CLASS NOTES

FOR

(Livestock Economics and Marketing) Theory

(V. C. I. Pattern)

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UNIT-6 (LIVESTOCK ECONOMICS AND MARKETING) Theory

(1) Introduction to Economics and Livestock Economics: definition and scope (production, consumption, exchange and distribution). (2) Basic concepts- want goods, wealth, utility, price, value, assets, capital, money, income etc. Important features of land, labour, capital and organization (3) Theories of demand, supply and cost. (4) Theories of production (law of diminishing return, increasing return, constant return and return to scale) (5) (a) Concept of market: market, market structure and classification of markets. (b) Market price and normal price, price determination under perfect competition in short and long run. (c) Marketing functions: meaning and their classification (packaging, transportation, grading, standardization, storage and warehousing, processing and value addition, buying and selling, market information, financing, risk bearing, minimization of risks (speculation and hedging). (d) Marketing agencies, institutions and channels for livestock and livestock products. Government interventions and role in marketing of livestock and livestock products. (e) External trade in livestock products, recent policies on trade and international trade agreements and their implications in livestock sector.

1. **Introduction to Economics and Livestock Economics: definition and scope (production, consumption, exchange and distribution)**

Introduction

Definition: Economics is a science of choice when faced with scarce means and unlimited ends.

1. Economics is the science which treats of wealth. **By. F.A.Walker**
2. Economics is the science which treats of those social phenomena that are due to the wealth-getting and wealth-using activity of man. **By. Ely**
3. Economics is a study of men's actions in the ordinary business of life; it enquires how he gets his income and how he used it. Thus it is on one side a study of wealth and on the other and more important side, a part of the study of man. **By. Dr.Alfred Marshall**
4. Economics is the study of causes of material welfare**. By. Cannan**
5. Economics is the study of the general methods by which men cooperate to meet their material needs. **By. Beveridge**
6. Economics studies human behaviour as a relationship between ends and scarce means which have alternative uses. **By Robbins**

Economics deals with that part of social welfare that can be brought directly or indirectly into relation with the measuring rod of money**" By Pigou**

The student a rough idea about Livestock Economics, we give an example.

Limited Means and Unlimited Ends- Atul has just pass out B.V. Sc. from college of veterinary science & A.H. Jabalpur and he want open a dairy farm. Suppose he got Rs. 500000/ as a loan from the bank. With this limited sum at his disposal, he has to meet all his needs for new dairy farm land, labour, capital (machinery), and management. He has to pay for good located land, livestock, office building, cattle shed, calf pen hutment, and store, supervisor and labour quarters. In equipments he has to pay for chaff cutter, hand pump, milking pails, etc. He has also pay for dairy farm manager, storekeeper, and driver cum mechanic, milk recorder, labour, fodder concentrates, medicine, bank loan, water and electricity charges etc. In fact, he wants to do or buy

so many things. But the amount of money that he has limited whereas his wants, as we have seen, are unlimited. Livestock Economics helps him in such situation. It will help him to derive maximum satisfaction from the limited amount of money he has.

Choosing between Ends- Economics tells us how a person tries to satisfy his unlimited wants with his limited means; in other words, how to use scarce goods that he has to his best advantage or how to economies. He must, therefore, choose what to buy and what not to buy. This is Economics. **Economics is a science of choice when faced with scarce means and unlimited ends.**

Deriving Maximum Satisfaction- In short, Economics teaches us to make the best use of our limited resources. It tells us how the scarce means at our disposal can be put to several alternative uses so as to derive the maximum benefit out of them. It thus merely means prudence or wisdom in the use of things. We should use them in such a manner as to get the greatest amount of satisfaction possible. Economics tells us how to do it.

Income and Employment- Recent thinking in Economics is that besides studying the behaviour of an individual consumer or producer deriving maximum benefit from the use of his limited resources, Economics is also concerned with the levels of income and employment in a country as well as causes of their fluctuation. Its study is thus intended to promote economic stability.

Economic Development- In respect of under-developed economies, Economics concerns itself with the study of economic growth. The theory of economic growth and the theory of income and employment are the two recent additions to the study of Economics.

Thus, Economics is a very wide subject. It concerns itself not only with the behaviour of individual consumers and individual producers or firms, but also with industries, national income and economic growth.

Divisions of Economics

Traditional Approach

As already pointed out, according to the old view, the study of Economics is divided into four main departments or divisions, viz., Consumption, Production, Exchange, and

Distribution.

Consumption- we study the nature of human wants as well as the principles governing their satisfaction. The law of diminishing marginal utility, law of substitution, the law of family expenditure and consumer's surplus are of special importance. We also study the nature of demand, whether it is elastic or inelastic, as well as the law of demand.

Production- we study how man makes efforts to satisfy his wants by producing wealth. In particular, we see how the four agents of production, viz., land, labour, capital and organisation, co-operate and combine in the work of production. We study each of these agents, their importance and the conditions of their efficiency.

Exchange- In the third department of Economics, viz., Exchange we discuss how in the various market forms buying and selling are done and how prices are determined. This happens through the interaction of the forces of demand and supply.

Distribution-The fourth department, Distribution is devoted to the study of the respective shares that go to the four agents-land, labour, capital and organization. These shares take the form respectively of rent, wages, interest and profit. In Distribution, we study how the share of each agent of production is determined.

It is usual to divide Economics into these four departments only. But in addition to these, we have to study also the problems of Public Finance. Here we discuss how governments get money and how they spend it. Thus, it involves a consideration of taxation and 'allied questions.

Modern Approach

As has been mentioned earlier, it is only an old approach to divide Economics into these four divisions. The modern approach is different. The study of Economics is now usually divided into two parts: (a) Income Theory or **Macro Economics;** and (b) Price Theory or **Micro Economics- Micro-Economics,** we study the determination of prices. We no longer divide the study of Economics into Consumption, Production, Exchange and Distribution. They are all covered by price theory. We shall see that prices are determined by the interaction of demand and supply. The theory of demand covers consumption and supply covers production.

According to the old arrangement, in exchange we studied commodity prices and in distribution we studied factor prices, i.e., rent, wages, interest and profit. But in price theory we study both product prices (i.e., exchange) and factor prices (i.e., distribution) Thus, all the old four divisions of Economics are covered in what we now call Micro-economics or Price Theory.

We study small individual parts of the economy. For instance, we study the individual consumer's behaviour or that of an individual firm or what happens in any particular industry. In the price analysis, we study the determination of the price of an individual commodity or of a particular factor of production, i.e., its reward. In the case of demand and supply, we study the demand and supply of an individual commodity or a factor. We study the income of an individual or of a firm in an industry, and not the national income.

Macro Economics- It studies aggregates or average of the entire economy, such as national income, output and employment, total consumption, total savings and investment, aggregate demand and aggregate supply, and so on. In this approach full employment is not assumed. We study the determinants of full employment and see how the fullest possible employment can be attained. The macro-approach is essential, for what is true of the parts may not be true of the whole. After all, the problem of the aggregate is not-merely a matter of adding or multiplying what happens in respect .of the various individual parts of the economy.

Nature and Scope

The essential idea in the definition almost universally accepted today is that it. tells us about such activities of a man when he is making the best use of his limited resources in time or money or any other form of wealth for satisfying his wants which are unlimited. Now in the present chapter we shall spell out its nature and subject-matter and discuss its scope. We shall also study economic laws, i.e., the general principles underlying economic behaviour. Also, we shall see how Economics is related to other social sciences and study its utility or importance. Besides, before we study the subject proper, we shall indicate how the subject-matter of Economics is usually divided.

Scope of Economics

While discussing the subject-matter and definition of Economics, we have said something

about the scope of Economics too. But there are a few more things which we have to discuss in considering the scope of Economics.

'Scope' means the sphere of study. We have to consider what Economics studies and what lies beyond it. The scope of Economics will be brought out by discussing the following:

(a) The subject-matter of Economics.

(b) Economics is a Social Science.

(c) Whether Economics is a Science or an Art?

(d) If Economics is a science, whether it is a positive science or a normative science?

We have already discussed at length the subject-matter of Economics; hence we now need consider the other four of the above aspects.

Subject-matter of Economics

Economics has a subject- matter of its own. We can know something about the subject-matter of Economics from its definitions given above. The student already knows about Mathematics, History and Geography. But Economics is new to him and he cannot say what it is about.

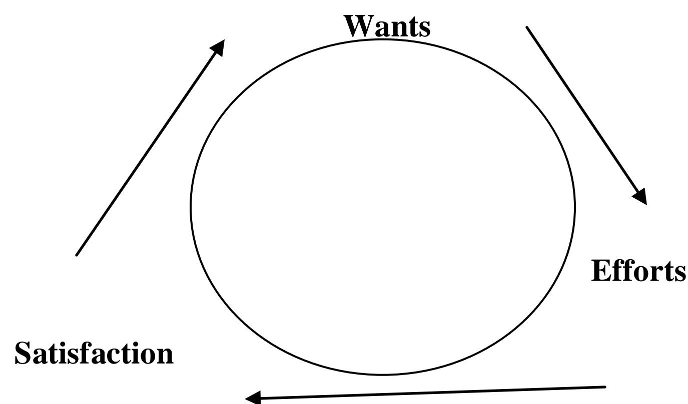
We can say that Economics studies man's life and work, not the whole of it, but only one aspect of it. It does not study how a person is born. How, he grows up and dies. This is the work of another science named Biology. Economics does not study how human body is made up and how it functions. That is the subject of Physiology. Economics does not tell us how a man thinks. It is Psychology which studies man's mind. Economics does not study the human organization like the State. This is the subject of Political Science **Economics only tells us how a man utilises his limited resources for the satisfaction of his unlimited wants**. A man has a limited amount of money and time; but his wants are unlimited. He must so spend the money and time he has that he derives maximum satisfaction. This is the subject-matter of Economics

Economic Activities- If we look around, we see the farmer tilling his field, the workman

working in the factory, the clerk at his desk, the doctor attending to his patients, the teacher teaching his students and so on they are all engaged in what is called economic activity. They earn money to satisfy their wants. It is with this part of man's life that Economics deals.

We may say that when a man is engaged in an economic activity he is busy earning money. But he does not want money for its own sake. He needs it to buy things which satisfy his wants. The purpose of all economic activity is the desire to purchase goods to satisfy human wants. Neither goods nor money is an end in itself. They are needed for the satisfaction of human wants and to promote human welfare.

A man wants food, clothes and shelter. To get these things he must have money. For getting money, he must work or make an effort. Effort leads to satisfaction. Thus, **Wants-Efforts-Satisfaction** sums up the subject-matter of Economics. This circle of economic activity is shown in the adjoining diagram.



In a primitive society, the connection, between wants, efforts and satisfaction is close and direct. A primitive man feels hungry he picks up some fruit, eats it, and is satisfied. But in a modern society things are not so simple and .straight. Here a man produces what he does not consume and consumes that he does not produce. The shoe-maker produces shoes, but he cannot use them all by himself. He sells them for money with which he buys the things he needs. This work of selling what you do not want and buying what you want is called exchange. Today the

process of exchange comes in between wants, efforts and satisfaction.

