



Food and Agriculture
Organization of the
United Nations

Regional Workshop on the Operational Guidelines of the WCA 2020

Dar es Salaam, Tanzania

23-27 March 2020

Relevance and advocacy of the census

Technical Session 3.1: Planning the census

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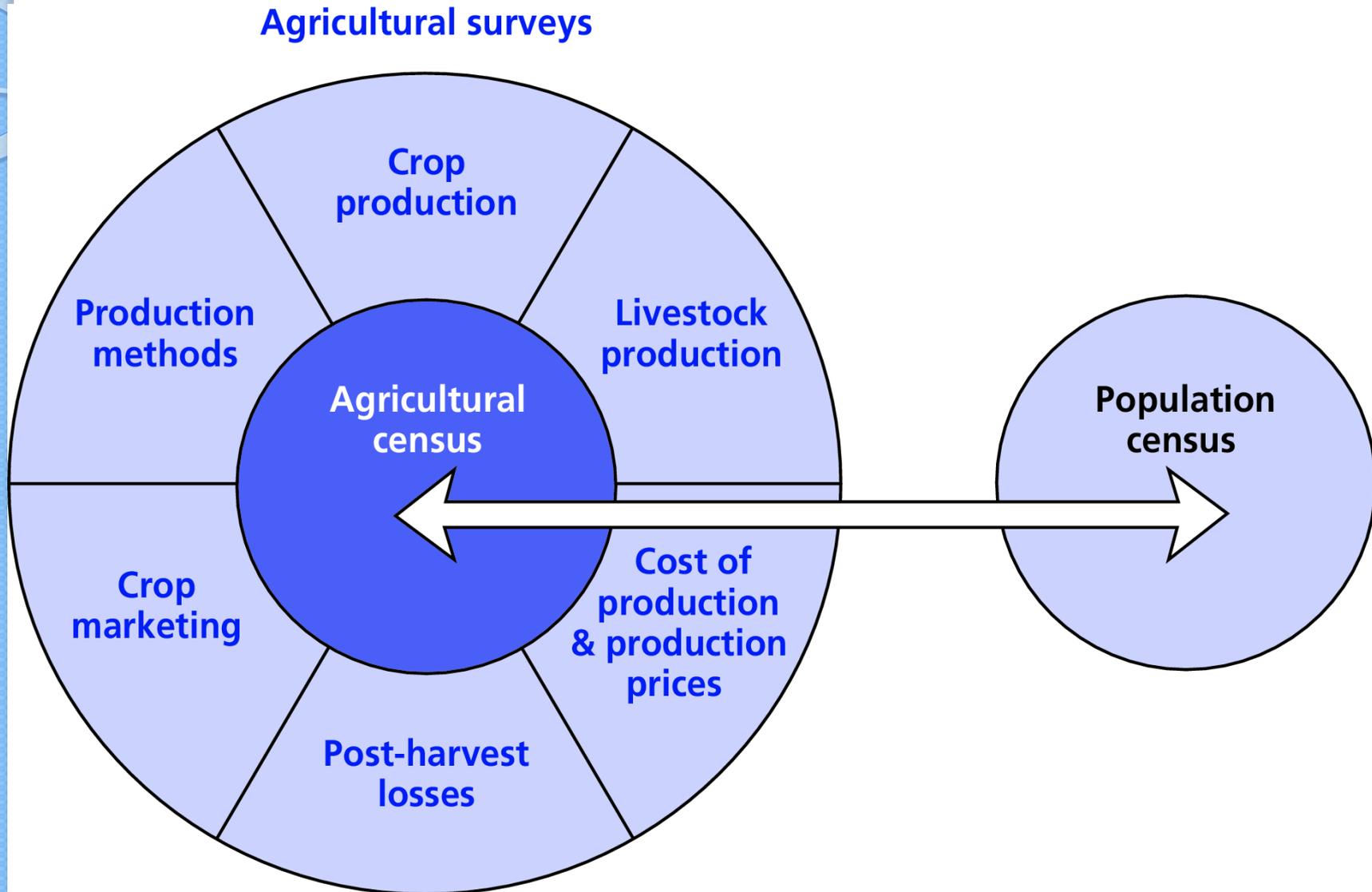
The census in an integrated statistical system

- 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.
- Structural agricultural data (size of holdings, land use, crop areas, livestock numbers and inputs) are collected at the lowest geographical level through the CA.
- While other data (crop and livestock production, food consumption, farm management and agricultural prices) are collected on a more regular basis through sample surveys and/or admin reporting systems to produce current agricultural statistics.

