FOOD AND AGRICULTURE ORGANIZATIONS OF THE UNITED NATIONS (FAO)

Food Security Data Needs/Usage by Donor/International Agencies in Tanzania

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List of Abbreviations

AISS -	Agricultural Information Systems and Services
ASMP -	Agricultural Sector Management Project
CMEWS -	Crop Monitoring and Early Warning Systems
DMD -	Disaster Management Department
FAO -	Food and Agriculture Organization of the United Nations
FASWOG -	Food and Agriculture Sector Working Group
FSD -	Food Security Department
FSIMT-	Food Security Information Management Team
MAC -	Ministry of Agriculture and Cooperatives
NBS -	National Bureau of Statistics
NGOs -	Non-Governmental Organizations
PMO -	Prime Minister's Office
SCF -	Save the Children Fund
TFNC -	Tanzania Food and Nutrition Centre
TSED -	Tanzania Socio-Economic Database
UNESCO -	United Nations Education, Scientific and Cultural Organization
UNICEF -	United Nations Children's Fund
USAID -	United States Agency for International Development
WFP -	World Food Programme

1. Background

The management of the agriculture sector, particularly in countries like Tanzania, where agriculture plays a central role in the overall economy of the country, entails taking a wide range of decisions. In a broad sense, the overall goals of agricultural decision making, which have been identified as growth, equity and stability cannot be effectively undertaken without reliable statistical data. In the same token, the formulation of strategies for promoting agricultural production by planners and policy makers calls for the availability of reliable and adequate data on the various subsectors and associated activities.

Agricultural data are required by all actors in the agricultural sector including, government, the private sector, policy and investment analysts, academia, NGOs and the wider public. On the other hand, agricultural statistical data are generated by various producers for a wide range of uses. Hence the ever growing need to streamline and standardize methodology for the collection and analysis of information in the agricultural.

In the overall day to day management of the agricultural sector, agricultural data is specifically required to facilitate, the following:

- Analysis of production capacity and trends;
- Food consumption and utilization analysis;
- Marketing efficiency analysis;
- National and international price analysis;
- Analysis of demand, nutrition, population and employment;
- Analysis of the level and prices of agricultural inputs
- Preparation of crop production forecasts

Food security data as a subset of overall agricultural statistical data is regarded in many spheres as among the most important data for any country - developed or developing. It is within this context that food security statistical data is deemed to be an important socio-economic variable by donor and international organizations.

2. The Importance of Food Security Statistics to the International/Donor Community in Tanzania

Donor and International agencies are great users of food security data in their overall planning process. FS data provides the basis for collaboration between the donors and international and the Governments. It enables them to properly target and dispense their resources to the most needy areas by sub-sector and geographically.

Food Security statistics also facilitates the periodic reporting exercise of donor/international agencies to their respective headquarters. In many cases food security

data is usually used to compare the reported situation with that prevalent in other countries and leads to the subsequent categorization or re-categorization of countries.

Food security related data also assists international organizations and donor countries to assess the levels of food security of a given country for the effective implementation of mitigation or relief plans. On the other hand, these figures are a basis for soliciting support and assistance from other donor countries by international organizations and NGOs. This is particularly true for organizations that have a mandate of providing humanitarian aid, for example WFP and UNICEF.

For organizations which are involved in the spearheading of increased agricultural production, like FAO, agricultural data is useful in determining the appropriateness and success of a given policy decision, newly initiated programme or technological packages. Programmes like the Special Programme for Food Security are a case in point, whereby increased food production levels are anticipated with the adoption of the programme. However, in some isolated case this has not been the case, thus necessitating change of strategies/approach.

With globalization taking roots across the world, food security data is becoming increasingly important, especially in the food trade and marketing spheres. More and more organizations as well as the private sector will be looking for this data to facilitate their business strategies and networks across continents for maximization of profits.

