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AGRICULTURAL MARKETING TRADE AND PRICES

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1	Agricultural Marketing, Trade and Prices
2	Marketing Mix and Market Segmentation
3	Classification and Characteristics of Agricultural Markets
4	Demand, Supply - Nature and Determinants of Demand and Supply
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AGRICULTURAL MARKETING TRADE AND PRICES

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	Trading
14	Regulated Markets - Agriculture Price Policy - Administered Price Regime - CACP
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Course Name	Agricultural Marketing Trade and Prices
Lesson 1	Agriculture market & Structure
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Concept and Definition:

The term agricultural marketing is composed of two words-agriculture and marketing. Agriculture, in the broadest sense, means activities aimed at the use of natural resources for human welfare, i.e., it includes all the primary activities of production. But, generally, it is used to mean growing and/or raising crops and livestock. Marketing connotes a series of activities involved in moving the goods from the point of production to the point of consumption. It includes all the activities involved in the creation of time, place, form and possession utility.

According to Thomsen, the study of agricultural marketing comprises all the operations, and the agencies conducting them, involved in the movement of farm-produced foods, raw materials and their derivatives, such as textiles, from the farms to the final consumers, and the effects of such operations on farmers, middlemen and consumers. This definition does not include the input side of agriculture.

According to Acharya and Agarwal “Agricultural marketing is the study of all the activities, agencies and policies involved in the procurement of farm inputs by the farmers and the movement of agricultural products from the farms to the consumers”. The agricultural marketing system is a link between the farm and the non – farm sectors. It includes the organization of agricultural raw materials supply to processing industries, the assessment of demand for farm inputs and raw materials, and the policy relating to the marketing of farm products and inputs.

According to the National Commission on Agriculture (XII Report), agricultural marketing is a process which starts with a decision to produce a saleable farm commodity, and it involves all the aspects of market structure or system, both functional and institutional, based on technical and economic considerations, and includes pre-and post-

harvest operations, assembling, grading, storage, transportation and distribution.

Objectives of the Study:

A study of the agricultural marketing system is necessary to an understanding of the complexities involved and the identification of bottlenecks with a view to providing efficient services in the transfer of farm products and inputs from producers to consumers. An efficient marketing system minimizes costs, and benefits all the sections of the society.

The expectations from the system vary from group to group; and, generally, the objectives are in conflict. The efficiency and success of the system depends on how best these conflicting objectives are reconciled.

Producers:

Producer-farmers want the marketing system to purchase their produce without loss of time and provide the maximum share in the consumer's rupee. They want the maximum possible price for their surplus produce from the system. Similarly, they want the system to supply them the inputs at the lowest possible price.

Consumers:

The consumers of agricultural products are interested in a marketing system that can provide food and other items in the quantity and of the quality required by them at the lowest possible price. However, this objective of marketing for consumers is contrary to the objective of marketing for the farmer – producers.

Market Middlemen and Traders:

Market middlemen and traders are interested in a marketing system which provides them a steady and increasing income from the purchase and sale of agricultural commodities. This objective of market middlemen may be achieved by purchasing the agricultural products from the farmers at low prices and selling them to consumers at high prices.

Government:

The objectives and expectations of all the three groups of society—producers, consumers and market middlemen – conflict with one another. All the three groups are indispensable to society. The government has to act as a watch-dog to safeguard the interests of all the groups associated in marketing. It tries to provide the maximum share to the producer in the consumer's rupee; food of the required quality to consumers at the lowest possible price; and enough margin to market middlemen so that they may remain in the trade and not think of going out of trade and jeopardize the whole marketing mechanism. Thus, the government wants that the marketing system should be such as may bring about the overall welfare to all the segments of society.

Scope and Subject Matter of Agricultural Marketing:

Agricultural marketing in a broader sense is concerned with the marketing of farm products produced by farmers and of farm inputs required by them in the production of these farm products. Thus, the subject of agricultural marketing includes product marketing as well as input marketing.

The subject of output marketing is as old as civilization itself. The importance of output marketing has become more conspicuous in the recent past with the increased marketable surplus of the crops following the technological breakthrough. The farmers produce their products for the markets. Farming becomes market-oriented. Input

marketing is a comparatively new subject. Farmers in the past used such farm sector inputs as local seeds and farmyard manure. These inputs were available with them; the purchase of inputs for production of crops from the market by the farmers was almost negligible. The importance of farm inputs-improved seeds, fertilizers, insecticides and pesticides, farm machinery, implements and credit-in the production of farm products has increased in recent years. The new agricultural technology is input-responsive. Thus, the scope of agricultural marketing must include both product marketing and input marketing. In this book, the subject matter of agricultural marketing has been dealt with; both from the theoretical and practical points of view. It covers what the system is, how it functions, and how the given method or techniques may be modified to get the maximum benefits.

Specially, the subject of agricultural marketing includes marketing functions, agencies, channels, efficiency and costs, price spread and market integration, producer's surplus, government policy and research, training and statistics on agricultural marketing.

MARKET:

Meaning:

The word market comes from the Latin word "marcatus" which means merchandise or trade or a place where business is conducted. Word "market" has been widely and variedly used to mean (a) a place or a building where commodities are bought and sold, e.g., super market; (b) potential buyers and sellers of a product, e.g., wheat market and cotton market; (c) potential buyers and sellers of a country or region, e.g., Indian market and Asian market; (d) and organization which provides facilities for exchange of commodities, e.g., Bombay stock exchange; and (e) a phase or a course of

commercial activity, e.g., a dull market or bright market.

There is an old English saying that two women and a goose may make a market. However, in common parlance, a market includes any place where persons assemble for the sale or purchase of commodities intended for satisfying human wants. Other terms used for describing markets in India are Haats, Pains, Shandies and Bazar.

The word market in the economic sense carries a broad meaning. Some of the definitions of market are given as follows:

1. A market is the sphere within which price determining forces operate.
2. A market is the area within which the forces of demand and supply converge to establish a single price.
3. The term market means not a particular market place in which things are bought and sold but the whole of any region in which buyers and sellers are in such a free intercourse with one another that the prices of the same goods tend to equality, easily and quickly (Counot).
4. Market means a social institution which performs activities and provides facilities for exchanging commodities between buyers and sellers.

5. Economically interpreted, the term market refers, not to a place but to a commodity or commodities and buyers and sellers who are in free intercourse with one another.

A market exists when buyers wishing to exchange the money for a good or service are in contact with the sellers who are willing to exchange goods or services for money. Thus, a market is defined in terms of the existence of fundamental forces of supply and demand and is not necessarily confined to a particular geographical location. The concept of a market is basic to most of the contemporary economies, since in a free market economy, this is the mechanism by which resources are allocated.

Components of a Market:

For a market to exist, certain conditions must be satisfied. These conditions should be both necessary and sufficient. They may also be termed as the components of a market.

1. The existence of a good or commodity for transactions(physical existence is, however, not necessary);
2. The existence of buyers and sellers;
3. Business relationship or intercourse between buyers and sellers; and
4. Demarcation of area such as place, region, country or the whole world. The existence of perfect competition or a uniform price is not necessary.

Dimensions of a Market:

There are various dimensions of any specified market. These dimensions are:

1. Location
2. Area or coverage
3. Time span
4. Volume of transactions

5. Nature of transactions
6. Number of commodities
7. Degree of competition
8. Nature of commodities
9. Stage of marketing
10. Extent of public intervention
11. Type of population served
12. Accrual of marketing margins

Any individual market may be classified in a twelve-dimensional space.

Difference in Marketing of Agricultural and Manufactured Goods

The marketing of agricultural commodities is different from the marketing of manufactured commodities because of the special characteristics of the agricultural sector (demand and supply) which have a bearing on marketing. Because of these characteristics, the subject of agricultural marketing has been treated as a separate discipline – and this fact makes the subject somewhat complicated. These special characteristics of the agricultural sector affect the supply and demand of agricultural products in a manner different from that governing the supply and demand of manufactured commodities. The special characteristics which the agricultural sector possesses, and which are different from those of the manufactured sector, are:

1. Perishability of the Product:

Most farm products are perishable in nature; but the period of their perishability varies from a few hours to a few months. To a large extent, the marketing of farm products is virtually a race with death and decay. Their perishability makes it almost

impossible for producers to fix the reserve price for their farm-grown products. The extent of perishability of farm products may be reduced by the processing function; but they cannot be made non-perishable like manufactured products. Nor can their supply be made regular.

2. Seasonality of Production:

Farm products are produced in a particular season; they cannot be produced throughout the year. In the harvest season, prices fall. But the supply of manufactured products can be adjusted or made uniform throughout the year. Their prices therefore remain almost the same throughout the year.

3. Bulkiness of Products:

The characteristic of bulkiness of most farm products makes their transportation and storage difficult and expensive. This fact also restricts the location of production to somewhere near the place of consumption or processing. The pricespread in bulky products is higher because of the higher costs of transportation and storage.

4. Variation in Quality of Products:

There is a large variation in the quality of agricultural products, which makes their grading and standardization somewhat difficult. There is no such problem in manufactured goods, for they are products of uniform quality.

5. Irregular Supply of Agricultural Products:

The supply of agricultural products is uncertain and irregular because of the dependence of agricultural production on natural conditions. With the varying supply, the demand remaining almost constant, the prices of agricultural products fluctuate substantially.

6. **Small Size of Holdings and Scattered Production:**

Farm products are produced throughout the length and breadth of the country and most of the producers are of small size. This makes the estimation of supply difficult and creates problems in marketing.

7. **Processing:**

Most of the farm products have to be processed before their consumption by the ultimate consumers. This processing function increases the price spread of agricultural commodities. Processing firms enjoy the advantage of monopsony, oligopsony or duopsony in the market. This situation creates disincentives for the producers and may have an adverse effect on production in the next year.

IMPORTANCE OF AGRICULTURAL MARKETING

Agricultural marketing plays an important role not only in stimulating production and consumption, but in accelerating the pace of economic development. Its dynamic functions are of primary importance in promoting economic development. For this reason, it has been described as the most important multiplier of agricultural development.

The importance of agricultural marketing in economic development has been indicated in the paragraphs that follow.

Optimization of Resource use and Output Management:

An efficient agricultural marketing system leads to the optimization of resource use and output management. An efficient marketing system can also contribute to an increase in the marketable surplus by scaling down

the losses arising out of inefficient processing, storage and transportation. A well-designed system of marketing can effectively distribute the available stock of modern inputs, and thereby sustain a faster rate of growth in the agricultural sector.

Increase in Farm Income

An efficient marketing system ensures higher levels of income for the farmers by reducing the number of middlemen or by restricting the commission on marketing services and the malpractices adopted by them in the marketing of farm products. An efficient system guarantees the farmers better prices for farm products and induces them to invest their surpluses in the purchase of modern inputs so that productivity and production may increase. This again results in an increase in the marketed surplus and income of the farmers. If the producer does not have an easily accessible market-outlet where he can sell his surplus produce, he has little incentive to produce more. The need for providing adequate incentives for increased production is, therefore, very important, and this can be made possible only by streamlining the marketing system.

Widening of Markets:

A well-knit marketing system widens the market for the products by taking them to remote corners both within and outside the country, i.e., to areas far away from the production points. The widening of the market helps in increasing the demand on a continuous basis, and thereby guarantees a higher income to the producer.

Growth of Agro-based Industries:

An improved and efficient system of agricultural marketing helps in the growth of agro-based industries and stimulates the overall development process of the economy. Many industries depend on agriculture for the supply of raw materials.

Price Signals:

An efficient marketing system helps the farmers in planning their production in accordance with the needs of the economy. This work is carried out through price signals.

Adoption and Spread of New Technology

The marketing system helps the farmers in the adoption of new scientific and technical knowledge. New technology requires higher investment and farmers would invest only if they are assured of market clearance.

Employment:

The marketing system provides employment to millions of persons engaged in various activities, such as packaging, transportation, storage and processing. Persons like commission agents, brokers, traders, retailers, weighmen, hamals, packagers and regulating staff are directly employed in the marketing system. This apart, several others find employment in supplying goods and services required by the marketing system.

Addition to National Income:

Marketing activities add value to the product thereby increasing the nation's gross national product and net national product.

Better Living:

The marketing system is essential for the success of the development programmes which are designed to uplift the population as a whole. Any plan of economic development that aims at diminishing the poverty of the agricultural population, reducing consumer food prices, earning more foreign exchange or eliminating economic waste has, therefore, to pay special attention to the development of an efficient marketing for food and agricultural products.

Creation of Utility:

Marketing is productive, and is as necessary as the farm production. It is, in fact, a part of production itself, for production is complete only when the product reaches a place in the form and at the time required by the consumers. Marketing adds cost to the product; but, at the same time, it adds utilities to the product. The following four types of utilities of the product are created by marketing:

- (a) **Form Utility:** The processing function adds form utility to the product by changing the raw material into a finished form. With this change, the product becomes more useful than it is in the form in which it is produced by the farmer. For example, through processing, oilseeds are converted into oil, sugarcane into sugar, cotton into cloth and wheat into flour and bread. The processed forms are more useful than the original raw materials.
- (b) **Place Utility:** The transportation function adds place utility to products by shifting them to a place of need from the place of plenty. Products command higher prices at the place of need than at the place of production because of the increased utility of the product.
- (c) **Time Utility:** The storage function adds time utility to the products by making them available at the time when they are needed.
- (d) **Possession Utility:** The marketing function of buying and selling helps in the transfer of ownership from one person to another. Products are transferred through marketing to persons having a higher utility from persons having a low utility.

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' behavior 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:

Whether or not the products are homogeneous 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 behavior of an integrated market will be different from that of a market where there is no 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, co-ordinating with competing firms and adopting predatory practices against rivals or potential entrants. The structural characteristics of the market govern the behavior 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 behavior of firms, specially 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:

1. **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.

2. **Demand Pattern:**

The demand for various products, specially 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.

3. **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. 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.

4. 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.



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LECTURE -2

Marketing mix and Market segmentation

Marketing Mix

"Marketing mix" is a general phrase used to describe the different kinds of choices organizations have to make in the whole process of bringing a product or service to market. The 4 Ps is one way – probably the best-known way – of defining the marketing mix, and was first expressed in 1960 by E J McCarthy.

Marketing Mix is a combination of marketing tools that a company uses to satisfy their target customers and achieving organizational goals.

McCarthy classified all these marketing tools under four broad categories:

1. Product
2. Price
3. Place
4. Promotion

These four elements are the basic components of a marketing plan and are collectively called 4 P's of marketing. 4 P's pertain more to physical products than services. Below is an illustration for marketing mix.

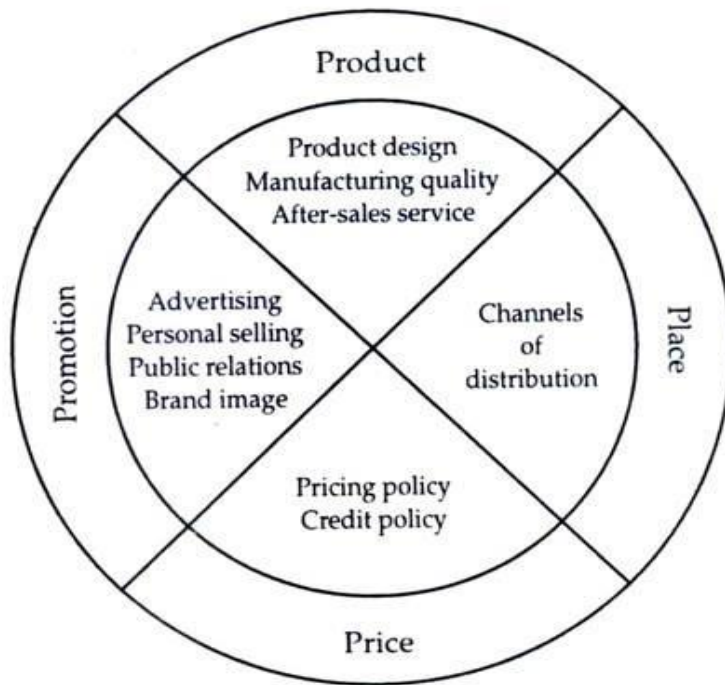


Fig. 2.6 : The Four Ps of Marketing

The important thing to note is that all these four P's (variable) are controllable, subject to internal and external constraints of marketing environment. Marketers, using different blends of these variables, can target different group of customers having different needs. So, a customer may call marketing mix "the offering".

Product

Product is the actual offering by the company to its targeted customers which also includes value added stuff. Product may be tangible (goods) or intangible (services).

While formulating the marketing strategy, product decisions include:

What to offer?

Brand name

Packaging

Quality

Appearance

Functionality

Accessories

Installation

After sale services

Warranty: replacement of only the defective part of a product but not the entire product

Price

Price includes the pricing strategy of the company for its products. How much customer should pay for a product? Pricing strategy not only related to the profit margins but also helps in finding target customers. Pricing decision also influence the choice of marketing channels. Price decisions include:

Pricing Strategy (Penetration, Skim, etc)

List price: The list price, also known as the manufacturer's suggested retail price (MSRP), or the recommended retail price (RRP), or the suggested retail price (SRP), of a product is the price at which the manufacturer recommends that the retailer sell the product.

Payment period: Whether the payment is in lumpsum or in installments

Discounts: The percentage decrease in the price of a product on special occasions.

Financing: If the product is bought on credit by the customer the amount financed by the financing agency and the down payment (i.e. customer's own money) details

Credit terms: The number of installments to be paid by the customer to the financing agency and the rate of interest to be charged on the credit amount.

Using price as a weapon for rivals is as old as mankind, but it is risky too. Consumers are often sensitive for price, discounts and additional offers. Another aspect of pricing is that expensive products are considered of good quality.

Place (Placement)

It not only includes the place where the product is placed, all those activities performed by the company to ensure the availability of the product to the targeted customers. Availability of the product at the right place, at the right time and in the right quantity is crucial in placement decisions.

Placement decisions include:

Placement

Distribution channels

Logistics i.e. the commercial activity of transporting goods to customers

Inventory

Order processing: Whether it is physical processing or computerized online processing?

Market coverage

Selection of channel members

Promotion

Promotion includes all communication and selling activities to persuade/convince future prospects to buy the product. Promotion decisions include:

Advertising: is through paid media done by the organization.

Media Types i.e. TV, Radio, Internet, newspapers, Cinema slides etc.

Publicity: From one person to other person without payment by the organization / company

Message

Budgets

Sales promotion i.e. endorsement/ certification with famous personalities

Personal selling

Public relations

Direct marketing

MARKET SEGMENTATION

How Market Segmentation Fits in with Marketing

Market segmentation is a key component of the market **segmentation, targeting and positioning** process, usually referred to as the **STP process/approach**. The three phases of market segmentation, targeting and positioning are linked and are designed to be executed together and sequentially, as shown in the following diagram:

Many marketers use the S-T-P approach; **Segmentation → Targeting → Positioning** to provide the framework for marketing planning objectives.

Model of the STP process



Definition: The division of a market into different homogeneous groups of consumers is known as market segmentation.

Rather than offer the same marketing mix to vastly different customers, market segmentation makes it possible for firms to tailor/ design the marketing mix for specific target markets, thus better satisfying customer needs. Not all elements of the marketing mix are necessarily changed from one segment to the next. For example, in some cases only the promotional campaigns would differ.

A typical market segment should be:

Identifiable: refers to the extent to which managers can identify or recognize distinct groups within the marketplace

Substantial: refers to the extent to which a segment or group of customers represents a sufficient size to be profitable. This could mean sufficiently large in number of people or in purchasing power

Accessible: refers to the extent to which marketers can reach the targeted segments with promotional or distribution efforts

Responsiveness: refers to the extent to which consumers in a defined segment will respond to marketing offers targeted at them

Actionable: segments are said to be actionable when they provide guidance for marketing decisions.

Durable: A particular market segment should not change too quickly.

Types of Consumer Market Segmentation

A basis for segmentation is a factor that varies among groups within a market, but that is consistent within groups. One can identify four primary bases on which to segment a consumer market:

- **Geographic segmentation** is based on physical location/ region such as country, state, city, suburb and regional variables such as climate, population density, and population growth rate.
- **Demographic (quantifiable population statistics) segmentation** is based on variables such as age, gender, marital status, income, education, ethnicity (origin), education, occupation, income, and family size, family status, religion etc.
- **Psychographic segmentation** is based on variables such as values, morals, ethics, principles, attitudes, and lifestyle.
- **Behavioral segmentation** is based on variables such as user status (first time, regular, non - regular), usage rate i.e. whether a regular user or occasional user, adopter status i.e. early adopters, late adopters or

laggards, price sensitivity, **brand loyalty**(*making repeated purchases of same brand product over time), and benefits sought.

Importance of Market Segmentation:

- **From Customers' Side:**
 - I. Market segmentation provides greater choices of products and services.
 - II. Products and services are more closely related to the customer needs.
- **From Company or producers' side**
 - I. It helps in better market planning
 - II. It helps to identify the prospective customers
 - III. Companies will get to know their customers better so that they can provide better services.
 - IV. Budgets can be more closely allocated on basis of investments and returns needed from different segments.
 - V. Small market segments may be easier to dominate.
 - VI. Markets and sales activity will be closely focused and monitored leading to more sales, lower costs and higher profitability.

Books referred:

1. Acharya S.S and Agarwal NL, 2006, Agricultural Marketing in India. Oxford & IBH Publishing Co. Pvt. Ltd. New Delhi
2. Agricultural Economics by S .Subba Reddy, P. Raghuram, T.V.N. Sastry and I Bhavani Devi. Oxford & IBP publishing company Ltd. New Delhi.

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LECTURE -3

Classification and characteristics of agricultural markets

Markets may be classified on the basis of each of the twelve dimensions mentioned below.

1. On the basis of Location:

On the basis of the place of location or operation, markets are of the following types:

- a) **Village Markets:** A market which is located in a small village, where major transactions take place among the buyers and sellers of a village is called a village market.
- b) **Primary wholesale Markets:** These markets are located in big towns near the centres of production of agricultural commodities. In these markets, a major part of the produce is brought for sale by the producer-farmers themselves. Transactions in these markets usually take place between the farmers and traders.
- c) **Secondary wholesale Markets:** These markets are located generally in district headquarters or important trade centers or near railway junctions. The major transactions in commodities take place between the village traders and wholesalers. The bulk of the arrivals in these markets is from other markets. The produce in these markets is handled in large quantities. There are, therefore, specialized marketing agencies performing different marketing functions, such as those of commission agents, brokers, weigh men, etc.
- d) **Terminal Markets:** A terminal market is one where the produce is either finally disposed of to the consumers or processors, or assembled for export. Merchants are well organized and use modern methods of marketing. Commodity exchanges exist in these markets, which provide facilities, for forward trading in specific

commodities. Such markets are located either in metropolitan cities or in sea-ports – in Bombay, Madras, Calcutta and Delhi.

- e) **Seaboard Markets:** Markets which are located near the seashore and are meant mainly for the import and/or export of goods are known as seaboard markets. Examples of these markets in India are Bombay, Madras, Calcutta.

2. On the Basis of Area/Coverage:

On the basis of the area from which buyers and sellers usually come for transactions, markets may be classified into the following four classes:

- a) **Local or Village Markets:** A market in which the buying and selling activities are confined among the buyers and sellers drawn from the same village or nearby villages. The village markets exist mostly for perishable commodities in small lots, e.g., local milk market or vegetable market.
- b) **Regional Markets:** A market in which buyers and sellers for a commodity are drawn from a larger area than the local markets. Regional markets in India usually exist for food grains.
- c) **National Markets:** A market in which buyers and sellers are at the national level. National markets are found for durable goods like jute and tea.
- d) **World Market:** A market in which the buyers and sellers are drawn from the whole world. These are the biggest markets from the area point of view. These markets exist in the commodities which have a world-wide demand and/or supply, such as coffee, machinery, gold,

silver, etc. In recent years many countries are moving towards a regime of liberal international trade in agricultural products like raw cotton, sugar, rice and wheat.

3. On the Basis of Time Span:

On this basis, markets are of the following types:

- a) **Short-period Markets:** The markets which are held only for a few hours are called short-period markets. The products dealt within these markets are of highly perishable nature, such as fish, fresh vegetables, and liquid milk. In these markets, the prices of commodities are governed mainly by the extent of demand for, rather than by the supply of, the commodity.
- b) **Long-period Markets:** These markets are held for a long period than the short-period markets. The commodities traded in these markets are less perishable and can be stored for some time; these are food grains and oilseeds. The prices are governed both by the supply and demand forces.
- c) **Secular Markets:** These are markets of permanent nature. The commodities traded in these markets are durable in nature and can be stored for many years. Examples are markets for machinery and manufactured goods.

4. On the Basis of Volume of Transactions:

There are two types of markets on the basis of volume of transactions at a time.

- a) **Wholesale Markets:** A wholesale market is one in which commodities are bought and sold in large lots or in bulk. Transactions in these markets take place mainly between traders.
- b) **Retail Markets:** A retail market is one in which

commodities are bought by and sold to the consumers as per their requirements. Transactions in these markets take place between retailers and consumers. The retailers purchase in wholesale market and sell in small lots to the consumers. These markets are very near to the consumers.

5. **On the Basis of Nature of Transactions:**

The markets which are based on the types of transactions in which people are engaged are of two types:

- a) **Spot or Cash Markets:** A market in which goods are exchanged for money immediately after the sale is called the spot or cash market.
- b) **Forward Markets:** A market in which the purchase and sale of a commodity takes place at time „t“ but the exchange of the commodity takes place on some specified date in future i.e., time $t + 1$. Sometimes even on the specified date in the future ($t+1$), there may not be any exchange of the commodity. Instead, the differences in the purchase and sale prices are paid or taken.

6. **On the Basis of Number of Commodities in which Transaction Takes place:** A market may be general or specialized on the basis of the number of commodities in which transactions are completed:

- a) **General Markets:** A market in which all types of commodities, such as food grains, oilseeds, fiber crops, gur, etc., are bought and sold is known as general market. These markets deal in a large number of commodities.
- b) **Specialized Markets:** A market in which transactions take place only in one or two commodities is known as a specialized market. For every group of commodities,

separate markets exist. The examples are food grain markets, vegetable markets, wool market and cotton market.

7. On the Basis of Degree of Competition:

Each market can be placed on a continuous scale, starting from a perfectly competitive point to a pure monopoly or monopsony situation. Extreme forms are almost non-existent. Nevertheless, it is useful to know their characteristics. In addition to these two extremes, various midpoints of this continuum have been identified. On the basis of competition, markets may be classified into the following categories:

Perfect Markets: A perfect market is one in which the following conditions hold good:

- a) There is a large number of buyers and sellers;
- b) All the buyers and sellers in the market have perfect knowledge of demand, supply and prices;
- c) Prices at any one time are uniform over a geographical area, plus or minus the cost of getting supplies from surplus to deficit areas;
- d) The prices are uniform at any one place over periods of time, plus or minus the cost of storage from one period to another;
- e) The prices of different forms of a product are uniform, plus or minus the cost of converting the product from one form to another.

Imperfect Markets: The markets in which the conditions of perfect competition are lacking are characterized as imperfect markets. The following situations, each based on the degree of imperfection, may be identified:

- a) **Monopoly Market:** Monopoly is a market situation in which there is only one seller of a commodity. He exercises sole control over the quantity or price of the commodity. In this market, the price of commodity is

generally higher than in other markets. Indian farmers operate in a monopoly market when purchasing electricity for irrigation. When there is only one buyer of a product the market is termed as a monopsony market.

- b) **Duopoly Market:** A duopoly market is one which has only two sellers of a commodity. They may mutually agree to charge a common price which is higher than the hypothetical price in a common market. The market situation in which there are only two buyers of a commodity is known as the duopsony market.
- c) **Oligopoly Market:** A market in which there are more than two but still a few sellers of a commodity is termed as an oligopoly market. A market having a few (more than two) buyers is known as oligopsony market.
- d) **Monopolistic competition:** When a large number of sellers deal in heterogeneous and differentiated form of a commodity, the situation is called monopolistic competition. The difference is made conspicuous by different trade marks on the product. Different prices prevail for the same basic product. Examples of monopolistic competition faced by farmers may be drawn from the input markets. For example, they have to choose between various makes of insecticides, pumpsets, fertilizers and equipments.

8. On the Basis of Nature of Commodities:

On the basis of the type of goods dealt in, markets may be classified into the following categories:

- a) **Commodity Markets:** A market which deals in goods and raw materials, such as wheat, barley, cotton, fertilizer, seed, etc., are termed as commodity markets.
- b) **Capital Markets:** The market in which bonds, shares and securities are bought and sold are called capital markets;

for example, money markets and share markets.

