



Food and Agriculture
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Overview of the New Features of the WCA 2020

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I. Background

- FAO is the leading UN agency for providing technical guidelines and support to member countries for the conduct of national censuses of agriculture.
- Since 1948, FAO has developed a dedicated World Programme that helps countries carry out their national censuses on agriculture.
- The *World Programme for the Census of Agriculture (WCA)* is updated every 10 years to build countries' capacities in the use of the most recent standards and methods to gather agriculture-related statistics.
- The World Programme for the Census of Agriculture (WCA) 2020 is the tenth decennial FAO programme covering agricultural censuses to be carried out by countries between January 1st, 2016 – December 31st, 2025.

Objectives of the census of agriculture

- To provide data on the structure of agriculture, specially for small administrative units, and to enable detailed cross-tabulations.
- To provide data to use as benchmarks for and reconciliation of current agricultural statistics;
- To provide frames for agricultural sampling surveys.



II. Main features of the WCA 2020

1. Two volumes: Vol I :
 - *Vol I: The Programme (2015)* – concepts, definitions and methodologies
 - *Vol II: Operational Guidelines (2018)* – practical aspects
2. Emphasis on the use of information technology in data collection, processing and dissemination;
3. The census of agriculture and the global initiatives (Global strategy, Busan action plan and SDG)
4. The programme has retained three key features introduced in the previous programme:
 - The relationship with population censuses;
 - The possibility to collect community-level data;
 - The recommendation to collect sex-disaggregated data in the census of agriculture.
5. Harmonization of concepts with other UN organizations (Forest and other wooded land with SEEA, work concepts consistent with the resolution adopted by the International Labour Organization (ILO))



II. Main features of the WCA 2020

5. Introduction of new modalities for census taking (4)
6. The census of agriculture in the framework of an integrated agricultural statistical system.
7. 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.
8. Introduces 3 categories of census items:
 - **Essential items:** those that are imperative for national purposes and international comparability, which all countries are recommended to collect (23);
 - **frame items:** related primarily to the modular approach and are those items collected in the core module and deemed necessary for the establishment of frames for supplementary census modules or follow-up surveys (15);
 - **additional item:** which are those items that countries consider important to collect regardless the census modality (96).



III. Census modalities

- i) **The classical approach:** It is a complete enumeration exercise comprising the universe of agricultural holdings to cover. It should cover all essential items and may include additional items.
- ii) **Modular approach:** It comprises: a) a core module undertaken by complete enumeration including frame and essential items and eventually other items; and b) supplementary modules targeting specific populations identified through the frame provided by the core module.
- iii) **Use of registers and administrative records:** Registers and other administrative sources can be used as a source of census data. The most complete use of registers will be when all the essential census items can be based on administrative sources. Normally a combined approach that uses administrative and statistical sources (survey/census data) will be used.



III. Census modalities (cont'd.)

- iv) **The integrated census and survey programme:** The census of agriculture integrates a multi-year programme of censuses and surveys. The surveys are part of a modular survey programme to be articulated with the agricultural census programme and conducted on an annual basis between two censuses (a ten-year cycle).
- One example of a modular survey programme is AGRIS (Agricultural Integrated Survey programme). It starts with a census covering the core module defined in the modular approach.
 - Afterwards until the next census, the AGRIS core module (crop production and livestock production) and one (or more) rotating modules (“Economy”; “Labour force”; “Machinery and equipment” and “Production methods and environment”) will be implemented each year.



III. Census modalities - Illustration of an AGRIS plan (cont'd.)

YEARS		0	1	2	3	4	5	6	7	8	9	10
Agricultural census core module and (if applicable) annual production survey ³⁷		✓										✓
AGRIS Annual Production Module ³⁸	Crop + Livestock production + other key variables (economy, labour, etc.)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Rotating Module 1	Economy				✓		✓		✓		✓	
Rotating Module 2	Labour			✓				✓				
Rotating Module 3	Machinery, Equipment, Asset and Decisions						✓					
Rotating Module 4	Production methods and Environment					✓				✓		



IV- Promotion of new data collection methods and use of modern information technology

Face-to-face interview methods.

- i. Paper and pen interview (PAPI);
- ii. Computer assisted personal interview (CAPI);
- iii. Computer assisted telephone interview (CATI) (partial face-to-face);

Self-interviewing methods.

- i. Computer assisted self-interviewed (CASI);
- ii. Mail-out/Mail-back: Questionnaires are sent and received by mail;
- iii. Drop-off/Mail back and Drop-off/Pick up: the census form is dropped off at the respondent's address by an interviewer and it can be mailed back by the respondent or collected by the enumerator at a later date.

Complementary tools.

- i. GPS /GIS;
- ii. SMS



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V. The census of agriculture and global initiatives

Post-2015 and the sustainable development goals.

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.

The Busan action plan for statistics.

- Adopted in 2011 the Busan Action Plan for statistics supports three principal objectives: i) Fully integrate statistics in decision-making; ii) Promote open access to statistics; iii) 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.

Global strategy to improve agricultural and rural statistics

Census of agriculture is a source for the minimum set of core data (58) of the GS (first pillar).

