

AEC 301.AGRICULTURAL MARKETING & INTERNATIONAL TRADE (1+1)



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Marketing and Market

The word **market** comes from the Latin word "marcatus" which means merchandise or trade or a place where business is conducted. The market, in economic sense, refers not to a place but to a commodity or commodities, and buyers and sellers are in free intercourse with one another.

The **marketing** is defined as the study of entire gamut activities that direct the flow of goods and services from the primary producer to ultimate consumer.

Agricultural marketing is the study of all the activities, agencies and policies involved in the procurement farm inputs by the farmer and the movement of agricultural products from the farmer to the consumers. It includes organization of agricultural raw materials supply to processing industries, the assessment of demand for farm inputs and raw materials.

Importance of Marketing

The points of view of producer, middlemen, and consumers are different, but each is individualistic and concerned with his profit. From the producer point of view it is important to know whether the prices prevailing in the market enable him to continue to produce or not, and what he should produce and where and at what time he should sell it. Large-scale production requires skill to sell it at remunerative price. A consumer looks at marketing from the point of view of good and the prices at which they are offered. Middlemen try to increase his profit margin by discharging various marketing functions. Marketing has greater importance and significance for the society as a whole than for any of the individual beneficiaries of the marketing process.

1. Any increase in the efficiency of the marketing process, which results in lower costs of distribution and lower prices to consumers, really brings about an increase in the National Income.
2. A reduction in the cost of marketing is a direct ,benefit to society

3. Marketing process brings new varieties, quality and beneficial goods to consumers. It provides connecting link between production and consumption.
4. Approximately one third of all persons gainfully employed in the country are engaged in the field of marketing and about one fourth of National Income is earned by marketing profession.
5. Scientific marketing has a stabilizing effect on the price level. If producers produce what consumers want and consumers have a wide choice of products there are no frequent ups and downs in price.
6. Marketing is a catalyst for the transmutation of latent resources into actual resources, of desires into accomplishments and development of responsible economic leaders and informed economic citizens.
7. Marketing brings to the peasants useful implements, tools and fertilizers etc. and the benefits of the use of machines and free after sales service, and make them modern farmers.
8. Scientific marketing also remedies the imbalance in the supply of making available the surpluses to the deficit areas.

If the functions of marketing are not performed properly the economic system may get out of balance resulting in piling up of goods with retailers, wholesalers and manufacturers, which lead to closure of factories and retrenchment of workers. Thus it plays an important role in economic stability of a country.

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.

1. Optimization of resource use and output management

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

2. Increase in farm income

An efficient system guarantees to the farmers better prices for farm products and induce them to invest their surpluses in the purchase of modern inputs so that productivity may increase. This again results in increase in the marketed surplus and income of the farmers.

3. Widening of markets

A well known marketing system widens market for products by taking them to remote corners of the country to areas far away from the production point e.g. paddy produced in Punjab and Haryana are sold in remote tribal areas. Another example is potato. The widening of the market helps in increasing the demand on a continuous basis and thereby guarantees a higher income to the producer.

4. Growth of agro- based industries

The agricultural marketing system helps in the growth of agro-based industries and stimulates the over all development process of the economy. Many industries depend on agriculture for the supply of raw materials e.g. sugar industry, cotton industry, and silk industry.

5. Price signals

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

6. Adoption and spread of new technology

The marketing system helps the farmers in the adoption of new scientific and technical knowledge.

7. Employment

The marketing system provides employment to millions of persons engaged in various activities such as packaging, transportation, storage and processing.

8. Addition to National income

Marketing activities add to the nation's Gross National Product.

9. Better living

Any plan of economic development that aims at diminishing the poverty of agricultural population, reducing consumer food prices, earning more foreign exchange or eliminating economic waste has to pay special attention to the development of an efficient marketing for food and agricultural products.

10. Creation of Utility

Marketing creates the following four types of utilities of the product :

a. Form Utility: The processing function adds form utility by changing the raw material into finished products. e.g.
paddy -rice.
Wheat -bread, biscuit, cake.
Milk- ghee, cream, cheese, skimmed milk, butter.

b. Place Utility: The transportation function adds place utility to products by shifting them to a place of need from the place of plenty. e.g. potatoes in plain, milk at urban places.

c. Time Utility: The storage function adds time utility to the products by making them available at the time when they are needed. e.g. tamarind, Rice in off-season.

d. Possession Utility: The marketing functions buying and selling helps in the transfer of ownership from one person to another in the marketing system.

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.
5. The existence of a perfect competition or uniform price is not necessary.

Classification of markets

Markets may be classified on the basis of dimensions like area, time, commodities, volume and competition.

1. On the basis of area

On the basis of area from which buyers and sellers usually come for transactions, markets

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 market exists mostly for perishable commodities.

b) Regional Markets: A market in which buyers and sellers for a commodity are drawn from a longer area than the local markets. Regional markets in India usually exist for food

c) National Markets: A market in which buyers and sellers are at the national level.

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 worldwide demand and or supply such as coffee, machinery, gold, silver etc.

The storage facility, transportation preservation and processing techniques used can enhance the area dimension of market for a commodity. e.g. mushroom local to wider area by dehydration; milk -pasteurization enhances the area dimension from local to regional.

2. On the basis of time span

a) *Short period Markets:* The markets, which are held only for a few hours we called short period markets. The products dealt with in these markets are of a highly perishable nature, such as fish, vegetables, milk and flowers. In these markets, the prices of commodities are

b) *Long-period markets:* These markets are held for a longer period than the short period markets. The commodities traded in these markets are less perishable and can be stored for some time e.g. food grains and oil seeds. The prices are governed both by the supply and demand forces.

c) *Secular-Markets:* These are markets of a permanent nature. The commodities traded in these markets are durable in nature and can be stored for many years. Example is markets for machinery and manufactured goods.

3. On the basis of commodities

It includes two aspects a) Number of commodities in which transactions take place and b) Nature of commodities.

a) *Number of Commodities:* A market may be general or specialized on the basis of the number of commodities in which transactions are completed.

i) *General Markets:* A market in which all types of commodities, such as food grains, oil seeds, fibre crops, *gur* etc. are bought and sold is known as general markets. These markets deal in a large number of commodities. e.g. Simmakal market in Madurai.

ii) *Specialized Markets:* A market in which transactions take place only in one or two commodities are known as specialized market. For every group of commodities, separate markets exist. The examples are food grain markets, vegetable market, wool market and cotton market.

b) Nature of Commodities

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

i) Commodity Markets: A market which deals in goods and raw materials such as wheat, barley, cotton, fertilizer seed, gold etc. are formed as commodity markets.

ii) Capital Markets: The market in which bonds¹ shares and securities are bought and sold are called capital markets, for example, money market and share market.

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) Whole Sale Markets: A wholesale market is one in which commodities are bought and sold in large lots or in bulk. Transaction in these markets takes place mainly between traders.

b) Retail Markets: A retail market is one in which commodities are bought and sold to the consumers as per their requirements. Transactions in these markets take place between retailers and consumers. The retailers purchase in wholesale markets and sell in small lots to the consumers. These markets are very near to the consumers.

5. On the basis of degree of competition

On the basis of competition, markets may be classified into the following categories.

a) Perfect Markets

A perfect market is one in which the following conditions hold good.

1. There are a large number of buyers and sellers.
2. All the buyers and sellers in the market have perfect knowledge of demand, supply and prices.
3. Prices at anyone time are uniform over a geographical area, plus or minus the cost of getting supplies from surplus to deficit areas.
4. The prices are uniform at anyone place, over periods of time, plus or minus the cost of storage from one period to another.
5. The prices of different forms of a product are uniform plus or minus the cost of converting the product from one form to another.

b) 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 imperfect, may be identified.

i) 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. e.g. Railways.

ii) Duopoly Market: A duopoly market is one, which has only two sellers of a commodity, e.g. two retailers in a village.

iii) 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 e.g. different air lines operating in our country.

iv) Monopolistic Competition: When a large number of sellers deal in heterogeneous and differentiated form of a commodity, the situation is called monopolistic competition. e.g. Tea and Coffee by different companies, pump sets, fertilizers etc.

Characteristics of Agricultural and Horticultural Produce

The special characteristics, which the agricultural and horticultural produce possess, make them differ from the manufactured products marketing.

1. **Perishability of produce:** Most of the farm produce is perishable in nature, but the period of perishability varies from few hours (flowers) to a few months (grains). The extent of perishability of the farm produce may be reduced by the processing function (chilling of milk) but they cannot be made non-perishable like manufactured products.
2. **Seasonality of production :** Traditional varieties are season bound in production but the high yielding varieties are not that much season bound but even then the availability of water facilities, temperature, wind, solar radiation to dry the produce make major part of agricultural production in particular season.

3. ***Bulkiness of products*** : the bulky characteristic of most of farm products makes their transportation and storage difficult and expensive. These increase the price spread.
4. ***Variation in quality of produce*** : Compared to manufacture goods there is large variation in the quality of agricultural products, which make their grading, and standardization somewhat difficult.
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 price of agricultural produce fluctuate substantially.
6. ***Small size of holdings*** : Farm products are produced throughout the length and breadth of the country and most of the producer's holdings are small in size. This makes the estimation of supply difficult and creates problem in marketing.
7. ***Processing*** : Most of the farm products have to be processed before their consumption by ultimate consumers. The processing function increases the price spread of agricultural commodities. The processing firms enjoy the advantage of monopsony, duopsony or oligopsony in the market. This situation creates disincentives for the produces and may have an adverse effect on production in the next year.

Marketable Surplus

The marketable surplus is that quantity of the produce which can be made available to the non-farm population of the country. The marketable surplus is the residual left with the farmer after meeting his family consumption, farm requirements, social and religions payments. This may be expressed as:

$$MS = P - C$$

where,

MS = Marketable Surplus

P = Total Production and

C = Total requirement of farm family

Marketed Surplus

Marketed surplus is that quantity of the produce, which the farmer actually sells in the market, irrespective of his requirements for family consumption, farm requirements, social and religious payments.

Relations between marketed surplus and marketable surplus

The marketed surplus may be more, less or equal to the marketable surplus. The relationship between the two terms may be stated as follows:

$$\begin{array}{lcl} & > \\ \text{Marketed surplus} & < & \text{Marketable surplus} \\ & = & \end{array}$$

1. The marketed surplus is more than the marketable surplus when the farmer retains a smaller quantity of crop than his actual family and farm requirements. This is true especially of small and marginal farmers whose need for cash is immediate. The situation of selling more than 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 / farm requirements. The quantity of distress sale increases with the fall in the price of the product. A lower price means that a larger quantity will be sold to meet some fixed cash requirements.

2. The marketed surplus is less than the marketable surplus when the farmer retains some of the surplus produce. This situation holds good under 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 other farm requirements 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 agricultural raw materials like cotton, jute etc and of the average farmer.

Factors Affecting Marketable Surplus

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

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

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

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

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

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

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

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

Approaches to the Study of Marketing

Marketing is a subject, which bristles with wide and varied problems. It includes the services and functions of different specialized institutions and middlemen. Different commodities have special marketing problems. Therefore, the results of the study of one commodity may not be applicable to other commodities. Various approaches have been suggested and used to study marketing problems. These are functional, institutional commodity approaches. Some times behavioural system approach and the legal approach, too, are considered. No single approach, however is satisfactory in all respects, for each has its merits and demerits. Therefore, a combination of these approaches is essential if we are to understand all the aspects of the problem related to a commodity in a better and lucid manner.

i) Functional Approach

Under this approach, the marketing system is studied by considering it as a composite of specialized functions and business activities. The functional approach takes into account the jobs which must be performed in the process of the movement of goods. This approach enables one to evaluate the importance of each marketing function and to suggest improvements. The advantages of the functional approach in the study of agricultural marketing problems are:

1. We can make inter-functional comparison of the marketing costs.
2. Inter-agency comparison of the cost of performing a marketing function can be made.
3. Inter-commodity comparison of cost of performing the various functions can also be made.

ii) Institutional Approach

The institutional approach to study of marketing problems implies a study of agencies and institutions, which perform various functions in the marketing process. The nature and character of various middlemen and other related agencies involved in the movement of the product are studied. The human element receives the primary emphasis.

The agencies and institution, which perform various marketing functions, are individuals, partnership, corporation, cooperatives, or government organizations.

These agencies vary widely in size and ownership. They get their reward in the form of marketing margins. This approach helps us to find answers to the problems of 'who does what' in the marketing process, whether the margin of the agency is commensurate with the services rendered, which government regulations are necessary so that their unlawful activities may be curbed, and how to simplify the procedural system.

iii) Commodity Approach

Under this approach, the commodity is the pivot around which all institutional and functional details are studied. The problems of marketing differ from commodity to commodity mainly because of the seasonality of production, the variations in its handling, storage, processing and the number of middlemen involved in them. For example potatoes are stored in cold storage, while wheat is stored in godowns. Paddy, pulses and oil seeds are processed at miller's level.

iv) Behavioural System Approach

This approach refers to the study of behaviour of firms, institutions and organizations, which exist in the marketing system for different commodities. The marketing process is continually changing in its organization and functional combinations. An understanding of the behaviour of the individuals is essential if changes in the behaviour and functioning of the system are to be predicted.

v) Legal Approach

The legal approach is another dimension of the study of the system of agricultural marketing. Increasing government intervention through legislation has increased the importance of this approach. The market regulation programme in many states was delayed because of the emergence of legal problems. Various rules and regulations have been introduced to achieve specified goals.

Marketing Functions

Meaning

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 any one 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.

Classification

The marketing functions may be classified various ways. Kohls and Uhl have classified marketing functions as follows:

- | | |
|---------------------------|---|
| 1. Exchange Functions | : Buying |
| 2. Physical Functions | : Selling
: Transportation
Storage and Warehousing
Grading
Processing |
| 3. Facilitative Functions | : Financing
Risk Taking
Dissemination of Market Information |

1. Exchange Functions

The process of passing goods into the consumer's hands is called function of exchange. It includes buying, assembling and selling.

a) Buying and Assembling

Buying is the first step in the process of marketing. Buying involves careful planning and needs setting up of policies and procedures. The following points are considered before a particular product is bought.

