

SAMPLING STRATEGY

FAO-PROINPA Encuesta de Hogares, Julio-Agosto 2007

Overview

- The objective is to get a sample of approximately 1000 agricultural households that are representative of the potato producing communities of the Tiraque and Pocona municipalities. The municipalities are next to each other so this represents a single region. This is a primary potato producing region with significant links to potato seed and output markets. Approximately, 50 varieties of potatoes have been identified as being produced in the region.
- The principal sampling unit is the community. In total, fifty communities will be sampled. Within each community, an average of 20 households per community will be sampled. This ensures a sufficient number of communities to analyze community-level variables as well as a sufficient number of households to ensure the sample is representative of the community.
- Lists of communities available from the government did not exactly match the names or geographic boundaries identified by local leaders or producers. Lists were moderately altered to reflect local information.
- Stratification of the sample has been done based on distance to local potato markets. Additionally, if there was a PROINPA-intervention related to potato production in the community, it was considered for inclusion.
- Three key potato markets were identified in the region; namely, the market fairs of Tiraque, El Puente and Colimi. The markets are similar in size although there is some variation in the varieties found in each. The distance from each community to each of these three markets was identified for all communities in the region. The stratification of the sample by distance will be done as follows. The minimum distance to a market was determined for each community. The distances varied from 0 km to about 20 km. Communities were divided into 10 groups based on their minimum distance to a market (0-2 km, 2-4 km etc.). More communities are closer to markets than further away so to ensure sufficient variability in market access the further communities were over sampled. Note that intervention communities will be identified in each of these sectors. The ones with active projects were few and it was decided to include those. The remaining communities were randomly selected among the list of communities in each category. The final community selection should include a broad geographic distribution of communities with varying access to markets.
- Since communities are not formal political units, lists of households are not readily available. Each community has a Sindicato which is an organization of agricultural producers. The Sindicatos have lists of all members which tend to be at least 80-90 percent of the community. The survey will focus on members of the Sindicatos and households will be randomly selected from these lists for inclusion in the survey. The Sindicatos are the primary mechanism for intervening in communities and belong to broader municipality and higher organizations. For an analysis focused on providing policy input, it is the relevant population. The survey will then be representative of active agricultural producers in the region.

- The average community has approximately 40 households. To get an average of 20 households per survey, 50 percent of households will be included. To ensure a sufficient number of households are surveyed, no less than 10 per community will be surveyed. To ensure, sufficient variation in communities no more than 30 households will be selected in a single community.

Steps for creating household sample

1. Identification of communities in the study region and information regarding distance to market and interventions
 - List of communities with distance to market and interventions have been obtained.
2. Identification of 10 strata by distance
 - Histograms of communities by minimum distance to market have been created
3. Identification of 50 communities for the sample
 - Intervention communities have been identified.
 - From the available list of communities, a list of communities stratified by distance has been identified and a set of communities has been randomly selected for inclusion in the survey.
4. Selection of households to include in sample
 - Lists of all agricultural households in the community – all produce potatoes and belong to the Sindicato – are being collected
 - From those lists, the identified number of households will be randomly selected for inclusion in the sample.
 - A list of alternative households has also been selected in the event the preferred households are not available or refuse to participate.