Introduction

The Agriculture Activity National Survey – PNAG is the central survey of National System of Agricultural Holding Sampling Surveys Project – SNPA, under development in the Coordination of Agriculture of IBGE. PNAG was planned to be a multipurpose and continuous survey, in order to cover the main demands set out in the Global Strategy (GS), from the point of view of quality improvement as well as regarding the expansion of the scope of agricultural statistics.

It is a multipurpose survey in different aspects, first and foremost, for its thematic diversity, covering various aspects of social, economic and environmental listed in GS. So is, to contemplate different units in the same survey and yet to be designed so that using the same statistical operation, are produced basic industry statistics, economic performance statistics of sub-segments, and still serving for longitudinal analysis.

This article was prepared for the ICAS VI, and had been proposed for the great theme Statistical Production Process (SPP) and the technical session Survey Design and Sampling Strategies for Agricultural Surveys. It presents key aspects of Project PNAG, with emphasis on solutions found regarding the survey design. Also addressed are issues related to survey design related to the Project SNPA as a whole.

PNAG - National Survey of Agricultural Activity

Motivation:
- Expand scope & relevance
  - Surpass the ongoing survey program directed to production and restricted to fixed categories (time and space).
  - Ensure information on emerging issues and allow analysis among economic, social and environmental dimensions of agricultural activity and follow its evolution and the performance of the most relevant sub-segments, through the direct investigation of the farm and the farmer.
- Incorporate new "categorical variables" (type of producer, activity, size, characteristics, etc.) and more "continuous and economic variables" such as revenues, expenses, incomes, resource use and consumption.

Enhance quality
Using probabilistic sampling of holdings surveys

Objectives:
- Investigating annually the agricultural activity.
- Providing basic statistics for the sector, determining the economic performance and financial status of the agricultural units, main activities, production systems and types of establishments, annually.
- Investigating the structural, socioeconomic, technological and environmental aspects of the agricultural sector, periodically.
- Providing a database for research and analysis of the agricultural and rural development policy, estimating longitudinal analysis.

Statistical Units:
- Agricultural Holding (sample unit)
- Agricultural Producer
- Agricultural Household

New indicators:
- Number of part-time producers
- Number of deficit farms
- Disposable income of households

Questionnaires:
- Core Form (economic performance)
  - Module 1 - Labor, plurality, household income
  - Module 2 - Finance, marketing and partnerships
  - Module 3 - Technology, practices and environmental issues
- Core Form (non-farm income)
  - Number of non-farm households
  - Plurality income = Non-farm income
  - Multi-activity = Non-agricultural prod./Total production %

National System of Agricultural Holding Sampling Surveys

Main objectives:
- Build a permanent framework to agricultural holding sample surveys
- Produce continuous agricultural statistics with higher quality (improving accuracy and error measure), based on individual data collected using probabilistic sample surveys

Target population
Agricultural Holdings, except:
- educational institutions
- experimental stations
- hotels and similar farms
- holdings without area

Statistical operations:
- PCAD – Structural and Register Survey
- PNPA - Quarterly Production Survey
- PNAG - National Survey of Agricultural Activity
- Supplements and special surveys

SNPA - Survey model

Thematic rotation scheme
Cross-sectional analysis: the annual core form every three years for each module

Survey cycle
Type of Information

Years 1
- Phase 1 (PCAD)
- Production

Years 1+1
- Phase 2 (PNPA)
- Household

Years 1+2
- Phase 3 (SNPA)
- Socio-economic and environmental well-being

Final considerations

The PNAG, being a direct survey of the agricultural holding and farmer entails a number of very significant developments in the production of agricultural statistics, for it sustains a continued generation of information on microdata. This allows its analytical exploitation for purposes of planning and tracking policy. The most important advantage of the continued generation of microdata is to enable greater detail according to categories of economic activity, class size, types of farm and others. Also, it permits that aspects related to economic performance could be accompanied discriminatingly, even considering only the data and indicators related to production. That would increase data use and relevance.

Countries with more robust statistical systems have experienced, explored and pointed out these advantages, given quality for agricultural statistics and a permanent voice for the farmers. Being one of the largest economies in the world and having the responsibility to be among the leading producers and exporters of farm products and livestock, it is important that Brazil improves its statistical system towards said sector in the same direction.

References
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