Nowadays most of the things we need are made in factories. To make them the worker gives his labour, the landlord his land, the capitalist his capital, while the businessman organizes the work of all these. They all get a reward in money. The labourer earns wages, the landlord gets rent, and the capitalist gets interest, while the entrepreneur's reward is profit. Economics studies how these incomes-**wages, rent, interest, and profits-**are determined. The process is called **Distribution.** Like Exchange, Distribution also comes in between efforts and satisfaction in a modem society.

Thus, we can say that the subject-matter of Economics is **Consumption** (i.e., the satisfaction of wants), **Production** (i.e., producing things or creating utilities or making an effort to satisfy our wants), **Exchange** and its mechanism (i.e., money, credit and banking, etc.) and finally **Distribution** (i.e., sharing of all that is produced in the country among workers, landlords, capitalists and organizers). In addition, Economics 8Iso studies Public Finance. Thus it is indeed a very wide subject.

Modern View

The view that is widely accepted today is far more comprehensive. The traditional subject-matter explained above is now regarded as constituting only one part of Economics, viz., **Price Theory** or also called **Micro-Economics.** According to modem approach, the scope or the subject-matter of Economics is not only the price theory but also the **study of the economy as a whole.** We study, for instance, how the income of an economy is generated and how the level of a country's income and employment is determined. In other words, we also study the factors that determined a country's national income, savings, investment, output, employment, general price level, etc. Such a study of the economy as a whole is called Macro-Economics. Hence we study both micro-economics and macro-economics.

More recently, economists have begun to pay special attention to how an economy grows, i.e., how the under-developed countries grow into developed economies and the developed economies grow still further. Economics thus also includes study of **economic growth.**

Conclusion- In sum, the subject-matter of Economics, according to the view held today,

includes **price theory** (or micro-economics), **income and employment theory** (or macro-economics) and **growth theory.** Thus, broadly speaking Economics may be described is a study of the economic system under which men live and work. It deals with decisions regarding the commodities and services to be produced in the economy, how to produce them most economically and how to provide for the growth of the economy.

Economics-a Social Science

We have seen that Economics studies human beings. But it does not study them as isolated individuals living aloof in jungles or in mountain caves. Rather, it studies man living in organized society, exchanging his goods for those of others, influencing them by his actions and being influenced by them in turn. He depends on them, and they on him. Economics is thus a social science and not one dealing with individual isolated human beings. Interest has now almost completely shifted to the economy as a whole, how it grows and develops, the factors that hinder its growth and the measures that would help or accelerate it.

Positive Science or Normative Science?

A positive science explains the 'why' and 'wherefore' of things, i.e., their causes and effects. A normative science, on the other hand, discusses the rightness or wrongness of things, Economists hold different views on this point.

Some economists think that Economics is only a positive science and as such explains why things are **as they are.** It is neutral as regards ends. Others think that it is a normative science and tells us as the things **ought to be.**

Our view is that Economics is both a positive and a normative science. It not only tells us why certain things happen, it also says whether it is the right thing to happen. For example, we know that a few people in the world are very rich while the masses are very poor. Economics should explain not only the causes of this unequal distribution of wealth, but it should also say whether this is good or bad. It might well say that wealth ought to be fairly distributed. Further, it should suggest the methods of doing it

A science or an art?

When a student joins a college, he has to choose between two groups of subjects-Science subjects and Arts subjects. In the former group are included Physics, Chemistry, and Biology, and in the latter History, Civics, Economics, Philosophy, Sanskrit, etc. According to this classification, Economics falls in the Arts group. But this is not a sound classification, and does not help us in deciding whether Economics is a science or an art.

Let us first understand what the terms "science" and "art" really mean. A science is a systematized body of knowledge. A. branch of knowledge systematized when relevant facts have been collected and analysed in a manner that we can "trace the effects back to their causes and project causes forward to their effects." Than it is called a science

In other words, when laws have been discovered explaining facts, it becomes a science. Facts are like beads. But mere beads do not make a necklace. When a thread runs through the beads, it becomes a necklace. The laws or general principles are like this thread and govern the facts of that science. A science lays down general principles which help to explain things and guide us.

The knowledge of Economics has advanced a great deal. It has reached a stage when its facts have been collected and carefully analysed, and 'laws' or general principles explaining facts have been laid down. Thus, the study of Economics has become so thoroughly systematized that it is entitled to be called a science.

But Economics is also an art. An 'art' lays down precepts or formulae to guide people who want to achieve a certain aim. The aim might be the removal of poverty from a country, or the production of more wheat from an acre of land.

Many English economists consider that Economics is a pure science and not an art. They claim that its function is merely to explore and explain and not to help in the solution of practical problems. Yet many others are of the opinion that **Economics is also an art.** Economics does undoubtedly help us in solving many practical problems of the day. It is not a mere theory; it has great practical use. **It is both light-giving and fruit-bearing.**

Hence, **Economics is both a science and an art.**

Conclusion- We may, then, sum up the scope of Economics by saying that it studies man's actions in relation to wealth from the social point of view. It does not merely explore and explain but it also advocates and condemns. It not only investigates facts and discovers truths, but it also prescribes rules of life and passes judgment as to what is right and what is wrong. It is also both an art and a science. The scope of Economics is very wide indeed

(2) Want, goods, wealth, utility, price, value, assets, capital, money, income etc.

Basic concepts- Basic Terms

We propose to explain some terms which are frequently used in Economics. This is essential not only for clear thinking but also for a correct understanding of the language used in books on Economics. The terms used in Economics are also used in the ordinary speech. But in Economics they are used in a sense different from that in which they are used in ordinary speech. We shall make it clear here in what sense they are used in Economics.

Want-"Man is a bundle, of desires." His wants are infinite in variety and number. Same, of his wants are, organic and natural. He must have some food to live, same clothing to caver his body and same sort, of shelter to protect himself against the in clemencies, of weather, and also against his enemies. Without these things man's life would be impassible.

But a civilised man is not satisfied with bare necessaries, of life. Even when the problem, of bare existence has been salved, the struggle, of life remains as keen as ever. The struggle now is far the comforts and jays, of life. As man becomes mare civilised, his wants multiply. He wants better food, fashionable clothing, comfortable lodging, and so on.

All people do not have the same wants. Wants vary from individual to individual. They are relative to, one's social an economic position. They are also the outcome, of, one's education, temperament and tastes. The modern man is the product, of a long process, of evolution which is reflected in his endless and ever-growing wants.

Characteristics of Human Wants

A careful study, of the nature at human wants shows that they have same well marked characteristics. The important ones among these characteristics are below:

1. **Wants are unlimited-** When, one want is satisfied, another come up take its place. The never-ending cycle of wants goes on and on. Man's mind is so made that he is never completely satisfied.

2. Wants are complementary- If we want to write a letter, we must buy a pen as well as ink and paper. The pen alone is not enough

3. Wants are competitive- Not only are our wants complementary, they are also competitive. One commodity competes with another for our choice.

4. Some wants are both complementary and competitive- Machinery competes with labour. A manufacturer can, to some extent, substitute one for the other. But they also go together. Both of them are used in factories. Thus, human wants not only compete, they also complement each other.

5. Wants are alternative- There are several ways of satisfying a particular want. If we feel thirsty, we can have cold drink, 'sharbat' or 'lassi' in summer, and tea coffee or hot milk in winter.

6. Wants vary with time, place and person- Wants are not always the same, nor the same with everyone. Different people want different things and the same man wants different things at different times and in different places.

7. Wants vary in urgency and intensity- All wants are not equally urgent and intense. Some wants are more urgent and intense than others. These are generally satisfied first, while others are postponed.

8. Wants multiply with civilization- As civilisation spreads among peoples their wants also go on increasing. That is why people living in urban areas have more wants than people inhabiting villages.

9. Wants recur- Most of the human wants are of a recurring nature. This applies to most of our routine expenditure, especially on food.

10. Wants change into habits- If a particular want is regularly satisfied, a person becomes used to it and it grows into a habit.

11. Wants are influenced by income, salesmanship and advertisement- We are often induced to buy particular brands by persuasive salesmen or clever advertisement or increased income even though better alternatives may be available

12. Wants are the result of custom or convention- Custom still rules the world. All of us, whether living in villages or towns, are slaves of custom, more or less.

13. Present wants are more important than future wants- It is a human instinct to regard the present wants as being more important than the future wants.

Goods-

Meaning of goods

We know that human wants are the starting point of all economic activity. Man has wants which he must satisfy. There are two things with which he can satisfy these wants-goods and services. Goods mean the commodities that we use, and services refer to the work that a person may do. Services are not something tangible or concrete. The help of a tutor, the advice of a lawyer or a doctor, the work done by railways or domestic servants-these are all services. Goods or commodities, on the other hand, are almost always concrete, material and tangible, .e.g., land, houses, furniture, etc. Goods and services are used to satisfy human wants. **Anything that can satisfy a human want is called a 'goods' in Economics.**

Kinds of Goods

Economic Goods and Free Goods

The most important classification of goods is as **free goods and economic goods.**

Free goods- are those goods that exist in such plenty that you can have as much of them as you like without any payment, e.g., air, sunshine, etc. They are free gifts of nature. Man has not made them nor has man to pay for them to get them.

Economic goods- on the other hand, are those goods which are scarce and can be had only on payment. Most of the things that a man needs to satisfy his wants fall in this group. They are limited in quantity and are man-made things. Payment has to be made in order to get them.

In Economics, we are concerned only with economic goods, for only in their case the question of valuation or payment arises. Economic goods mean wealth and it is with wealth that Economics deals. Thus, there would have been no science of Economics if all goods had been free goods.

This distinction between economic goods and free goods is not permanent-

A good may be a free good today and become an economic good tomorrow or the same thing may be free good under certain conditions and an economic good under others. For instance, air is not a free good in a deep mine; water in a city is an economic good and not a free good, because price has to be paid for it.

As population increases, goods which were free before become economic goods (i.e., goods for which a price is paid) later. Increase in economic goods is synonymous with increase in wealth. But that does not necessarily mean that the people are now better off. This is so because many things, like fuel and water, for which the primitive man had to pay nothing, the modern man cannot get without payment. Even those things which were free goods before have been included in the category of economic goods or wealth and have become scarce. And human welfare is not increased by scarcity. Hence increase in economic goods alone does not necessarily mean increase in economic welfare, because both economic goods and free goods contribute to human welfare.

Consumption Goods and Capital Goods- Goods can also be classified as

Consumption goods and capital goods thus:

Consumption Goods- are those goods which yield satisfaction directly. They are used by the consumers to satisfy their wants directly, e.g., food, clothing, pen, ink, etc. They are also called **Goods of the First Order.**

Capital Goods- are those goods which help us to produce other goods, e.g., tools, machines, etc. They are, also called. **Producers' goods or goods of the second order.** They satisfy our wants only indirectly, because they produce goods which in turn satisfy our wants directly.

Intermediate Goods- In between the consumption goods and capital goods are the intermediate

goods. They are the raw materials used in the production of the final or consumption goods. For instance, in the making of cloth or the clothes that we wear (i.e. the consumption), we need capital goods like textile machinery in a big factory or a handloom in a cottage industry. But we also need cotton or silk or some synthetic fibers of which the cloth is made. This is the intermediate good.