- i) What to buy? (Product)
- ii) When to buy? (Time)
- iii) How much to buy? (Quantity)

- iv) From whom and where to buy? (Source)
- v) On what terms and conditions and prices? (Price)

Assembling starts after the goods have already been purchased. It is a function separate from buying. Buying involves transfer of ownership of the goods, whereas assembling involves creating and maintaining of stock of goods purchased from different sources

b) Selling

The function of marketing is to ensure that the right product is made available at the right place, in the right quantity, at the right price, at the right time and under the right impressions to the consumer. All these righteousness is made possible by performing the sales function. Through selling function desires are created hence it is called as creative function. Selling is also often referred to as distribution function, because distribution makes goods move from the place of production to the place of consumption. This is achieved through selling function.

Thus buying, assembling and selling functions are directly concerned with change in the ownership of goods. They are complementary in nature. For every sale there is a purchase and for every purchase there must be sale. And, assembling precedes a sale and assembling follows buying.

Forms of sales of agricultural produce in India are:

- i) **Under Cover:** Under this system buyer or his representative indicates the price he is prepared to pay by clasping the hand of seller's agent under cover of cloth and pressing or manipulating the fingers e.g. cattle sale.
- ii) **By open auction:** The broker invites bids for the produce and the produce is sold to the highest bidder. eg. vegetables by commission agents.
- iii) **By private agreement**
- iv) **By quoting on samples**
- v) **Dara Sales:** The heaps of grain of different quantities are sold at a flat price.
- vi) **Closed tender system:** This system is followed in regulated markets.

vii) **Moghum sale:** The sale is based on the verbal understanding between buyers and sellers without mentioning the rate as it is understood that buyer will pay the prevailing rate. eg. Flowers and vegetables by Commission agents.

2. Physical Functions

Physical functions include Transportation, Storage and Warehousing, Grading and Processing.

a) Transportation

It is a necessary function of marketing because the most of the markets are geographically separated from the areas of production. It enhances the economic value through creation of place utility. The important functions of transport are:

- i) It helps in the growth of industries whose products require quick marketing e.g. vegetables, flowers, milk and fish.
- ii) It increases the demand for goods through widening of market
- iii) It creates place utility. As such transportation bridges the gap between production and consumption centres.
- iv) By virtue of improvement in the speed of transport it offers time utility to products.
- v) It helps in stabilization of prices by moving commodities from surplus area to deficit area.
- vi) Ensures even flow of goods into the hands of consumers.
- vii) It enables consumers to enjoy the benefits of many goods not produced locally.
- viii) Transport intensifies competition, which, in turn, reduces prices. Prices are also reduced because of the facilities offered by transport for large-scale production.

Classification of transport

Broadly, the various modes of transport fall under the three categories: Land, Water and Air. These are further classified on the basis of the vehicles used.

a) Land Transport

i) Road Transport

Merits : It is cheap, safe and flexible.

Demerits :It has got limited carrying capacity, slow speed, and unstable rates.

ii) Rail Transport

Merits : Most suitable for heavy and bulky commodities. Long distance is quickly covered, cheap, all weather friendly transport.

Demerits :Inflexibility, non suitable for local transport and lesser accessibility.

b) Water Transport

Merits : Cheapest means of transport, high carrying capacity, creator of international trade and especially suitable for certain areas (forest products).

Demerits : Low speed, seasonal difficulties, longer journey required, international and political problems and limited area of operation.

c) Air transport

Merits : Rapid speed, no barriers and boon to perishable commodities.

Demerits :High rate, low carrying capacity, dependence on climatic conditions and high rate of accidents.

Problems in Transportation of Agricultural Commodities

1. The means of transport used are slow moving.
2. There are more losses/damages in transportation because the use of poor packaging material, over loading of the produce, and poor handling, especially, of fruits and vegetables at the time of loading and unloading.
3. The transportation cost per 100 rupee worth of the produce is high because of perish ability of the produce and its bulkiness.
4. There is lack of co-ordination between different means of transport e.g. railways and truck companies.
5. Non- availability of wagons at the time of harvest.

Suggestions for Improvement

Some of the suggestions for effecting improvement in the transport function and reducing the transport costs are

1. Full utilization of the transportation facility in terms of load. This will reduce the per quintal cost of transportation.
2. Standardization of transport cost per quintal for different means.
3. Reduction in spoilage, damage, breakage and pilferage by better handling, packing and the use of proper types of wagons.
4. Removal of barrier in the transport of agricultural produce between states or regions.
5. The bulky agricultural produce can be converted into value added products near production centres so there will be reduction in cost.
6. The speed and capacity of the vehicles used in transportation should be increased.
7. Unification of railway gauge system, extension of roads and vehicles to every Village.

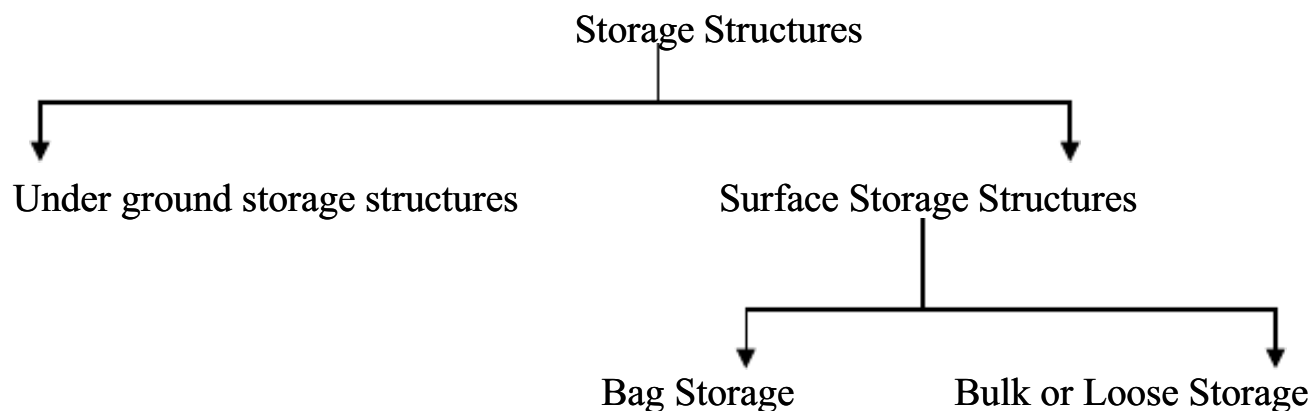
b) Storage and Warehousing

Storage is an important marketing function, which involves holding and preserving goods from the time they are produced until they are needed for consumption. While transportation is the process of transferring goods from one place to another, storage is a function, which helps in preserving goods in one place until they are needed at another place. Without storing transportation is Impossible and storing is made possible by transportation. The storage of agricultural produce/inputs is necessary for the following reasons:

1. Agricultural products are seasonally produced but are required for consumption throughout the year.
2. Some goods are produced throughout the year but their demand is only seasonal e.g. umbrella, fans, woolen clothes, agricultural inputs.
3. The quality of certain products increases by storing e.g. whisky, wine, tamarind, rice, and pickles.
4. Storage of some farm commodities is necessary for ripening e.g. banana, mango.

5. Storage protects the quality of perishable and semi-perishable products from deterioration.
6. It helps in stabilization of price.
7. Storage is necessary for some periods for the performance of other marketing functions.

Storage structures



Improved Grain Storage Structures

1. Small Scale Storage Structures

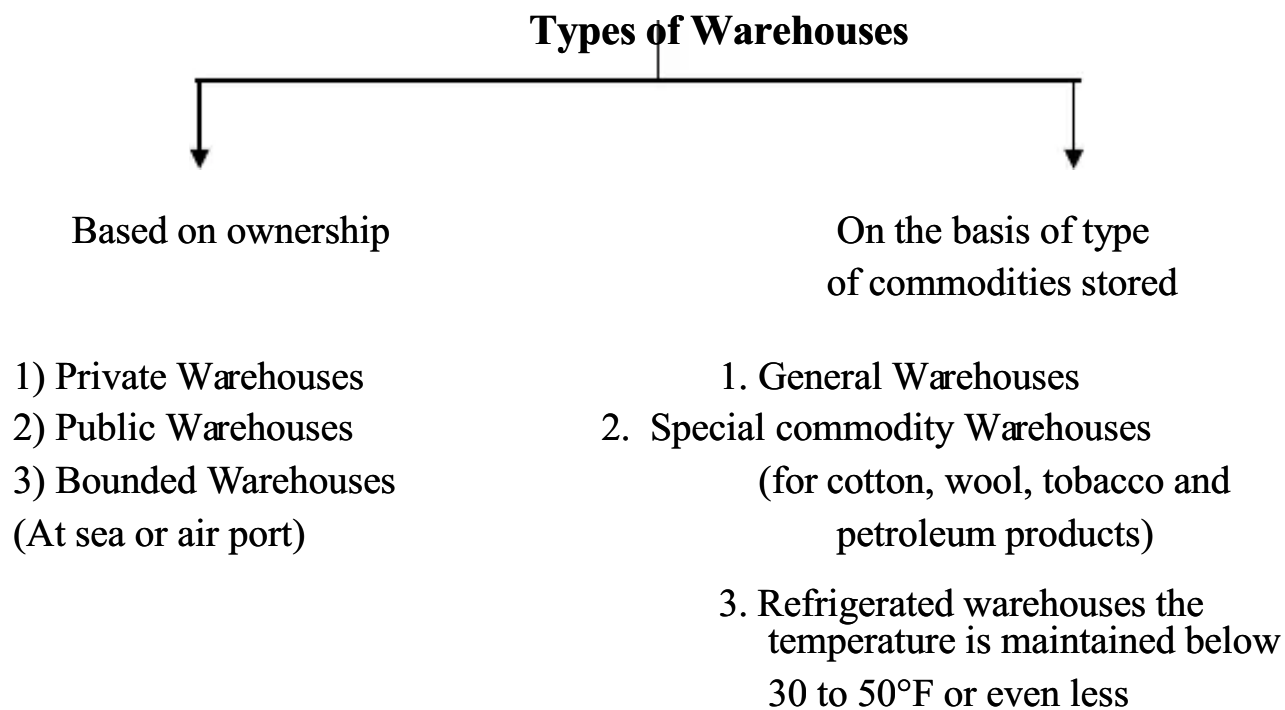
- a) **PAU bin** : Galvanized iron structure whose capacity ranges from 1.5 to 15 quintals. It is developed by Punjab Agricultural University, Ludhiana.
- b) **PUSA bin** : Made of mud or bricks with a polythene film embedded within the walls. It is developed by IARI, New Delhi.
- c) **Hapur Tekka** : Developed by Indian Grain Storage Institute, Hapur. It is a cylindrical rubberized cloth structure supported by bamboo poles on a metal tube base, and has a small hole in the bottom through which grains can be removed.

2. For Large Scale Storage

1. **CAP storage (Cover and Plinth)**: the Food Corporation of India has developed This. It involves construction of brick pillars, to a height of 14" from ground with groves in which wooden crafts are fixed for stacking of bags of food grains. The whole unit is covered with a thick polythene sheet.
2. **Warehouse**: It has been created by FCI, CWC, SWC and Co- operative Marketing organization.

Warehousing: Warehouses are scientific storage structures specially constructed for the protection of quantity and quality of stored products. The important functions of the ware house are : 1) Scientific storage 2) Financing

3) Price Stabilization 4) Market Intelligence



Warehousing in India

1. National co-operative Development and Warehousing Board (1956)
2. Central Warehousing Corporation (1957)
3. State Warehousing Corporation
4. Food Corporation of India
5. Co-operative Sector

Objectives of Warehousing corporations:

- a. Creation of negotiable paper to provide an instrument for expansion of credit through commercial banks.
- b. Reduce the losses and waste in storage by adopting scientific storage.
- c. Introduction of standard grade specification / ware house receipt.
- d. Training of personnel to manage and run modern warehouse
- e. Providing assistance to government/ governments sponsored organisations in their scheme of price support / price control.

Functions of Warehousing corporation:

1. To acquire and build godowns .
2. To run warehouses for the storage of all commodities
3. To subscribe to the share capital of a state warehousing corporation.
4. To act as an agent for the traders

Utilization of Warehouses by farmers:

The main reasons for the very poor utilization of warehouses by farmers are :

1. Lack of knowledge about available facilities to the farmers.
2. Location disadvantages.
3. Complicated and time-consuming procedure of depositing and withdrawing the produce from the warehouses.
4. Non-availability of Nationalized banks at the villages to advance loans against warehouse receipt.
5. Small quantity of surplus produce available with most farmers and the pressing need for finance.

Risk bearing / taking in Agricultural Marketing

Risk in marketing may be defined as uncertainty in regard to cost, loss, or damage.

The risks associated with the marketing process are of three basic types.

1) Physical Risk

This includes a loss in the quantity and quality of the product during marketing process. It may be due to fire, flood, earthquake, insects, pests, fungus, excessive moisture or temperature, careless handling unscientific storage, improper packing, looting and arson.

2) Price Risk

Prices change not only year to year, but also during month-to-month, day-to-day or even on the same day.

3) Institutional Risk

These include risks arising out of changes in government's budget policy, in tariffs and tax laws, in the movement restriction, statutory price controls, and the imposition of levies.

Minimization of risks

Reduction in Physical Loss

- a. Use of fire-proof materials in the storage structures to prevent accidents due to fire;
- b. Use of improved storage structures and giving necessary pre-storage treatment to the product to prevent loss in quality and quantity arising out of excessive moisture, temperature, attacks by insects and pests, fungus and rodents;
- c. Use of better and quicker transportation methods and proper handling during transit; and
- d. Use of proper packaging material.

Transfer of Risks to Insurance Companies

The burden of physical risk may be minimized by shifting it to insurance companies. There are specialized professional agencies to bear such risks. They collect some premium and provide full compensation to the party in case of loss due to the reasons for which the products are insured. In this way, the company insures a number of farmers against losses.

Minimization of Price Risk

- a. Fixation of minimum and maximum prices of commodities by the government and allowing movements in prices only within the specified range;
- b. Marketing arrangement for the dissemination of accurate and scientific price information to all sections of society over space and time. This should include information on market demand, acreage under a particular crop, estimates of market supply and of the import and export of commodities;

- c. An effective system of advertising may reduce price uncertainty and create a favourable atmosphere for commodity;
- d. Operation of speculation and hedging. The price risk associated with the commodities for which the facility of forward trading is available may be transferred to professional speculators through the operation of hedging. A detailed exposition of speculation and hedging follows.

Processing

The term processing may be defined a deliberate activity which changes the form of a commodity. It converts farm products into a more usable form. India's food processing involves only primary processing. It accounts for 80 percent of the value. As much as 42 percent of food industry is in the organized sector and 33 percent in the small scale tiny and cottage sectors.

