

Group Exercises on Modular Approaches to Census and Survey Program

Learning Objective

To be able to assess the user requirements, prioritize them and suggest a cost-effective feasible plan for collection of agricultural data through census and surveys.

Activities

First 60 minutes

Divide the group in 2 parts: Data Providers (5 persons) and Data Users (10 persons). Each person in the group assumes the role of representatives of one of the stake holder listed in Annex-1.

Imagine that you all belong to a specific country (AFRILAND) which is planning to carry out its long over due agricultural census. The National Statistics Office (NSO) acknowledges the urgent need for an agricultural census as the ongoing sample surveys are not able to provide reliable estimates. However, it neither has the financial nor the technical capacity to plan and execute the census. This census will form the basis of future development of current agriculture statistics. Many stakeholders have high expectations from this exercise. Some development agencies are looking forward to the census data for planning their development projects (Please feel free to imagine one or two such projects).

The NSO has prepared a budget estimate of US\$ 4.00 million for a comprehensive agricultural census by complete enumeration of all households and enterprises. The total funds available for the census are not even half of this amount. Some donors are, however, willing to fund up to US\$ 2.00 million provided the census meets their key data requirements for international comparison and national project planning.

It is almost certain that a Population Census will be conducted shortly before the planned date of agricultural census. The cartographic work of listing of enumeration areas has already been started.

Assignment

To come-up with feasible plan of agricultural census this satisfies most of the stakeholders in the light of above scenario.

Steps:

Step I: Prepare a short list of data items which are relevant in the context of AFRILAND using an exhaustive list of themes and data items (Annex -2) preloaded on your computer. Use the preloaded file Group Activity Technical Session 2. First select themes and then a manageable list of data items for the activity.

Step II: Data Provider Group conducts a mock Workshop to discuss the short listed data items with Data Users Group to understand their expectations in terms of:

- Administrative Level (country, province, district, village) at which a specific data is needed
- Level of accuracy expected
- Periodicity
- Urgency in data requirement/other sources of data
- How data will be used?

Synthesize the inputs from Data Users in the excel sheet using codes (options) given on top of the Columns C, D, E and F.

The group of 15 persons is split in two sub-groups having representation of both Data Providers and Data Users. Each of the two Groups uses the same short-list of data items and follows on to the exercise below.

Next 60 minutes

STEP-III: Each of the two sub-groups uses the same out put from STEP-II. The whole sub-group now models as

Based upon the inputs of Data Users and the technical judgement of the group fills the last two columns of the sheet, basically deciding the suitability of data items for sample survey or census.

STEP-IV: Data providers prepare a cost-effective plan of agriculture Census and Surveys. The plan should inter alia indicate:

- How the plan takes advantage of activities of the Population Census
- The strategy for agricultural census: sampling and/or complete enumeration
- Different modules for census and surveys: data item in each module
- Time schedule for implementing each module.
- Linkages between the modules.
- Length of the module, in terms of response time

The group is free to imagine the following numbers for preliminary evaluation of cost implication of their census-survey plan.

- Number of Households in country
- Number of agricultural holdings of different types
- Unit cost for visiting a household etc.

Final Presentation (60 minutes) (4 group presentations)

Data providers present their plans to the audience comprising Heads of Departments in the user Ministries and Donor organizations. (Roles may be pre-assigned)

Annex A

List of Institutions for Selection of Role Models in Group Activity

Data Provides (National agency responsible for Agricultural Census and Surveys)

1. Methodological Unit
2. Field Operation Unit
3. Data processing Unit
4. Data Dissemination
5. User Coordination Unit

Data User (Stake holders)

1. Department of crops
2. Department of Livestock Development
3. Department of Fisheries and aquaculture
4. Ministry of Irrigation and water resources
5. Ministry of Fertilizers
6. Ministry of Food Processing Industries
7. Ministry of Rural Development
8. Ministry of Local Self Government
9. Association of Meat Exporters
10. Farmers' Association
11. Association of Agricultural Enterprises/ Cooperatives
12. Agriculture Exporter's Association
13. International Agencies and donor's representatives

Annex B

Items recommended for international comparison¹

- 0001 Identification and location of agricultural holding
- 0002 Legal status of agricultural holder
- 0003 Sex of agricultural holder
- 0004 Age of agricultural holder
- 0005 Household size
- 0006 Main purpose of production of the holding
- 0007 Area of holding according to land use types
- 0008 Total area of holding
- 0009 Land tenure types on the holding
- 0010 Presence of irrigation on the holding
- 0011 Types of temporary crops on the holding
- 0012 Types of permanent crops on the holding and whether in compact plantations.
- 0013 Number of animals on the holding for each livestock type
- 0014 Presence of aquaculture on the holding
- 0015 Presence of forest and other wooded land on the holding
- 0016 Other economic production activities of the holding's enterprise

Items for consideration

(The group is free to add important new items, as required)

Theme 01 – Land

(Reference group: holdings with land in Item 0008)

For each parcel

- 0101 Location
- 0102 Area
- 0103 Land tenure
- 0104 (For rented parcels) Terms of rental
- 0105 Presence of shifting cultivation
- 0106 Number of years since cleared

For the holding

- 0111 Presence of soil degradation: type and degree

Theme 02 – Irrigation and water management

(Reference groups: Items 0201–0205 – holdings with irrigation in Item 0010; Item 0206 – holdings with temporary crops or permanent crops in Items 0011 and 0012; Item 0207 – holdings with land in Item 0008).