Material and Non-Material Goods- Another classification of goods is between material and non-material goods. The examples of **material goods** are land; buildings, furniture, cash, books, etc.

Non-material goods are various kinds of services- They are not tangible. But some of them are scarce and can be transferred. The goodwill of a business falls in this category. It can be bought and sold.

Transferable and Non-transferable Goods- Most material goods can change their ownership. In such cases, a bodily transfer takes place and the goods may be moved from one place to another. In some cases, however, actual physical transfer cannot take place e.g., in the case of land. In this case, no actual movement is possible, only ownership is changed and this makes them transferable. Hence, goods are called transferable, whether they are physically transferred or their mere ownerships are transferred.

Non-transferable goods- Like skill, ability, intelligence, etc. which is personal qualities cannot be transferred-only then service can be used by others.

Personal and impersonal goods- Personal goods refer to the personal qualities of a person, e.g., his ability and skill. They are non-material and exist inside him. They are, therefore, also called **Internal goods**. They are **what he is** and **not** what he has.

Impersonal goods are those that are not personal. They are external and lay out side a person. They are, therefore, also called **External goods.** They are **what he has,** e.g., land, houses etc.

Private and Public Goods- Private goods are the property of private individuals. e. g. land or buildings owned by them exclusively and not shared with others.

Public goods- are those which are common to all and are owned by society collectively e.g., a

town hall, a college, or a hospital.

Necessaries Comforts and Luxuries- Goods can also be classified as necessaries, comforts and luxuries.

From the above classification, it is clear that the same 'good' can fall in several categories. Land, for instance, is a material good, it is transferable and may also be a private or a public good.

Wealth-

Meaning of Wealth

Wealth is another term used in Economics which requires clear understanding. The term 'Wealth' causes a lot of confusion in the mind of a beginner in the study of Economics. This is due to the fact that 'Wealth' in Economics is used in a sense different from its use in the ordinary speech.

In ordinary language, 'Wealth' conveys an idea of prosperity and abundance; it means riches, property, etc. A man of wealth, as ordinarily understood, is a rich man, i.e., one who is prosperous. But in Economics every man, even the poorest of the poor, possesses some wealth, as we shall see presently. Further, in the ordinary speech, by ‘Wealth’ people mean money. But in Economics money is not the only form of wealth; anything which has value is called wealth in Economics.

In Economics the term 'Wealth' is synonymous with economic goods. Economic goods are scarce and command a price in the market.

Utility-

Meaning of Utility

We have seen that goods satisfy human wants. **This want-satisfying quality in a good is called Utility.** Hence utility means the power to satisfy a human want. In order to find out whether a good possesses utility or not, we have simply to ask ourselves the question: 'Does it satisfy a human want? If so, it has utility, otherwise not. If a person is prepared to pay for it, it

is clear that he thinks that it will satisfy his want. For him such a commodity will possess utility. Utility is that quality in a commodity by virtue of which it is capable of satisfying a human want. Air, water, etc. (free goods) and food, clothes, land, house, cash (economic goods) satisfy people's wants, and as such they possess utility.

Forms of Utility

The main forms of utility are:

(a) Form Utility- By changing the form of an article, we can give it greater utility, e.g., the transformation of a log of wood into a piece of furniture. This is called Form Utility.

(b) Place Utility- Utility can also be increased by transporting a good from one place to another. When timber is brought to the market, it comes to have much greater utility than it had in the forest. That is Place Utility.

(c) Time Utility- By storing a commodity and selling it at a time of scarcity, we can give it greater utility. This is Time Utility.

Price-

Meaning of Price- Value is not the same thing as price. When value is expressed in terms of money, it is called price. In pre-historic times, people did not know the use of money. They exchanged goods for other goods. This system is called barter. In those days, the price of a commodity meant the commodity or commodities for which it could be exchanged. In other words, price and value could be used as synonyms.

In modem times, however, goods are ordinarily exchanged for money. Therefore the price of a commodity today means its money-value, i.e., the price it commands in the market. **'Price' expresses value in terms of money.**

Value-

Meaning of Value

'Value' is another term which has to be frequently used in Economics, but which creates a lot of confusion. In Economics, we do not use it in the same sense as we use it in our -ordinary

speech. We often say education has great value, or that fresh air is very valuable. Here the term 'value' is used in the sense of usefulness. This is **value-in-use** for which economists use the term 'utility'. In Economics, the term 'value' is not used in this sense, that is, in the sense of value -in-use for which we use the term 'utility'.

Economists use the term 'value' in the sense of **value-in-exchange.** Value of a commodity refers to the goods that can be obtained in exchange for it. We cannot exchange fresh air for anything; its value in economic sense is, therefore, zero even though it is otherwise so valuable-nay, indispensable. Rupees, on the other hand, have value because it can be exchanged for something; we may be able to get any things.

The value of a commodity, thus, means the commodities or services that we can get in return for it; it is, in short, its purchasing power in terms of other commodities and services; it is its power of commanding other things in exchange for itself.

Attributes of Value

Three qualifications are thus essential for goods before it can have value:

(a) It must possess utility;

(b) It must be scarce; and

(c) It must be transferable or marketable.

All these three qualities are required together. In the absence of any one of these qualities, a good will have no value at all.

Assets-

Meaning of Assets

Any item of economic value owned by an individual or corporation, especially that which could be converted to cash. Examples are cash, securities, accounts receivable, inventory, office equipment, real estate, a car, and other property.
On a balance sheet, assets are equal to the sum of

- liabilities,

- common stock,
- preferred stock, and
- Retained earnings.

From an accounting perspective, assets are divided into the following categories:

- current assets (cash and other liquid items),
- long-term assets (real estate, plant, equipment),
- prepaid and deferred assets (expenditures for future costs such as insurance, rent, interest), and
- Intangible assets (trademarks, patents, copyrights, goodwill).

Capital-

Meaning of Capital

Capital means not only cash used in business but it also includes tools, machinery and appliances used in production.

Money-

Money income, Real income and National income

Distinction may also be made between money income and real income.

Money income- While income of a person expressed in terms of money per month or year is his money income.

Real income- of a person consists of goods and services that he purchases with his money income. Real income depends on prices. It rises inversely with the price level.

National income- Income from the point of view of the economy as a whole, i.e., national income may be defined as the aggregate factor income (i.e. earnings of labour and property) which arises from the current production of goods and services by the nation's economy. It includes income produced both inside the country and that earned by its nationals abroad.

Saving- A part of the current income is consumed or spent and a part thereof is saved and invested. The excess of income over consumption is the saving made by the people. Saving may be held in the form of cash or a bank balance or in some investment, i.e. in the form of income-

yielding assets.

Investment- means an addition made to the nation's physical stock of capital like the building of new factories, new machines as well as any addition to the stock of finished goods or goods in the pipelines of production. Investment thus includes additions to inventories as well as

Important features of land, labour, capital and organization

Traditional Classification

These factors have been called by economists **Land, Labour, Capital** and

Organisation- (or **Enterprise**) respectively These factors are also called inputs and the production is called **output.**

Land- By land we mean, not merely soil, as is commonly understood, but all the natural resources on land, in water and air available to man. It stands for natural resources.

Labour- Labour means not merely the, work of a coolie or of an unskilled labourer but all type of work, mental and manual undertaken for earning an income. Thus, any type or work undertaken for earning an income is called labour in Economic

Capital- Capital means not only cash used in business but it also includes tools, machinery and appliances used in production.

Organisation- Organisation or enterprise is the work of bringing the above three factors together and making them work harmoniously. This also includes the process of rewarding them for their labour. Thus, it means not merely organising a business but also taking its risk.

The- factors are supplied **by landlords, labourers, capitalists and organisers**

(Or **entrepreneurs**). Their respective incomes are called **rent, wages, interest and profit.**

(3) Theories of demand supply and cost

Demand Theory

Meaning of Demand

In ordinary speech, the word demand is used rather loosely, and it is often confused with desire.

Desire is the wish to have something or to enjoy a service. But **demand** implies more than mere desire. It means that the person is willing and able to pay for the object he desires. A beggar's desire to travel by air from Delhi to Bombay has no significance as he cannot pay for it. On the other hand a **businessman's desire to go to Mumbai by air** is demand, **as he** is able to pay for it and is willing to do so. Demand thus means desire backed by willingness and ability to pay.

Both willingness and ability to pay are essential. If a man is willing to pay but he is unable to pay, his desire will not become demand. In the same manner, if he is able to pay but is not willing to pay, his desire will not be changed into effective demand. In order to change desire into demand it is essential that he should be **both willing and able to pay.**

Besides, demand also signifies a price and a period of time in which demand is to be fulfilled. It is obvious that a person's demand for anything varies with the price at which it is offered. He buys more of it at a lower price and less of it at a higher price. Similarly, his demand varies with the period of time. A family's demand for wheat is much more for a month than for a day.

It may be noted that there is no isolated demand. Things are demanded as part of a system. For instance, a student does not want books alone but also books, stationery, etc. We demand things in groups. The standard of living of a person governs the system of demand.

The following is therefore a good definition of demand:

By demand we mean the various quantities of a given commodity or service which consumers would buy in one market in a given period of time at various prices or at various incomes, or at various prices of related goods. (Bober).

Kinds of demand

Three kinds of demand may be distinguished: (a) price demand (b) income demand and (c) cross demand

Price demand- This demand refers to the various quantities of a commodity or service that a consumer would purchase al a given time in a market a various hypothetical prices. It is assumed that other things such as consumer's income, his tests and prices of related good remain unchanged. The demand of the individual consumer is called **Individual Demand** and the aggregate demand of all the consumers combined for the commodity or service is called **Industry Demand-** The total demand for the product of an individual firm at various prices is known as firm's demand or **Individual Seller's Demand.**

Income demand- Refers to the various quantities of goods and services which would be purchased by the consumer at various levels of income. Here we assume that the price of the commodity or service as well as the prices of related goods and the tastes and desires of consumers does not change. The price demand expresses relationship between prices and quantities and the income demand brings out the relationship between income and quantities demanded for preparing demand schedule of income demand, we write incomes in one column and quantities purchased at these incomes in the second column, Superior goods or high-priced articles command brisk sales when income increases. On the other hand, inferior goods command large sales when incomes are at a lower level.

Cross demand- Cross demand means the Quantities of a good or service which will be purchased with reference to changes In the price not of this good but of other related goods. These goods are either substitutes or complementary goods. A change in price of tea will affect demand for coffee. Similarly, if horses become cheap, demand for carriages may increase. In order to prepare demand schedule of this type of demand, we writ~ prices of one commodity in one column and the quantities purchased of the other commodity in the second column.

Demand schedule- If we write down the different quantities that an individual or a group of individuals would buy at different prices, we get that individual's or that group's demand schedule. Thus, a demand schedule is a table or a chart which shows the quantities of a commodity demanded at different prices in a given period of time.