Advantages of processing

- 1. It changes raw food into edible and palatable form
- 2. By processing, the value addition to farm products is increased
Sugarcane -Sugar, gur
Wheat -Flour
Mango -Squash, Pulp, Paste and Pickles
- 3. Processing function makes it possible for us to store perishable and semi-perishable agricultural commodities for later use.
- 4. It generates employment
- 5. It widens market Processing serves as adjunct to other marketing functions such as transportation, storage and merchandising.

Standardization

It means the determination of the standards to be established for different commodities Standards are fixed on the basis of certain characteristics such as weight, size, colour appearance, texture, moisture content, amount of foreign matter present etc.

Grading

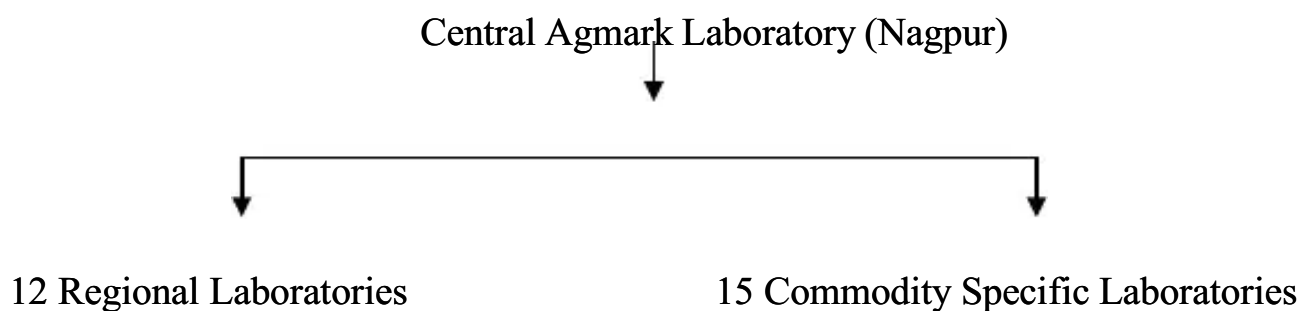
Sorting of the unlike lots of the produce into different lots according to the quality specifications laid down. Grading follows standardization. **It** is a sub-function of standardization.

Advantages of grading

1. Grading before sale enable farmers to get a higher price for their produce.
2. Grading facilitates marketing
3. Grading widens market, without inspection the sale can be effected over phone at distant places.
4. Grading helps consumers to get standard quality products at fair price shops.
5. Grading contributes to market competition and pricing efficiencies. Grading helps the farmer
 - to get finance against pledging in CWC godowns.
 - to get claims settled by insurance companies and railways.
 - improve the keeping quality of stored products by removing inferior goods from the good lot .
 - facilitates future trading in a commodity

The Agricultural Produce (Grading and Marking} Act 1937, authorizes the Central Government to frame rules relating to the fixing of grade standards and the procedure to be adopted to grade agricultural commodities included in the schedule. At present grade standards are available for 142 commodities. Grading is voluntary for trade within India. Till 1991, for export grading was compulsory but it is also made voluntary now.

Grading is permitted in selected commodities at the producers level for few commodities. Grading facilities exists only in 13 per cent of the country's regulated markets and that too only for a few selected commodities. (153 as on 1995-96)



Market information

Market information may be broadly defined as a communication or reception of knowledge or intelligence. It includes all the facts, figures, opinions and other information, which affect the marketing of goods and services. Market information is useful to all the sections of the society -Farmer, Producer, Middlemen, General Economy, and government.

Market information is of two types

1) Market intelligence

This includes information relating to such facts as the prices that prevailed in the past and market arrivals over time. It is historical nature. An analysis of the past helps to take decision about the future.

2) Market News

This term refers to current information about prices, arrival and changes in the market conditions. The availability of market news in time and with speed is of utmost value.

Marketing Research

It is defined as gathering, recording and analyzing of all facts about problems relating to the transfer and sale of goods and services from producer to consumer .

Market Research

It describes research on markets, their size, geographical distribution, and incomes and so on It is a sub-function of marketing research.

Methods of Quality Control

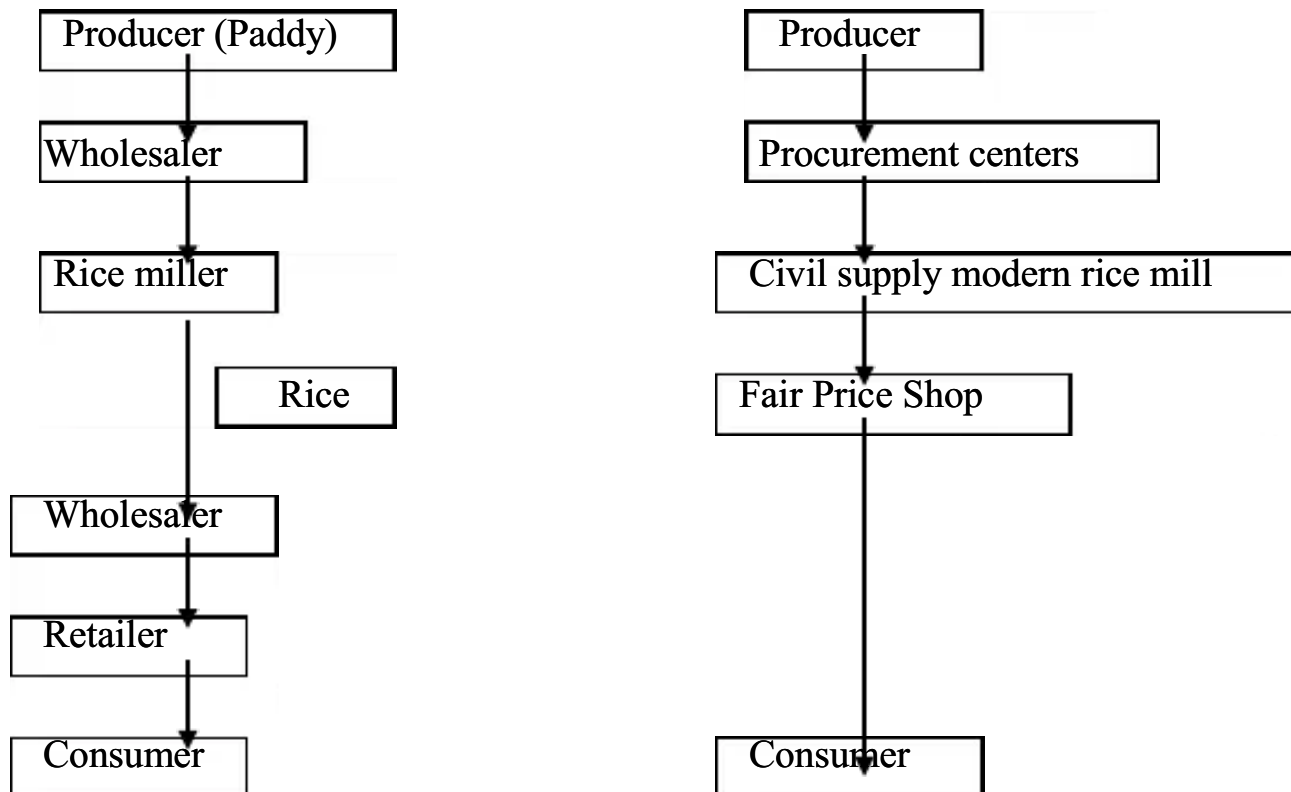
The quality control can be effected at the time of production itself for manufactured goods, but it is not so for agricultural produce because agriculture production is done in harmony with nature. Farmer has little or no control over nature.

The possible source of quality deterioration during production are pest and disease attack, weed, seed mixing, non filling of grains due to late flowering, mixture and off types and other varieties, inclusion of foreign matter. These. Quality-deteriorating factors can be reduced at the time of harvest and cleaning. And also grading can be done to get better price for quality produce. But the grading at producers level is not popular in India. During processing the traders in order to make quick profit may deliberately include foreign matter like stone, things imitating produce, mixing old produce with current year harvested produce some of these materials may also cause injury to human health. The 'agmark' laboratories do the quality control at consumer level. But it is only voluntary. If the consumers are quality conscious and demand the quality produce the marketing middlemen cannot but provide the quality produce. Even some private traders to create a separate market share for their produce enforce quality tests. Since India is poor country the 'agmark' labeling cannot be made compulsory. Through improvement in literacy, by conducting quality awareness programmes during exhibitions and propagating through mass media quality in agricultural produce can be enforced.

Marketing Channel

The chain of intermediaries through whom the various food products pass from producers to consumers constitute the marketing channel. The length of the channel varies from commodity to commodity depending upon the quantity to be moved, the form of consumer demand and degree of regional specialization in production.

Rice marketing channel



The cost involved in moving the product from the point of production to the point of consumption i.e. the cost of performing the various marketing functions and of operating various agencies is called **marketing cost**.

The market functionaries involved in moving the produce from the initial point of production till it reaches the ultimate consumer, charge **profit margin / market margin** for the service rendered.

Price Spread

The difference between the price paid by the consumer and the price received by the producer for an equivalent commodity is known as price spread, some times this is termed as marketing margin.

Three methods are used in the estimation of price spread

1. Lot Method

A specific lot or consignment is selected and chased through the marketing system until it reaches the ultimate consumer. The cost and margin involved at each stage are assessed and added to get the price spread.

Limitations of this method:

1. It is difficult to chase the movement of a lot from the producer to the ultimate consumer.
 2. Most of the lots lose their identity because either the product gets processed or lot gets mixed up with other lots.
 3. There is no assurance that the lot selected is representative of the whole product.
- This method is appropriate for perishable commodities like vegetables, fruits and milk.

2. Sum-of-Average Gross Margin 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.

$$MT = \sum_{i=1}^N \left[\frac{\{Si - Pi\}}{Qi} \right]$$

where,

MT = Total marketing margin

Si = Sale value of a product for ith intermediary

Pi = Purchase value paid by the ith intermediary

Qi = Quantity of the product handled by the ith intermediary

i = 1, 2 ..N {number of intermediaries involved in the marketing channel}

Limitations of this method:

1. Traders may not allow access to their account books because they may make false entries to evade sales and income tax.
2. This method necessitates adjustment for the difference between the quantities purchased and sold because a part of the product is wasted during handling.

3. Comparison of Prices at Successive Levels of Marketing

Under this method prices at successive stages of marketing at the producer, wholesaler and retailer level are compared. The margin of an intermediary is worked out by deducting the ascertainable costs incurred by that intermediary.

Limitations of this method:

1. Representative and comparable series of prices for the same quality at successive stages of marketing are not readily available for all the products.
2. Adjustment for loss in the quality of the product at various stages of marketing due to wastage and spoilage in processing and handling is difficult.
3. The time lag between the performance of various marketing operations is not properly accounted for.

Marketing efficiency

The term marketing efficiency refers to the effectiveness or competence with which a market structure performs its designated function. A reduction in marketing cost without reduction in consumer satisfaction indicates improvement in efficiency. A higher level of consumer satisfaction at higher marketing cost may mean increased efficiency if the additional satisfaction derived by consumer outweighs the additional cost incurred on the marketing process. But a change that reduces cost but also reduces consumer satisfaction need not indicate increase in marketing efficiency. Efficiency of marketing system could be looked at two angles.

1. Technical or physical or operational efficiency
2. Pricing or allocative efficiency.

Technical efficiency

Efficiency is said to have increased when cost is reduced for performing a function for each unit of output. This can be brought out by reducing physical losses or through change in technology of the function *viz* storage, transportation, handling and processing. A change in the technique may result in the reduction of per unit cost.

Pricing efficiency

Pricing efficiency means that the system is able to allocate farm products either over time, across the space or among the traders, processors and consumers in such a way that no other allocation would make producers and consumers better off. This is achieved *via* pricing of the product at different stages at different places, at different time and among different users. The above two types of efficiencies are mutually reinforcing in the long run, one without the other is not enough.

MARKET STRUCTURE

Market structure means those characteristics of the organization of market which seem to influence strategically the nature of competition and pricing within the market. It means the organizational characteristics which determine the relation sellers to the buyers in the market to each other, of the sellers to the buyers and of sellers established in the market to other actual or potential suppliers of goods including potential new firms which might enter the market

Market structure characteristics

There are four market structure characteristics that are important determinate of the type of conduct that prevails in all markets.

- i. Number of size of the firms
- ii. Nature of the product (as viewed by the buyers)
- iii. Entry and exit conditions and
- iv. Status of knowledge about costs, prices and market conditions among the participants.

i. Number and size of the firm

A single firm may conduct itself in such a manner as to maximize its total profits without concern about other firms trying to undercut the price. But where few firms exist in a market situation, each firm is striving to increase its share of the market and may use a number of sales tactics including price cutting to achieve this result.

ii. Nature of the product

Some products are not standardized in the market. e.g. different feed formulation. What is significant is that the feeds are different in the eyes of the buyers. As long as farmers think that the feeds are different, they are willing to pay different prices. When product and / or services are distinguished from one another in the eyes “ product differentiation”. Thus, the nature of the product helps to determine the type of behaviour that can be anticipated in market situations

iii. Entry and exit conditions

Entry and exit conditions refer to the ability of firms to enter or leave the market. There are definite barriers that might exist eg.: Patent rights, absolute cost advantages held b existing firms, managerial and technical competence held by existing firms etc.

iv. Status of knowledge

Market knowledge refers to information held by market participants (buyers and sellers) that permit them to make informed decisions in the market environment in which they operate.

Types of market structure

Four types of market structure are observed based on the said characteristics.

Selling Market

- I Perfect competition
- II Monopolistic competition
- III Oligopoly
- IV Monopoly

Buying Market

- Perfect competition
- Monoposonistic competition
- Oligopsony
- Monosony

Supply or Seller side of Market

I. Monopoly (no competition)

1. There is only one firm and it determines the amount to be produced and the prices.
2. There is no close substitute for that product.
3. There is no freedom for new firms to enter, through control of the market or raw materials; the existing firm can prevent new entrants.

