

THE ENVIRONMENT STATISTICS PROGRAMME IN COTE D'IVOIRE AND IN THE ECOWAS REGION

by Fanta Kaba

1. BACKGROUND

Environmental challenges cannot be addressed without the availability of scientifically reliable information obtained on the basis of knowledge of what is happening at the qualitative and quantitative levels. In this regard, the United Nations Framework for the Development of Environment Statistics (FDES) has been an indispensable tool in Côte d'Ivoire for the organization, collection and dissemination of basic environment statistics which is a prerequisite for the development of environmental indicators and integrated environmental and economic accounting, as well as for the preparation of national State of the Environment reports.

2. THE EXPERIENCE OF CÔTE D'IVOIRE

2.1 Policy Background

Aware of the deterioration of the environment and the risks it generates, the Government of Côte d'Ivoire developed "the White Paper of the Environment of Côte d'Ivoire" in 1995. This document presents a complete diagnosis of the state of the environment in Côte d'Ivoire and proposes a strategy for the protection of the environment. Moreover, Côte d'Ivoire defined strategies to manage its natural resources in a rational way and to promote sustainable development through action plans. Included in the strategy was the creation of a national system of information which was considered very important. Indeed, the evaluation and the follow-up actions require reliable and integrated data.

It is in this context that, in his speech at the National Assembly in 1988, the President of Côte d'Ivoire said the following:

« Si nos tendances actuelles se prolongent, dans moins de 30 ans, nous serons 30 millions d'âmes (...), 30 millions de bouches à nourrir alors même que nos forêts disparaissent et que les pluies deviennent insuffisantes sinon rares. Voilà pourquoi nous devons agir. Agir pour changer nos comportements à l'égard de la nature. C'est là un impératif, parmi tant d'autres, que nous ne pouvons ignorer ».

Therefore, the priorities established by the government to face this situation were as follows:

- Restore the degraded natural environment (fight against deforestation and bush fires);
- Improve the quality of rural and urban life (sanitation projects, organization of the collection, treatment and the disposal of waste);
- Improve the management of water resources and protection of their quality;
- Inform, sensitize and educate the population.

2.2 The Role of the National Statistical Office

To carry out this mission focused on the priorities set by the Government of the Côte d'Ivoire, the "Institut National de la Statistique" (INS) which is responsible for setting up a statistical system and for ensuring at the national level the consistency of the statistical, economic and social data, has undertaken a number of actions. The first action was to request the assistance of the United Nations Statistics Division (UNSD) to assist in the organization of a seminar on the establishment of the United Nations Framework for the Development of Environment Statistics (FDES) which was held in Abidjan, Côte d'Ivoire on 26 and July 27 1994. Representatives from the Ministry of Environment, Ministry of Agriculture, Water and Forestry, Ministry of Finance and Planning, Ministry of Transport and Energy, Ministry of Industry, Direction of Health and Well-being, Direction of Housing, various research centres, the University of Côte d'Ivoire, the National School of Statistics and Applied Economy ("Ecole Nationale de Statistique et de l'Economie Appliquée"), regional and international organizations concerned with environmental issues, as well as some diplomatic representations, participated in this seminar. Following this seminar, an Advisory Commission of Environment Statistics and a Steering Committee were established, which continue to exist today. The Advisory Commission consists of representatives of all the structures producer and user institutions of environmental statistics. The membership of the Steering Committee is as follows:

1. Chair: Ministry of Environment
2. Secretariat: INS
3. Members: Representatives from two other ministries
Centre of Research
National School of Statistics and Applied Economy

2.3 Pilot Project for Producing Environment Statistics

The work of the Advisory Commission led to the proposal for a pilot project aimed at strengthening the capacity of the INS in the collection, centralization, processing and dissemination of environment statistics. The objective of the pilot project was to allow the Government of Côte d'Ivoire and all institutions working in the environmental sector to have reliable and detailed statistics on the environment as a basis for the development of environmental plans and the management of the phenomenon. It also involved the application of the FDES in Côte d'Ivoire (described below) which resulted in producing, inter alia, the following:

- Report on the Situation of Environment Statistics in Côte d'Ivoire (published in 2005);
- Compendium of Environment Statistics (first publication in 2006).