9. On the Basis of Stage of Marketing:

On the basis of the stage of marketing, markets may be classified into two categories:

- a) **Producing Markets:** Those markets which mainly assemble the commodity for further distribution to other markets are termed as producing markets. Such markets are located in producing areas.
- b) **Consuming Markets:** Markets which collect the produce for final disposal to the consuming population are called consumer markets. Such markets are generally located in areas where production is inadequate, or in thickly populated urban centres.

10. On the Basis of Extent of Public Intervention:

Based on the extent of public intervention, markets may be placed in any one of the following two classes:

- a) **Regulated Markets:** Markets in which business is done in accordance with the rules and regulations framed by the statutory market organization representing different sections involved in markets. The marketing costs in such markets are standardized and practices are regulated.
- b) **Unregulated Markets:** These are the markets in which business is conducted without any set rules and regulations. Traders frame the rules for the conduct of the business and run the market. These markets suffer from many ills, ranging from unstandardised charges for marketing functions to imperfections in the determination of prices.

11. On the Basis of Type of Population Served:

On the basis of population served by a market, it can be classified as either urban or rural market:

- a) **Urban Market:** A market which serves mainly the population residing in an urban area is called an urban market. The nature and quantum of demand for agricultural products arising from the urban population is characterized as urban market for farm products.
- b) **Rural Market:** The word rural market usually refers to the demand originating from the rural population. There is considerable difference in the nature of embedded services required with a farm product between urban and rural demands.

12. On the basis of visibility:

a) **Open markets/Visible markets:** Transactions takes place in open b/w buyers and sellers.

b) **Invisible markets/ Closed markets/ Black markets:** Here transactions do not takes place in open b/w buyers and sellers leading to hoarding and black marketing.

13. On the Basis of Accrual of Marketing Margins:

Markets can also be classified on the basis of as to whom the marketing margins accrue. Over the years, there has been a considerable increase in the producers or consumers co-operatives or other organizations handling marketing of various products. Though private trade still handles bulk of the trade in farm products, the co-operative marketing has increased its share in the trade of some agricultural commodities like milk, fertilizers, sugarcane and sugar. In the case of marketing activities undertaken by producers or consumers co-operatives, the marketing margins are either negligible or shared amongst their members.



Course Details

**Course
Name**

Agricultural Marketing Trade and Prices

Lesson 4

Demand, supply -nature and determinants of demand and supply

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Supply is a term that describes the quantity of goods or services that all producers are willing to offer in the market at a given time and price.

Demand refers to the amount of goods or services that customers are willing to buy at a specific price in a specific period.

Determinants of Demand



1 Price of Good or Service

Five Determinants of Demand with Examples and Formula

$$qD = f$$

F = price, income, prices of related goods, tastes, expectations



5 Expectations



2 Income of Buyers



3 Prices of related goods or services



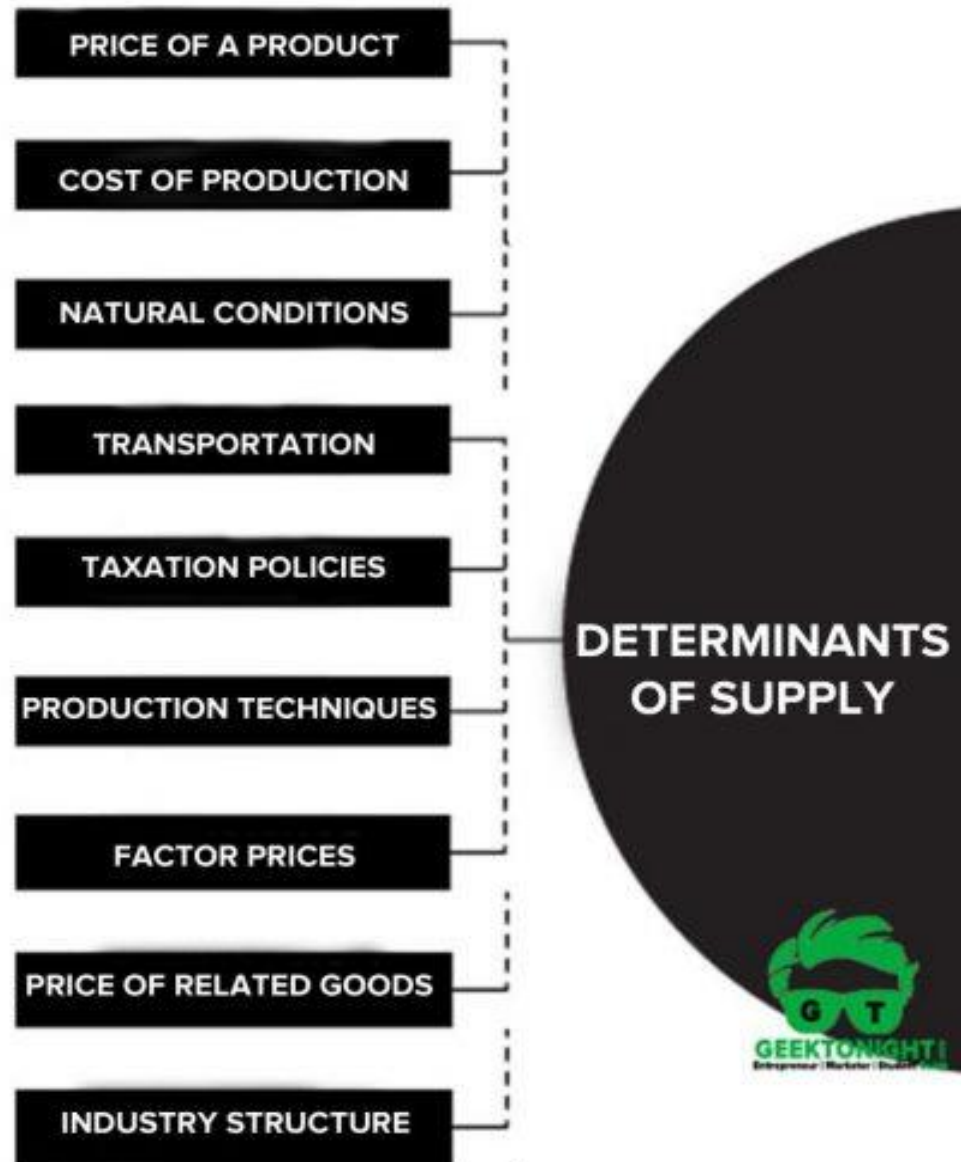
4 Tastes of Consumers

the balance

The level of demand for products is determined by the following factors:

1. Consumer tastes and preferences
2. Number of buyers in the market
3. Consumer income
4. Price of related goods, such as substitutes or complements
5. Consumers' expectations for the future

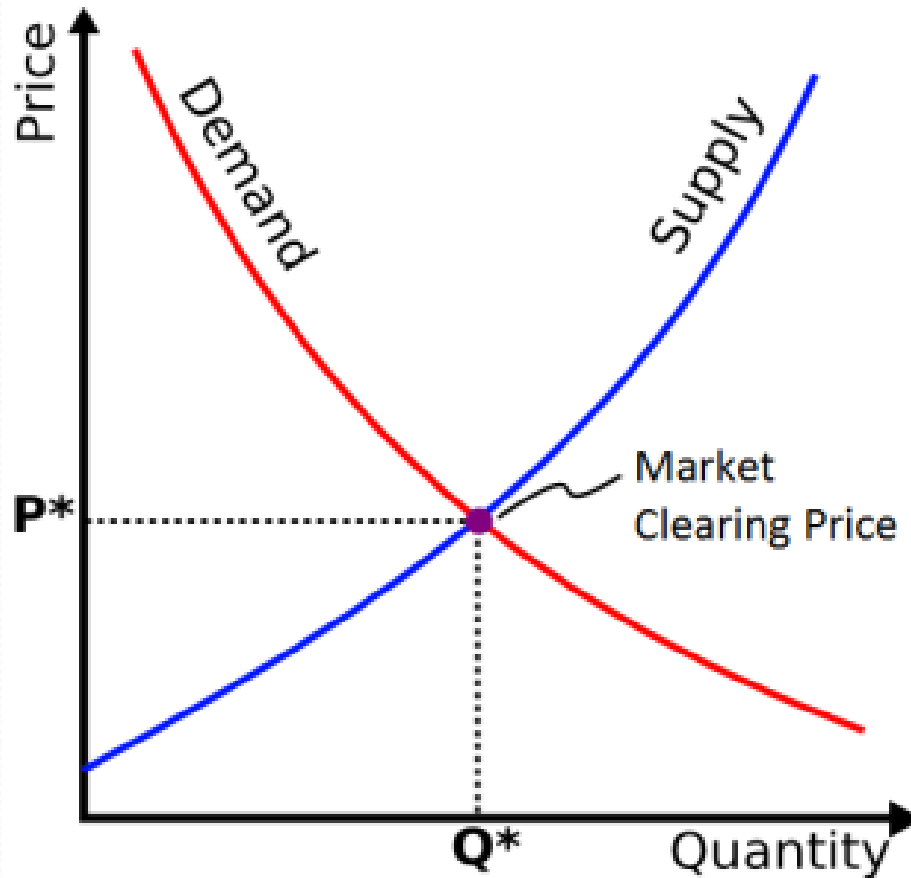
• Determinants of Supply



The supply level for a product or service is determined by the following factors

1. Cost of resources
2. Production technology
3. Taxes and subsidies
4. Price of other commodities the supplier could produce:
5. Supplier's expectations for the future: Number of suppliers in the market

The Relation Between Supply and Demand

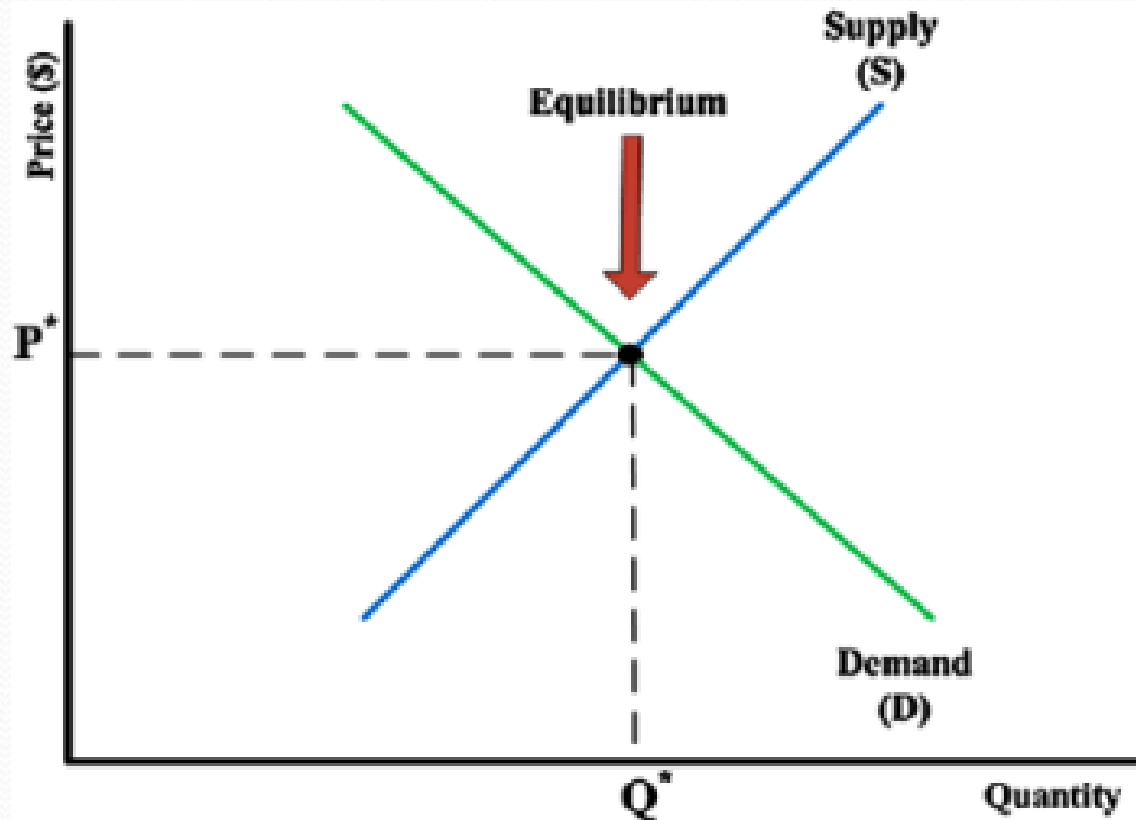


With regard to supply and demand, farmers need to know two important things:

1. Supply and demand will determine the market price of the goods or services
2. Market price will determine the supply-demand relationship of products or services

A Balance Between Supply and Demand

Supply and demand, and market prices, will rise and fall until they find a balance, which is called **market equilibrium**.



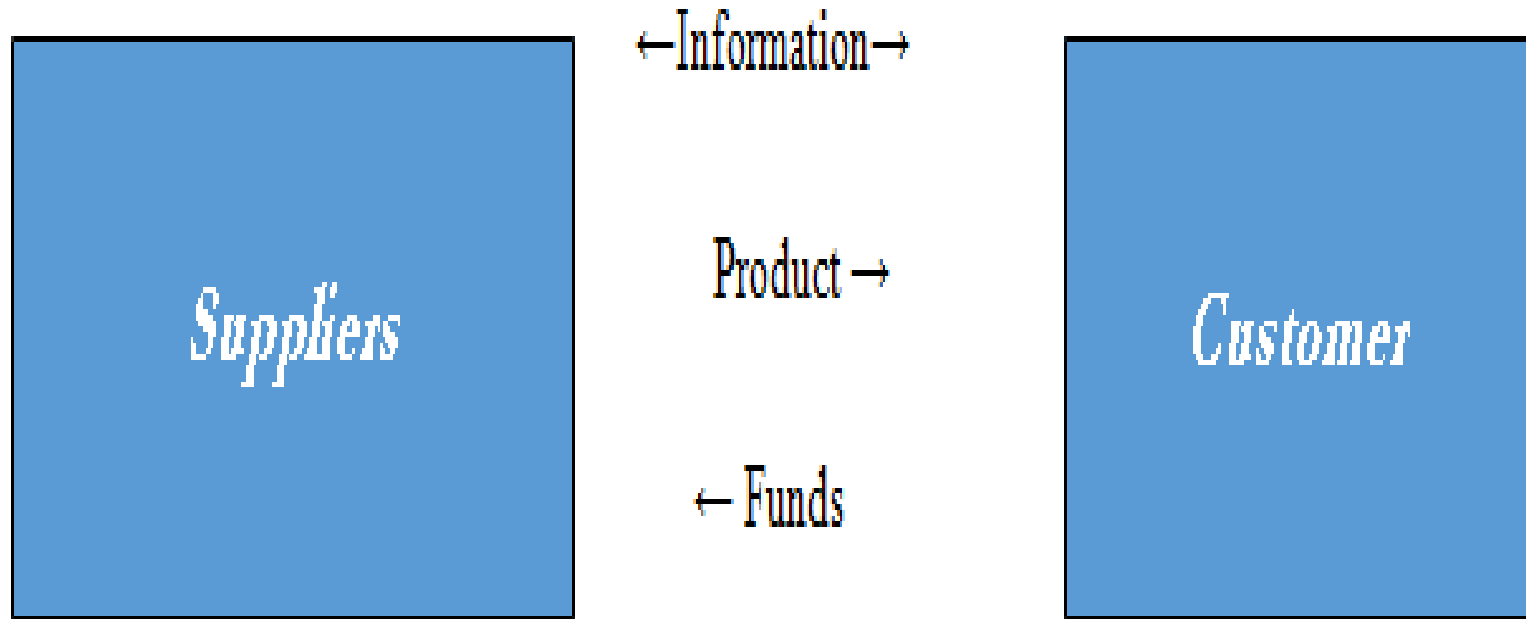
SUPPLY CHAIN MANAGEMENT

Definitions:

Sengupta and Turnbull (1996): ***SCM is the process of effectively managing the flow of materials and finished goods from vendors to customers using manufacturing facilities and warehouses as intermediate stops.

Russell (2001) SCM is the practice of coordinating the flow of goods, services, information, and finances as they move from raw material to parts supplier to manufacturer to wholesaler to retailer to consumer.

Flows in a Supply Chain



Benefits of supply chain management

- Supply chain management creates efficiencies, raises profits, lowers costs, increases collaborations and more.
- It enables companies to better manage demand, carry the right amount of inventory, deal with disruptions, keep costs to a minimum and meet customer demand in the most effective way possible.

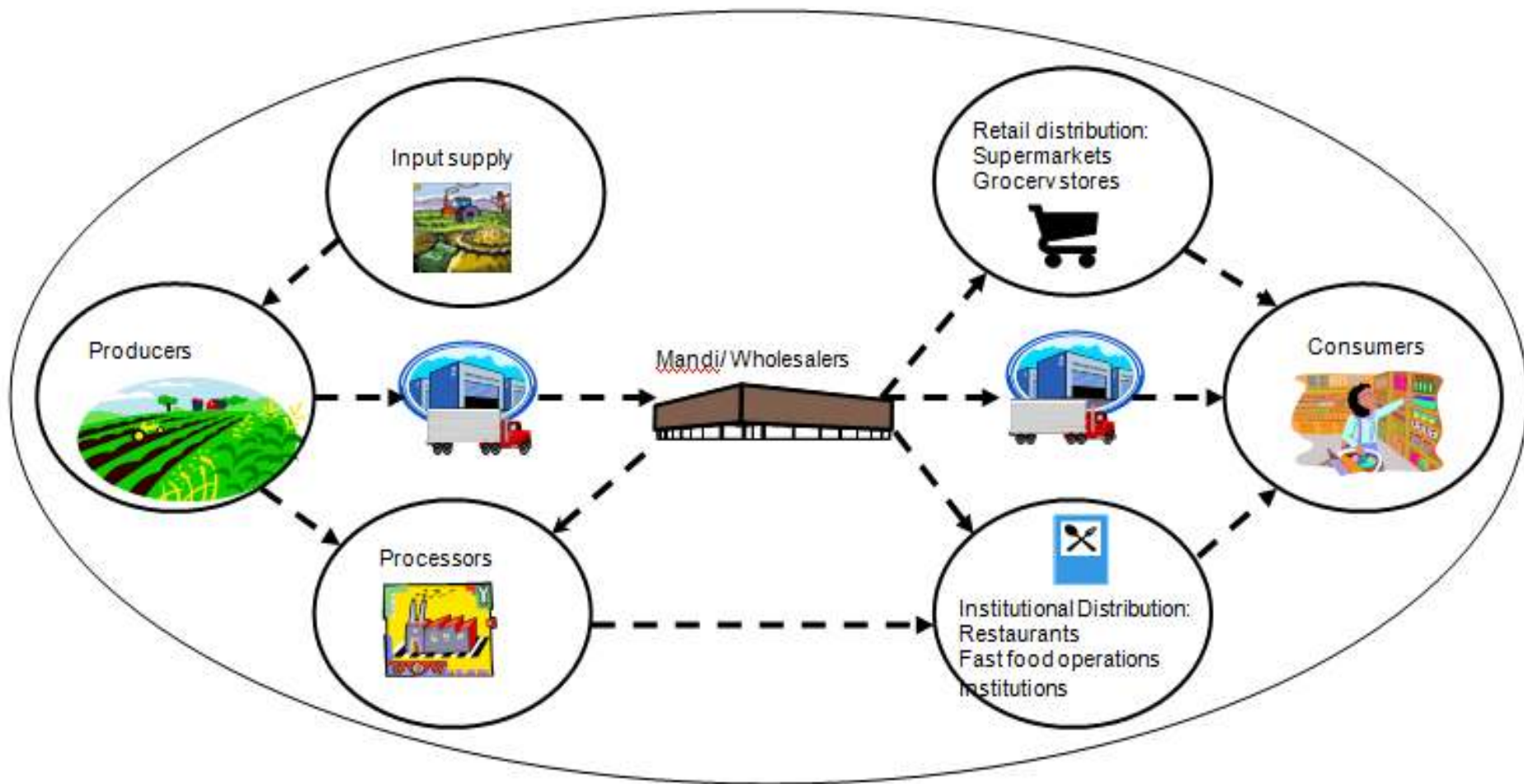
Supply chain management



ILLUSTRATIONS: VLADIMIR/GETTY IMAGES; VECTOR TRADITION SHADORE STOCK; VLADIMIR/ROOSE STOCK; LEO, SINDORE STOCK; SIV/STOCK/ROOSE STOCK

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Agricultural Supply Chain System



LECTURE-5

Producers' surplus – meaning and its types, marketable and marketed surplus, factors affecting marketable surplus of agri-commodities

Producers' 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.

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 the surplus of that commodity and vice versa.

Estimation of the marketed and marketable surplus of agricultural commodities 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 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 quantities.
- (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 produce from one area, where they are in surplus, to another area which is deficient.
- (iv) **Advanced 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 System:** The knowledge of marketed surplus helps in developing adequate capacity of transport and storage system to handle it.

Meaning and types of producers' surplus:

The producers' surplus is the quantity of produce which is or can be made available by the farmers to the non-farm population. The producers 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 producers farmers after meeting his requirement for family consumption, farm needs for seeds and feed for cattle, payment to labour in kind, payment to artisans, 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 payment 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 the 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 security. 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 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.

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.

$$\begin{array}{l} > \\ \text{Marketed surplus} < \text{surplus} \\ = \end{array}$$

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 increased 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 farmers 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 production 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 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 :

$$M = f(x_1, x_2, x_3, \dots)$$

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

the other factors may be specified.

RELATIONSHIP BETWEEN PRICES AND MARKETABLE SURPLUS

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

1. INVERSE RELATIONSHIP: There is an inverse relationship between prices and the marketable surplus. This hypothesis was presented by P.N. Mathur and M. Ezetkiel. 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

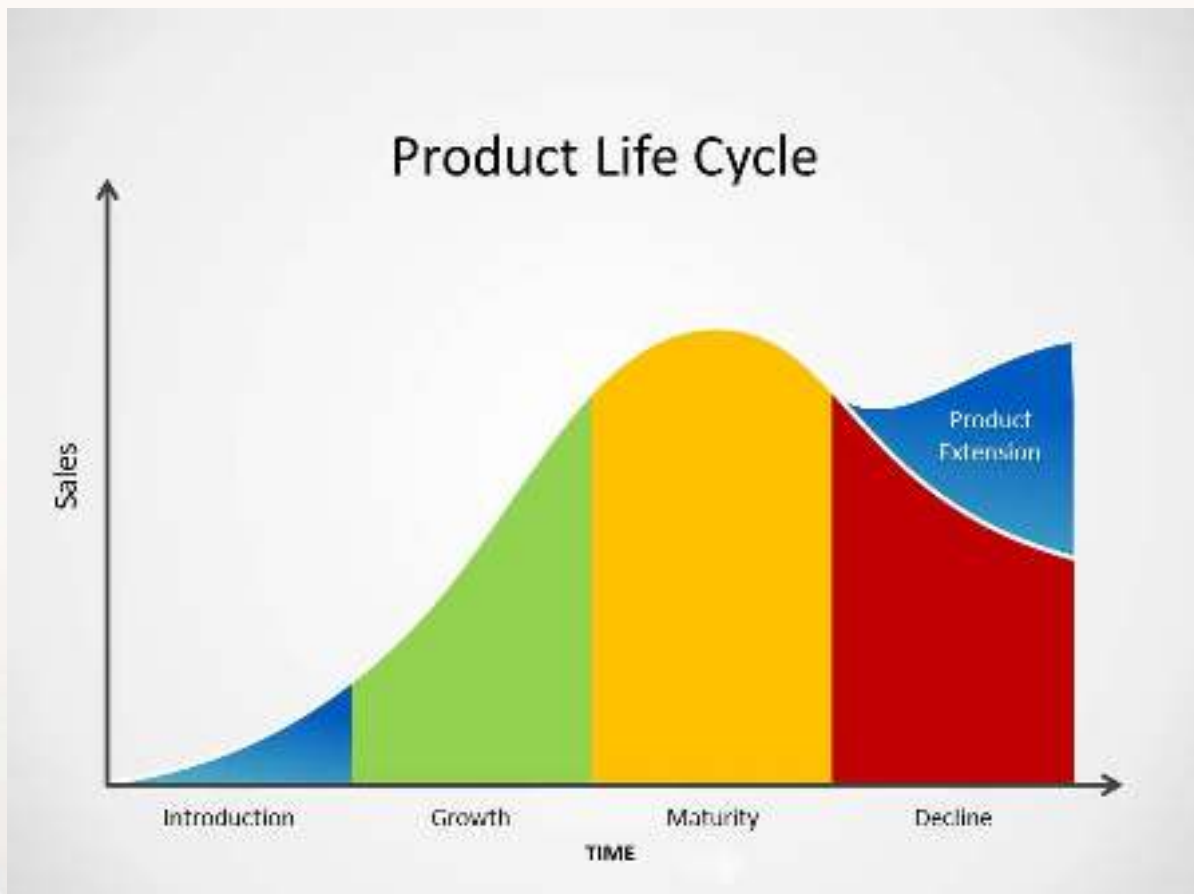
satisfy their cash requirements ; they retain the balance of output for their own consumption purpose. With a rise in the prices of foodgrains, they sell a smaller quantity of foodgrains to get the cash they need and vice versa. In other words, with a rise in price, farmers sell a smaller, and with the 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 producers 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 of a positive relationship between prices and the marketed surplus of foodgrains in India. This relationship is based on the assumption that farmers are price conscious. With a rise in the prices of foodgrains, farmers are tempted to sell more and retain less. As a result, there is increased surplus. The converse, too, holds true.

Course Name	Agricultural Marketing Trade and Prices
Lesson 6	Product Life Cycle- stages, characteristics and strategies
Content Revisor Name	SADDIKUTI HYMA JYOTHI
University/College Name	Acharya N.G. Ranga Agricultural University, Guntur
Course Reviewer Name	JAHANMOHAN KR
University/College Name	Tamil Nadu Agricultural University, Coimbatore

S

Meaning and stages in PLC; characteristics of PLC; strategies in different stages of PLC



Product Life Cycle Stages

The product life cycle has 4 very clearly defined stages, each with its own characteristics that mean different things for business that are trying to manage the life cycle of their particular products.

Introduction Stage – This stage of the cycle could be the most expensive for a company launching a new product. The size of the market for the product is small, which means sales are low, although they will be increasing. On the other hand, the cost of things like research and development, consumer testing, and the marketing needed to launch the product can be very high, especially if it's a competitive sector.

Growth Stage – The growth stage is typically characterized by a strong growth in sales and profits, and because the company can start to benefit from economies of scale in production, the profit margins, as well as the overall amount of profit, will increase. This makes it possible for businesses to invest more money in the promotional activity to maximize the potential of this growth stage.

Maturity Stage – During the maturity stage, the product is established and the aim for the manufacturer is now to maintain the market share they have built up. This is probably the most competitive time for most products and businesses need to invest wisely in any marketing they undertake. They also need to consider any product modifications or improvements to the production process which might give them a competitive advantage.

Decline Stage – Eventually, the market for a product will start to shrink, and this is what’s known as the decline stage. This shrinkage could be due to the market becoming saturated (i.e. all the customers who will buy the product have already purchased it), or because the consumers are switching to a different type of product. While this decline may be inevitable, it may still be possible for companies to make some profit by switching to less-expensive production methods and cheaper markets.

The table below provides a summary of the characteristics of the product life cycle stages and the appropriate marketing strategies for each stage.

Product Life Cycle Stage- Characteristics and strategies:

Particulars	Characteristics			
	Introduction	Growth	Maturity	Decline
Sales	Low sales	Rapidly increasing sales	Peak sales	Declining sales



Costs	High cost per customer	Average cost per customer	Low cost per customer	Low cost per customer
Profits	Negative	Rising profits	High profits	Declining profits
Customers	Innovators	Early adopters	Middle majority	Laggards
Competitors	Few	Growing number	Stable number beginning to decline	Declining number
Particulars	Strategies			
	Introduction	Growth	Maturity	Decline
Product	Offer a basic product	Offer product extensions, service and warranty	Diversify brand and models	Phase out weak items
Price	Unit cost plus pricing	Price to penetrate market	Price to match or beat the competitors	Cut price
Distribution	Build selective distribution	Build intensive distribution	Build more intensive distribution	Go selective phase out unprofitable outlets
Advertising	Build product awareness among Early adopters and innovators	Build awareness and interest in the mass market	Stress brand differences and benefits	Reduce to level needed to retain most loyal customers



<p>Sales promotion</p>	<p>Use heavy sales promotion to entice/attract trial</p>	<p>Reduce to take advantage of heavy consumer demand</p>	<p>Increase to encourage brand switching</p>	<p>Reduce to minimal level</p>
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Course Name	Agricultural Marketing Trade and Prices
Lesson 7	Pricing and promotion strategies
Content Revisor Name	SADDIKUTI HYMA JYOTHI
University/College Name	Acharya N.G. Ranga Agricultural University, Guntur
Course Reviewer Name	JAHANMOHAN KR
University/College Name	Tamil Nadu Agricultural University, Coimbatore

PRICING STRATEGIES:

Price is a versatile (flexible/useful/handy) element of the marketing mix.

