

## New features of the World Programme of Census of Agriculture 2010 (WCA2010): Modular Approach to Data Collection, M. Srivastava, FAO

The new World Programme for the Census of Agriculture 2010 has been issued as guidance to countries in the preparation for their agricultural censuses to be undertaken during the decade 2006-2015. It has many new features as compared to the previous Programmes, in particular the data items to be covered, the relation between the agricultural census and related surveys and censuses, and the role of agricultural census in monitoring emerging concerns at world summits. The paper presents these new aspects focusing on the recommendations to: (i) collect data at community level to help meet the increasing demand for such data by policy makers, planners and development partners; (ii) include new data items on agricultural services, agricultural practices and aquaculture; (iii) adopt a modular approach for the census taking; (iv) establish linkage between agricultural census and other major statistical undertakings such as population census; and (v) the role of agricultural census in obtaining indicators useful for monitoring the Millennium Development Goals.

### 1. Introduction

The new World Programme for the Census of Agriculture (WCA 2010) has been issued by FAO in 2005 for the decade 2006 – 2015. This is the ninth programme in the series of World Censuses of Agriculture, and the seventh decennial programme issued by FAO. The programme would be useful to the countries, which plan to conduct their national censuses during this period. FAO World Programme for the Census of Agriculture (WCA) has helped countries to carry out their national agricultural census at least once every decade using standard international concepts, definitions and methodology.

The new programme, besides maintaining the conventional role of agricultural census as provider of key structural data at lower geographic level, sees the agricultural census as the heart of the national food and agricultural statistics system. Its role towards monitoring of Millennium Development Goals (MDGs), and monitoring and measurement of poverty, contribution of women to agriculture and food security is being increasingly realized. The new programme gives special attention to this aspect. For preparing targeted programme for development of rural areas, increasing need is being realized for Community-level data on rural infrastructure, such as effectiveness of agricultural produce markets. The programme shows how agriculture related community-level data could be collected easily with agricultural census.

The additional new features of this programme are the following:

- A modular approach to agriculture data collection has been introduced. The core census covers all agricultural holdings but collects only a limited range of items. Supplementary modules use samples chosen from the core census;
- Emphasis is given to integrating national agricultural and population censuses for greater synergy and cost-effectiveness;
- The option of combining the agricultural and the aquaculture censuses is included;
- The option to include households that are not agricultural producers is considered;

- Data content, concepts, definitions and classifications have been updated and improved.
- A concept of sub-holding has been introduced to better capture the data on contribution of women.

In order to increase the utility of data collected through the agricultural census the concepts and classifications recommended for WCA 2010 have been aligned to standard international practices, particularly to the national accounting framework. In particular, the classification of crops has been harmonized with the latest version of Common Product Classification (CPC). The classification of land use has been fine tuned to collect data for seven elementary land categories which could be further broken down by countries as per their needs. A classification on livestock and one on agricultural machinery have been included in the new document. The scope of agricultural census within the framework of International Standard Industrial Classification of all Economic Activities (ISIC) has been examined in detail to establish clear linkage with the national accounts framework.

## 2. Expanded list of data items and Modular approach

The previous programme recommended to countries a set of about 10 “essential data items” for inclusion in their agricultural census. Also guidelines were provided to countries on a few “optional data items” for inclusion in their census programme as per their need. The new programme (WCA 2010) has recognized the need for international comparison as well as the challenge faced by countries to collect data on a variety of new subjects. The new programme give guidance to countries on a large set of data items, in addition to 16 key items recommended for inclusion of census programmes of all countries. The concepts relating to many new data items have been explained, particularly in the areas of Agricultural practices, Agricultural services, Aquaculture, Irrigation and Water management, Livestock rearing cycles, and Management of the holding. Additional data-items have been grouped in 12 themes.

The new programme offers to the countries a great amount of flexibility to design their survey programme as per their needs, priorities and resource availability through adoption of a modular approach. Under this approach, a core census module, to be conducted on a complete enumeration or large sample basis, will provide a limited range of key data at lower administrative level. The programme lists 16 items for inclusion in the core census module of all countries for key international comparison purposes. The core module would also provide frames for further surveys to be carried out on the basis of agricultural surveys. One or more census supplementary modules could be conducted on a sample basis as part of the census or soon after it to provide more in-depth data on a selected field. These optional items would be important for national policy-making, and would at the same time be useful for making inter-country comparisons. As these modules which will be integrated to the core census items, even though carried out at different points of time, they will offer a cost-effective solution to data production and enhanced scope for analysis.

### 3. Community-level data

Responding to a great demand of data at village or commune level, the new programme has specially addressed this issue. The programme identifies a list of data items which may not be suitable for collection with the agricultural holding as the statistical unit. The appropriate statistical unit for such data would be the community. These 33 data-items identified in the programme cover the data domains of: Geography of the Community, Socio-economic conditions, Community infrastructure services and Development programmes. The programme encourages the countries to include this component according to national circumstances and data requirements. While selecting the data items for inclusion in the agricultural census, it is to be noted that ample opportunities to interface this data with other similar data from other sources also exist.

