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AFRISTAT PROGRPAM IN NATIONAL ACCOUNTING

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OBSERVATOIRE ECONOMIQUE ET
STATISTIQUE D'AFRIQUE
SUBSAHARIENNE
AFRISTAT

AFRISTAT PROGRAM IN NATIONAL ACCOUNTING

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The text hereunder makes a brief introduction of the Economical and Statistical Observatory in sub-Saharan Africa (AFRISTAT) and clearly describes the activities of this institution in the field of national accounting in member states. It also introduces the ERETES module to help in the elaboration of national accounts according to SNA 93; advantages and constraints in the use of this module, as recorded by AFRISTAT, are analyzed. Finally, there is in annex a type of work minimum program and a minimum type budget for the establishment of the module in an AFRISTAT member state.

A. BRIEF INTRODUCTION OF AFRISTAT

AFRISTAT is an international organization created by a treaty signed on 21 September 1993 in Abidjan by 14 African countries member of the Franc zone. These are: Benin, Burkina Faso, Cameroon, Central Africa, Comoro, Congo, Cote d'Ivoire, Gabon, Equatorial Guinea, Mali, Niger, Senegal, Chad and Togo. In April 1998, Guinea-Bissau and Mauritania joined AFRISTAT, bringing to 16 the number of its member states. According to article 5 of the treaty, any state of sub-Saharan Africa or Indian Ocean can be admitted in this institution.

AFRISTAT has the mission of contributing to the development of economical, social and environmental statistics in member states and of reinforcing their capacities in this field. As such, its role is to advise national statistical institutes (NSI) of the member states and support their action. It has regulatory powers in terms of harmonization of statistical concepts, standards and methods.

AFRISTAT headquarters are located in Bamako, Mali; it commenced its operations on 2 January 1996.

AFRISTAT administrative and management bodies are the Council of Ministers, the Executive Committee, the Scientific Council and the General Directorate.

AFRISTAT General Directorate includes, besides the services of the Director-General, three technical departments and an administrative and financial service. Technical departments are the department of statistics and surveys, the department of economic studies and synthesis, the computer, documentation and publications department.

B. AFRISTAT ACTIVITIES IN THE FIELD OF NATIONAL ACCOUNTING

The creation of AFRISTAT derives from the African concern for regional economical integration, which requires some homogeneity and the comparability of statistical information. This effort of harmonization and integration is materialized by AFRISTAT through support operations in the collection, processing and dissemination of statistical information or economical analyses and synthesis, especially in the field of national accounting.

Thus, the institution provides to the NSI of member states, the required technical assistance for the implementation of SNA 93. Ultimately, the INS of member states will have to develop national accounts for their respective countries according to SNA 93 and based on a common harmonized methodology and using the same computer tool.

AFRISTAT work plan underway regarding the national accounting includes actions aiming at the design of methodological bases common to its member states, technical assistance to states requesting it, and long-term actions.

(a) Elaboration of methodological common bases

At the start of AFRISTAT activities, exploratory missions of national accounting performed in NSI of member states made possible the assessment of the situation in this field. It was concluded that statistical data used for the elaboration of national accounts were very poor. The number of national accountants is insufficient compared to the amount of work to be carried out for the elaboration of these national accounts. Work conditions were generally not satisfactory and work methods poorly performing.

Following these missions, three categories of actions were planned and their implementation is underway.

The first action is to assist the NSI of member states to set up harmonized classifications, especially the classification of activities and that of products, which are two important elements of convergence and comparability of macro-economic data. Already, national experts, with AFRISTAT support, have developed a project for activities common classification based on ISIC rev.3 and a project of products classification articulated on the activities classification. National accounts will be developed with reference to these common classifications.

The second action is the harmonization of elaboration methods for national accounts. It is the consideration of experiences and practices of the different states, analyzing their conformity with the concepts of SNA 93 and suggests necessary modifications. This analysis reached major fields such as agriculture, livestock, fisheries, forests, processing and integration of the international assistance in national accounts, processing and integration of the informal sector in national accounts, processing companies accounts balances, public administration accounts, etc.