1. Penetration Pricing:

The price charged for products and services is set **initially low** in order to gain market share. Once this is achieved, the price is increased Ex: Jio internet of Reliance Telecom Services. These companies need to grab large numbers of consumers to make it worth their while, so they offer free telephone/internet services. Once there is a large number of subscribers prices gradually creep up. So they move from a penetration approach to more of a skimming/premium pricing approach.

2. Price Skimming:

Price skimming sees a company charge a higher initial price because it has a substantial competitive advantage of innovation. However, the advantage will not to be sustainable. The high price attracts new competitors into the market, and the price inevitably falls due to increased supply.

Manufacturers of digital watches used a skimming approach. Once other manufacturers were tempted into the market and the watches were produced at a lower unit cost, other marketing strategies and pricing approaches are implemented.

3. Economy Pricing:

The costs of marketing and promoting a product are kept to a minimum. Supermarkets often have economy brands for soups, vermicelli, etc. Budget airlines are famous for keeping their overheads/ fixed costs as

low as possible and then giving the consumer a relatively lower price to fill an aircraft. The first few seats are sold at a very cheap price (almost a promotional price) and the middle majority are economy seats, with the highest price being paid for the last few seats on a flight (which would be a premium pricing strategy). During times of recession economy pricing sees more sales.

4. Psychological Pricing.

This approach is used when the marketer wants the consumer to respond on an **emotional, rather than rational basis**. Price Point Perspective (PPP) followed by Bata Company is an excellent example for psychological pricing. Charging Rs. 999 instead of Rs.1000 for a pair of footwear.

5. Product Line Pricing.

Where there is a range of products or services, the pricing reflects the benefits of parts of the range. Creating a product line that offers the low end, mid- range and high-end pricing can lead the customers to believe that different products have different values. The business will have to offer more features on its top-end products to justify a higher price if all the products are sold under the same name and in the same place. For example car washes; a basic wash could be Rs.200, a wash and wax Rs.400 and the whole package for Rs.600. Product line pricing seldom reflects the cost of making the product since it delivers a range of prices that a consumer perceives as being fair incrementally – over the range. Profit is made on the range rather than single items.

6. Optional Product Pricing.

Companies will attempt to increase the amount customers spend once they start to buy. **Optional 'extras'** increase the overall price of the product or service. For example airlines will charge for optional extras such as guaranteeing a window seat or reserving a row of seats next to each other.

Again budget airlines are main users of this approach when they charge customers extra for additional luggage or extra legroom.

7. Captive Product Pricing

Where products have complements, companies will charge a premium price since the consumer has no choice. For example a razor manufacturer will charge a low price for the first plastic razor and recoup its margin (and more) from the sale of the blades that fit the razor. Another example is where printer manufacturers will sell you an inkjet printer at a low price. In this instance the inkjet company knows that once you run out of the consumable ink you need to buy more, and this tends to be relatively expensive. Again the cartridges i.e. inkjet and laser jet are not interchangeable and you have no choice.

8. Product Bundle Pricing.

Here sellers combine several products in the same package. This also serves to move old stock. You might also see product bundle pricing with the sale of items at auction, where an attractive item may be included in a lot with a box of less interesting things so that you must bid for the entire lot. It's a good way of moving slow selling products, and in a way is another form of promotional pricing.

9. Promotional Pricing.

Pricing to promote a product is a very common application. There are many examples of promotional pricing including approaches such as BOGOF (Buy One Get One Free), money off vouchers and discounts. Promotional pricing is often the subject of controversy. Many countries have laws which govern the amount of time that a product should be sold at its original higher price before it can be discounted.

10. Geographical Pricing.

Geographical pricing sees variations in price in different parts of the world. For example rarity value, or where shipping costs increase price. In some countries there is more tax on certain types of product which makes them more or less expensive, or legislation which limits how many products might be imported again raising price.

11. Value Pricing.

This approach is used where external factors such as recession or increased competition force companies to provide value products and services to retain sales e.g. value meals at McDonalds and other fast-food restaurants. Value price means that you get great value for money i.e. the price that you pay makes you feel that you are getting a lot of product.

12. Premium Pricing.

Use a high price where there is a *****unique product brand.** This approach is used where a substantial competitive advantage exists and the marketer is safe in the knowledge that they can charge a relatively higher price. Such high prices are charged for luxuries such as Taj hotel rooms in Mumbai, ITC Mourya Sheraton hotel rooms in New Delhi and first class air travel in international in reputed airways, first class railway travel on 'Palace on Wheels' etc.

13. Cost Plus Pricing

The price of the product is production costs plus a set amount ("mark up") based on how much profit (return) that the company wants to make. Although this method ensures the price covers production costs it does not take consumer demand or competitive pricing into account which could place the company at a competitive disadvantage. For example a product may cost Rs.100 to produce and as the firm has decided that their profit will be twenty percent they decide to sell the product for Rs.120.

14. Cost Based Pricing:

This is similar to cost plus pricing in that it takes costs into account but it will consider other factors such as market conditions when setting prices. Cost based pricing can be useful for firms that operate in an industry where prices change regularly but still want to base their price on costs.

15. Value Based Pricing:

This pricing strategy considers the value of the product to consumers rather than the how much it cost to produce it. Value is based on the benefits it provides to the consumer e.g. convenience, wellbeing, reputation or joy. Firms that produce technology, medicines, and beauty products are likely to use this pricing strategy.

16. Competition based pricing: Setting a price in comparison with competitors. In reality a firm has three options and these are to price lower, price the same or price higher than competitors. Some firms offer a price matching service to match what their competitors are offering. Others will go further and refund back to the customer more money than the difference between their price and the competitor's price.

PROMOTIONAL STRATEGIES/ PROMOTIONAL MIX:

Promotion may be defined as “**the co-ordination of all seller initiated efforts to set up channels of information and persuasion to facilitate the sale of a good or service.**” The promotion mix consists of six elements. They are:

- Advertising,
- Publicity,
- Sales promotion,
- Personal selling,
- Direct marketing
- Public relations

a) Advertising: The word advertising originates from a Latin word advertise, which means “to turn to”. The dictionary meaning of the term is “to give public notice or to announce publicly”. **Definition:** Advertising

is the dissemination of information by non-personal means through paid media where the source is the sponsoring organization.

Advantages:

(1) Introduces a New Product in the Market:

Advertising plays significant role in the introduction of a new product in the market. It

stimulates the people to purchase the product.

(2) Expansion of the Market:

It enables the manufacturer to expand his market. It helps in exploring new markets for the product and retaining the existing markets. It plays a sheet anchor role in widening the marketing for the manufacturer's products even by conveying the customers living at the far flung and remote areas

(3) Increased Sales:

Advertisement facilitates mass production to goods and increases the volume of sales. In other words, sales can be increased with additional expenditure on advertising with every increase in sale, selling expenses will decrease.

(4) Fights Competition:

Advertising is greatly helpful in meeting the forces of competition prevalent in the market. Continuous advertising is very essential in order to save the product from the clutches of the competitors.

(5) Enhances Good-Will:

Advertising is instrumental in increasing goodwill of the concern. It introduces the manufacturer and his product to the people. **Repeated**

advertising and better quality of products brings more reputation for the manufacturer and enhances goodwill for the concern.

(6) Educates the Consumers:

Advertising is educational and dynamic in nature. It **familiarizes the customers with the new products and their diverse uses** and also educates them about the new uses of existing products.

(7) Elimination of Middlemen:

It aims at **establishing a direct link between the manufacturer and the consumer**, thereby eliminating the marketing intermediaries. This increases the profits of the manufacturer and the consumer gets the products at lower prices.

(8) Better Quality Products:

Different goods are advertised under different brand names. **A branded product assures a standard quality to the consumers.** The manufacturer provides quality goods to the consumers and tries to win their confidence in his product.

(9) Supports The Salesmanship:

Advertising greatly facilitates the work of a salesman. The customers are already familiar with the product which the salesman sells. **The selling efforts of a salesman are greatly supplemented by advertising.** It has been rightly pointed out that “selling and advertising are cup and saucer and key and lock wards.”

(10) More Employment Opportunities:

Advertising provides and creates more employment opportunities for many talented people like **painters, photographers, singers, cartoonists, musicians, models and people working in different advertising agencies.**

(11) Reduction in the Prices of Newspapers and Magazines Etc:

Advertising is immensely helpful in reducing the cost of the newspapers and magazines etc. The cost of bringing out a newspaper is largely met by the advertisements published therein.

(12) Higher Standard of Living:

The experience of the advanced nations shows that advertising is greatly responsible for raising the living standards of the people. In the words of Winston Churchill “advertising nourishes the consuming power of men and creates wants for better standard of living.” By bringing to the knowledge of the consumers different variety and better quality products, it has helped a lot in increase.

Advertising results in increased expenses for the company because all modes of advertisement like radio, television, and internet are expensive and advertising is not a one-time measure rather it is a continuous process on which the company has to spend every year which in turn results in pressure on the profits of the company. Hence if advertising is not achieving the desired increase in sales figure of the company then it is an unnecessary expense for the company.

Disadvantages:

1. Advertisement can be misleading and not all products or services which are advertised are good and hence in a way advertisement gives wrong impression in the minds of consumers leading them to purchase the advertised product or service which are of inferior quality.
2. Another limitation of advertisement is that big companies have undue advantage with them of having higher budget for advertisements whereas

local manufacturers or small companies do not have any budget which results in bigger companies advertising and selling those products which are of lower quality than local manufacturers products and hence in a way advertisement kills competition and give larger companies unfair advantage over smaller companies.

3. The cost of advertisements are ultimately reflected in the price of product which the company sells to its customers and at the end it is the customer who has to pay higher price for the product, hence in a way advertisements leads to higher price for a product.

Therefore the advertisement has both benefits as well as limitations, hence one can easily say that advertisement is like a double edged sword which should be used by the company judiciously.

b) Publicity:

Publicity is the disseminating of information by personal or non-personal means and is not directly paid by the organization and the organization is not the source. **Advantages:**

1. The cost of publicity is very less. Publicity comes voluntarily from newspaper or through social media and doesn't cost anything to the company.

2. Publicity ensures credibility/ reliability as the consumers expect a significant level of bias or exaggeration in the advertisements a company produces about its services or products. However, third-party sources, such as blogs, online reviews and magazines are often considered less biased.

3. Consistent publicity helps a company to strengthen its brand.

4. Publicity open doors for more opportunities and help to build relationships with more number of high **net worth companies**.

5. **Publicity helps to go viral.** Advertisements don't go viral on their own publicity help them. Word of mouth is a successful tool that drives more business for a company.

Disadvantages:

1. **Timing:** Timing of the **publicity is not always completely under the control of marketer.** Unless the press thinks the information has very high news value, the timing of the press release is entirely up to the media, if it gets released at all. Thus, the information may be released earlier than desired or too late to make an impact.

2. **Accuracy:** A major way to get publicity is the press release. **Unfortunately, the information sometimes get lost in translation,** that is not always reported the way the provider wishes to be.

c) Sales Promotion: Sales promotion is the dissemination of information through a wide variety of activities **other than personal selling, advertising and publicity** which stimulate consumer purchasing and dealer effectiveness. Examples of sales promotion activities include coupons, celebrity endorsements; event, team or league sponsorships; contests; rebates (refunds); free samples; catalogs; social media; donations; and direct mail

Advantages

- **Building brand awareness:** Customers who are unfamiliar with your brand may be more willing to try your products if you drop your prices, even if this decrease is only temporary. Once they become familiar with these products, you can often secure their ongoing business by continuing to provide products or services that they enjoy.
- **Newsworthiness:** A promotional sale is an event worth shouting out to your customer base. It gives you material for social media posts and newsletters, and if the deal you offer is extra special, your loyal clientele may even do some of your promotion for you by sharing the good news.

- **Inventory turnover:** A promotional pricing event can move old product out the door quickly, making space for new stock that you can sell at more advantageous prices.
- **Cross marketing:** Promotional pricing may earn you less on the items that are actually on sale, but it may encourage customers to purchase additional items on which you earn a higher profit. Some promotional pricing examples illustrate this phenomenon: If you own a fabric store, you can run a promotional sale on scissors to encourage customers to buy fabric.

Disadvantages

- **Deal hunters:** Promotional pricing can attract the types of customers who are only looking for deals. They may buy your product when the price is reduced, but these shoppers are unlikely to spend money on your products and services when you go back to offering them for full price.
- **Reduced revenue:** When you sell your offerings at reduced prices, you do not earn as much from these sales. You may even incur losses from the sale of items that are priced for promotion. Aside from the intangible and longer-term benefits of encouraging potential customers to try your products, you are unlikely to earn any real profit from promotional pricing.
- **Perception of lower quality:** Some customers may see your products as being of lower quality if they are always able to buy these items on sale. Even if they like the product, they may get used to paying less, and this convenience can affect perceptions of what your offerings are actually worth.

d) Personal Selling: Personal selling occurs when a sales representative meets with potential client / customers for the purpose of transacting the sale. Products with relatively high prices or complex features are often sold using personal selling. Examples: Cars, office equipment (photo copiers)

and many products that are sold by businesses to other industrial customers.

- **Two-Way Form of Communications** – Unlike other promotional methods, personal selling is a two-way form of communication, which enables a salesperson to adjust the message as she/he gains feedback from the customer (e.g., adjust message if customer does not fully understand how the product works).
- **Effective in Building Personal Relationships** – The interactive nature of personal selling makes it the most effective promotional method for building relationships with customers, which is particularly important when purchases take a considerable amount of time to complete (e.g., business-to-business purchasing).
- **Important in International Sales** – Building relationships is also a critical part of the personal selling process when doing business internationally, especially in such area as Asia and Latin America, where personal relationships between buyer and seller are often more important than seeking the best business deal.
- **Best Promotion for Hard to Reach Customers** – Personal selling is the most practical promotional option for reaching customers who are not easily reached through other methods (e.g., do not response to advertising, public relations, and sales promotions).

Disadvantages

- **Negative Perception of Salespeople** – Possibly the biggest disadvantage of personal selling is the degree to which this promotional method is misunderstood as many view salespeople as being overly aggressive or even downright annoying, and only interested in making a quick sale.
- **Expensive to Maintain a Sales Force** – Organizations face numerous expenses when utilizing this method of promotion including:
 - For an organization, the money spent to support a sales staff can be steep. These costs include compensation (e.g., salary,

commission, bonus), providing support materials (e.g., product literature), allowances for entertainment spending, travel expenses, office supplies, telecommunication, and much more.

- *Training Costs* – The cost of training a sales team can also be quite high and include such expenses as travel, hotel, meals, and training equipment, and while salespeople are in training, an organization is most likely also paying certain fixed costs including the trainee's salary, health care, and other expenses (e.g., mobile phone).

5. Direct marketing: The business of selling products / services directly to the public Ex. By mail order/ telephone selling rather than through retailers.

6. Public relations: Public relations (PR) includes information that an organization wants to provide its public (customers, employees, stakeholders, general public) to know. PR involves creating a positive image for a company, an offering, or a person via publicity. PR has become more important in recent years because there are now so many media outlets people pay attention to, including YouTube, social networking sites, and blogs.

References:

1. Marketing Management-a South Asian Perspective. 13th Edition by Philip Kotler, Kevin Lane Keller, Abraham Koshy and Mithileshwa Jha. Prentice Hal, Publication.
2. Principles of Marketing. 18th Edition by Philip Kotler and Armstrong.

Course Name	Agricultural Marketing Trade and Prices
Lesson 8	Marketing process-concentration, dispersion and equalization- Marketing functions-exchange functions – buying and selling; physical functions – storage, transport and processing; facilitating functions – packaging, branding, grading, quality control and labeling (AGMARK& FISSAI)
Content Revisor Name	SADDIKUTI HYMA JYOTHI
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Marketing Process:

The process of concentration, equalisation and dispersion is a peculiar characteristic of agricultural marketing. To get products from growers into the hands of distant consumers involves three important and related processes which may be called concentration, equalization and dispersion.

(a) Concentration: Concentration begins with the collection of small surpluses of individual farms at the country's trading centres which may be the primary markets, secondary markets or tertiary markets. The basic raw materials, foodstuffs etc. are at first concentrated at the central points.

Concentration is particularly important in the marketing of goods sold in their natural state. Raw cotton, wool grain (to be milled) iron ore, fresh fruits, vegetables, liquid milk etc. are concentrated. Concentration is also important in the marketing of some manufactured products that are used as production goods by other manufacturers.

(b) Equalization: The activity which we frequently call equalization. It occurs between the processes of concentration and dispersion. The supplies that flow into the primary and secondary markets more or less fluctuate in quantity due either to the seasonal character of the crops or changes in weather, or prices. Similarly, the demand is constantly changing. By adjusting the fluctuating supply to a constantly changing demand, these markets perform an indispensable equalising process.

Equalization thus consists of adjustments of supply to demand on the basis of time, quantity and quality. It is the process by means of which the supply of goods ready for sale is adjusted to the demand for them.

(c) Dispersion: The final step in adjusting the farm supply to the demands of manufacturers and consumers is the process of dispersion. This is the process of dispensing toward the consumer those commodities which have been concentrated in the central markets and equalised in the wholesale markets.

MARKETING FUNCTIONS

Any single activity performed in carrying a product from the point of its production to the ultimate consumer may be termed as a marketing function. A marketing function may have anyone or combination of three dimensions, viz., time, space and form.

The marketing functions involved in the movement of goods from the producer to its ultimate consumer vary from commodity to commodity, market to market, the level of economic development of the country or region, and the final form of the consumption. The marketing functions may be classified in various ways. For example, Thomsen has classified the marketing functions into three broad groups. These are:

1. Primary Functions : Assembling or procurement
Processing
Dispersion or Distribution
2. Secondary Functions : Packing or Packaging
Transportation
Grading, Standardization and Quality Control
Storage and Warehousing
Price Determination or Discovery
Risk Taking Financing
Buying and Selling
Demand Creation
Dissemination of Market Information
3. Tertiary Functions : Banking

Insurance

and

Communications –

posts & T

elegraphs

Supply of Energy –

Electricity Kohls and Uhl have classified marketing functions as follows:

1. Physical Functions : Storage and Warehousing
Grading
Processing
Transportation

2. Exchange Functions :

Buying
Selling

3. Facilitative Functions : Standardization of grades
Financing
Risk Taking
Dissemination of Market Information

BUYING AND SELLING:

Meaning:

Buying and selling is the most important activity in the marketing

process. At every stage, buyers and sellers come together, goods are transferred from seller to buyer, and the possession utility is added to the commodities.

The number of times the selling-and-buying activity is performed depends on the length of the marketing channel. In the shortest channel where no middleman is involved, this activity takes place only once, i.e., the producer or farmer sells and the consumer purchases. But, usually, in the case of farm commodities, selling/buying activities are undertaken each time when the produce moves from the farmer to the primary wholesaler, from the wholesaler to the retailer, and from the retailer to the consumer.

The buying activity involves the purchase of the right goods at the right place, at the right time, in the right quantities and at the right price. It involves the problems of what to buy, when to buy, from where to buy, how to buy and how to settle the prices and the terms of purchase.

The selling activity involves personal or impersonal assistance to or persuasion of, a prospective buyer to buy a commodity. The objective of selling is to dispose of the goods at a satisfactory price. The prices of products, particularly of agricultural commodities vary from place to place, from time to time, and with the quantity to be sold. Selling, therefore, involves the problems of when to sell, where to sell, through whom to sell, and whether to sell in one lot or in parts.

Methods:

The following methods of buying and selling of farm products are prevalent in Indian markets:

(i) Under Cover of a Cloth (Hatha System)

By this method, the prices of the produce are settled by the buyer and the commission agents of the seller by pressing/twisting the fingers of each other under cover of a piece of cloth. Code symbols are associated with the twisting of the fingers, and traders are familiar with these.

The negotiations in this manner continue till a final price is settled. When all the buyers have given their offers, the name and offer price of the highest bidder is announced to the seller by the commission agent.

This system provides opportunities for cheating the seller, for the seller is not aware of the price that has been offered by other buyers; the commission agent may not communicate the various prices to the seller, and may strike a deal in favour of one who offers a somewhat lower price. This method has been banned by the government because of the possibility of cheating, though it continues to be used in some markets.

(ii) Private Negotiations:

By this method, prices are fixed by mutual agreement.

This method is common in unregulated markets or village markets.

Under this method, the individual buyer come to the shops of commission agents at a time convenient to the latter and offer prices for the produce

which, they think, are appropriate after the inspection of the sample. If the price is accepted, the commission agent conveys the decision to the seller, and the produce is given, after it has been weighed, to the buyer.

In villages, too, private negotiations take place directly between buyer and seller. The sellers takes the sample to the buyer and asks him to quote the price. If it is acceptable to the buyer, a contract is executed. This however, is a slow and time-consuming process and is not suitable when either large quantities have to be sold or a large number of buyers exist in the market. The advantage of this method is that the seller gets a good price, for buyers are not aware of the price

offered by other buyers. Each buyer, therefore, tries to bid the highest to get the produce.

(iii) Quotations on Samples taken by Commission Agent:

By this method the commission agent takes the sample of the produce to the shops of the buyer instead of the buyer going to the shop of the commission agent. The price is offered, based on the sample, by the prospective buyers. The commission agent makes a number of rounds of prospective buyers until none is ready to bid a price higher than the one offered by a particular buyer. The produce is given to the one whose bid has been the highest.

(iv) Dara Sale Method

By this method, the produce in different lots is mixed and then sold as one lot. The advantages of this method is that, within a short time, a large number of lots are sold off. The disadvantage is that the produce of a good quality and one of a poor quality fetch the same price. There is, therefore, a loss of incentive to the farmer to cultivate good quality products. This method is common for such crops as zeera in many markets of the country.

(v) Moghum Sale Method:

By this method, the sale of produce is effected on the basis of a verbal understanding between buyers and sellers without any pre-settlement of price, but on the distinct understanding that the price of the produce to be paid by the buyer to the seller will be the one as prevailing in the market on that day, or at the rate at which other sellers of the village sold the produce. This method is common in villages, for farmers are indebted to the local money lenders. Often the buyer pays less than the prevailing market rate on the plea of the poor quality of the produce.

(vi) Open Auction Method:

By this method, the prospective buyers gather at the shop of the commission agent around the heap of the produce, examine it and offer bids loudly. The produce is given to the highest bidder after taking the consent of the seller farmer. This method is preferred to any other method because it ensures fair dealing to all parties, and because the farmers with a superior quality of produce receive a higher price. In most regulated markets, the sale of the produce is permissible only by the open auction method.

The following are the merits of the open auction method:

- a) A sale by this method inspires confidence among the buyers and sellers. The seller is able to follow the bidding easily.
- b) The auction serves as a meeting place for the supply of, and demand for, goods.
- c) It disposes of the market supply promptly.
- d) A wide variety of goods are available to buyers for selection.
- e) The auction method reduces the number of salesmen needed in the process.
- f) The buyers of small lots are not put to a disadvantage against the buyers of large lots.
- g) All the sections interested in the sale and purchase are well informed about the prevailing prices and can take judicious decisions about the sale and purchase of agricultural commodities.
- h) The payment of the price of the goods is made immediately after the sale if an auction has been completed.

The disadvantages of the open auction method are:

- a) The auction method requires more time on the part of both the buyer and the seller, for they have to wait for the day and time of the auction. An open auction is a very

time-consuming process because of the variation in the quality of the various lots.

- b) In big market centers, specially in the peak marketing season, the time allotted for auction is short. Both the buyers and the sellers are in a hurry. As a result, sellers may receive a low price.
- c) In an open auction, buyers sometimes join hands. Active participation in it is then reduced.
- d) The auction leads to a “buyers” market”, for buyers have full information about the supply of, and demand for, the product.

Some of the problems arising out of the open auction method may be overcome if the grading of agricultural produce is adopted by the cultivators. This will reduce the time involved in inspection and bidding for each lot separately, and will result in increasing the overall efficiency of the marketing system.

Three types of open auctions are prevalent in different markets. These are:

- a) **Phar System of Open Auction:** By this method, one bid is given for all the lots in a particular shop and all the lots are sold at that price. One extreme case of this method is when one bid is given for the product in the whole market.
- b) **Random Bid System of Open Auction:** By this method, the commission agent invites a few buyers when the produce is brought to his shop for sale. All the prospective buyers are not informed. As a result, the competition is poor. Sometimes, the commission agent informs only those buyers who are either his relatives or whom he wants to oblige. Bidding may continue simultaneously at a number of places to reduce competition.
- c) **Roster Bid System of Open Auction:** This is a systematic

method of open auction. Bidding starts from a point in the market at a notified time about which the prospective buyers are given information in advance. This overcomes the defects existing in the previous two methods of open auction. The bidding party, after the auction of the produce at one shop, moves to the next in a clock-wise or anti-clockwise direction till the auction of the produce at all shops is over, or the scheduled auction time expires. On the following day, the auction starts from the next point, and so on. This method is in vogue in most of the regulated markets. The auction is supervised by the auction clerk or the person nominated by the market committee.

(vii) Close Tender System:

This method is similar to the open auction method, except that bids are invited in the form of a close tender rather than by open announcement. The produce displayed at the shop of the commission agent is allotted lot numbers. The prospective buyers visit the shops, inspect the lots, offer a price for the lot which they want to purchase on a slip of paper, and deposit the slip in a sealed box lying at the commission agent's shop. When the auction time is over, the slips are arranged according to the lot number, and the highest bidder is informed by the commission agent that his bid has been accepted and that he should take delivery of the produce.

Some of the regulated markets have adopted this method of sale, which is time-saving and involves the minimum physical labour. There is no possibility of collusion among the buyers because each has quoted the price on the basis of his individual assessment of profit margins, taking into consideration the price prevailing in terminal and other secondary markets. The smooth functioning of this method

depends on the efficiency of, and the supervision exercised by, the market committee officials.

The methods employed for the sale of agricultural commodities in Indian markets differ from market to market and also from commodity to commodity. However, in regulated markets, either the open auction or the close tender system is prevalent. In Tamil Nadu the buyers have adopted the close tender system which, it is claimed, is quicker and tends to give a higher price to the farmer than in the open auction system.

STORAGE:

Meaning and Need:

Storage is an important marketing function, which involves holding and preserving goods from the time they are produced until they are needed for consumption. Storage is an exercise of human foresight by means of which commodities are protected from deterioration, and surplus supplies in times of plenty are carried over to the season of scarcity. The storage function, therefore, adds the time utility to products.

Agriculture is characterized by relatively large and irregular seasonal and year – to – year fluctuations in production. The consumption of most farm products, on the other hand, is relatively stable. These conflicting behaviors of demand and supply make it necessary that large quantities of farm produce should be held for a considerable period of time.

The storage function is as old as man himself, and is performed at all levels in the trade. Producers hold a part of their output on the farm. Traders store it to take price advantage. Processing plants hold a reserve stock of their raw materials to run their plants on a continuous basis. Retailers store various commodities to satisfy the consumers day – to – day needs. Consumers, too, store foodgrains, depending on their financial status.

The storage of agricultural products is necessary for the following reasons:

1. Agricultural products are seasonally produced, but are required for consumption throughout the year. The storage of goods, therefore, from the time of production to the time of consumption, ensures a continuous flow of goods in the market;
2. Storage protects the quality of perishable and semi – perishable products from deterioration;
3. Some of the goods, e.g., woolen garments, have a seasonal demand. To cope with this demand, production on a continuous basis and storage become necessary;
4. It helps in the stabilization of prices by adjusting demand and supply;
5. Storage is necessary for some period for the performance of other marketing functions. For example, the produce has to be stored till arrangements for its transportation are made, or during the process of buying and selling, or the weighing of the produce after sale, and during its processing by the processor;
6. The storage of some farm commodities is necessary either for their ripening (e.g., banana, mango, etc.) or for improvement in their quality (e.g., rice, pickles, cheese, tobacco, etc.); and
7. Storage provides employment and income through price advantages. For example, middlemen store foodgrains by purchasing them at low prices in the peak season and sell them in the other seasons when prices are higher.

Risks in Storage:

The storage of agricultural commodities involves three major types of risks. These are:

1. **Quantity Loss:** The risks of loss in quantity may arise during storage as a result of the presence of rodents, insects and pests, theft, fire, etc. Dehydration too, brings about an

unavoidable loss in weight. It has been estimated that about 10 million tones of foodgrains are lost every year because of poor and faulty storage.