3. Coordination/Collaboration Between Donors/International Agencies and Government in the Generation of Agricultural Statistical Data

As stated earlier in the text, international organizations and donors utilize considerably both primary and secondary data generated by various government agencies. With increasing demand for reliable and authentic data and particularly considering the government's poor financial and human resource base for data collection, analysis and dissemination, it has been compelling for international and donor agencies to assist and collaborate with government agencies in the generation of both primary and secondary data.

Coordination between data producers and between producers and users is essential in avoiding duplicating efforts, advancing common understanding of policy issues and related data requirements, setting data priorities, clarifying for data collection and agreeing on the best methods for collecting and analyzing data. Data users need to routinely specify their data needs, the form in which data are required, the detail the data should take and the timeframe for data presentation and to be informed on potential application of existing data. On the other hand, data producers need to indicate what data are available and their quality, how available data can be accessed, what data are to be collected, what problems are experienced in data production etc. Above all they need to promote use of their products.

While informal consultations have in the past taken place between various donor agencies (users) and government agencies (producers), these have tended to be infrequent and far in-between. However, in recent years more formal and institutionalized mechanisms and networking have evolved between them. The most recent initiatives include the Food and Agriculture Sector Working Group (FASWOG), which brings together representatives drawn from donor/international agencies and those from the government, particularly the Ministry of Agriculture and Cooperatives, the Ministry of Natural Resources and Tourism and the Prime Minister's Office. This forum facilitates the exchange of information between donors and government on matters pertaining to agriculture and food security.

Another important networking initiative towards collaboration between donor/international agencies and the government in the generation of primary data is the Steering Committee of the Tanzania Socio-Economic Database (TSED). This forum, which was launched in late 1998, is intended to formulate a methodology for standardized collection and analysis of socio-economic data. This includes the selection of appropriate hard and software for data analysis. The Steering Committee comprises of representatives from government ministries/agencies, which are major producers of socio-economic data and donor/international agencies, who are the main users of both intermediate and secondary data. The Committee is chaired by the National Bureau of Statistics (NBS).

In recent years, assistance has been provided by various agencies through a number of initiatives, in the building of government capacity to collect, analyse and store agricultural data, including food security data. These efforts have been directed to building both the human resource base as well as data processing equipment. The best example in this regard, is the FAO funded project on Crop Monitoring and Early Warning Systems (CMEWS), which was executed by the Food Security Department of the Ministry of Agriculture and Cooperatives. Through this project food security personnel were trained in the best practice of for data collection and analysis. Besides, a variety of early warning equipment was installed to enable the prompt analysis/processing of food security statistical data. To-date FAO utilizes the data generated through the CMEWS to prepare its monthly and annual food security bulletins, which are circulated to all FAO member countries to give reflections on food security levels in various parts of the world.

These initiatives have been instrumental in the establishment of a more reliable and effective reporting systems both at national, regional and district levels. Another important and more recent initiative is the USAID Famine and Early Warning System (USAID/FEWS) project, which in collaboration with the Food Security Department of the Ministry of agriculture and Cooperatives keeps track of the food security situation across the country. Data generated through the FEWS goes a long way to facilitating the institution of mitigation measures as well as strategies for assistance/support to the vulnerable groups/populations.

The World Bank, through the Agricultural Sector Management Project (ASMP), which was initiated in 1994 to-date, and implemented by the Policy and Planning Department of the MAC also has a component of Agricultural Information Systems and Services (AISS), the main objective of which, is to strengthen, rationalise and expand agricultural sector information used by various government and non-government organizations. Through the AISS, improvements have been made in the conduct of the crop forecast survey, which collects data on impending food shortages and surpluses in advance of crop harvest, for appropriate and timely action to be undertaken. Improvements were have also been made in the production of the monthly Food Security Bulletin. Through the ASMP, personnel from both the Food Security Department, the Statistics Unit of the MOA and the National Bureau of Statistics (NBS) were trained in various disciplines of information systems, including the collection and processing of agricultural statistical data. The most outstanding achievement of the ASMP was the facilitation of a collaborative arrangement for the Statistics Unit of the MAC and the National Bureau of Statistics to jointly conduct the census of agriculture and the subsequent agricultural survey. This was an unprecedented breakthrough in fostering inter-institutional coordination and the basis for an integrated framework for agricultural data collection and analysis.