For the holding

- 0201 Area of land irrigated according to land use type
- 0202 Area irrigated according to method of irrigation
- 0203 Area irrigated for each crop type
- 0204 Sources of irrigation water
- 0205 Payment terms for irrigation water
- 0206 Other types of water management practices

¹ If the agricultural census is conducted in conjunction with the aquacultural census, an additional core item on area of aquaculture by type of site is included.

0207 Presence of drainage equipment

Theme 03 – Crops

(Reference groups: Items 0301–0303 – holdings with temporary crops in Item 0011; Items 0311–0314 – holdings with permanent crops in Item 0012; Items 0321–0327 – holdings with temporary crops or permanent crops in Items 0011 and 0012).

For each temporary crop type

- 0301 Area of temporary crops harvested
- 0302 (For selected crop types) Area of temporary crops harvested according to end-use
- 0303 (For selected crop types) Production of temporary crops harvested

For each permanent crop type

- 0311 Area of productive and non-productive permanent crops in compact plantations
- 0312 (For tree crops) Number of permanent crop trees in compact plantations and scattered plantings
- 0313 (For selected crop types) Area of productive permanent crops in compact plantations according to end-use
- 0314 (For selected crop types) Production of permanent crops

For the holding

- 0321 Area of land used to grow temporary crops as a secondary land use
- 0322 Use of each type of fertilizer
- 0323 Area fertilized for each type of fertilizer and major crop type
- 0324 Source of seed inputs for each major crop type
- 0325 Type of seed for each major crop type
- 0326 Area of nurseries
- 0327 Area of cropped land under protective cover

Theme 04 – Livestock

(Reference group: holdings with livestock in Item 0013)

For the holding

- 0401 Type of livestock production system
- 0402 Use of veterinary services

For each livestock type

- 0411 Number of animals: age and sex
- 0412 Number of animals according to purpose
- 0413 Number of milking animals according to milk status
- 0414 Number of animals born
- 0415 Number of animals acquired
- 0416 Number of animals slaughtered
- 0417 Number of animals disposed of
- 0418 Number of animals died from natural causes
- 0419 Types of feed

Theme 05 – Agricultural practices

(Reference group: all holdings)

For the holding

- 0501 Use of agricultural chemicals
- 0502 Use of good agricultural practices
- 0503 Use of organic agricultural practices
- 0504 Use of genetically modified crops according to crop type
- 0505 Selected machinery and equipment used on the holding according to source

- 0506 Non-residential buildings according to use
- 0507 Percentage of each major agricultural product sold

Theme 06– Agricultural services

(Reference group: holdings in sector “single-holding household” in Item 0002)

For the holding

- 0601 Receipt of credit for agricultural purposes
- 0602 Source of credit
- 0603 Type of collateral for credit
- 0604 Period of loan or credit
- 0605 Sources of agricultural information
- 0606 Sources of agricultural extension services
- 0607 Travelling time to nearest periodic or permanent agricultural produce market

Theme 07 – Demographic and social characteristics

(Reference group: holdings in sector “single-holding household” in Item 0002)

For the holding

- 0701 Whether holding is part of an agricultural household
- 0702 National/ethnic group of household head or agricultural holder

For each household member

- 0711 Sex.
- 0712 Age
- 0713 Relationship to household head or other reference person
- 0714 Marital status
- 0715 Educational attainment

Theme 08 – Farm labour

(Reference group: Items 0801–0814 – holdings in sector “single-holding household” in Item 0002; Items 0821–0823 – all holdings)

For each household member of working age

- 0801 Activity status

For each economically active household member

- 0811 Status in employment of main job
- 0812 Occupation of main job
- 0813 Time worked in main job
- 0814 Time worked on the holding

For the holding

- 0821 Number of employees on the holding: time worked and sex
- 0822 Form of payment for employees
- 0823 Use of contractors for work on the holding according to type of contract

Theme 09 – Household food security

(Reference group: holdings in sector “single-holding household” in Item 0002)

For the household

- 0901 (a) Whether household members could not afford to eat what they normally eat at any time during a twelve-month reference period.

- (b) Months in which food shortage occurred.
 - (c) Reasons for food shortage.
 - (d) How the household's eating patterns were affected by food shortage.
 - (e) Steps taken to alleviate food shortage.
- 0902 Whether the household fears a food shortage during a future twelve-month reference period
- 0903 Frequency of normally eating selected food products
- 0904 Effects of natural disasters
- 0905 Extent of loss of agricultural output due to natural disasters
- For children aged under 5 years
- 0911 Height and weight

Theme 10 – Aquaculture

(Reference group: holdings with aquaculture in Item 0014)

For the holding

- 1001 Area of aquaculture according to type of site
- 1002 Area of aquaculture according to type of production facility
- 1003 Type of water
- 1004 Sources of water for aquaculture
- 1005 Type of aquacultural organism cultivated

Theme 11 – Forestry

(Reference group: holdings with forest and other wooded land in Item 0015)

For the holding

- 1101 Area of forest and other wooded land as primary land use
- 1102 Area of forest and other wooded land as a secondary land use on agricultural land
- 1103 Main purpose of forest and other wooded land
- 1104 Whether agro-forestry is practised

Theme 12 – Management of the holding

(Reference group: holdings in sector "single-holding household" in Item 0002)

For each holding

- 1201 Identification of sub-holdings
- 1202 Identification of sub-holders

For each sub-holding

- 1211 Sex of sub-holder
- 1212 Age of sub-holder
- 1213 Area of crops managed for each crop group
- 1214 Number of livestock managed for each livestock group