2. **Quality Deterioration:** The second important risk involved in the storage of farm products is the deterioration in quality, which reduces the value of the stored products. These losses may arise as a result of attack by insects and pests, the presence of excessive moisture and temperature, or as a result of chemical reaction during the period of storage. Dehydration of fruits, vegetables and meat during storage may lower their sale value. Butter, if not properly stored, may become rancid, which reduces its sale value. The loss in the quality of farm products varies with their quality at the time of storage, the method of storage and the period of storage.
3. **Price Risk:** This, too, is an important risk involved in the storage of farm products. Prices do not always rise enough during the storage period to cover the storage costs. At times they fall steeply, involving the owner in a substantial loss. Farmers and traders generally store their products in anticipation of price rise and they suffer when prices fall.

TRANSPORTATION:

Transportation or the movement of products between places is one of the most important marketing functions at every stage, i.e., right from the threshing floor to the point of consumption. Most of the goods are not consumed where they are produced. All agricultural commodities have to be brought from the farm to the local market and from there to primary wholesale markets, secondary wholesale markets, retail markets and ultimately to the consumers. The inputs from the factories must be taken to the warehouses and from the warehouses to the wholesalers, retailers and finally to the consumers(farmers). Transportation adds the place utility to goods.

Transport is an indispensable marketing function. Its importance has increased with urbanization. For the development of trade in any commodity or in any area transport is a sine qua non. Trade and transport go side by side; the one reinforces and strengthens the other.

Advantages of Transport Function:

The main advantages of the transport function are:

1. **Widening of the Market:** Transport helps in the development or widening of markets by bridging the gap between the producers and consumers located in different areas. Without transport, the markets would have mainly been local markets. The exchange of goods between different districts, regions or countries would be impossible in the absence of this function. The example is the market for Himachal or Kashmir apples. The producers are located mainly in Himachal Pradesh and Jammu & Kashmir; but apples are consumed throughout the country.
2. **Narrowing Price Difference Over Space:** The transportation of goods from surplus areas to the places of scarcity helps in checking price rises in the scarcity areas and price falls in surplus areas thus reduces the spatial differences in prices.
3. **Creation of Employment:** The transport function provides employment to a large number of persons through the construction of roads, loading and unloading, plying of the means of transportation, etc.
4. **Facilitation of Specialized Farming:** Different areas of the country are suitable for different crops, depending on their soil and agroclimatic conditions. Farmers can go in for specialization in the commodity most suitable to their area, and exchange the goods required by them from other areas at a cheaper price than their own production cost.
5. **Transformation of the Economy:** Transportation helps in the transformation of the economy from the subsistence stage to the developed commercial stage. Industrial growth is

stimulated by being fed with the raw material produced in rural areas. Manufactured goods from industries to village or rural areas, too, can be moved.

- 6. Mobility of the Factors of Production:** Transport helps in increasing the mobility of capital and labour from one area to another. Entrepreneurs get opportunities for the investment of their capital in newly opened areas of the country, where the prospects of profit are very bright. Moreover, transportation helps in the migration of people in search of better remunerative jobs.

Transportation Cost:

The transportation cost accounts for about 50 percent of the total cost of marketing. It is higher when the produce is transported by bullock carts than when it is carried by other means. The efficiency of transportation depends on the speed and the care with which goods move from one place to another, the extent of the facilities provided, and the degree of care with which goods are handled en route and at terminal stations. However, there is a need for reducing the cost of transportation.

Factors affecting the cost of transportation:

Other things remaining the same, the transportation cost of a commodity depends on the following factors:

- 1. Distance:** With an increase in the distance over which a commodity is transported, the total transportation cost increases; but the transportation cost per unit quantity of the produce decreases after a certain distance.
- 2. Quantity of the Product:** The transportation cost per unit quantity of a commodity decreases with the increase in the volume. It will be less if a full truckload is available than it would be if only a few quintals are transported.
- 3. Mode of Transportation:** The cost of transportation varies with the mode of transportation, e.g., bullock cart, tractor, truck, railway etc.

4. **Condition of Road:** The cost of transportation is less where metalled or tar roads have been constructed than in places where graveled roads exist or where there are no roads at all.
5. **Nature of Products:** The cost of transportation per unit is higher for the products having the following characters:
 - a) Perishability (e.g., Vegetables);
 - b) Bulkiness (e.g., straw);
 - c) Fragility (e.g. tomatoes);
 - d) Inflammability (e.g., Petrol);
 - e) Requirement of a special type of facility (for example, for livestock and milk).
6. **Availability of Return Journey consignment:** If goods are also available for transportation when a truck is to return to its starting place, the per unit cost of transportation is less.
7. **Risk Associated:** The transportation cost is less if the produce is transported at the owner's/sender's risk than when the risk is on the agency transporting the produce.

Problems in Transportation of Agricultural Commodities:

The problems in the transportation of agricultural commodities are very serious because of the special factors associated with them; for example, the perishability of the produce, its bulkiness, the small quantity in which it is available, and a large number of suppliers and purchasers. The following are some of the important problems arising out of the transportation of agricultural commodities:

1. The means of transportation used are slow moving;
2. There are more losses/damages in transportation because of the use of poor packaging material, overloading of the produce and poor handling, specially of fruits and vegetables, at the time of loading and unloading;
3. The transportation cost per 100 rupees worth of the farm

produce is higher than that for other goods. This is so because of its bulky character and the prevailing practice of fixing charges on the basis of weight or volume rather than on the basis of its value;

4. There is lack of co-ordination between different transportation agencies, e.g., the railways and truck companies. Some of the places are not connected by railway. The produce is often transported for a part of the distance by rail and a part by trucks or other means of transportation.
5. The multi-gauge system of railways was also a serious problem in transportation of goods by railways. However, now the country is moving towards a uni-gauge system which augurs well for marketing of farm products.

Suggestions for Improvement:

The following are some of the suggestions for effecting improvements in the transport function and reducing transport costs:

1. There must be full utilization of the capacity of the transportation facility in terms of the load. This would reduce the per quintal cost of transportation.
2. The transportation cost per quintal can be reduced by fixing the rate of transportation for different means. At present, each agency charges what it likes and not on the basis of any rational computation of the cost factor.
3. There should be a reduction in spoilage, damage, breakage and pilferage during the period of movement as a result of better handling, packing and the use of the proper types of wagons.
4. There should be a reduction in the barriers to inter-state movement of the produce. If this happens, the time taken in transportation and the quantity of the fuel consumed would be reduced.
5. A reduction in the bulk of the produce by processing it can help

in minimizing the transport cost. For example, milk may be processed into condensed milk, butter or ghee and fruits into juices.

6. The speed and capacity of the vehicles used in transportation should be increased. This can be done by research in respective areas. The speed and capacity of bullock carts can be increased by:
 - a) The use of pneumatic tyres instead of the existing wooden and iron wheels;
 - b) The use of springs in the axle of the cart;
 - c) The development of atleast good all-weather roads in the areas.
7. It must be recognised that roads and railways are important components of infrastructure; therefore, more public initiative in their expansion is called for. Nearly 50 percent of the villages in the country are still not connected by roads. This apart, there are sharp differences among the states. For example, in states like Orissa, Rajasthan and Madhya Pradesh more than half of the villages are still to be connected by link roads. The rail transport, though capable of transporting agricultural commodities to longer distances in larger quantities with greater speed but it also suffers from multi-gauge system, shortages of wagon capacity and congestion on trunk routes. Therefore, in the overall scheme of public investment, development of this infrastructure should receive more allocation.

Packaging

Packaging is the first function performed in the marketing of agricultural commodities. It is required for nearly all farm products at every stage of the marketing process. The type of the container used in the packing of commodities varies with the type of the commodity as well as with the stage of marketing. For example,

gunny bags are used for cereals, pulses and oilseeds when they are taken from the farm to the market. For packing milk or milk products, plastic, polythene, tin or glass containers are used. Wooden boxes or straw baskets are used for packing fruits and vegetables.

Meaning of Packing and Packaging:

Packing means, the wrapping and crating of goods before they are transported. Goods have to be packed either to preserve them or for delivery to buyers. Packaging is a part of packing, which means placing the goods in small packages like bags, boxes, bottles or parcels for sale to the ultimate consumers. In other words, it means putting goods on the market in the size and pack which are convenient for the buyers.

Advantages of Packing and Packaging:

Packaging is a very useful function in the marketing process of agricultural commodities. Most of the commodities are packed with a view to preserving and protecting their quality and quantity during the period of transit and storage. For some commodities, packing acts as a powerful selling tool.

The chief advantages of packing and packaging are:

1. It protects the goods against breakage, spoilage, leakage or pilferage during their movement from the production to the consumption point.
2. The packaging of some commodities involves compression, which reduces the bulk like cotton, jute and wool.
3. It facilitates the handling of the commodity, specially such fruits as apples, mangoes, etc., during storage and transportation.
4. It helps in quality-identification, product differentiation, branding and advertisement of the product, e.g., Hima peas and Amul

butter.

5. Packaging helps in reducing the marketing costs by reducing the handling and retailing costs.
6. It helps in checking adulteration.
7. Packaging ensures cleanliness of the product.
8. Packaging with labeling facilitates the conveying of instructions to the buyers as to how to use or preserve the commodity. The label shows the composition of the product.
9. Packaging prolongs the storage quality of the products by providing protection from the ill effects of weather, specially for fruits, vegetables and other perishable goods.

Branding:

A brand is a product, service, or concept that is publicly distinguished from other products, services, or concepts so that it can be easily communicated and usually marketed. A brand name is the name of the distinctive product, service, or concept. Branding is the process of creating and disseminating the brand name. Branding can be applied to the entire corporate identity as well as to individual product and service names.

Brands are usually protected from use by others by securing a trademark or service mark from an authorized agency, usually a government agency. Before applying for a trademark or service mark, you need to establish that someone else hasn't already obtained one for your name. Although you can do the searching yourself, it is common to hire a law firm that specializes in doing trademark searches and managing the application process, which, in the United States, takes about a year. Once you've learned that no one else is using it, you can begin to use your brand name as a trademark simply by stating it is a trademark (using the "TM" where it first appears in a publication or Web site). After you receive the trademark, you can use the registered symbol after your trademark.

Brands are often expressed in the form of *logos*, graphic representations of the brand. In computers, a recent example of widespread brand application was the "Intel Inside" label provided to manufacturers that use Intel's microchips.

A company's brands and the public's awareness of them is often used as a factor in evaluating a company. Corporations sometimes hire market research firms to study public recognition of brand names as well as attitudes toward the brands.

Here is the famous advertising copywriter and ad agency founder David Ogilvy's definition of a brand:

Brand is the intangible sum of a product's attributes: its name, packaging, and price, its history, its reputation, and the way it's advertised.

Branding is also a way to build an important company asset, which is a good reputation. Whether a company has no reputation, or a less than stellar reputation, branding can help change that. Branding can build an expectation about the company services or products, and can encourage the company to maintain that expectation, or exceed them, bringing better products and services to the market place.

Reputed manufacturers have brand name & mostly sold in their exclusive retail outlets. These products are known as branded items. Non-branded items are sold in retail outlets with many such products of different companies. Branded items are bit expensive because of their design, quality backed by guarantee where as non-branded items have no reliability.

What is 'Brand Loyalty'

Brand loyalty is a pattern of consumer behavior where consumers become committed to brands and make repeat purchases from the same brands over time. Loyal customers consistently purchase products from their preferred brands, regardless of convenience or price. Companies often use different marketing strategies to cultivate loyal customer, including loyalty programs (i.e. rewards programs) or trials and incentives (such as samples and free gifts).

GRADING AND STANDARDIZATION

Grading and standardization is a marketing function which facilitates the movement of produce. Without standardization the rule of caveat emptor (let the buyer beware) prevails; and there is confusion and unfairness as well. Standardization is a term used in a broader sense. Grade standards for commodities are laid down first and then the commodities are sorted out according to the accepted standards.

Products are graded according to quality specifications. But if these quality specifications vary from seller to seller, there would be a lot of confusion about its grade. The top grade of one seller may be inferior to the second grade of another. This is why buyers lose confidence in grading. To avoid this eventuality, it is necessary to have fixed grade standards which are universally accepted and followed by all in the trade.

Meaning: Standardization means the determination of the standards to be established for different commodities. Pyle has defined standardization as the determination of the basic limits on grades or the establishment of model processes and methods of producing, handling and selling goods and services.

Standards are established on the basis of certain characteristics-such as weight, size, colour, appearance, texture, moisture content, staple length, amount of foreign matter, ripeness, sweetness, taste, chemical content, etc. These characteristics, on the basis of which products are standardized, are termed grade standards. Thus, standardization means making the quality specifications of the grades uniform among buyers and sellers over space and over time.

Grading means the sorting of the unlike lots of the produce into different lots according to the quality specifications laid down. Each lot has substantially the same characteristics in so far as quality is concerned. It is a method of dividing products into certain groups or

lots in accordance with predetermined standards. Grading follows standardization. It is a sub-function of standardization.

Types of Grading

Grading may be done on the basis of fixed standards or variable standards. It is of three types:

1. **Fixed Grading / Mandatory Grading:** This means sorting out of goods according to the size, quality and other characteristics which are of fixed standards. These do not vary over time and space. It is obligatory for a person to follow these grade standards if he wants to sell graded products. For a number of agricultural commodities, grade standards have been fixed by the Agricultural Marketing Advisor, Government of India, and it is compulsory to grade the produce according to these grade specifications. Individuals are not free to change these standards. The use of mandatory standards is compulsory for the export of the agricultural commodities to various countries.
2. **Permissive / Variable Grading:** The goods are graded under this method according to standards, which vary over time. The grade specifications in this case are fixed over time and space, but changed every year according to the quality of the produce in that year. Under this method, individual choice for grading is permitted. In India, grading by this method is not permissible.
3. **Centralized / Decentralized Grading:** Based on the degree of supervision exercised by the government agencies on grading of various farm products, the programme can be categorized into centralized and decentralized grading.

Under the centralized grading system, an authorized packer either sets up his own laboratory manned by qualified chemists or seeks access to an approved grading laboratory set up for the purpose by the state authorities / co-operatives / associations / private agencies. Grading in respect of commodities such as ghee, butter and

vegetable oils where elaborate testing facilities are needed for checking purity and assessing quality has been placed under centralized grading system. In this system, the Directorate of Marketing and Inspection exercises close supervision on grading work of approved chemists through periodical inspection of the grading stations and the quality of the graded produce.

The decentralized grading system is implemented by State Marketing Authorities under the overall supervision and guidance of the Directorate of Marketing and Inspection. This is followed in those commodities which do not require elaborate testing arrangements for quality assessment. The examples are fruits, vegetables, eggs, cereals and pulses. For these commodities, the grade of the produce is determined on the basis of physical characteristics.

Advantages of Grading;

Grading offers the following advantages to different groups of persons:

1. Grading before sale enables farmers to get a higher price for their produce. Studies during sixties and seventies revealed that on an average, the producers obtained a premium of 12 paise per kg of tobacco at Ongloe (AP) and Rs. 9.40 per quintal of kapas at Hubli (Karnataka). Graded apple fetched a premium price of 11.27 per cent over that of ungraded apples. Graded dasheri and desi mango fetched a premium of Rs.31.50 and Rs.32.50 per quintal over the price of ungraded mangoes. Grading also serves as an incentive to producers to market the produce of better quality.
2. Grading facilitates marketing, for the size, color, qualities and other grade designations of the product are well known to both the parties, and there is no need on the part of the seller to give any assurance about the quality of the product.
3. Grading widens the market for the product, for buying can take place between the parties located at distant places on the telephone without any inspection of the quality of the product.

4. Grading reduces the cost of marketing by minimizing the expenses on the physical inspection of the produce, minimizing storage losses, reducing its bulk, minimizing advertisement expenses and eliminating the cost of handling and weighing at every stage.
5. Grading makes it possible for the farmer –
 - a) To get easy finance when commodities are stored;
 - b) To get the claims settled by the railways and insurance companies;
 - c) To get storage place for the produce;
 - d) To get market information;
 - e) To pool the produce of different farmers;
 - f) To improve the “keeping” quality of the stored products by removing the inferior goods from the good lot; and
 - g) To facilitate futures trading in a commodity.
6. Grading helps consumers to get standard quality products at fair prices. It is easier for them to compare the prices of different qualities of a product in the market. It minimizes their purchasing risk, for they will not get a lower quality product at the given price.
7. Grading contributes to market competition and pricing efficiency. The product homogeneity resulting from grading can bring the market closer to perfect competition, encourages price competition among sellers, and reduces extraordinary profits.

Thus, the grading of product is beneficial to all the sections of society; i.e., the producers, traders and consumers of the product.

Progress in India

To improve the quality of agricultural products in India, grading and marking were introduced under an Act – The Agricultural Produce (Grading and Marking) Act, 1937. The act authorizes the Central Government to frame rules relating to the fixing of grade standards

and the procedure to be adopted to grade the agricultural commodities included in the schedule. The Act of 1937 was amended from time to time to widen its scope, so that a number of commodities may be included under the changed circumstances. Initially, only 19 commodities were included for grading purposes; but now there are 153 commodities in the schedule for which grade standards are available. The commodities included in the schedule are foodgrains, fruits and vegetables, dairy products, tobacco, coffee, oilseeds, edible oils, oilcakes, fruit products, cotton, sannhemp, edible nuts, jiggery, lac, spices and condiments, essential oils, honey, besan, suji and maida.

The Agricultural Marketing Advisor to the Government of India (AMA) is the authority empowered to implement the provisions of the Act, and suggest suitable modifications. The Central Agricultural Marketing Department (Directorate of Marketing and Inspection) maintains some staff for the inspection of the grading premises and the collection of the samples of graded products from different points in the marketing process. The collected samples are examined and analyzed either at the central Agmark laboratory or at other laboratories set up in different parts of the country to test whether the graded products conform to the standards of quality laid down in the Act. If the

sample is below standard, the necessary legal action against the party is taken, and the graded product is removed from the market. The licence of the party, too, is cancelled.

MARKET INFORMATION:

Market information is an important marketing function which ensures the smooth and efficient operation of the marketing system. Accurate, adequate and timely availability of market information facilitates decision about when and where to market products. Market information creates a competitive market process and checks the growth of monopoly or profiteering by individuals. It is the lifeblood of a market.

Everyone engaged in production, and in the buying and selling of products is continually in need of market information. This is more true where agricultural products are concerned, for their prices fluctuate more widely than those of the products of other sectors. Market information is essential for the government, for a smooth conduct of the marketing business, and for the protection of all the groups of persons associated with this. It is essential at all the stages of marketing, from the sale of the produce at the farm until the goods reach the last consumer.

Meaning: Market information may be broadly defined as a communication or reception of knowledge or intelligence. It includes all the facts, estimates, opinions and other information which affect the marketing of goods and services.

Importance: Market information is useful for all sections of society which are concerned with marketing. Its importance may be judged from the point of view of individual groups. These groups are:

- a) **Farmer-Producers:** Market information helps in improving the decision-making power of the farmer. A farmer is required to decide when, where and through whom he

should sell his produce and buy his inputs. Price information helps him to take these decisions.

- b) **Market Middlemen:** Market middlemen need market information to plan the purchase, storage and sale of goods. On the basis of this information, they are able to know the pulse of the market, i.e., whether the market is active or sluggish, the temperature of the market (whether prices are rising or falling), and market pressure (whether supply is adequate, scarce or abundant). On the basis of these data, they project their estimates and take decisions about whether to sell immediately or to stock goods for some time, whether to sell into the local market or to go in for import or export, whether to sell in their original form or process them and then sell, and so on. The failure of a business may partly be attributed to either the non-availability of market information or its inadequate availability and interpretation. Co-operative marketing societies operating as commission agents make use of market information for advising their members so that they may take decisions about when to sell their product. Processors make use of market information to plan their purchases so that they may run their plant continuously and profitably.
- c) **General Economy:** Market information is also beneficial for the economy as a whole. In a developed economy, there is need for a competitive market process for a commodity, which regulates the prices of the product. The competitive process contributes to the operational efficiency of the industry. However, a perfectly competitive system is difficult to obtain; but the availability of market information leads towards the competitive situation. In the absence of this system, different prices will prevail, leading to the profiteering by specialized agencies. The business of

forward trading is based on the availability of market information.

- d) Government: Market information is essential for the government in framing its agricultural policy relating to the regulation of markets, buffer stocking, import- export, and administered prices.

QUALITY CONTROL

To ensure the confidence of consumers, it is essential that grading is done in accordance with the standards that have been set. For this purpose, the inspection of the goods at regular intervals by a third party is essential.

Inspection involves the testing of graded goods with a view to determining whether they conform to the prescribed standards. It ensures quality control. For the purposes of inspection, samples of product are drawn at various stages- from the manufacturer, the market middleman or the consumer at his door steps- and are tested in the laboratory. These inspections are carried out by inspectors appointed by the government, and not by a producer or a buyer.

Regular inspection creates confidence among the buyers. Producers, too, know that there is someone who checks the standards of the produce graded by them. This avoids the temptation of adopting such malpractices in the grading as mixing of the inferior grade produce, etc. after laboratory tests, if the produce is below standards, the licence of the grader is cancelled and legal action is initiated against him.

There were 566 approved grading and/or testing laboratories in the country at end of March, 1984. Their number increased to 633 in 1990-91 and further to 700 in 1991-92. Presently, there are 111 state-owned grading laboratories, 549 laboratories of the licensees (private packers), nine laboratories in co-operative

sector and 49 private and commercial laboratories with a total of 718 approved grading and/or testing laboratories in the country which are engaged in the analysis in the analysis and determination of AGMARK grades.

QUALITY CONTROL- AGRICULTURAL PRODUCTS

The graded products according to the standards fixed by the Agriculture Marketing Advisor, Government of India, bear the label „AGMARK“.

AGMARK is the abbreviation of Agriculture Marketing. It the quality certification marks under the Central Agricultural Produce (Grading and Marketing) Act, 1937. This label indicates that the purity and the quality of the product on the basis of the standards that have been laid down. The labels of different colours are used to indicate bthe grade of the product. The AGMARK labels are printed on the special quality paper and issued by the Agriculture Marketing Advisor. They are serially numbered, and the firm is required to maintain the account of the labels, which are issued to the grader, in a register. It is a voluntary scheme. Interested traders and manufacturers are given licence to grade their products under AGMARK quality certification mark.

AGMARK label is attached to the container of the product in such a way that it is not possible to remove the contents of the package with out tampering the AGMARK label. Each AGMARK package bears the date of the packing and date of expiry of the product. AGMARK products are pretested and certified for the quality. AGMARK products are of assured quality and different from adulterated and spurious goods. If any AGMARK product purchased by the consumer is found to be defective, the consumer gets the product replaced or gets the money back as per the procedure laid out. There are about 14,000 licensees manufacturing and marketing their products under AGMARK quality certification marks.

"Agmark grading" means grading of an article in accordance with the grade standards prescribed under the provisions of the Act;
"Agmark label" means the label specifying name of commodity, grade designation and bearing prescribed insignia;
"Agmark replica" means a grade designation mark in lieu of Agmark label consisting of prescribed design with the word "AGMARK" and the Certificate of Authorisation number;

"Certificate of Agmark Grading" means a certificate in specified proforma issued by an authorised Officer of the Directorate of Marketing and Inspection or a person designated by the approved laboratory to issue the same in respect of agmark graded consignment meant for export.

GROUPWISE LIST OF THE COMMODITIES FOR WHICH AGMARK GRADE STANDARDS HAVE BEEN FORMULATED UNDER THE AGRICULTURAL PRODUCE (GRADING AND MARKING) ACT, 1937 (as on 31-03-2011)

Name of the Group & No. of commodities notified

1. Food grain and allied products 30
2. Fruits and Vegetables 44
3. Spices and condiments 26
4. Edible Nuts 8
5. Oil Seeds 15
6. Vegetable Oils and Fats 19
7. Oil cakes 8
8. Essential oils 8
9. Fibre crops 5

- 10. Live stock,
Dairy and 10
poultry
products
- 11. Other products 32

TOTAL 205

MANUFACTURED PRODUCTS

Manufactured products are grades in accordance with the standards laid down by the Indian Standards Institution, now Bureau of Indian Standards and bear the ISI label. Manufacturers have to use proper ingredients in specified proportions and follow the technique of manufacture given in the standards laid down by the Indian Standards Institution. The ISI label is an indicator of the good quality of the product.

Quality management in food:

(a) HACCP

Indian manufacturers need to upgrade the quality of the products by adopting HACCP (Hazard Analysis and Critical Control Point), a food safety system, which is an internationally recognized auditing method. HACCP focuses on chemical, physical and microbial hazards.

HACCP and Risk Analysis is a modern concept of quality management applied to food items. The concept of HACCP gained recognition and acceptance globally as a system of choice for good safety due to following reasons:

- i. To identify food safety hazards for different farm products and their process of production.
- ii. To accept responsibility for food safety instead of relying upon compliance with official regulation and inspection by food safety inspectors.

- iii. Necessity of creating awareness among people to realize their role and responsibility for food safety.
- iv. To improve the design of food products and process for achieving safe food, and
- v. To prepare food companies for future HACCP based food safety regulations and trade specifications.

International food safety standards are developed by the Codex Alimentarius Commission (CODEX) . This is a joint commission of FAO and WHO and recognizes HACCP based system for food. As per the WTO requirement, only Codex standards are acceptable for international trade. Therefore, Codex-HACCP is minimum international standard for trade among countries in future. Based on this analysis, appropriate action can be taken to ensure that the areas identified as critical control points are kept under control and are not allowed to endanger the items produced.

There are seven principles of Codex-HACCP:

- i. Conduct a hazard analysis
- ii. Determine the critical control points (CCPs)
- iii. Establish critical limit
- iv. Establish a system to monitor control the CCP
- v. Establish the corrective action to be taken when the monitoring indicates that a particular CCP is not under control
- vi. Establish procedure for verification to confirm that the HACCP system is working effectively.
- vii. Establish documentation concerning all procedures and records appropriate to these principles and their application. Food safety is analyzed in terms of hazards and risks. A hazard is the capacity of a thing to cause harm under certain conditions. The probability that a defined harm will occur is the risk associated with that hazard. The hazards may be physical,

chemical or micro-biological and can occur at any stage from raw material to the consumption by the consumer.

The benefits of testing food by HACCP are:

- i. Avoids human sufferings;
- ii. Reduces burden form over burdened health care system;
- iii. Increases the export of food products;
- iv. Attracts more foreign tourists; and
- v. Increases earning potential of citizens.

The Food Safety and Standards Authority of India (FSSAI) has been established under Food Safety and Standards , 2006 which consolidates various acts & orders that have hitherto handled food related issues in various Ministries and Departments. FSSAI has been created for laying down science based standards for articles of food and to regulate their manufacture, storage, distribution, sale and import to ensure availability of safe and wholesome food for human consumption.

Highlights of the Food Safety and Standard Act, 2006

- Various central Acts like Prevention of Food Adulteration Act,1954,Fruit Products Order , 1955, Meat Food Products Order,1973,
- Vegetable Oil Products (Control) Order, 1947,Edible Oils Packaging (Regulation)Order 1988, Solvent Extracted Oil, De- Oiled Meal and Edible Flour (Control) Order, 1967, Milk and Milk Products Order, 1992 etc will be repealed after commencement of FSS Act, 2006.

The Act also aims to establish a single reference point for all matters relating to food safety and standards, by moving from multi- level, multi-departmental control to a single line of command. To this effect, the Act establishes an independent statutory Authority – the Food Safety and Standards Authority of India with head office at Delhi. Food Safety and

Standards Authority of India (FSSAI) and the State Food Safety Authorities shall enforce various provisions of the Act.

Establishment of the Authority: Ministry of Health & Family Welfare, Government of India is the Administrative Ministry for the implementation of FSSAI. The Chairperson and Chief Executive Officer of Food Safety and Standards Authority of India (FSSAI) have already been appointed by Government of India. The Chairperson is in the rank of Secretary to Government of India.

FSSAI has been mandated by the FSS Act, 2006 for performing the following functions:

- Framing of Regulations to lay down the Standards and guidelines in relation to articles of food and specifying appropriate system of enforcing various standards thus notified.
- Laying down mechanisms and guidelines for accreditation of certification bodies engaged in certification of food safety management system for food businesses.
- Laying down procedure and guidelines for accreditation of laboratories and notification of the accredited laboratories.
- To provide scientific advice and technical support to Central Government and State Governments in the matters of framing the policy and rules in areas which have a direct or indirect bearing of food safety and nutrition.
- Collect and collate data regarding food consumption, incidence and prevalence of biological risk, contaminants in food, residues of various, contaminants in foods products, identification of emerging risks and introduction of rapid alert system.
- Creating an information network across the country so that the public, consumers, Panchayats etc receive rapid, reliable and objective information about food safety and issues of concern.
- Provide training programmes for persons who are involved or intend to get involved in food businesses.

- Contribute to the development of international technical standards for food, sanitary and phyto-sanitary standards.
- Promote general awareness about food safety and food standards.