The following is the **demand schedule of an imaginary consumer** of milk:

Price Rs. per liter	Quantity demanded per day
Rs. per liter	per day
40	Nil
35	0.50
30	1
25	1.50
24	2
18	3
15	4

Market schedule- The above is the demand schedule of a particular individual. But we can also construct a market schedule showing the total quantity of milk demanded at different prices in a market by the whole body of consumers. We can divide in to three classes. (A) with a monthly income up to Rs. 5000 (B)Rs. 7000 (C) above Rs. 7000 we can see how much will each class buy at each price and then total them up

Price per liter	Demanded Class C	Demanded Class B	Demanded Class A	Total Liters
40	1.0	0.50	Nil	1.50
35	1.50	1.0	0.50	3.00
30	2.0	1.50	1.0	4.50
25	2.50	2.0	1.50	6.0
24	3.0	2.50	2.0	7.50

Difficulties in the construction of demand schedule- It is difficult to frame the demand schedule of an individual. It is all hypothetical. An individual cannot positively say how much he

would purchase it the prices were different. Some prices in the schedule are unreal. What is the use of asking an individual how much he would by at these prices? To construct a market schedule is still more difficult. Market schedule is even more hypothetical.

Practical utility of a demand schedule- It is not possible to construct a scientifically accurate demand schedule. But it is true that different quantities are bought at different prices. The demand schedule is useful as follows:

(i) After all businessmen do make an intelligent forecast of the quantity they could dispose of at higher or lower prices. Monopolists sometimes deliberately lower prices to stimulate demand. This would help them to 'forecast profits and to arrange production.

(ii) In order to find out the effect of different rates of taxes on the sale of a commodity, a Finance Minister has to get the help of demand schedules. The calculations may be rough, but they are all the same useful. Imposition of tax is bound to raise prices which would in turn reduce demand.

Substitution effect income effect and price effect

If the price of a commodity rises relatively to other goods, the consumer will buy less or that commodity and buy more of the other goods in place of these particular goods.

This is called **Substitution effect** in Economics. Another reason for buying less of goods whose prices have risen is that raise in prices means a loss of purchasing power. It is as it were that the consumer's income has come down. This is called the **Income effect.** This is, the consumer has become relatively poor or worse off, since his real income (i.e., income in terms of goods) has fallen. When the price of a commodity falls, more of it is demanded and substituted for other commodities and there is income effect too, for the purchaser feels better off when the price falls and is able to buy more. The combination of the substitution effect and income effect is known as the **price effect**.

This is the case with normal or ordinary goods. But if the goods are considered inferior, the effect will be opposite, i.e. less will be purchased even If the price falls. But If the substitution effect is greater than the negative income effect, the law of demand will apply even to inferior goods, i.e. demand will extend when price falls.

Law of demand

We have seen what demand means, and we have also studied the demand schedule. From the demand schedule we know that demand varies with price. We can now formulate the Law of Demand. This law says that demand varies inversely

{in the opposite direction} with price, i.e. if the price rises, demand contracts, and if the price falls, demand extends.. In other words, demand increases with a falling price and decreases with a rising price.

-**At any given time, the demand for a commodity or service at the prevailing price is greater than it would be at a higher price and less than it would be at a lower price.**

-The qualifying phrase **'at any given time'** is very important, for demand is different at different times and under different conditions, even if the price does not alter.

Exceptions to the law of demand

-The law of demand seems to be applicable to all situations concerning a consumer's demand. But there are certain exceptions:

(i) Conspicuous consumption- Where a consumer regards the consumption of a commodity as a mark of distinction, he will go in for a high-price commodity, e.g. diamonds. Such consumers measure the utility of a commodity entirely by its price. Hence more will be purchased when its price goes up, whereas according to the Law of Demand, less is purchased at a higher price than at a lower price.

(ii) Giffen paradox- Sir Robert Giffen observed in the mid-19th century that when the price of bread increased the low-paid workers in Britain spent more on it (Since it was their staple food) and they cut on meat. That is, they substituted bread for meat. This means that the demand for bread increased when its price went up, which is obviously an exception to the law of demand.

(iii) Changes in expectations- When prices are expected to continue rising people in order to avoid paying more in future buy more even though the price has risen.

(iv)Trade Cycles- In times of general economic prosperity people buy more even when the price

goes up, since people's incomes have gone up. Opposite is the case when there is a general depression in the economy.

(v) Different brands- It often happens that different brands of commodities are priced differently. Some persons conscious of their higher status buy more of the higher priced brand than the lower-priced brand, because the former are regarded as status symbols.

(vi) Other miscellaneous situations- If a commodity goes out of fashion, its demand may fall despite its falling prices. **When a shortage of a commodity is feared,** more of it may be purchased even if its price in the market is raising, since producers, traders and consumers all develop a hoarding psychology. Or people may not buy more of a commodity, notwithstanding a fall in its price, simply because they may not be aware of such a fall.

It will however be seen that the cases mentioned above arise under special circumstances while basically the Law of Demand must operate in normal circumstances.

All the above types of exceptional demands are represented by exceptional demand curves, i.e., curves rising upwards instead of sloping downwards

Increase and Decrease and Extension and Contraction of Demand

The law of demand discussed above relates merely to the extension and contraction of demand. **When the demand changes merely because the price has changed it is a case of extension or contraction.** Increase and decrease are different. Let us understand the difference.

Increase and Extension- If a man buys more milk because its price has fallen, it is an extension of demand. But if the demand changes independently of the prices, that is, a man buys more not because the price has fallen but for some other reason, e.g., due to a rise in his income, it will be called an increase of demand.

In sum, Extension of demand means more demand at less price-

Increase in demand means greater demand at the same price or the same quantity demanded at a higher price.

An increase in a consumer's demand signifies that he is prepared to spend a larger amount of

money on a commodity than before on account of some changes in his circumstances, ego increase in his income or increase in the size of his family.

Decrease and Contraction- If a man buys less when the price rises, it is simply a case of **contraction of demand.** But if he buys less irrespective of the price, it means a **decrease in demand.** In the case of a decrease in demand, a consumer may, owing to change in fashion or other circumstances, buy less of a good even when the price remains the same or may continue buying the same quantity as before in spite of a fan in price.

In sum Contraction of demand means less demand at a high price.

Decrease in demand means less demand at the same price or the same quantity

demanded at a lower price.

Following are the factors (other than a change in price) which bring about changes in demand:

1. Change in fashion- When some goods go out of fashion, they will be less in demand, even though they may become cheap.

2. Change in weather- It has the same effect as a change in fashion. Demand changes when the weather changes. A fall in the price of woolen clothes does not increase their demand in summer.

3. Change in the quantity of money in circulation- If the quantity of money in circulation increases, the people will have more purchasing power. Demand will consequently increase. A decrease in the quantity of money similarly works in the opposite direction.

4. Change in population- A change in the size or the composition of population will bring about a change in demand. If the birthrate increases in a country, more toys and perambulators will be demanded; while another country with more old men will demand more walking sticks, false teeth and medicines.

5. Change in real income- Increase in real income means that things are cheap so that with the same money income people are able to buy more goods.

6. Change in habits, tastes and customs- Demand also depends on the tastes habits and customs of a community.

7. Technical progress- Inventions and discoveries bring new things in the market with the result that old things are no longer wanted.

8. Discovery of cheap substitutes- Manufacture of duplicate items has made available a cheap substitute for original items.

9. Advertisement- A clever and persistent campaign of advertisement may create a new type of demand. This is the case with the demand for patent medicines and toilet accessories.

These are some of the factors that bring about a change in demand irrespective of a change in price.

Inter- related demands

We have been discussing demand as if the demand for a commodity stands by itself. Actually this may not be the case. Demand for one commodity may be connected with that for another and often it is.

Joint demand

When several things are demanded for a joint purpose, it is a case of a joint demand. Milk, sugar and tea leaves are wanted for making tea. Bricks, mortar, wood, and the services of carpenters and masons are all needed for building a house. These are cases of joint demand.

Direct and derived demand

In the above example, the demand for the ultimate object, e.g., a house is called **Direct demand,** while the demand for the various kinds of labour and materials which go to make the final product is called **Derived demand.**

Demand for bricks and mortar is derived from the demand for a house. It is really the house that we want; other things are wanted only because we want a house.

Composite demand

The demand for a commodity that can be put to several uses is a composite demand. It is composed of the demand for each of the several uses. Coal can be used for heating, cooking and for running steam engines. Demand for coal is, therefore, composed of its demand for all these uses. It is thus a case of composite demand.

Complementary and competitive demand of goods

Complementary goods are also called **Complements** and competitive goods are called **Substitutes.** Complements are required together, e.g. car and fuel, tea and sugar, pen, ink and paper, bread and butter, and so on. Substitute means either this or that. Examples of substitutes are tea and coffee, train and bus, wheat and rice, and so on.

We find in such cases that the demand for one goods is influenced by the price of another goods. That is, a change in price of goods may raise/lower the demand for another goods. A fall in the price of one goods may either raise the demand for another goods or lower it. In the case of complements, a fall in the price of one goods, say bread will raise the demand for another goods i.e. butter. But, in the case of substitutes, a fall in the price (say of tea) will result in the fall in the demand for another, say coffee.

Supply-

Meaning of supply

Supply means the quantities that a seller is willing and able to sell at different prices. It is obvious that if the price goes up, he will offer more for sale. But if the price goes down, he will be reluctant to sell and will offer to sell less. Supply thus varies with price. Just as we cannot speak of demand without reference to price and time, similarly we cannot speak of supply without reference to price and time. Supply is always at a price. The supply of any good may then be defined **"as a schedule of respective quantities of the good which people are ready to offer for sale at all possible prices."**

Just as demand implies willingness and ability to pay, in the same manner the phrase 'ready to offer for sale' in the definition of supply given above implies both willingness and ability to deliver the goods.

Like demand, supply is also relative to a person, place and time. It would be different in a different place, at a different time and with a different person. When we say that Mohan is willing to supply 100 litters of milk at Rs. 20 per litter, we mean that he will do it in a particular set of circumstances. Any change in these circumstances will bring about a change in the supply.

Inter- related supply-

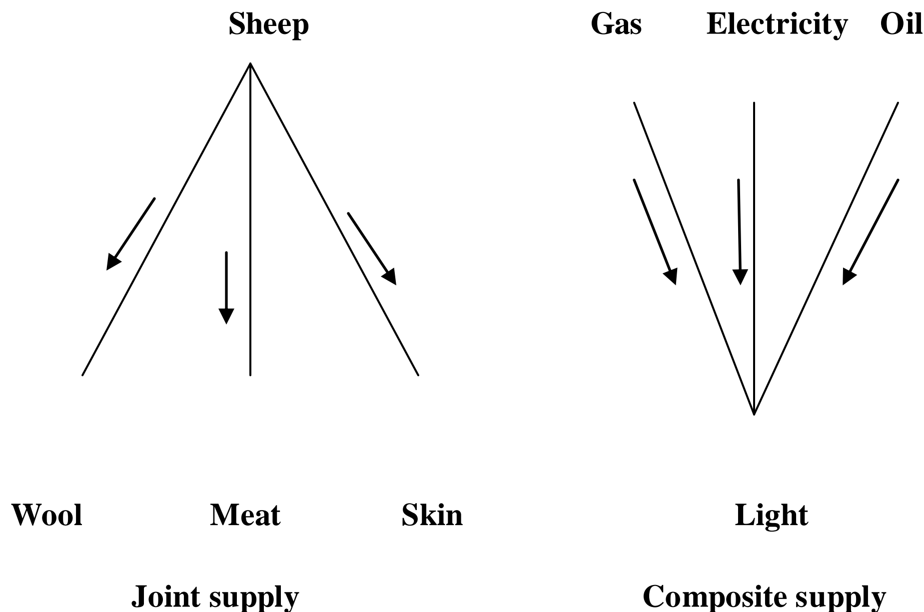
These are some of the factors which bring about changes in the conditions of supply and increase it or decrease it.

