity building, pilot data collection and technical equipment. Countries would need to make human and financial resources available on a long-term basis.

The participants noted that the UNSD/UNEP Questionnaire on Environment Statistics in the areas of water, waste, air and land was the appropriate tool to define the data needed in these areas and should be used to collect data available on environment in the ECOWAS region. These data should be included in a regional environment statistics compendium and also used to support environmental assessment and reporting. For other priority environmental issues such as biodiversity, other data collection tools should be developed accordingly.

It was noted that the creation and/or strengthening of adequate mechanisms and responsibilities for the collection of environmental data, accompanied with legal backing, was necessary. It was also noted that existing environmental data should be made available to all parties concerned and that environment statistics should be strengthened in the countries.

The Workshop discussed possibilities to move toward a regional programme on environment statistics and suggested that a strategic framework be developed and approved by the ECOWAS countries, the aim of which is to establish a sustainable institutional framework and the necessary competence to ensure regular and reliable information on the environment. The framework should be complemented by an action plan comprising the main activities for the next 45 years. Substantial financial resources would be needed to support this action plan. ECOWAS, in collaboration with UNSD and UNEP, was asked to develop a project framework which could be used for resource mobilization.

The Workshop noted that the objectives of this framework should include: an increase in capacity in order to improve data availability and quality in the most critical environmental areas; appropriate national coordination mechanisms between the Environment Ministries, statistical offices and other relevant institutions in all ECOWAS countries; ability to respond to national, regional and international data requests; a regular publication of a Compendium on Environment Statistics in ECOWAS countries, under the responsibility of ECOWAS and UNSD, and in collaboration with UNEP, UNECA, FAO, ADB, AFRISTAT, and other international organizations concerned; and input into environmental assessment and reporting at national, sub-regional (ECOWAS Environment Outlook Report) and regional levels (Africa Environment Outlook, AEO).

## **(ii) Assessment of the Situation of Environment Statistics**

As part of the follow-up to the Workshop UNSD prepared a report entitled “An Assessment of the Situation of Environment Statistics in the ECOWAS Countries” in collaboration with the ECOWAS Secretariat and the ECOWAS member countries. The report is based on country papers presented at the Workshop, responses to the UNSD/UNEP Questionnaire on Environment Statistics, information from relevant websites, as well as responses to the draft country profiles sent to the countries by UNSD.

The report includes background information about the assessment, provides a description of the availability of environment statistics in ECOWAS countries, presents detailed information on the state of environment statistics in each ECOWAS country and includes recommendations for improvements, as well as describes the role and activities of international and regional organizations related to environment statistics in the region. The report is available on UNSD’s

website (<http://unstats.un.org/unsd/environment/ecowas.htm>) and ECOWAS's website (<http://www.ecostat.org/en/pdf/>).

The main conclusions of the report include the following:

- National Statistical Offices (NSOs) exist in all countries and a statistical law exists in all but one country. None of the countries have a specific law on environment statistics. In some countries the ministry of environment or equivalent institution have special environmental acts which empower the institution to be responsible for activities related to environmental information and data.

- only four countries have created a special unit dealing with environment statistics at the NSO.

- there is a lack of financial resources to establish environment statistics programmes in countries. Priority setting in the development of environment statistics is recommended to overcome financial shortages.

- availability of trained staff in environment statistics at the NSO is insufficient in all countries.

- the availability of environment statistics in ECOWAS countries is generally quite low but seven out of the 15 countries have a basic set of environmental data.

- six countries produce at regular intervals a State of the Environment Report which contains some environment statistics. The amount of data disseminated through the Internet is limited and differs across countries in terms of the methods used for the design of the tables and their contents. This situation also reflects the varying priorities and areas of concern in the countries and the still limited capacities in environment statistics.

- institutionalized cooperation among the NSO, other national producers and users of environmental data is not well established. In most countries the Ministry of Environment or the Environment Protection Agency has been attributed a coordinating role to improve the management of the national environmental information system. In only few countries, however, has this coordination been established and is operational

- cooperation in environment statistics at the regional level is still in its initial phase. The Workshop on Environment Statistics held in Dakar in 2005 was a first coordinated action to support environment statistics at the regional level. Related activities were launched by UNEP and the Economic and Statistical Observatory of Sub-Saharan Africa (AFRISTAT). Increased regional cooperation would allow for better use of regional know-how and would promote the application of common methods, comparable standards and classifications and a common approach for the development of environment statistics.

