CHAPTER 2

MARKET STRUCTURE CONDUCT AND PERFORMANCE

Market Structure – Meaning

The term *structure* refers to something that has organization and dimension – shape, size and design; and which is evolved for the purpose of performing a function. A function modifies the structure, and the nature of the existing structure limits the performance of functions. By the term market structure we refer to the size and design of the market. It also includes the manner of the operation of the market. Some of the expressions describing the market structure are:

1. Market structure refers to those organizational characteristics of a market which influence the nature of competition and pricing, and affect the conduct of business firms,

2. Market structure refers to those characteristics of the market which affect the traders' behaviour and their performances,

3. Market structure is the formal organization of the functional activity of a marketing institution.

An understanding and knowledge of the market structure is essential for identifying the imperfections in the performance of a market.

Components of Market Structure

The components of the market structure, which together determine the conduct and performance of the market, are:

1. Concentration of Market Power

The concentration of market power is an important element determining the nature of competition and consequently of market conduct and performance. This is measured by the number and size of firms existing in the market. The extent of concentration represents the control of an individual firm or a group of firms over the buying and selling of the produce. A high degree of market concentration restricts the movement of goods between buyers and sellers at fair and competitive prices, and creates an oligopoly or oligopsony situation in the market.

2. Degree of Product Differentiation

Homogeneous or other nature of the product affects the market structure. If products are homogeneous, the price variations in the market will not be wide. When products are heterogeneous, firms have the tendency to charge different prices for their products. Everyone tries to prove that his product is superior to the products of others.

3. Conditions for entry of Firms in the Market

Another dimension of the market structure is the restriction, if any, on the entry of firms in the market. Sometimes, a few big firms do not allow new firms to enter the market or make their entry difficult by their dominance in the market. There may also be some government restrictions on the entry of firms.

4. Flow of Market Information

A well-organized market intelligence information system helps all the buyers and sellers to freely interact with one another in arriving at prices and striking deals.

5. Degree of Integration

The behaviour of an integrated market will be different from that of a market where there is no or less integration either among the firms or of their activities.

Firms plan their strategies in respect of the methods to be employed in determining prices, increasing sales, coordinating with competing firms and adopting predatory practices against rivals or potential entrants. The structural characteristics of the market govern the behaviour of the firms in planning strategies for their selling and buying operations.

Dynamics of Market Structure – Conduct and Performance

The market structure determines the market conduct and performance. The term market conduct refers to the patterns of behaviour of firms, especially in relation to pricing and their practices in adapting and adjusting to the market in which they function. Specifically, market conduct includes:

(a) Market sharing and price setting policies;
(b) Policies aimed at coercing rivals; and
(c) Policies towards setting the quality of products.

The term market performance refers to the economic results that flow from the industry as each firm pursues its particular line of conduct. Society has to decide the criteria for satisfactory market performance. Some of the criteria for measuring market performance and of the efficiency of the market structure are:

1. Efficiency in the use of resources, including real cost of performing various functions;

2. The existence of monopoly or monopoly profits, including the relationship of margins with the average cost of performing various functions;

3. Dynamic progressiveness of the system in adjusting the size and number of firms in relation to the volume of business, in adopting technological innovations and in finding and/or inventing new forms of products so as to maximize general social welfare.

4. Whether or not the system aggravates the problem of inequalities in inter-personal, inter-regional, or inter-group incomes. For example, inequalities increase under the following situations:

(a) A market intermediary may pocket a return greater than its real contribution to the national product;

(b) Small farmers are discriminated against when they are offered a lower return because of the low quantum of surplus;

(c) Inter-product price parity is substantially disturbed by new uses for some products and wide variations and rigidities in the production pattern between regions.

The market structure, therefore, has always to keep on adjusting to changing environment if it has to satisfy the social goals. A static market structure soon becomes obsolete because of the changes in the physical, economic, institutional and technological factors. For a satisfactory market performance, the market structure should keep pace with the following changes:

(i) Production Pattern

Significant changes occur in the production pattern because of technological, economic and institutional factors. The market structure should be re-oriented to keep pace with such changes. Emergence of producers groups or group marketing practice is likely to alter market structure.

(ii) Demand Pattern

The demand for various products, especially in terms of form and quality, keeps on changing because of change in incomes, the pattern of distribution among consumers, and changes in their tastes and habits. The market structure should be re-oriented to keep it in harmony with the changes in demand.

