Lecture No. 2.

Farm management decision making process ? Production, operational, strategic, administrative and marketing management decisions.

c) The third classification of farm management functions indicates that the farm management decisions or functions can be categorized into production, administration and marketing functions as depicted in the chart.

1) Production and Organization Decisions: The farm manager has to take vital decisions on production of enterprises and organization of his business. His decisions centre on what to produce and how to produce. Such decisions can be further classified into i) strategic and ii) operational decisions.

i**. Strategic Management Decisions**: These are the management decisions, which involve heavy investment and have long lasting effect. These decisions give shape to overall organization of the business.

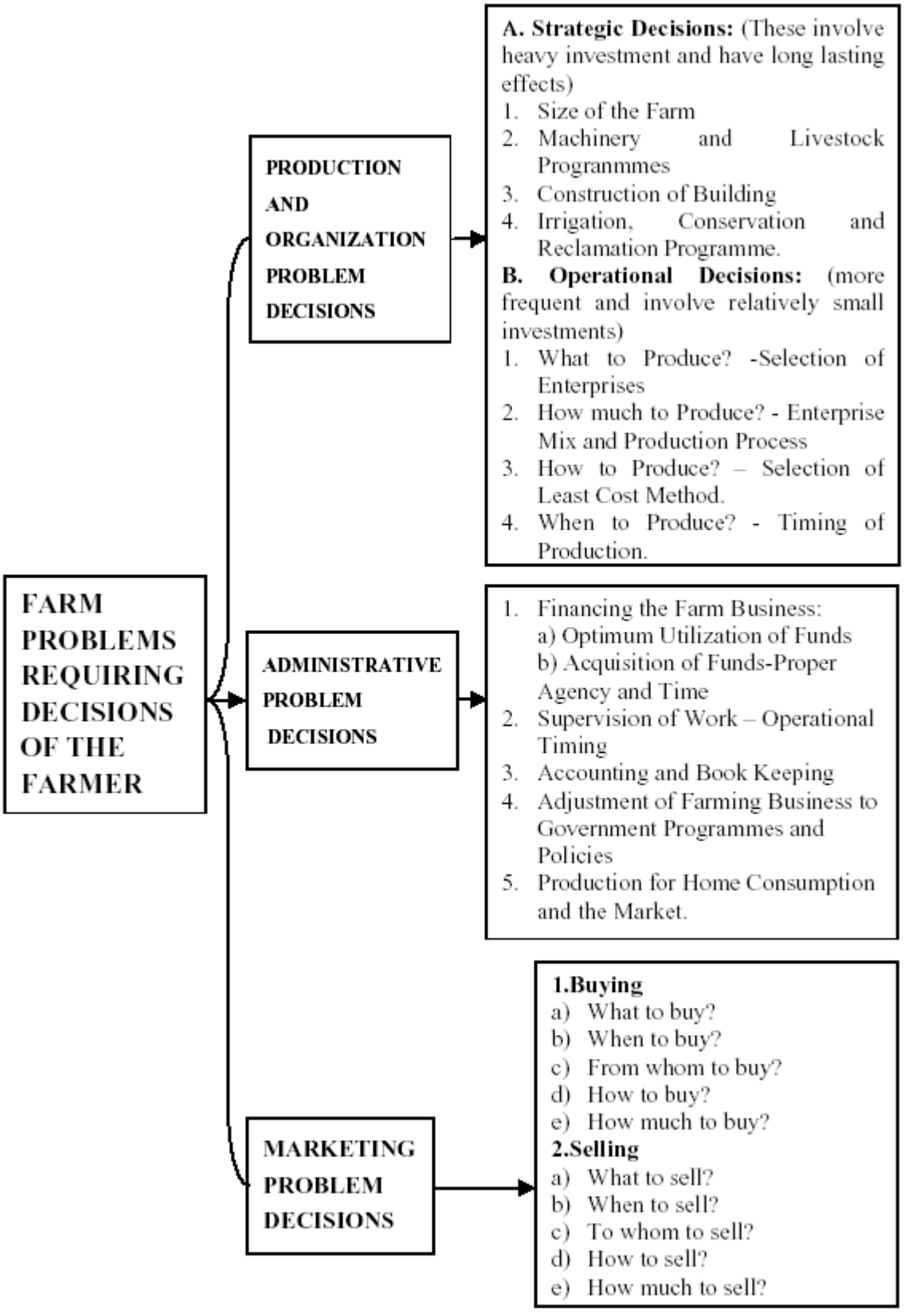
a) Deciding the best size of the farm: The size of farm depends upon type of farm business, irrigation potential, level of mechanization, intensity of usage of land and managerial ability of the farmer. The economic efficiency of each crop/or live stock enterprise and their combinations, when they are operated on different scales, are considered to decide upon the optimum size of the holding.