Fair Average Quality (FAQ):

- For the purpose of MSP operations, the central nodal agencies like Food Corporation of India (FCI) National Agriculture Cooperative Marketing Federation (NAFED), Cotton Corporation of India (CCI), Jute Corporation of India (JCI) have laid down quality standards for various commodities.

Books referred:

1. Acharya S.S and Agarwal NL, 2006, Agricultural Marketing in India. Oxford & IBH Publishing Co. Pvt. Ltd. New Delhi
2. Subba Reddy. S, Raghuram. P, Sastry T.V.N. and Bhavani Devi I, 2016. Agricultural Economics. Oxford & IBP publishing company Ltd. New Delhi.
3. Memoria CB and Joshi RL, 1995. Principles and Practices of Marketing in India. Kitab Mahal, Allahabad

Course Name	Agricultural Marketing Trade and Prices
Lesson 9	Market functionaries-meaning- classification - definition of marketing channel- number of channel levels- marketing channels for different farm products.
Content Revisor Name	SADDIKUTI HYMA JYOTHI
University/College Name	Acharya N.G. Ranga Agricultural University, Guntur
Course Reviewer Name	JAHANMOHAN KR
University/College Name	Tamil Nadu Agricultural University, Coimbatore

1. 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.

2. 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 two types:

i) 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.

ii) 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 financiers 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.

(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 or brokerage. They serve as buyers or sellers in effective bargaining. Agent middlemen are of two types

i) 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 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 renders all facilities to 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:

- (a) They advance 40 to 50 percent of the expected value of the crop as a loan to farmers to enable them to meet their production expenses;
- (b) 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;
- (c) They offer advice to farmers for purchase of inputs and sale of products;
- (d) They provide empty bags to enable the farmers to bring their produce to the market;
- (e) They provide food and accommodation to the farmers and their animals when the latter come to the market for the sale of their produce;
- (f) They provide storage facility and advance loans against the stored product up to 75 percent of its value;
- (g) They arrange, if required by the farmer, for the transportation of the produce from the village to the market; and
- (h) They help the farmers in times of personal difficulties.

ii) 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 food grain marketing trade is decreasing. But they still play a valuable role in the marketing of other agricultural commodities, such as gur, sugar, oil, cottonseed 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.

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.

(d) 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:

i) Hamals or Labourers: They physically move the goods in marketplace. They do unloading from and the loading on to bullock carts or trucks. They assist in weighting 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.

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

iii) 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.

iv) 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 food grains.

v) 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, Television, Internet and informal links are the main communication channels in agricultural marketing.

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

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

MARKETING CHANNELS

Marketing channels are routes through which agricultural products move from producers to consumers. The length of the channel varies from commodity to commodity, depending on the quantity to be moved, the form of consumer demand and degree of regional specialization in production.

Definitions of Marketing Channels

1. According to Moore et al. “The chain of intermediaries through whom the various food grains pass from producers to consumers constitutes their marketing channels”.
2. Kohls and Uhl have defined marketing channels as alternative routes of product flows from producers to consumers.

FACTORS AFFECTING LENGTH OF MARKETING CHANNELS

Marketing channels for agricultural products vary from product to product country to country, lot to lot and time to time. For example, the marketing channels for fruits are different from those for foodgrains. Packers play a crucial role in the marketing of fruits. The level of the development of a society or country determines the final form in which consumers demand the product. For example, consumers in developed countries demand more processed foods in a packed form. Wheat has to be supplied in the form of bread.

MARKETING CHANNELS OF DISTRIBUTION

The course taken in the transfer of the title of a commodity constitutes its channel of distribution. (OR) It is the route taken by a product in its passage from its first owner i.e. producer to the last owner, the ultimate consumer. Important channels of distribution :

1. Producer or manufacturer – Retailer – Consumer.
2. Producer or manufacturer – Consumer.
3. Producer or manufacturer – Wholesaler – Retailer – Consumer.
4. Producer – Commission agent.

Wholesaler is most important functionary in the chain of distribution of goods.

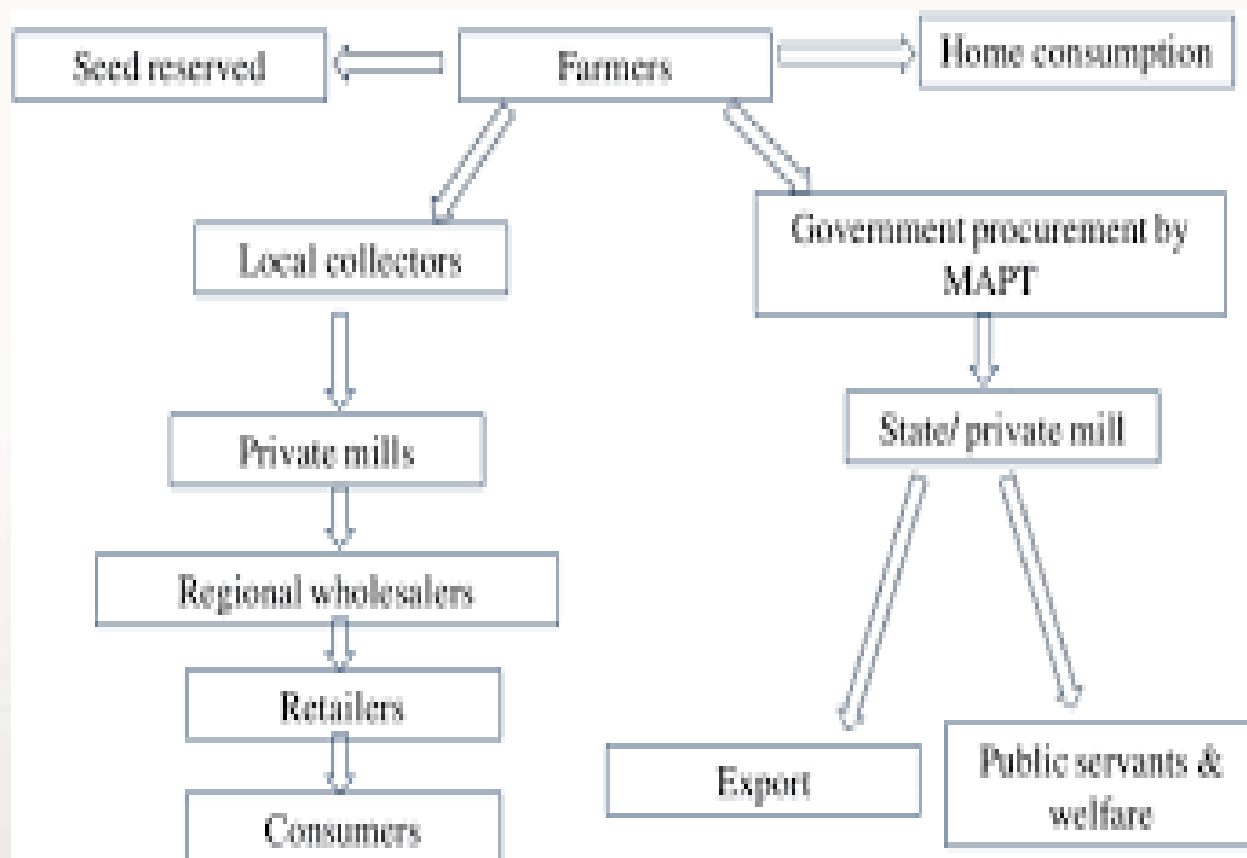
Factors considered while choosing a Channel:

1. Nature of the product.
 2. Price of the product.
 3. No. of units of sale.
 4. Characteristics of the user.
 5. Buyers and their buying units.
- Low priced articles with small units of sale are distributed through retailers.
 - High price special items like radios, sewing machines etc are

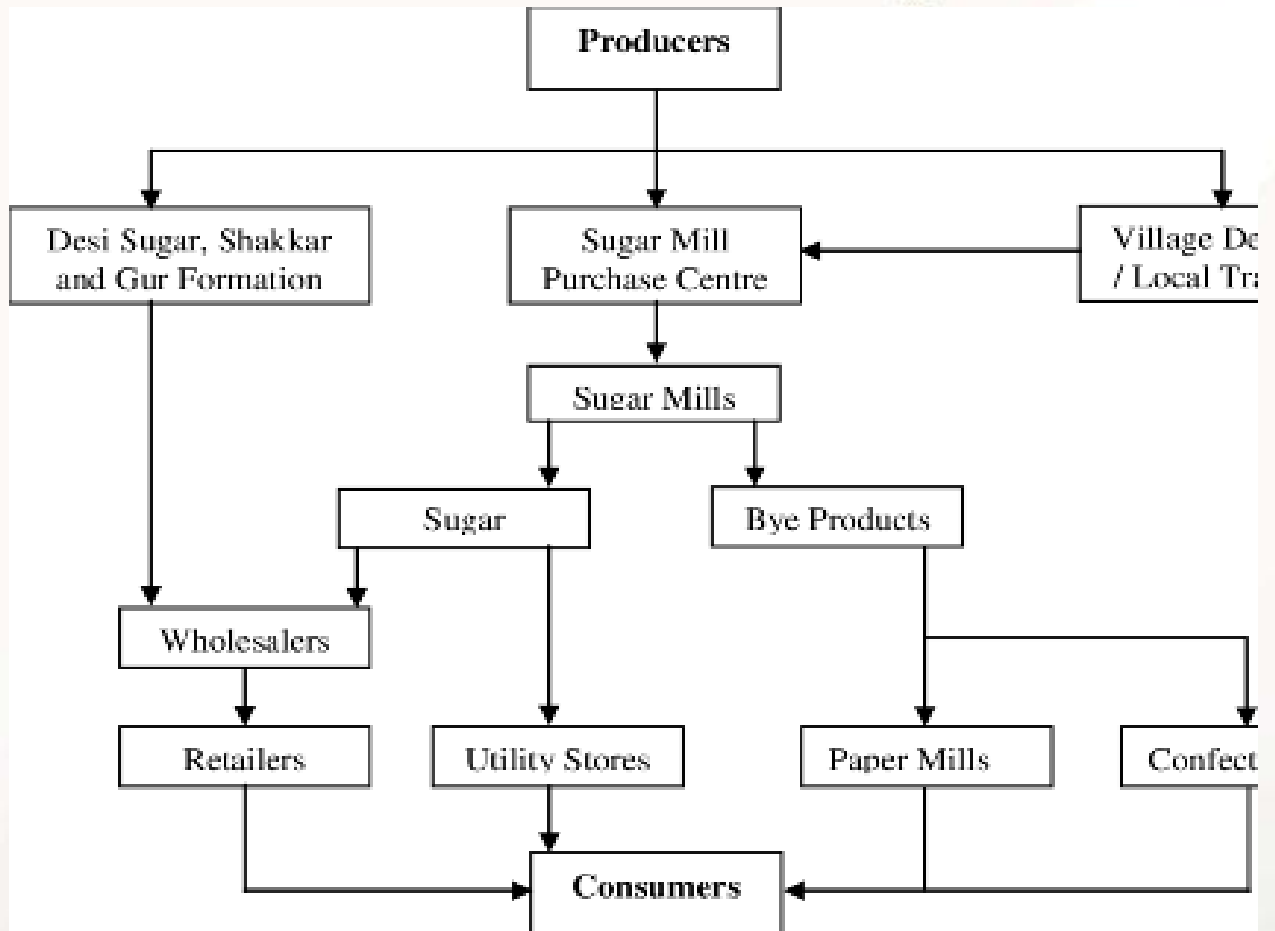
sold by manufactures and then agents.

- Public services like gas, electricity and transport are usually sold directly to the consumer.

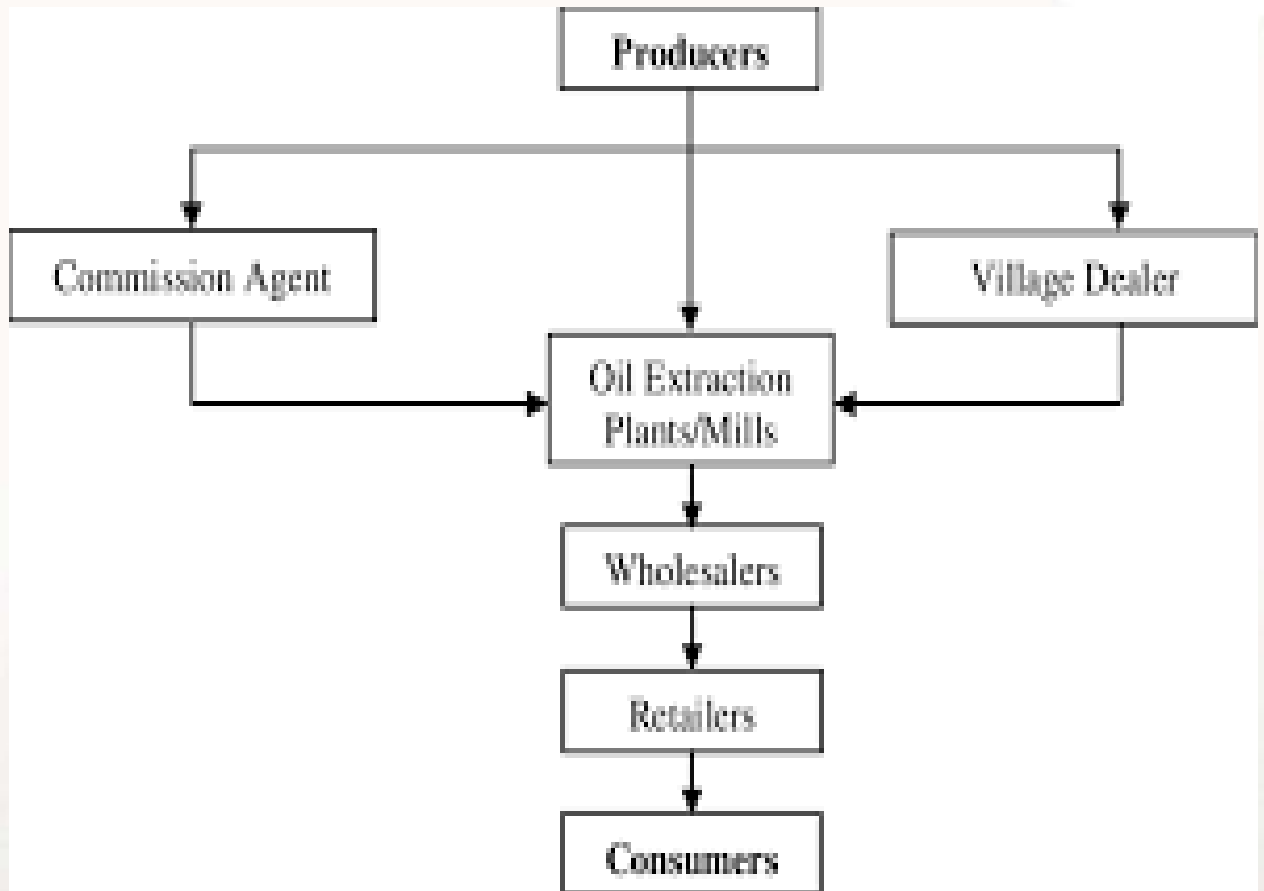
Marketing channels for Paddy:



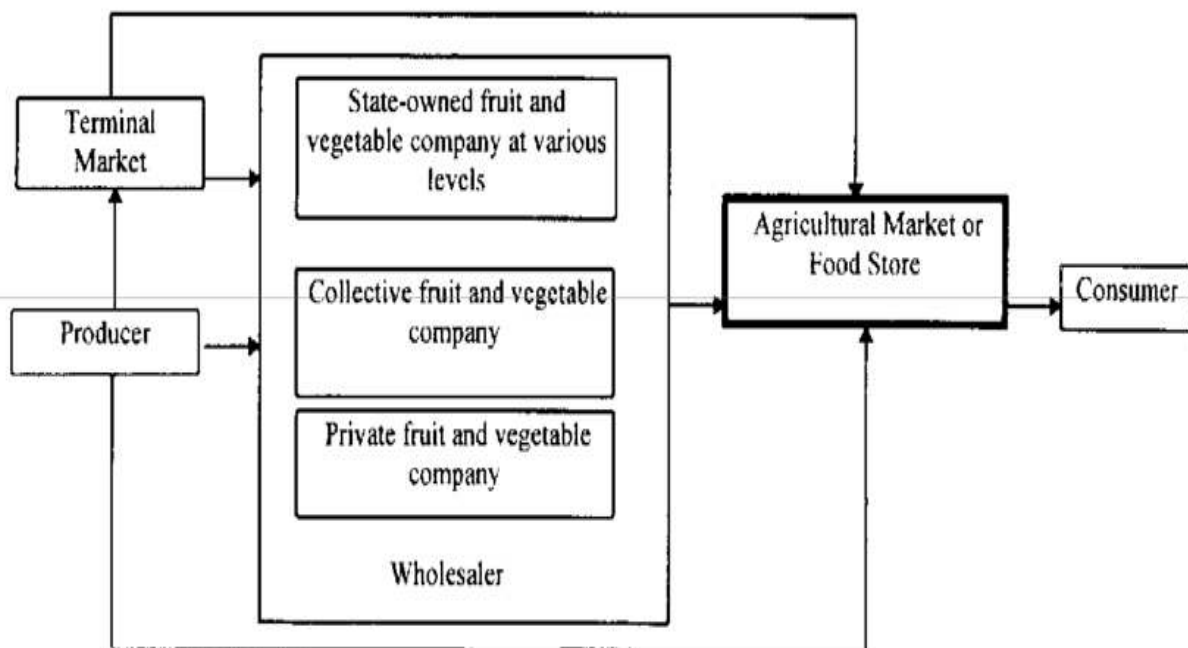
Marketing channels for Sugar:



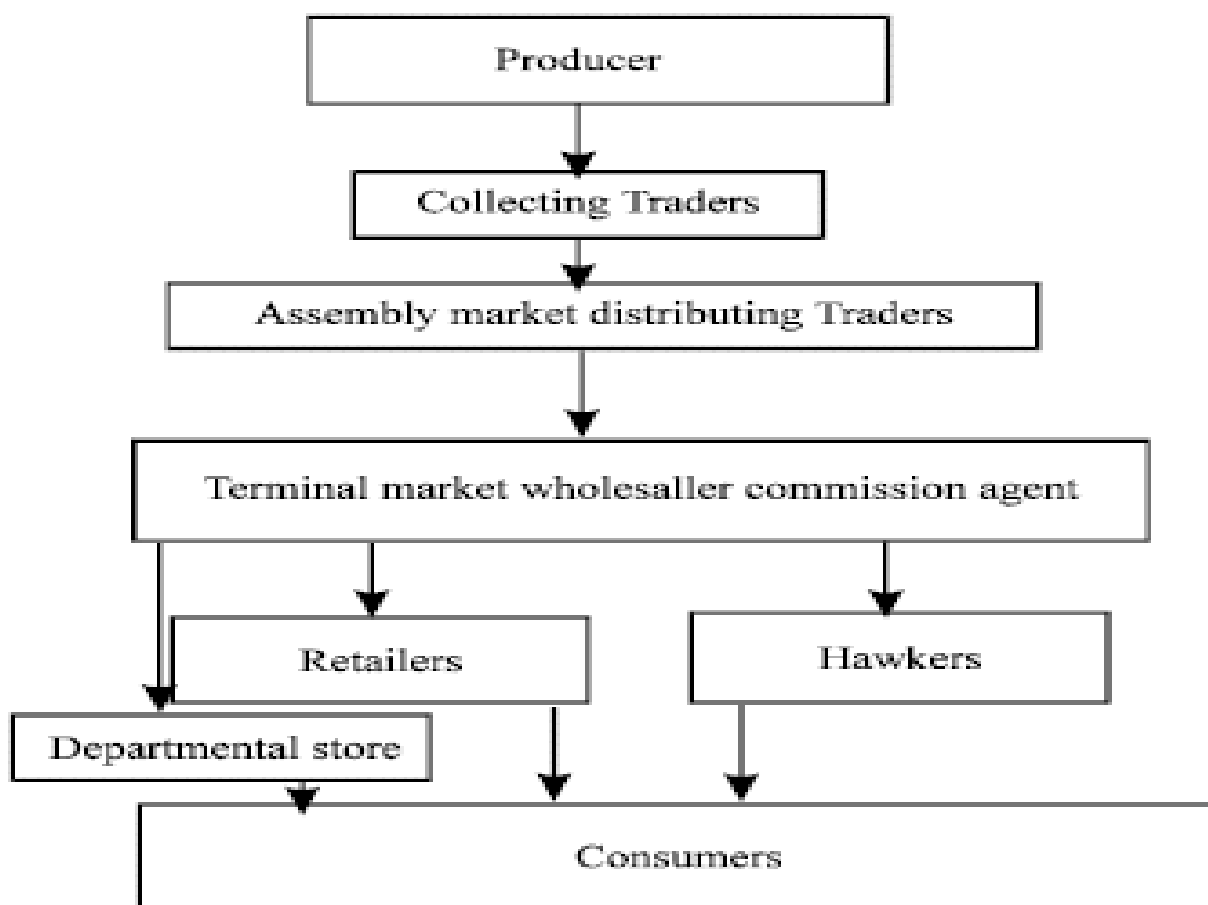
Marketing channels for oilseeds



Marketing Channels for Fruits and Vegetables:



b) Egg marketing channel





Course Name	Agricultural Marketing Trade and Prices
Lesson 10	Market Integration, Marketing efficiency- Meaning, definition and types
Content Revisor Name	SADDIKUTI HYMA JYOTHI
University/College Name	Acharya N.G. Ranga Agricultural University, Guntur
Course Reviewer Name	JAHANMOHAN KR
University/College Name	Tamil Nadu Agricultural University, Coimbatore

MARKET INTEGRATION

Kohis and Uhl have defined “Market integration as process which refers to the expansion of firms by consolidating additional marketing functions and activities under a single management”.

Eg: - 1. Setting up of milk processing plant.

2. Establishment of wholesale facilities by retailers.

- Integration shows the relationship of firms in a market.
- Integration influences market conduct of firms and consequently their marketing efficiency.
- Markets differ in the extent of integration.

Types of market integration :

1. Horizontal integration :

When a firm gains control over other firms, performing similar marketing functions. Some marketing agencies (say, sellers) combine to form a union with a view to reducing their effective number and the extent of competition in the market.

Horizontal integration is advantageous for the members who join the group. If farmers join hands and form cooperatives, they are able to sell their produce in bulk and reduce their cost of marketing.

2. Vertical integration :

Occurs when a firm performs more than one activity in the sequence of the marketing process. It is linking together of two or more functions within a single firm or under a single ownership. Vertical integration leads to some economies in the cost of marketing. Enjoys greater market power while reducing the number of middlemen.

There are two types of vertical integration

a). Forward integration :

Eg: Wholesaler assuming the function of retailing i.e. assuming another function.

b). Backward Integration:

Eg: Processing firm assumes the function of assembling / purchasing the produce from villages.

Firms often expand both vertically and horizontally. Eg: Modern retail stocks.

Horizontal: Expanding either retail stores or number of commodities they deal.

Vertical: Operate their own wholesale, purchasing and processing establishment.

3. Conglomeration:

A combination of agencies or activities not directly related to each other, may when it operates under a united management, be termed a conglomeration.

Eg: Hindustan Lever Ltd. Delhi cloth and General mill (cloth & vanaspati).

MARKETING EFFICIENCY

Marketing efficiency is essentially the degree of market performance. It is a broad and dynamic concept.

Definition: - It is the ratio of market output (satisfaction) to marketing input (cost of resources). An increase in ratio represents improved efficiency and vice versa.

Components of marketing efficiency :

1. Effectiveness with which a marketing service is performed.

2. The cost at which the service is provided.
3. The effect of this cost and the method of performing the service as production and consumption. i.e. effect of (1) & (2), last two are more important.

Assessment of marketing efficiency :

1. Technical or Physical or Operational efficiency: It pertains to the cost of performing a function; Efficiency is increased when the cost of performing a function per unit of output is reduced.

Eg: - Storage processing, handling etc.

2. Pricing / Allocative efficiency : System is able to allocate farm products either over time, across the space or among the traders, processors and consumers at a point of time in such a way that no other allocation would make producers and consumers better off. This is achieved via pricing the product at different stages, places, times among different users. Pricing efficiency refers to the structural characteristics of the marketing system, when the sellers are able to get the true value of their produce and the consumers receive true worth of their money.

The above two types are mutually reinforcing in the long run.

Empirical Assessment of Marketing Efficiency :

A reduction in the cost for the same level of satisfaction or an increase in the satisfaction at a given cost results in the improvement in efficiency. (Khol and Uhl.)

$$E = \frac{O}{I} \times 100$$

E = level of efficiency

O = value added to the marketing system. I = real cost of marketing

Shepherd's formula of marketing efficiency :

$$ME = \frac{V}{I} - 1 \times 100$$

ME = Index of marketing efficiency

V = Value of the goods sold or price paid by the consumer (Retail price) I = Total marketing cost or input of marketing.

This method eliminates the problem of measurement of value added.

Acharya's method/ Modified method of marketing efficiency Index:

$FP/(MC+MM)$,

Where FP= Price received by the producer

MC= Marketing Costs

MM= Marketing margin

Books referred:

1. Acharya S.S and Agarwal NL, 2006, Agricultural Marketing in India. Oxford & IBH Publishing Co. Pvt. Ltd. New Delhi
2. Subba Reddy. S, Raghuram. P, Sastry T.V.N. and Bhavani Devi I, 2016. Agricultural Economics Oxford & IBP publishing company Ltd. New Delhi.

Course Name	Agricultural Marketing Trade and Prices
Lesson 11	Marketing costs, margins and price spread; factors affecting cost of marketing; reasons for higher marketing costs of farm commodities; ways of reducing marketing costs
Content Revisor Name	SADDIKUTI HYMA JYOTHI
University/College Name	Acharya N.G. Ranga Agricultural University, Guntur
Course Reviewer Name	JAHANMOHAN KR
University/College Name	Tamil Nadu Agricultural University, Coimbatore

Marketing Costs

The movement of products from the producers to the ultimate consumers involves costs, taxes, and cess which is called marketing costs. These costs vary with the channels through which a particular commodity passes through.

Eg: - Cost of packing, transport, weighment, loading, unloading, losses and spoilages.

Marketing costs would normally include :

- i. Handling charges at local point
- ii. Assembling charges
- iii. Transport and storage costs
- iv. Handling by wholesale and retailer charges to customers
- v. Expenses on secondary service like financing, risk taking and market intelligence
- vi. Profit margins taken out by different agencies.

Producer's share in consumer's rupee :

$$P_s = \frac{P_F}{P_r} \times 100$$

Where,

P_s = Producer's share

P_F = Price received by the farmer

P_r = Retail price paid by the consumer

Total cost of marketing of commodity:

$$C = C_f + C_{m1} + C_{m2} + \dots + C_{mn}$$

Where, C= Total cost of marketing of the commodity

C_f = Cost paid by the producer from the time the produce leaves till he sells it

C_{mi} = Cost incurred by the i^{th} middlemen in the process of buying and selling the products.

Market Margins

Margin refers to the difference between the price paid and received by a specific marketing agency, such as a single retailer, or by any type of marketing agency such as retailers or assemblers or by any combination of marketing agencies such as the marketing system as a whole.

Absolute margin is expressed in rupees. A percentage margin is the absolute difference in price (absolute margin) divided by the selling price.

Mark-up is the absolute margin divided by the buying price or price paid.

Marketing margin of a Middleman : There alternative measures may be used.

The three alternative measures which may be used in estimating market margins are

(a) Absolute margin of i^{th} middlemen (A_{mi})

$$= P_{ri} - (P_{pi} + C_{mi})$$

(b) Percentage margin of i^{th} middlemen

$$(P_{mi}) = \frac{P_{Ri} - (P_{Pi} + C_{mi})}{P_{Ri}}$$

(c) Mark-up of i^{th} middleman (M_2)

$$\frac{P_{Ri} - (P_{Pi} + C_{mi})}{P_{Pi}}$$

Where

- e,
- P_{Ri} = Total value of receipts per unit (sale price)
 - P_{Pi} = Purchase value of goods per unit (purchase price)
 - C_{mi} = Cost incurred on marketing per unit.

The margin includes profit to the middlemen and returns to storage, interest on capital, overheads and establishment expenditure.

Three methods of measuring marketing margins:

- 1. Lot method:** A single lot is chased through a marketing channel for perishable commodities
- 2. Comparing of prices at successive level of marketing:** Followed for products which do not need processing before consumption.

3. Sum of Average Gross margins method : The average gross margins of all the intermediaries are added to obtain the total marketing margin as well as the break up of the consumer's rupee :

$$M_T = \sum_{i=1}^n \frac{S_i - P_i}{O_i}$$

M_T = Total marketing margin.

S_i = Sale value of a product for i^{th}

firm P_i = value paid by the i^{th} firm

Q_i = Quantity of the product handled by its firm

$i = 1, 2, \dots, n$ (No. of firms involved in the marketing channel).