Just as there are cases of inter-related demand, e.g., joint demand and composite demand, similarly there are cases of inter-related supply, viz., joint supply and composite supply.

Joint supply-

Joint supply refers to goods supplied or produced jointly. Some commodities have a common origin and are produced in the same process. Examples are wheat and straw, cotton and cotton seed, wool, and mutton, etc. When anyone of them is produced, the other is produced automatically. For instance, when we produce wheat, the straw comes out itself. One is called the main product, e.g. wheat, and the other is called the by-product, e.g., straw.

In some cases, the joint products are produced in nearly fixed proportions, e.g., cotton and cotton seed. Their proportions cannot be varied. In other cases, the proportion can be varied. For example, it has been found that is possible through cross-breeding to breed sheep either for wool or for meat. The quantity of one can be increased at the expense of the other.



Composite supply

When there are different sources of supply of a commodity or service, we say that its supply is composed of all these sources. You can get light from electricity, gas, kerosene oil, candles, etc. All these sources go to make up the supply of light. It is a case of composite supply. Whenever there are substitutes or rival sources of supply, the supply is composite. There is competition among them and the most economical source of supply is tapped first. But they also combine and co-operate to satisfy the same need.

Cost-

Meaning of Cost

An amount that has to be paid or given up in order to get something In business, cost is usually a monetary valuation of (1) effort, (2) material, (3) resources, (4) time and utilities consumed, (5) risks incurred, and (6) opportunity forgone in production and delivery of a good or service. All expenses are costs, but not all costs (such as those incurred in acquisition of an income-generating asset) are expenses.

(4) Theories of production (law of diminishing return, increasing return, constant return and return to scale) Theory of production

Meaning of Production

Form Utility- A carpenter makes a table. He has produced wealth. But he has not produced wood; it was already there. What, then, has he really done? He has changed the form of wood and given it utility which it did not possess before. He has thus created what is called Form Utility. Conversion of cotton into cloth and sugarcane into sugar are some other examples of form utility. In fact, we can notice this type of utility in all manufacturing industries.

Place Utility- If the carpenter sends the table to a big city for sale it will fetch a higher price. Now it acquires additional utility. Its transportation to the city means the creation of Place Utility. Transportation of goods from the places where they are cheap to places where their prices are higher is creating a place utility. It gives the commodity an additional value.

Time Utility- In case the carpenter keeps the tables with him till tables are in greater demand, he may further add to its price. This storing creates time utility. Fruits and vegetables are kept in cold storages to be sold for consumption in the off season. Wheat may be kept in godowns to be sold when prices rise in the lean season. These are some examples of time utility. It is time which gives them more value.

In all these cases, wealth has been produced, but not matter. Just as man cannot destroy matter, so he cannot create matter. In the above cases he has simply created utilities.

Thus, there are three types of utilities- (i) Form utility, (ii) Place utility and (iii)Time Utility.

In the examples cited above, utilities have been created and physical goods or wealth produced. However, this may not always be the case. A utility may be created which cannot be sold in the market. For example, a tube of oxygen will find no market in the plains as there is abundance of it in the air. The provision of such utility-and oxygen has a big utility-cannot be considered production A thing may possess utility; but it may have no value, e.g; air Production, in Economics means production of wealth or value, and not merely utility.

Thus, Production is best defined as the creation or addition of value or on wealth. It may consist not only of goods but also of the services such as of doctors, teachers, etc. Production, In short, does not mean creation of all utilities, but only such utilities as have value-in-exchange.

From the above, it is clear that the act of production is not complete till the commodity reaches the hands of the consumers. A table cannot be considered as 'produced' just when it has been made. It must pass through various agencies and reach the final consumer before it can be so considered.

In Economics, we are not concerned with the technical processes of production; we do not study how cloth is actually woven. We do not learn the art of making it. That is the work of spinners, weavers, and dyers. The student of Economics has simply to note the various stages through which cotton passes-ginning, carding, spinning, weaving, bleaching, etc.-till it reaches the hands of the final consumer. We are concerned with economic aspect, i.e., cost, price, profit, etc., and not the technical aspect.

Factors Affecting Production

There are several factors which go to determine the volume of production in a country. They are:

(i) Natural factors- The amount and nature of production in a country depends on its climate, nature of the soil, rain fall, etc. Production is diminished by natural calamities like earthquakes, floods, droughts and hailstorms.

(ii) Political factors- The form and character of government have a great deal to do with the volume of production in a country. In India, the Government has brought about tremendous increase in production through planning.

(iii) Technical progress- Production largely depends on the state of scientific knowledge and technical progress in the country. Discovery of new materials new processes and new machines is bound to increase the volume of production. This is what is happening in India at present.

(iv) Development of credit and banking and means of transport and communication- In the absence of a sound banking system and efficient and cheap mean of transport and communication, production is bound to suffer. These are the prime needs of a country if production is to be increased. They are known as infrastructure.

(v) Character of the people- inhabiting a country also exerts a powerful influence on the nature and volume of its production. Hard working, educated and disciplined people can always produce relatively more and better goods than those who do not possess such qualities.

Economic principles applied to farm management

Why use economic principles?

A farmer without knowledge of economic principles is handicapped to reach his goal of profit maximization. The principles guide him in the setting of goals of profit maximization. The principles guide him in the setting of goals and lying of plans on the basis of optimum resource allocation, resource substitution and enterprise combination. They facilitate his task in finding out the causes of the disparity between actual and desired results and make him understand where he is, why he is there and what opportunities are there. They sharpen his decision-making ability and specify the direction in which he should go to attain the twin objectives of profit maximization and maximizing farm family satisfaction.

The outpouring of new technological information is making the farm problems increasingly

challenging and providing attractive opportunities for maximizing profit.

Hence, the application of economic principles to farming is important for successful farm management.

Let us now discuss the following economic principles. Each principle, in general, is applicable to all the sections of farm management, as there is no separate principle or law for each component part of farm business.

1. The law of diminishing returns
2. The Law of equi - marginal returns
3. The law of opportunity cost
4. The law of substitution
5. The law of comparative advantage
6. The principle of combining enterprises
7. Cost concepts and principles

Laws of returns

There are three laws of returns, namely, (i) Law of increasing returns, (ii) Law of constant returns and (iii) Law of decreasing returns. According to the marginal returns that are increasing, constant and falling respectively.

Table – 2

Proportion of returns

Units of X Input	Total Y Output	Average Y/X Product	Marginal Δ Y / Δ X Product	Proportionate Increase	Law Returns
1	8	8	8		
2	20	10	12	More	Increasing
3	36	12	16		
4	52	13	16	Equal	Constant
5	60	12	8		
6	66	11	6	Less	Decreasing

Table - 2 shows that the marginal product decreases faster than the average product.

1. Total product (TP) - It is the amount of product produced by different quantities of the variable input.

2. Average product (AP) - It is the total product divided by the number of units of the variable input used to produce that product.

Suppose TP = Y and the variable input = X

$$AP = Y / X$$

3. Marginal product (MP) - It is the quantity which an added unit of the variable input adds to the total product.

$$MP = \Delta Y / \Delta X$$

A connection between physical and economic

1. The law of diminishing returns

The law of diminishing returns is a powerful physical law that has its origin

in scarcity. Broadly speaking, the law is a generalization based on experience that the use of increased inputs leads to less than proportionate increase in output.

"An increase in the capital and labour employed in the cultivation of land causes, in general, a less than proportionate increase in the amount of produce raised unless it happens to coincide with an improvement in the art of agriculture".

-- *Marshall*

"The law of diminishing returns, as in usually formulated, states that with fixed amount of any factor of production, successive increases in the amount of other factors will, after a point, yields a diminishing increment of output".

--J. *Robinson*

With the conditions given in the definitions, we may interpret the law as of diminishing marginal productivity.

How would farm production behave in the absence of the law of diminishing returns?

If this law was not true, a farmer could multiple his variable inputs on a fixed land area and multiplies his produce on the same area to feed his whole village. Similarly, a cow as a fixed resource would supply milk to the whole village, if every addition to the feeding stuff increased the weight and milk capacity at a steady rate. The fact is that the extent to which yield per hectare or per cow can be pushed revolves around the law of diminishing returns.

Can the operation of the law of diminishing returns be suspended?

The answer is "Yes", but for a brief period under certain conditions. The use of modern variable inputs to the fixed land area and increase the yield 4-5 times as much as the traditional. In this way a farmer, for a time, can work under the law of increasing returns, i.e., additions to his inputs yield a more than proportionate increase in produce. But soon after the law of diminishing returns asserts itself. Similarly, a half-starved buffalo may respond with constant returns or increasing returns, if the quality and quantity of here ration is brought to the standard, but after some time there will be diminishing increments of mild, the law of diminishing returns remained suspended unto the third unit of the input, thereafter successive increments of the doses of the input conformed to the law of diminishing returns, other things remaining the same.

Scope of the Law of Diminishing Returns

"The law is as universal as the law of life itself". Wicks teed

It is of basic importance to the farmer in decision making on

(i) The level to which he can push production per hectare or per cow.

(ii) The level of application of fertilizer, the number of ploughings, the rates of seeding, the amount of irrigation water and the amount of feed per animal.

(iii) The proportioning of inputs to chose in production.

(iv) The area to operate efficiently.

(v) It is important in price-fixing. If the law is in operation, the product fetches higher

price because of increasing cost of production per unit.

(vi) When the law is in operation in the production of those products whose demand is elastic, the law limits the volume of output.

Limitations of the law

1. It is a technical law relating to physical relationship between one variable input and output.
2. It comes into operation after a certain stage has been reached.
3. If the units of labour and capital applied to land is so meager that the land resource is not properly utilised, the law does not operate.
4. If the units of factors of production on the initial stage are inefficient and later efficient units are employed, the law does not come into picture.
5. As pointed by Marshall, the law operates in a static condition. With the use of modern technology, the law is held back.
6. The law has nothing to do with profits.

2. The Law of equi - marginal returns

A further illustration of the law of diminishing returns can be explained by the law of equi-marginal returns which is concerned with the allocation of the same amount of a limited resource among different enterprises. The law states that profits are maximized by using a resource in such a way that the marginal returns from that resource are equal in all cases.

