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## Agenda Item 9

### ASIA AND PACIFIC COMMISSION ON AGRICULTURAL STATISTICS

#### TWENTY-SECOND SESSION

Kuching, Malaysia, 9-13 June 2008

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## World Programme for the Census of Agriculture 2010: Opportunities, Plans and Issues

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### **World Programme for the Census of Agriculture 2010: Opportunities, Plans and Issues**

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#### *Abstract*

*The paper presents the key features of the seventh FAO World Programme for Census of Agriculture (WCA 2010). It particularly highlights the use of opportunity of agricultural census to collect data required for monitoring MDGs. It shows how a linkage of agricultural census with population census could save costs and result in completeness of data collected through agricultural census. The possibility of use agricultural census operations for collecting agriculture related community-level data is discussed in some details along with the experience of some Asian countries collecting such data. The available information on the plans of the countries to participate in WCA 2010 is summarized. The critical issues that need to be considered at the early stages of census planning to ensure complete coverage and international comparability are highlighted. The paper aims to set the stage for a detailed discussion on the country plans on WCA 2010.*

## **I. INTRODUCTION**

1.1. The initial attempts to collect structural agricultural statistics at global level were made in 1930 and in 1940 by the International Institute of Agriculture (IIA) whose responsibilities were taken over by FAO following its dissolution in 1946. Beginning with 1950, FAO programme for census of agricultural census has played a major guiding role in collection of agricultural structural statistics by countries. The seventh World Programme for the Census of Agriculture 2010 (WCA 2010), covering the period between 2006 and 2015, was launched by FAO in 2005. It is the ninth round in the decennial programme of agricultural censuses prepared at the global level.

1.2. The number of countries participating in the WCA programme has steadily increased during last five decades. In the last round, which refers to the period from 1996 to 2005, out of 197 FAO member countries 122 countries have conducted an agricultural census, and 106 countries have provided their reports to FAO Statistics Division. Among the 45 Asian countries 29 have undertaken agricultural censuses and 25 have provided their reports to FAO. Looking at trends, it is expected that this number will further increase for the WCA 2010.

## **II. NEW FEATURES OF THE WORLD PROGRAMME FOR THE CENSUS OF AGRICULTURE 2010**

2.1 Besides providing guidelines on concepts, definitions, classifications and methodologies, WCA 2010 argues for an *integrated statistical system approach*. It also provides enough flexibility to countries to create a census-cum-survey plan as per their need, while ensuring that a minimum set of essential data for international comparison is made available through the agricultural census.

2.2 The new features of this programme are the following:

- A *modular approach* 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 sampling frames obtained the core census;
- The role of the census of agriculture in helping to *monitor the Millennium Development Goals (MDGs)* is highlighted;
- *Community data* are now covered, which addresses rural infrastructure and food access issues such as the effectiveness of agricultural produce markets; and
- Emphasis is given to *integrating national agricultural and population censuses* for greater synergy and cost-effectiveness;
- The option of *combining the agriculture and the aquaculture* censuses is included;
- The option to include *rural households* that are not agricultural producers is considered;
- Data content, concepts, definitions and classifications have been updated and improved.

### III. INTRODUCTION OF A MODULAR APPROACH

3.1 It is envisaged that countries will undertake their census of agriculture in modules, rather than as single one-off operation. The core module, preferably based on complete enumeration, will cover a limited range of 16 data items on which information is needed at lower geographical level, and those required for sample frame construction. One or more sample-based supplementary modules will also be implemented as part of the census of agriculture to provide more detailed structural data. This approach will reduce costs and allow countries to collect a wider range of data than in previous censuses.

### IV. MONITORING THE MILLENNIUM DEVELOPMENT GOALS

4.1 Country-level monitoring of the progress towards the Millennium Development Goals (MDGs) has 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. A census of agriculture is one of the largest national statistical operations undertaken by a country, and its use as a potential source of data for monitoring the MDGs should be taken into consideration in the census planning and design.

4.2 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.