Concepts of Marketing Margins :

Complex because it is difficult to follow the path of the channel for a given quantity of the channel for a given quantity of the commodity. It is still difficult to estimate in respect of commodities subjected to processing.

Two methods are identified :

1. Concurrent margin method :

- This method stresses on the difference in price that prevails for a commodity at successive stages of marketing at a given point of time.

2. Lagged Margin Method :

- This method takes into account the time that elapses between buying and selling of a commodity by the intermediaries and also between the farmer and the ultimate consumer.
- Lagged margin indicates the difference of price received by an agency and the one paid by the same agency in purchasing in equivalent quantity of commodity.

PRICE SPREAD

- The difference between the price paid by the consumer and price received by the farmer.
- It involves various costs incurred by various intermediaries and their margins.
- Marketing costs are the actual expenses required in bringing goods and services from the producer to the consumer.

Price Spread in Groundnut Marketing Marketing channel :

Producer – wholesaler – Decorticating unit – Oil miller – Retailer – Consumer

		(Rs 1 q)	
S. No.	Marketing channel	Amount	%
1.	Producers sale price	Rs/g 1119.50	80
2.	Wholesaler		
	Purchase price	1119.50	
	Marketing	3.5.25	2.51

		cost	
	Margin	71.00	5.06
3	Decorticating unit	PP	1225.75
		MC	31.62
		MM	40.0
4	Oil miller	PP	1297.35
		MC	44.55
		MC	32.50
5	Retailer	PP	1374.40
		MC	13.00
		MM	16.80
6	Consumer's purchase price		1404.20
			100

Objectives of Studying Marketing Costs :

1. To ascertain which intermediaries are involved between producer and consumer.
2. To ascertain the total cost of marketing process of commodity.
3. To compare the price paid by the consumer with the price received by the producer.

To see whether there is any alternative to reduce the cost of

4. marketing.

Reasons for High Marketing Costs:

1. High transportation costs
2. Consumption pattern – Bulk transport to deficit areas.
3. Lack of storage facilities.
4. Bulkiness of the produce.
5. Volume of the products handled.
6. Absence of facilities for grading.
7. Perishable nature of the produce.
8. Costly and inadequate finance.
9. Seasonal supply.
10. Unfair trade practices.
11. Business losses.
12. Production in anticipation of demand and high prices.
13. Cost of risk.
14. Sales service.

Factors Affecting marketing costs

1. Perishability
2. Losses in storage and transportation
3. Volume of the product handled

Volume of the
More – less cost
Volume of the Less
– more cost
4. Regularity in supply : Costless irregular in supply – cost is more
5. Packaging : Costly (depends on the type of packing)
6. Extent of adoption of grading
7. Necessity of demand creation (advertisement)
8. Bulkiness
9. Need for retailing : (more retailing – more costly)
10. Necessity of storage
11. Extent of Risk
12. Facilities extended by dealers to consumers. (Return facility, home delivery, credit facility, entertainment)

Ways to reduce marketing costs of farm products.

1. Increased efficiency in a wide range of activities between producers and consumers such as increasing the volume of business, improved handling methods in pre-packing, storage and transportation, adopting new managerial techniques and changes in marketing practices such as value addition, retailing etc.
2. Reducing profits in marketing at various stages.
3. Reducing the risks adopting hedging.
4. Improvements in marketing intelligence.
5. Increasing the competition in marketing of farm products.

Books referred:

1. Acharya S.S and Agarwal NL, 2006, Agricultural Marketing in India. Oxford & IBH Publishing Co. Pvt. Ltd. New Delhi
2. Subba Reddy. S, Raghuram. P, Sastry T.V.N. and Bhavani Devi I, 2016. Agricultural Economics Oxford & IBP publishing company Ltd. New Delhi.

Course Name	Agricultural Marketing Trade and Prices
Lesson 12	Role of Govt. in agricultural marketing-Public sector institutions- CWC, SWC, FCI, DMI – their objectives and functions
Content Revisor Name	SADDIKUTI HYMA JYOTHI
University/College Name	Acharya N.G. Ranga Agricultural University, Guntur
Course Reviewer Name	JAHANMOHAN KR
University/College Name	Tamil Nadu Agricultural University, Coimbatore

Role of Govt. in agricultural marketing:

Government legislations:

The Government of India is aided and advised by two organizations in Agricultural Marketing.

1. Directorate of Marketing and Inspection (DMI).

It functions under of the Ministry of Agriculture Government of India. Head Office: Faridabad.

2. National Institute of Agricultural Marketing (NIAM), Jaipur, Rajasthan in 1988

Transfer of the Subject of Agricultural Marketing:

***The Subject of Agricultural Marketing has been transferred to the Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India (till then it was state subject) with effect from 19th December, 1998.

- COSAMB: Council of State Agricultural Marketing Boards
- SAMB: State Agricultural Marketing Board
- AGMARK Act, 1937: Agricultural Produce Grading and Marking Act. Implementing agency is DMI.
- In 1928, the Royal commission on agriculture underscored the need for a warehousing system in India.
- The Central Banking Enquiry Committee (CBEC), 1931.
- The All India Rural Credit Survey Committee -(Gorwala)
- Meat Food Products order, 1973
- Cold Storage Order, 1980
- The establishment of a National Co-operative Development and Warehousing Board (NCDWB)- in 1956

- The establishment of Central Warehousing Corporation-1957
- The establishment of State Warehousing Corporations in all states in the country (which were established in various states between July 1957 and August 1958).
- Food Corporation of India (FCI) was setup on 14th January **1965** under Food Corporations Act 1964 to implement the objectives of the National Food Policy.
- MODEL ACT: The State Agricultural Produce Marketing (Development & Regulation Act, 2003) 9th September 2003***
- Food safety standards Authority of India Ltd. was established in 2011 under FSSAI Act, 2006

Meaning:

Warehousing: Warehouses are scientific storage structures especially constructed for the protection of quantity and quality of stored products

Warehousing may be defined as the assumption of responsibility for the storage of goods. It may be called the protector of national wealth, for the produce stored in warehouses is preserved and protected against rodents, insects and pests. and against the ill-effect of moisture and dampness.

The warehousing scheme in India is an integrated scheme of scientific storage, rural credit, price stabilization and market intelligence and is intended to supplement the efforts of co-operative institutions.

The important functions of warehouses are :

1. **Scientific storage:** Here, a large bulk of agricultural commodities may be stored. The product is protected against quantitative and qualitative losses by the use of such methods of preservation as are necessary.
2. **Financing:** Nationalized banks advance credit on the security of Warehouse receipt issued for the stored products to the extent of 75 % of their value

3. **Price stabilization:** Warehouses help in price stabilization of agricultural commodities by checking the tendency to making post-harvest sales among the farmers. Warehouse helps in staggering the supplies throughout the year. Thus helps in stabilization of agricultural prices.
4. **Market intelligence:** Warehouses also offer the facility of market information to persons who hold their produce in them. They inform them about the prices prevailing in the period, and advice them when to market their products.

This facility helps in preventing distress sales for immediate money needs or because of lack of proper storage facilities. It gives the producer holding power; he can wait for the emergence of favourable market conditions and get the best value for his product.

Warehousing in India:

In 1928, the Royal commission on agriculture underscored the need for a Warehousing system in India. The central banking enquiry committee, 1931, too, drew attention to this need. The Reserve bank of India emphasized the need for Warehouses as early as in 1944, and proposed that every state government enact legislation to regulate the functioning of warehouses. The All India Rural Credit Survey Committee of the Reserve Bank of India (set up in 1951 and submitted its report in 1954) also made comprehensive recommendations for the development of Warehousing as an integrated scheme of rural credit and marketing. As a result of the recommendations of the committee, the Government of India enacted the Agricultural produce (Development and Warehousing) corporation act, 1956. The act provided for:

- a) The establishment of a National Co-operative Development and Warehousing board (which was set up on 1st September, 1956);
- b) The establishment of central Warehousing corporation (Which was established on 2nd March, 1957); and
- c) The establishment of state Warehousing Corporation in all states in the country (which were established in various states between July

1957 and August 1958).

Central Warehousing Corporation:

Central Warehousing Corporation(CWC) is a premier warehousing agency in India, established during 1957 providing logistics support to the agricultural sector, and one of the biggest public warehouse operators in the country offering logistics services to a diverse group of clients. CWC is operating 475 Warehouses across the country with a storage capacity of 10.3 million tonnes providing warehousing services for a wide range of products ranging from agricultural produce to sophisticated industrial products.

Warehousing activities of CWC include

- foodgrain warehouses,
- industrial warehousing,
- custom bonded warehouses,
- container freight stations,
- inland clearance depots and aircargo complexes.
- Apart from storage and handling, CWC also offers services in the area of clearing & forwarding, handling & transportation, procurement & distribution, disinfection services, fumigation services and other ancillary activities.
- CWC also offers consultancy services/ training for the construction of warehousing infrastructure to different agencies.

Functions:

1. To acquire and build godowns and Warehouses at suitable places in India.
2. To run Warehouses for storage of agricultural produce, seeds, fertilizers and notified commodities for individuals, co-operatives and other institutions.
3. To act as an agent of the govt. for purchase, sale, storage and

distribution of the above commodities.

4. To arrange facilities for the transport of above commodities.
5. To subscribe to the share capital of SWC.

State Warehousing Corporation:

SWCs were operating 1440 Warehouses with total capacity of over 131.38 lakh tones. The total share capital of the SWC is contributed equally by the concerned state govt. and CWC. The area of operation of the SWC are centres of district importance

- The Warehousing Scheme envisages providing storage facilities for food grains and other agriculture commodities, seeds, manures and fertilizers to minimize losses and deterioration in storage.
- The scheme also aims to enable farmers to have easy and cheap credit facilities from Banks against pledge of the Warehouse Receipt to improve the holding capacity of the producer to avoid distress sales in harvesting seasons.
- To realize the above objectives, the Warehousing Corporation is empowered to acquire and build Warehouses for storage of agricultural produce, seeds, fertilizers and other notified commodities .
- to act as an agent of the Central Warehousing Corporation or of the Government, for the purpose of purchases, sales storage, distribution etc., of agricultural commodities in time of need.

FOOD CORPORATION OF INDIA

An efficient management of the food economy with a view to ensuring an equitable distribution of grains of food grains at reasonable prices to the vulnerable sections of society is essential in the present socio-economic environment of the country. The government felt the necessity of an organization which can act as its main agency for handling food grains., acquire a commanding position in the food grain trade as a countervailing force to the speculative activities of private trades and, at the same time, work on commercial lines. Towards the end of 1964,

Parliament decided to transfer the government's function of trading in food grains to the public sector. Legislation was enacted; and the food corporation India (FCI) was born on January 1, 1965.

Food Corporation of India was setup on 14th January 1965 under Food Corporation Act, 1964 to implement the following objectives of the National Food Policy :

- i. Effective price support operations for safeguarding the interests of the farmers
- ii. Distribution of foodgrains throughout the country for Public Distribution System
- iii. Maintaining satisfactory level of operational and buffer stocks of foodgrains to ensure National Food Security

It is the largest Corporation in India and probably the largest supply chain management in Asia. It operates through 5 zonal offices and 24 regional offices. Each year, the Food Corporation of India purchases roughly 15-20 per cent of India's wheat output and 12-15 per cent of its rice output. The purchases are made from the farmers at the rates declared by the Govt. of India.

The Food Corporation of India initially operated in the southern part of the country. Later, it extended its services throughout the country. Today, the FCI is unrivalled food marketing agency, serving the interest of both the farmers and consumers. Its market operations prevent the speculative trader from acting against the interests of the farmers by assuring him a remunerative price for his produce, it ensures a prompt and uninterrupted supply of food grains to the vulnerable sections of the society all over the country. Operationally the FCI reaches the remotest corners of the country through its vast network of offices and storage centers. Financially, it is one of the largest public sector undertakings, with an annual turnover of over Rs.25400 crores.

FUCTIONS:

The main functions of the Food Corporation of India are:

- a) To produce a sizable portion of the marketable surplus of foodgrains and other agricultural commodities at incentive prices from the farmers on behalf the central and state governments
- b) To make timely releases of the stocks to public distribution system(Fair price shops and controlled item shops)so that consumer prices may not raise unduly and unnecessarily
- c) To minimise seasonal price fluctuations and inter regional price variation in agricultural commodities by establishing a purchasing and distribution network and
- d) To build up a sizable buffer stock of food grains to meet the situation that may arise as result of short falls in internal procurement and imports.

Warehouse receipt:

All nationalized banks offer finance against Warehouse Receipts of Agricultural Commodities issued by State/Central Warehousing Corporations (SWCs/CWC). By keeping the warehouse receipt as collateral security farmers can avail loans to avoid distress sales/forced sales.

Main advantages of warehouse receipt are:

- Best suitable for short term fund needs.
- Loan amount up to 70 % of the value of goods pledged/covered by the warehouse receipt.
- Minimal paperwork and hassle free processing.
- No hidden charges or heavy penalties.
- No collateral security needed.
- Repayment can be done as Lump sum.
- Loan can be availed as demand loan or cash credit
- Primary Security of the loan will be Pledge of warehouse receipts/Storage Receipts issued by State/Central Ware Housing Corporations or approved Collateral Managers.

Types of warehouse receipts issued by CWC/SWC are :

a) Negotiable warehouse receipt (NWR):

Negotiable warehouse receipts are transferred by endorsement and delivery; i.e., either the original depositor or the holder in due course (transferee) can claim the commodities from the warehouse. NWRs can be traded, sold, swapped and used as collateral to support borrowing.

RBI Governor Shaktikanta Das [announced](#) an increase in the limit of loans under priority sector lending from Rs 50 lakh to Rs 75 lakh per borrower. This includes loans availed by farmers, farmer producer organisations and primary agriculture cooperative societies. These loans are given for agricultural produce against a pledge or hypothecation for which the warehouses registered with the Warehousing Development and Regulatory Authority have issued negotiable warehouse receipts or electronic-NWRs.

b) Non-negotiable warehouse receipt: non-negotiable warehouse receipt means a warehouse receipt, by the terms of which, the commodities stored viz., wheat/ rice / corn stored shall be delivered to the depositor; or to a specified person named therein.

Books referred:

1. Acharya S.S and Agarwal NL, 2006, Agricultural Marketing in India. Oxford & IBH Publishing Co. Pvt. Ltd. New Delhi
2. Subba Reddy. S, Raghuram. P, Sastry T.V.N. and Bhavani Devi I, 2016. Agricultural Economics. Oxford & IBP publishing company Ltd. New Delhi.
3. Memoria CB and Joshi RL, 1995. Principles and Practices of Marketing in India. Kitab Mahal, Allahabad

Course Name	Agricultural Marketing Trade and Prices
Lesson 13	Cooperative marketing in India; Risk in marketing: Types of risk in marketing; speculation & hedging- an overview of futures trading
Content Revisor Name	SADDIKUTI HYMA JYOTHI
University/College Name	Acharya N.G. Ranga Agricultural University, Guntur
Course Reviewer Name	JAHANMOHAN KR
University/College Name	Tamil Nadu Agricultural University, Coimbatore

Cooperative Marketing-meaning:

Cooperative marketing organizations are association of producers for the collective marketing of their produce and for securing for the members the advantages that result from large-scale business which an individual cultivator cannot secure because if his small marketable surplus.

In a co operative marketing society, the control of the organization is in the hands of the farmers, and each member has one vote irrespective of the number of shares purchased by him. The profit earned by the society is distributed among the members on the basis of the quantity of the produce marketed by him. In other words, co operative marketing societies are established for the purpose collectively marketing the products of the member farmers. It emphasizes the concept of commercialization. Its economic motives and character distinguish it from other associations. These societies resemble private business organization in the method of their operations: but they differ from the capitalistic system chiefly in their motives and organizations

Functions:

The main functions of co operative marketing societies are:

- i) To market the produce of the members of the society at fair prices
- ii) To safeguard the members for excessive marketing costs and malpractices;
- iii) To make credit facilities available to the members against the security of the produce brought for sale;
- iv) To make arrangements for the scientific storage of the members produce;
- v) To provide facilities of the grading and market information which may help them to get a good price for their produce
- vi) To introduce the system of pooling so as to acquire a better bargaining power than the individual members having a small quantity of produce for marketing purposes;
- vii) To act as an agent of the government for the procurement of

food grains and for the implementation of the price support policy

- viii) To arrange for the export of the produce of the members so that they may get better returns;
- ix) To make arrangements for the transport of the produce of the members from the villages to the market on collective basis and bring about a reduction in the transportation; and
- x) To arrange for the supply of the inputs required by the farmers, such as improved seeds, fertilizers, insecticides and pesticides.

The **advantages that co-operative marketing** can confer on the farmer are multifarious, some of which are listed below.

1. Increases bargaining strength of the farmers:

Many of the defects of the present agricultural marketing system arise because often one ignorant and illiterate farmer (as an individual) has to face well-organised mass of clever intermediaries. If the farmers join hands and form a co-operative, naturally they will be less prone to exploitation and malpractices. Instead of marketing their produce separately, they will market it together through one agency.

2. Direct dealing with final buyers:

The co-operatives can altogether skip the intermediaries and enter into direct relations with the final buyers. This practice will eliminate exploiters and ensure fair prices to both the producers and the consumers.

3. Provision of credit:

The marketing co-operative societies provide credit to the farmers to save them from the necessity of selling their produce immediately after harvesting. This ensures better returns to the farmers.

4. Easier and cheaper transport:

Bulk transport of agricultural produce by the societies is often easier

and cheaper. Sometimes the societies have their own means of transport.

5.Storage facilities:

The co-operative marketing societies generally have storage facilities. Thus the farmers can wait for better prices.

6.Grading and standardization:

This task can be done more easily for a co-operative agency than for an individual farmer. For this purpose, they can seek assistance from the government or can even evolve their own grading arrangements.

7.Market intelligence:

The co-operatives can arrange to obtain data on market prices, demand and supply and other related information from the markets on a regular basis and can plan their activities accordingly.

8.Influencing marketing prices:

Wherever strong marketing co-operative are operative, they have bargained for and have achieved, better prices for their agricultural produce.

9. Provision of inputs and consumer goods:

The co-operative marketing societies can easily arrange for bulk purchase of agricultural inputs, like seeds, manures fertilizers etc. and consumer goods at relatively lower price and can then distribute them to the members.

10. Processing of agricultural produce:

The co-operative societies can undertake processing activities like crushing seeds, ginning and pressing of cotton, etc. In addition to all these advantages, the co-operative marketing system can arouse the spirit of self-confidence and collective action in the farmers without which the programme of agricultural development, howsoever well conceived and implemented, holds no promise to success.

Cooperative Marketing System in India

Though the above measures have improved the system of agricultural marketing to some extent, a major part of the benefits has been derived by large farmers, who have adequate marketable surplus. However, the small and marginal farmers continue to sell a major part of their produce to moneylenders to meet their credit needs and these moneylenders offer them very low prices. Therefore it is essential to form cooperatives of the small and marginal farmers to enable them to obtain fair prices for their produce

National Agricultural Cooperative Marketing Federation

(NAFED): NAFED is the apex agency looking cooperative marketing in India. It was established in 1958, New delhi as its headquarters. The objectives of the NAFED are

- 1) to organise, promote and develop marketing, processing and storage of agricultural, horticultural and forest produce,
- 2) to distribute agricultural machinery, implements and other inputs,
- 3) undertake inter-State, import and export trade, wholesale or retail as the case may be and

- 4) to act and assist for technical advice in agricultural production for the promotion and the working of its members and cooperative marketing, processing and supply societies in India.

Apart from these objectives, the NAFED may undertake one or more of the following **functions/ activities**:

1. to facilitate, coordinate and promote the marketing and trading activities of the cooperative institutions in agricultural and other commodities, articles and goods;
2. to undertake or promote on its own or on behalf of its member Institutions or the Government or Government Organisations, Inter-State and international trade and commerce and undertake, wherever necessary, sale, purchase, import, export and distribution of agricultural commodities, horticultural and forest produce.
3. to undertake purchase, sale and supply of agricultural products, marketing and processing requisites, such as manure, seeds, fertiliser, agricultural implements and machinery, packing machinery, construction requisites, processing machinery for agricultural commodities, forest produce, dairy, wool and other animal products;
4. to act as warehouseman under the Warehousing Act and own and construct its own godowns and cold storages;
5. to act as agent of any Government agency or cooperative institution, for the purchase, sale, storage and distribution of agricultural, horticultural, forest and

- animal husbandry produce, wool, agricultural requisites and other consumer goods;
6. to act as insurance agent and to undertake all such work which is incidental to the same;
 7. to organise consultancy work in various fields for the benefit of the cooperative institutions in general and for its members in particular;
 8. to undertake manufacture of agricultural machinery and implements, processing, packing, etc. and other production requisites and consumer articles.
 9. to set up storage units for storing various commodities and goods, by itself or in collaboration with any other agency in India or abroad;
 10. to maintain transport units of its own or in collaboration with any other organisation in India or abroad for movement of goods on land, sea, air etc.;
 11. to collaborate with any international agency or a foreign body for development of cooperative marketing, processing and other activities for mutual advantage in India or abroad;
 12. to undertake marketing research and dissemination of market intelligence;
 13. to subscribe to the share capital of other cooperative institutions as well as other public, joint and private sector enterprises if and when considered necessary for fulfilling the objectives of NAFED.
 14. to arrange for the training of employees of marketing/processing/supply cooperative societies;
 15. to maintain common cadres/pools of managerial/technical personnel required by the marketing/processing/supply cooperative societies;
 16. to establish processing units for processing of agricultural, horticultural and forest produce and wool;

17. to undertake grading, packing and standardisation of agricultural produce and other articles;
18. to acquire, take on lease or hire, lands, buildings, fixtures and vehicles and to sell, give on lease or hire them for the business of NAFED.
19. to advance loans to its members and other cooperative institutions on the security of goods or otherwise;
20. to guarantee loans or advances or give undertakings to any Society or Company in which the Federation has a shareholding or financial involvement as a

- promoter to be able to assist its development or expansion or for starting any industrial undertaking by such societies/companies;
21. to guarantee loans or advances or give undertakings on behalf of any such society or company as mentioned above to any financing institutions:
 22. to do all such things or undertake such other business or activities as may be incidental or conducive to the attainment of any or all of the above objects.

Box : Onion Imports by NAFED



Onion import through NAFED to avert crisis

Our Corporate Bureau | New Delhi Last Updated at January 28, 2013 17:12 IST

The Centre has decided to import onions through the National Agricultural Co-operative Marketing Federation of India (Nafed) following the sudden rise in onion prices.

Retail prices of onion are touching a high of Rs 18-25 a kg in some cities while in the wholesale markets it is costing between Rs 10 and Rs 15 a kg.

Meanwhile, to avert a 1998 Assembly elections-type situation, when the then BJP government lost power following high onion prices, the Delhi government has ordered subsidised sale of onion at all Mother Dairy outlets for Rs 11.25 per kg.

Usually, at this time of the year, onions cost about Rs 14-16 a kg in retail and Rs 6-8 a kg in wholesale.

Although there had not been a shortfall in area coverage and production of onion, an official said the market arrivals had been delayed due to heavy rains in Nashik. The high levels of humidity had also spoiled the stored onion, thereby reducing the availability in the markets, he added.

"Following delay in fresh arrivals, stockists are also seen hoarding the commodity and this, too, has pushed prices up," said Kanhaiya Lal, a Jaipur-based trader.

An official statement said Union Agriculture Minister Sharad Pawar held an inter-ministerial meeting to review the production, storage and availability of the vegetable.

The latest review showed significant rise in onion prices since October 17, when prices at Nashik and Azadpur markets jumped from Rs 1,000 for 100 kg to Rs 1,500."

The current prices at both the markets are about Rs 1,375 to Rs 1,400 for 100 kg.

"With the delayed Maharashtra crop (early Kharif) expected in mid-October, prices are likely to come to the earlier levels of Rs 15-16 a kg," said Dayanand, president of Jaipur's Potato-Onion Association.

However, an agriculture ministry official said the current stock was estimated at 18.10 lakh tonnes, enough to meet the domestic demand. The crop arrivals, he added, may be a bit lower due to rains across the country but the mandi stocks were enough to meet the demand.

Total production of onions in 2004-05 is estimated around 59.42 lakh tonnes, up from last year's 57 lakh tonnes.

The early kharif crop from Maharashtra will arrive by early October while the late kharif crop of Maharashtra, Rajasthan and Gujarat will hit the markets from early November. Rabi crop from Maharashtra and Rajasthan is expected around early March.

The early kharif crop from other regions has been usual this year. The arrivals began in July from Tamil Nadu and in late August from Andhra Pradesh and Karnataka.

Tearjerker

Retail prices of onion at a high of Rs 18-25 per kg

Wholesale rate hovering around Rs 10-15 per kg

Delhi Govt orders subsidised sale at all Mother Dairy outlets for Rs 11.25 per kg

Risks in Marketing

Risk is inherent in all marketing transactions. Fire, rodents, quality deterioration, price fall, change in tastes, habits or fashion, placing the commodity in the wrong hands or area are all also associated with marketing risk. Hardy has defined risk as uncertainty about cost, loss or damage. The longer the time lags between production and consumption, the greater the risk. Most of the risk is taken by market middlemen. The bearer of the risk may be better off or worse-off. A risk cannot be eliminated because it also carries profit.

Types of Risk: The risks associated with marketing are of three types, namely physical risk, price and institutional risk.

- i. Physical risk includes loss of quantity and quality. It may be due to fire, flood, earthquake, rodents, pests, excessive moisture or temperature, careless handling, improper storage, looting or arson.
- ii. Price risk associates with fluctuation in price from year to year or within the year.
- iii. Institutional risks include the risks arising out of a change in the government budget policy, imposition of levies price controls etc.

Measures to Minimize Risks :

- a. Reduction in Physical loss through fire proof storage, proper packing and better transportation.
- b. Transfer of physical losses to Insurance companies.
- c. Minimization of price risks through.
 - Fixation of minimum and maximum price by government.

- Dissemination of price information to all sections of society over space and time.
- Effective system of advertising and create a favourable atmosphere for the commodity.
- Operation of speculation and hedging, futures trading, forward market, contract farming, contract marketing.

Speculation: Purchase or sale of a commodity at the present price with the object of sale or purchase at some future date at a favourable price.

Hedging: It is a trading technique of transferring the price risk. “Hedging is the practice of buying or selling futures to offset an equal and opposite position in the cash market and thus avoid the risk of uncertain changes in prices” (Hoffman).

Futures Trading: It is a device for protecting against the price fluctuations which normally arise in the course of the marketing of commodities. Stockicsts processors or manufactures utilize the futures contracts to transfer the price risks faced by them.

Future trading includes both hedging and speculation.

Speculation

1. Purchases and sales in the cash as well as in futures markets are made with the objective of making profit
2. The activities of buying and selling are not necessarily opposed to each other.
3. It is not necessary that the

Hedging

- two types of transactions should be of equal quantity.
4. Speculator purchases and sells goods when prices are as per his expectations.

- : To protect oneself against excessive price fluctuation.
- : Are always opposed to each other.
- : If is obligatory to buy and sell the goods in equal quantities in the two markets.
- : The commodities are not stored by traders. Only the difference in the price is given or taken on the due date.

Commodities for Futures Trading

Commodities permissible under futures trading must satisfy the following conditions.

1. Plentiful supply of the commodity.
2. Must be storable.
3. Commodity should be homogeneous.
4. Commodity should have a large demand.
5. Supply of the commodity should not be controlled by a few large firms.
6. The price of a commodity should be liable to fluctuate over a wide range.

Forward Markets

A market in which the purchase and sale of a commodity takes place at time „t“ but the exchange of the commodity takes place on some specified date in future i.e. $t+1$.

Some times even on the specified date in the future, $(t+1)$ there may not be any exchange of the commodity. Instead, the differences in the purchase and sale price are paid or taken.

Services Rendered by a Forward Market.

1. Reduces price fluctuations so that the margin of profit may be small.
2. Ensures an even flow of goods, avoiding gluts in the peak season,

and shortages in the slack seasons.

3. It brings about an integration of the price structure of commodities at different points of time.
4. Facilitates large purchases and sales at a short notice.
5. Brings coordination of the current and future expectations by rotating in the light of changing supply – demand situation.

Dangers of Forward Market

1. Forward market opens out the way for a large number of persons with insufficient means, inadequate experience and information to enter into commitments which may be beyond their means. In such conditions market gets demoralized.

2. It enable unscrupulous speculators, with little interest in the actual supply of and demand for, a particular commodity, to corner the supplies and organize bear raids and bull raids on the market in the hope of making easy money for themselves. This results in violent fluctuations in prices.