The main advantages of an integrated statistics system are:

- A comprehensive multi-year census-survey programme ensures efficient and balanced use of available resources and avoids 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 census in an integrated statistical system



Importance of the census of agriculture

The census satisfies stakeholders' needs in:

1. Agricultural planning: contributing to the definition of policies on food security or gender issues and promoting agricultural production and investments, economic growth, rural development, etc.;
2. Research, investment and business decisions: providing crucial data for the research and appraisal of the composition, distribution and past and prospective growth of the sector;
3. Agriculture and the environment: allowing inter-temporal comparisons for monitoring environmental changes and providing data on the use of environmentally friendly practices and inputs that helps decision-makers and planner when adopting measures to mitigate adverse effects;
4. Food security: providing data for assessing severity of food insecurity;
5. Work in agriculture: supporting labour and other social policies related to the quality of employment through the provision of data on status in employment of main job and on forms of payment on an annual basis;
6. The role of gender in agriculture: providing gender disaggregated data to help monitor progress towards achieving gender equality goals.

Importance of the census (contd.)

The census satisfies stakeholders' needs also in:

7. Baseline data for M&E: giving detailed structural data for small geographic areas;
8. Contribution of agriculture in national accounts: information to define structural components of the national accounts, data as inputs of the System of Environmental-Economic Accounting (SEEA), or for establishment of base year for national accounts.

The census satisfies statistical needs:

9. Provide structural data at minimum level of disaggregation.
10. Provide a reliable benchmark and reconciliation of current agricultural statistics.
11. Provide sampling frames for probabilistic surveys.
12. It allows the construction of registers of agricultural holders.

Relevance of the census in the 21st century

The 2030 Sustainable Development Agenda

The census of agriculture is not considered to be a primary data source for monitoring the Sustainable Development Goals (SDGs) but has the potential to provide valuable data, particularly in the absence of other data sources:

- Supports monitoring of **SDG 2** (end hunger, achieve food security) and **SDG 5** (achieve gender equality and empower all women/girls)
- Particularly SDG target **2.3** (productivity and income of smallholders), target **2.4** (sustainable food production systems), **5.4** (unpaid domestic work), and **5.a.1** (ownership or secure rights over agricultural land).
- The census underpins the statistical system which monitors the SDGs, providing the sampling frame for the agricultural survey programme and a benchmark for the national agricultural statistics system.

Relevance of the census (cont'd)

The Busan action plan for statistics (Paris 21)

Adopted in 2011 the Busan Action Plan for statistics supports three principal objectives:

- Fully integrate statistics in decision-making;
- Promote open access to statistics;
- Increase resources for statistical systems.

WCA 2020 reflects the above by emphasizing the need for a national integrated census and survey programme prepared in close consultation with users.

Quantifying the benefits of the census

- As budgets tighten, producers of statistics are under increasing pressure to justify the cost of producing statistics.
- Large operations such as the CA, need to demonstrate the benefits (both qualitative and quantitative) to make a convincing case for funding.
- Some of these benefits depend on statistical agencies being open with information to encourage and inform debate about the effectiveness of government policies.
- Often, listing the benefits is not enough. Quantifying benefits in monetary terms further strengthens the case for the census.
- The quantification of the benefits is challenging: statistics in themselves do not deliver benefits; it is the *use of statistics that delivers benefits* – through better and/or timelier decisions by governments, companies and individuals.
- The more users and the more they use the data, the greater the benefits. Greater benefits can therefore be achieved by expanding the dissemination of and facilitating the access to census data.

