

AGRICULTURAL ECONOMICS

Introduction

A study of economic principles, with emphasis on their application to the solution of farm, agribusiness, and agricultural industry problems in relationship to other sectors is known as Agricultural Economics. In other words, it applies principles of economics to issues of agricultural production, natural resources, and rural development. It mainly focuses on principles of microeconomics.

Agricultural economics began in the 19th century as a way to apply economic principles and research methods to crop production and livestock management. The roots of the discipline, however, can be found in the writings of the classical economists like Adam Smith.

The word, agriculture comes from the Latin word *ager*, referring to the soil and *cultura*, to its cultivation. Agriculture, in its widest sense can be defined as the cultivation and /or production of crop plants or livestock products. It is synonymous with farming: the field or field –dependent production of food, fodder and industrial organic materials.

Having known the meaning of agriculture, let us know what economics is. Economics is the science that studies as to how people choose to use scarce productive

resources to produce various goods and to distribute these goods to various members of society for their consumption. Now having defined agriculture and economics, we look into the field of agricultural economics.

Definition

Agricultural economics is an applied field of economics in which the principles of choice are applied in the use of scarce resources such as land, labour, capital and management in farming and allied activities. It deals with the principles that help the farmer in the efficient use of land, labour and capital. Its role is evident in offering practicable solutions in using scarce resources of the farmers for maximization of income.

Prof. Gray has defined agricultural economics as “The science in which the principles and methods of economics are applied to the special conditions of agricultural industry”

According to **Prof. Hibbard**, “Agricultural economics is the study of relationships arising from the wealth-getting and wealth-using activity of man in agriculture”

Snodgras and Wallace defined agricultural economics as “an applied phase of social science of economics in which attention is given to all aspects of problems related to agriculture.”

Importance of agricultural economics

Akin to economics, the field of agricultural economics finds to seek relevance between cause and effect using the most advanced methods viz, production functions and programming models. It uses theoretical concepts of economics to provide answers to the problems of agriculture and agribusiness. Initially earnest efforts were made by the economists to use the economic theory to agricultural problems. Now the subject matters of agricultural economics is enriched in many directions and fields taking the relevant tools of sciences particularly mathematics and statistics. Agricultural depression which occurred in last quarter of 19th century and middle of 20th century brought about increased attention and concern to find out plausible cause and solutions for world agricultural depression. Here in this context the contribution made by agronomists, economists, horticulturists, etc., is noteworthy. Agriculture is the integral part of the world food system, having the foundation links between crops and animal production system. Agricultural economists here have to play a major role in understanding the intricacies involved in the foundation systems. Knowledge regarding problems in production, finance, marketing and government policies and their impact on production and distribution is very essential to find out suitable solutions for the farm problems. Students of agricultural economics are taught the subject disciplines viz.,

microeconomics, macroeconomics, agricultural production economics, farm management, agricultural marketing etc., to fulfill the requirements.

Agricultural production economics- Meaning- Definitions- Subject matter – Objectives - Farm Management – Meaning – scope – Definitions- Objectives

Agricultural production economics

Agricultural production economics is a field of specialization within the subject of Agricultural Economics. It is concern with the selection of production pattern and resource use efficiency in order to optimize the objective function of farming community or the nation within a frame work of limited resources. The goals of agricultural production economics are:

- (1) To provide guidance to individual farmers in using their resources most efficiently and
- (2) To facilitate the most efficient use of resources from the stand point of economy.

Definition

Agricultural production economics is an applied field of science wherein the principles of choice are applied to the use of capital, labour, land and management resources in the farming industry.

Subject matter

Agricultural production economics involves analysis of production relationships and principles of rational decisions in order to optimize the use of farm resources on individual farms and to rationalize the use of inputs from nation's point of view. The primary interest is applying economic logic to problems that occur in agriculture.

Agricultural production economics is concerned with the productivity of inputs. As a study of resource productivity, it deals with resource use efficiency, resource combination, resource allocation, resource management and resource administration.

The subject matter of production economics involves topics like factor-product relationship, factor-factor relationship and product- product relationship, size of farm, returns to scale, credit and risk and uncertainty, etc.

Objectives:

1. To determine and outline the conditions which give the optimum use of capital, labour, land and management resources in the production of crops and livestock.
2. To determine the extent to which the existing use of resources deviates from the optimum use.
3. To analyse the forces which condition existing production pattern and resource use.
4. To explain means and methods in getting from the existing use to optimum use of resources.