Books referred:

1. Acharya S.S and Agarwal NL, 2006, Agricultural Marketing in India. Oxford & IBH Publishing Co. Pvt. Ltd. New Delhi
2. Agricultural Economics by S .Subba Reddy, P. Raghuram, T.V.N. Sastry and I Bhavani Devi.2016. Oxford & IBP publishing company Ltd. New Delhi.

Course Name	Agricultural Marketing Trade and Prices
Lesson 14	Regulated markets- Agriculture Price Policy- Administered Price Regime-CACP
Content Revisor Name	SADDIKUTI HYMA JYOTHI
University/College Name	Acharya N.G. Ranga Agricultural University, Guntur
Course Reviewer Name	JAHANMOHAN KR
University/College Name	Tamil Nadu Agricultural University, Coimbatore

REMEDIAL MEASURES FOR THE PROBLEMS OF MARKETING OF AGRICULTURAL PRODUCE

The remedial measures for the problems of marketing are classified into three types:

1. Reduction and regulation of market charges through establishment of regulated markets.
2. Government legislations.
3. Organization of cooperative marketing.

History of Market Regulation in India:

- The first regulated Karanja cotton market was established in the year 1886 under the Hyderabad Residency Order.
- The first market legislation was Berar Cotton and Grain Market Act of 1897. This act became model act for legislation in other parts of the country and considered as mother act for legislation of regulated markets.
- The Indian Cotton Committee (ICC) appointed by Government of India in 1917 recommended the regulation of cotton markets on the lines of Berar act.
- On the recommendation of Royal Commission Agriculture (RCA) in 1928 and Central Banking Enquiry Committee (CBEC) in 1931 the Government of India in 1935 established the office of Agricultural Marketing Advisor (AMA), later renamed as Directorate of Marketing and Inspection (DMI).
- In 1938 DMI prepared model bill and circulated among the states.
- Different state governments have enacted legislation for the regulation of markets in their states. Important of them were
 - ❖ Hyderabad Agricultural Marketing Act, 1930
 - ❖ Madras Commercial Crops Act of 1935
 - ❖ Agricultural Produce Market Act of Bombay, Punjab and Mysore, 1939

- Andhra Pradesh state adopted Madras act Gujarat and Maharashtra states adopted the Bombay act.

- **REGULATED MARKET:**

Under the traditional system of marketing of the agricultural products, producer-sellers incurred a high marketing cost, and suffered from unauthorized deductions of marketing charges and the prevalence of various malpractices. To improve marketing conditions and with a view to creating fair competitive conditions, the increase in the bargaining power of producer-sellers was considered to be the most important prerequisite of orderly marketing. Most of the defects and malpractices under, the then existing marketing system of agricultural products have been more or less removed by the exercise of public/Government control over markets, i.e., by the establishment of regulated markets in country.

Definition:

A regulated market is one which aims at the elimination of the unhealthy and unscrupulous practices, reducing marketing charges and providing facilities to producer-sellers in the market.

Objectives of regulated markets are:

1. To prevent the exploitation of farmers by overcoming the handicaps in the marketing of their products.
2. To make the marketing system most effective and efficient so that farmers may get better prices for their produce, and the goods are made available to consumers at reasonable prices.
3. To provide incentive prices to farmers for inducing them to increase the production both in quantitative and qualitative terms.
4. To promote an orderly marketing of agricultural produce by improving the infrastructural facilities.

Important features/ essential elements of regulated markets:

1. **Market area:** The area from which the produce naturally flows to a commercial center, i.e. the market, and it assures adequate business and income to the market committee.
2. **Principal assembling market:** It is the main market which is declared as a principal market yard on the basis of transactions and income generated for the market committee.
3. **Sub market yard:** It is sub yard of the principal assembling market and does not generate sufficient income to be declared as a principal assembling market.
4. **Market yard:** This is a specified portion of the market area where the sale, purchase, storage and processing of any of the specified agricultural commodities are carried out. These are built as per the Indian Standards Institute (ISI) specifications. They cover wider areas (2 to 10 acres), and are lined with traders' shops. It has large space for unloading, display and auction place in the center. Bullock stalls, a canteen and toilet facilities are generally available.

Some other important features or characteristics of regulated markets are:

1. **Method of sale:** In a regulated market, the sale of agricultural products is undertaken either by open auction and closed tender system. These sales methods ensure a fair and competitive for the produce and prevent cheating of farmers by market functionaries/ middlemen.
2. **Weighing of the produce:** It is done by licensed weighmen with standard weights on platform scale balance.
3. **Grading of produce:** The produce in the regulated market is sold only after grading, but due to absence of facilities like space, funds for the employment of technical experts, the practice of grading could not be implemented in all the regulated markets in the country.



4. **Market news services:** In regulated markets, there is an arrangement for a proper and correct dissemination of market prices through loud speakers, notice boards and electronic display boards.
5. **Market charges:** With the regulation of markets, unofficial market charges like charity / dhramada / muddat/ karda were abolished. But the rates of other market charges such as commission, brokerage, labour/hamali charges were specified in proportion to the extent of service rendered by middlemen.
6. **Payment of the value:** It is obligatory on the buyer to make prompt payments for the produce without deductions.
7. **Licensing of market functionaries:** All the market functionaries i.e. from hamalies to traders working in a regulated market have to obtain a license from the market committee, after paying the prescribed fees to carry on their business
8. **Supervision:** The day to day functioning of a regulated market is supervised by the officials of the market committee i.e. the secretary, auction clerks and other staff. The administrative decisions are taken by the nominated/ elected market committee.
9. **Settlement of disputes:** Disputes arising farmers and traders with regard to quality of the produce, accounts and deductions of unauthorized charges are solved by the sub-committee of the market committee.
10. **Elimination of malpractices:** Regulated markets have brought a general awakening among producer-sellers. This wakening helps them to protect themselves against number of malpractices which were formerly prevalent in the unregulated markets.
11. **Provision of amenities in the market:** The market committee provides amenities required for a smooth and efficient marketing of the produce of farmers.

Regulated markets offer pledge loan facilities to farmers

In order to avoid distress sales by the small and marginal farmers in the peak season, Regulated Markets are issuing pledge loan to farmers. Under this scheme, the farmers can store their agricultural produce in the godowns of Regulated Markets for a maximum period of 6 months and take pledge loan of 75% of the total value of the produce upto a maximum of Rs.1,00,000. For the first 15 days no interest is charged and beyond 15 days interest will be charged @ 5%. Likewise pledge loan facilities are extended to traders also with the rate of interest specified from time to time. Interest at the rate 9% for traders is charged for pledge loan facilities.

Meaning of Price: Price means the cost (or) the amount at which something is valued. An example of a price is Rs. 600/- for three cookies.

Functions of price: The price of goods plays a crucial role in determining an efficient distribution of resources in a market system.

Price acts as a signal for shortages and surpluses which help firms and consumers respond to changing market conditions.

If a good is in shortage – price will tend to rise. Rising prices discourage demand, and encourage firms to try and increase supply. If a good is in surplus – price will tend to fall. Falling price encourage people to buy, and cause firms to try and cut back on supply. Prices help to redistribute resources from goods with little demand to goods and services which people value more i.e. with more demand. Adam Smith talked about 'the invisible hand' of the market. This 'invisible hand' relies on the fluctuation of prices to shift resources to where it is needed.

Problems in marketing of Agricultural Produce:

1. Lack of organization

2. Forced /distress sales
3. Superfluous middlemen
4. Multiplicity of market charges.
5. Malpractices in markets
6. Adulteration
7. Inadequate storage facilities
8. Transportation means are not well developed
9. Absence of grading & standardization
10. Lack of information regarding processing
11. Lack of financial facilities at cheaper rates

Characteristics of Agricultural product prices:

In agricultural based economies like India, prices of farm products undergo wide variations than in industrial goods. They have profound effect on the economy. The characteristics of agricultural product prices are

1. Production and supply of agricultural products cannot be adjusted quickly to changes in prices or demand.
2. Variability in cost of production from region to region.
3. Wide variation in quality of products and hence prices.
4. The prices of farm products in general exhibit co-movement at least within a group.
5. The prices of farm products vary across space.
6. The prices of farm products in general remain low in the post-harvest period.
7. There are multiple prices in the same market at a point of time.

Price stabilization:

A government (or) agency can establish a target price, and then guarantee to pay farmers and growers this price, whatever output is produced. If the market price rises above this guarantee, the market price will prevail.

Stabilization of agricultural prices would impart stability to industrial prices. At the same time it serves to stabilize the purchasing power of the large agricultural population and thereby provides a steady demand for the industrial products.

Need for Agricultural Price Policy

Agricultural Price Policy has special significance when there is a maladjustment in demand and supply and jump up and down the equilibrium price level.

1. Agricultural product prices fluctuate more violently than industrial / manufactured products.
2. Price fluctuations badly affect the producers and consumers. Middlemen take undue advantage and exploit the rest of the population through speculation.
3. Price fluctuations retard economic development of the nation (.i.e. low saving → low capital formation → less development).
4. During the inflation, low income group people will be very much affected because most of the goods will not be within the accessible reach of the consumers.

5. An appropriate price policy is needed for procurement operations.

Objectives of a price policy:

1. **To Ensure Relation between Prices of Food-grains and Agricultural Goods:** The foremost objective of agricultural price policy is to ensure the appropriate relationship between the prices of food grains and non-food grains and between the agricultural commodities so that the terms of trade between these two sectors of the economy do not change sharply against one another.
2. **To Watch Interests of Producers and Consumers:** To achieve the balance between the interest of producers and consumers, price policy should keep a close eye the fluctuations within maximum and minimum limits.
3. **Relation Between Prices of Crops:** The price policy should be such which may sustain the relationship between the prices of competing crops in order to fulfill the production targets in respect of different commodities in accordance of its demand.
4. **To Control Seasonal Fluctuations:** Another object of price policy is to control cyclical and seasonal fluctuations of price rise to the minimum extent.
5. **Integrate the Price:** The agricultural price policy should also aim at to bring the greater integration of price between the various regions in the country so that regular flow of marketable surplus could be maintained and exports of farm products stimulated regularly.

Commission for Agricultural Costs and Prices (CACP):

CACP is a decentralized agency of the Government of India. It was established in 1965 as the Agricultural Prices Commission (APC), and was given its present name in 1980. It is an attached office of the Ministry of Agriculture & Farmers

Welfare, Government of India. APC was established based on recommendations of Food grain Prices Committee (1964) headed by Sri. L. K. Jha.

Mission: The commission was established to recommend Minimum Support Prices (MSPs), to motivate cultivators and farmers to adopt the latest technology in order to optimize the use of resources and increase productivity.

Recommendations: As of now, CACP recommends MSPs of 23 commodities:

- Seven (7) cereals (paddy, wheat, maize, sorghum, pearl millet, barley and ragi),
- Five (5) pulses (gram, tur, moong, urad, lentil),
- Seven (7) oilseeds (groundnut, rapeseed-mustard, soyabean, seasmum, sunflower, safflower, nigerseed)
- Four (4) commercial crops (copra, sugarcane, cotton and raw jute).

The Role of CACP:

1. The need to provide incentive to the producer for adopting improved technology and for developing a production pattern broadly in the light of national requirements.

2. The need to ensure rational utilization of land, water and other production resources.

3. The likely effect of the price policy on rest of the economy, particularly on the cost of living, level of wages, cost structure of agro-based products and the competitiveness of agriculture and agro-based commodities.

4. The Commission may also suggest such non-price measures related to credit policy, crop and income insurance and other sectors as would facilitate the achievements of the objectives set out in 1 above.



5. To recommend from time to time, in respect of different agricultural commodities, measures necessary to make the price policy effective.

6. To take into account the changes in terms of trade between agricultural and non-agricultural sectors.

7. To examine, where necessary, the prevailing methods and cost of marketing of agricultural commodities in different regions, suggest measures to reduce costs of marketing and recommend fair price margins for different stages of marketing.

8. To keep under review the developing price situation and to make appropriate recommendations, as and when necessary, within the framework of the overall price policy.

9. To undertake studies in respect of different crops as may be prescribed by Government from time to time.

10. To keep under review studies relating to the price policy and arrangements for collection of information regarding agricultural prices and other related data and suggest improvements in the same, and to organize research studies in the field of price policy.

11. To advise on any problems relating to agricultural prices and production aspects that may be referred to it by Government from time to time.

12. To effectively integrate the recommended non-price measures with price recommendations and to ensure competitive agriculture.

Administered Price Regime:

An administered price is the price of a good or service as dictated/ determined by a government or centralized authority, as opposed/ against to market

forces of supply and demand. Administered prices are prices fixed by the government under varied circumstances. In India the administered price regime includes 5 types of prices. They are

1. Minimum Support Price: It is fixed based on cost of cultivation or average cost of production. This is the price fixed by the government to protect the producers / farmers against excessive fall in price during bumper production years. MSP is announced by GOI ahead of well before the agricultural season every year. MSP is the price at which the government of India makes a commitment to purchase all the quantities offered by the farmers. But in reality MSP is always less than the market prices for foodgrains.

The minimum price has assigned / given a statutory status in case of sugarcane and it is called Statutory Minimum Price (SMP) under Sugarcane Control order of 1966. It was amended in October, 2009 and the concept of SMP was replaced by the Fair and Remunerative Price (FRP) of sugarcane.

The statutory minimum price (SMP) is announced by the central government based on the cost of cultivation estimated by the Commission for Agricultural Costs and Prices (CACP). This is the basic price which the sugar mills must pay sugarcane growers. However, citing differences in cost of production, productivity levels and also as a result of pressure from farmers' groups, some states (Uttar Pradesh, Punjab, Haryana, Tamil Nadu and Uttarakhand) used to declare state-specific sugarcane prices called State Advised Prices (SAP), usually higher than the SMP. These states also argued that SMP was merely the 'minimum' price which could be enhanced to protect farmers' interests.

Even though the name suggests that SAPs are advisory prices, litigation in courts has established that the mills in these states mandatorily pay SAP to

farmers. Unlike the MSP for wheat or paddy announced by the Centre, where the government procures a commodity from farmers directly in case market prices go below the MSP, the government never procures sugarcane from farmers directly. It is only sugar mills or khandsari units that buy it from farmers at the prices which shouldn't fall below that determined by the government (SMP or SAP).

Later on the government of India decided to change its pricing policy that would not only reform the sugarcane pricing system but would also remove ambiguities in this regard. Consequently, the government amended Section 3 (3C) of the Essential Commodities Act, 1955, replacing the concept of "Minimum Price" by "Fair and Remunerative Price" (FRP) of sugarcane with consequential amendments to the Sugarcane Control Order, 1966. An ordinance to the effect was promulgated on October, 2009

Under the 'fair and remunerative price' regime, the government has included '**risk**' and '**profit**' as factors, over and above the cost of production used for SMP, in calculating the FRP based on the overall sugarcane and sugar production scenario.

FRP of Sugarcane from 2011-12 to 2021-22

Year	FRP (Rs. per Quintal)
2011-12	145.95
2012-13	170.95
2013-14	210.95
2014-15	220.95
2015-16	230.95
2016-17	230.95
2017-18	255.95
2018-19	275.10
2019-20	275.10
2020-21	255.10
2021-22	290.10

(Source: Sugarcane Pricing Policy, Ministry of Consumer Affairs, Food & Public Distribution System, GOI)

2. Procurement Price: Procurement price of a commodity refers to the price at which government procures the commodity from producers and millers for maintaining buffer stocks and for distribution through Public Distribution System (PDS).

3. Issue Price : It is the price at which commodities are made available to the consumers at fair price shops/PDS. Issue price is always more than procurement price.

4. Ceiling Price: Ceiling price is an upper price level of a commodity fixed by the government to protect the consumers from unwarranted price rise. Through this the government can able to check the traders from not charging a higher price. It does not apply to farmers.

5. Levy price: The levy price is the procurement price at which both the traders and millers are forced to sell a certain quantity of a commodity to the government. This will prevail only in case of rice and sugar. The levy price exists as long as the demand for a commodity is more than the supply.

Books referred:

1. Acharya S.S and Agarwal NL, 2006, Agricultural Marketing in India. Oxford & IBH Publishing Co. Pvt. Ltd. New Delhi
2. Agricultural Economics by S .Subba Reddy, P. Raghuram, T.V.N. Sastry and I Bhavani Devi.2016. Oxford & IBP publishing company Ltd. New Delhi.

Course Name	Agricultural Marketing Trade and Prices
Lesson 15	Trade: Concept of International Trade and its need, theories of absolute and comparative advantage. Present status and prospects of international trade in agri-commodities
Content Revisor Name	SADDIKUTI HYMA JYOTHI
University/College Name	Acharya N.G. Ranga Agricultural University, Guntur
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International Trade

International trade is the exchange of goods and services between countries. This type of trade gives rise to a world economy. Trading globally gives consumers and countries the opportunity to be exposed to goods and services not available in their own countries. Almost every kind of product can be found on the international market: food, clothes, spare parts, oil, jewellery, wine, stocks, currencies and water. Services are also traded: tourism, banking, consulting and transportation. A product that is sold to the global market is an export, and a product that is bought from the global market is an import. Imports and exports are accounted for in a country's current account in the balance of payments.

Global trade allows wealthy countries to use their resources - whether labor, technology or capital - more efficiently. Because countries are endowed with different assets and natural resources (land, labor, capital and technology), some countries may produce the same good more efficiently and therefore sell it more cheaply than other countries. If a country cannot efficiently produce an item, it can

obtain the item by trading with another country. This is known as specialization in international trade. We discuss an example in the following.

The basis of international trade

The comparative cost theory developed by David Ricardo illustrated it in 1817 by using two country, two commodity model.

Country	Labour units/unit of cloth	Labour units/unit of wine	Exchange ratio between wine and cloth
England	100	120	1 wine : 1.2 cloth 120 ----
Portugal	90	80	1 wine : 0.88 cloth 100 80 ---- 90

Portugal has an absolute superiority in production of both cloth and wine.

Law of comparative advantage indicates that a country should specialise in the production of that commodity in which it is more efficient and leave the other commodity to other country. The two nations will then have more of both goods by engaging in trade.

Portugal has a greater comparative advantage over England in wine relating to cloth

$$\frac{80}{120} < \frac{90}{100}, \text{ i.e. } 0.67 < 0.9$$

and import of cloth from England which has a comparative advantage in cloth production. England will gain by specializing in producing cloth and selling it in Portugal in exchange of wine.

The key to international trade lies in the theory of comparative advantage ie each nation specializes in the production of those commodities in which it has the highest productivity.

Country	Specialization
US	Making computers
Brazil	Growing coffee

The theory of comparative advantage states that international trade is mutually beneficial even when one of the countries can produce every commodity more cheaply than the other country.

The terms „absolute“ and comparative are key terms to understand this principle.

Eg: A best lawyer is best typist in the town. A secretary is less efficient than lawyer

The benefit of international trade results in a more efficient employment of the productive forces of the world. (John Stuart Mill). Foreign trade expands a nation’s consumption possibilities. The following table explains this fact.

Sells	Buys	Good	Foreign trade
Japan	US	Cameras	By specializing, each nation ends up consuming more than it could produce alone.
US	Australia	Computers	
Australia	Japan	Coal	

Two issues are involved in foreign trade:

1. Trade among different nations : Problem of Protectionism : (whether foreigners are discriminated or treated equally)
2. Different nations use different currencies (or monies).

Differences between foreign trade and domestic trade.

S.No	Domestic	Foreign trade

		trade	
1	Factors of production	Immobile	Mobile
2	Currencies	No difficulty	The possibility of variations in exchange rates between different currencies in creases risk
3	Restrictions on trade	Relatively less	Imposed by a. Custom duties

			<ul style="list-style-type: none"> b. Fixed quotas c. Tariff barriers d. Exchange restrictions
4	Ignorance	Less ignorance	Difference in culture, religion language etc.
5	Separate markets	India uses right hand drive cars	Ethiopia uses left hand drive cars
6	Transport and insurance costs	Less	Impede international trade.

Free Trade vs. Protectionism

There are opposing views. International trade has two contrasting views regarding the level of control placed on trade: free trade and protectionism. Free trade is the simpler of the two theories: a laissez-faire approach, with no restrictions on trade. The main idea is that supply and demand factors, operating on a global scale, will ensure efficient production. Therefore, nothing needs to be done to protect or promote trade and growth because market forces will do so automatically.

In contrast, protectionism holds that regulation of international trade is important to ensure that markets function properly. Advocates

of this theory believe that market inefficiencies may hamper the benefits of international trade and they aim to guide the market accordingly. Protectionism exists in many different forms, but the most common are tariffs, subsidies and quotas. These strategies attempt to correct any inefficiency in the international market.

To conclude, the opportunity for specialization and therefore more efficient use of resources, international trade has potential to maximize a country's capacity to produce and acquire goods. Opponents of global free trade have argued, however, that international trade still allows for inefficiencies that leave developing nations

compromised. What is certain is that the global economy is in a state of continual change

and, as it develops, so too must all of its participants.

- Revealed Comparative Advantage (RCA) is a measure of international trade specialization as given by Balassa, 1965

$$RCA_{ij} = (X_{ij}/X_{ik})/(X_{nj}/X_{nk})$$

Where, X_{ij} = Exports of country 'i' of cereal 'j'

X_{ik} = Exports of country 'i' of a total cereals 'k'

X_{nj} = Exports of a world 'n' of cereal 'j', and

X_{nk} = Exports of a world 'n' of a total cereals 'k'

When RCA value is greater than unity ($RCA > 1$) for a given country in a given cereal, the country is said to have a revealed comparative advantage in that commodity.

The RCA index is made symmetric, following the methodology suggested by Dalum et al. (1998) and the resultant index is called as Revealed Symmetric Comparative Advantage (RSCA).

$$RSCA = (RCA - 1) / (RCA + 1)$$

This measure ranges between -1 and +1 and is free from the problem of skewness. A commodity is said to have comparative advantage in its exports if the corresponding RSCA value is positive and vice versa.

Exports Value in 000' US \$

Product	Rice			
Year	2013-14	2014-15	2015-16	2016-17
World	25,711,756	26,455,796	23,232,906	20,398,785
India	8,169,519	7,905,650	6,380,082	5,315,535
Product	Cereals			
Year	2013-14	2014-15	2015-16	2016-17
World	123,672,687	120,272,945	103,934,957	96,174,728
India	11,592,455	10,059,331	6,846,427	5,554,785

Revealed Comparative Advantage (RCA) and Revealed Symmetric Comparative Advantage (RSCA) of rice exports of India

$RCA_{ij} = (X_{ij}/X_{ik}) / (X_{nj}/X_{nk})$, Where,

X_{ij} = Rice exports of India

X_{ik} = Cereal exports of India

X_{nj} = Rice exports of world

X_{nk} = Cereal exports of world

During 2013-14:

Revealed Comparative Advantage (RCA)

$= (8,169,519 / 11,592,455) / (25,711,756 / 123,672,687)$

$= 0.7047 / 0.2079 = 3.38$

Revealed Symmetric Comparative Advantage (RSCA)

$$\begin{aligned} \text{RSCA} &= (\text{RCA}-1) / (\text{RCA}+1) \\ &= (3.38-1) / (3.38+1) = 0.54 \end{aligned}$$

During 2014-15:

$$\begin{aligned} &\text{Revealed Comparative Advantage (RCA)} \\ &= (7,905,650 / 10,059,331) / (26,445,796 / 120,272,945) \\ &= 0.7859 / 0.2199 = 3.57 \end{aligned}$$

Revealed Symmetric Comparative Advantage (RSCA)

$$\begin{aligned} \text{RSCA} &= (\text{RCA}-1) / (\text{RCA}+1) \\ &= (3.57-1) / (3.57+1) = 0.56 \end{aligned}$$

During 2015-16:

$$\begin{aligned} &\text{Revealed Comparative Advantage (RCA)} \\ &= (6,380,082 / 6,846,427) / (23,232,906 / 103,934,957) \\ &= 0.9319 / 0.2235 = 4.17 \end{aligned}$$

Revealed Symmetric Comparative Advantage (RSCA)

$$\begin{aligned} \text{RSCA} &= (\text{RCA}-1) / (\text{RCA}+1) \\ &= (4.17-1) / (4.17+1) = 0.61 \end{aligned}$$

During 2016-17:

$$\begin{aligned} &\text{Revealed Comparative Advantage (RCA)} \\ &= (5,315,535 / 5,554,785) / (20,398,785 / 96,174,728) \\ &= 0.9569 / 0.2121 = 4.51 \end{aligned}$$

Revealed Symmetric Comparative Advantage (RSCA)

$$\begin{aligned} \text{RSCA} &= (\text{RCA}-1) / (\text{RCA}+1) \\ &= (4.51-1) / (4.51+1) = 0.64 \end{aligned}$$

Inference: Analysis of the rice export data indicated that India is having both the Revealed Comparative Advantage and Revealed Symmetric

Comparative Advantage as the values are more than one and positive respectively in all the four years under study.

Table 1: Revealed Symmetric Comparative Advantage of Agricultural commodities of India (Lakra et.al, 2014)

Year	Wheat	Barley	Maize	Sorghum	Millets	Pulses
1991	-0.44	-1.00	-1.00	-1.00	0.70	-0.25
1992	-0.95	-1.00	-1.00	-1.00	0.80	-0.03
1993	-1.00	-1.00	-0.94	-0.74	0.70	-0.08
1994	-0.85	-1.00	-0.95	0.11	0.77	-0.04
1995	-0.69	-1.00	-0.98	-1.00	0.14	-0.44
1996	-0.43	-1.00	-0.94	-0.99	0.34	-0.29
1997	-1.00	-1.00	-1.00	-0.98	0.34	0.22
1998	-1.00	-1.00	-1.00	-1.00	-0.19	-0.30
1999	-1.00	-1.00	-0.99	-1.00	-0.03	0.27
2000	-0.57	-1.00	-0.94	-1.00	0.40	0.30
2001	-0.19	-1.00	-0.86	-0.99	0.45	-0.03
2002	-0.29	-1.00	-0.94	-0.93	0.22	-0.25
2003	-0.08	-1.00	-0.69	-0.86	0.47	-0.20
2004	-0.44	-0.98	-0.52	-0.71	0.53	-0.20
2005	-0.69	-1.00	-0.72	-0.62	0.79	0.31
2006	-0.98	-1.00	-0.60	-0.76	0.73	0.09
2007	-1.00	-0.43	-0.23	-0.73	0.70	-0.28
2008	-1.00	-0.66	-0.04	-0.36	0.83	-0.29

2009	-1.00	-0.86	-0.13	-0.16	0.81	-0.50
2010	-1.00	-0.91	-0.17	0.02	0.84	-0.15
2011	-0.87	-0.92	-0.16	-0.62	0.69	-0.22

Table 2. Revealed Symmetric Comparative Advantage of Agricultural Commodities Exported from India (Kanaka et.al, 2012)

Year	Tea	Coffee	Cashew	Ground nut	Cotton	Tobacco	Fruits and Vegetables	Sugar
1994-95	0.87	0.60	0.99	0.70	0.10	-0.36	-0.61	-0.32
1995-96	0.85	0.56	0.99	0.76	-0.33	-0.30	-0.74	0.03
1996-97	0.88	0.68	0.99	0.90	0.78	0.15	0.44	0.23
1997-98	0.89	0.63	0.98	0.90	0.00	0.06	-0.71	0.30
1998-99	0.89	0.65	0.98	0.58	-0.66	-0.25	-0.77	-0.30
1999-00	0.85	0.60	0.99	0.79	-0.77	-0.12	-0.74	-0.49
2000-01	0.81	0.48	0.98	0.72	-0.77	-0.33	-0.70	-0.56
2001-02	0.79	0.39	0.98	0.64	-0.83	-0.43	-0.67	-0.27
2002-03	0.74	0.09	0.98	0.42	-0.78	-0.43	-0.67	-0.62

2003-04	0.73	0.08	0.97	0.45	0.35	-0.40	-0.62	-0.66
2004-05	0.74	0.02	0.98	0.77	-0.03	-0.38	-0.64	-0.79
2005-06	0.71	0.00	0.98	0.68	0.63	-0.45	-0.62	-0.79
2006-07	0.74	0.15	0.98	0.58	0.63	-0.45	-0.59	-0.49
2007-08	0.66	-0.07	0.98	0.71	0.67	-0.45	-0.66	-0.83
2008-09	0.67	-0.11	0.98	0.64	0.19	-0.52	-0.71	-0.64

Conclusion: In nut shell, India's comparative advantage in most of the important agricultural exports has been found to be eroding and losing out to other Asian competitors in certain commodities during the period after economic reforms and signing of WTO.

Major Agricultural Products of International Trade are:

1. Food and Live animals
2. Meat and meat preparations
3. Dairy products, birds and eggs
4. Fish, Crustaceans, molluscs and preparations there of
5. Cereals and cereal preparations
6. Vegetables and fruits
7. Sugar and sugar preparations
8. Coffee, tea, spices, cocoa and manufactures thereof

9. Feed stuffs for animals (excluding unmilled cereals)
10. Miscellaneous edible products and preparations

Major Exporters of Food and Agricultural Products during 2019 (World Trade Centre Statistics, 2020): USA, Brazil, China Canada Thailand, Indonesia, Argentina, India, Mexico.