II. Oligopoly (Competition among few)

1. A small number of firms each producing a large enough portion of the total to affect prices and pricing policies of other firms.
2. The product produced has no close substitute, if there are close substitutes such as among automobiles through advertising etc., the firm will attempt to convince consumers that there are differences among them
3. There is limited entry to the industry by new firms, entry is limited by capital investment requirements, market organization needs etc.,
4. There may be actual collusion among firms, but each must consider what effects its policies will have on other firms and vice versa. Price competition is of no use for oligopoly because if one cuts the price all others much follow and all are worse off. eg. Fertilizers, farm machineries, TV etc.,

III. Monopolistic competition (Competition among many)

As the name implies monopolistic competition has characteristics of both perfect competition and monopoly. The characteristics of monopolistic competition are:

1. Many small firms each producing a small portion of the total industry output to have a little influence on price.
2. Output among firms not highly standardized but the output of each is fairly good substitute for the output of others.

3. No collusion among firms, each generally ignores the existence of other firms.
4. No restrictions for new firm entering the industry. eg. Oil industry etc.,

IV. Perfect competition (Competition among large)

1. Large number of individual sellers that no one seller can influence the price and from buying point of view, such a large number of buyers that no one buyer can influence the price.
2. All sellers offer a nearly identical product and any sellers product is a perfect substitute for any other sellers product.
3. No restrictions on entry or exit of producers and resources to or from the industry.
4. Perfect knowledge of prices.
5. No effective collusion among buyers or sellers.

Demand or Buyer side of Market

I. Monopsony

Describes the situation where there is only one buyer. e.g.: Coffee Board.

II. Oligopsony

A few number of buyers dominate the market. e.g.: Natural rubber and synthetic rubber, tea market etc.

III. Monoposonistic Completion

Presence of a fairly large number of buyers. e.g.: Plastic units, fiber etc.,

Price Determination

1. Price Determination under Perfect Competition

Market price is determined by the equilibrium between demand and supply in a market period of short run (Short run production period is one in which at least one factor of production is fixed). The demand and supply equilibrium is shown in Fig. Given the supply the shifts in demand curve and its intersection with supply curve determine the equilibrium price. When demand is D_1D_1 the equilibrium price is P_1 at that market determined price the individual firm is a price taker and equates P_1 (which is also the Marginal revenue and Average Revenue for the firm) with its Marginal Cost. Then the firm produces q_1 quantity of output and sells it at P_1 price and earns super normal profit (Fig). When the demand curve shifts to D_2D_2 the market equilibrium price is P_2 and firm equates this price to MC and produces q_2 quantity. But P_2 is less than AC and above AVC hence it covers AVC but not AFC ($AFC = AC - AVC$) and hence it is incurring loss at the short run but will continue production since it covers a part of AFC. As the Demand further shifts down to D_3D_3 the new equilibrium price is P_3 . At that price, $P_3 = MC = AVC$ which is just sufficient to cover Average Variable Cost. If the price falls below P_3 the firm will pull down its shutters since the price does not cover AVC.

2. Price Determination under Monopoly

Monopoly is a market form in which a single producer controls the whole supply of single commodity and which has no substitute. The price determination under monopoly is depicted in Fig.

A firm under monopoly faces a downward sloping demand curve or average revenue curve (AR). This means that as the monopolist lowers price demand for his product and vice versa. Monopolist also equates Marginal Cost with Marginal Revenue, produces Q_m quantity of output and sells at price P . Under monopoly the firm MR is less than AR (Price). Thus the condition states that $MC = MR < AR$ (Price). Whereas under perfect competition $MC = MR = AR$.

3. Price determination under monopolistic competition

An industry may consist of many firms each making a product which differs only in detail from that of its rivals . Each firm, since its product is not homogenous with that of other firms, enjoys some monopoly power. On the other hand, because there is no real gap in the chain of substitution, there is competition from other firms. What we really have is a number of small ‘monopolists’ competing with one another – ‘monopolistic competition’.

a) The short period

In the short period existing firms can not increase production by employing additional fixed factors, nor can new firms enter. Each firm, therefore, is little ‘monopolist’ having a down-sloping demand curve for its product and producing where MC equals MR. Because there are many firms, each firm can set its price without having to consider the reaction of competitors. The price will be greater than MR, and supernormal profits are made.

b) The long period

In monopolistic competition the full long period equilibrium position is possible only when both firms and industry are in equilibrium. Whereas for each firm the condition of equilibrium ($MR = MC$) will apply whatever the output, for the industry we must allow , as with perfect competition, for entry of new firms and for increased production by existing firms. This is where monopolistic competition differs essentially from monopoly; with the latter, one firm is the industry.

The increase in supply in the long period will lead to a fall in the price of good, and the demand curve facing each producer shifts its position downwards to the left, for more producers are dividing up the total market. At the same time, it is likely that the demand curve will become more elastic, for all products of the group will tend to become more similar to that of the most successful. In other words each brand becomes a better substitute for other brands.

This will continue until supernormal profits have disappeared. Each firm will be earning only normal profits. A comparison of the equilibrium position of the firm in the short period and long period under monopolistic competition.

A comparison of the equilibrium position of the firm in the short period and the long period under monopolistic competition is shown in Fig 3.6. In the short period output is OM, where $MR = MC$. But the inability to add to fixed factors means that supernormal profits exist, equal to ABCD. In the long period, the entry of close substitutes causes the AR curve to fall supernormal profits disappear, and the equilibrium output is OM1, where $MC = MR$ and $AC = AR$.

Market integration

Integration shows the relationship of firms in a market. The extent of integration influences the market conduct of the firms and consequently their marketing efficiency. Markets differ in the extent of integration and, therefore, there is a variation in their degree of efficiency. Market integration is a process which refers to the expansion of firms by consolidating additional marketing functions and activities under a single management.

Types of market integration

There are three basic kinds of market integration.

1) Horizontal Integration

In this type of integration, some marketing agencies (say, sellers) combine to form a union to reduce their effective number and the extent of actual competition in the market. e.g. Primary milk producers cooperative society.

2) Vertical integration

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 in the marketing process with in a single firm or under a single ownership. For e.g. if a firm assumes wholesale as well as retailing, it is a vertical integration or rice processor under taking retailing.

3) Conglomeration

A combination of agencies or activities not directly related to each other may operate under a unified management. Examples of conglomeration are Hindustan Lever Ltd. {Hima peas and soaps) and Delhi Cloth and General Mills {cloth and vanaspathi).

Problems in Agricultural Marketing

There is an urgent need for tackling the emerging problems of agricultural marketing more resolutely and efficiently than ever before. The important problems which have emerged in the recent past pertain to the following areas:

1. Increase in Production Levels and Market Arrivals

With increased market arrivals, and in order to enforce strictly market regulations, it is necessary that a large number of market yards should be developed in rural areas with all the necessary marketing facilities. Presently, most of the markets do not have spacious market yards and the transactions are carried on in congested areas in the centre of the city and on the roadsides. Recently, some market committees have constructed spacious market yards; but a majority of market committees do not have them because of the paucity of funds and the non-availability of land.

2. Price Instability

Agricultural prices are very unstable and fluctuate violently. These prices fall in the post – harvest months and increase later in the year. This situation has worsened with the increased market arrivals as a result of the emergence of surpluses, especially of wheat and rice. The increasing instability in price adversely affects the income of farmers as well as the tempo of increasing production.

3. Market Intelligence

The Directorate of Economics and Statistics, Government of India, as well as the State Department of Agricultural Marketing have been collecting data on wholesale and retail prices at various markets and disseminating the information through periodical

bulletins issued on the All India Radio and in the form of publications. However, this is not a satisfactory position because the information provided is state in the sense that, by the time it reaches the farmers, the market prices have changed. Farmers are not able to take advantage of the available intelligence because their illiteracy. There is, therefore, an urgent need for refinement in the available market intelligence, so that announcements of market information may be made on the expected prices, arrivals, demand and supply.

4. Grading of Agricultural Commodities

Grading ensures that producers receive a price which is commensurate with the quality of the produce. At the same time, grading protects the consumers against adulteration. The progress in the adoption of grading by farmers and consumer preference for graded rather than ungraded produce has been poor; and this situation needs to be corrected. Scientific quality testing machines and equipment can solve this problem by rendering a quick and systematic grading service.

5. Transportation

With the increase in production and marketed surplus, farmers and traders are faced with the problem of adequate and quick means of transportation of the produce at the village level, inter-market level and inter-state level. Farmers in many areas generally transport the produce from the farm or village to the market in their bullock carts or camel carts. These take a lot of time and involve a high cost of transportation by reason of their slow speed and low carrying capacity.

6. Storage Facilities

The problems of the storage of farm produce has been accentuated by the increase in the volume of production. Storage is necessary, at the village site to check the tendency of immediate post – harvest sale by the farmers, and at the market level so that the various marketing functions may be performed and advantage may be taken of any price rise. In the recent past, warehouses have been constructed by the Food Corporation of India, Central Warehousing Corporation, State Warehousing Corporation, Co-operative Marketing Societies and the government. Individuals also have build-up storage space. The available storage space in these warehouses is less than the requirement. There is, therefore, a need for the construction of more godowns, specially in rural and hilly / desert areas.

7. Marketing of Agricultural Inputs

The marketing procedures of agricultural inputs have to be improved. This is most essential in the present context of the use of new technology. The newly-evolved HYV seeds are more responsive to other inputs and arrangements for their timely availability are a prerequisite for the success of the programmes of agricultural development.

8. Ancillary Facilities in the Markets

The existing markets lack the ancillary facilities, which include banks, a post office telegraph office and shopping centres. Also the facilities of sorting, grading and packaging in the villages or primary markets are not available. These should be increased to provide full benefits to the farmers.

9. Finance for Market Development

Market development with all the ancillary facilities is highly capital-intensive, and returns on investment in it accrue slowly over a period of years. For market development, a special arrangement for financing is necessary.

10. Education of Farmers

It is equally necessary to educate farmers in marketing of agricultural products so that they may derive necessary benefits of their activities. Without proper education, benefits cannot reach the farmers fully. This is more so in the present context with the availability of increased marketed surplus with producer-farmers.

11. General Dissatisfaction of Farmers

The problems listed above generally reflect the inadequacy of the market infrastructure for handling of the increased volume of production. This inadequacy is reflected in the general discontentment amongst farmers, which, if not checked, will thwart the tempo of increasing production.

Role of Government in Promoting Agricultural Marketing

In the interest of public welfare, the government intervenes in the marketing system. The extent of intervention depends on the objectives of the government and the extent of defects and malpractices prevailing in the system. Government intervention may be direct or indirect, and it may take any one or a combination of the following forms.

1. The framing of rules and regulations for the protection of the interest of some sections of the population. This may include restriction on activities of traders, licensing and market regulation.
2. Promotional activities such as storage and warehousing, transportation and communication facilities, credit facility, grading and standardization, and encouragement of co-operative marketing.
3. Administration of prices at different levels of marketing -guaranteeing minimum support prices to producers, providing commodities at fair prices to consumers, and fixing the rates of commission charged by commission agents.
4. Influencing supply and demand by import, export, internal procurement and distribution.

Some of the govt. efforts to improve the marketing techniques of agricultural commodities are:

1. Establishment of Directorate of Marketing and Inspection. The specific functions of this Directorate are:
 - a) Market research and commodity survey
 - b) Market extension
 - c) Statutory regulation of markets and market practices.
 - d) Promotion of Grading and Standardization.
 - e) Marketing Intelligence cell.
 - f) Training of marketing personnel.
 - g) Marketing Improvement and Development cell
 - h) Publication of Journal
2. State Marketing Departments
3. Regulation of Agricultural Marketing
4. State Agricultural Marketing Boards
5. Council of State Agricultural Marketing Boards (CO SAMB)
6. State Trading Corporation
7. Food Corporation of India

8. Buffer stock, Procurement and Distribution.
9. Quality Control of agricultural products
10. Consumer protection
11. Administered prices
 - a) Minimum support prices
 - b) Procurement prices
12. Statutory Price Control and Rationing
13. Passing of Acts for improving Agricultural Marketing
14. Promotion of Cooperative Marketing
15. NAFED – National Agricultural Co-operative Marketing Federation

MARKETING INSTITUTIONS

Marketing institutions are business organizations which have come up to operate the marketing machinery. In addition to individuals, corporate, co-operative and government institutions are operating in the field of agricultural marketing. They perform one or more of the marketing functions. They assume the role of one or more marketing agencies, described earlier in this section. Some important institutions in the field of agricultural marketing are:

(a) Public Sector Institutions

- (i) Directorate of Marketing and Inspection (DMI)
- (ii) Commission for Agricultural Costs and Prices (CACP)
- (iii) Food Corporation of India (FCI)
- (iv) Cotton Corporation of India (CCI)
- (v) Jute Corporation of India (JCI)
- (vi) Specialized Commodity Boards
 - ❖ Rubber Board
 - ❖ Tea Board
 - ❖ Coffee Board
 - ❖ Spices Board
 - ❖ Coconut Board
 - ❖ Oilseeds and Vegetable Oils Board
 - ❖ Tobacco Board

- ❖ Cardamom Board
- ❖ Arecanut Board
- ❖ Coir Board
- ❖ Silk Board
- ❖ National Horticulture Board (NHB)
- ❖ National Dairy Development Board (NDDB)

(vii) Others

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

(b) Cooperative Sector Institutions

- (i) National Cooperative Development Corporation (NCDC)
- (ii) National Agricultural Cooperative Marketing Federation (NAFED)
- (iii) National Cooperative Tobacco Growers Federation (NTGF)
- (iv) National Consumers Cooperative Federation (NCCF)
- (v) Tribal Cooperative Marketing Federation (TRIFED)
- (vi) Special Commodity Cooperative Marketing Organizations (Sugarcane, Cotton, Milk)
- (vii) State Cooperative Marketing Federation
- (viii) Primary Agricultural Cooperative Marketing Societies

Unorganized 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.

Organized Markets

These are those 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.

1. Regulated Markets

The basic philosophy of the establishment of regulated market is elimination of malpractices in the system and assignment of dominating power to farmers or their representatives in the functioning of markets. The specific objectives of the 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 systems most effective and efficient so that farmers may get better prices for their products and goods are made available to consumers at reasonable prices;
- 3) To provide incentive prices to farmers for a better production programme both in quantitative and qualitative terms; and
- 4) To promote an orderly marketing of agricultural produce by improving the infrastructure facilities.

Some of the important features of the regulated markets are:

Methods of Sale: Either open auction or by the closed tender method is followed.

Weighment of Produce: It is done by licensed weigh-man with standard weights and platform scale.

Grading of Produce: The produce is sold only after grading.

Market News Service: Arrangements are made for proper and correct dissemination of market prices through various media such as loud speakers and notice boards.