b) Decisions on farm labour and machinery programmes: Deciding the most profitable combination of the factors to be used in producing a commodity is one of the important farm management decisions. What combination of farm labour and machinery should be adopted to get maximum returns? Would it be profitable to vary labour or land to better utilize a given set of machinery? These decisions are to be taken so as to reduce the cost of production.

c) Decisions on construction of buildings: Decisions on size and type of buildings involve heavy investment, which become fixed resource for the business. Type of buildings, for the present pattern and level of production depends upon the kind and level of crops or livestock produced.

d) Decisions regarding irrigation, conservation and reclamation programmes: As improvements of alkalinity, salinity and other soil defects require heavy investments, soil conservation and reclamation programmes often have to be spread over years. The choice of most economical method or a combination of methods of reclamation has to be made from among mulching, contouring, bunding, terracing and application of soil amendments, laying down of proper drainage and so on. Decision on irrigation programme is also very crucial

because it involves heavy investment and it gives a flow service over long period of time and also improves the productivity of other related inputs.



Farm Management Decisions

2. Operational Management Decisions: Operational management decisions are continuously made to carry out the day-to-day operations of the farm business. The investment involved in such decisions is relatively small and hence, the impact of such decisions is short-lived. These decisions are generally: i) what to produce? ii) how much to produce? how to produce? and when to produce? A brief discussion is made on these decisions below:

i) What to produce? (Selection of enterprises): The objective of the farm business, i.e., maximization of returns, could be achieved through the best combination of different enterprises. The relative profitability of these enterprises will be useful to determine what to produce and what not to produce.

ii) How much to produce? (Enterprise mix): This decision has two aspects: Enterprise mix and resource use.

a) Enterprise Mix: Combination of crop and livestock enterprises will depend upon the level of resources available, fertility of the soil, prices of factors and products in addition to the existence of complementary and supplementary relationship. Principle of substitution is used to decide the level of each enterprise, i.e., the scarce farm resources are first used for the most profitable enterprise and then the next best profitable enterprise is considered for inclusion. However, apart from profitability of each enterprise, factors like labour availability for each enterprise, size of land holding, use of by-products, maintenance of soil fertility, relative risks, distribution of incomes over time and efficiency in the use of machine power and building are considered to decide the level of each enterprise.

b) Resource Use: The best combination and optimum level of inputs can be determined based on the substitution principle and these have to be decided for minimizing the cost of production and maximization of returns.

iii) How to produce? (Selection of least - cost / efficient method or practice): Decisions, here, are made on the best practice or combination of practices and methods, which involve the least cost. The choice making from among the various alternatives has become a management problem. Although the objective generally is to select the least cost combination of inputs methods, consideration has to be given on the availability of resources in required quality and quantity at right time.

iv) When to produce? (Timing of production): Since the agricultural production is season-bound, it's timing has to be properly decided. However, farmer faces difficulty in selecting season, i.e., normal, early or late, for a particular crop due to non-availability of inputs in time and as a result he could not fetch maximum price for the produce.

3. Administrative Decisions

Along with production and organization decision, the former has to see that the work is done in a right way. Such administrative decisions are briefly discussed below:

i) Financing the farm business: While some farmers have their own sufficient funds, others may have to borrow. The problem is two fold, viz., a) utilization of funds within the farm business, and b) acquisition of funds, i.e., proper agency, time, type, and terms of credit. Cash flow analysis would be used to decide the timing and quantum of credit required.

ii) Supervision of work: The farm manager has to ensure that each job is scrupulously done as planned.

iii) Accounting and book keeping: Collection, analysis and evaluation of data have to be done in order to assess the performance of the farm at any point of time. Here decision is to be made on the kinds of farm records, time allocation and money to be spent on this activity.

v) Adjustments to government programmes and policies: Government programmes and policies on food zones, restriction on product movements, price support policy, input subsidy, etc. influence farm production and marketing. The farmer has to decide on the level of production and resource-use with the maximum economic efficiency at the farm level consistent with the government policies concerned.

