

SUGGESTED PROCEDURES FOR MAKING FARM MANAGEMENT SURVEYS IN BRAZIL

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1. Purpose

a. The main purpose is to obtain facts about the farming in an area, variations in management and how these variations affect farm production and earnings (that is, why some farms pay better than others), and provide averages or benchmarks for important factors affecting production and earnings as bases for comparisons and goals for improvement in farming.

b. Such information should be useful in: (1) Serving the needs of the local area; that is, assist the Extension Service in its program to increase production and standards of living of farm families in the area; (2) Serving as a guide to development programs in areas adapted to similar types of farming; and (3) providing useful information for statisticians in building up national figures and for other groups concerned with agriculture.

2. Type, Detail, and Quantity of Data Needed

To serve the above mentioned main purpose in each relatively homogeneous type of farming area, it is necessary to obtain information such as, acres and production of various crops grown; kinds and numbers of livestock kept and their production; labor force; farm receipts; farm inputs and expenses for the year; capital investment in the business and information on rates of depreciation of capital items.

As for detail of the information needed for each item, this will be governed by its importance as a factor affecting the farm business and its importance in the analysis to be made. One should obtain sufficient detail so that in the analyses, group averages and relationships are reliable and valid and would not be materially affected by refinement in detail.

The quantity of data needed will depend upon the variability of the farms in the area and the detail to be considered in the analysis. Generally, it is desirable to obtain more farm records in the sample where considerable variation in the farming set-ups exist in an area than when there is little variability. The problem involved is securing reasonable representativeness of the data included in sorts and presented as averages.

To ensure reasonable representativeness, at least 25 to 30 farm records should be included in any sort especially when relationships to farm earnings are involved. Thus, if in an analysis one intends to group the farms in 3 groups (high, middle, and low thirds), it would be desirable to collect information on about 100 farms. If, however, sorting the farms into 2 groups would suffice (above and below average of all farms for the factor involved), then 50 to 60 farm records would be expected to be adequate.

3. Method of Collection of Data

Most farmers do not keep farm records. Thus, if farm accounts were the only means of collecting farm management facts, it would eliminate most of the farmers who otherwise might benefit from assistance in farm management. Also, it would be practically impossible to obtain data which would be representative of an area.

An alternative is to use the survey method; either by having enumerators visit each farmer periodically throughout the year to make observations and collect information, or by having well-trained interviewers obtain the needed information primarily by the interview-method in one or as few visits as possible. Generally, a one-visit interview of approximately two hours is adequate.

An advantage and important consideration in the use of the survey interview-method of collecting farm management information, is its low cost as compared with other alternative methods. The time element advantage is also important in that you do not have to wait a year to collect your facts.

Obtaining reliable farm record information in a farm management survey depends largely on two important considerations: (a) Gaining the confidence and cooperation of the farmers, which involves much advance educational work with farmers and their leaders in explaining the purpose and usefulness of the information and enlisting their goodwill and support, and (b) Having well-trained and responsible interviewers and supervisors who can communicate in the local language.

4. Suggestions on Procedures for Making Surveys

A. Selection of Area

Particular attention should be given in the selection of an area to be studied, to the homogeneity of the area -- where physical factors of climate, soils, and topography and the type of farming are similar. However, it is desirable to have variations in farms with respect to size and management, but the area should be such that the findings and recommendations would be representative and generally applicable to the farms in the area and its environs.

Select areas as representative as possible of the type of farming involved. Select relatively compact areas for sampling, and it is recommended that at least 25 or 30 farm records be taken in each area or sub-area of a study. This will permit computing averages for the data collected in each sub-area which will be useful locally.

In early surveys, select areas where support and cooperation of local authorities, farm leaders and farmers would be expected to be forthcoming with reasonable advance educational preparation for the study.

B. Developing the Questionnaire

(1) Develop a questionnaire which is adapted to the area and type of farming in which the study is to be made.

(2) Use expressions and terms which are meaningful locally. These can later be converted into standard terms and measures.

(3) Because farming situations generally are quite variable, it is preferable to develop a short and relatively simple questionnaire and train interviewers how to use it, rather than to prepare a long list of specific questions designed to cover any possible farm situation, of which most of the questions would not be applicable to any one farmer. The well trained interviewer can save time and the farmer's ~~patience~~.

(4) It is desirable to have the interviewers and field supervisor participate in the development of the questionnaire during a period of in-service training. This will help them to become more familiar with the questionnaire, what is wanted and why it is important.

(5) The questionnaire should be field tested.