Market Charges: the buyers of agricultural produce pay the market charges

Payment of the Value without deduction.

The buyers should make prompt payments for the produce

Licensing of Market Functionaries

Supervision: the officials of the market committee supervise the day-to-day functioning of regulated markets i.e.. The secretary, auction clerks and other staff. The administrative decisions are taken by the nominated/ elected market committee.

2. Cooperative Markets

The efforts of the government to improve the marketing system of agricultural commodities have been only partially successful. The progress of regulated markets is not uniform in all areas. So the establishment of co-operative marketing societies is another step taken to overcome the problems arising out of the present system of marketing agricultural produce.

Meaning

A cooperative sales association is a voluntary business organization established by its member patrons to market farm products collectively for their direct benefit. It is governed by democratic principles, and savings are apportioned among members on the basis of their patronage.

Functions

The main functions of co-operative marketing societies are :

- 1) To market the produce of the members of the society at fair prices;
- 2) To safeguard the members from excessive marketing costs and malpractices.
- 3) To make credit facilities available to the members against the security of the produce brought for sale.
- 4) To make arrangements for the scientific storage of the members' produce. To provide the facilities of grading and market information which may help them to get a good price for their produce;

- 5) 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.
- 6) To arrange for the export of the produce of the members so that they may get better returns
- 7) To act as an agent of the government for the procurement of food grains and for the implementation of the price support policies.
- 8) To make arrangement for the transport of the produce of the members from the villages to the market on collective basis and bring out a reduction in the cost of transportation. .
- 9) To arrange for the supply of inputs required by the farmers such as improved seeds, fertilizers, insecticides and pesticides.

Types of Cooperative Marketing Societies

On the basis of the commodities dealt in by them, the cooperative marketing societies may be grouped as

- i) Single commodity marketing societies e.g. Sugar cane Cooperative Marketing Society, Cotton Cooperative Marketing Society, Milk Cooperative Marketing Society
- ii) Multi -commodity cooperative marketing societies.
- iii) Multi-purpose, Multi- commodity cooperative marketing societies.

Structure

The cooperative marketing societies have both two tier and three tier structures.

Two tier structure

State level marketing federation



(Taluk Level) Primary co-operative marketing societies

Three-tier structure

State level marketing Federation



District marketing societies



(Taluk Level) Primary Cooperative marketing societies.

Three-tier structure is found in Assam Bihar, Kerala, Madhya Pradesh, Karnataka, Orissa, Rajasthan and West Bengal. In all other states two-tier structure is functioning.

Reasons for Slow Progress of Co-operative Marketing Societies

The main reasons for slow progress are

- i) Farmers do not make use of cooperative societies since they are situated at distant *Taluk* levels, farmers need cash after harvest to meet personal obligations and also they are indebted to local moneylenders.
- ii) In some cases rivalries among farmer members result in indecision, which retards the progress of societies.
- iii) Societies do not provide facilities of food and shelter to farmers when they visit the market for the sale of the produce.
- iv) Managers of societies do not offer business advice to farmers, and they often get linked with local traders and become impersonal to the needs of the majority of small and marginal farmers.
- v) Lack of funds with societies to meet the credit needs of the farmers against pledging of the produce brought for sale. They also do not have storage facilities.
- vi) They are not capable of carrying on their business in competition with traders and commission agents because of absence of adequate business expertise among their employees.

Suggestions for strengthening of Cooperative Marketing Societies

- i) The area of operation of societies should be large enough so that they may have sufficient business and become viable.
- ii) Storage facilities, transport facilities, accommodation and drinking facilities should be strengthened in the societies.
- iii) Cooperative feeling among members should be inculcated by proper education and adequate representation should be given to small and marginal farmers in their organizational set up.
- iv) In selection of officials of cooperative marketing societies weightage should be given to business experience and qualification. After selection proper training should be given.

COMMODITY BOARDS

The commodity Boards are essentially the producer controlled organizations with government support and authority over a broad range of functions starting with production, processing and marketing of the crops. The commodity boards function under the purview of Ministry of Commerce, Government of India. The state governments have little control over these boards. These commodity boards are mainly confined to plantation and commercial crops in India. The commodity boards also promote both internal and external trade of the commodity. Each board deals with a specific commodity or group of commodities. The important commodity boards established for the specific commodity or group of commodities in Indian along with their role are discussed below.

(a) Tea Board: Tea board is the premier organization for looking after the growth and development of Indian Tea Industry. It is a statutory organisation of the Union Government established under the Tea Act of 1953. The board functions under the direction of the commerce ministry of the Union Government. Tea Board was not very active in the earlier decades as the main emphasis was on re-plantation programmes. Thereafter, the board started giving emphasis to increase the domestic production and exports. Tea Board advances loans and subsidies for extension, planting, re-planting and refilling besides exploring the possibilities in non-traditional areas and assisting small growers. The Boards also advances loans to manufactures. The Boards deals with export promotion, market intelligence and participation in fairs and exhibitions.

(b) Coffee Board: The Coffee Markets expansion Ordinance, 1940 set-up the Indian Coffee Market Expansion Board on December 21, 1940. The functions assigned to the Coffee Board are:

- (i) Promotion of sale and consumption in India and elsewhere of Indian coffee
- (ii) Promotion of agricultural and technological research in the interest of the coffee industry.
- (iii) Assistance to the coffee estates for their development
- (iv) Securing better working conditions and the provision and improvement of amenities and incentives for workers

(c) Rubber Board: The Rubber Board is a statutory body constituted under the Rubber Board Act, 1947 by the Ministry of Commerce, Government of India. The main functions of this board are to conduct research and training programmes in production and marketing of rubber, extension services and to plan for the welfare of the plantation workers.

(d) Tobacco Board: Tobacco Board was established on 1st January, 1976 under the Tobacco Board Act, 1975 by the Government of India. The main functions of the Tobacco Board are regulation of production and marketing of functions tobacco, ensuring remunerative prices to growers by purchasing tobacco from the growers, promoting the grading by growers and recommending minimum prices to the government, for export of Virginia tobacco, set up of auction platforms and conduct of scientific research related to tobacco.

(e) Spices Board: The Spices Board was established by the Ministry of Commerce, Government of India in 1987 under the Spices Board Act, 1986 at Cochin. The main objectives of establishment of Spices Board are to improve the production and quality of spices and promote export of different spices to earn foreign exchange. For achieving these objectives, the Spices Board is providing package of services oriented to different commodities and areas according to potential/scope of increase in earnings and exports.

(f) Cardamom Board: The Cardamom, the queen of spices, is grown predominantly in the ever green forests of western ghats of Kerala, Karnataka and Tamil Nadu. It is an important plantation crop in the domestic as well as in external trade of the country. The Cardamom Board was established in the year 1966 under the Ministry of Commerce, Government of India to develop various promotional activities such as extension of plantations, improvement in the quality of cardamom and increasing the productivity of cardamom estates.

STATE AGRICULTURAL MARKETING BOARDS

They were established to supervise and provide guidance to market committees. The main functions of the board are

- 1) To carry out the training of officers and staff, create facilities for grading and standardization, construct market roads and approach roads to the markets, construct market yard and sub- yards, establish and maintain the Board office and others as specified;
- 2) To tender advice to the government on the functioning of market committees and on improvement in agricultural marketing as and when referred to;
- 3) To frame byelaws, help in the functioning of market committees and supervise their operations;
- 4) To look after the regulation of markets;
- 5) To bring about an effective level of coordination in the functioning of regulated markets at the state level; and
- 6) To involve in publicity and propaganda activities

COUNCIL OF STATE AGRICULTURAL MARKETING BOARDS (COSAMB)

The COSAMB, an apex body of the State Marketing Boards was established in February 1988. The need for such a body was felt to co-ordinate the activities of State Marketing Boards, especially those connected with credit mobilization, central assistance for market development and some common problems. Under COSAMB, the state agricultural boards have augmented their activities in achieving the objectives.

STATE DEPARTMENT OF AGRICULTURAL MARKETING (Directorate of Agricultural Marketing and Agri-business)

Objectives:

- To survey the markets in the state and to prepare a programme for their regulation.
- To have a administrative control over the market committees.
- To gather market intelligence and grading agricultural commodities under AGMARK
- Market regulation

STATE TRADING CORPORATION (STC)

The State Trading Corporation of India was set up to help the government in trading operations. One of the responsibilities of the government is to ensure the supply of essential commodities to the people. This may require direct intervention on its part in trading of agricultural commodities.

Objectives:

- To make available supplies of essential commodities to consumers at reasonable prices on regular basis.
- To ensure a fair price to the farmers so that there may be an adequate incentive to increase production.
- To minimize violent price fluctuations occurring as a result of seasonal variations in supply and demand.
- To arrange for the supply of such inputs as fertilizers and insecticides so that the tempo of increased production is maintained.
- To undertake the procurement and maintenance of buffer stock, and their distribution, whenever and wherever necessary.
- To arrange for storage, transportation, packaging and processing.
- To conduct surveys and provide required statistics to the government so that it may improve the conditions of the farmers.
- To check hoarding, black marketing and profiteering.

TAMIL NADU CO-OPERATIVE MARKETING FEDERATION (TANFED)**Objectives:**

- To coordinate and promote the marketing and trading activities of its affiliated cooperative institution
- To make arrangements for the supply of agricultural inputs required by member institutions
- To promote interstate trade of agricultural and other commodities
- To act as an agent of the government for the purchase, sale, storage and distribution of agricultural products and inputs.

NATIONAL AGRICULTURAL CO-OPERATIVE MARKETING FEDERATION (NAFED)

At the national level, The National Agricultural Co-operative Marketing Federation (NAFED) was established in October 1958. The State Level Marketing Federation and National Co-operative Development Corporation are its members. The head office of NAFED is at Delhi and its branch offices are located at Mumbai, Calcutta and Chennai. NAFED's area of operation extends to the whole country. It has established branches in all the major port towns and capital cities in the country.

Activities:

- Internal trade.
- Foreign trade -Export and Import of Agricultural commodities.
- Price Support operation.
- Production and Marketing of agricultural inputs.
- Promotional activities.
- Developing Co-operative marketing of Tribal produce.
- Setting of scientific storage system.
- Processing of Fruits and Vegetables.

PRIVATE MARKETING AGENCIES

1. Merchant middlemen: They are those individuals who take title of 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. Merchant middlemen are of following types:

(a) Wholesalers buy and sell food grains in large quantities. They may buy directly from farmers or from other wholesalers. They sell food grains 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 godown for the storage of the produce.

(b) Retailers buy goods from wholesalers and sell them to consumers in small quantity.

They are producer's personal representatives to consumers. Retailers are closest to consumers in the marketing channel.

(c) **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.

(d) **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. 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.

2. Agent Middlemen: They act as representative of their clients. They do not take title of 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 the effective bargaining. Agent middlemen are of two types, commission agents and brokers.

(a) **Commission Agent** normally takes over the physical handling of the produce, arranges for its sale, collects the prices from the buyer, deducts his expenses to the seller. All these facilities are extended to buyer firm as well if asked for .

(b) **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 buyer and sellers on the same platform for negotiations. Their charge is called brokerage. They may claim brokerage from the buyer and seller or both, depending upon the market situation and the service rendered. They have no establishments in the market. They have complete knowledge of the market -of quantity available and prevailing prices.

3. Speculative Middlemen: They take title to the product with a view to make a profit on it. They are not regular buyer or sellers of produce. They specialize in risk taking. They buy at lower prices when arrivals are substantial and sell in the off-season when prices are high. They do the minimum handling of the goods. They make a profit from the short run as well as long run price fluctuations.

4. Processors: They 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 the processed products.

5. Facilitative Middlemen: They 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 marketing systems increases when they are engaged in business, these middlemen receive their income in the form of fees from those who use their services. The important facilitative middlemen are labourers, weigh men, graders, transport agency, communication agency and advertising agency.

Stabilization of Agricultural Prices

In an agricultural country like India, the prices of agricultural commodities, especially of food grains hold a key position in the price structure of economy. Any distortion in agricultural prices leads to a distortion in the whole structure. Prices may rise faster at times and fall rapidly at some other times, due to temporary imbalance of supply and demand. Both sharp rise and precipitous fall in agricultural prices have dangerous potentialities.

Excessive fall in agricultural prices is dangerous for the following reasons

- a) It leads to fall in the incomes of the farmers.
- b) Besides distress sale, the farmers will lose incentive to increase production. Thus there will be a fall in the supply of agricultural products.
- c) A fall in the prices of agricultural products will reduce the purchasing power in the hands of the rural people. This will lead to a fall in the demand for industrial products.

The prices should not be allowed to fall below economic levels to maintain farmer's incentive to invest in the improvement of his farm income, and thereby sustain the basis of progressive agriculture. Excessive rise in agricultural prices is equally dangerous for the following reasons

- a) A steep rise in the food prices increase the cost of living of the people. Consumer section of the population are hit hard, as their incomes do not increase correspondingly to offset the increase in prices.

- b) Once the prices of agricultural products rise, they are likely to cause an inflationary spiral in the economy.
- c) Rising agricultural prices are not favourable even from the point of view of the majority of the farmers. The majority of small farmers sell their small produce immediately after harvest when prices are comparatively low. They have to pay higher prices when they have to buy in the market during off-season.

Thus both sharp falling agricultural prices and inflationary rise in prices are dangerous to health and growth of the economy. The harmful effects of instability of food prices indicate the undoubted need for stabilization of agricultural prices. Rigid price control of price structure is neither feasible nor desirable. So long as prices move gradually allowing for costs and incomes to get adjusted, there is really not much to take exception to such price fluctuations.

Measures for Stabilization

Two principle measures can be adopted to achieve stabilization in agricultural prices.

A. Full Price Control

Rationing is a measure for controlling the demand of consumers and keeping the rise in demand under check by allotting a limited quantity per capita per time period. Rationing can be of two types – statutory rationing and modified rationing. When whole of the population in the command area is covered, it is called the statutory rationing. If only a selected section of the population is covered under the rationing system, it is called modified rationing.

Full price control in the sense of rationing and procurement does not seem desirable in the present circumstances.

1. A complete rationing will involve a large increase in government's commitment for maintaining supplies to the rationed population.
2. Rigid system of procurement if introduced as a regular feature in developing economy may have adverse effect on production as well as on marketed surplus.
3. It would encourage black market with all its attendant evils.
4. The system is likely to prove very costly also.
5. People do not take kindly to price controls, rationing and procurement.
6. The policy of full control is bound to fail because by and large, we do not have an efficient administrative machinery for its proper enforcement.

