

Agricultural And Rural Statistical Development – Capacity Building In Cameroon

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Abstract

All over the world, countries are regrouping into bigger economic areas with the aim to ensure sustainable growth and development for their own population; on the other hand, the globalization of the world economy has become a reality. Furthermore, most African sub-Saharan countries, since the big drought of the years eighties, the change in the world climate, and other economic and human factors, have faced so far chronic poverty and food insecurity. They had to put in place new methods and good practices, rules and regulations for national accountability, trade, agricultural development; to name a few. In addition, data needs are widening and become more and more complex. Thus, adjusting development policies and strategies, and building integration of statistical systems have become an imperative task. But due to a lack of financial resources, appropriate human resources and economic infrastructure to tackle efficiently those problems, different African governments have sought help from the international community.

In response, the international partners backed by national authorities have adopted some political measures among which we can name: Millennium Development Goals, Poverty Reduction and Food security, etc. For formulation, implementation and a follow-up of different strategies they acknowledged that some actions were to be taken urgently such as strengthening food and agricultural statistics in Africa in the frame work of National statistics systems. Data being seen as a backbone of these operation as African economies are based on agriculture.

Cameroon which had been under structural adjustment of the IMF and World Bank, since the early 90's has put in place National Council of Statistics (NCS). This consultative forum is in charge of building statistical national policy. Agricultural statistic system is an element of that network. The national core system of statistics has been put in place and implemented by the National Institute of Statistics (NIS). NIS coordinates most statistical activities carried out at the national and satellite systems. NIS also plays the role of permanent secretariat of the NCS.

Cameroonian agricultural statistical system has benefited since 1979 of international assistance that allowed the country to: carryout an agricultural census, strengthen the capacity building of the system (training, survey equipments, etc.) and put in place a medium term agricultural program which is now implemented. This paper tries to go through mains activities performed in term of: data collection, processing and dissemination. Weaknesses and strengths will be highlighted; difficulties encountered, main constraints and new challenges will be pointed out. Some light will be put on the way forward that might improve the flow and the quality of data produced. The national statistical network and the assistance of international agencies will be presented.

1- Introduction

One of the major challenges facing Cameroon is improving the living conditions of the population. Indeed, over 60 % of that population lives in the rural area and has agriculture as the main activity. Recent surveys on living conditions of Cameroonian households have showed that 4 Cameroonians out of 10 live below the poverty line; 75 % of which are in the rural area.

To cope with this situation, the country has drafted a “Poverty Reduction Strategy Paper“(PRSP). The raison d’être of this document is to improve the people’s living conditions by tackling the major causes of poverty. Accordingly, the PRSP recommends:

- The implementation of a policy of sustainable and equitable growth;
- Ensuring the development of the quality of human capital;
- Improvement of the institutional framework of administrative management and governance.

On the other hand, still on the framework of the improvement of living conditions, Cameroon has subscribed to: the Millennium Development Goals (MDG), the New Partnership for Africa’s Development (NEPAD), the “ New US/African Partnership at dawn of the XXIst Century“, the ACP/EU Cotonou Convention“, the Tokyo International Conferences on African Development (TICAD), and recently, the Beijing International Conference on African Development, etc. The objectives of the PRSP are compatible with those of these international conventions or partnerships.

To ensure better implementation, monitoring and evaluation of the of the poverty reduction strategy paper, the government has put in place a information system which aims at to strengthening the existing statistical system. This system seeks to produce timely and reliable data for development stakeholders in Cameroon and abroad. A steering committee in charge of monitoring and evaluation of the statistical aspect of the PRSP has been put in place. The job of this steering committee is completed by what is done at the sector level A coherent national statistical system requires an integration process to fit within the sub-regional and international information systems.

An assessment was done on the agricultural statistical system to ensure good integration by strengthening the capacity building. Light will be put on main achievements, assessment, actions under way, and also challenges to meet in order to overcome the problem of statistical integration.

2 - Assessment Of The Agricultural Statistical System

2.1 Importance of Agriculture in the National Economy

In spite of a progressive decrease of its relative importance since the political independence in 1960, the rural sector keeps on playing a key role in the national economy as far as GDP is concerned. Indeed, in 2005, the agricultural sector, contributed for 20 % to the national GDP with an annual growth rate of 4,1 % against 3,4 % for the rest of the economy. It provides jobs to more than 60 % of the active population and registers the lowest unemployed workers. In term of export taxes, the rural sector contributed up to 54,5 % in 2003. The sector is also important in terms of taxes collection. The importance of rural sector in the PRSP is high. The portion of the budget used for food consumption is very high at the household level, this percentage is 43 % for medium households and 53,4 % of the poor.