4.3 The agricultural census could be particularly useful in collecting data for the following MDGs:

- ✓ Goal 1: Eradicate extreme poverty and hunger
- ✓ Goal 2: Achieve universal primary education
- ✓ Goal 3: Promote gender equality and empower women
- ✓ Goal 7: Ensure environment sustainability

4.4 The indicators for monitoring these could come from both aggregate holding-level data and the community- level data.

### V. COMMUNITY- LEVEL DATA

5.1 The importance of multi-faceted Community-level data, at the village or the commune level, is being increasingly realized in countries for assessing the infrastructure and services available to

agricultural holdings and to help in formulating, executing and evaluating community projects. The information on proneness of the community to natural disasters or seasonal food shortages can also be brought under the ambit of this type of data as it is well related to agricultural activities of the communities. Given the strong demand for community-level data, a community-level component has been included in the WCA 2010, and countries are encouraged to include this component in their agricultural censuses according to national circumstances and data requirements. The Chapter 5 of the WCA document provides detailed guidelines on concepts and data items for this type of data (FAO, 2005).

5.2 A community-level data collection as part of agricultural census should focus on agriculture related data that would not be collected from holdings, such as the area of communal land. However, aggregate data from many holding/household surveys could be pooled in the community data base for providing better scope of analysis. Community-level data collection is not completely new to the agricultural census programme. Selected examples of such data collection efforts in the region are given in the subsequent paragraphs.

5.3 Indonesia is regularly collecting Village Level Information through special survey module (*Podes*) which is attached to Population Census, Agricultural Census and Economic Census, each one of which follows a decadal frequency. Thus the *Podes* survey is carried out 3 times in a decade. In addition to serving many other uses this data is utilized for identifying poor villages and to monitor diversion of agricultural land to non-agricultural purposes. Such data is also used for preparing village profiles, classification of settlements into rural and urban area, compiling indices and atlas of different types.

5.4 In socio-economic household surveys of Cambodia a village questionnaire is included. The themes covered in this questionnaire include:

- Demographic information
- Economic infrastructures
- Rainfall and natural disasters
- Education
- Health
- Retail prices
- Employment wages
- Access to common property resources during the last 5 years
- Sales prices of agriculture land in the village
- Recruitment of children for work outside the village

Since 2001 a Commune Level Data base is being built to aid the planning process.

5.5 The 1995-95 agricultural census of India included a village module which was partly used for checking consistency between aggregate holding data and village data, particularly to ensure that all village land has been accounted for. In some villages where clear land use information was not available this was used for estimating some variable and checking completeness of the information gathered from holding.

5.6 It is learnt that similar information is also being collected in Republic of Korea. The need for district level information, including in agricultural field, is being realized for decentralized planning in Nepal also. Countries which are planning such data collection would thus find enough examples to follow and the opportunities for exchange of experience.

## **VI. INTEGRATING AGRICULTURAL AND POPULATION CENSUSES**

6.1 National censuses are extremely large and costly undertakings. 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 census activities can be strengthened that can save costs and enhance the usefulness of the data. These ways are:

- 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.

6.2 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.

6.3 As a population census almost invariably involves a complete enumeration of all areas, it provides a unique opportunity for:

- ✓ getting information on urban agriculture, particularly when the agricultural census is confined to rural area;
- ✓ getting information from such holders who reside in urban area but operate land in rural area; and
- ✓ providing information of small holdings and kitchen garden which normally remain outside the scope of an agricultural census.

6.4 Some countries in Asia, eg. Nepal, have already made use this approach. 2005 Population Census of Laos also had also collected some information on “main occupation during last 12 months”. Detailed information on “type of farming activity” was also collected.

## **VII. COMBINING AGRICULTURAL AND AQUACULTURE CENSUSES**

7.1 Aquaculture has become increasingly important in many countries, and there is a growing demand for data on the structure of the aquacultural production industry. There is a strong interest in many countries to link aquaculture with agriculture by carrying out the agricultural and aquaculture censuses together.

7.2 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 raising 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.

7.3 Apart from the close links between agriculture and aquaculture, there are other advantages in carrying out a joint agricultural/aquaculture census:

- The cost of data collection for the two censuses is reduced.

