

THE PLACE OF AGRICULTURAL ECONOMICS AT
DIPLOMA, CERTIFICATE, IN-SERVICE AND
FARMERS' TRAINING LEVELS

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It is well known that Agricultural Economics has been a neglected sector in Government agricultural advisory services and agricultural departments the world over. And yet, it is recognised, even if not always spelled out, that the ultimate objective of any department of agriculture is to increase farm productivity and the income of the agriculture sector, in line with the national interest. This widespread lack of awareness of the role of agro-economic data often results in extension advice consisting purely of physical recommendations such as advice on inputs, cultural practices and recommended crops. Frequently the farmer is not willing to follow this kind of extension advice, as rightly or wrongly he feels that there is considerable RISK that his income may actually decrease if he adopts the recommendations.

The Role of Agricultural Economics in the
Department of Agriculture

It is the responsibility of the Agro-Economist to provide information that will convince the farmer that extension advice will lead to increased PROFITABILITY and farm income. The recommendations contained in extension messages must be related to increased profitability to gain farmer acceptance.

Some examples of the information that the agro-economic sector should provide are as follows :

1. Which of the recommended crops/cropping patterns in the agro-ecological zones offer the best income potential?
2. What are the added costs/returns of recommended cultural practices, and levels of inputs?

3. Which crops/cropping patterns in each agro-ecological zone are unlikely to yield a satisfactory level of income?
4. What is the profitability ranking within each agro-ecological zone of the recommended crops and cropping patterns?
5. What is the break-even yield of recommended crops at given levels of inputs by agro-ecological zone?
6. What is the peak labour, draft power and credit requirement for recommended crops and cropping patterns?

In addition to the factors of production under the control of the farmer such as land, labour, crop selection and cultural practices, there are certain other factors affecting productivity that are outside his control. These are the agricultural support services (credit input supplies, extension services) and the marketability and price levels of the commodities the farmer produces. These factors often act as constraints to increasing production, and the Agro-Economist should be prepared to make recommendations on the removal of these constraints.

How Important is Non-Degree Training in Agricultural Economics?

This paper has already stressed that extension messages are quite ineffective unless adopted by the farmer. The information on costs, returns and profitability provided by the Agro-Economist should help to convince the farmer of the utility of the extension message.

However, unless the extension officer and his subject matter officer have access to the necessary agro-economic data, related to the local environment, understand it fully, and can clearly explain it to the farmer, so as to convince him, extension messages will still not be adopted.

The extension officer is therefore the vital link between research and the farmer, and unless his training is suited to the work he has to perform, and is effective, the adaptive research and training programmes will serve little purpose.

How to make Agro-Economics Training at
Non-Degree Level Effective

This training is aimed at the district, range and village level extension staff, and farmers. These extension workers must therefore be trained in the relevant agro-economic techniques, which must be locally applicable. This means that the data on which these techniques are based must apply to the local farm situation. The levels of achievement adopted in the recommendations should be equal to the achievement of above average farmers in the area. Ideally, adopted levels would be backed by findings from demonstration farms.

For example, when farm resources and production are discussed, examples of farm types and situations in the local agro-ecological environment must be given. When dealing with marketing, the local market structure should be used to illustrate the points made.

This is the only way to provide students, who will eventually become extension workers, with the information needed to convince farmers to follow their advice. It is therefore vital to establish a DATA BANK based on major agro-ecological regions and farm types.

How do we Establish a Data Bank?

The Agro-Economist at each Regional Research Station should be responsible for the collection, analysis and summary of locally applicable production, marketing and institutional data by agro-ecological region. Methodology used in all regions should be standardised according to guidelines issued by the Senior Agricultural Economist. This data must be made available to the Education and Training Division for use in their training courses. To ensure that this data bank meets the requirements of the department, there should be regular coordination between the Divisions of Research, Education and Training, Extension and the Division of Agricultural Economics through the Technical Unit and the R.T.W.Gs.

Suggested Course Subject Matter Content

It has already been stressed that content of all courses should be primarily oriented towards local conditions. Emphasis should be on practical work, students being involved in the construction and evaluation of crop and farm budgets and in the evaluation of infrastructural, organizational and institutional constraints. Students should be

asked to work out solutions to problems.

Field work at the village and farm level and farm situation stimulation in the class-room must play a major role.

It is not intended to discuss in detail differences in curricular between the various courses. Suffice it to say that the Diploma Course is intended to train the Subject Matter Officer, who, as a specialist in his field, would need a more sophisticated and in-depth approach. The training would cover all the main agro-ecological regions.

The Certificate Course at the farm school is applicable to the K.V.S's level, with a less sophisticated more practical approach, confined to the agro-ecological environment of the particular school.

In-Service Training Courses would cover a variety of situations from short courses giving brief coverage of the whole sector, to in-depth treatment of particular aspects of importance in a particular environment at a certain time.

Farmer Training Courses should be of course be entirely locality and village oriented, with emphasis on practical applications of agro-economic principles, illustrating the economic advantages of extension recommendations.

In all training, the importance of treating farming as a business should be stressed, leading to the essential part played by farm records.

Subject matter that should be covered by the Agro-Economic Sector can best be defined as the study of the factors influencing productivity and profitability, which are not covered by the physical disciplines. Broadly speaking, these are the factors related to Man and his resources.

Main subject matter areas are as follows :

- A. - Production Economics including Farm Management.
 - Farm Resource Analysis: land, labour, draft power, fixed and liquid capital.
 - Production Analysis: crops and cropping patterns, cropping intensity.

- Enterprise Analysis
 - Whole Farm Budgets
 - Efficiency Standards
 - Farm and Household Analysis: Household expenditure
Non and off farm income, household and farm budget.
- B. - Commodity Marketing, Prices, and Related Infrastructure
- Supply and demand
 - Prices and price analysis
 - Infrastructure requirements: (Storage, roads,
transportation, agro-industrial processing)
 - Structure and Organisation of commodity marketing and
pricing in Sri Lanka.
- C. - Socio Institutional Aspects.
- Government Agricultural Policies
 - Agencies dealing with Agriculture
 - Land Tenure Status
 - Agricultural support services (extension, credit, input
supplies, education, community development).
 - Population and Employment
 - Population growth rate
 - Employment and Unemployment Urban and Rural Population.
- D. Survey Methods and Analysis
- Survey Methods and Analysis
 - Survey Methods
 - Sample Selection
 - Questionnaire Design
 - Data Analysis
- E. Farmer Record Keeping'
- Objective and advantages
 - Types of record
 - Record design
 - Record Analysis.