The pilot project was conducted by the INS, which ensured the quality of the work and its conformity to statistical methodology, and with the technical assistance of UNSD and financial assistance of the United Nations Development Programme (UNDP). It was managed by the INS in collaboration with the Steering Committee, and the support of the regional offices of the INS for the data collection at the sub-national level.

The INS met with all the institutions concerned with the environment to discuss information to be included in the report and in the compendium. The drafts were discussed with the Steering Committee and submitted for review to the Advisory Commission at the plenary session.

2.4 Framework for the Development of Environment Statistics in Côte d'Ivoire (FDES-CI)

Under the leadership of the Advisory Commission and with the assistance of UNSD, the INS developed the Framework for the Development of Environment Statistics in Côte d'Ivoire (FDES-CI) in 1996. To determine the scope and contents of the FDES-CI, the INS referred to the concepts and methods of environment statistics of UNSD taking into account the priorities expressed by members of the Advisory Commission of Environment Statistics of Côte d'Ivoire.

The contents of the FDES-CI consist of "statistical topics" covering aspects of environmental problems that lend themselves, at least theoretically, to statistical description. The determination of statistical topics within each information category was an important step in identifying the variables of interest for each component of the environment. The statistical topics and variables in the FDES-CI relate to each component and selected issues of the environment, that is: flora, agriculture, fauna, fish, pollution, water, land and soil, human health and settlements (refer to the table on pages 7 to 8 for an example of how the FDES-CI was applied to flora). It should be noted that the components of the environment in the FDES-CI were expanded from those of the UN FDES to also include selected environmental issues based on the environmental concerns and priorities in Côte d'Ivoire. When developing the variables used in the FDES-CI the list of environmental indicators adopted by the United Nations Statistical Commission in 1995, as well as the list of indicators of sustainable development approved by the Commission on Sustainable Development in 1996, were also consulted. Some priority variables in the FDES-CI were selected based on data availability. In addition to the identification of the variables, the FDES-CI was also used to assess the data requirements, and identify the data sources and availability.

After the FDES-CI was produced in 1996 the INS focused its efforts on the preparation of meta-data for each of the variables as well as on the development of questionnaires to send to the various data producers. The INS requested UNSD again

in 1998 to assist them in the review and finalization of these questionnaires as well as to organize another national seminar with all data producers and users where the FDES-CI and the way forward were presented. The overall process of data collection took several years (1998 to 2003) as for some of the institutions it was the first time for them to collect these data and the INS had to undertake the responsibility for data validation, which in this new field of statistics was not always easy. However, in 2005 the INS produced the Report on the Situation of Environment Statistics in Côte d'Ivoire and the first Compendium of Environment Statistics in 2006. In this first Compendium the INS organized the chapters according to the FDES-CI with some minor modifications. After the publication of the Compendium the pilot project culminated and evolved into an established programme of environment statistics in the INS (refer to the table on page 9 for a timeline of activities).

Currently in Côte d'Ivoire the INS has committed to producing an environment statistics compendium every two years and also participates in the ECOWAS programme for the development of environment statistics for the region. In the second Compendium which is expected to be released soon, the chapters have been expanded to include additional statistical topics and variables. Despite the number of years that the INS has been working in environment statistics there are still many data gaps and issues of data quality. It is the intention of the INS to also develop integrated environmental and economic accounts once the basic environment statistics are adequately established and their quality is of a satisfactory standard.

3. EXPERIENCE IN COUNTRIES OF THE ECONOMIC COMMUNITY OF WEST AFRICAN STATES (ECOWAS)

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. 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. In order to address the problems of basic data availability in region, UNSD carried out a statistical capacity building project in the ECOWAS region, one of the topics covered being environment statistics. As part of the project 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 UNEP, ECA and ECOWAS. 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. After the UNSD project came to an end ECOWAS developed a regional programme on environment statistics.

3.1 ECOWAS Regional Programme on Environment Statistics

The 57th Ordinary Session of the Council of Ministers (Ouagadougou, 18-19 December 2006) adopted the regulation C/REG.24/12/06 on the Strategic Framework for Strengthening Capacity in the Development and Institutionalization of Environment Statistics in the ECOWAS Region (further on referred to as strategy). This strategy was developed by ECOWAS in collaboration with UNSD.