Cameroon has a very diversified agricultural sector resulting from various agro-ecological areas. Because of this, there are wide ranges of crops and livestock species. The methods for data collection are complex and the rate of coverage low

2.2 Main problems encountered in producing and disseminating Agricultural statistics.

A study carried out in 2001 by FAO, the World Bank (WB) and the government on the assessment of agricultural statistics in Cameroon, has pointed out the following problems:

2.2.1- The obsolescence of structural data

The most recent structural data available in Cameroon were provided by the second agricultural census carried out in 1984. This is a serious matter that needs to be quickly solved. Because of the economic crisis which affected the country from 1986 up to the mid 90s, many habits have changed on agricultural practices: activities are no longer subsidized by the government, the number of large scale farms is increasing, products diversification for external trade is becoming more and more important, etc. A new picture on the agricultural sector is an imperative task; although the National Institute S has carried out some surveys such as Multiple Indicators Cluster survey, Household living condition survey that have provide part of structural data needed in the agricultural sector. In general even for conjuncture's data there is a problem of timeliness and punctuality of data production.

2.2.2 Poor quality of data produced.

Objective yearly surveys had been conducted only from 1985 to 1993. From 1994 to concerning farm activities where not collected in the Ministry of Agriculture. From 1998 on, subjective methods are used to collect field data at the sub divisional level. Forms designed are filled out by "field experts" who are public service employees working for the Ministry of agriculture or for Ministry of Livestock Fishery and Animal Industry.

There is not direct interview at the farm level. Such information is not reliable. It was only in December 2005 that the last population and housing census was conducted. MINADER took that opportunity to let interviewers administer a form designed for crop and livestock data collection. Results from that questionnaire will allowed the statisticians in MINADER to construct the sampling frame, which is not yet available. The lack of good sampling frame has reduced the quality of data collected by some NGO's or by some international agencies operating in the country.

2.2.3 Poor Integration and disseminating of existing data

Data produced and disseminated in the rural sector in general come from different sources and are often incoherent. Methods of collection or processing are not harmonized. This raises a problem of comparability and usefulness of data produced. Data dissemination does not usually follow general and international standards. New technologies are not fully used in dissemination of information. This situation is more difficult since authorities and other data users do not quickly develop a culture of evidence-based decision-making. Divergence in data sources is highlighted more when it comes to build food balance sheet or to produce agricultural national accounts.

Agricultural statistics in a broadest sense are produced in Cameroon by different institutions which often do not consult no discuss each other for a common minimum acceptable methodology. Other dimensions of data quality are not met in Cameroon that is case of completeness.

2.2.4 Poor technical, operational and institutional capacities

Besides the NIS, at least three Ministries deal mainly with agricultural statistics. Within the Ministry of Agriculture and Rural Development, the Department in charge of statistics has now a total staff numbers of 30 persons among which these are only 4 statisticians. The same structure in the MINEPIA (Ministry of Livestock, Fishery and Animal Industries), does has no statistician out of staff of 18 persons; It's the same situation in the Ministry of Forestry and Wild life. Others problems facing production of agricultural statistics in Cameroon are:

- A quasi-total independence on external financial resources;
- Lack of a sufficient functioning budget and operational means to correctly perform field activities of data collection.
- Increasing difficulties to implement field operations due a high mobility of trained personnel;
- Poorer data on livestock than the one on crops.

2.3 Potentialities of the Agricultural statistical Information system.

If, as mentioned above, there is a lack of technical personnel for conceptual tasks in sampling and survey methodologies; on the other hand, field-staff personnel is enough to perform the data collection duty. Indeed, in the Ministry of Agriculture and Rural Development, there are more than 1500 extension-workers all over country. They need good trainings and appropriate incentives to be involved in data collection.

The CEMAC (Economic and Monetary Community of Central African States) has a high school of statistics and economics located in Yaoundé, Cameroon. This is a great opportunity for the country to have more trained staff in statistics. It is worth underlining the fact that low credit is given to agricultural statistics. Although agriculture and rural development is becoming more and more complex implying a widening of the scope of agricultural statistics, time devoted to that subject remains the same since the creation of the school in the early 70's.