B. Other Alternative Measures

1. Buffer stock operation

The term buffer stock of foodgrains refers to the stock of foodgrains maintained by the government to be used as a buffer to cushion the shocks of fluctuating supply and price, to meet the emergency needs and to meet the situations arising out of serious unexpected shortages resulting from transport bottlenecks, natural calamities like flood, famine, earthquakes and from the influx of refugees.

The main advantages of maintaining a buffer stock are:

- (i) It helps in the stabilization of prices by counteraction the effects of the activities of speculators and hoarders.
- (ii) It safeguards the producers against low prices, specially during the surplus-production years.
- (iii) It imparts stability to the country's food economy.

2. Fixation of prices (Administered prices)

Another method of intervention in the market mechanism has been the announcement of different administered prices viz., minimum support prices, statutory minimum prices, procurement prices and issue prices. These prices are announced for different agricultural crops by the Government of India on the recommendations of Commission for Agricultural Costs and Prices (CACP). This Commission was originally set up in January, 1965 in the name of the Agricultural Prices Commission (APC).

While recommending the price, the Commission considers the following aspects:

- (i) The need for incentives to farmers for the adoption of improved technology and maximization of production:
- (ii) The need for ensuring a rational utilization of land and other production resources.
- (iii) The likely effect of the price policy on the rest of the economy, particularly on the cost of living of masses and industrial cost structure.

The Commission recommends two sets of prices, minimum support prices and procurement prices.

a) Minimum Support Price

This is the price fixed by the government to protect the farmers against excessive fall in price during bumper production years. These prices give a sort of price guarantee to the farmers which means that a price not lower than the announced minimum price will be paid to the farmers when they bring their produce for sale to the market. In case the market price for the commodity falls below the announced minimum price due to bumper

production and glut in the market, government purchases the entire quantity offered for sale by the farmers at the announced minimum support price. Minimum support price has been assigned a statutory status in case of sugar cane and as such the announced price is termed as statutory minimum price. There is statutory binding on sugar factories to pay the minimum announced price and all those transactions or purchase at a price lower than this are taken as illegal.

The minimum support prices for different agricultural crops viz. , food grains, oil seeds, fibre crops, sugar cane and tobacco are announced by the Govt. of India before the start of the sowing season of the crop. This makes it possible for the farmer to have an idea about the extent of price insurance cover provided by the government for the crop.

b) Procurement Prices

Procurement price of a commodity refers to the price at which the government procures the commodity from producers / manufacturers for maintaining the buffer stock or the public distribution system. These prices are announced by the Government of India on the recommendations of CACP before the start of harvest season of the crop. Procurement prices are fixed generally at a level, which is somewhat higher than the level of minimum support prices but lower than the prevailing market prices. Since procurement prices are lower in relation to the actual market prices, the farmers and traders are not willing to sell their stocks voluntarily to government. In such circumstances the Government procures food grains at announced procurement prices either by imposing a levy on producer, levy on Traders and Millers and through monopoly procurement policy. Beginning with the Kharif crops of 1991-92, the system of announcement of procurement prices has been abolished and only minimum support prices for all food grains crops is operative.

3. Public Distribution System (PDS)

The distribution of foodgrains to the vulnerable sections of society at fair prices during periods of scarcity and rising prices is the ultimate aim of the policy of the procurement and storage of foodgrains by the government.

The public distribution system has been operative since 1943. However, during the last two decades it has expanded considerably. The public distribution is concerned with distribution of food grains to consumers through a vast network of fair price shops at issue price fixed by the government periodically taking into account the changes in procurement prices and cost of distribution. These prices are kept below the economic cost to keep them within reach of vulnerable sections of the society. The difference

between the issue price and economic price is borne by government by way of food subsidy. Seven essential commodities are supplied by Central Government to State Governments and Union Territories for distribution through the public distribution system to the consumers. These are wheat, rice, sugar, edible oils, soft coke, controlled cloth and kerosene.

The functioning of the public distribution system has been criticized on many grounds. Some of these are:

- i) The number of fair price shops are inadequate in the sense that consumers have to travel long distances to get their supply and have to wait for long hours;
- ii) The supply of foodgrains through fair price shops is inadequate;
- iii) The quality of foodgrains supplied through fair prices shops is inferior;

Concept of Parity Price

Parity price is the price that purchases for the seller of a unit of an article, as much of other things and services as he could purchase with the same unit in a given base period. The parity prices seek to stabilize inter-relations between different agricultural products as well as between agricultural and non-agricultural products. The principle of parity is thus to maintain given relationships and not reduction of price fluctuations. Parity may be conceived in a number of ways :

- Parity between prices of agricultural commodities and non-agricultural commodities.
- Parity between prices of individual agricultural commodities and general agricultural prices.
- Parity between prices received for the farm products and prices paid for farm inputs.
- Parity between prices received for the farm products and prices paid for the farm and family expenditure taken together .

The terms of trade between agricultural and non-agricultural sector assume great significance, because the sectoral relationship of prices have a bearing on production. Inter crop price ratios have an important influence on the production programme of the farmers and therefore need to be kept in mind while fixing the prices of various commodities under managed price system.

Agricultural Inputs Marketing

A timely and adequate supply at fair prices of farm inputs -seeds, fertilizers, micronutrients, organic inputs, plant protection chemicals and agricultural implements are of great importance in the production of output. The importance of purchased farm inputs has significantly increased in recent past with the technological break through in Indian agriculture. The timely supply of modern farm inputs to the farmers of all categories at reasonable prices depends on the existence of an efficient marketing system for them. The importance of an efficient marketing system for inputs may be judged by the following.

1. The effect of change in production methods can be realized only if the farm inputs reach the farmers in time at the least cost.
2. The use of modern inputs by farmers largely depends upon the spread of information about them.
3. Dynamic and efficient channels for marketing of farm inputs are essential for the popularization of knowledge about modern inputs among the farmers.

Manufacturing and supplying industries of farm inputs provide employment opportunities in manufacturing, selling and handling.

1. Fertilizer Marketing

a. Chemical fertilizers

Among all the inputs purchased by farmer, fertilizer is the most important input used to accelerate agricultural production. The demand for chemical fertilizer has increased with the evolution of new hybrid and dwarf variety seeds, which are more responsive to chemical fertilizers. The consumption of nitrogenous and phosphoric fertilizer is 13.6 million tonnes (MT). The production is not enough to meet the demand for fertilizers. We produce only N and P fertilizers and entire K fertilizers are imported. We import about 3.15 MT of NPK fertilizers to meet our demand. The subsidy for fertilizers is increasing year after year since 1995-96 and touching Rs.15,000 crores.

The consumption in appropriate mix (ratio) of the three primary plant nutrients -Nitrogen (N) Phosphate (P) and Potash (K) is essential for increasing crop yields. The ideal NPK ratio aggregated for the country as a whole is 4 : 2 : 1, but the current all India NPK consumption ratios do not confirm to ideal norms. Another important effect of decontrol has been distortion in the nutrient consumption ratio and imbalanced fertilizer

use. In the pre-decontrol year of 1991-92, NPK consumption ratio was 5.9 : 2.4 : 1 which was very near to ideal ratio and it widened to 10 : 2.9 : 1 in 1996-97.

The retail prices of fertilizers affect the consumption of fertilizers. The nitrogenous fertilizers are relatively cheaper compared to P & K fertilizers after decontrol of fertilizer prices in August 1992. To ensure the balanced application of NPK fertilizers recently the Government of India increased the subsidy for P&K fertilizers.

The increase of subsidy to fertilizer will add to the subsidy account of budget. The subsidy for DAP fertilizer is Rs.4600 per tonne for indigenously produced and Rs.3,200 imported fertilizer. The subsidy for Muriate of potash is Rs. 3,250 per tonne and that of single super phosphate is Rs. 900 per tonne . The subsidy for complex fertilizers range from Rs. 2,588 – 4,282 per tonne depending upon the NPK nutrient content. The administered price of Urea is Rs. 4,000 per tonne.

In general, the dealer's commission accounts for 30 to 35%, transportation cost 20%, handling cost 10%, storage cost 10% and miscellaneous items account for remaining 25-30% of the gross marketing margin. The marketing cost for fertilizer has been estimated as 10% of the farm price.

b. Secondary and micro-nutrients

Fertilizer use efficiency for major nutrients namely N, P and K are also affected due to the micronutrient deficiency in the soil. Since mid 1960s, deficiency systems of secondary and micronutrients have been observed particularly for Sulphur, Zinc and Iron. Sporadic deficiency of other nutrients either in specific areas or in specific crops has also been noted. In view of higher intensity of cultivation in future, greater micronutrient deficiencies may be noted in most of the states. Application of micronutrients will become very essential to obtain response to major nutrients and achieve our food production goals.

Inconsistency in production, quality, price and availability of micronutrients has discouraged farmers to extensively use these inputs. Government of India has taken initiatives to promote the use of micro nutrient fertilizers. However, the production of micronutrient fertilizers has been left with the small-scale industry. The farmers are finding it difficult to get good quality micronutrient fertilizers at the right time and the right place

C. Bio-fertilizers

There is growing concern about the adverse effect of indiscriminate use of fertilizers on soil productivity and environmental quality. Bio-fertilizers, which are cost effective, eco-friendly, and renewable source of plant nutrients can be used to supplement or partly replace chemical fertilizers. It is estimated that bio-fertilizers can generally provide 20-25 per cent of the nitrogen requirements of crops. However, their performance is highly unpredictable with an increase in crop use varying from 10 to 65 per cent. The main bio-fertilizers produced in India are Rhizobium (23.3%), Azospirillum (12.4%), Azotobacter (26.4%) and Phosphates Solubilizer (37.4%). At present, there are 62 Bio-fertilizer units with a production capacity of 8115 tonnes. However, the total production was 5177 tons only.

The use of bio-fertilizers is constrained by a number of factors and is limited to certain crops and locations. The main constraints are short shelf-life (3-6 months), poor storage, transportation and distribution system, lack of awareness and in effective extension programmes.

2. Marketing of Seeds

Seed is the basic and crucial input for attaining sustained growth in agricultural production. Seed is the carrier of new technology for crop production, propagation and multiplication. Distribution of assured quality seeds are fundamental to attain higher crop yields. Policy initiatives taken by Government of India during 1960's and 1970's for generating quality seed production and distribution of new improved plant varieties is the main reason for country's current self sufficiency in food grains. Indian seed industry has shown impressive growth and should continue to provide further potential for growth in agricultural production. The role of seed industry is not only to produce adequate quantity of seeds of good quality but also to achieve diversity in variety distribution. Towards achieving this objective the principal players are the two national level organizations -National Seeds Corporation (NSC) and State Farm Corporation of India (SFCI) - State Seeds Corporations and private seed organizations. There are 23 State Seed Testing Laboratories to ensure/check the quality of seeds.

National Seeds Project -World Bank assisted Project -provides assistance to NSC, SFCI, State Seed Corporation and State Seed Certification Agencies for their restructuring. The breeder seed production has increased from 23.64 thousand quintals in 1985-86 to 46.13 in 1997-98. The production of foundation seeds have increased from 3.35 lakh quintals to 6.70 in 1998-99. The production of certified / quality seed, on the

other hand, has increased to 83.00 lakh quintals in 1998-99 from 55.01 lakh quintals in 1985-86

About 80 per cent of area under rice and 90 per cent of wheat are covered under high yielding varieties. There has been progress under major millets also over the 90s , which has increased from about 50 per cent of total cultivated area to about 64 per cent. Hybrid seeds, which have high yield potential, are available for jowar, bajra, maize, cotton, sunflower, castor and cotton.

The Seed Act, 1966 provides for a system of certification of seeds to assure the farmer about the quality of seed. However, seed certification is voluntary and not mandatory except, for MRTP /FERA and Foreign Collaboration Companies. There are also a number of problems in seed certification and lack of standard procedures, which have made seed certification cumbersome and difficult. As such, the availability of certified seed is limited and much less than the demand. Uncertified quality seed branded as "Truthfully Labeled" (TL) seed is sold to the farmers by the private seed distributors.

Import and export of seeds

The New Policy on Seed Development (1988) provides for liberal import of seed and planting materials. India's imports of vegetable and ornamental seeds, coarse cereals, oil seeds and planting material has been increasing in recent years. About 460 tonnes of seed was imported in 1994-95 as compared to 83.5 tonnes in 1990-91. India with varying agro-climatic zones is very suitable for producing a large number of varieties of hybrid seeds for export purpose. Due to recent liberalization of various policies and rapid growth of private seed industry, export of seeds particularly of cereals, vegetables, flowers, forest plants, has increased in last few years.

Role of public and private sector industries

The public sector, which accounts for 60-65 per cent of total turnover of seed industry, is mostly engaged in production and distribution and distribution of seeds of cereals (mainly wheat and rice), pulses and oil seed crops. The private sector, on the other hand, is mainly involved in the business of hybrid seeds of maize, jowar, bajra and cotton and also seeds of high value crops like vegetable and ornamental plants. The private industry is also playing a leading role in the development of planting material through biotechnology and tissue culture.

3. Marketing of Pesticides

Diseases and pests attack crop plants and decrease yields, and are some times responsible for total crop failure. Weeds compete with crop plants, for nutrients. Plant protection chemicals are used to either prevent their attack or control them. Unlike seed, this input has to be used at different times of growth. Plant protection measures begin with soil treatment before sowing, and continue up to the disposal of produce. The use of chemicals requires a high level of technical knowledge in the selection of chemical, the method of its use, the care to be taken in handling it and an appropriate dosage and frequency of treatment.

Production and Consumption of Pesticides

Private sectors as well as public sector companies or corporations manufacture plant protection chemicals in India. Nearly 44 technical grade pesticides, having 110 formulations, are manufactured in India. The production of pesticides in 1990-91 was 60,000 tonnes against the installed capacity of around 1.07 lakh tonnes. There are 25 large units manufacturing pesticides and formulations apart from 450 small ones. The actual production of pesticides is less than the established capacity, resulting in import of pesticides. Pesticides, which include insecticides, herbicide, fungicides, rodenticides and fumigants, are important input to prevent or control such losses.

Initially, pesticide requirements in India were met through imports. However, the pesticide industry grew rapidly between 1977 and 1996. Since then there has been a consistent growth in the domestic pesticide production. At present there are 125 production units with an installed capacity of about 1, 16,000 tons of technical grade pesticides per annum in addition there are about 500 small-scale units engaged in the manufacture of pesticide formulations. The highest pesticide consuming state is Andhra Pradesh followed by Punjab, Karnataka and Tamil Nadu. Among the different crops cotton and rice are the major pesticide consuming crops.