Change in the consumption pattern and tastes and preferences of consumers leads to specific or exclusive marketing practices followed by the companies to cater to the specific needs of that group.

(iii) Costs and Patterns of Marketing Functions

Marketing functions such as transportation, storage, financing and dissemination of market information, have a great bearing on the type of market structure. Recent policy encourages group marketing or operation of producer groups and this is likely to reduce the number of buyers and/or sellers actually taking part in marketing functions. Government policies with regard to purchases, sales and subsidies affect the performance of market functions. The market structure should keep on adjusting to the changes in costs and government policy. Number of players in the market must be in accordance with the marketing functions performed and size of operations to take advantage of size economy.

(iv) Technological Change in Industry

Technological changes necessitate changes in the market structure through adjustments in the scale of business, the number of firms, and in their financial requirements. Establishment of retail chains and entry of MNCs in the food retailing effected conspicuous change in the structure of vegetable markets in India

Agricultural Marketing and Economic Development

Orderly and efficient marketing of food grains plays an important role in solving the problem of hunger. Most of those who go hungry do so because they can not pay higher prices for food grains. If marketing system is not efficient, price signals arising at the consumers' level are not adequately transferred to the producers, as a result farmers do not get sufficient price incentive to increase the production of the commodities which are in short supply. Thus, an inefficient marketing system adversely affects the living standards of both the farmers and consumers. In agricultural-oriented developing countries like India, agricultural marketing plays a pivotal role in fostering and sustaining the tempo of rural and economic development. Markets trigger the process of development.

The development of an efficient marketing system is important in ensuring that scarce and essential commodities reach different classes of consumers. Marketing is not only an economic link between the producers and the consumers but it also helps to maintain a balance between demand and supply. The objectives of price stability, rapid economic growth and equitable distribution of goods and services cannot be achieved without the support of an efficient marketing system.

Marketing Functions and their Classification

The marketing functions may be classified in various ways. For example, Thomsen has classified the marketing functions into three broad groups. These are:

(i)	Primary Functions	Assembling or Procurement Processing Dispersion or Distribution
(ii)	Secondary Functions	Packing or Packaging Transportation Grading, Standardization and Quality Control Storage and Warehousing Determination or Discovery of Prices Risk Taking Financing Buying and Selling Demand Creation Dissemination of Market Information
(iii)	Tertiary Functions	Banking Insurance Communications – Posts & Telecommunication Supply of Energy – Electricity

Kohls and Uhl have classified marketing functions as follows:

(i)	Physical Functions	Storage and Warehousing Grading Processing Transportation
(ii)	Exchange Functions	Buying Selling
(iii)	Facilitative Functions	Standardization of Grades Financing Risk Taking Dissemination of Market Information

Converse, Huegy and Mitchell have classified marketing functions in a different way. According to them, the classification is as follows:

(i)	Physical Movement Functions	Storage Packing Transportation

		Grading Distribution
(ii)	Ownership Movement Functions	Determining Need Creating Demand Finding Buyers and Sellers Negotiation of Price Rendering Advice Transferring the Title to Goods
(iii)	Market Management Functions	Formulating Policies Financing Providing Organization Supervision Accounting Securing Information

Marketing Agencies

In the marketing of agricultural commodities, the following agencies are involved:

(i) Producers

Most farmers or producers, perform one or more marketing functions. They sell the surplus either in the village or in the market. Some farmers, especially the large ones, assemble the produce of small farmers, transport it to the nearby market, sell it there and make a profit. This activity helps these farmers to supplement their incomes. Frequent visits to markets and constant touch with market functionaries, bring home to them a fair knowledge of market practices. They have, thus, an access to market information, and are able to perform the functions of market middlemen,

(ii) Middlemen

Middlemen are those individuals or business concerns which specialize in performing the various marketing functions and rendering such services as are involved in the marketing of goods. They do this at different stages in the marketing process. The middlemen in foodgrain marketing may, therefore, be classified as follows:

(a) Merchant Middlemen

Merchant middlemen are those individuals who take title to the goods they handle. They buy and sell on their own and gain or lose, depending on the difference in the sale and purchase prices. They may, moreover, suffer loss with a fall in the price of the product. Merchant middlemen are of following types:

Wholesalers: Wholesalers are those merchant middlemen who buy and sell foodgrains in large quantities. They may buy either directly from farmers or from other wholesalers. They sell foodgrains either in the same market or in other markets. They sell to retailers, other wholesalers and processors. They do not sell significant quantities to ultimate consumers. They own godowns for the storage of the produce.

