ASIA AND PACIFIC COMMISSION ON AGRICULTURAL STATISTICS

TWENTY-SEVENTH SESSION

Nadi, Fiji, 19 – 23 March 2018

Agenda Item 7.3a

DATA COLLECTION SYSTEM FOR AGRICULTURAL STATISTICS

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DATA COLLECTION SYSTEM FOR AGRICULTURAL STATISTICS

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Asia-Pacific Commission on Agriculture Statistics (APCAS)
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An integrated agricultural statistical system involves a multi-year programme of statistical activities, including an agricultural census and agricultural surveys in order to provide the data requirements on food and agriculture.

So...It implies an strategy!!!
The main advantages of an integrated statistics system are:

- It is possible to plan and develop a comprehensive statistical programme ensuring efficient and balanced use of available resources and avoiding duplication of statistical activities or the release of conflicting statistics;
- Make easier to interpret and analyse related data from different sources;
- The census of agriculture and other statistical collections can be restricted to a coherent and manageable set of items.
The implementation of such ideal system depends on the particular setting of a country:

- Countries with limited resources to collect a census
  - Although preferable, should not be an impediment to design and collect agricultural surveys

- Countries with limited resources to collect surveys
  - Although not ideal, a minimum approach on survey data collection can be taken aiming at i.e. production of most relevant crops and livestock

- Technical assistance aims to identify with the country the best alternative balancing needs and the availability of resources making use of new technologies for data collection

Nevertheless…
Census of Agriculture WCA 2020
In 2015, FAO published **Volume 1** of the World Programme for the Census of Agriculture 2020 (**WCA 2020**) *Programme, concepts and definitions*.

- It is the tenth decennial programme that provides guidelines for implementation of national agricultural censuses in the 2016-2025 decade.
- Volume 1 deals with the methodological and conceptual aspects of the census of agriculture.

In addition to the use of international standards, the proper conduct of an agricultural census also depends on adequate planning, implementation, use of resources and quality assurance throughout all stages of the census.

In light of this, **Volume 2 Operational guidelines** was prepared to guide national census practitioners responsible for conducting the agri-census.

- It deals with the practical steps involved in actually conducting an agricultural census in the field.
- Intended to be as user-friendly and practical as possible. Provides links to country practices, hyperlinks to specialised/detailed methodological publications and bibliographic references.
Volume 2. Structure

- Provides a comprehensive coverage of the main stages in the preparation and implementation of the census of agriculture.
Main steps and associated census activities are described in 25 different chapters organised in three main parts:

- **Part 1** covers ground work census activities, such as deciding the methodology, preparation of the legal and institutional framework, work plan and budgeting.
- **Part 2** discusses the practical aspects of four census methodological modalities defined in Volume 1, their requirements, advantages and limitations.
- **Part 3** focuses on census fieldwork and the implementation of collection, analysis and dissemination of census data.

First draft was presented in an international Technical Review Meeting, held in January 2017 at FAO Rome.

Second draft was peer-reviewed by Statistics Canada.

Third draft was subject to a global consultation by member countries of the United Nations Statistical Commission (UNSC) in Oct-Nov 2017.

Presented in the Statistical Commission of UN march 2018:
- which recommended countries to use it as a reference for the implementation of the 2020 round of censuses.
- Urged members to conduct a census in the period 2016-2025
- Requested resource mobilization for its implementation
A system of integrated farm-based surveys that aims to accelerate the production of data on the national agricultural sector

Focus is on agricultural production, as well as on the technical, economic, environmental and social dimensions of farms, including small holders

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Strengthen national agricultural statistical systems in partner countries through technical and financial assistance that progressively decreases, so that countries can gradually take over the implementation of the Integrated System of Agricultural Surveys (AGRISurveys).
AGRISurvey does not impose a model or standard questionnaires to partners countries. Rather, it builds on national practices and national priorities.

We encourage countries to adopt the principle of ‘rotating thematic modules’ and to consider the AGRISurveys indicator list.
**AGRISurveys: Principles**

**Statistical Units**
- All agricultural holdings – i.e., economic unit of agricultural production under the unique management
- Household sector (including small-scale farmers)
- Non-household sector (Governmental farms, cooperatives, etc.)