Many other institutions have been put in place that can enhance production of agricultural statistics in Cameroon.

2.4 - Main constraints

2.4.1 Financial and institutional constraints

The national budget is limited to satisfy all governmental needs. As a matter of fact there is a big gap between actual needs and financial resources allocated. Resources are not mobilized on time for many reasons among which; corruption, heavy administrative process, etc. As a result, data is not collected at the right moment, the yields a low in information quality. Sometimes data is not collected at all because it's too late. Resource allocation is not usually done on an objectives basis. This is a handicap against the political declarations aimed at building a society based on a culture of transparency and an evidence decision-making.

When the project is to be implemented by two or more institutions, mobilizing funds is sometimes a headache, if the government must contribute.

2.4.2 Technical constraints

The high rate of illiteracy among farmers is a big problem for data collection. Most farmers know nothing as far as farm areas are concerned. To have accurate data on areas and yields objective measurement must be done by surveyors. This is time-consuming. As a consequence, the sampling

size has to be reduced. Farmers have no formal accountability, the memory is very often the sole mean to keep track of some data like production or sales.

Intercropping is another big issue to deal with for area allocation. Continuous harvesting crops like cassava render measurement of production very difficult. For this last case, FAO has organised all over the world, some workshops regrouping experts from some countries, in order to put in place a suitable methodology. But up to now, methods to collect data on cassava production still have to be improved. In the southern part of country tree presence in many farms does not facilitate the use of satellite devices for area measurements nor the counting of crops. Producing agricultural statistics in sub-Saharan African countries is much more difficult. Technical as well as financial constraints imply a partial coverage of data needs.

3 - Main Achievements

3.1 Training

In order to enhance agricultural statistical integration, Cameroon like most of African countries has benefited in the recent years from the support of bilateral and multilateral agencies. It's worth mentioning that in the early 80s, some Cameroonians got scholarships from USAID and have studied in different universities of the USA. Those scholarships concern domains such as: statistics, agricultural economics and computer science. But at that time, training was not agricultural statistics integration-oriented. The aim was to build capacities for data collection, processing and analysis in the agricultural sector. In the past, the staff of MINADER and MINEPIA concerted very little on the statistical activities they were preparing or implementing.

Training toward statistical integration was fully in motion in Cameroon from 1999 with the technical workshop organized back to back with the AFCAS 16th session in Conakry, Guinea, by WB, Paris 21 and FAO. Since then, Cameroonians have attended different workshop and seminars organized by international agencies. The following encounters can be listed:

- FAO/WB Workshops on “strengthening Food and Agricultural statistics in Africa in support of Food Security and Poverty Reduction Policies and Programmes” November 2001, Pretoria, South Africa.
- Sub-regional Technical Workshop FAO/AFRISTAT on Integrated Agricultural Statistics Systems in Support of Food Security, Bamako, Mali, 27 June-6 July 2002; and subsequent ones up to Maputo in 2005;
- 5th International Round Table Discussion on Current Agricultural Production and External Trade, statistics, Tunis, Tunisia, June 2002.; and many other workshops and seminars.

3.2- Creation and Implementation of Appropriate Institutions

Actually, Cameroon has taken some years ago a step toward the statistical integration at the national level. Indeed, this political will has been implemented by the creation and functioning of some state institutions as follows:

3.2.1 The National Council of Statistic (NCS)

Created in 1993, the NCS aims at: (1) enhancing dialogue between users and producers, (2) constructing medium-term programs for surveys and censuses in all economic sectors, (3) harmonizing methods, nomenclatures and statistical concepts. Later on, new objectives were added to its mandate. Thus, the NCS has to look into questions related to: (1) monitoring of Millennium

Development Goals (MDGs), (2) monitoring poverty reduction strategy. The secretariat had been held by the Department of statistics and National Accounting (DSCN) acting as the National Statistics office (NSO). The NCS holds its annual sessions since 1999.

The NCS has many achievements:

- The creation of the National Institute of statistics (NIS) to replace DSCN. The new structure is financially autonomous; that will enhance the implementation of statistical activities at the national level. Hence, the secretariat of the NCS is held by the NIS;
- Manuals have been elaborated for survey concepts and definitions. Nomenclatures of products and services were elaborated for national accounting, in line with those put in place by AFRISTAT;
- Indicators to meet the 18 targets for the 8 MD goals were adopted for the country along with defined periodicity, methodology of production and the structure in charge of implementation. Hence, indicators related to the first goal : eradicate extreme poverty hunger were elaborated.
- Medium-term programs for statistical activities have been elaborated. Indeed, it is in that framework that the Agricultural census was classified as a national priority.