The wholesalers perform the following functions in marketing:

(a) They assemble the goods from various localities and areas to meet the demands of buyers;

(b) They sort out the goods in different lots according to their quality and prepare them for the market;

(c) They equalize the flow of goods by storing them in the peak arrival season and releasing them in the off-season;

(d) They regulate the flow of goods by trading with buyers and sellers in various markets;

(e) They finance the farmers so that the latter may meet their requirements of production inputs; and

(f) They assess the demand of prospective buyers and processors from time to time, and plan the movement of the goods over space and time.

Retailers: Retailers buy goods from wholesalers and sell them to the consumers in small quantities. They are producers' personal representatives to consumers. Retailers are the closest to consumers in the marketing channel.

Itinerant Traders and Village Merchants: Itinerant traders are petty merchants who move from village to village, and directly purchase the produce from the cultivators. They transport it to the nearby primary or secondary market and sell it there. Village merchants have their small establishments in villages. They purchase the produce of those farmers who have either taken finance from them or those who are not able to go to the market. Village merchants also supply essential consumption goods to the farmers. They act as financers of poor farmers. They often visit nearby markets and keep in touch with the prevailing prices. They either sell the collected produce in the nearby market or retain it for sale at a later date in the village itself.

Mashakhores: This is a local term used for big retailers or small wholesalers dealing in fruits and vegetables. Earlier, the mashakhores used to deal only in one or two vegetables, purchasing from the commission agents or wholesalers in substantial quantities usually three to four quintals of vegetables like potato, onion, carrot, okra, tomato and spinach. They usually sell to the bulk consumers like hotelwalas, para-miliary units or small retailers/vendors in lots of around 5 kg to 10 kg each. However, in recent years, mashakhores have started retailing to all types of customers without the condition of a minimum quantity. In other words, the mashakhores are now working more like ordinary retailers.

(b) Agent Middlemen

Agent Middlemen act as representatives of their clients. They do not take title to the produce and, therefore, do not own it. They merely negotiate the purchase and/or sale. They sell services to their principals and not the goods or commodities. They receive income in the form of commission of brokerage. They serve as buyers or sellers in effective bargaining. Agent middlemen are of two types:

Commission Agents or Arhatias: A commission agent is a person operating in the wholesale market who acts as the representative of either a seller or a buyer. He is usually granted broad powers by those who consign goods or who order the purchase. A commission agent normally takes over the physical handling of the produce, arranges for its sale, collects the price from the buyer, deducts his expenses and commission, and remits the balance to the seller. All these facilities are extended to buyer-firms as well, if asked for.

Commission agents or arhatias in unregulated markets are of two types, *Kaccha arhatias* and *Pacca arhatias*: Kaccha arhatias primarily act for the sellers, including farmers. They sometimes provide advance money to farmers and itinerant traders on the condition that the produce will be disposed of through them. *Kaccha arhatias* charge *arhat* or commission in addition to the normal rate of interest on the money they advance. A *Pacca arhatia* acts on behalf of the traders in the consuming market. The processors (rice millers, oil millers and cotton or jute dealers) and big wholesalers in the consuming markets employ *Pacca arhatias* as their agents for the purchase of a specified quantity of goods within a given price range.

In regulated markets, only one category of commission agent exists under the name of 'A' class trader. The commission agent keeps an establishment – a shop, a godown and a rest house for his clients. He is, therefore, preferred by the farmers to the co-operative marketing society for the purpose of the sale of the farmer's produce. Commission agents extend the following facilities to their clients:

(i) They advance 40 to 50 per cent of the expected value of the crop as a loan to farmers to enable them to meet their production expenses;

(ii) They act as bankers of the farmers. They retain the sale proceeds, and pay to the farmers as and when the latter require the money;

(iii) They offer advice to farmers for purchase of inputs and sale of products;

(iv) They provide empty bags to enable the farmers to bring their produce to the market;

(v) They provide food and accommodation to the farmers and their animals when the latter come to the market for the sale of their produce;

(vi) They provide storage facility and advance loans against the stored product up to 75 per cent of the value;

(vii) They arrange, if required by the farmer, for the transportation of the produce from the village to the market; and

(viii) They help the farmers in times of personal difficulties.