The third action concerns the definition of a common ground for the elaboration of accounts for member states. This consists in the definition of minimum elements to be retained from

SNA 93 central framework. In this matter, a first proposal which mentions the accounts of goods and services (resources equilibrium - employment and branch accounts) and their synthesis within the Table of Resources and Employment (TRE) and the Table of Integrated Economical Accounts (TCEI) up to the capital account, included. Peripheral systems will be developed on an optional basis. Property accounts will not be analyzed. However, it is recommended to process specifically the data on the public debt.

For all these actions, the work method consists in gathering working groups where responsible of national accounts in member states NSI discuss methodology methods based on their own experiences and formulate proposals for a common processing according to SNA 93 recommendations (international classifications, namely ISIC). For participating in this work, there are also experts from: the Commission for Economic and Monetary Union for West Africa States (UEMOA), the Executive Secretariat of the Economic and Monetary Community for Central Africa States (CEMAC), the central banks of these two economic unions, the Economic Community of West African States (ECOWAS), and the United Nations Economic Commission for Africa (ECA). The work has the support of experts from the European Statistical Office (EUROSTAT) and from the French National Institute for Statistics (INSEE).

Regarding the national accounting, results of this work will be presented in a manual of methods for the elaboration of national accounts for AFRISTAT member states.

(b) Support to member states

In the mid-term, AFRISTAT member states should undertake the elaboration of the accounts following new methodologies by straightening at the best the available statistical data. The common tool adopted for the elaboration design of accounts is the ERETES module¹. This is a computer tool helping in the design of national accounts. The NSI of three member states (Cameroon, Central Africa and Côte d'Ivoire) are already elaborating national accounts according to SNA 93, with the help of the ERETES module. This module is being installed in Mali. The situation of these countries with regard to the design of national accounts can be summarized as follows:

Cameroon

Under the experimentation, Cameroon, second country to use this module, has processed its accounts using the beta version of the ERETES module. The basic year was 1989/90². Presently, Cameroon has a series of finalized accounts according to SNA 93 for years 1989/90 and 1992/93 through 1995/96. Semi-finalized accounts for year 1996/97 and provisional accounts for 1997/98 were also published by the Department of statistics and national accounting in Cameroon (DSCN).

The team of national accountants of the DSCN includes at least 11 senior officers (A level).

The package of version 2.0 of the module will soon be available at DSCN, making this team even more operational.

Central Africa

¹ A quick presentation of this module is at section C of this document.

² In Cameroon, the budget year starts on 1st July, ending on 30 June next year.

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Central Africa was the first country, which served as experimentation ground for ERETES. At the time, the team was composed of four A level officers and two external technical assistants. Designed accounts used the module prototype. 1998 was the basic year and to date Central Africa possesses a series of accounts from 1988 to 1994 processed with the prototype, and then with the beta version of the module.

Presently, with the departure of a number of senior employees of the Department of Statistics and Economic Studies, the work of the national accounting is somewhat slack, which is worsened by the poor quality of statistical data difficulties met in its collection.

As soon as conditions become favorable, the work should resume with AFRISTAT assistance, based on the last version of the module (2.0 version).

Côte d'Ivoire

Côte d'Ivoire is the third country, which undertook the elaboration of its national accounts with the ERETES module. The industrial version was to be tested on Côte d'Ivoire's accounts and the selected basic year was 1993. For reasons essentially related to the instability of the staff assigned to the national accounting within the National Statistical Institute in Cote d'Ivoire, the work is not yet achieved. Thereafter, year 1993 considered as a trial run was dropped and a new basic year was picked up, i.e. 1996, now under processing.

Mali

Mali has just started the work of national accounting based on the ERETES module and the selected basic year is 1997. Preliminary work, consisting in setting up the conditions for the installation of the module has been carried out. The installation took place in June 1999.