The sole problem facing the NCS, is that its recommendations have to be approved by different stakeholders; they do not have the force of law. They can be adopted, implemented or not. They have no coercive effect.

3.2.2 The creation of NIS

The NIS was created to replace DSCN. Its mandate is :

- Coordination of the national statistical system's activities;
- making available to all users, necessary data and indicators for decision-making, analysis, monitoring/evaluation of the implementation of poverty alleviation;
- Conserving census and survey files produced by public administrations and para-statal or structures working under the state's control;
- Enhancing statistical scientific development and economic research under its competence, and promoting the training specialized staff on the functioning of the national statistical information system.

3.2.3 Others State Action in favour of statistical Integration

Cameroon has ratified many conventions related to statistical development in the world. It is a member of some specialized agencies such as: AFRISTAT, ISSEA (The Sub-regional Institute of Statistics and Applied Economics), FAO, etc.

3.3 Implementation of FAO TC Project and Establishment of Rural Statistical Medium term Program

Between 2002 and 2004, Cameroon had benefited from the FAO Technical Cooperation Project which aimed at rehabilitating the Agricultural statistical and Food security system. The main objectives which were partly achieved are as follows:

- Putting in place conditions of suitability and effectiveness of statistical instructions to respond to the increasing and complex data demand in support of the new development agenda and priorities (PRSP, MDG, Food security, etc);
- Elaboration of adapted methodologies that fit better to the country's conditions (technical, financial and political). These methodologies have to ensure sustainable collection, processing and disseminating data. New methodologies were elaborated in : (1) The food and Market Information System (FMIS) in line with the early warning system, (2) Integration of gender issues in agricultural surveys and censuses, (3) Sampling design for data collection on small farm population;
- National staff was trained in: new methodologies and good practices for data production, processing conservation and data dissemination, construction of supply utilisation accounts and food balance sheets
- Study trips were organized in two African countries: (1) Burkina Faso, to understand the functioning of the use of farmers as enumerators (interviewers), (2) Mali, to see how the FMIS works in that country. Staff was also trained in two other African countries Niger and Tanzania;
- A medium-term Program was built at the end of the project. This program was integrated in 2005 within the Rural Development Strategy Paper, elaborated by MINADER and MINEPIA. This program encompasses the project of preparation and implementation of the 3rd Agricultural and Livestock Census.

3.4 French Cooperation

This agricultural statistical program has been endorsed partially by French cooperation and has been integrated into the project named C2D ("Contrat Désendettement Développement"). This C2D project is working toward the promotion of the integration of crop and livestock statistics. But this activity is still underway. It will intervene in building capacity in the agri-census preparation stage.

3.5 Farm enumeration Questionnaire

In December 2005, Cameroon implemented a demographic and dwelling census, MINADER took that opportunity to elaborate a questionnaire that was administered to all agricultural and livestock households. This questionnaire will be used as a sampling frame of the coming agri-census. The household identification is the same as that found on the demographic and dwelling questionnaire. Hence cross analysis will be performed and then value will be added to data collected from the coming agri-census. It's important to add that this questionnaire on agriculture comprises crop and livestock's information. The coming agri-census will take into account the recommendations adopted in the World Program for the census of agriculture 2010; that is : produce a wider range of data from agricultural census while minimizing the cost by integrating a core census module and supplementary modules.

4 - Ongoing Actions

4.1 Implementation of the Medium-term Rural Statistical Program

This medium-term program comprises several components

- Consolidation of acquired knowledge by pursuing implementation of permanent yearly surveys integrating gender issues;
- Implementation of community data;
- Rehabilitation of FMIS useful for the early warning system;
- Consolidation of the data base;

- Implementation of crop forecasting surveys.

Permanent yearly surveys have not yet been implemented due to lack of money. And authorities have put priority on the agricultural and livestock census which will be a new start for the permanent data collection. Since preparation and data collection will last two years starting in January 2008, it's possible to launch the permanent system in 2010. The same situation holds for crop forecasting surveys.