- It can help to provide a link between agricultural and aquacultural data, enabling a wider analysis of data in both censuses.
- It makes it easy to apply standard concepts and definitions in the two censuses.
- There would be organizational benefits in having one enumeration team responsible for data collection in both censuses.

7.4 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, particularly inland aquaculture. Countries are strongly urged to take this option if aquaculture is an important economic activity in their country. The experience of Thailand in this regard would be particularly relevant to countries planning to collect aquaculture statistics with their agriculture census.

## **VIII. INCLUDING RURAL HOUSEHOLDS THAT ARE NOT AGRICULTURAL PRODUCERS**

8.1 In considering the socio-economic dimension, particularly of the rural sector, it may be considered important to collect information about the non-agricultural households as well as the agricultural households. The WCA 2010 provides guidance to countries which wish to consider this approach.

## **IX. WIDER COVERAGE OF DATA ITEMS, CONCEPTS, DEFINITIONS AND CLASSIFICATIONS**

9.1 The list of recommended items for inclusion in the WCA 2010 has been expanded and updated along with the associated concepts, definitions and classifications. Of particular note is the introduction of the sub-holding and sub-holder concepts to better understand the management practises used on the holding and to better reflect the role of women in agriculture. Apart from 16 core data items recommended for complete enumeration, guidance is provided to countries on 89 data items grouped under 12 themes for specialized survey. An indicative classification of crops based upon Common Product Classification is suggested to be used for greater international comparability of data collected through agricultural census.

## **X. COUNTRY PLANS FOR WCA 2010**

10.1 FAO has played a role in census programmes of many countries. FAO Statistics Division continues to bear the responsibility of keeping a watch over the developments in the field of agricultural statistics in countries with a view to documenting country experiences and providing critical guidance in the matter. It is noted that in most of the APCAS member countries the task of undertaking an agricultural census periodically or an equivalent agricultural survey has been relatively institutionalized. Some countries also collect structural agricultural statistics through surveys which are not wholly an agricultural survey. In some island countries, agricultural information is collected as part of their programme for Population Census. Household surveys are also used as an instrument for collecting structural agricultural information.

10.2 The table below gives the census years of APCAS countries during WCA 2000 and their plan for the WCA 2010 round.

	<b>Country</b>	<b>WCA 2000 Round</b>	<b>WCA 2010 Round<sup>s</sup></b>
1	Australia	2001	2010
2	Bangladesh	1996/97	2007
3	Bhutan	2000	2008
4	Cambodia	-	Planning
5	China, People's Rep. of	1997	2007

6	Cook Island	2000	-
7	Fiji	1991	2008-09
8	India	2005-06	2010-11
9	Indonesia	2003	2013
10	Iran, Islamic Rep. of	2003	-
11	Japan	2000	2010
12	Lao PDR	1998/99	2009
13	Viet Nam	2001	2011
14	Malaysia	2004/05	-
15	Marina Islands (US)	2002	-
16	Myanmar	2003	2010
17	Nepal	2001/02	2011/12
18	New Caledonia	2002	-
19	New Zealand	2002	-
20	Pakistan	2000	2010
21	Philippines	2002	2012
22	Republic of Korea	2000	2010
23	Sri Lanka	2002	2012
24	Thailand	2003	2013

§: Information available as on 31 May 2008.

## XI. CRITICAL ISSUES IN WCA

11.1 While many countries have established a routine for carrying out an agricultural census, some issues, if not adequately considered at planning stage, often render the census data incomplete and incomparable at international level. These issues include:

- ✓ ensuring that at least minimum information is available on all units engaged in agricultural activity, particularly those which do not qualify as an agricultural holding as per national definition. The national definition is often based on certain cut-off limits on the basis of scale of operation or purpose of production. Varying levels and types of cut-offs are adopted by countries to keep the cost and the effort of conducting an agricultural census under manageable limits. But in some countries the total contribution of uncovered holdings (below the cut-off) could be significant. This also complicates the process of international comparison.
- ✓ ensuring a mechanism to capture information on such holding whose operator lives outside the boundaries of the area where agricultural census is conducted

## REFERENCE

*FAO (2005): FAO Development Series No. 11: A system of integrated agricultural censuses and surveys, Volume 1, World Programme for Census of Agriculture.*