The main objective of the strategy is to strengthen and institutionalize environment statistics at the regional level as well as in the national statistical systems of the ECOWAS countries in the framework of National Strategies for the Development of Statistics (NSDS) in order to build a sound base of environment statistics. One of the key activities of the strategy is linked to the development of an agreed regional programme for environmental statistics and indicators for compilation and dissemination.

UNSD, in collaboration with UNEP and ECOWAS, organized a Workshop on Environment Statistics that took place from 19 to 23 May 2008 in Abuja, Nigeria. The Workshop adopted, with some modifications, the agreed list of ECA regional environmental indicators (adopted at a UNSD/UNEP/ECA Workshop on Environment Statistics in Addis Ababa in 2007). The ECA list of indicators was developed by matching the FDES information categories, statistical topics and variables with The New Partnership for Africa's Development (NEPAD) which served as the policy framework. Based on the country papers which the ECOWAS countries presented at the Workshop in Abuja, country specific information was collected following a common worksheet format requesting meta-data for each indicator. As a follow-up to this activity, two consultants were hired by ECOWAS to carry out missions to selected countries in the region.

3.2 Missions to selected countries in the ECOWAS region

To assist the ECOWAS countries in the development of the statistics of the environment, the consultants carried out missions to:

- evaluate the capacity of the national statistical system in the production of environmental data;
- discuss the list of environmental indicators for the ECOWAS region adopted in Abuja in May 2008 for the compilation and dissemination of environment statistics;
- collect relevant information on environment statistics with the aim of developing a regional compendium;
- propose groundwork for the preparation of the activities of the programme, including the elements of the budget.

Major observations

- Most of the countries with the exception of Côte d'Ivoire and Mali, do not yet have a National Committee of Environment Statistics;
- Although most of the agencies collect environmental data on a daily basis, there was no real effort in the development of an uniform set of indicators for the collection and dissemination of environment statistics;
- There was very weak collaboration and co-operation between various agencies and also between the NSO and the other agencies concerned with the production and the management of the environment statistics;
- In about all the countries visited, the NSO has a unit responsible for the collection of the environment statistics although the activities of this unit have different levels of development from one country to the other.

Conclusions

It was clear from the missions undertaken that a framework, such as the FDES, would be a very useful tool in assisting the countries in, inter alia, bringing together the main stakeholders, reviewing the environmental problems, selecting statistical topics, identifying variables, and assessing data sources and availability, as was in the case of Côte d'Ivoire.

4. CONCLUSION

The experience of Côte d'Ivoire and of the ECOWAS region make it possible to draw the following conclusions:

1. The technical support of UNSD in environment statistics has proved to be paramount;
2. The existence of "political will", support of the "high authorities" and decision makers (sponsors) was also essential;
3. The establishment of institutions for the coordination and collection of relevant information and the establishment of databases in environment statistics are imperative;
4. The effective participation of all actors and the partners in the social and economic sectors is a guarantee for the success of the programme;
5. The FDES has proved to be extremely helpful in achieving points 3 and 4 above, as well as in establishing basic environment statistics in Côte d'Ivoire and would be recommended for other countries in the region;
6. There is a need for assistance from UNSD to help the countries in the establishment of the FDES;
7. It is important to have a list of environmental indicators for countries to embark on the development of environment statistics, such as the ECOWAS list of indicators adopted at the Workshop in Abuja in 2008 for the ECOWAS region.