Brokers: Brokers render personal services to their clients in the market; but, unlike the commission agents, they do not have physical control of the product. The main function of a broker is to bring together buyers and sellers on the same platform for negotiations. Their charge is called brokerage. They may claim brokerage from the buyer, the seller or both, depending on the market situation and the service rendered. They render valuable service to the prospective buyers and sellers, for they have complete knowledge of the market – of the quantity available and the prevailing prices.

Brokers have no establishment in the market. They simply wander about in the market and render services to clients. There is no risk to them. They do not render any other service except to bring the buyers and sellers on the same platform. In most regulated markets, brokers do not play any role because goods are sold by open auction. Their number in foodgrain marketing trade is decreasing. But they still play a valuable role in the marketing of other agricultural commodities, such as gur, sugar, edible oil, cotton seed and chillies.

(c) Speculative Middlemen

Those middlemen who take title to the product with a view to making a profit on it are called speculative middlemen. They are not regular buyers or sellers of produce. They specialize in risk-taking. They buy at low prices when arrivals are substantial and sell in the off-season when prices are high. They do the minimum handling of goods. They make profit from short-run as well as long-run price fluctuations.

(d) Processors

Processors carry on their business either on their own or on custom basis. Some processors employ agents to buy for them in the producing areas, store the produce and process it throughout the year on continuous basis. They also engage in advertising activity to create a demand for their processed products.

(e) Facilitative Middlemen

Some middlemen do not buy and sell directly but assist in the marketing process. Marketing can take place even if they are not active. But the efficiency of the system increases when they engage in business. These middlemen receive their income in the form of fees or service charges from those who use their services. The important facilitative middlemen are:

Hamals or Labourers: They physically move the goods in marketplace. They do unloading from the loading on to bullock carts or trucks. They assist in weighing the bags. They perform cleaning, sieving, and refilling jobs and stitch the bags. Hamals are the hub of the marketing wheel. Without their active co-operation, the marketing system would not function smoothly.

Weighmen: They facilitate the correct weighment of the produce. They use a pan balance when quantity is small. Generally, the scalebeam balance is used. They get payment for their service through the commission agent. The weighbridge system of weighing also exists in big markets.

Graders: These middlemen sort out the product into different grades, based on some defined characteristics, and arrange them for sale. They facilitate the process of prices settlement between the buyer and the seller.

Transport Agency: This agency assists in the movement of the produce from one market to another. The main transport means are the railways and trucks. Bullock carts or camel carts or tractor-trolleys are also used in villages for the transportation of foodgrains.

Communication Agency: It helps in the communication of the information about the prices prevailing, and quantity available, in the market. Sometimes, the transactions take place on the telephone. The post and telegraph, telephone, newspapers, the radio and informal links are the main communication channels in agricultural marketing.

Advertising Agency: It enables prospective buyers to know the quality of the product and decide about the purchase of commodities. Newspapers, the radio, television and cinema slides are the main media for advertisements.

Auctioners: They help in exchange function by putting the produce for auction and bidding by the buyers.

Marketing Institutions

Marketing institutions are business organizations which have come up to operate the marketing machinery. In addition to individuals, corporate, co-operative and government institutions are operating in the field of agricultural marketing.

They perform one or more of the Marketing functions. They assume the role of one or more marketing agencies, described earlier in this section. Some important institutions in the field of agricultural marketing are:

(a) Public Sector Institutions

(i) Directorate of Marketing and Inspection (DMI)

(ii) Commission for Agricultural Costs and Prices (CACP)

(iii) Food Corporation of India (FCI)

(iv) Cotton Corporation of India (CCI)

(v) Jute Corporation of India (JCI)

(vi) Specialized Commodity Boards

- Rubber Board
- Tea Board
- Coffee Board
- Spices Board
- Coconut Board
- Oilseeds and Vegetable Oils Board
- Tobacco Board
- Cardamom Board
- Arecanut Board
- Coir Board
- Silk Board
- National Horticulture Board (NHB)
- National Dairy Development Board (NDDB)