Ensuring cost-effectiveness of the census

- A strong case for the census is made when one can demonstrate that it will be conducted cost effectively and that it is “value for money”.
- Field data collection is a major budget item: 40-60% in some developing/transition countries (salaries and allowances of field personnel).
- Materials and supplies, particularly vehicles, can also be high.
- In other countries: the cost of the census management team can be significant.
- It is striking that the cost of processing, analysing and disseminating census results is often allocated a relatively limited share of the census (5-15%).

Ensuring cost-effectiveness (cont'd)

- **Census costs can be reduced by:**
 - a. adopting more efficient data collection (e.g. CAPI) and data processing approaches and related technologies;
 - b. contracting out appropriate parts of the operation;
 - c. exploring possible sources of alternative funding and, if appropriate, developing proposals for cost recovery and income-generation;
 - d. re-using existing systems and optimizing int'l collaboration (e.g. south-south cooperation).
 - e. encouraging holders to self-complete forms online (CAWI) or on paper (mail-out/back).
 - f. replacing direct collection of data with use of administrative data.

Ensuring cost-effectiveness (cont'd)

- **Census costs can also be reduced by:**
 - a. using the census methodological modality most suitable to the country (technically adequate).
 - b. focusing the census on the collection of structural items given that other (non-structural) items needed more frequently are available from other sources.
 - c. establishing a system for monitoring and reviewing detailed census work plan and budget to avoid delays and over costs.
 - d. using experienced personnel and previous census infrastructure (e.g. from previous population censuses or similar);
 - e. adapting remuneration strategies based on a mix of fixed and performance-based salary/allowance systems. Large quantity of interviews could neglect attention to quality.

Quantifying the benefits of the census

- The main steps to enable financial quantification of benefits are:
 1. Identifying users and uses (e.g. government agencies, trade associations).
 2. Resourcing, prioritisation and planning the work (prioritize the users and uses that are likely to derive the greatest financial benefit from census data).
 3. Initial data collection (desk-based research, surveys, meetings/workshops).
 4. Compiling, aggregating and analysing data (database, spreadsheet).
 5. Overcoming reluctance to participate (quantification important in order to secure its ongoing existence).