Table

Total physical product (TPP) **and marginal physical product** (MPP)

Units of Nitrogen (each unit of 40 kg)	TPP		MPP	
	Y1 Qtl/ha	Y2 Qtl/ha	Δ Y1 Qtl/ha	Δ Y2 Qtl/ha
0	20	21		
1	40	44	20	23
2	**50**	56	**10**	12
3	59	**66**	9	**10**
4	63	70	4	4
5	60	68	- 3	-2

Example - Let us assume in Table - 4 that a farmer has 200 kg of nitrogen with him for application to two Y1 and Y2 HYV of wheat whose N requirements are 120 kg and 140 kg per hectare respectively.

By using 2 x 40 = 80 kg on Y1 and 3 x 40 = 120 kg on Y2 we find that their marginal physical products are equated. Hence we get the maximum of 116 Qtl.

But we are interested more in economic returns. As such the physical returns should be converted into rupees and then see that the return of the last rupee in each use is equal in order to maximize profit irrigation water, hired labour, pesticides etc. are examples of variable costs.

The marginal returns are equal. But each enterprise is getting less input in comparison to added cost added return principle.

Example

A farmer has Rs. 3000 and wants to grow sugarcane, wheat and cotton that are suitable for his farm situation. What amount of money should be spent on each enterprise to obtain highest profit?

Table -

Addition to income from the marginal amount or Rs. 500

Amount of money spent Rs.	Sugarcane Rs.	Wheat Rs.	Cotton Rs.
500	800	750	**650**
1000	700	**650**	560
1500	**650**	580	550
2000	640	540	510
2500	630	520	505
3000	605	510	500
Total Returns	4025	3550	3275
Net Profit	1025	550	275
Average Return per Rupee at Rs. 3000	1.34	1.18	1.09

What inferences do you draw from table –?

Should a farmer follow the law of average returns or equi-marginal returns? If he goes by the average returns, he gets a net profit of Rs. 1025/on sugarcane. On the other hand, if he is guided by the law of equi-marginal returns where the marginal returns in each direction of his investment on the three crops are equalized, he gets a net profit of Rs. 1200/- Therefore of his

investment, he should spend Rs. 1500/- on sugarcane, Rs. 1000/- on wheat and Rs. 500 on cotton.

What is the practical utility of the law of equi-marginal returns?

(i) It guides the farmer to plan his budget for the preparation of his cropping scheme and fitting therein his livestock programme.

(ii) It enables him to determine enterprise relationship complementary or competitive

(iii) It provides guidance to the adoption of diversified or specialised farming, as there is a profitable limit for each enterprise as well as most profitable enterprise for each farm.

3. The law of opportunity cost

Underlying the concept of equi-marginal returns is the idea of opportunity cost or alternative cost. An opportunity cost is the earning from the next best alternative sacrificed.

Example - If a pair of bullock labour earns Rs. 20 per day on ploughing, but it can also earn Rs. 25 per day in the alternative employment of carting, opportunity cost of ploughing is Rs. 25 per day i.e., the value of the bullock labour in its best alternative use.

Under subsistence type of farming, the concept of opportunity cost can be applied to the production of cash crops. But the alternative earnings (opportunity cost) can only be determined by projected cash outlay cost and net returns.

Cost of production and opportunity cost

The following example will show that the cost of production of a crop is the value of the foregone alternative crop that the resources used in its production could have produced.

Methods of calculating opportunity cost

Gross Income Basis - When costs of production are equal

Net Income Basis - When costs of production are not equal

Table

Example 1. (a) Gross income basis, when costs are equal

Enterprise	Gross Income Rs.	Cost of Production Rs.	Net Income Rs.
Tobacco 12 Qtl. @ Rs. 300	3600	1000	2600
Potato 140 Qtl. @ Rs. 40	5600	1000	4600

The opportunity cost of growing tobacco is the gross income of Rs. 5600 hac. was sacrificed by not producing potato.

Table -

Example 1. (b) Net income basis, when costs are unequal

Income	Tobacco Rs.	Potato Rs.	Wheat(Mexican) Rs.
Gross Income	3600	5600	7000
Cost of Production	1000	1000	1800
Income	2600	4600	5200

The opportunity cost of growing potato is the net income of Rs. 5200 which was sacrificed by not growing wheat.

4. The law of substitution

The tendency that operates through the whole field of economics - production exchange and consumption - is to replace the less efficient by the more efficient agent law states:

"When more than one means of producing a given result is known an able, the least costly will be selected."

It is the operation of this law that when the wages of labourers go high, labour is

replaced by capital to a certain extent. Rather to pay high wages to harvesting wheat crop, farmers, for example, tend to substitute labourers by a bullock n reaper. In the same manner, replacement of capital by labour ($\Delta C / \Delta L$) is effective cost of machine is very high.

5. The law of comparative advantage

It is evident from the fact that farmers try to produce those commodities that maximize their net income. They normally include in their cropping scheme as large an area as possible of the most profitable crops for 'the area and for their particular farms. Hence, the determination of type of farming is based upon the principle of comparative advantage.

The concept of comparative advantage is associated with (i) resource endowment, (ii) resource productivity and (iii) cost of production of enterprises. If there are equal differences in costs, the comparative advantage is equal. In such a situation, the consideration of specialization and diversification does not arise.

Types of advantages - On the maximum net return per hectare basis, there are two types of advantages:

(i) Absolute advantage

(ii) Comparative advantage

How does the law direct the farmer in farming?

The law of comparative advantage directs a farmer in the selection of those crop and livestock enterprises in the production of which available resources have the greatest relative and not absolute advantage. Thus, fruit and vegetable farming near the cities, sugarcane farming around the sugar factories, paddy farming in the low lying humid region and sheep farming in the hills are outcome of the operation of this principle. The specialised or diversified farming depends largely on the principle of comparative advantage.

6. The principle of combining enterprises

The principle of combining enterprises requires a prior study of the nature of relationship between enterprises. First consider the nature of relationships between enterprises. If the relationship is found to be complementary, efforts should be made to arrange resources for increasing the area of complementarities, as complementary relationship implies an increase in both the enterprises.

7. Cost concepts and principles

The term cost generally refers to expenses on goods and productive services.

Costs are classified into two major categories: (i) fixed costs (or overhead costs),

(ii) Variable cost (or prime costs). These two costs when added are called total cost.

Different types of cost per unit -

1. Fixed cost (F.C.) - These costs refer to the value of services from fixed resources and as such are overhead costs. Since, they are not the functions of output; they are the same at all levels of production. Rent, interest, depreciation, taxes and wages of permanent labour constitute fixed cost.

2. Variable cost (V.C.) - These costs are related to the outlays on variable resources that are used up during the production process. Since these costs are the function of output they vary with the quantity of production. Expenditures on feed, fodder medicine water, hired labour, pesticides etc are examples of variable costs.

3. Total cost - These costs are the sum of total fixed costs and total variable costs. The total cost stands even when production is zero. (TC) = FC + VC

4. Average total cost – It refers to the average of all costs (fixed plus variable) per unit of output. Average cost (AC) = TC/Y (Y= output)

5. Marginal cost - Marginal cost (MC) is the change in cost associated with an increase of one unit of output. Marginal cost (MC) = $\triangle VC / \triangle Y$

6. Average fixed cost - Average fixed cost is a fixed cost per unit of output. Since the total fixed cost is the same at all the levels of production, the average fixed cost falls continually at a decreasing rate as more output is produced. It is because the fixed cost is divided by increasingly large numbers as output increases. (AFC)=FC/Y

7. Average variable cost - The average variable cost (AVC) refers to total variable cost per unit of output. (AVC)=VC/Y

(5) (a) Concept of market: market, market structure and classification of markets. (b) Market price and normal price, price determination under perfect competition in short and long run. (c) Marketing functions: meaning and their classification (packaging, transportation, grading, standardization, storage and warehousing, processing and value addition, buying and selling, market information, financing, risk bearing, minimization of risks (speculation and hedging). (d) Marketing agencies, institutions and channels for livestock and

(a) Market: Concept, Structure and Classification of Market

In simple terms, market refers to a physical place where goods and services are exchanged between buyers and sellers at a particular price.

However, in economic sense, market does not require a physical location or personal contact between buyers and sellers for the transaction of a product.

"Economists understand the term market not any particular marketplace in which things are bought and sold but the whole of any region in which buyers and sellers are in such free intercourse with one another that the price of the same goods tends to equality easily and quickly" – *Cournot.*

In economics, market is defined as a set of buyers and sellers who are geographically separated from each other, but are still able to communicate to finalize the transaction of a product. The market for a product can be local, regional, national, or international.

Concept of Market-

In general terms, the word market is associated with a place where transaction occurs between sellers and buyers. It is defined as an area where a large number of shops sell a particular product. For example,Dairy market at Pariat in jabalpur is a whole sale& retail market of milk & milk products.

Structure of market-

A market can have a number of interconnected characteristics, including level of competition, number of sellers and buyers, type of products, and barriers to entry and exit. These interlinked characteristics are combined to form a market structure. Among various characteristics of a market, the level and nature of competition contribute a significant part in the classification of market structure.

Depending on the degree and type of competition, market structures can be grouped into three main categories, namely, purely competitive market, perfectly competitive market, and imperfectly competitive market. A purely competitive market is one which is characterized by a large number of independent sellers and buyers dealing in standardized products.

A perfectly competitive market is a wider term than a purely competitive market. In a perfectly competitive market, a large number of buyers and sellers are involved in the transaction of homogenous products. In this type of market, buyers and sellers are fully aware about the prices of products.

Therefore, the market price of a product is fixed in a perfectly competitive market. However, this type of market structure cannot exist in the real world. On the other hand, an imperfectly competitive market is defined as a market in which buyers and sellers deal in differentiated products. Moreover, in an imperfectly competitive market, sellers have the power of influencing the market price of products.

Classification of market

Market can be classified on different basis. There are different types of markets on the basis of geographical area, time, business volume, nature of products, consumption, competition, seller's situation, and nature of transaction etc. as follows

1. Classification of market on the basis of geographical area-

Market can be classified in local, regional, national and international level on the basis of geographical area:

i. Local market- The market limited to a certain place of a country is called local market. Perishable consumer products such as milk, vegetables, fruits, etc. are sold and bought in local markets.

ii. Regional market- The market which is not limited to a certain place but expanded in regional level is called regional market. Mostly, food grains such as wheat, paddy, maize, millet, sugar, oil etc.

iii. National market- If buying and selling of some products is done in the whole nation, this is called national market. The products such as clothes, steel, cement, iron, tea, coffee, soap, cigarette, etc are bought and sold nationwide.

iv. International or global market- Market cannot be limited to any geographical border of any country. If the goods produced in a country are sold in different countries, this is called international market. Today, not any country of the world is self-dependent. All the countries are exporting the goods produced in other countries. The market of some goods such as gold, silver, tea, clothes, machines and machinery, medicines etc. has spread the world over.