(vii) Others

- Central Warehousing Corporation (CWC)'
- State Warehousing Corporations (SWCs)
- State Trading Corporation (STC)
- Agricultural and Processed Food Export Development Authority (APEDA)
- Export Inspection Council
- Marine Products Export Development Authority (MPEDA)
- Silk Export Promotion Council (SEPC)
- The Cashewnuts Export Promotion Council of India (CEPCI)
- Agricultural Produce Market Committees (APMC)
- State Agricultural Marketing Boards (SAMB)
- Council of State Agricultural Marketing Boards (COSAMB)
- State Directorates of Agricultural Marketing
- Research Institutions and Agricultural Universities

(b) Cooperative Sector Institutions

(i) National Cooperative Development Corporation (NCDC)

(ii) National Agricultural Cooperative Marketing Federation (NAFED)

(iii) National Cooperative Tobacco Growers Federation (NTGF)

(iv) National Consumers Cooperative Federation (NCCF)

(v) Tribal Cooperative Marketing Federation (TRIFED)

(vi) Special Commodity Cooperative Marketing Organizations (Sugarcane, Cotton, Milk)

(vii) State Cooperative Marketing Federations.

(viii)Primary Agricultural Cooperative Marketing Societies

PRODUCER'S SURPLUS

Producer's Surplus of Agricultural Commodities

In any developing economy, the producer's surplus of agricultural product plays a significant role. This is the quantity which is actually made available to the non-producing population of the country. From the marketing point of view, this surplus is more important than the total production of commodities. The arrangements for marketing and the expansion of markets have to be made only for the surplus quantity available with the farmers, and not for the total production. This is because, only a portion of the total production is sold in the market after personal consumption by the members of farm household and retention in the farm for several reasons.

The rate at which agricultural production expands determines the pace of agricultural development, while the growth in the marketable surplus determines the pace of economic development. An increase in production must be accompanied by an increase in the marketable surplus for the economic development of the country. Though the marketing system is more concerned with the surplus which enters or is likely to enter the market, the quantum of total production is essential for this surplus. The larger the production of a commodity, the greater will be the surplus of that commodity and vice versa. The knowledge of marketed and marketable surplus helps the policy-makers as well as the traders in the following areas:

i. Framing Sound Price Policies: Price support programmes are an integral part of agricultural policies s necessary for stimulating agricultural production. The knowledge of quantum of marketable surplus helps in framing these policies.

ii. Developing Proper Procurement and Purchase Strategies: The procurement policy for feeding the public distribution system has to take into account the quantum and behaviour of marketable and marketed surplus. Similarly, the traders, processors and exporters have to decide their purchase strategies on the basis of marketed quantity

iii. Checking Undue Price Fluctuations: A knowledge of the magnitude and extent of the surplus helps in the minimization of price fluctuations in agricultural commodities because it enables the government and the traders to make proper arrangements for the movement of product from one area, where they are in surplus, to another area which is deficient.

iv Export/Import policies*:* Advance estimates of the surpluses of such commodities which have the potential of external trade are useful in decisions related to the export and import of the commodity. If surplus is expected to be less than what is necessary, the country can plan for imports and if surplus is expected to be more than what is necessary, avenues for exporting such a surplus can be explored.

v. Development of Transport and Storage Systems: The knowledge of marketed surplus helps in developing adequate capacity of transport and storage system to handle it.

Meaning and Types of Producer's Surplus

The producer's surplus is the quantity of produce which is, or can be, made available by the farmers to the non-farm population. The producer's surplus is of two types:

1. Marketable Surplus

The marketable surplus is that quantity of the produce which can be made available to the non-farm population of the country. It is a theoretical concept of surplus. The marketable surplus is the residual left with the producer-farmer after meeting his requirements for family consumption, farm needs for seeds and feed for cattle, payment to labour in kind, payment to artisans – carpenter, blacksmith, potter and mechanic – payment to landlord as rent, and social and religious payments in kind. This may be expressed as follows:

$$MS = P - C$$

Where

MS = Marketable surplus

P = Total production, and

C = Total requirements (family consumption, farm needs, payment to labour, artisans, landlord and payments for social and religious work).

2. Marketed Surplus

Marketed surplus is that quantity of the produce which the producer-farmer actually sells in the market, irrespective of his requirements for family consumption, farm needs and other payments. The marketed surplus may be more, less or equal to the marketable surplus.

Whether the marketed surplus increases with the increase in production has been under continual theoretical scrutiny. It has been argued that poor and subsistence farmers sell that part of the produce which is necessary to enable them to meet their cash obligations. This results in distress sale on some farms. In such a situation, any increase in the production of marginal and small farms should first result in increased on-farm consumption.