Major Importers of Food and Agricultural Products during 2019 (World Trade Centre Statistics, 2020): China, USA, Japan, United Kingdom, Canada, Republic of Korea, Russian Federation, and Mexico.

India's Agricultural Trade: India is an agrarian economy and is a major contributor to the global food basket, thanks to the favourable agro-climatic conditions and the rich base of natural resources. As per WTO's Trade Statistics, the share of India's agricultural exports and imports in the world agriculture trade in 2017 was 2.27% and 1.90%, respectively. India is among the world's leading producers of many commodities such as dairy, cereals, spices, fruits & vegetables, rice, wheat, cotton, and others. Apart from fulfilling domestic demand, Indian agricultural produce that includes horticultural produce, and processed foods are exported to more than 100 countries in the world including the US, countries in the Middle East, and the EU. Amidst the COVID-19 pandemic, the smooth functioning of the agriculture sector was ensured by issuing relevant guidelines. There was a considerable improvement in the food grain production and the COVID-19 induced movement restrictions worldwide did not affect India's agri-exports as they did with other commodities. With respect to agri-

imports, India majorly imports vegetable oils, fresh fruits, pulses, and spices (Source: Department of Commerce website)

India's agriculture exports increased by 7 times and imports by 8 times, in 15 years

India has consistently maintained a trade surplus in agricultural commodities over the years. India's agri-exports increased from Rs. 38,078 crores in 2004-05 to Rs. 2.7 lakh crores in 2018-19, registering an increase of nearly 7 times in the span of 15 years. However, in 2019-20, there was a drop in export by around 8%. Between April 2020 and February 2021 of 2020-21, India's agri-exports have already crossed the 2019-20 levels, indicating growth in agri-exports for 2020-21 in line with the earlier trends.

Likewise, the import of agricultural products has also increased over the years. In 2004-05, agri-imports were worth Rs.18,924 crores which went up to Rs. 1.68 lakh crores in 2016-17, recording a growth of almost 8 times. However, since 2016-17, the value of imports dropped to reach Rs. 1.42 lakh crores in 2018-19. In 2019-20, India's agri-imports were worth Rs.1.51 lakh crores and in 2020-21, up to 28 February 2021, the imports were worth Rs.1.44 lakh crores.

APEDA supervises agriculture exports in India

Agricultural and Processed Food Products Export Development Authority (APEDA) is responsible for the export promotion and development of listed products including meat products, dairy products, floriculture products, horticulture, medicinal plants, etc. It plays an important role in strengthening India's export potential along with encouraging better price realization.

Some of the actions taken by APEDA to boost agriculture exports during the pandemic include promotion in virtual buyer-seller meets, formation of product specific export promotion forums, hosting product promotion meetings and webinars regularly for understanding problems, and resolving them, and promotion of GI products, among others. Under the Agriculture and Processed Foods Export Promotion Scheme of APEDA, financial assistance was provided for infrastructure development, Quality Development, and Market Promotion.

India must address certain underlying issues

Agricultural exports are pivotal for helping farmers to increase their incomes. Apart from being a source of foreign exchange for the country, the exports help farmers, producers, and exporters to utilize a wider international market and increase their income. Exports have also resulted in increased production in the agriculture sector by increasing area coverage and productivity. Though India aims to double farm exports by 2022, there are some underlying issues, addressing which would help boost India's exports. Some such issues are reduction of post-harvest loss, availability of necessary infrastructure like cold storage, proper monitoring

of fertilizer and pesticides usage, and adoption of the latest farm technology.

Major Agricultural Exports of India during 2020-21: Marine products, rice (other than basmati) , rice basmati, spices, buffalo meat, sugar, oil meals, castor oil, tea, groundnut, fresh vegetables, processed fruits and juices and coffee.

Major Agricultural Imports of India during 2020-21: Vegetable oils, fresh fruits, pulses, spices cashew, sugar, natural rubber, cotton raw including waste, cocoa products and marine products.

Major Destinations of India's exports:

Indian agricultural commodities and processed foods are exported to more than 200 countries. Top ten destinations for exports are Vietnam, Iran, Saudi Arabia, U.A.E., U.S.A., Indonesia, Nepal, Bangladesh, Malaysia and Iraq during 2018-19 (Source: Farmer Connect Portal, GOI)

Books referred:

1. Acharya S.S and Agarwal NL, 2006, Agricultural Marketing in India. Oxford & IBH Publishing Co. Pvt. Ltd. New Delhi
2. Subba Reddy. S, Raghuram. P, Sastry T.V.N. and Bhavani Devi I, 2016. Agricultural Economics Oxford & IBP publishing company Ltd. New Delhi.
3. Ravi Kumar. KN Sree Lakshmi. K, Satyanarayana. TV and Vijay Krishna Kumar. K, 2008. World Trade Agreement and Indian Agriculture: Implementation Experience, Daya Publishing House, New Delhi, India.

Course Name	Agricultural Marketing Trade and Prices
Lesson 16	GATT- WTO- Agreement on Agriculture (AoA) and its implications on Indian agriculture-TRIPS.
Content Revisor Name	SADDIKUTI HYMA JYOTHI
University/College Name	Acharya N.G. Ranga Agricultural University, Guntur
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Globalization: Globalization is nothing but integration of national economy with that of world economy. Its main aim is to create demarkless world.

Genesis/ origin of World Trade Organization:

For facilitating world trade the General Agreement on Tariff and Trade (GATT) was established in 1947 in Geneva, Switzerland. GATT traces its origin to 1944 at Brettonwood, U.S.A to plan economical and financial security for post- World War II reconstruction. Brettonwood conference of 1944 recognized the need for an institution to oversee the liberalization of free trade. India was founder member of GATT. There have been several rounds of negotiations were held between 1947-94 to discuss various aspects of GATT.

2 nd round	1948	France	Concentrated on Tariff, rules and trade policies till 1964.
3 rd round	1956	England	„
4 th round	1956	Geneva	„
5 th round	1960	Dillon	„
6 th round	1967	Kenny	Antidumping
7 th round	1973-79	Tokyo	Framework of GATT arrangements.
8 th round	1986-93	Uruguay	Boundaries were expanded to TRIPS, TRIMS, GATTs, Agricultural trade etc.
9 th	1994	Morocco	WTO establishment on 01-01-

round			1995.
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Main features of GATT (General Agreement on Tariffs & Trade)

1. Reduction in agricultural tariffs by 30% for all agricultural commodities from 1994.
2. Agricultural input subsidies are reduced by 30%, export subsidies by 36% and value of subsidized exports by 21%.
3. Trade liberalisation policies would bring about 2-10% rise for agricultural commodity prices in international markets resulting in a gain of \$200 billion.
4. As import tariffs are reduced, the domestic demand for imports increases putting pressure on trade balances. The developing countries have to resort to real exchange rate devaluation to increase their exports.
5. GATT reforms are more beneficial to developed countries because of high prices for export goods such as capital goods, machinery etc.
6. According to GATT, India can offer subsidy to increase its export competitiveness without altering policy related to PDS, food security etc.
7. Under TRIPS, seeds and plant varieties must be protected either by patents or by an effective system of its own or a combination of both.
8. All regulations, rules, restrictions (QR_s), export duties, minimum export prices have to be removed to boost exports.

9. TRIMS : No restrictions on quantum of foreign investment.

The first seven rounds of trade negotiations of GATT were aimed stimulating international trade through reduction of tariff barriers and reduction of non-tariff restriction on imports. The 8th round of “multilateral trade negotiations” are popularly known as Uruguay round started in 1986 and continued up to 1993 was basis for formulation of WTO. Till 1964, negotiations were concentrated on tariff, rules, trade policies under GATT. In 1982, US suggested new items such as TRIPS, agriculture and service sectors for inclusion in the discussions. Several nations opposed the move initially. In order to reduce the differences among participating countries on certain critical areas such as agriculture, textiles, trips, trims and anti-dumping measures etc. Mr. Arthur Dunkel, the then Director General of GATT compiled a very detailed document, popularly known as Dunkel proposal/ Dunkel Draft and presented it before the member countries as a compromise document. The Dunkel proposal culminated in to final act on December 15th, 1993 and India signed the agreement along with 117 nations on April 15th, 1994 at Marrakesh. The World Trade Organization (WTO) came into existence on 01.01.1995 as a result of 9th round of trade negotiation held at Marrakesh, Morocco as successor to General Agreement on Tariff and Trade (GATT), which was established in 1947 to look after world trade. WTO head quarters is located Geneva, Switzerland. By 2021, the number of member countries in WTO is 164. The current Director General of WTO is Ngozi Okonjo- Iweala of Nigeria. She is the first woman Director General of WTO. W.T.O is the only international organization dealing with the global rules of trade between nations.

Principles of W.T.O:

The two basic principles of WTO are

1. **Most favored Nation status (MFN):** A grant of special favour (reducing custom duty rate for one of the products) to one country

has to be extended to all other member countries.

2. **National Treatment:** Imported and locally produced goods should be treated equally in domestic market of a country.

Three divisions of WTO:

1. Ministerial level conference: Meet once in two years to take principal policy decisions.
2. General Council: Consists of all members, handles day to day work of WTO.
3. Bodies: (a) Dispute settlement Body, (DSB). (b) Trade policy Review Body (TPRB).

Functions of W.T.O:

1. Its main function is to ensure that trade flows as smoothly, freely and predictably as possible. Its other functions.
2. To act as a forum for multilateral trade agreements among member countries.
3. To resolve trade disputes, tariffs concessions, rules of TRIPS and TRIMS etc.
4. To oversee national trade policies.
5. To administer and implement the multilateral trade and plurilateral trade arrangements.
6. To cooperate with other international institutions in global policy making.
7. Assisting developing countries in trade policy issues through technical assistance

Objectives of W.T.O are:

1. In the field of trade and economic development:
 - a) Raising the standard of living
 - b) Achieving full employment and increasing the volume of real income and effective demand.
 - c) Expanding the production and trade in goods and service.

2. For the fulfillment of sustainable development
 - a) Promoting the protection and preservation of environment
 - b) Augmentation/improving the resources in proportion to the respective needs and concerns at different levels of economic development.
3. Ensuring the developing countries particularly the poorest countries to get due share in the growth of international trade in accordance/consistent with their needs of economic development.
4. To enter in to mutually beneficial arrangements aiming for reduction of trade barriers and elimination of discrimination in international trade.
5. To develop more viable and durable multilateral trading system
6. To take effective steps for coordinating policies in the fields of trade, environment and economic development.

Principles of multilateral trade:

1. Non-discrimination:

Non-discrimination has two major components.

- i) The most-favored-nation (MFN) status,
- ii) The national treatment (NT) principle.

2. Reciprocity: Reciprocity is a fundamental element of the negotiating process. Obtaining a reduction in foreign import barriers as a quid- pro- quo for a reduction in domestic trade restrictions.

3. Binding and Enforceable Commitments: The tariff commitments made by WTO members in a multilateral trade negotiation are enumerated in schedules (lists) of concessions. These schedules establish “ceiling bindings”: the member concerned cannot raise tariffs above bound/specified levels without negotiating compensation with the principal suppliers of the products concerned.

4. **Transparency:** Enforcement of commitments requires access to information on the trade regimes that are maintained by members. The agreements administered by the WTO therefore incorporate mechanisms designed to facilitate communication between WTO members on issues.

5. **Safety Valves:** A final principle embodied in the WTO is that, in specific circumstances, governments should be able to restrict trade (to protect the interests of domestic producers)

WTO- New Areas:

As compared to GATT, WTO included many new fields such as

1. Agreement on Agriculture (AoA) for Agriculture related goods
2. Multi Fiber Agreement (MFA) for textiles is replaced by Agreement on textiles and clothing (ATC)
3. General Agreement on Trade in Services (GATS)- Services
4. Trade Related Intellectual Property Rights (TRIPS)
5. Trade Related Investment Measures (TRIMS)

Agreement on Agriculture (AoA):

AoA was signed as part of the Uruguay (8th) Round Agreement in April, 1994. It came into force with effect from 1st January, 1995

f	<p>Developed countries (1995-</p>	<p>Developing countries (1995-</p>
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	2000)	2004)
: s	36%	24%
l	15%	10%
:		
r		
:	20%	30%
:	36%	24%
:	21%	13%

The three main objectives of AoA are:

1. Fair and market oriented trading.
2. Reduction in agriculture support and protection
3. Preventing restrictions and distortions in world markets

AoA covers three broad areas/ three pillars/ three main components of agriculture and trade policy, namely.

1. Market Access
2. Domestic Support
3. Export Competition

1. Market access:

Permission to a foreign product to enter the domestic market and compete with domestic product on non-discriminatory basis. Market access is expressed in W.T.O. terms as easing border measures i.e. tariff and non-tariff measures in the cross border supply of goods and regulations inside the market in case of services and intellectual property rights.

2. Domestic Support (Internal Support):

In agriculture, domestic subsidy measures acts to maintain the producer prices above those prevailing in the international trade. Ex. Direct payments to producers including deficiency payments to

producers (minimum support price, procurement price) and input and marketing cost reduction measures (input subsidy, reduction of freight charges/transportation charges).

The domestic support has been classified into three categories or groups based on their impact on trade and their effect on production.

- a) Amber Box Measures
- b) Blue Box Measures
- c) Green Box Measures

a) Amber box measures:

These measures are dealt under two parts.

- i) Product specific subsidy: Minimum support price.
- ii) Non-product specific subsidy: Subsidy given towards fertilizers, seeds, irrigation, electricity etc.

The subsidies falling under Amber box can significantly distort trade and affect the level of production. These are subjected to reduction commitment under AoA.

b) Blue box measures:

They allow countries unlimited spending for direct payments to farmers if the payments are linked to production limiting programmes. These blue box measures are linked to production limiting programmes. These will distort the trade and production minimally and are not subjected to reduction commitment. Example: Particular

production incentives, crop holiday as in case of tobacco.

c) Green box measures:

These contain payments linked to environmental programmes, pest and disease control, infrastructure development and domestic food aid. They will have no effect on production and does not affect the trade. These are not subjected to reduction obligation. Example: Subsidies falling under DPAP, dry land agriculture research and extension activities.

Aggregate Measures of Support (AMS):

It is an index that measures the monetary value of the extent of government support to a sector. If AMS is for positive, agriculture is subsidized and if AMS is negative, agriculture has negative subsidy.

Agreement on the Application of Sanitary and Phyto-sanitary Measure (SPS):

SPS measures deals with standards for food safety and animal and plant health. WTO encourages member countries to use international standards or guidelines where they exist like

1. Codex Alimentarius commission (CAC) is named for food safety which is an inter- governmental body of FAO & WHO.
2. International Office of Epizootics for animal health.
3. FAO Secretariat of the International plant protection convention for plant health.
4. Higher standards are based on scientific justification, which is based on “risk assessment.

The objective of SPS measures were to protect

1. Human life from the risks arising from additives, toxins and plant & animal borne diseases
2. Animal life from the risks arising from additives, toxins, pests, diseases, disease causing organisms
3. Plant life from the risks arising from pests, diseases, disease causing organisms
4. A country from the risks arising from damages caused by entry, establishment or spread of pests.

SPS measures imposed by other countries on India are restricting its exports in multiple ways.

A few examples showing how export consignments from India have been rejected are viz.,

1. Japan insists on a DDT residue level of 0.4 ppm in unmanufactured tobacco while the international standard is set at 6 ppm. Indian tobacco, which has a residue level of 1-2 ppm, is well within the permissible limit set by the international standard but Japan prohibits import of unmanufactured tobacco from India on SPS grounds.
2. EU restricted import of meat from India although India has been free from the rinderpest since 1995.
3. EU does not import milk and milk products from India as Indian cows are not mechanically milked and often because the cows have not been kept in farms.
4. EU thwarted/upset exports of shrimps from India to the EU on SPS grounds. The US and Japan also restrict import of shrimps from India because of the presence of pesticides/antibiotics.
5. Exports of spices from India have been restricted on SPS measures that were not applied in a transparent manner. Spain detained consignments of chilly exported from India without explaining why they considered the product as contaminated by aflatoxin. Italy

and Germany also detained Indian spice consignments on grounds of pesticide residue. The problem became more serious because of lack of standards on permitted level of aflatoxin or pesticide residues.

6. India's Tea exports to many developed countries have been affected due to concerns about pesticide content. Although Indian exporters adhered to maximum pesticide levels recommended by US, stricter limits permitting only 0.01 mg of tetraflon and 2 mg of ethion per kg was imposed by some countries in EC.
7. Marine product export from India is facing market access barrier on account of metallic, pesticide and antibiotic content. For example 0.2 % of benzoic contents in shrimps from India was banned while this limit was set at 0.6 % in case of other countries.
8. EU banned imports where hormones whether natural or synthetic have been used in livestock production assessment".

Trade Related Intellectual Property Rights (TRIPs)

TRIPS came into force on 1st January 1995. It involves ownership of ideas, including literary and artistic works (protected by copyrights), inventions (protected by patents), signs for distinguishing goods of an enterprise (protected by trade marks) and other elements of industrial property. Different form of intellectual property rights (IPR).The TRIPS agreement encompasses seven areas of intellectual property rights viz.,

1. Patents
2. Copyrights
3. Trade marks
4. Industrial Designs
5. Trade secrets
6. Geographical indications.
7. Layout of designs of integrated circuits

1. Patent :

A patent is an exclusive right granted to the inventor to use and market the invention for a limited period of time in consideration of the disclosure of the invention. The product must be (a) novel, (b) have industrial application and (c) must be useful for entitlement of a patent. Patents are given only for inventions. Inventions are solutions to specific problems in the field of technology. An invention may relate to a product or a process.

2. Copy Rights:

Copy right law deals with the rights of intellectual creators. It is concerned with protecting creativity and ingenuity. It promotes and disseminates national cultural heritage. It is meant for original literary, dramatic, musical and artistic works, cinematographic films and software. Copy right is registered at Ministry of HRD which is valid for 60 years after authors death.

3. Trade mark:

It is a sign that individualize the goods of a given enterprise and distinguishes them from the goods of its competitors. It is limited to word marks, abbreviations, names, figures and hologram.

4. Designs:

A design includes features of structure, configuration, pattern, ornament, or composition of lines and colors applied to an article in 2 or 3 dimensional form by any technical process. The process or product can be manual, civil, electrical, chemical and mechanical or combination of all.

5. Trade secret:

It is the agreement between the employer and employee to keep the research information secret or confidential. The employer can recover damages from the improper disclosure or use of his trade secret by the employee.

6. Geographical Indication:

Place names used to identify products such as “Champagne”, Roquefort cheese, Basmati rice etc. They provide legal means so that interested parties can stop the use of such geographical indications for products that do not originate from the used place name or do not have the usual characteristics associated with that place name.

7. Layout of designs of integrated circuits:

An integrated circuit means a product intended to perform an electronic function. The Semiconductor Integrated Circuit Layout-Design Act, 2000, protects original, inherently distinctive layout-designs that have not been previously commercially exploited and registration is a necessary prerequisite for protection. Protection under the Act extends for ten years and commences from the date of application for registration in case of layout-designs which have not been commercially exploited.

Plant Variety Protection (PVP):

PVP is a legal designation designed to protect plant breeders. It grants them IPRs over the seed, whether new cultivar was achieved through open pollinated methods, by hand or through genetic modification. No one else is allowed to profit from sale of that seed over an ensuing period of time. The protection lasts only for a period of 18-20 years.

Protection of Plant Variety and Farmers Right Act, 2001 (PPVFR Act)

It is an Act of the Parliament of India that was enacted to provide for the establishment of an effective system for protection of plant varieties, the rights of farmers and plant breeders, and to encourage the development and cultivation of new varieties of plants.

World Intellectual Property Organization (WIPO)

It is an international organization designed to promote the worldwide protection of both industrial property (inventions, trademarks, and designs) and copyrighted materials (literary, musical, photographic, and other artistic works). The organization, established by a convention signed

in Stockholm in 1967, began operations in 1970 and became a specialized agency of the United Nations in December 1974. It is headquartered in Geneva, Switzerland

IPR in India before TRIPs or WTO

- The establishment of IPR in India commenced in 1856 with the enactment of an Act of Protection of Inventions, based on the British Patent Law of 1852 when certain privileges were granted to the inventor for new methods of manufacture.
- Subsequent changes were by way of the Patents and Designs Protection Act 1872 and the Protection Inventions Act introduced in 1883 that was further consolidated as the Invention and Designs Act in 1888.
- The 1872 Designs Act extended protection to textiles, linen, cotton, calicoes and muslin; this included patterns/prints and modelling, casting, embossment of ornaments or articles of manufacture.
- The next development was the Indian Patent and Designs Act in 1911 with amendments in 1978 with the rules amended in 1985.
- After Indian independence in 1947, a new Patents Bill was tabled in Parliament in 1965, which after considerable debate was reintroduced in 1967, resulting in the Patents Act of 1970, which, with its subsidiary legislation came into force on 20 April 1972 as the Indian Patents Act 1970.
- Legislation to protect trademarks came into force on 6 June 1942 and was based on the principles of English Common Law. The Act of 1940 was further amended to the Indian Trade and Merchandise Marks Act 1958, which came into force on 25 November 1959.
- A Copyright Act was passed for the first time in India in 1914. The Copyright Act 1957 adopted several principles of the British Copyright Act 1956 to cope with the emerging problems created by

technological advances in communication, broadcasting, microfilming, movies, etc.

- The Copyright Act 1957 was amended in 1983, 1984, 1992 1994 to keep it in tune with the changing needs and technological progress, including the challenges posed by the rapid growth of information technology.

IPR protection in India after TRIPS

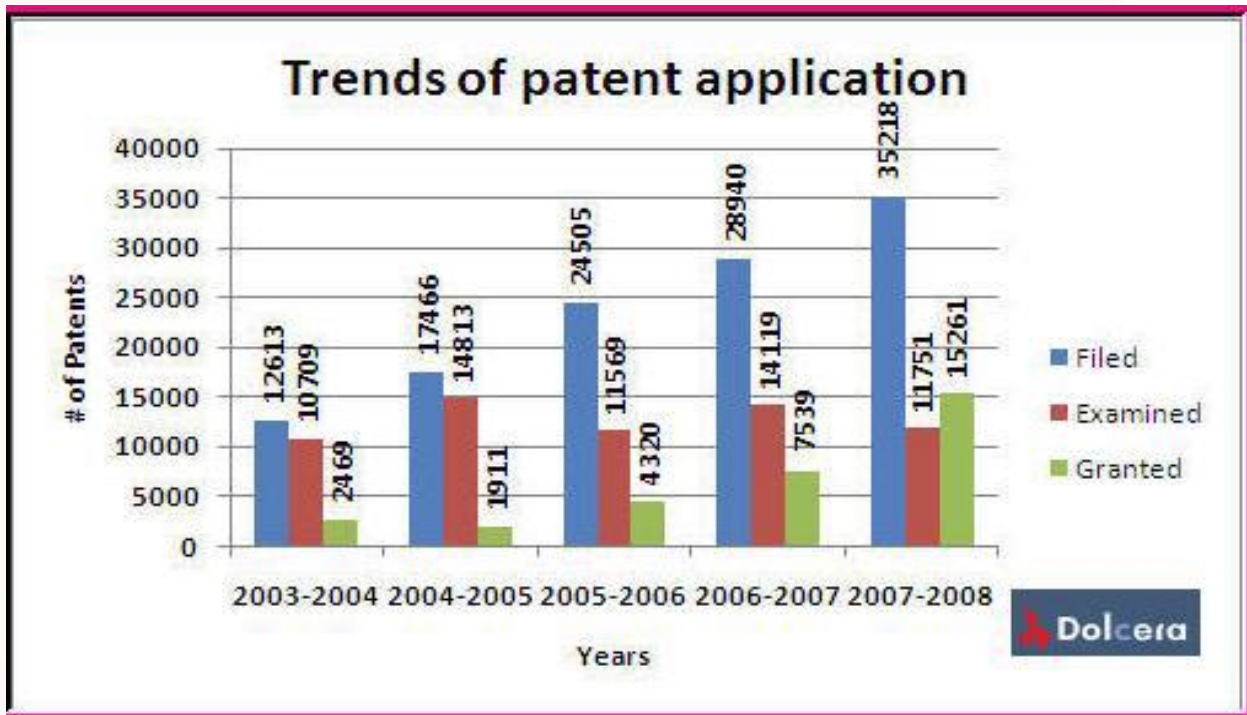
- The Copyright Act was amended in 1999 to incorporate features making it TRIPS compliant by encompassing neighboring rights including performers rights and protection of rights of broadcasting organizations.
- Accordingly, the Trade Marks Act, 1999 was passed providing for equal protection to service marks. Indian Trade Mark laws comply with WTO requirements.
- In India, The Trade and Merchandise Marks Act 1958 have been replaced by a TRIPS compliant Trade Marks Act 1999.
- The Geographical Indications of Goods (Registration and Protection) Act 1999 was introduced in India for the first time..
- Accordingly, Industrial Design Act, 2000 was enacted to make Indian laws compliant with WTO obligations in this respect.

TRIPS and Agriculture

Among the different forms of intellectual property rights (IPRs), patents and geographical indications have profound implication to agriculture, and trademarks and copyrights have lesser implications.

Patent and Indian Agriculture

Due to increased patent awareness and changed circumstances, because of WTO, patent filing by Indians in the country has increased threefold



Source: Annual report, 2007-08, IPO.

Geographical Indication and Indian farmers

- A geographical indication denotes the product's quality and helps to protect it from limitation in both the national and international markets.
- Pursuant to the Agreement on Trade-Related Aspects of Intellectual Property Rights provision that a product cannot be protected internationally unless it is protected in its country of origin, it is vital to preserve the rich wealth of traditional arts, crafts and food products that are an inseparable part of Indian culture.
- According to Geographical Indications Registry records, since the Geographical Indications of Goods (Registration and Protection) Act 1999 came into force, 97 products have been granted geographical indication protection in categories such as agricultural, natural and manufactured goods, handicrafts, textiles and foodstuffs, and applications are being examined by the registry The Uttar Pradesh

government is trying to use the granted geographical indication status as a branding and marketing tool to ensure that no one outside Lucknow can produce chikankari.

- Pokkali rice, which gets its name from the cultivation system that alternates paddy and prawns, is grown in the wetlands of the Alappuzha, Thrissur and Ernakulam districts of Kerala. The indigenous variety of rice cultivated through this method thrives on salinity and water as it is close to the sea. The geographical indication registration will help to enhance the market value of Pokkali rice and allow farmers to prevent others from using the geographical name POKKALI if the rice does not originate from defined areas.

Agencies of International Trade:

There are several forums of economic cooperation among nations with varied degrees of integration. These include

- North American Free Trade Agreement (NAFTA)
- United Nations Conference on Trade and Development (UNCTAD)
- European Economic Community (EEC)
- The European Common Market (ECM)
- European Free Trade Association (EFTA)
- Latin American Free Trade Association (LAFTA)
- Central American Common Market (CACM)

Some important Terms used in International Trade are:

Balance of Trade (BoT): Balance of trade refers to the difference in the value of exports and imports of commodities only.

Balance of trade = Value of exports - value of imports

If value of exports exceeds the value of imports, it is referred as favorable balance of trade and vice-versa.

Balance of Payments (BoP): Balance of payments are more comprehensive in scope than balance of trade. It includes not only the value of exports and imports, which are visible but also invisible items such as shipping, banking, insurance, tourist traffic interest on investments, gifts etc.

Box-shifting: Shifting of domestic agricultural subsidies from the amber box (which are subjected to reduction commitments) to certain green and blue box measures (which are not subjected to reduction commitments) by developed countries is called box shifting. This has enabled the developed countries to increase their overall level of domestic support.

Special products (SPs): The July framework of 2004 has recognized that the developing countries have the flexibility to designate certain products as SPs based on criteria of food security and rural development needs. Special products refers to agricultural products on which there will be either nil or marginal tariff reductions.

Special Differential Products (SDTs): At Doha Ministerial Conference, 2003 the concept of SDTs was introduced for providing assistance for developing countries by

- Allowing longer implementation periods
- Less stringent disciplines
- Occasional exemption from the rules altogether
- Obligations of assistance and preference by developed countries.

Dumping: It is an international price discrimination in which an exporting firm sells a portion of its output in a foreign market at a very low price and the remaining output at a high price in the home market. Dumping of products by foreign companies for a longer period is harmful for domestic companies.

Books referred:

1. Acharya S.S and Agarwal NL, 2006, Agricultural Marketing in India. Oxford & IBH Publishing Co. Pvt. Ltd. New Delhi