## **II. FRAMEWORK FOR STRENGTHENING CAPACITY IN THE DEVELOPMENT AND INSTITUTIONALIZATION OF ENVIRONMENT STATISTICS IN THE REGION**

### **INTRODUCTION**

As stated earlier, to ensure sustainable development in the region, policy formulation and decision-making must be made using timely and reliable information. The main uses of the statistics will be for the monitoring of progress made in sustainable development, Poverty Reduction Strategy Papers, the Millennium Development Goals, other international initiatives on the environment, ECOWAS environmental policies, as well as a tool for natural resource management. The major stakeholders will be national statistical offices (NSOs) and line ministries, such as environment, water, finance and planning.

In some countries the NSOs are responsible for the compilation and dissemination of environment statistics. The advantages of having the NSOs as the responsible institution are, inter alia, as follows: they already apply rigorous statistical standards in data collection and dissemination; for possibly expanding existing censuses and surveys, which are generally the responsibility of NSOs, to include environmentally-related issues or to design new specialized environmental surveys; for the integration of environment statistics into sectoral statistics such as energy and transport; and for the linking of environment statistics to, inter alia, basic economic and socio-demographic statistics. If environment statistics are collected and/or coordinated by another institution then that institution should maintain responsibility but coordinate with the NSOs.

While the NSOs in the ECOWAS region, in the framework of the National Strategies for the Development of Statistics (NSDS), are willing to undertake the development of environment statistics, they are faced with serious resource constraints. In very few cases is it possible for NSOs to embark on the production of those statistics without requiring a larger allocation from the national budget as their scope of operations is usually restricted to statistics and indicators in basic socio-economic fields.

### **OBJECTIVE**

The main objective of the framework is to strengthen capacity and institutionalize environment statistics at the regional level as well as in the national statistical systems of the ECOWAS countries in the framework of NSDS in order to build a sound base of environment statistics. The framework will be implemented by the ECOWAS Secretariat and will be supported and monitored by the regional technical committee on energy and environment statistics (to be established).

The specific objectives of the framework are to:

1. develop an agreed programme for environmental statistics and indicators for the region;
2. sensitize countries on the importance of environmental statistics, indicators and accounting, and on related data collection;

3. establish and/or enhance national statistics legislations to accommodate environment statistics for the regular production and dissemination of environment statistics in the countries;
4. allocate adequate financial resources;
5. increase human resources through the training of staff;
6. establish environment statistics units in appropriate institutions at the national level;
7. establish an institutional framework for the collection and dissemination of environment statistics which should define clearly which bodies have responsibility for the collection of various types of environmental data and statistics;
8. increase the availability of environment statistics in ECOWAS countries;
9. define a framework to facilitate the sharing of and access to environmental data between all national organizations concerned and make relevant data publicly available, preferably through websites;
10. promote regional cooperation in environment statistics which would allow for better use of regional know-how and would promote the application of common methods, comparable standards and harmonized classifications and a common approach for the development of environment statistics;
11. set up an information system for the monitoring of principal environmental and natural resource indicators, and to respond to the impact of environmental disasters;
12. equip the institutions responsible for the collection of environment statistics with monitoring instruments.

## **ACTIONS**

The following actions are envisaged in the framework which will be implemented by the ECOWAS Secretariat in consultation with UNSD.

### **Regional level**

#### ***Resource mobilization***

- (i) Identification, diversification and securing of sources of funding from regional banks, such as the ECOWAS Bank for Investment and Development, the African Development Bank and other international organizations such as the World Bank and the United Nations Environment Programme;

#### ***Institutionalization***

- (ii) Strengthening the capacity of the statistical service at the ECOWAS Secretariat to adapt it to the emerging needs required for the implementation of the regional framework;
- (iii) Establishment of a regional technical committee on energy and environment statistics;

#### ***Coordination***

- (iv) Coordination of activities between countries and supporting exchange of experiences between experts in the region;

- (v) Strengthening further coordination with UNEP, AFRISTAT, ECA and with other relevant regional organizations in building capacity for environment statistics and data collection to avoid duplication of effort and the overburdening of the data demands on countries;
- (vi) Further cooperation of ECOWAS with UNSD and other relevant international organizations to follow-up developments in environment statistics, both in methodological work and in data collection;

***Training and technical assistance***

- (vii) Preparation of regional guidelines and training material including standard classifications, guidelines for harmonization, data collection guidelines, and best practices or case studies from the ECOWAS region;
- (viii) Organization of training workshops on environmental statistics and indicators;
- (ix) Institutionalization of environment statistics into regular training programmes at regional training institutions (such as the Ecole Nationale Supérieure de Statistique et d'Economie Appliquée in Côte d'Ivoire, the African Institute for Economic Development and Planning in Senegal, the Federal School of Statistics in Nigeria) and identification of other regional training bodies and promotion of environment statistics courses.
- (x) Provision of in-country technical assistance upon request by countries and facilitation of inter-country study tours;
- (xi) Provision of support to countries in responding to international data requests.