The census contributes to integration of agriculture into the national statistical system through the master sampling frame and an integrated census-survey programme (second pillar). AGRIS* will be instrumental in this.

The census involves a comprehensive capacity building exercise (third pillar)



VI. Relationship to other censuses

A. Population census.

- The statistical units is the agricultural holding (household engaged in own-account agricultural activities).
- Coordinating aspects of the two censuses (Use of common concepts, definitions and classifications; Sharing field materials; Using the listing of the population census as a starting point for the frame; Collecting agriculture data items in the population census (core or frame items))

B. Aquaculture census.

- Different statistical units (aquaculture holding, agricultural holding) and different scope (aquaculture census, activities under ISIC (Rev. 4) group 032 and for agricultural census, activities under ISIC (Rev. 4) groups 011-015).
- Coordination aspects (Joint census of agriculture and aquaculture; jointly created frames from the population census combined with administrative registers).
- Use of common items, concepts and definitions. Some items will need to be adapted according to the specific characteristics of each activity.



VI. Relationship to other censuses (cont'd.)

C. Economic censuses.

- Use of common concepts, definitions and classifications.
- The statistical units in the economic censuses is the establishment and for the agricultural census it is the agricultural holding. The definition of agricultural holding is compatible with the establishment concept. This opens up the possibility of integrating the agricultural census into the economic census programme.
- The Ways of integrating include the use of common frames; Integrating the agricultural census into existing economic censuses; Linking data between the agricultural and economic censuses.

D. Widened agricultural censuses.

- Adding non-agricultural production households in rural areas in the census coverage. Rural households is defined in terms of households living in areas designated as rural areas



VI. Relationship to other censuses (cont'd.)

- Regarding the methodology, basic frame items can be collected under both the classical and modular approaches to the census. It is best suited for the modular approach.
- Supplementary surveys of the modular approach provide a suitable method for collection of additional items such as rural labour, fisheries activities, aquaculture or forest use from non-agricultural production households.
- **Fisheries module.**
 - A fisheries module is recommended for WCA 2020 and it is intended for use by countries conducting a widened agricultural census that collect limited additional data on all households. Suggested items refer to small-scale fishing activities at household level;
 - It covers activities under group 031 ISIC (Rev4);
 - The statistical unit is the rural household engaged in fishing activities.
 - The module can be applied to countries using the classical approach or the modular approach.



VII- The Operational Guidelines

- To complement the WCA 2020, FAO published Volume 2 *Operational Guidelines* in 2018. It provides practical guidance to national census practitioners on the stages/steps involved in census preparation and implementation.
- The 49th session of the United Nations Statistical Commission (UNSC, New York, March 2018) encouraged member countries to use the new *Operational Guidelines* as a census reference.
- The *Operational Guidelines* discusses the substantial changes in the census technological environment over the last decades.
- The publication is as user-friendly and practical as possible. It provides cross-references between sections and chapters, links to country practices, and hyperlinks to relevant specialized and detailed methodological publications and Web-based resources.
- An electronic version of the Operational Guidelines, including resources, is enclosed in the front cover pocket of the book. Available in six languages. The English version is available at <http://www.fao.org/3/CA1963EN/ca1963en.pdf>



