Nepal - National Census of Agriculture 2011-2012

CENSUS METHODOLOGY

A. Complete Enumeration of Holdings, Area and Livestock

The census methodology in undertaking the 2001/02 National Census of Agriculture of Nepal is a combination of complete enumeration and sampling.

As mentioned earlier, the Census of Agriculture was implemented in two phases. The first phase was the complete enumeration of all holdings, their area and the number of livestock and poultry raised by all households in the country as an integral activity in the listing operations of the Census of Population 2001. Two questions were asked concerning agricultural activities of households, namely: total area of the agriculture holding and total number of livestock/poultry kept by the households. All households listed in the Population Census 2011 that possessed the characteristics of the holding as defined in the agriculture census were identified as agricultural holdings. These holdings and their corresponding areas and number of livestock kept including their household population were compiled by ward for all the 75 districts of Nepal from which the sampling frame was constructed.

B. Sampling Design

A two-stage stratified sampling was employed in the selection of the samples for enumeration to obtain the characteristics of the holdings for the 2011/12, NCA. This design is almost similar to that of the 2001/01 sampling design, which is a self-weighting sample.

Construction of the sampling frame.

The listing of the wards in each district with the summarized data of the number of holdings and area was used to form enumeration areas (EAs). However, wards containing less than 30 holdings were combined to form one EA. The EAs in each district were stratified according to the number of holdings enumerated, arranged from the highest to the lowest.

Selection of samples

The first stage of sample selection involved the primary sampling units (PSUs), where sample enumeration areas (EAs) were selected with probability proportional to size (PPS), with power allocation 0.4. The measure of size is the number of holdings enumerated in the EAs during the Census of Population 2011 listing operations and to measure the importance of each district, the total area under 8 major crops (paddy, wheat, maize, millet, barley, sugarcane, oilseed and potato) was determined.

The second stage of sample selection involved the selection of sample holdings systematically in each sample EA. Before the sample selection was done, a listing of holdings in each sample PSU was conducted to update the listing during the Population Census. The target number of holdings for enumeration in each sample EA was 25.

Approximately 5,200 enumeration areas were selected in the 74 districts and about 130,000 agricultural holdings were selected for enumeration. One district was completely covered in the second phase of the census of agriculture because of the few number of enumeration areas and holdings. This is the district of Manang.

Questionnaires

The questionnaires for the National Sample Census of Agriculture were structured questionnaires based on FAO recommendation with some modifications and additions. The main questionnaire was Schedule-2 which contains the following topics:

Identification Information
Part 1: Information on Holder and respondent
Part 2: General Information
Part 3: Description of Population
Part 4: Description for Land and Water
Part 5: Crops
Part 6: Livestock and Poultry
Part 7: Agriculture Machinery by Source and Use
Part 8: Non-Residential Building
Part 9: Forest and Fisheries
Part 10: Agricultural Loan
Part 11: Miscellaneous

Community Questionnaire (Schedule 3)
The Community Questionnaire: This community questionnaire is adapted first time in Nepal. The aim of the questionnaire is to collect information of the community i.e selected enumeration area. It contains four sections given below:

0. Information on Enumeration
1. Land used and Other Information of the ward
2. Social and Economic Situation of the ward
3. Community Structure and Facility of the ward
4. On going Development Program in the ward

The total area of the holding was reported in the district where the holder resides, regardless of the physical location of the parcels comprising the holding. Although in Nepal a holding is usually equivalent to the household and it is very rare where a household operates a holding where some parcels are located in other districts.

Data collection

**Data Collection Dates**

<table>
<thead>
<tr>
<th>Start</th>
<th>End</th>
<th>Cycle</th>
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</thead>
<tbody>
<tr>
<td>2012-01</td>
<td>2012-03</td>
<td>first phase</td>
</tr>
<tr>
<td>2012-04</td>
<td>2012-06</td>
<td>second phase</td>
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</tbody>
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**Data Collection Mode**

Face-to-face [f2f]

**Data Collection Notes**

The pilot survey was conducted one year ago i.e. in 2010.

For the Agricultural Census, training for district officer and central supervisor were held in centre and training for the field supervisors and enumerators are held in districts at the beginning of the field work.

On an average one hour is taken for filling the questionnaire i.e. schedule. Nepali National language was used for conducting interview.

**Data Collectors**

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<tr>
<th>Name</th>
<th>Abbreviation</th>
<th>Affiliation</th>
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<tr>
<td>Central Bureau of Statistics</td>
<td>CBS</td>
<td>National Planning Commission Secretariat</td>
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**Supervision**

There are two types of supervisor. First one is central supervisor and the other is field Supervisors. Central supervisors are from central Bureau of statistics and Branch Statistics Office (BSO) where as the field supervisors are from BSO and districts government offices as well as in contract.

Field Supervisors supervise day to day work of enumerator. One supervisor controls 4 enumerators. Supervisors supervised daily works of the enumerators and selected Secondary Sampling Unit (SSU) from selected EAs after listing all Agricultural households of a selected ward. District Officers and Supervisors supervise the field work intensively. In addition to this central supervision were also frequently done.

**Data processing**

**Data Editing**

The data will be subjected to the following editing process:

1. Manual editing and coding were done at the head office after collecting the filled questionnaires.
2. Completeness check after data entry done by a completeness checking computer program.
3. Machine editing by machine editing program.
Other Processing

The data entry process will be included the following steps:

1) Data entry
2) Structure and completeness checking
3) Verification entry
4) Comparison of verification data