

Modular Approach to Data Collection

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Main aims of an agricultural census

- To provide data on the structure of agricultural holdings for policy-making and planning.
- To provide a sampling frame for agricultural surveys.
- To provide data for small administrative units and other finely classified data such as minor crops.
- To provide benchmarks to improve current crop and livestock production estimates.

Issues in past WCA programmes

- High cost and demands on technical and other resources.
- How to satisfy demand for more data, such as food security and gender.
- Complexity of topics such as food security, and difficulties in collecting these in an agricultural census.
- Need for coordination with population census.
- Need for integration of agricultural census with current agricultural statistics.
- Whether agricultural census should cover agricultural holdings or all rural households.
- Statistical terminology in “censuses” based on sample enumeration.

Modular approach of WCA 2010

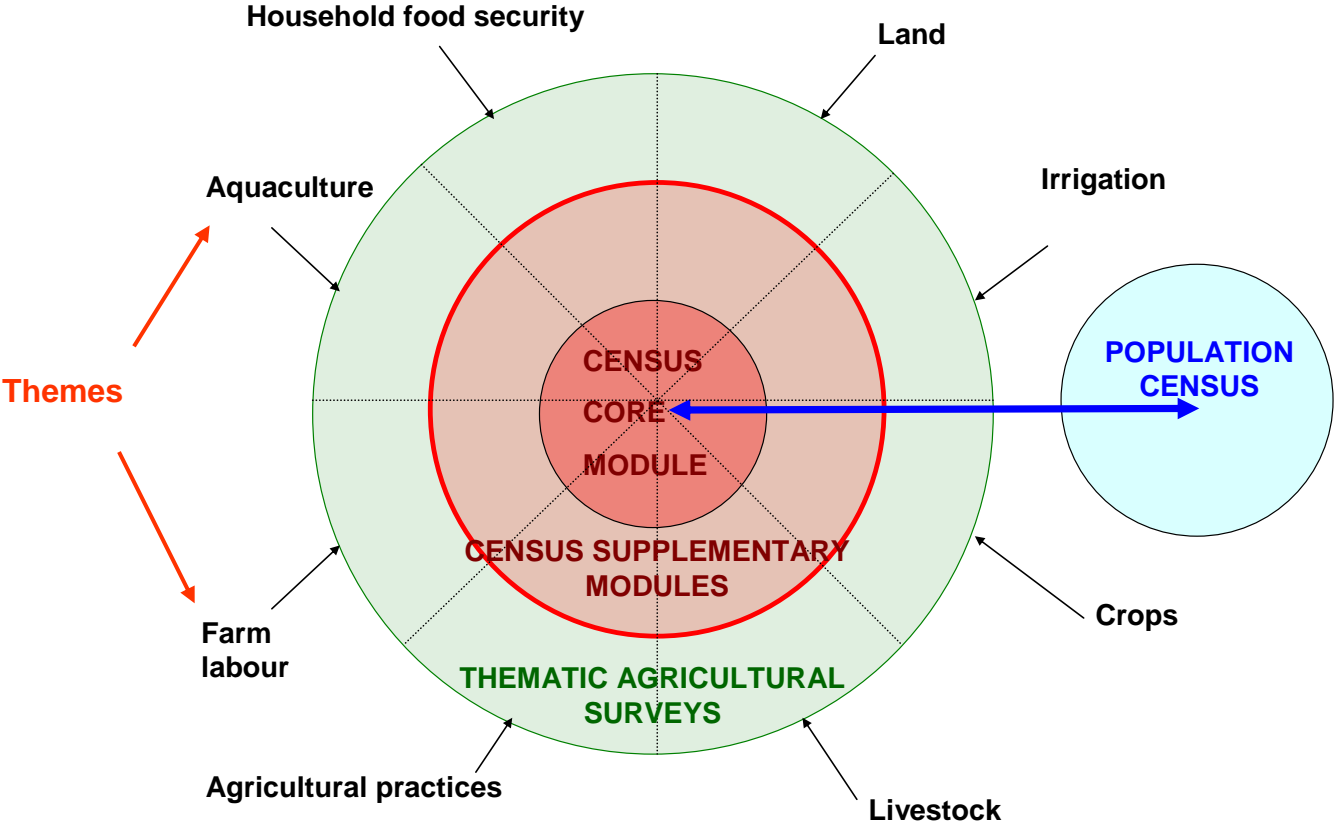
Agricultural census to be undertaken within the framework of the whole agricultural survey programme.