2. Classification of market on the basis of time

On the basis of time, market can be divided in very short-term, short-term, long term and very long-term market.

i. Very short-term market- The market where shortly perishable goods are sold is called very short-term market. The market of milk, fish, meat, fruits and other perishable goods is called

very short-term market. The price of short goods is determined according to the pressure of demand. When the demand for such goods is high, price rises and when demand declines, the price falls down. If the supply is low and the demand is high, the price rises higher. In such market supply cannot be increased.

ii. Short-term market- In the short term market, supply of products can be increased using the maximum capacity of installed machines of the firm. The goods cannot be produced according to the demand for adjustment of supply by expanding or changing the existing machines and equipment. In short-term market, price of the goods is determined on the basis of interaction between demand and supply. But, as the supply cannot meet the demand, demand affects price determination in short-term market.

iii. Long-term market- In long-term market, adequate time can be found for supply of products according to demand. New machines and equipment can be installed for additional production to meet demand. As supply can be decreased or increased according to demand situation, price is determined by interaction between demand and supply in long-term market. Market of durable products is long-term market.

iv. Very long-term market or secular market- In secular market, produces can get adequate time to use new technology in production process and bring new changes in products. They become able to produce and supply goods according to changed needs, interest, fashion etc. of customers. Market research becomes helpful in doing so.

3**. Classification of market on the basis of volume of business-** On the basis of volume of business, type and size, market can be classified in wholesale market and retail market.

i. Wholesale market- If a large quantity of products are purchased from producers and sold to different retailers, this is called wholesale market. In wholesale market, the products are not sold directly to ultimate consumers. But, if consumers want to buy in large quantity, they can buy from wholesaler.

ii Retail market- The market that sells small quantity of products directly to ultimate consumers is called retail market.

4. Classification of market on the basis of nature of product

On the basis of nature of product, market can be classified in two types as follows:

i. Commodity market- The market where consumer and industrial commodities like clothes, rice, machines, equipment, tea, soap, fruits, vegetables etc. are bought or sold is called commodity market. In some market only certain special commodities are bought and sold and in some other different consumer commodities are bought and sold.

ii. Financial market- The market and financial instruments is called financial market. In such market, money, shares, debentures, treasury bills, commercial papers, security exchanges, loan giving or taking etc are dealt. Dealing of short term fund is called money market and dealing of long-term fund is called capital market.

5. Classification of market on the basis of consumption

On the basis of consumption of products, market can be divided as follows:

i. Consumer market- The market of products, which the people buy for consumption, is called consumer market. The customers buy consumer goods, luxury goods etc. for daily consumption or meeting their daily needs from such market.

ii. Industrial market- Generally, raw materials, machines and equipment, machine parts are dealt in industrial market. Domestic consumer goods are produced using them.

6. Classification of market on the basis of competition

On the basis of competition, market can be classified into monopoly market, perfect market and imperfect market.

i. Monopoly market- If there is full control of producer over market, then such market is called monopoly market. In such market, the producer determines price of his products in his own will. In such market, only one producer or seller controls market. In practice, the producer or seller can supply products or achieve monopoly on price only in small or limited area, but in wide area it becomes impossible.

ii. Perfect market- The market where the number of buyers and sellers is large, homogeneous of products are bought and sold, same price of similar type products is determined from free interaction between demand and supply is called perfect market. Perfect competition takes between consumers and producers or buyers and sellers, but in practice perfect market can be rarely found.

iii. Imperfect market- The market where there is no perfect competition between buyers and seller is called imperfect market. In this type of market, customers are affected by product discrimination. Post-sale services, packaging, price, nearness of market, credit facility, discount etc make product discrimination. Customers can buy same types of products from different sellers according to their desires and comfort. In practice, mostly products are bought and sold in imperfect market.

7. Classification of market on the basis of seller's position

On the basis of seller's position, market can be divided into primary market, secondary market and terminal market.

i. Primary market- In primary market, primary goods are bought and sold. Producers sell primary goods such as agricultural products, food grains, livestock, raw materials etc. to wholesalers or commission agents in such market.

ii. Secondary market- Primary goods are bought from producers and sold to retailers in secondary market. Generally, wholesalers buy secondary products and sell them to retailers.

iii. Terminal market- In this type of market, retailers sell products to final consumers.

8. Classification of market on the basis of nature of transaction

On the basis of nature of transaction, market can be classified into spot market and future market.

i. Spot market- The market where delivery or handling over of the good is made immediately after sales is called spot market. In such market, price of product is paid immediately at the spot and ownership of the product is transferred to buyer at the same time.

ii. Future market- In this type of market contract is signed for sale of products in future, but no delivery of product is made. In this market, buyer and seller sign a contract for buying and selling products at certain rate of price or on condition to determine the price in future.

9. Classification of market on the basis of control

On the basis of control, law, rules and regulations, market can be classified into regulated market and Non-regulated market.

i. Regulated market- If trade association, municipality or government controls buying, selling, price of products etc. it is called regulated market. Such market must follow the established rules, regulations and legal process and provisions. Otherwise, the businessmen are fined or punished.

ii. Non-regulated market- If a market is freely functioning and is not under control of any government body or any organization, it is called non-regulated market. In such market, price is determined through interaction between demand and supply of products and buying and selling takes place. This market has not to follow any rules, regulations and legal provisions.

Technical Term

Marketable Surplus-It is the residual product available with the farmer after meeting his family and farm needs. It is calculated as:

Marketing Surplus = (Total production) - (produce withheld for family consumption. Wage payment in kind, social and religious functions, cattle feed and seeds for sowing).

Marketed Surplus- It is the actual quantity of produce sold according to the new concept. It consists of the marketable surplus distress or forced sale made by small and marginal farmers. It may be more, equal or less than marketable surplus depending upon the quantity sold as distress sale and the quantity of the marketable surplus actually brought to the market.

Marketing Costs - These include all the marketing charges from local assembling to retailing in the marketing process. Marketing costs limit the income of the farmers, affect the cost of living of the consumers and define the margins and profits of the marketing agencies.

The seven steps of livestock marketing

1. Estimate costs

The first step involves accurately estimating costs of production and cash flow needs. This step is listed first because of its importance. While it can be done at any time, it is best to do this step as early as possible.

By estimating both production costs and cash flow requirements, you can decide what type of animal to produce and when it will have to be sold to meet payment schedules. These estimates, along with price forecasts, should be used to determine how the animal will be marketed.

Knowing past production costs and future price forecasts can also help determine when to retain female stock for expansion or when to cull more heavily. Production cost estimates and breakeven calculations are critical in setting a series of target prices that should be watched for in the changing market.

2. Gather information, including market outlook

Following market trends and projected livestock prices helps you decide what to produce to bring the greatest net returns. For example, deciding whether to sell as weaned calves, yearlings or slaughter cattle depends upon the market outlook for each of these animals. Income tax considerations are also a factor in timing of sales.

3. Know your product

The quality and type of livestock for sale must be known before you can seriously evaluate the different pricing and delivery alternatives. By knowing what you have for sale, you can contact interested buyers and, if there are premiums in the market for livestock with specific characteristics, you can then capitalize on them.

Knowing your product also involves presenting it favorably. Sorting animals into lots of similar size and weight will make them more attractive to buyers. Selling clean and healthy animals assures buyers that they are paying for a quality product.

4. Set several target prices

Set target prices by knowing production costs and what the market is paying or is expected to pay. The level and timing of these targets should be set based on outlook information, cost of production figures and cash flow needs rather than expected profit levels. The advantage of setting several target prices rather than just one price is that it gives you flexibility to respond to

changing market trends. Staying in touch with the market is crucial when trying to achieve a target price.

5. Evaluate pricing and delivery alternatives

Evaluate all available alternatives for pricing and delivering livestock. Each alternative has specific features that may make it more suitable for you than another one.

When pricing livestock, there are several choices available. A forward contract offers you the opportunity to lock in a price for the livestock ahead of an expected sale date. Other livestock pricing alternatives include open bids at auction markets, producer or breed association sales, video auctions, electronic auctions, direct sales to packers, sales to livestock order buyers or using the futures or options market for a hedging strategy. As a pricing alternative is considered, keep the target prices in mind.

For each of the market delivery alternatives, there are associated pricing methods to consider. For example, a pricing method may determine whether an animal is sold live or rail graded, and whether it is sold with a pencil shrink or not. All pricing agreements will have a direct influence on the final returns.

When evaluating marketing alternatives, keep in mind how the animals will be delivered to the buyer and if this delivery method will influence the settlement price. Transportation considerations include both the costs of the trucking and the costs of lost quality or weight of the animals. These factors should be kept in mind as you decide how and where to price the livestock.

Pricing and delivery decisions are typically made together when selling. The pricing decision will sometimes dictate what the delivery method will be. Some marketing alternatives enable both pricing and delivery factors to be negotiated when reaching a settlement price with a buyer. By knowing production costs, cash flow needs and current market conditions, you can determine if the price being negotiated is suitable for your needs and is a reasonable price for current conditions.

6. Stick to your plan

A livestock marketing plan involves all the steps listed above. By executing these steps, you will have a better understanding of how your business is functioning. Have confidence to stick to your plan as you follow the market.

7. Evaluate your plan

All plans must be evaluated to determine what worked and what can be improved upon. By looking back on livestock sales and how the returns matched the needs of the business, you will continue to learn about what factors influence the operation. This learning process will provide opportunity for future growth.

(b) Market price and normal price, price determination under perfect competition in short and long run.

What is 'Market Price'

The market price is the current price at which an asset or service can be bought or sold. Economic theory contends that the market price converges at a point where the forces of supply and demand meet. Shocks to either the supply side and/or demand side can cause the market price for a good or service to be re-evaluated.

Normal Price (Under Perfect Competition)

According to Professor Marshall, Normal or Natural Price of a commodity is that which economic forces would period normal price as Sub-Normal Price. Therefore, the normal price has been bifurcated into:

a. Short-Period Normal Price

b. Long-Period Normal Price

Price determination under perfect competition can be analyzed into three periods:

i. Very Short Period:

Refers to a time period in which quantity supplied of a product cannot be increased with increase in its demand.

In simple terms, in very short period of time, the supply of a product is fixed. For example, a dairy has 200 liters of milk at a particular time.

After an hour, a customer requires 400 liters of milk. In such a case, the dairy cannot supply 200 liters of more milk in an hour and can only supply 200 liters of milk. Therefore, the supply is fixed 200 liters of milk, which is in the given example. The price determined in very short period is known as market price.

ii. Short Period:
Refers to a time period in which the level of supply of a particular product can be increased, but only as per the production capacity of an organization. For example, an organization can produce 500 Kg. meats in a day. This is the maximum production capacity of the organization.

Suppose the demand of meat increases to 1500 Kg. per day for three days. In such a scenario, the organization cannot purchase new animals big slaughter house or hire more labor in three days to meet the additional demand. Thus, the supply is fixed even in short period and the price determined in this period is known as sub-normal price.

iii. Long Period:
Refers to a period in which the supply of a product can be increased or decreased with the changing level of demand. In this period, organizations can install new machines or hire more labor to meet the supply requirements.

Generally, in the long period, demand is determined by change in the size of population and change in customer's tastes and preferences.' On the other hand, organizations can reduce production level if there is decrease in demand. Therefore, it can be said that in the long period, the price of a product is influenced by supply. The price in the long period is called normal price.

(c) Marketing functions: meaning and their classification (packaging, transportation, grading, standardization, storage and warehousing, processing and value addition, buying and selling, market information, financing, risk bearing, minimization of risks (speculation and hedging).