4. Marketing Decisions

A farm manager has to buy various farm inputs and sell out the produces in which he has to take rational decisions. While purchasing inputs he has to consider the following aspects: a) what to buy? b) when to buy? c) from whom to buy? d) how to buy? and e) how much to buy? Similarly, in selling out the farm produces he has to carefully ponder over the following points in order to maximize his farm income: a) what to sell? b) when to sell? c) to whom to sell? d) how to sell? and e) how much to sell?

vii) Relationship between Farm Management and Other Sciences

Farm management is an integral part of agricultural production economics. Farm management is an intra farm science whereas agricultural production economics is an inter farm or inter region science. The distinction sometimes made between production economics and farm management is based on macro and micro level contents respectively. In so far as various agricultural economic problems regarding agricultural finance, land tenure, marketing, etc, are concerned at farm level, the field of specialization related to each problem becomes an integral part of farm management.

Farm management is closely related with other social sciences like psychology and sociology (Fig.1). Farmer's ability to bear risk and uncertainty is influenced by his

psychological characteristics. His decisions are also influenced by the customs, habits and cultural values of the society in which he lives. The acceptance of new production techniques and methods in farming is influenced by political decisions of the government like restriction or encouragement of growing of crops, ceiling on land holding, price policies, etc.

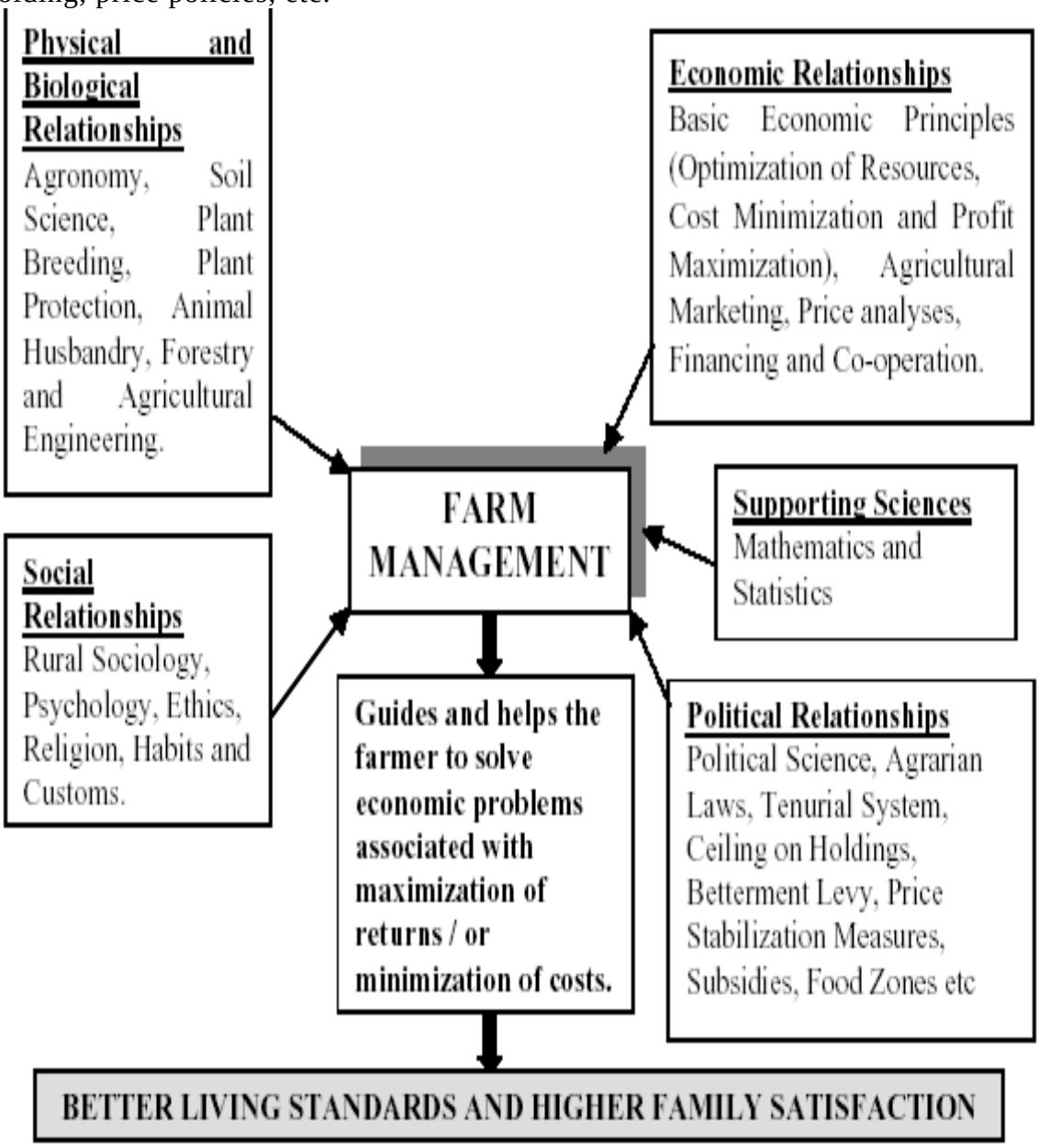


Fig.1 Relationship between Farm Management and Other Sciences

Statistics is another science that helps in providing methods and procedures by which data regarding specific farm problems can be collected, analyzed and evaluated.