An increase in the real income of farmers also has a positive effect on on-farm consumption because of positive income elasticity. Since the contribution of this group to the total marketed quantity is not substantial, the overall effect of increase in production must lead to an increase in the marketed surplus.

Bansil writes that there is only one term – marketable surplus. This may be defined subjectively or objectively. Subjectively, the term marketable surplus refers to theoretical surplus available for sale with the producer-farmer after he has met his own genuine consumption requirements and the requirements of his family, the payment of wages in kind, his feed and seed requirements, and his social and religious payments. Objectively, the marketable surplus is the total quantity of arrivals in the market out of the new crop.

Relationship between marketed surplus and marketable surplus

The marketed surplus may be more, less or equal to the marketable surplus, depending upon the condition of the farmer and type of the crop. The relationship between the two terms may be stated as follows:

$$\text{Marketed surplus} \begin{matrix} > \\ < \\ = \end{matrix} \text{Marketable surplus}$$

1. The marketed surplus is more than the marketable surplus when the farmer retains a smaller quantity of the crop than his actual requirements for family and farm needs. This is true especially for small and marginal farmers, whose need for cash is more pressing and immediate. This situation of selling more than the marketable surplus is termed as distress or forced sale. Such farmers generally buy the produce from the market in a later period to meet their family and/or farm requirements. The quantity of distress sale increases with the fall in the price of the product. A lower price means that a larger quantity will be sold to meet some fixed cash requirements.

2. The marketed surplus is less than the marketable surplus when the farmer retains some of the surplus produce. This situation holds true under the following conditions:

(a) Large farmers generally sell less than the marketable surplus because of their better retention capacity. They retain extra produce in the hope that they would get a higher price in the later period. Sometimes, farmers retain the produce even up to the next production season.

(b) Farmers may substitute one crop for another crop either for family consumption purpose or for feeding their livestock because of the variation in prices. With the fall in the price of the crop relative to a competing crop, the farmers may consume more of the first and less of the second crop.

3. The marketed surplus may be equal to the marketable surplus when the farmer neither retains more nor less than his requirement. This holds true for perishable commodities and of the average farmer.

Factors Affecting Marketable Surplus

The marketable surplus differs from region to region and, within the same region, from crop to crop. It also varies from farm to farm. On a particular farm, the quantity of marketable surplus depends on the following factors:

(i) **Size of Holding:** There is positive relationship between the size of the holding and the marketable surplus.

(ii) **Production:** The higher the production on a farm, the larger will be the marketable surplus, and vice versa.

(iii) **Price of the Commodity:** The price of the commodity and the marketable surplus have a positive as well as a negative relationship, depending upon whether one considers the short and long run or the micro and macro levels.

(iv) **Size of Family:** The larger the number of members in a family, the smaller the surplus on the farm.

(v) **Requirement of Seed and Feed:** The higher the requirement for these uses, the smaller the marketable surplus of the crop.

(vi) **Nature of Commodity:** The marketable surplus of non-food crops is generally higher than that for food crops. For example, in the case of cotton, jute and rubber, the quantity retained for family consumption is either negligible or very small part of the total output. For these crops, a very large proportion of total output is marketable surplus. Even among food crops, for such commodities like sugarcane, spices and oilseeds which require some processing before final consumption, the marketable surplus as a proportion of total output is larger than that for other food crops.

(vii) Consumption Habits: The quantity of output retained by the farm family depends on the consumption habits. For example, in Punjab, rice forms a relatively small proportion of total cereals consumed by farm-families compared to those in southern or eastern states. Therefore, out of a given output of paddy/rice, Punjab farmers sell a greater proportion of paddy/rice, Punjab farmers sell a greater proportion than that sold by rice eating farmers of other states.

The functional relationship between the marketed surplus of a crop and factors affecting the marketed surplus may be expressed as:

$M = f(x_1, x_2, x_3, x_4)$

where

M	=	Total marketed surplus of a crop in quintals

x_1	=	Size of holding in hectares
x_2	=	Size of family in adult units
x_3	=	Total production of the crop in quintals
x_4	=	Price of the crop

Relationship between prices and marketable surplus

Two main hypotheses have been advanced to explain the relationship between prices and the marketable surplus of foodgrains.