Although most of the data in respect of food security is normally generated by government agencies, in recent years international organizations have also participated fully in the collection and processing of primary food security data. The best example in this regard is the Joint FAO/WFP/Government/Donor/NGOs crop and food assessment missions. This have in recent years proved to be an effective and rapid means of generating food security data, particularly in times of emergency or acute food insecurity situations. Being a collaborative effort, data generated through this means is usually considered as being authentic by all stakeholders, thus facilitating the early dispensation of emergency relief by the respective donor agencies. Although the initial crop and food assessment missions were a combination of both foreign and local experts, more recent initiatives have taken a local outlook.

A more recent initiative, which is being spearheaded by the Government, FAO and the World Bank is the Framework for Development of Agricultural Statistics. This framework, which is in its final stages of adoption by the Government, will provide a description of the priority data requirements of users, of the most appropriate methods and means of collecting data and of the related organizational and institutional arrangements for data production. The framework consists of a number of integrated components, which together cater for the entire agricultural data production process, viz. Data collection, processing, storage, analysis, reporting and dissemination of the required data. Once adopted by the Government, the Framework constitutes a policy and strategy document on agricultural statistics, providing a long-term development plan towards a sustainable statistics system, as well as master plan for the implementation of all data collection activities. A time frame of 10 years has been proposed for this Framework.

Another forum, which is in the process of being established and which will be specifically focused on food security data is the Food Security Information Management

Team (FSIMT). This framework, which will comprise representatives from the central Government, Donor/international agencies and NGOs will facilitate and enhance the generation and exchange of food security data. The FSIMT will be an advisory body to both the Disaster Management Department (DMD) of the PMO and the Food Security Department (FSD) of the MAC in matters related to data coordination, analysis and dissemination. The FISMT will be co-chaired by the FSD and the DMD.

4. Problems Encountered by International/Donor Agencies and Users of Food Security Statistical Data

There is a whole array of problems associated with the usage of agricultural data, which is to a large extent emanate from the manner and methodology employed as well as the skills of the personnel involved in its generation.

The most central problem with agricultural data and more so food security data, is the accuracy of the data. On several occasions, food security data has been found inaccurate and sometimes misleading, with detrimental consequences to overall national estimates. As a result of this, many donors and international organizations have lost trust in most of the data, which is solely generated by government agencies. The most dramatic example is the food security data which was produced in 1996 depicting a countrywide food deficit of 900,000 Metric tons, which was gravely erroneous. This kind of data is a testimony of poor data collection and processing methodology as well as doubtful skills of the personnel.

The accuracy of data is just as important as its consistency. There is widespread belief among the international/donor agencies that data from different sources is inconsistent. This problem arises from poor technical and inter institutional coordination and linkages among data producers. Generally, data producers use different concepts, definitions, classifications, methodologies and qualities of staff to collect and present data. For example there is usually considerable variations/discrepancies between food security data collected by the Food Security Department and that collected by the Statistics Unit or that collected by the National Bureau of Statistics. There is need therefore, to establish a unified system of data collection and analysis among data producers, so as to avert confusion and instill confidence among various users.

Another shortcoming associated with food security data is the incompleteness of the presented data. Most of the data does not give a complete picture of the situation. Considering the complexity of food security as a concept and since it encompasses a variety of variables, there are usually gaps in the data collected. Some critics also argue that a large proportion of food security data is usually not put to its optimum use.

For data to be utilized to its fullest use, it needs to be produced at an appropriate time i.e. when it is still valid. For this to happen, data needs to be processed in good time before situations change. Stale news or information is just as misleading as inaccurate data. To avert this, data should be handled (processed) in a timely manner.

