

PROGRAMME FOR THE 2010 ROUND OF CENSUSES OF AGRICULTURE

SAMPLING FRAMES FROM AGRICULTURAL CENSUS

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What is a sampling frame?

A sampling frame is the means of identifying all the units to be covered by a survey.

A sampling frame could be a list of units (such as households or holdings), geographic areas (such as villages), or other materials (such as maps).

A sampling frame must provide complete and up-to-date coverage of all units, without omissions or duplications and without any units not covered by the survey.

Sampling frames comprising lists of units

Examples:

- National agricultural survey: list of all agricultural holdings in the country.
- Agricultural survey in Province A: list of agricultural holdings in Province A.
- National rice production survey: list of all rice producers in the country.
- Survey of young farmers: list of holdings with age of holder less than 25 years.

Problems in keeping lists of agricultural holdings up-to-date

- New households are created.
- Households cease to exist.
- Households move from one place to another.
- New agricultural holdings are created as households become agricultural producers.
- Agricultural holdings cease to exist as households stop being agricultural producers.
- The management structure of holdings changes so that a holding is split into two or combined with another holding.

Example of multi-stage sampling for a wheat production survey

- Divide the country into EAs for organizing the agricultural census.
- Select a sample of agricultural census EAs. Wheat data from the agricultural census could be used to help in the sample selection.
- Prepare an up-to-date list of wheat producers in the sample EAs. Fieldwork is usually needed for this purpose.
- Select a sample of wheat producers in each sample EA and enumerate those units for the survey.

Note. In multi-stage sampling, it is not necessary to maintain up-to-date lists of holdings, but it is necessary to have up-to-date administrative units. This can be a problem if administrative boundaries change frequently.

Example of a combination single- and multi-stage sample for a coffee production survey

- Maintain an up-to-date list for certain coffee producers, such as the large commercial producers. Use this list to select a single-stage sample for those units.
- Use multi-stage sampling for all remaining units.

Master sampling frame

A master sampling frame is a general purpose sampling frame created from a population or agricultural census for use in selecting samples for different surveys.

The benefits of a master sampling frame are:

- Quick and easy to conduct surveys of any kind.
- The cost of preparing field materials is lower.
- It is easier to relate data from different surveys.
- It is one element of statistical integration.

Frames for specialized surveys from agricultural census

- Include at least one question in the core module for each type of frame required, e.g. on
 - livestock holdings by types of systems: Nomadic, household integrated, commercial
 - organic holdings
 - Aquaculture holdings
 - Rural services: agriculture and non-agriculture



- Thank You!