**Sample Design**
- Versatile sampling strategy, able to meet different country situations
- Sample for the core module can be either a panel or a rotating
- Rotating modules are administered on a sub-sample of the core module
The core module is essentially a production questionnaire – repeated every year – which allows monitoring key indicators in a timely manner, thus establishing trends.

**Topics covered:**

- Crop and livestock production
- Essential structural data on the holding and the household
- Shocks and coping mechanisms
- Access to markets and information
- Essential data on inputs (including labour), and production methods and labour – all topics that are further investigated in the rotating modules
The Economy questionnaire focuses on farm’s budget.

Multiple-visit approach is recommended to ensure better quality data (ie., shorten the recall).

This module should be rolled-out **every other year**, as budgets may change quickly.

**Topics covered:**
- Value of crop and livestock production
- Value of variable costs (ie., seeds, fertilisers, labour, animal feed, etc.)
- Value of fixed costs (ie., farm overhead expenses)
- Value of production and costs of other agricultural activities (ie., fishery, forestry, etc.)
The **Labour module** collects detailed data on labour input in agriculture. Multiple-visit approach is recommended to ensure better quality data (i.e., shorten recall periods).

**Topics covered:**

- Volume of labor input in the holdings, from household members and external workers (i.e., amount of time, expressed in hours)
- Organization of labour in the holding (who does what?), in particular identification of age- and sex-specific roles
- Payments, wages and their modalities
The Production Methods & Environment questionnaire collects data on the production processes adopted by the holdings, and their environmental impact. This allows characterizing ag technologies, and their potential sustainability.

Topics covered:
- Tillage practices and soil management
- Energy resources
- Irrigation systems
- Crop production systems
- Livestock production systems and use of pastures
- Organic farming
- Manure management
- Adaptation to climate change
The **Equipment, Machinery & Asset** module gathers information the physical equipment used in the holdings

Structural information, not subjected to changes on the short term. Therefore implemented **every ten years**

**Topics covered:**

- Manual equipment, animal powered equipment, motor powered equipment, by type, number and ownership status.
- Non residential buildings used by the holding
- Other assets owned *(only for household sector)*
- It can be expanded easily to accommodate ‘decision-making’ question and to collect sex-disaggregated data on asset ownership
Two Models

- Model 1: countries will benefit from technical assistance and financial support
  
  Cambodia, Guatemala, Senegal, Uganda

- Model 2: countries will receive technical assistance as well as FAO’s support in fundraising and resource mobilization
  
  Armenia, Costa Rica, Ecuador, Georgia, Ghana, Kazakhstan, Uruguay

Resources: resources have been mobilized to support countries implementing the AGRIS methodology. Supporting Donors are:

- United States Agency for International Development (USAID)
- Bill & Melinda Gates Foundation (BMGF)
IMPLEMENTING AGRISurveys: how we work

The GRAInS Partnership: the AGRIS implementation occurs under the umbrella of a new partnership established FAO (AGRIS team) and the World Bank (LSMS-ISA) – ie., the GRAInS Partnership.

Through this partnership, FAO and World Bank collaborate in the following areas:

- Promote cost-effectiveness in data collection
- Advocate and raise funding
- Coordinate the provision of technical assistance
- Conduct methodological and operational research
- Identify synergies in countries where both agricultural surveys and a LSMS-ISA type of surveys are implemented.
FAO is selecting additional countries for participation in AGRISurveys
A response to current data needs

Major international initiatives, such as the Sustainable Development Goals (SDGs), define new frameworks for mutual accountability and have increased the data demand for the agricultural sector.

AGRIS provides the basic data for monitoring Goal 2 indicators:

- **SDG 2.3.1** – Volume of production per labor unit by classes of farming / pastoral / forestry enterprise size
- **SDG 2.3.2** – Average income of small scale food producers, by sex and indigenous status

In addition, AGRIS offers the possibility to monitor:

- **SDG 2.4.1** – Proportion of agricultural area under productive and sustainable development
- **SDG 5.a.1** – (a) proportion of total agricultural population with ownership or secure rights over agricultural land, by sex
  (b) share of women among owners or rights-bearers over agricultural land, by tenure type
Thank you!

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