Marketing functions-

Meaning of marketing functions- Marketing is related to the exchange of goods and services. Through its medium the goods and services are brought to the place of consumption. This

satisfies the needs of the customers. The following activities are undertaken in respect of the exchange of goods and services:

Marketing functions and their classification-

1. packaging- Packaging aims at avoiding breakage, damage, destruction, etc., of the goods during transit and storage. Packaging facilitates handling, lifting, conveying of the goods. Many a time, customers demand goods in different quantities. It necessitates special packaging. Packing material includes bottles, canister, plastic bags, tin or wooden boxes, jute bags etc.

Label is a slip which is found on the product itself or on the package providing all the information regarding the product and its producer. This can either be in the form of a cover or a seal.

For example, the name of the medicine on its bottle along with the manufacturer's name, the formula used for making the medicine, date of manufacturing, expiry date, batch no., price etc., are printed on the slip thereby giving all the information regarding the medicine to the consumer. The slip carrying all these is details called Label and the process of preparing it as Labelling.

2. Transportation- Production, sale and consumption-all the three activities need not be at one place. Had it been so, transportation of goods for physical distribution would have become irrelevant. But generally it is not possible. Production is carried out at one place, sale at another place and consumption at yet another place.
Transport facility is needed for the produced goods to reach the hands of consumers. So the enterprise must have an easy access to means of transportation.

Mostly we see on the road side's private vehicles belonging to Pepsi, Coca Cola, LML, Britannia, etc. These private carriers are the living examples of transportation function of marketing. Place utility is thus created by transportation activity.

3. Grading and standardization- Standardisation refers to determining of standard regarding size, quality, design, weight, colour, raw material to be used, etc., in respect of a particular product. By doing so, it is ascertained that the given product will have some peculiarities.

This way, sale is made possible on the basis of samples. Mostly, it is the practice that the traders look at the samples and place purchase order for a large quantity of the product concerned. The basis of it is that goods supplied conform to the same standard as shown in the sample.

Products having the same characteristics (or standard) are placed in a given category or grade. This placing is called grading. For example, a company produces commodity – X, having three

grades, namely A’. ‘B’ and ‘C’, representing three levels of quality; best, medium and ordinary respectively.

Customers who want best quality will be shown ‘A’ grade product. This way, the customer will have no doubt in his mind that a low grade product has been palmed off to him. Grading, therefore, makes sale-purchase easy. Grading process is mostly used in case of agricultural products like food grains, cotton, tobacco, apples, mangoes, etc.

4. Storage and warehousing- There is a time-lag between the purchase or production of goods and their sale. It is very essential to store the goods at a safe place during this time-interval. Godowns are used for this purpose. Keeping of goods in godowns till the same are sold is called storage.
For the marketing manager storage is an important function. Any negligence on his part may damage the entire stock. Time utility is thus created by storage activity.

5. Processing and value addition- Processing of certain products on farm has been a traditional activity of farmers in almost all countries. The making of desi ghee,paneer, butter and cheese, for example, and selling directly to neighbours or in the village has been a small scale complementary activity to farming and income supplement where production has been surplus to domestic needs. But there also exist farm holdings which have separate and professional processing enterprises with specific processing investment, and which contribute a substantial proportion of farm-household and business income. Such activities have allowed the farmer to come closer to his market-place and generate added value to products the raw material prices. In this respect, it was important to understand how and where such products were positioned in the market for meat and dairy products and how they were regarded by consumers.

6. Buying and selling- Buying - people have the opportunity to buy products that they want. Selling - producers function within a free market to sell products to consumers.

7. Market information

Gathering and analyzing market information is an important function of marketing. Under it, an effort is made to understand the consumer thoroughly in the following ways:

(a) What do the consumers want?

(b) In what quantity?

(c) At what price?

(d) When do they want (it)?

(e) What kind of advertisement do they like?

(f) Where do they want (it)?

What kind of distribution system do they like? All the relevant information about the consumer is collected and analysed. On the basis of this analysis an effort is made to find out as to which product has the best opportunities in the market.

8. Financing- banks and other financial institutions provide money for the production and marketing of products.

9. Risk bearing, minimization of risks (speculation and hedging).

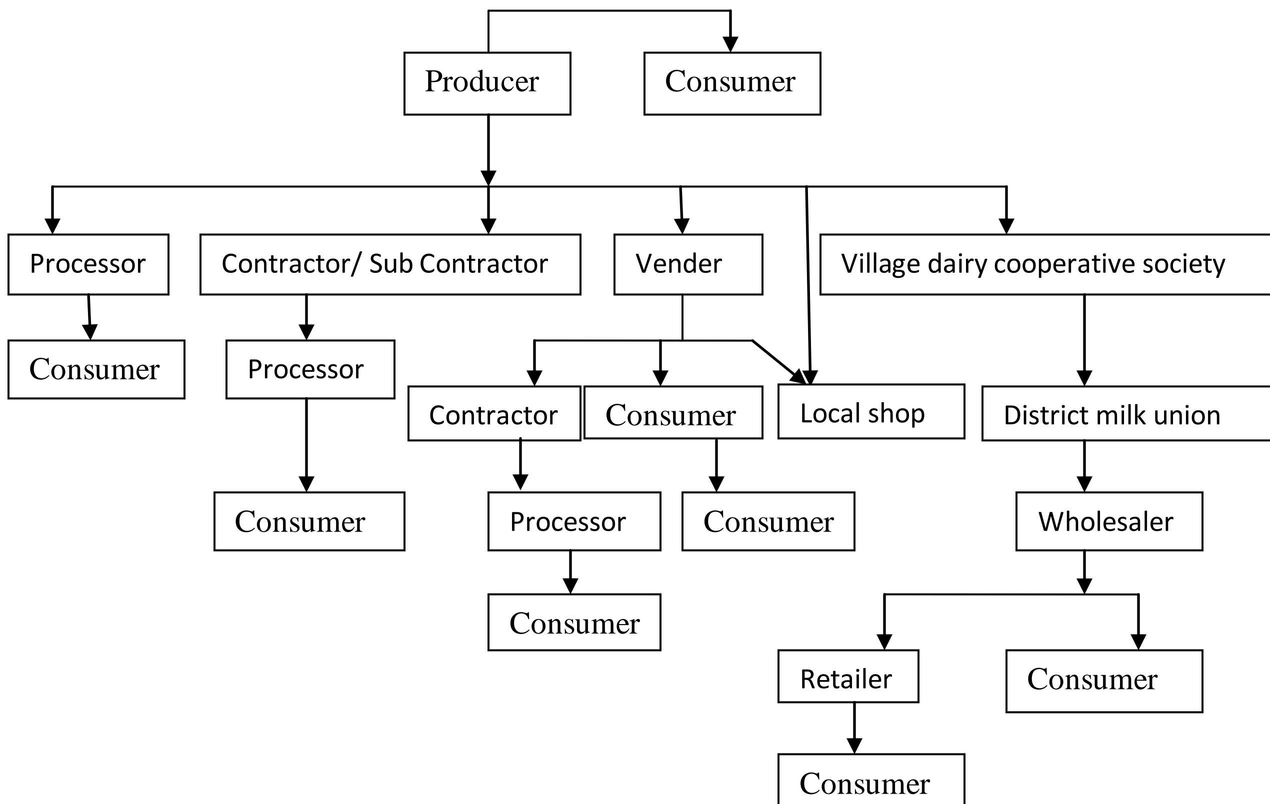
To manage risk, you first have to understand the risks that you are exposed to. This process of developing a risk profile thus requires an examination of both the immediate risks from competition and product market changes as well as the more indirect effects of macro economic forces. We can develop a complete risk profile for a firm, where we outline all of the risks that a firm is exposed to and estimate the magnitude of the exposure. We turn to a key question of what we should do about these risks. In general, we have three choices. We can do nothing and let the risk pass through to investors in the business – stockholders in a publicly traded firm and the owners of private businesses. We can try to protect ourselves against the risk using a variety of approaches – using options and futures to hedge against specific risks, modifying the way we fund assets to reduce risk exposure or buying insurance. Finally, we can intentionally increase our exposure to some of the risks because we feel that we have significant advantages over the competition.

Risk Profile- Every business faces risks and the first step in managing risk is making an inventory of the risks that you face and getting a measure of the exposure to each risk. In this section, we examine the process of developing a risk profile for a business and consider some of the potential pitfalls. There are four steps involved in this process. In the first step, we list all risks that a firm is exposed to, from all sources and without consideration to the type of risk. We categorize these risks into broad groups in the second step and analyze the exposure to each risk in the third step. In the fourth step, we examine the alternatives available to manage each type of risk and the expertise that the firm brings to dealing with the risk

To hedge or not to hedge? Assume now that you have a list of all of the risks that you are exposed to, categorizes these risks and measured your exposure to each one. A fundamental and key question that you have to answer is which of these risks you want to hedge against and which you want to either pass through to your investors or exploit. To make thus judgment, you have to consider the potential costs and benefits of hedging; in effect, you hedge those risks where the benefits of hedging exceed the costs.

(d) Marketing agencies, institutions and channels for livestock and livestock products. Government interventions and role in marketing of livestock and livestock products.

Marketing Channel for milk The possible visible Marketing channels of distribution for milk is shown below. Marketing Channel for Milk



(e) External trade in livestock products, recent policies on trade and international trade agreements and their implications in livestock sector.

Importance of macroeconomic, trade and other policies in economic theory

Macroeconomic stability and growth

Economic prospects for animal agriculture in less developed countries are conditioned by the general economic performance impinging on agriculture and the rural sector. Concerns for technology, infrastructure and sectoral policies are frequently foremost in the minds of livestock producers and analysts. Economists, however, point to the equal if not greater importance of economic growth and macroeconomic policies (including trade, finance, and investment policies) to the development prospects of farm and other rural based activities in low income countries. Political economy factors in these countries often militate against the economic interests of rural communities and their often underestimated contribution to national output and economic welfare .

Prudent macroeconomic policies are widely recommended as the basis for an "enabling environment" for growth and broad based gains in economic welfare. These policies include stable monetary growth, open and relatively flexible arrangements for international transactions and sustainable fiscal policies designed especially to avoid excess monetary expansion and not cause inflation.

For livestock, prudent policies assume particular importance given that the subsector involves assets that, analogous to durable manufactures, can be stores of value as well as inputs to production. Meat, milk and dairy products and eggs are also widely regarded as superior goods in consumption - that is, goods that increase in importance in consumption expenditure as household (and national) incomes rise (Mellor and Johnston, 1984). In this last connection, although production and especially consumption of livestock products might be expected to increase as income levels rise with economic development, it should be emphasized that the causality runs principally from economic growth and development on the one hand, to the livestock subsector, on the other. In other words, promotion of animal agriculture cannot usually be advanced beyond the pace of general economic development except where fundamental economic factors enable a country to specialize in animal production and export the bulk of it to markets in higher income countries. Where foreign investment is allowed, some important constraints, such as availability of human capital and advanced production and other technologies, might also be alleviated, furthering the possibilities for development of animal agriculture where other fundamental factors (and economic policies) are favourable.