- Agricultural census: provides basic structural data and sampling frames for agricultural surveys. Census to be done in modules:
 - **Listing: Community-Level data**
 - Main Census:
 - Census supplementary modules
- Agricultural survey programme: covers various ongoing and in-depth surveys to be undertaken after the agricultural census, using the census as a frame.

Strategy for agricultural census component

- Core census module
 - Done on complete enumeration or large sample basis.
 - Limited data to be included:
 - + key data required by the country
 - + data needed for sampling frames for agricultural surveys
 - + data for international comparisons
 - + data to be finely classified – e.g., by administrative units
- Census supplementary module(s)
 - Collection of more detailed data for sub-samples selected from core census module.
 - Countries select topics for census supplementary modules according to needs.

Outline of WCA 2010 programme



Agricultural census core module: recommended minimum items

- identification/location of holding
- type of holding
- sex of holder
- age of holder
- household size
- main purpose of production
- area of holding according to land use types
- total area of holding
- land tenure types
- presence of temporary crops by type
- presence of permanent crops by type and whether in compact plantation
- number of animals by livestock type
- presence of aquaculture
- presence of forest trees and other wooded land
- other economic activities
- whether holding is a “farm household”

Agricultural census component: recommended items for sample enumeration

Some 80 items proposed under 12 main headings (modules)

- Land (7)
- Water (6)
- Crops (10)
- Livestock (10)
- Agricultural practices (8)
- Agricultural services (10)
- Demography (6)
- Economic activity of household members (4)
- Household food security (6)
- Aquaculture (5)
- Forestry (4)
- Management of the holding (4)

An example: aquaculture

Recommended for agricultural census

Complete enumeration

- presence of aquaculture

Sample enumeration

- area of aquaculture by type of site
- area of aquaculture by type of production facility
- area of aquaculture by type of water
- sources of water for aquaculture
- type of aquaculture organism

Recommended for thematic modules

- aquaculture production
- value of sales
- cost of production
- seed and juvenile production.
- aquafeeds; fertilizers; biocides.
- Integration with agriculture.

Issues for countries in developing core and supplementary modules

- Core module
 - Include recommended minimum set of 16 core items.
 - Include additional items from recommended sample items as required for national needs.
 - Include additional items needed for sampling frame purposes.
- Supplementary modules
 - Select topics for survey(s) from recommended headings and items, according to data needs.
 - One survey may cover items from different headings.
 - Select sample based on census frame.

Full enumeration or sample census

- Ideally, countries do a full enumeration core census module.
- Countries can do core census module on a sample basis, but the sample should be big enough to provide detailed geographic and other data.

Strategy for agricultural survey programme

- Agricultural survey programme includes:
 - + surveys for current agricultural statistics such as crop production
 - + special in-depth surveys
- Surveys to be done using agricultural census as a frame.
- Themes to be developed for the survey programme.
- The need for these surveys to be taken into account in design of core census module.

Advantages of the modular approach

Previous problems

- High cost and demands on resources.
- Difficulty meeting demands for more data.
- Complexity of some census topics.
- Coordination with population census.
- Integration with agricultural statistics programme.
- Inclusion of all rural households.

WCA 2010

- Modular approach: small core module plus sample modules.
- Can collect more data through use of sampling.
- Cover in more depth in supplementary modules.
- Guidelines for coordination provided.
- Census and survey development integrated.
- Option provided to expand scope.



Thank You!