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REQUIREMENTS FOR CONTRIBUTIONS

Articles in the field of agricultural economics, suitable for publication in the journal, will be welcomed.

Articles should have a maximum length of 10 folio pages (including tables, graphs, etc.), typed in double spacing. Contributions, in the language preferred by the writer, should be submitted in triplicate to the Editor, c.o. Department of Agricultural Economics and Marketing, Pretoria, and should reach him at least one month prior to date of publication.

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General Comments and Announcements

The use of Mail-in Records in Production Economic Research

The efficiency of production economic research for determining costs of production, enterprise planning and agricultural policy depends to a considerable extent on the availability of reliable data.

Thus far cost data have been obtained -

1. by farm management surveys, and
2. from record books kept by collaborating farmers.

Both methods entail visits to the farmers on their farms and are therefore costly. The data obtained by the second method are more reliable than those of the farm management surveys, where one has to depend largely on the memory of the farmers.

Upon completion of a farm management survey, or compilation of the data from the record books, the information has to be tabulated and analysed. Notwithstanding mechanical calculation and tabulation, this still requires a considerable amount of time on the part of the professional staff.

The Division of Agricultural Production Economics endeavours to obtain as much information as possible on the various farming regions in the country. Because of the limitations of the present methods of securing information etc., as well as the shortage of staff, it is not possible to undertake long term studies in the various agro-economic regions, consequently data are only available over short periods for a limited number of regions.

For policy decisions it is frequently essential to have continuous information

on farming conditions in various regions. Because farm surveys take up so much time, and are only made periodically, they do not fulfil this need.

The Division realises that alternative and more efficient methods of collection and analysis must be evolved, which will not only expand the scope of this research, but will also ensure greater productivity on the part of the limited manpower.

The collection of data by means of mail-in farm records and processing with the assistance of an electronic computer, promise to replace the existing methods and to secure the same results at appreciably less cost and with less man-power.

With the mail-in farm record method the farmer receives a record book containing record forms which he has to complete every month and forward to a central office. The records are easily completed and do not require much time. In the central office the data are recorded. For this, two methods are being tested: According to the first the data are coded every month and analysed periodically with an electronic computer. Under the second method payments and receipts are entered on cards and allocated to the various enterprises. The payments and receipts are totalled every month, and at the end of the year the totals of the data are coded and analysed with the help of a computer. A comparison of the time required for the two methods will be made. The accuracy of the results and the time required, will be the main considerations in deciding on the method eventually adopted.

The introduction of a computer will make it possible to handle data from a large

number of farmers, and the number of records which can be handled by one professional officer will be far greater than with the existing methods. Female assistants will be employed for a considerable part of the work. Furthermore the collecting and coding of the data are distributed over the year, and the results will be available soon after the close of the year for the farmer to plan his activities for the coming year; and those who have to determine future policy will have up-to-date information available.

The University of Michigan in the U.S.A. started a mail-in farm record project in 1955. This new method was soon favoured and is at present used by a large number of universities as the basis for production economic research. The system has also been adopted in other countries. In Britain the Imperial Chemical Industries Company has more than 5,000 farmers who collaborate.

Thus far the advantages of mail-in farm records for the production economist and director of policy have been reviewed; but what does it offer to the farmer?

Firstly, at the end of the financial year he receives a summary of his income and expenses. Along with certain supplementary information he will find it easy to complete his income-tax return. At the end of the crop year his farming activities are analysed and compared with the average results of farms in his neighbourhood. In this manner weak points can be detected.

The Division realised the possibilities of the mail-in farm record system five years ago and piloted a research project in this connection.

A mail-in record book was compiled and tried out amongst farmers on the Vaalharts Irrigation Scheme. The first objectives were -

1. to establish whether farmers would accept this system;
2. to determine the usefulness of the method as a means of collecting information;
3. to establish what information the farmer can furnish without difficulty; and
4. to detect any problems which could arise.

It became clear that the success of such a system depended upon five basic requirements:

1. The records which the farmer had to complete must not be complicated. Nevertheless the records have to contain all the essential data for research;
2. the farmer must complete the records regularly in accordance with the prescribed requirements and forward them in time to the central office;
3. an efficient coding system must be evolved to represent every transaction which might occur on the farm;
4. the program by which the data is analysed by the computer must be adaptable, so that, without basic changes to the program, new requirements could be included;
5. the organisation in the central office must be well planned to cope efficiently with a large number of records.

Towards the end of 1966 data collected from about 500 farmers through mail-in farm records, half of which will be in the Winter Rainfall Region, will be available.

There is still some uncertainty as to the amount of detail the farmer should provide. It was therefore decided to draw up two systems, and to leave it to the farmers to decide which they wish to adopt. If the farmer is satisfied to receive an analysis which merely reflects his income

and expenses and a few efficiency standards, he may select the less complicated system. If he desires a complete analysis, he must be prepared to furnish more information.

A suitable code system has been prepared and tested. The office arrangements have been planned and it has been decided to launch the program for the computer in collaboration with research workers of the C.S.I.R.

The Division considers that with a well planned mail-in farm record system returns from several thousand farmers could be processed every year. If these farmers are selected on the basis of regions and farming systems, the results which will be available continuously will not only prove valuable for research and extension work but also in determining policy.

Contributed by I. Nemeth, Division of Agricultural Production Economics.

The Division of Agricultural Economic Research Divided into Two Divisions

For a number of years the Department has given consideration to the desirability of establishing two Divisions, and thereby separate the two main functions of the Division of Agricultural Economic Research, namely farm management and planning research and marketing and statistical research. In each of these fields a growing amount of research is being undertaken, and the Department is convinced that the establishment of two divisions will be conducive to greater efficiency. In fact, such a splitting of the Division was considered an inevitable and logical development. Shortage of staff and the large number of resignations compelled the Department, however, to postpone this for a time.

In the meantime it became urgent to split the main functions of the Division, and approval was obtained to divide the Division as follows:

1. Division of Agricultural Production Economics, and
2. Division of Agricultural Marketing Research.

The main activities of the first-mentioned will be:

- (a) Farm management research and planning.
- (b) Agricultural economic extension work.
- (c) Production economic services.

Technological developments and the accompanying economic growth in all sectors of the economy, along with rising standards of living, compel the farmer to make adjustments continuously. A dynamic agricultural policy must diagnose these essential adjustments in time and assist in their implementation. Production economic research constitutes the foundation for rational adjustments and the development of the agricultural industry.

With the Division of Agricultural Marketing Research it is the intention to undertake basic and applied research so as to provide data which would serve as a basis for the formulation of agricultural policy (for promoting the efficiency of marketing agricultural products), and to undertake statistical research and provide statistical services.

Mr. S.P. van Wyk and Mr. J.K. Siertsema are the Chief and Assistant Chief respectively of the Division of Agricultural Production Economics, and Mr. S.J. van N. du Toit and Mr. J.B. Bester are in charge of the Marketing Division.