Inverse Relationship

There is an inverse relationship between prices and the marketable surplus. This hypothesis was presented by P N. Mathur and M. Ezekiel. They postulate that the farmers' cash requirements are nearly fixed, and given the price level, the marketed portion of the output is determined. This implies that the farmers' consumption is a residual, and that the marketed surplus is inversely proportional to the price level. This behaviour assumes that farmers have inelastic cash requirements.

The argument is that, in the poor economy of underdeveloped countries, farmers sell that quantity of the output which gives them the amount of money they need to satisfy their cash requirements; they retain the balance of output for their own consumption purpose. With a rise in the prices of foodgrains, they sell a smaller quantity of foodgrains to get the cash they need, and vice versa. In other words, with a rise in the prices of foodgrains, they sell a smaller quantity of foodgrains to get the cash they need, and vice versa. In other words, with a rise in price, farmers sell a smaller, and with the fall in price, they sell a larger quantity. Olson and Krishnan have argued that the marketed surplus varies inversely with the market price. They contend that a higher price for a subsistence crop may increase the producer's real income sufficiently to ensure that the income effect on demand for the consumption of the crop outweighs the price effect on production and consumption.

Positive Relationship

V.M.Dandekar and Rajkrishna put forward the case for a positive relationship between prices and the marketed surplus of food grains in India. This relationship is based on the assumption that farmers are price conscious. With a rise in the prices of food grains, farmers are tempted to sell more and retain less. As a result, there is increased surplus. The converse, too, holds true.

Model Quiz

1.Market conduct includes

a. Market sharing and price setting policies
b. Policies aimed at coercing rivals
c. Policies toward setting the quality of products
d. Efficiency in the use of resources

Ans: b.

2. Knowledge of marketable surplus helps the

a. farming population b. non farm population c. both a and b d. neither a nor b.

Ans: c

3. Marketable surplus will be more in the case of

a. rice b. jowar c.cotton d. gram

Ans: c

4. Marketable surplus will be less in the case of

a. rice b. cotton c.sugarcane d. tomato Ans: a

5. All the following have positive relationship with marketable surplus except

a. size of family b. size of holding c. quantity of production d. a and b

Ans: a.

6. Commodity price and marketed surplus would have negative relationship in the case of a. rice b. cotton c. sugarcane d. jute.

7.Primary function of marketing includes

a. Procurement b. transport c. storage d. banking Ans: a.

8.Secondary function of marketing includes

a. Assembling b. grading c. insurance d. banking Ans: b.

9.Tertiary function of marketing includes

a. Assembling b. transport c. storage d.insurance Ans: d

10.Physical function of marketing includes

a. Grading b. buying c. selling d. financing Ans: a.

11.Exchange function of marketing includes

a. Processing b. transport c. selling d. standardization Ans:c.

12.Facilitative function of marketing refers to

a. Processing b. grading c.buying d. financing Ans: d.

13.Physical movement function of marketing refers to

a. Storage b. Creating demand c. financing d. None of these Ans : d.

14.Ownership movement function of marketing refers to

a. Packaging b. distribution c. negotiation of price d. supervision Ans: c.

15.Market management function of marketing refers to

a. Distribution b. rendering advice c. determining need d. financing Ans: c.

16.Wholesalers perform the following functions except

a. Assembling b. sorting c. advancing loans d. none of these Ans: d.

17.Commission agents earn their income as

a. Profit b. per cent of sales value c. per cent of quantity sold d. service charge Ans: b.

18.Brokers differ from commission agents by

a. Not owning the commodity b. providing financial assistance to farmers c. g services they offer d. earning profit. Ans: c.

19.Risk taking is a function of

a. Agent middlemen b. merchant middlemen c. speculator d. facilitative middlemen Ans: c.

20.Pick the odd man out from the following

a. FCI b. CWC c. NAFED d. Spices board Ans: c.

TRUE or FALSE

1. Growth in producers' surplus determines the pace of economic development. (True)
2. Minimising the price fluctuations in agricultural commodities requires knowledge on marketable surplus. (True)
3. Export – import policies of a country is designed based on the marketable surplus expected in the country. (True)
4. Higher the rice price in the market, more will be the supply of paddy to the market by the farmers. (False)
5. Agent middlemen do not take title to the produce. (True)
6. Brokers do not take title to the produce. (True)
7. Processors play a dominant role in agricultural marketing in developed countries. (True)
8. Commission agents are important for better performance of Rythu bazaars in India. (False)