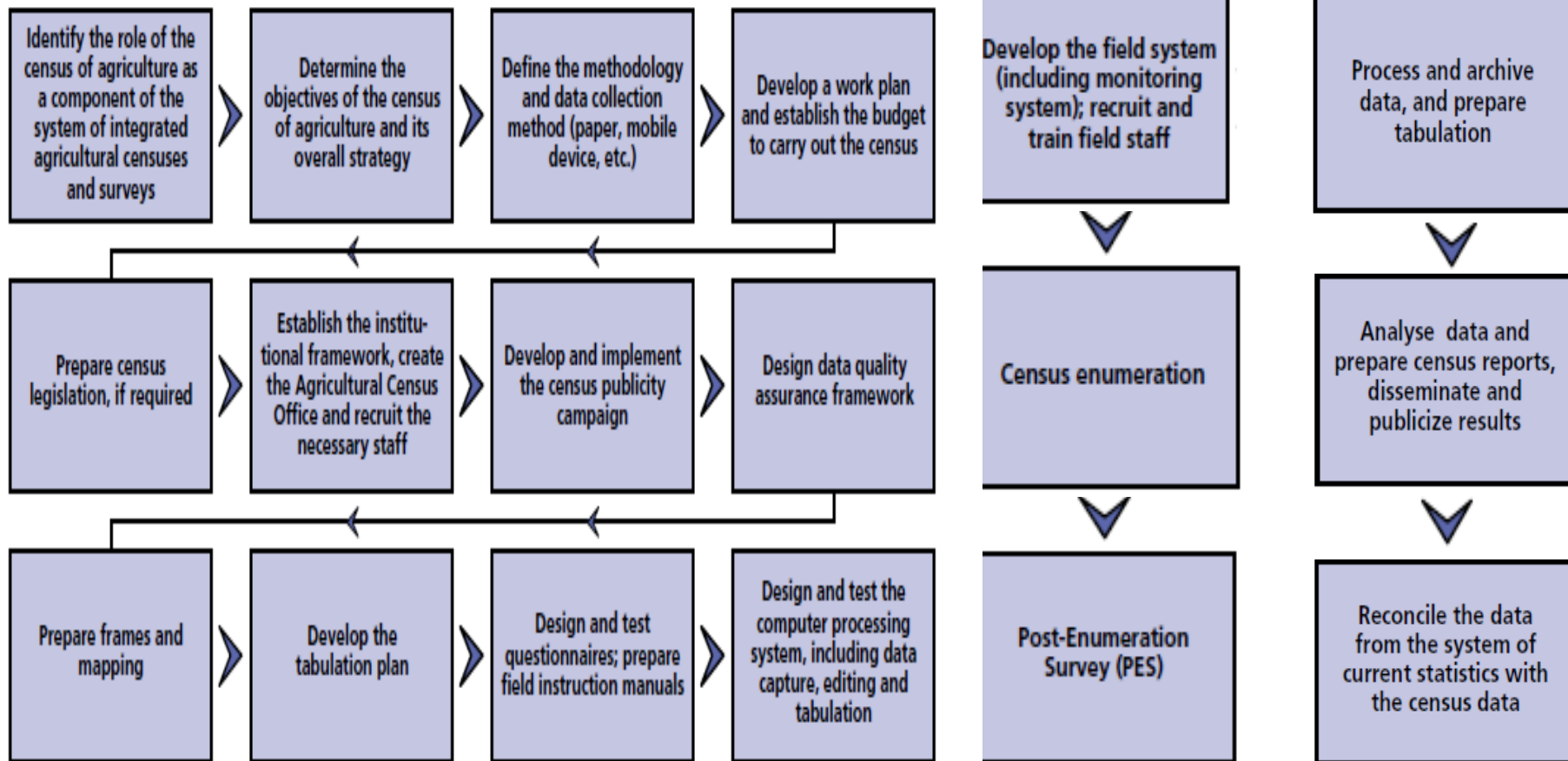
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VIII- Steps in developing and conducting the AC

Design and Planning

Field Work

Processing, Analysis, Publication





IX- Develop work plan and budget

- Elaboration of **detailed work plan** with the different stages of implementation clearly established.
- Development of **detailed budget** where different components of spending are estimated and **time-table** of expenditures and funding.
- **All census operations** including planning, cartography, enumeration, processing, PES, analysis and dissemination carefully budgeted from the **beginning** and efforts made to mobilize the required funds.
- Establishment of a **monitoring system** and periodic review of work plan, budget and **expenditure control**.
- **Outsourcing** of some activities under Census Office's (CO) supervision:
 - Layout and printing of questionnaires, other census material; reports and other printed census dissemination products
 - Packing and delivery of census materials and equipment
 - Census mapping
 - Publicity campaign
 - Data collection, processing and dissemination systems



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IX- Develop work plan and budget: Example of a general workplan

ACTIVITY	YEAR 1				YEAR 2				YEAR 3				YEAR 4			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Pre-enumeration																
Update the census legislation																
Form a census steering committee																
Design and implementation of the communication and publicity strategy																
User-producer workshop																
Tabulation plan																
Development of the census methodology and questionnaire design																
Manuals																
Pilot census																
Preparation of frame/holding listing																
Printing census questionnaires and other materials																
Distribution of materials																
Recruitment of field staff																
Training																
Enumeration																
Field data collection																
Receipt of questionnaires and other materials from field staff and their delivery to the central census office																
Post-enumeration																
Post-enumeration Survey																
Preliminary results																
Data processing																
- data coding and data capture																
- editing and validation																
- tabulation																
Analysis and dissemination																
- thematic analyses																
- production (including printing) of census reports and of other dissemination products (CDs, maps, etc.)																
- national seminar and other public events to disseminate census results																
- online dissemination																
Archiving of census data and materials																



X- Develop the tabulation plan

- **The tabulation plan** is a set of prototypes of statistical tables (dummy tables) prepared to present the main census results, based on users' primary needs.
- Should be based on **user consultation**.
- Needs to be undertaken **at early stages** of census preparation to define census content and developing the census questionnaires.
- The preparation of the tabulation plan is an **iterative process**: census questionnaire and methodology are conditioned by the data to be tabulated, and *vice-versa*.



XI- Design and test questionnaires

- Design supported by a working group and users-producers consultations (to ensure ownership)
- Design and characteristics of the census questionnaires depends on:
 - the census **approach/modality**
 - the **type of holding** (household sector, non-household sector, community level)
 - **method of data collection**: PAPI (face-to-face interviews or mailed) or electronic questionnaires (CAPI or CASI)
- Pre-test of questionnaire(s), revise and pilot test



XI- Design and test questionnaires (cont'd)

Aspects to be taken into account

- Concepts and definitions in questionnaire harmonized with other agricultural statistics programmes.
- Questions, concepts and definitions used in the questionnaire should be easily understood by the holder and census field staff.
- Reasonable size (length).
- Different languages in multi-lingual countries.



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Thank you