

CHAPTER 8

COLLECTING ADDITIONAL AGRICULTURAL DATA FOR HOUSEHOLDS THAT ARE NOT AGRICULTURAL PRODUCERS

Chapters 1–7 focus on traditional agricultural censuses, covering economic units (agricultural holdings) engaged in crop and livestock production activities. Some countries might like to obtain additional agricultural data for other households, such as for households living in rural areas or households whose members are working in the agricultural industry. This chapter discusses issues to be considered by countries requiring such additional data from their agricultural censuses. The use of the population census or existing surveys as a possible source for these data is also examined.

Introduction

8.1. Agricultural censuses, as presented in earlier chapters, aim to measure the structure of crop and livestock production activities carried out by agricultural holdings. Some countries might like to use the agricultural census to also collect additional data on households that are not agricultural holdings.

8.2. Often, in an agricultural census, it is necessary to interview each household to identify agricultural holdings, before going on to collect the required agriculture-related data from each holding. This especially applies where the agricultural census frame is obtained from the population census household lists (see paragraph 3.59). Because all households need to be interviewed in any case, it can be cheap and easy to collect additional data for all households. Some countries might be interested in providing data specifically for households that are involved in agriculture in some way, such as households living in rural areas or households whose members are working in agriculture.

8.3. Agricultural censuses are normally concerned with aspects of agricultural production activities, such as farm size, crops grown, number of livestock, and use of farm machinery. These data are not relevant to households that are not agricultural holdings because such households do not grow crops or raise livestock. The main interest in these households would centre on socio-economic data, such as demographic and economic activity data. Such data are usually better obtained from a population census.

Use of a population census or survey to meet additional data needs

8.4. A population census provides a wide range of data on the characteristics of the population, such as sex, age, activity status, status in employment, occupation and industry. Sometimes, income data are also provided. The target group of interest for the additional data can also usually be identified. For example, a population census distinguishes between urban and rural households, which enables tabulations of population census data specific to rural households to be prepared. Occupation data from a population census can also be used to prepare tabulations specific to persons working in agriculture.

8.5. It is recommended that consideration first be given to meeting additional data needs of this type through the population census, rather than the agricultural census. As noted in Chapter 6, the agricultural census development team should work closely with the population census development team to coordinate the two activities and find the best way to satisfy data needs. Often, the additional data needs can be met directly from the population census; sometimes, minor changes can be made to the population census to meet the additional needs.

8.6. Sometimes, the additional data needs can be only partly met from the population census. For example, the population census may provide basic demographic and activity status data, but more detailed

data such as work in all jobs, type of agricultural work done, or time worked may be required. Data not normally covered in a population census, such as household food security or household income, may also be needed. Rather than collecting these data as part of a wider agricultural census, it is usually better to carry out a separate survey based on a sampling frame from the population census. Again, the need to coordinate work on the two census activities is paramount.

8.7. Often, other national household surveys can be used to meet the additional agricultural data needs. Many countries carry out regular employment and demographic surveys. The Living Standards Measurement Surveys (LSMS) often include an agricultural component. Using an existing survey to meet additional agricultural data needs is cheaper and also provides the opportunity for more analysis than from a standalone survey. For example, an LSMS provides a vast array of data on various social and economic topics, such as income and expenditure, which could be useful in analyzing the agricultural data.

8.8. Usually, countries are able to satisfy most additional agricultural data needs directly from the population census, from an existing survey, or through a special survey. Only rarely should there be a need to widen the agricultural census beyond the collection of data on agricultural production activities.

Scope of a widened agricultural census

8.9. The scope of a wider agricultural census depends on the data requirements. Some countries may wish to cover all households. More commonly, interest centres on households involved in agriculture in some way. This may be defined in various ways.

8.10. Some countries may wish to carry out a census of rural households. Rural households are defined in terms of households living in areas designated as rural areas, usually based on the population census. There are no standard criteria for classifying areas as urban or rural. Often, it is based on population density; for example, a rural community could be defined as one with population density less than 150 inhabitants/square kilometre. Sometimes, data on the percent of economically active population employed in agriculture can be used. Ideally, the urban/rural split is provided at the level of the smallest administrative unit of the country, such as the village (UN, 1998, pp. 2.52–2.59; UNECE et al., 2005, Chapter II.1). Note that a census of rural households, on its own, would not cover all agricultural holdings; some households living in urban areas have crop and livestock production activities.

8.11. Another type of wider agricultural census is one that covers all households containing at least one member employed in an agricultural occupation. This would include households with persons working on their own holding, as well as households with persons working as employees in agricultural jobs. Another option could be to cover all households whose main source of income is from agriculture.

8.12. Note that, in widening the agricultural census in this way, three types of statistical units would be covered: (i) agricultural holdings in the household sector; (ii) agricultural holdings in the non-household sector; and (iii) non-production households.

Analyzing household data for agricultural holdings and non-production households

8.13. To analyse a wider agricultural census, data from non-production households need to be combined with data from agricultural holdings in the household sector. To do this, a common statistical unit – the household – is needed.

8.14. The definition of an agricultural holding distinguishes between the economic unit of agricultural production and the household (see paragraphs 3.28–3.31). Many countries define the two units to be equivalent, which simplifies the analysis of a wider agricultural census. If the holding and household units are different, the two units need to be clearly distinguished in the data collection and analysis.

8.15. In terms of household data, a wider agricultural census includes two types of households: (i) households with own-account agricultural production (that is, households associated with holdings in the household sector); and non-production households. In a normal agricultural census, household data are often collected as part of the holding-level data. In a wider agricultural census, a different approach may be used; namely: (i) collect general household data for all households of the two types given above; and (ii) identify each agricultural holding and collect agricultural production related items for each holding. It may be necessary to use two questionnaires: one for all units in the household sector, and the other for holdings in the non-household sector.

Methodology and items for a wider agricultural census

8.16. A wider agricultural census should be carried out within the same modular framework as for a normal agricultural census.

Core module

8.17. Some core agricultural census items identified in Chapter 4 could also be applicable to non-production households; in particular, Item 0005: Household size; Item 0014: Presence of aquaculture; Item 0015: Presence of forest and other wooded land; and Item 0016: Other economic production activities.

8.18. Other household items could be included to meet data requirements. The number of items should be kept to a minimum, in keeping with the modular philosophy used for the agricultural census, and taking into account data already available from the population census and elsewhere. Note that any additional items required for non-production households also need to be collected for households with own-account agricultural production.

Supplementary modules

8.19. Census supplementary modules for a wider agricultural census would be carried out as per a normal agricultural census. The supplementary modules could be of two types.

8.20. First, there are the normal census supplementary modules based on agricultural holding frames. Items should be chosen from the list of items in Chapter 4. Concepts and definitions in Chapter 11 apply.

8.21. Second, there are modules based on a frame of non-production households and households with own-account agricultural production. These could cover supplementary themes shown in Chapter 4; in particular, Theme 07 (demographic and social characteristics); Theme 08 (farm labour); Theme 09 (household food security); Theme 10 (aquaculture); and Theme 11 (forestry). Modules on household food security module or farm labour could be particularly useful, given the wider coverage of households. Household supplementary modules could be conducted on other themes altogether.

Frame for a wider agricultural census

8.22. Various frame options are available. A frame of households or EAs from the population census is commonly used. If necessary, screening questions are asked in the agricultural census to identify the specific non-production households to be covered by the agricultural census. Depending on the content of the population census, it may be possible to construct a frame of agricultural holdings and non-production households directly from the population census. Alternatively, a farm register could be used in conjunction with a frame of non-production households from the population census.