Prospects

The installation of the ERETES module implies certain costs (computer equipment, software, human resources, technical assistance, etc.) inherent to any work of accounts modernization.

Under a regional statistical support program for UEMOA countries (PARSTAT) funded by the European Union, there are plans for the installation of the module in each state of the area. But various difficulties have not yet permitted an effective start of the activities of the national accounting program component. However, without delay and considering their priorities, the Malian National Department of statistics and the National Statistical Institute of Côte d'Ivoire, as above-mentioned, have started, with AFRISTAT technical support, the installation of the module and the design of accounts using the ERETES module.

In other countries, the installation of the module will take place according to their respective work plans, with the help of the development partners, if needed. AFRISTAT will provide support upon request from the countries.

(c) Long term actions

In the long run, the states are encouraged to improve their database, especially in agriculture, livestock, and data concerning the informal sector. AFRISTAT will continue to provide technical assistance to support the NSI of member states engaged in this process of improving their database. One of the objectives sought is to enable the states to

generate updated national accounting data, while respecting the deadlines recommended by the General Data Dissemination System (GDDS) designed by the International Monetary Fund (IMF).

C. THE ERETES MODULE

The purpose of this section is to provide a brief introduction of the ERETES module and clarify the required conditions for its installation in a country. There is also a statement of the advantages that can be taken from the module and the constraints that it imposes on its users.

(a) Brief introduction of the ERETES module

ERETES is a tool helping in the design of national accounts. It is based on the existence of a system made up by a data base gathering up together the necessary information for national accounting and other tools destined to the design of accounts: resources-employment by product, branch production accounts, table of resources and employment.

The module is also a work organizational tool for the national accountant and allows the perpetuation of methodological achievements in terms of national accounts elaboration.

Closely linked to concepts and methodologies recommended by the SNA 93, the ERETES module is a product jointly funded by the European Commission and France. The corrective and evolutive maintenance of the software is ensured by the CESD-Communauté³, AFRISTAT providing the first level maintenance for Western and Central Africa.

In addition to countries already mentioned, the ERETES module is installed in Ghana (Government Statistical Service - GSS). Other countries (Botswana, Morocco, and Tunisia) are also interested in ERETES.

(b) Conditions for the installation of the ERETES module

The installation of the ERETES module in a country is the choice to modernize its accounts (choice of a basic year and processing of a series of successive accounts in the current year). Any modernization of accounts requires a certain number of conditions. The installation of the module implies, moreover, a certain level of requirements regarding the quality of the accounts, and leads towards a regular and timely production of accounts related to the most recent years.

This kind of information is of the utmost interest for national decision-makers and development partners. The decision of building up national accounts will therefore depend on a strong political will. As it is a long-term operation, it is necessary that this commitment be endorsed by a public authority or by donors. The conditions required to materialize this will include the following elements:

- ✓ an appropriate institutional environment
- ✓ human resources

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- ✓ plenty of good quality statistical data
- ✓ appropriate and sufficient material resources
- ✓ technology transfer

Appropriate institutional environment

The national structure in charge of the design of national accounts should be stable and include means and conditions enabling it to coordinate national activities for the collection of statistical information. It should be staffed with sufficient and qualified personnel (statisticians, macro-economists, etc.) and enjoy the trust of national authorities and development partners.

Human resources

Processing national accounts supposes the permanent presence of a competent and motivated staff. In the past, it was mainly thanks to the intervention of an international expert hired for a more or less long-term assignment that national accounts were designed. Though it may be useful for a short-term expert, the ERETES module is specifically meant for a local team with the ability of capitalizing the experience.

The construction of national accounts requires the availability of a strongly staffed team with computer and national accounting skills. The number of the staff in this team and the qualifications of its members will essentially depend on the quality of data to be processed, the quality of statistical sources, the sharing of planned tasks with the services generating them, the degree of detail in which the accounts will be elaborated and the information drawn from SNA 93 central unit.