Integrated Pest Management

In the past, chemical pesticides have been effective, dependable and economical. However, their indiscriminate use has resulted in several problems such as development of resistance in pests, toxic residues in food, water, air and soil and disruption of eco system and environment. In order to tackle pest problems and minimize crop losses Government of India has recognized the need to promote Integrated Pesticide

Management (IPM) approach. IPM is a broad ecological approach of pest control utilizing intelligently all techniques and methods viz. cultural, mechanical, biological and

chemical in as compatible manner as possible to maintain the pest population below Economic Threshold Level (ETL). The results obtained from IPM demonstration and the experience of the farmers have been very encouraging by implementing IPM. Some states like Tamil Nadu, and Punjab have already brought down their pesticides consumption by about 50 percent.

Bio-control and bio-pesticides

The term bio-pesticides refer to all biological materials, which can be formulated for use as pesticides for control of pests. Bio-pesticides are gaining importance for control of pests not only in agriculture but also in horticulture, forestry and public health programmes. Concerted efforts are being made to reduce the use of pesticides to provide pesticide residue free food by promoting use of bio-pesticides and bio-control agents.

4. Marketing of Agricultural Implements and Farm Machinery

The use of draught animal energy for crop production measured in terms of animal pair hour used per hectare per year has declined from 159 (1971-72) to 90 (2001-02). Farm modern implements (Machines) are used to perform certain operations with speed and accuracy -which may not be possible with human and bullock labour. The machines used for farming are tractors, pump sets, sprayers/dusters and threshers. The demand for farm machines is derived demand. Machines are manufactured mostly in the private corporate sector. The manufacturers market their products through their authorized dealer and sub dealers. Most of the sales depots are located in cities or towns. The Agro-Industries corporations have entered late in the market for the sales of farm machines and their spare parts.

A sharp rise in farm power availability from mechanical sources relative to animal sources This being especially pronounced from 1971 when the Green Revolution was beginning to take roots. Thus while in 1971 the contribution of mechanical sources to total farm power availability stood at 21 percent. This share has now crossed 70 percent. Higher mechanization levels, in turn, have also prompted a near three-fold increase in aggregate farm power capacity since the early 1970s to 1,43,145 MW in 1996. The growth of tractor drawn implements is more perceptible than the animal operated implements.

International Trade

International trade is the exchange of goods and services across international boundaries or territories. As far as individual country is concerned, external trade is done in the form of either imports and exports of goods and services.

The fundamental basis of international trade lies in the fact that countries are endowed by nature with different elements of productive power. In other words, factor endowments are unevenly distributed among the countries of the world. This is due to geographic facts, physical features, and climatic differences. Some countries are rich in some minerals eg. Africa in gold and diamonds, Arab countries in oil resources. Thus international trade is inevitable when there are marked differences in the countries regarding materials, natural vegetation, climate, soils and other physical and geographical conditions.

Classical theory of international trade

1. The theory of absolute advantage

Adam Smith argued that a country could certainly gain by trading with other nations. For instance, if it takes 10 units of labour to produce one unit of good X in country A, but 20 units of labour to produce the same good in country B, and if it takes 10 units of labour to produce one unit of good Y in country B and 20 units of labour to produce the same good in country A, then both the countries will gain by trading. After the opening of trade, country A will specialize in the production of good X, while country B will specialize in the production of Y.

2. The theory of comparative advantage

Ricardo argued that any two countries can very well gain by trading even if one of the countries is having an absolute advantage in both the goods over another country, provided the extent of absolute advantage is different in the two commodities in question i.e. comparative advantage is greater in respect of one good than in that of the other. Eg.,

In country A	: Marginal cost of producing wheat is Rs.70/ql Marginal cost of producing cotton is Rs. 140/ql
In country B	: Marginal cost of producing wheat is Rs.50/ql Marginal cost of producing cotton is Rs.70/ql

In this case, country B can produce both wheat and cotton cheaper than country A, But the comparative advantage is greater if it produces cotton. i. e

Country A

1 qtl of wheat = 0.5 qtl of cotton

Country B

1 qtl of wheat = 0.71 qtl of cotton

Therefore, the country B can specialize in cotton and the country A can specialize in wheat.

Autarky

A state of isolated or closed economy, that is, an economy having no international economic transactions. This is an economy that limits trade with outside world, or an ecosystem not affected by influences from outside, and relies entirely on its own resources.

Free trade

This is a market model, wherein trade of goods and services between countries flows unhindered by government imposed artificial costs. A policy under which a country does not restrict its imports by quantitative restrictions, and import duties.

Trade policy

It covers the entire range of policies relating to the external sector of an economy, including those relating to invisible trade, capital and investment flows, trade agreements, international agreements and commitments and so on.

Trade policy instruments

1. Tariffs (duty)

A tariff / duty is a tax levied on imports and less often on exports as they cross the borders of other countries.

Types of Tariffs:

- a. Advalorem duty – Percentage of value of an imported good.
- b. Specific duty – Flat amount charged for each physical unit of a particular imported good.
- c. Compound duty – A combination of the above two.

2. Quotas

A quota exerts a restrictive influence on the volume of imports. It sets a limit on the total physical quantity or total value of a particular import that may enter the country during a given period of time.

Types of Quotas:

- a. Absolute quota – Set outright limits on the amounts of different commodities that can be imported. In its extreme form an absolute quota may completely prohibit the importation of a particular product in which case it can be termed an embargo.
- b. Tariff quota – Limits are imposed not on the total quantity of an imported product but on the amount that may come in free of duty or at a specially reduced duty rate. Imports in excess of this amount are permitted but are subject to the regular duty or even a higher duty.

3. Subsidies

Subsidies are intended to make it possible for high cost domestic producers to compete in the world market with more efficient foreign producers. Such subsidies take many different forms.

In its simplest form a subsidy consists of a direct payment by the Government to the exporter after the latter has completed his sale. The payments may be based on the number of units sold.

Another form of subsidization is the support that Government normally grant to their merchant marines (shipping lines)

Lastly, export subsidies may consist of tax concessions to exporters. In several countries exporters are either exempted from or reimbursed for payment of various business taxes.

Terms of Trade

The price of imports in terms of price of exports (or) the value of exports in terms of value of imports.

Balance of Trade

The difference between the value of commodity exported and the value of commodity imported is known as balance of trade. Balance of trade refers only to merchandise balance or balance on visible transactions alone.

Balance of Payments

The balance of payments of a country refers to the balance between the payments that are owed to the outside world and that are owned by the country. It is a recording of the value of the transaction across borders and comparison of in country transaction with outgoings. The difference of inflows and outflows shows the extent of balance of payments and the capacity of drain on foreign exchange of a country.

The balance of payments refers to sum of both the balance of visible and invisible transactions (transportation charges, shipping freights, passenger fares, harbour and canal dues, commercial services, financial services and services connected with the tourist traffic and payments of interest on external debt).

Exchange Rate

The exchange rate between two currencies specifies how much one currency is worth in terms of the other currency.

Forex Market / Foreign exchange rate market

Forex market is an international market where various currency exchange transactions take place; this is in the shape of simultaneously buying one currency and selling another currency. The mechanisms of the market place are very similar to that of other markets such as stock market. The purpose is to buy low and sell high to maximize profits.

Agricultural Exports and Imports

Agricultural Exports

In 1998-99, India emerged as a major exporter of basmati and non-basmati rice. The international trade in agricultural products is increasingly being dominated by concerns of quality to safeguard human health. Importing countries are setting higher standards of quality for food products. It is therefore very important that agro – food-processing industry improves its functioning and pays attention to hygiene and processors/ manufacturers are made aware of the high international standards for quality. There is also a need to harmonise domestic standards with international standards, lay down standards for products where there are none but are necessary, and revise the current standards to meet the changing requirements. Towards this end revision of standards for spices and basmati rice is underway. Keeping the potential of this sector in view, there is considerable scope for increasing the share of agricultural and food products in the total export basket. The Government is giving special attention to this area by providing thrust to agricultural exports through enhanced public investments and by building up a conducive policy environment. The growth of exports in India and the world is furnished in Table I.

Table-I
Trends in India's Share in World Trade (Exports)

(Value in US \$ Million)

Commodity Group	1970			1999		
	World	India	%	World	India	%
Rice	925	6	0.6	8105	1632	20.1
Sugar & Preparation	2700	26	1.0	15194	12	0.1
Vegetables & Preparation	1471	17	1.2	71799	689	1.0
Meat	3584	4	0.1	43535	200	0.5
Fish	-	-	-	47070	1119	2.4
Coffee , Tea Spices	5437	280	5.1	31135	1315	4.2
Tobacco	1713	43	2.5	22814	149	2.4
Total	21680	379	1.8	286731	5120	1.8

Agri-exports can be divided into three broad categories, i.e. export of a) raw products b) semi raw products c) processed and ready to eat products. Raw products exported are essentially of low value high volume nature, while semi processed products are of intermediate value and limited volume and processed ready – to-eat products are of high value but low volume nature. The major agri-exports of India are cereals (mostly rice – Basmati and non-Basmati), spices and cashew, oilcake/ meals, tobacco, tea, coffee and marine products. Value of agri-exports of the country has been ranging between 15 to 20 per cent (Table II).

Table-II
Trend and shares of Agricultural products in exports of India
(Value in Rs. Crores)

Year	Total Exports	Agricultural and Allied products	Share of AAP in total exports(%)
1960-61	642	284	44.20
1970-71	1535	487	31.72
1980-81	6711	2057	30.65
1990-91	32553	6317	19.41
2001-02	209019	29312	14.02

A number of agricultural commodities are exported from India. The commodities exported from India fall broadly in three categories.

1. Traditional export items – These products are cashew nuts/ shelled; castor oil; coffee; raw cotton, cotton waste; fruits, spices, sugar and molasses; tea and tobacco – unmanufactured.
2. Non-Traditional items but uncertain – These items are raw jute; raw wool; gums, resins and lac, essential vegetable oils; and non-essential vegetable oils (excluding castor oil).
3. Non-Traditional items with good prospects – These items are floriculture products; HPS groundnut; oil meals; meat and meat preparation; processed fruits and juices, processed vegetables; sesame and niger seeds; shellac; wheat and rice.

The growth in the export of non-traditional new items has been at a rate higher than that of traditional items (Table III). Tea, coffee, tobacco, cashew kernels and spices are the traditional export items. During 1990-91, they together accounted for 31.1 percent of the total AAP exports but their share deceased to 23.10 percent in 2001-02. As against this, the exports of non-traditional items like marine products, basmati rice, fruits, vegetables, oil meals and processed foods have been increasing in the export basket of the country. Among the non-traditional items, the increase has been conspicuous in rice and fish and fish preparations. Rice accounted for 7.3 percent of total exports of AAP in 1990-91 which further increased to 10.8 percent in 2001-02. Similarly the share of fish and fish preparations increased from 15 to 20 percent during this period. The relative importance of various commodities in total agricultural and allied products exports has substantially changed during the last four decades.

During the nineties, agricultural exports have received special attention since it is in this area that there exists great potential for raising farm incomes, tackling unemployment problem and earning foreign exchange. The impetus for accelerated growth in agricultural exports envisaged through increased infrastructure support and by building up conducive policy environment. Some of the measures undertaken in this connection include, market determined exchange rate policy, lowering import duties on capital goods, particularly machinery necessary for food processing, easier availability of

credit for exports, removal of restrictions on export of agricultural products and several concessions to export – oriented units.

Table-III
Exports of Agricultural and Allied Products from India (Value in Rs. Crore)

Commodities	1960-61	1970-71	1980-81	1990-91	2001-02
Tea and Coffee	131	173	640	1332	2814
Oil Cakes/meals	14	55	125	609	2263
Tobacco	16	33	141	263	808
Cashew kernels	19	57	140	447	1652
Spices	17	39	11	239	1497
Sugar and Molasses	30	29	40	38	1782
Raw Cotton	12	14	165	846	43
Rice	-	5	224	462	3174
Fish & Fish Preparation	5	31	217	960	5897
Meat & meat preparation	1	3	56	140	1193
Fruits, Vegetables & Pulses	6	12	80	216	1560
Processed Foods	1	4	36	213	1236
Others	32	31	182	952	5393
Total Agricultural and Allied products	284	487	2057	6317	29312

India's agri-exports face certain constraints that arise from conflicting domestic policies relating to production, storage, distribution, food security, pricing concerns etc. Unwillingness to decide on basic minimum quantities for export makes Indian supply sources unreliable. Higher domestic prices in comparison to international prices of products of bulk exports like sugar, wheat, rice etc make our exports commercially less competitive. Market intelligence and creating awareness in international market about quality of products need to be strengthened to boost agricultural exports.

Agricultural Imports

Agri-imports constitute only a small proportion of the country's total imports (Table IV). During the period 1996-97 to 1999-2000, agri-imports have been in the range of 4 to 7 per cent of the total imports of the country. In recent years, edible oil has become the single largest agri-import accounting for more than 50 per cent of the value of total agri-imports. In 1999-2000, it accounted for as high as 70 per cent of total agri-imports. Another item, which has been accounting for around 10 per cent of total agri-imports is raw cashew nut. Each of the other agricultural and allied products imported into the country – cereals, pulses, spices, sugar, milk and milk product, chicken, meat etc.

account for very small proportion of total agri import, except in some climatically abnormal years warranting relatively larger import of a particular commodity – cereals (mostly wheat) in 1997-98, pulses in 1996-97 and 1997-98.

The general policy is that imports duties should be low for those sensitive essential products where there is a large domestic shortfall in production. Pulses are a typical example, where there is zero import duty. High tariff walls we raised this year for many agricultural and allied products, such as rice, wheat, millets, sugar, milk powder, apple, chicken, edible oils etc to ally the fears of large scale dumping of such products in Indian market in view of liberalization of import policy in respect of many such products.