C. Training Interviewers and Supervisors

(1) The interviewers are important people in farm management survey work. They should be Brazilians and preferably natives from the region, who can be taught how to take survey records, who are dependable, and who can communicate well in the local language with farmers and with their supervisors.

(2) The job of the interviewer is to get the facts from the farmer about his farming operations. He has to know how to ask objective questions in such a manner that the farmer understands them and can provide reliable answers based on his knowledge of his farm business. He needs to be responsive to the facts given, be alert to when additional questioning is needed to get the facts, and keep the questioning moving to save the farmer's time.

(3) To meet the above qualifications, minimum requirements for interviewers should at least be the equivalent of a high school graduate with some knowledge and/or experience in agriculture. Field supervisors should be college graduates (or equivalent with training and/or experience) preferably agriculturally trained.

(4) In Brazil, it may be feasible to train a few research field interviewers and supervisors in each Region and move them around to different areas of the Region to collect data. A practical alternative would be for research workers to train Extension personnel in each Region as interviewers and field supervisors. Taking farm management survey records is excellent in-service training for Extension workers. In addition to getting some local factual information to extend, it is a good way for them to get acquainted with the problems and needs of farmers in their districts quickly, to develop know-how and confidence in helping farmers with their problems, and to pave the way for future cooperation and more effective extension work.

(5) A 3-week training school for survey field supervisors and interviewers is recommended. Such training should include farm management background information, important factors to consider in selecting an area, sampling, practice exercises on acreage measurements, development of a questionnaire, practice in interviewing and field testing the questionnaire, and working up the data and interpreting the results on a sample basis. It should also include information and any known check-facts about the farming and habits of the people in the area to be surveyed.

D. Size of Survey Crew and Transport

It is suggested that a survey crew consist of one field supervisor, who would also be expected to take some records and check all records for adequacy, and 3 interviewers. A crew of such size should be able to take and check (review for adequacy and completeness) about 60 farm records in a period of 3 to 4 weeks. One transport vehicle would suffice.

E. Obtaining Farmer Cooperation

(1) An important prerequisite to the actual taking of survey records from farmers is the laying of informational groundwork to insure the goodwill, confidence, and cooperation of the farm leaders and farmers. It is necessary to explain the purposes and usefulness of the survey; that it is for the benefit of the farmers; that record information will be treated as confidential and not used for tax purposes; that supplying the information is voluntary; and that each cooperating farmer will receive a summary report of his farm record.

(2) In carrying out such educational work, it is desirable first to make personal visits to various leaders who have contacts with farmers

in the area and in whom the farmers have confidence. Leaders should include such people as Extension advisors, cooperative association leaders, and other local leaders in the community.

These contacts might well be made 2 to 3 weeks before records are expected to be taken. This will permit such leaders time to discuss the merits of the study with their farmer friends and associates to help eliminate any suspicions or fears on the part of the local people concerned. This could then be followed up with a general meeting of farmers, called by a local leader, at which the survey supervisor would explain the survey and clear up any questions about it.

F. Obtaining the Survey Information

(1) It is desirable to take the farm records soon after the main crop is harvested and the income for it has been received.

(2) Each record should be carefully reviewed and checked for reasonableness and completeness by the field supervisor soon after the record is taken (within a day or two). It is desirable to fill out a summary check-sheet for each farm to bring together the various items and show the farm business operations for the year, such as, receipts, expenses, investment, family net income, size of business, and important crop or livestock yields. This helps the interviewer to see the importance of various items and how they fit into the farm business as a whole.

(3) After the record taking has commenced, it should be completed in a reasonably short period of time, within a month if possible. The reason is to capitalize fully on the interest of farmers in the study after carrying out the advance educational program and not allow time for other surveys, tax collection drives, or the like to intervene.

(4) There is no good substitute for careful record taking by the interviewer and careful checking of records and field supervision by the supervisor in obtaining reliable and useful survey information.

(5) Survey record taking day after day is hard work. It is important to keep the interviewers and supervisors interested in their work; thus, it is well to provide incentives to do good work. Credit toward promotion, as might apply for taking a short-course at home or overseas, is a good way to provide the incentive for continued hard work and reliable performance on the part of the survey workers.

G. Record Analysis and Reports

(1) It generally takes 2 to 3 times as long to summarize, analyze, and prepare a useful report for a group of survey records as it does to collect the record information.

(2) The use of IBM type punch card, sorting and tabulating machines, where they are available, can be a great time saver and a useful aid in making adequate analysis of survey record information.

(3) Record analysis and preparation of each study report might well be the responsibility of the survey Field Officer working in cooperation with and under the guidance of a research agricultural economist.

(4) Surveys should not be considered completed until usable reports have been prepared and distribution made to important potential users of the information.

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