PREOCCUPATION: FLORE

SUBJETS STATISTIQUES	VARIABLES	CLASSIFICATION	SOURCES	
A.	ACTIVITES SOCIALES ET ECONOMIQUES, EVENEMENTS NATURELS			
A.1	UTILISATION DES RESSOURCES NATURELLES ET ACTIVITES CONNEXES			
A.1.1	Récolte, pertes naturelles, régénération	Exploitation commerciale (m3, Km2)	Type d'essence Type d'activité	SODEFOR
		Mortalité naturelle des arbres (m3, km2)	Type d'essence	SODEFOR
		Déforestation (m3, km2)	Type d'activité Type d'essence	SODEFOR MINAGRA
		Plantation (nbre, km2)		
		Reboisement contrôlé Reboisement populaire (nbre, \$)	Par espèce Par espèce	SODEFOR
A.1.2	Autres activités forestières	Récolte de produit autres que le bois (t, km2)	Type de produit	SODEFOR
		Brulis (km2)	Type de forêt	SODEFOR MINAGRA
		Construction of routes d'exploitation (km2)	Type de forêt	DCGTX
A.1.3	Indicateurs économiques importants	Grumes (m3, \$)	Type de produit Pays de destination	Direction des Eaux et Forêt
		Exploitation (m3, \$)	Type d'essence Type de produit	Direction des Eaux et Forêt
B.	INCIDENCES DES ACTIVITES SUR L'ENVIRONNEMENT			
	Ressources forestières	Variation nette de la biomasse (t)	Géographique	SODEFOR
		Variation nette de la superficie des forêts (km2)	Type de forêt	SODEFOR
C.	REACTIONS AUX INCIDENCES SUR L'ENVIRONNEMENT			
C.1	AMENAGEMENT ET RESTAURATION DES RESSOURCES			
C.1.1	Protection et conservation de la nature	Réseau de parcs (km2)	Ecologique	SODEFOR
		Autres zones protégées (km2)	Niveau de protection écologique	SODEFOR CI-NATURE
C1.2	Aménagement et conservation des ressources naturelles	Forêts classées de l'Etat (nbre, km2)	Type de programme	SODEFOR MINAGRA
		Réglementation de l'exploitation des ressources	Type de réglementation	
C.1.3	Restauration des environnements dégradés	Terre agricole (\$, km2)	Type de programme	MINAGRA
		Zones reboisées (\$, km2)	Type de programme	SODEFOR
		Zones désertifiées (\$, km2)	Type de programme (lutte contre la	SODEFOR

SUBJETS STATISTIQUES		VARIABLES	CLASSIFICATION	SOURCES
			désertification)	
D.	STOCKS ET INVENTAIRES			
D.1	RESSOURCES BIOLOGIQUES			
D.1.1	Stock forestier	Forêts productives (km2)	Type de forêt	MINAGRA
		Forêts naturelles (km2)	Type de forêt	SODEFOR
		Maturité	Age moyen	SODEFOR

TIMELINE OF THE IMPLEMENTATION OF THE ENVIRONMENT STATISTICS PROGRAMME

Date	Event
1988 Abidjan, Côte d'Ivoire	Speech of the President of Côte d'Ivoire at the National Assembly
1992 Rio de Janeiro, Brazil	Earth Summit on Environmental and Development.
27 July 1994 Abidjan, Côte d'Ivoire	Seminar on the establishment of the Framework for the Development of Environment Statistics in Côte d'Ivoire organized by INS and UNSD
1995 Abidjan, Côte d'Ivoire	The Government of Côte d'Ivoire developed "Livre Blanc sur l'Environnement en Côte d'Ivoire"
1996 Abidjan, Côte d'Ivoire	INS, in collaboration with UNSD, developed the Framework for the Development of the Statistics of the Environment in Côte d'Ivoire (FDES-CI)
1998 Abidjan, Côte d'Ivoire	Review and finalization of questionnaires to be sent to various data producers and seminar with all data producers and users organized by INS and UNSD
28 February to 4 March 2005 Dakar, Senegal	Workshop on Environment Statistics organized by UNSD in collaboration with UNEP, ECOWAS and ECA
2005 Abidjan, Côte d'Ivoire	Report on the Situation of Environment Statistics in Côte d'Ivoire
2006 Abidjan, Côte d'Ivoire	First edition of the Compendium of Environment Statistics
18-19 December 2006 Ouagadougou, Burkina Faso	The 57th Ordinary Session of the Council of Ministers adopted the regulation C/REG.24/12/06 on the Strategic Framework for Strengthening Capacity in the Development and Institutionalization of Environment Statistics in the ECOWAS Region.
16-20 July 2007 Addis Ababa, Ethiopia	Workshop on Environment statistics organized by UNSD in collaboration with UNEP and ECA
19-23 May 2008 Abuja, Nigeria	Workshop on Environment Statistics organized by UNSD in collaboration with UNEP and ECOWAS