Beside the team leader, conductor who coordinates the overall activities, the distribution of tasks should be made so as to assign a determined scope to each team member. The arbitration work linked with the module requires a minimum of skills. Thus people with a statistical background or equivalent senior officers with macro-economic skills are better indicated to be enrolled in the team. Lastly, safe in the knowledge that one can become a good national account only after completion of several years of experience, the stability of the team is also highly desirable.

Based on the above, the minimum desirable A level officers to work on the module in a medium size country is as follows:

- one A level statistician (senior) with a wide experience in national accounting and/or macro-economics (senior statistician or equivalent);
- four level A statisticians (junior) with experience in national accounting and/or macro-economics (junior statistician or equivalent);
- a few level B officers (intermediate grade employees) as support staff for data collection and processing.

Statistical data

The quality of the assessment of the national economy provided by the national accounting depends not only on the quality of the used computer tool, but also that of the quantitative feeding data. It is thus necessary to possess a minimum of information on the products and

the branches for the design of the branch account of a sound Table of integrated economic accounts and of a sound Table of Resources-Employment.

Material resources

Each A level officer should desirably have a microcomputer with enough capacity to process the ERETES module. *Progress*⁴ and *Microsoft Office*, especially *Word and Excel* (illustratively a *Pentium 150*, 24 Ram and 1 Giga is sufficient).

For the exploitation of some data upstream, such as companies' balance sheets, additional microcomputers may be needed.

Printers and UPS's are necessary; their number will depend on the layout of the accountants' office (one printer and one UPS may serve many microcomputers).

Technology transfer

The skills of the staff assigned to the construction of national accounts are not enough. Mastering the techniques to be used take a long time. It is well known that learning the techniques for the design of national accounts is not achieved in university classrooms. An important transfer of technology is often necessary, and is time consuming. It is the responsibility of the national body where ERETES is being installed to integrate the time element in its action to take the maximum advantage of the module.

As an example, a typical program⁵ for assistance in the design of national accounts using the module to process two years of accounts (one basic year and one current year) is in annex 1.

(c) Advantages and constraints of the module⁶

The ERETES module has the vocation of designing annual accounts; it is not compatible with the design of term accounts. It is not either structured to allow the design of satellite accounts (e.g. environment). It can be adapted to the design of regional accounts; but its major vocation is the elaboration of national accounts in basic year and current year, at fluctuating prices and at constant prices, at the national level. The database contained therein covers the overall flows and stocks proposed by the SNA 93 central unit. However, its present version does not yet offer procedures enabling the design of institutional sector accounts.

ERETES is structured to suit the situation as it is, without imposing specific minimum conditions. On the contrary, it is organized in a way to allow the integration of all the data national accounts can gather to better do their job.

If the module can facilitate an accurate use of available statistical data, it does not provide solutions for the processing, notably the improvement of data quality.

ERETES helps national accountants in the implementation of their duty. It offers them, at the same time, work screens, task pilot system, and a line assistance, all this stuck to "module's heart": a relational data base.

⁴ The Progress software is the engine of the ERETES module.

⁵ This program was proposed to UEMOA Commission under PARSTAT.

⁶ For more detail, the reader should consult the comparative study of different national accounting softwares carried out in 1998 in a meeting organized by EUROSTAT.

The module is constructed with reference to all concepts and definitions of SNA 93. The database it contains enables the storage of all economical dimensions anticipated by the central unit, whether branches or institutional sectors (including patrimonial data). However, all desirable detail is not proposed in the selected classifications, so that each country may include what is most suitable for them, in order to take into account local socio-economic specifications.

On the other hand, the Table of integrated economic accounts can be obtained through an external processing of data drawn from the module base following arbitration relatively less complicated than the one to be used for the Table of Resources-Employment.

In summary, the module offers simultaneously:

- a methodological ground for the design of national accounts;
- an integrated technical assistance enabling the acquisition of implementation methods;
- a modern computerized environment to host a team work;
- a flexibility of adaptation to local situations of the countries.