Farm management relies closely on other branches of agricultural sciences such as agronomy, soil science, plant protection studies, animal husbandry, agricultural engineering, forestry, etc. These physical and biological sciences are not directly concerned with economic efficiency. They provide input-output relationships in their respective areas in physical terms, i.e., they define production possibilities within which various choices can be made. It is the task of the farm management specialist and agricultural economist to determine how and to what extent the findings of these sciences should be used in farm business management.

viii) Characteristics of Farming as Business: Farming as a business has many distinguishing features from most of other industries in their management methods and practices. The major differences between farming and other industries are:

1) Agricultural production is biological is nature.

2) Agricultural production heavily depends on agro-climatic conditions.

3) Agricultural production is carried out mostly in small - sized holdings.

4) Frequent and speedy decisions are to be taken up in agricultural production. For instance, there is no time to consider the merits of paying more wages to drain the field when there is a sudden monsoon floods.

5) Agricultural prices and production usually move in opposite direction.

6) Lack of standardization of practices and products: By the use of machines and trained personnel, it is possible to produce large volume of products exactly the same in size, form and quality. Such standardization of practices and products is not possible in agriculture. Grading system for agricultural commodities is also very weak.

7) Slow turn -over: It takes long time to recover the investment.

8) Farm financing is more risky due to drought, pest and disease attack, yield variations, etc.

9) The proportion of fixed cost is more in agriculture and so adjustment and substitution of resources are more difficult.

10) Inelastic income demand for farm products: As income increases, the demand for agricultural products will increase in lesser proportion when compared with industrial goods.

11) Perishable and bulky nature of agricultural commodities cause storage, processing and transportation problems.

12) Lack of Knowledge: All farmers do not know the latest developments in agricultural technologies.

13) Agricultural markets are not regulated properly and there are too many middlemen in the agricultural marketing system, whereas in industry, the distribution channels are well defined and controlled by producers.

14) Agriculture is considered not only a means of livelihood but also a way of life to the farmers in all the under developed countries.

ix) Farm Management Problems under Indian Conditions

Farm management problems in India vary from place to place depending mostly on the degree of infrastructural development and the availability of resources. The following are some of the most common problems in the field of farm management:

1) Small size of farm business: The average size of operational holding in India was 1.55 ha in 1990-91. The holdings are fragmented, too. Unfavourable land man ratio due to excessive family labour depending upon agriculture have weakened the financial position of the farmers and limited the scope for farm business expansion.

2) Farm as a household: In most parts of the country, farmers, especially dry land farmers, follow the traditional combinations of crops and methods of cultivation. Work habits are closely associated with food commodities consumed and living conditions. Farm has become the means of livelihood of farmers and hence, subsistence farming is followed. Home management, thus, heavily influences and gets influenced by farm management decisions.

3) Inadequate capital: The new technology demands costlier inputs such as fertilizer, plant protection measures, irrigation and high yielding variety seeds as well as investment on power and machinery. But perpetual debt and low marketable surplus prevent the farmers from adopting new technologies. 4) Under employment: Unemployment results from 1) small size of farm, 2) large supply of family labour, 3) seasonal nature of production and 4) lack of subsidiary or supporting rural industries. It reduces efficiency and productivity of rural manpower.

5) Slow adoption innovations: Small farmers are usually conservative and sometimes skeptical of new techniques and methods. However, once they try a new idea and find it effective, they are eager to adopt that. The rate of adoption, however, depends on farmer's willingness and his ability to use the new information.

6) Inadequacy of input supplies: Farmers may be willing to introduce change, yet they may face the difficulty in obtaining the required inputs of proper quality, in sufficient quantity and on time in order to sustain the introduced changes.

7) Lack of managerial skill: Due to lack of managerial skill among small farmers, adoption of new techniques and use of costly inputs could not be followed up by them.

8) Lack of infrastructural facilities: Infrastructural facilities such as marketing, transport, and communication are either inadequate or inefficient and this results in the shortage of capital and quality inputs and non-availability of inputs in time.