Cameroon has constructed its own food balance sheets for 2002, 2003 and 2004. A national committee on food Balance sheet has been created and sessions have been organized since then. Agricultural accounts and revenue building have yet to start; the main reason being the absence of adequate data. As far as agricultural and livestock census is concerned, some activities have been so far executed. Very soon, by the end of the current year, the sampling frame will be ready. Financial resources have been allocated for some equipment, such as motorcycles, cars, bicycles, Desktops computers, etc These equipments hopefully be ready by the end of this year 2007. FAO, through a recent TCP (February 2007) worked out a project draft for preparation and implementation of that agri-census. This draft comprises: the cost of the whole operation, the role of different stakeholders, etc. The government is working now in collaboration with FAO to mobilize necessary financial resources.

From a technical stand point, structures in charge of rural statistics are also involved. The NIS, the Bureau of Demographic Census, MINEPIA are working hand in hand with the Ministry of Agriculture and Rural Development to come out with data fully integrated within the national statistical information, in line with the recommendations of the NCS. Collection of community data has started and is under way. Concerning the food market information system, markets have been identified; data collection has started and is under way. For this year 2007, emphasis is put on training field personnel.

4.2 Implementation of a trade Information System on Agricultural Products within the CEMAC Sub-region

With the support European Union, the Permanent Secretariat of CEMAC has recruited a consultant whose mandate was:

- Assessment of agricultural data quality related to the sub-regional trade between the member states;
- Assessment of methodologies used in different countries of the region, and;
- Making a proposal for the harmonization of concepts and definitions, methodologies, classification nomenclatures and ways of working in synergy.

This work when completed will probably foster economic integration and solve the problem of food insecurity in the CEMAC region.

5- Challenges To Meet And Risks Involved

Although the Government has a political will to overcome the problems of food insecurity and poverty alleviation, the way out is still very long. Several challenges are to be met.

- Institutions put in place, must benefit have sufficient resources in term of funds, infrastructure and personnel. The funding process has to be evaluated and improved to enhance monitoring and evaluation of the implementation of the poverty reduction strategy and achievement of the MD goals. Structures producing statistics must have autonomous mechanism of funding in order to be more efficient

- Efforts have to be made to let mentality change in many domains. The authorities and the population must interiorize the culture of evidence –based decision-making. To do so, transparency, appropriate legal framework, compliance with professional codes of ethics; in short, fight against corruption have to be promoted, as far as public administration is concerned. On the other hand, farmers should have training, in order to better understand the importance of statistics to their own business
- Rural and agricultural statistical integration for policy support has to be improved. If there is a good partnership between some producers of data, some projects or services do not cooperate very well. Indeed, in Cameroon, there are many structures dealing with food insecurity issues but they do not share very often data produced. For instance, there is no coordinating authority for Food Insecurity and Vulnerability Information and Mapping System.

In the Ministry of Agriculture and Rural Development (MINADER), there is a sub-department within the department in charge of statistics, which deals with market information system and the motoring of food insecurity areas. This structure has nothing to do with what is done for livestock data monitored in another Ministerial Department. Within MINADER, there are several projects: PSSA (Special Program for Food Security) PNDRT (National Tubers and Roots Development Program) Maize Project, etc, which produce valuable data for food security, but all these data are not integrated in the same data base for in-depth- analysis. Seminars have to be organized regrouping participants from different stakeholders in order to improve understanding among them and therefore to increase synergy and efficiency for a better integration.

6 - Conclusion

Cameroonian authorities are aware of the importance of rural and agricultural statistical integration. There exist a political will. Much has been done with the support of international agencies in charge of statistics.

Some state institutions have been created to coordinate statistical activities and therefore enhance integration of statistics for a better fight against hunger and poverty. The process is underway for coordinating population and agricultural censuses. The Government has the support of FAO, WB, French Cooperation and European Union.

A medium term program integrating crop and livestock statistics has been put in place and is implemented by different stakeholders. The staff has been trained in sampling design, conducting field operations for data collection, processing and dissemination, construction of food balance sheets, etc; but yet the staff number trained is still below the needs.

Internal funding process is still facing a lot of problems that have a negative impact for producing good quality data. For the country to win the fight against a more or less integrated system of rural and agricultural data, the government must:

- Reinforce the power of the coordinating structures: National Council of statistics, National Institute of Statistical;
- Put in place an adequate mechanism for public fund mobilization to avoid for delays with a negative impact;
- Put in place other appropriate structures for a better integration.