***Data collection and dissemination***

- (xii) Development and agreement on a regional programme of environmental statistics and indicators for compilation and dissemination;
- (xiii) Compilation of meta-data (data availability, definitions, sources, methodologies) for the environmental statistics and indicators for which Member States collect data;
- (xiv) Compilation and harmonization of data from international, regional and national sources;
- (xv) Publication of a (pilot) Compendium on Environment Statistics for the ECOWAS countries;
- (xvi) Creation of regional databases and promotion of free access to environmental information via Internet;

Outputs will include:

- regional programme of environmental statistics and indicators
- trained personnel in the collection and processing of environment statistics
- regional publication on environmental statistics and indicators
- regional guidelines/training material
- regional databases
- regional network of environmental statisticians
- tools for decision-making in the environmental field, such as a monitoring system on the state of ecosystems, and reports on the state of the environment

## **National level**

### ***Legislation***

- (i) Establishment of appropriate environment statistics legislation in all countries;

### ***Resource mobilization***

- (ii) Allocation of necessary financial and human resources for the production of timely, accurate and reliable environment statistics;

### ***Institutionalization***

- (iii) Establishment of Environment Statistics Units, with adequate resources, in NSOs or the ministry/institution in charge of environmental data collection and processing;

### ***Coordination***

- (iv) Establishment of Inter-agency Task Forces to ensure appropriate national coordination mechanisms and to share expertise between the National Statistical Offices, Ministries of Finance and Planning, Environment Ministries, NGOs, research institutes and other relevant institutions;
- (v) Nomination of a lead agency (either the NSO or the Environment Ministry) to coordinate the activities of the Task Force;
- (vi) Representation of high-level representatives of the key institutions to at least the first national seminar to ensure cooperation and follow-up of these institutions;
- (vii) Development of a plan or work programme on how to implement environment statistics at the national level by the Task Force through subsequent national seminars;

### ***Training and technical assistance***

- (viii) Participation of staff involved in training workshops as well as in inter-country study tours;
- (ix) Conduct of pilot projects to assess the status and needs for the implementation of environment statistics;

### ***Data collection and dissemination***

- (x) Compilation of available environmental data, as well as the related meta-data, from the respective agencies through questionnaires, forms or electronic means by the institution responsible for the data collection;
- (xi) Where there are data gaps, strategies for collecting those data should be developed, such as adding questions to existing censuses and surveys, developing specialized environmental surveys, and conducting research studies;
- (xii) Development of a national database on environment statistics which would be accessible to all institutions involved;
- (xiii) Presentation of draft compendia or the results of the data collection at a national seminar of data users/producers to engage all stakeholders and to obtain feedback;
- (xiv) Publication of national compendia on environment statistics, preferably jointly between National Statistical Offices and Environmental Ministries, or at least publication of environmental data in existing national statistical yearbooks. Data should also be disseminated through websites and other electronic means.



Outputs will include:

- strategic action plans and policies
- national frameworks of environmental statistics and indicators
- national publications on environmental statistics and indicators
- trained personnel
- environmental information systems
- strengthened capacity of the production of environment statistics
- national databases on environment statistics
- national networks of environmental statisticians

### **III. IMPLEMENTATION PLAN**

#### **Regional**

1. Draft strategic framework and implementation plan – August 2006
2. Expert Group Meeting to discuss the draft strategic framework – 7-9 August 2006, Abuja
3. Establishment of a regional technical committee on energy and environment statistics 2007
4. Preparation of regional guidelines and training material on environment statistics – 2007
5. Training workshop on environmental statistics and indicators - 2007
6. Agreed programme of regional environmental statistics and indicators – 2007
7. Compilation of meta-data – 2007/2008
8. Compilation and harmonization of data – 2007/2008
9. Publication of a (pilot) Compendium on Environment Statistics for the ECOWAS countries – 2008/2009