Quantifying benefits: methods

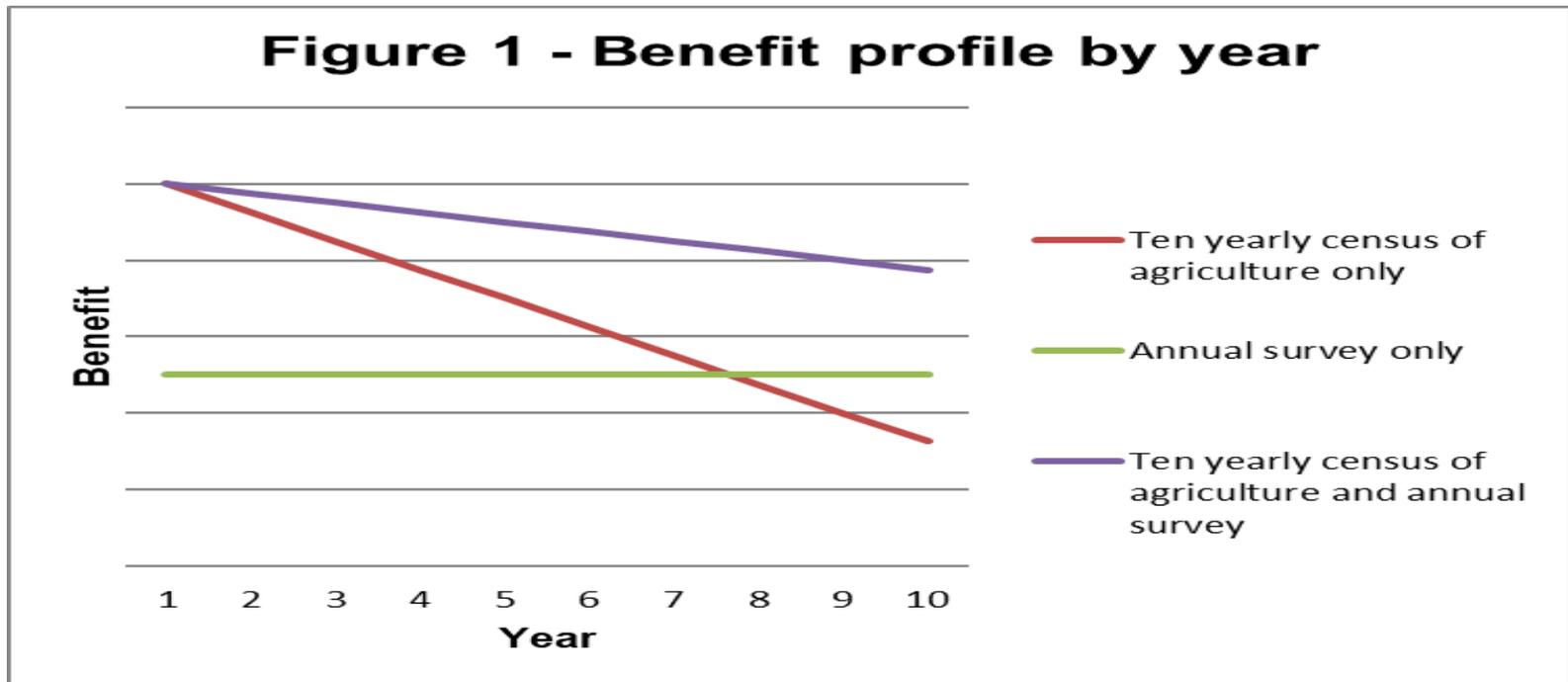
- Methods to financially quantify the benefits of the AC:
 1. Direct estimate by users.
 2. Willingness to pay (may be different to the actual amount they currently pay).
 3. Costs avoidance (what resources are saved).
 4. Estimating value added (of the proportion of the sector or decision's value attributable to data, estimate the proportion attributable to CA data).

Example of benefit calculation

Sector	Value of sector (A)	Contribution of data to sector (B)	Contribution of census out of total data (C)	Benefit attributable to census data (A x B x C)
High usage: for export policy making	\$10m	40%	20%	\$0.8m
Low usage: for agro-machinery supply	\$200m	2%	20%	\$0.8m

Quantifying benefits: scenarios

- Possible scenarios:
 1. A decennial Census (red line)
 2. Annual sample surveys (with no Census, green)
 3. A decennial Census and annual surveys (blue)
- Census data becomes out of date over the years and the benefit values would decline over the decade.



How African countries faced resource constraints of the census

In the WCA 2010 round, some African countries used sampling or combined the agri-census with the pop-census in order to deal with resource constraints:

- 1. Modular approach:** Burkina Faso (2006-2010), Côte d'Ivoire (2015-2016), Niger (2004-2008), Uganda (2008-2009) and Togo (2012).
- 2. Use of sample enumeration only:** Botswana (2015), Gambia (2011-2012, modular), Lesotho (2009-2010, modular), Malawi (2006-2007, modular), Mauritius (2014), Mozambique (2009-2010, modular), Namibia (2013-2014) and Tanzania (2007-2008).
- 3. Census of agriculture combined with the pop-census:** Burkina Faso (2006-2010), Equatorial Guinea (2015), Uganda (2008-2009), Senegal (2013).

Country example: Brazil

IBGE originally requested a census budget of \$472.1 million in 2016 for its 2018 agri-census, but only \$244.8 million was allocated between 2017 and 2018. IBGE took the following steps:

1. Reduced the questionnaire from 24 to 10 pages (e.g., by eliminating detailed questions on the characteristics of tenure and agrochemicals).
2. Reduced staff in the field (from 80,000 to 27,000) and increased the enumeration period (from 4 to 6 months).
3. Reduced the number of field tests.
4. Reduced the number of data collection points from 5,500 to 1,700, in order to reduce the number of IT equipment.



Thank you