With current government decentralization policy, with the resultant district focus, there is increasing demand for disaggregated data at the district and sub-district levels, by various donors/international organizations. This kind of data is not readily available, because most statistical systems in the country are based on sampling technology, which are not suited for producing data at local level. Without this kind of data it is very difficult to undertake any meaningful and accurate targeting of relief assistance. Similarly, lack of properly disaggregated data poses difficulty in the planning, monitoring and evaluation process, particularly measuring the pace and impact of projects/programmes on the beneficiary community. Donors, International organizations and NGOs , which undertake community based projects (UNICEF, UNESCO, TFNC, SCF, CONCERN, etc) or relief operations (WFP, Red Cross, Oxfam etc) are the ones who are particularly concerned with the quality of data at the local level.

Donors and international organizations have retorted to the inaccessibility of agricultural data and to some extent food security data, save for that, which is published on a monthly basis through institutionalized food security bulletins. The problem lies with the poor data dissemination mechanisms adopted by statistical data producers. Few data producers have a system of planning and budgeting for data dissemination. Data should not be produced just for the sake of it, but rather should target potential users and make them aware of the availability of the respective data. Inaccessibility of data can be termed in two main aspects namely, the physical inaccessibility, whereby data does not percolate through to the users due to various reasons; and inaccessibility due non-user friendly data, which poses difficulty in its interpretation. Through time and with advances in information technology most statistical data is becoming increasingly user friendly. User friendliness is also being enhanced by different graphic packages, which have made it possible to present some results using figures rather than tables.

5. Recommendations

From the foregone text, it is apparent that considerable efforts have been made in recent years, by both the government and its agencies on the one hand and donor/international agencies on the other to streamline, standardize and integrate the whole process of agricultural statistical data production. Despite the initiatives already undertaken to-date, there is still scope for improvement and betterment of the overall agricultural data production framework in the country. In this context the following recommendations are made:

1. In order to circumvent the problem of conflicting data from different sources, it is necessary that an effective system of coordination and integration of agricultural data production in the country be developed. This could be undertaken through the various recent coordination initiatives outlined above, namely the FSIMT, the Framework for Development of Agricultural Statistics and the Tanzania Socio-Economic Database Steering Committee. This should however, be coupled with a the institution of a system of release and clearance of agricultural data the end users.

2. In view of the ever increasing and diverse demands of agricultural statistical data by various users, there is a need of enhanced inter-institutional coordination and dialogue between the producers and users of data, so as to agree on the type, scope and duration of data production.

3. For agricultural data to be credible to the users, it needs to be accurate and authentic as possible. This as stated in the text is still far from being achieved by the current data generation system. There is need therefore, that a more whole embracing system of data collection particularly at the local level be developed, so as to instill trust among the data end users and to facilitate the policy decision making process. This should be done in full collaboration with the authorities at the regional and district levels. The instituted systems should be closely monitored to be in tandem with changing data demands over time.

4. The currently produced agricultural data and more so food security data, is not comprehensive enough to cater for all user needs. Since food security encompasses a variety of variables it is necessary that the spectrum of variables in the overall food security database be expanded, so as to enable the proper assessment of the sector by various end users.

5. For data to be used for the desired purpose it needs to be delivered in the most appropriate time to the user. This is particularly for agencies, which undertake emergency or relief operations. There is need therefore, that data producers strive to ensure timely delivery of agricultural data to the respective users. The timely delivery of data should be coupled with the production of user friendly data, so as to enhance accessibility and utilization of produced data.

6. Conclusion

Agricultural statistical data, particularly in developing countries are increasingly becoming indispensable tools for developing policy strategies and decision making within government circles. However, despite its importance, there are still numerous problems, which still hinder the production and proper usage of agricultural statistical data at both the national and international level.

It is encouraging to see that, some of the constraints have now been acknowledged by both the government and donor/international agencies, hence the recent initiatives towards alleviating them. Nevertheless, there is still considerable scope and work to be undertaken to ensure that the most pertinent bottlenecks to agricultural data production are well catered for. This crusade will entail the unwavering government will, but also collaboration with donors/international organizations, who are also prominent stakeholders and end users of agricultural statistical data in the country.

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