### 4. Agricultural Census in the National Statistical System

National censuses are extremely large and costly undertakings. However, in the past, many countries have seen their agricultural census as an independent statistical exercise separated from their programme for collection of agricultural statistics. Such an approach tends to be costly and often leads to divergent data from various surveys. The new programme provides for agricultural censuses to be conducted as the central component of the system of agricultural sample surveys. Under this scenario, the agricultural census/survey programme can be viewed as having two related elements: (i) the agricultural census; and (ii) the series of agricultural sample surveys based on the agricultural census, called the thematic agricultural surveys.

There is also considerable commonality between the population and housing census and the census of agriculture. For this reason, FAO has worked closely with United Nations Statistics Division to explore ways in which the relationship between the two censuses activities can be strengthened that can save costs and enhance the usefulness of the data. The possibilities of integration of the two censuses exist in the following ways:

- use of common concepts, definitions and classifications;
- sharing field materials;
- using the population census as a household frame for the census of agriculture;
- making use of agriculture-related data from the population census;
- collecting additional agriculture-related data in the population census;
- linking data from the two censuses;
- conducting the two censuses as a joint field operation.

The WCA 2010 stresses that the opportunity for coordinating the various national census activities should be actively explored at an early stage in the census planning process, and be taken into consideration in developing national statistical plans. Countries should make the necessary administrative arrangements to ensure close collaboration between the census development teams and to ensure that all avenues for coordination are explored.

Yet another opportunity for integration of agricultural census with other census and surveys exists with aquaculture census, wherever aquaculture production industry is important and such a census is to be conducted. There is a strong interest in many countries to link

aquaculture with agriculture by carrying out the agricultural and aquaculture censuses together. Agriculture and aquaculture are seen to be closely related because:

- Aquaculture involves the raising of fish in captivity or cultivation of aquatic plants, which is analogous to rearing of livestock or cultivation of crops under agricultural production.
- Aquaculture is often integrated with agricultural production, such as in rice-cum-fish culture.
- Aquaculture and agriculture commonly share the same inputs, such as machinery and labour.

The WCA 2010 provides the option to conduct an aquaculture census at the same time as the census of agriculture to cover all aquaculture production, and yet keeping it conceptually separate from agricultural census. Countries are strongly urged to examine this option if aquaculture is an important economic activity in their country.

The integrated approach to survey planning could particularly prove cost-effective in countries where carrying out a statistical operation such as a census is a rare opportunity. Integrating the surveys and censuses also increases the scope of analysis of data gathered through various statistical operations, and hence enhances the utility of existing data to policy makers.

## 5. Agricultural Census and World Summits

FAO has been entrusted the task of estimating and monitoring targets set by World Food Summit by 2015. As country level policies are the main instruments for achieving the Millennium Development Goals (MDGs), country-level monitoring of the progress towards the MDGs has thus become an important element in formulating economic development strategies, and countries have begun to focus on the need for MDG-related indicators as a key component of the national statistical programme. A variety of data sources are being sought for this purpose. Considering that a census of agriculture is one of the largest national statistical operations undertaken by a country, WCA 2010 programme advocate its use as a potential source of data for monitoring the MDGs. The programme shows that at least 8 indicator to monitor 5 different MDGs could be obtained to a great extent through agricultural census programme. Agriculture census data could be particularly useful in monitoring:

- Eradication of extreme poverty,
- Achievement of Universal education,
- Promotion of gender equality and empowerment,
- Ensuring environmental sustainability,
- Development of global partnership for development.

The new modular approach used for the current round of agricultural censuses, based on the census core and supplementary modules, together with the programme of agricultural surveys, enhances the usefulness of the agricultural census/survey programme as a source of data for MDG monitoring. Countries should look to carrying out regular agricultural surveys, based on the census of agriculture frame, to provide additional MDG-related data to complement the data collected in the census of agriculture.

Newer strategies for sustainable development and agrarian reform are being sought. Focus of these approaches often tends to be the challenges confronting the under-privileged communities in rural areas around the globe. FAO has been given the mandate at the International Conference on Agrarian Reforms and Rural Development (ICARRD) in March 2006 to identify the indicators to monitor the implementation of the declaration. The declaration reiterated the importance of traditional and family agriculture, and other small-holder production as well as the roles of rural communities in contributing to food security and the eradication of poverty. Community-level data, at the village or the commune level, can be useful for this purpose. Information on the infrastructure and services available to holdings would help in formulating, executing and evaluating community projects. Data on whether the community is prone to natural disasters or subject to seasonal food shortages can also be of interest for food security analysis.

#### REFERENCES

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