Farm management

In the context of increased accent on commercialization there is a greater need to improve the managerial abilities of the farmers. So far the managers in general have responded admirably to technological changes that occurred in Indian agriculture. But response of some of the farmers is not in line with needed direction. We can always differentiate those farmers performing against those not performing. Hence, it is of paramount importance for the farm managers to identify the changes that take place and respond suitably, for any lapse on his part does not help him to survive in the changing economy. This speaks of the need for the managers to sharpen the skills to tackle varying problems that crop up from time to time in the organization of farm business.

The role of farm management, therefore, is to supply the information from the farmers for sound planning. All farm management tools are helpful to the farmers in solving their managerial problems for successful operation of the farm business.

Scope

Farm management is considered to fall in the field of microeconomics. It treats every farm as separate unit because of differences in the ability of resources, problems and potentiality. The main concern of farm management is the farm as a unit. Farm management deals with the allocation of inputs at the level of individual farms. The objective of farm management is to maximize returns from the farm as a whole. It is interested in the profitability along with practicability. What crops, livestock enterprises and their combination to grow, what amount of resources to be applied, how the various farm activity to be performed, etc., all these fall within the scope of farm management.

Definitions

Farm management is defined as the science that deals with organization and operation of the farm in the context of efficiency and continuous profits **(J. N.Efferson)**

Farm management is defined as the art of managing a farm successfully as measured by the test of profitableness **(Gray)**

Farm management is a branch of agricultural economics, which deals with wealth earning and wealth spending activities of farmer in relation to the organization and operation of

the individual farm unit for securing maximum possible net income (**Bradford and Jhonson**)

Objectives

1. To examine production pattern and resource use on the farm.
2. To identify the factors responsible for the present production pattern and resource use on the farm.
3. To determine the conditions of optimality in the resource use and the production pattern on the farm.
4. To analyse the extent of sub optimality in the resource use on the farm, and
5. To suggest ways and means in getting the present use of resources to optimality on the farm.

Agricultural finance – Meaning – Definitions – micro vs macro finance –need for agricultural finance-Agricultural marketing – meaning, definition , importance of agricultural marketing

Agricultural finance

Agricultural finance generally means studying, examining and analyzing the financial aspects pertaining to farm business, which is the core sector of the country. The financial aspects include money matters relating to production of agricultural products and their disposal.

According to Murray (1953), “It is an economic study of borrowing funds by farmers; of the organization and operation of farm lending agencies, and of society’s interest in credit for agriculture.”

According to Tandon and Dhandyal (1962), “as a branch of agricultural economics, which deals with the provision, and management of bank services and financial resources related to individual farm units”

Micro Vs Macro finance

Agricultural finance is viewed both at macro level and micro level. Macro finance deals with the different sources of raising funds for agriculture as a whole in the economy and it is also concern with the lending procedures, rules, regulations, monitoring and

controlling procedures of different agricultural institutions. Thus, macro finance pertains to financial agriculture at the aggregate.

Micro finance deals with financing the individual farm business units and it is concern with the study as to how the individual farmer considers various sources of credit to be borrowed from each source and how he allocates the same among the alternative uses within the farm.

Need for agricultural finance

Given the requirement of finance in agricultural sector, very few farmers will have capital of their own to invest in agriculture. Therefore, a need arises to provide credit to all those farmers who require it. Even if we look into the expenditure pattern of the farm families, they have hardly any savings to fall back on. Therefore, credit enables the farmers to advantageously use seeds, fertilizers, irrigation, machinery, etc. Farmer has to invariably search for a source which supplies adequate farm credit. Above all, small and marginal farmers constitute majority of the farming community.

Agricultural Marketing

The term, agricultural marketing implies selling of goods and services by the farmers and ranchers. It includes various functions viz., assembling, transportation, storing, buying, selling, standardization, grading, processing, sales promotion, etc.

According to Thomsen, “agricultural marketing comprises all the operations, and the agencies conducting them involved in the movement of farm produced foods, raw materials and their derivatives, such as textiles, from the farms to the final consumer and effects of such operations on farmers, middlemen and consumers.”

Importance of agricultural marketing

Marketing gives signals to increase production and thereby ensures the availability of goods, and services. If the marketing activity is developed, demand for goods increases as a result, production of goods also increases. Due to increased production, the demand for inputs increases i.e., demand for input is derived from the increase in demand for the output. To distribute the required input to the farm sector, the input marketing has to be strengthened.