Table-IV

Trend and shares of food products in imports of India(Value in Rs. Crores)

Year	Total Imports	Food Articles	Share of FA in total imports (%)
1960-61	1122	186	16.6
1970-71	1634	252	15.4
1980-81	12549	809	6.4
1990-91	43193	508	2.2
2001-02	245199	562	0.02

Projection of exports and imports of agricultural commodities and processed products during the Tenth Five Year Plan are shown in Table V. The major thrust of exports will be on rice, wheat, tea / coffee, marine products, sugar and processed foods. As regards imports, India's imports of pulses, raw cotton and edible oils will increase considerably by the end of Tenth Five Year Plan in 2006-07

Table-V

India: Projections of Exports & imports during Tenth Plan(US \$ Million)

Commodity	Exports		Imports	
	2001-02	2006-07	2001-02	2006-07
	619	1085	*	*
Rice	289	384	*	*
Wheat				
Other Cereals	74	99	7	10
Pulses	78	90	641	1240
Jute	2	2	22	23
Cotton	6	7	487	1010
Tea & Coffee	568	869	15	36
Rubber	15	20	172	261
Other crops	462	613	49	75
Livestock	344	632	20	39
Forestry & Logging	266	290	30	58
Fish	1357	2075	9	17
Sugar	515	863	21	44
Edible Oils	180	206	1586	4835
Other Food & Beverages	1585	2657	472	1151
Total	6360	9892	3531	8799

Exports and Imports Procedures

To become an exporter, whether proprietorship, partnership, or company - the head of the concern should apply for allotment of exporters code in the prescribed CNX form in duplicate (available in all branches of the RBI). Exporter should enclose a certificate from his bankers in prescribed form and two declarations and submit them along with CNX form. After processing of application exporter code is allotted within 3 days. After RBI code is allotted, the concern should apply for allotment of importer –

exporter code in the office of Joint Director General (Foreign Trade) in a prescribed application form. Along with the form Rs.1000 should be paid by challan – counterfoil of the challan should be enclosed with a application. After processing the application the Import – Export code (IMPEX code) is allotted. IMPEX code and RBI code are necessary and it should be mentioned on shipping documents of all consignments both for import transaction and export transaction. The consignments at customs (or) at ports are identified with the help of this code numbers. As per Foreign Exchange Regulation Act (FERA) an exporter as to realize the export proceeds with in 180 days. If it is not realize, exporter (with RBI code) is reminded of his duties, failing which he has to explain the reason for not having realized the proceeds to the satisfaction of competent authorities. For trade enquires, one should verify the import - export policy of the Government to know whether the particular commodity is allowed for export/import or not. If commodity is allowed for export as per export import policy, one should gain full knowledge about his product.

RECENT POLICIES ON TRADE

Export-Import Policy, 1992-97

The Government of India announced a new five year export-import policy effective from April 1, 1992 which gave further push to liberalization of imports and intended to give significant boost to exports. Under this policy, the international trade was made free subject to a negative list of imports and exports. But as far as farm products and related goods are concerned, most of them remained a part of the negative list, as per the following details:

Negative List of Exports

(i) Permitted Subject to Licensing -

Coconut, copra, seeds and planting materials, cotton seed, vegetable oils, groundnut cakes, rice bran, milk, cattle, camels, chemical fertilizers.

(ii) Permitted through Canalising Agency –

Onion (NAFED), Niger seed (NAFED/TRIFED), Powdered Milk (NDDB), Ghee (NDDB).

(iii) Permitted without a Licence but subject to terms and conditions – Basmati rice, non-basmati rice, wheat, barley, maize, bajra, jowar, ragi, HPS groundnut, raw cotton (Bengal desi, Assam comilla, staple cotton, yellow picking), sesame seed, sugar, gram and gram flour, wheat flour, deoiled groundnut cake, deoiled rice bran, VFC tobacco, soyabean extractions, cotton yarn, black pepper etc.

Negative List of Imports

(i) Canalised Items

–All fertilizers (MMTC), edible oils (STC, HVOC), seeds of oilseed crops (STC, HVOC), Cereals (FCI).

(ii) Restricted Items

–Livestock, plants, seeds and other materials (licence from the Department of Agriculture)

The import of pulses, raw cashewnut, seeds of vegetables and flowers, plants, tubers and bulbs of flowers etc were placed in the negative list. The philosophy underlying these massive trade policy reforms include the following:

(i) Trade – both exports and imports can flourish in a free regime

(ii) Trade policy should go far beyond balancing of imports and exports and should lead to better technology, greater investment and more efficient production at home.

(iii) Liberalization and removal of licensing, quantitative restrictions and other discretionary controls on matters relating to exports and imports are essential to trade policy reforms. This meant fewer governmental restrictions, greater freedom to trade and lesser administrative controls. The process of pruning the negative list and decanalization has continued in recent years.

Export-Import Policy, 1997-2002

Objectives:

- To accelerate the economy to derive maximum benefits from expanding global market opportunities.
- To simulate sustained economic growth by providing access to essential raw materials, intermediaries, components, consumables and capital goods required for augmenting production.
- To provide consumers with good quality products at reasonable prices.
- To enhance the technological strength and efficiency of agriculture, industry and services, thereby by improving the competitiveness while generating employment opportunities and encouraging the internationally accepted standards.
- To conceive Export Processing Zones (EPZs) free from fiscal barriers and thereby providing an ideal setting for production at low cost, so that exporting units could compete in the International Markets.

Export-Import (Exim) Policy, 2002-07

- Removal of all quantitative restrictions and decanalization of exports (except few sensitive items) of farm products.
- Scheme of Special Economic Zones (SEZ) strengthened
- Major thrust to promote agricultural exports by setting up of Agri Export Zones and by removing export restrictions on designated items (agro and agro-based products)
- Transport subsidy provided for export of fruits, vegetables, floriculture, poultry and dairy products.
- Simplification of procedures to further reduce transaction costs
- Widening of the scope of Market Access Initiative Scheme to include setting up of Business Centres in Indian Missions abroad for focused market promotion of exports.
- Dereservation from small scale industry provisions of over 50 items including agricultural implements.

Export Promotion Councils

The basic objective of Export Promotion Councils is to promote and develop the exports of the country. Each Council is responsible for the promotion of a particular group of products, projects and services.

The main role of the EPCs is to project India's image abroad as a reliable supplier of high quality goods and services. In particular, the EPCs shall encourage and monitor the observance of international standards and specifications by exporters. The EPCs shall keep abreast of the trends and opportunities in international markets for goods and services and assist their members in taking advantage of such opportunities in order to expand and diversify exports.

The major functions of the EPCs are

1. To provide commercially useful information and assistance to their members in developing and increasing their exports;
2. To offer professional advice to their members in areas such as technology upgradation, quality and design improvement, standards and specifications, product development, innovation, etc.;
3. To organise visits of delegations of its members abroad to explore overseas market opportunities.
4. To organise participation in trade fairs, exhibitions and buyer-seller meets in India and abroad;
5. To promote interaction between the exporting community and the Government both at the Central and State levels; and
6. To build a statistical base and provide data on the exports and imports of the country, exports and imports of their members, as well as other relevant international trade data.

Agricultural and Processed Food Products Export Development Authority (APEDA)

The Agricultural and Processed Food Products Export Development Authority (APEDA) was established by the Government of India under the Ministry of Commerce on February 13, 1986 under the Agricultural and processed Food Products Export Authority Act, 1985. The main responsibility of APEDA is the export promotion of fruits and vegetable products, meat and meat products, poultry products, dairy products, confectionery, biscuits and bakery products, honey, jaggery, sugar and coca products, alcoholic and non-alcoholic beverages, pickles, chutneys, papads, cereals (non-basmati rice) and other processed foods.

The main objectives of establishing APEDA are:

- (i) To maximize foreign exchange earnings through increased agro-exports for providing higher incomes to the farmers through higher unit value realization;
- (ii) To create employment opportunities in rural areas by encouraging value added exports of farm products; and
- (iii) To implement schemes for providing financial assistance to improve post-harvest facilities to boost their exports.

The APEDA has brought qualitative change in the agricultural marketing system and environment and, therefore, has increased the credence of the agri-business in the products. The examples of these may be export of grapes and mangoes from Maharashtra and Karnataka; strawberry and mushrooms from Punjab and Haryana; litchi from Andhra Pradesh, Uttar Pradesh and Bihar; and cutflowers from Delhi, Haryana and Karnataka. The efforts made by APEDA had brought significant impact on the growth of exports of its scheduled products.

The APEDA has build links between Indian producers and the global markets. APEDA has undertaken following development programmes to achieve the objectives for which it has been set-up in the country:

- (i) Development of databases on products, markets and services;
- (ii) Publicity and information dissemination;
- (iii) Inviting official and business delegations from abroad and organization of product promotions and visit of official and trade delegations abroad
- (iv) Organization of seminars, workshops and awareness programmes on exports
- (v) as well as on latest farming practices; Participation in International Trade Fairs in India and abroad and organization of buyer-seller meets and other business interactions;
- (vi) Information dissemination through APEDA's newsletter, feedback series and library;
- (vii) Providing recommendatory, advisory and other support services to trade and industry;
- (viii) Problem solving in government agencies and organisations, RBI, and customs related to import-export procedures;
- (ix) Offer of financial assistance under various schemes, which seek to promote and develop agro-exports.

The activities for financial assistance from APEDA include;

- (a) Strengthening of market intelligence and data base through studies and surveys
- (b) Quality up-gradation
- (c) Development of Infrastructural facilities
- (d) Research & Development
- (e) Development of packing quality
- (f) Human resource development, and
- (g) Up-gradation of meat processing facilities.

General Agreement on Trade and Tariffs (GATT)

and

World Trade Organisation (WTO)

Background

Globalization is a process of growing economic linkages between countries through a reduction on restrictions on trade and capital flows etc., Experience of Inter-World War chaotic practices prompted leading economic powers of the world to search for a rule-based and orderly world trade regime supported by:

- a reconstruction of war torn economies,
- a solution of the developmental problems, and
- a healthy international financial system capable of tackling exchange rate and balance of payments problems.

Accordingly, they planned to create the following three international institutions for the attainment of these objectives.

The first institution, namely, the **International Bank for Reconstruction and Development (later known as the World Bank)** was created for financing (i) reconstruction of the war-devastated economies (particularly of Western Europe), and (ii) economic development of the backward countries.

The second institution, the **International Monetary Fund**, was created for supporting a regime of stable exchange rates and for overcoming short term balance of payments difficulties faced by member countries.

The third institution (which they failed to create) was the **International Trade Organization (ITO)**. Its objective was to create a new world economic order incorporating a system of free trade with minimum or zero tariffs and zero non-tariff barriers.

General Agreement on Trade and Tariffs (GATT)

The General Agreement on Trade and Tariff (GATT) was a multinational treaty to liberalize world trade and it took effect on 1st January 1948. GATT established a code of conduct for international trade, based on the principle that the trade should be conducted

without discrimination, tariffs should be reduced through multilateral negotiations and member countries should consult each other to overcome trade problems.

Objectives

The three basic objectives of the GATT were a) to provide a frame work for the conduct of trade relations b) to promote the progressive elimination of trade barriers and c) to provide a set of rules (codes of conduct) that would inhibit countries from taking unilateral actions.

Principles

1. Non-Discrimination

The basic principle of GATT is non-discrimination. Contracting parties accept the so called most-favoured nations (MFN) clause. It rules out any preferential treatment among nations as far as trade policy is concerned, except vis-à-vis those not members of GATT. That is, any country gives preferential tariff access to any other country then that concession must be extended immediately to all other countries so that all the contracting parties benefit to the same extent. The MFN clause has played an important part in encouraging countries to negotiate on trade liberalization.

2. Reciprocity

The reciprocity obligation requires that a country receiving a concession from another country should offer an 'equivalent' concession in turn.

3. Transparency

Article XI of the GATT forbids the use of direct controls on trade particularly quantitative restrictions, except under a few designated circumstances (such as a balance of payments crisis, allowed under Article XII). The rationale for banning quotas etc. is that a quantitative restriction is less transparent instrument for reducing imports than a tariff.

4. Consultation

It was expected that trade disputes among nations would be solved through mutual consultations within the GATT framework.

World Trade Organisation (WTO)

WTO is an international body to supervise and encourage international trade. The Uruguay Round of trade talks concluded in 1994 resulted in setting up of the World Trade Organisation (WTO) to take over the functioning of GATT for encouraging multilateral trade in goods and services. The WTO began functioning on 1st January, 1995. The Agreement on Agriculture (AOA) under WTO requires clear understanding.

Agreement on Agriculture (AoA) under WTO

The provisions under AoA can be understood to consist of five broad groups:

1. Market Access Commitment
2. Reduction Commitment for Aggregate Measure of Support (AMS)
3. Reduction Commitment for Export Subsidy
4. Sanitary and Phyto-Sanitary Measures (SPS)
5. Trade Related Intellectual Property Rights (TRIPS)

(i) Market Access

The provisions under market access commitment include the following:

- a. Tariffication of all non-tariff barriers (like converting quantitative restrictions to import duty)
- b. Reduction of all tariffs in a time bound framework as follows:

Country	Period	Reduction (%)
Developed	6 years	36
Developing	10 years	24

- c. If imports of foreign goods to the domestic market is less than three percent in the base period (1986-88), it must be brought to three percent and to further raise it to five percent in the implementation period.
- d. If dumping is proved, the countries will have the freedom to increase the import duty.

(ii) Aggregate Measures of Support (AMS)

The aggregate measures of support for a country's agriculture is the sum of product specific and non-product specific subsidies. If AMS in the base period (1986-88) is more than the permissible limit, it should be reduced by the following amount during the implementation period.

Country	Permissible AMS (% of GDP)	Reduction commitment if exceeds the limit (%)
Developed	5	20
Developing	10	13

(iii) Export Subsidies

The reduction commitment for export subsidies require that (a) the developed countries would reduce it by 36 percent in six year; and (b) the developing countries would reduce it by 24 percent in 10 years.

(iv) Sanitary and Phyto-Sanitary Measures (SPS)

The SPS provisions of AoA require all exporters to employ international standard relating to sanitary and phyto-sanitary conditions. In the case default, the importing countries are allowed to prohibit imports from defaulting countries.

The Uruguay Round of trade talks had evolved a detailed discipline that a member country may apply trade restrictive measure for the protection of human life or its health and of plant or animal life or their health. These measures are contained in the Agreement on the Application of Sanitary and Phyto-Sanitary (SPS) Measures. SPS measures are applied to protect human life (health) or animal life (health) from risks arising from

- (i) The additive, contaminants, toxins or diseases causing organisms in foods, beverages or food stuffs;
- (ii) The entry of or spread of pests, diseases, disease carrying organisms or disease-causing organisms; and
- (iii) The diseases carried by animals, plants or their products.

(v) Trade Related Intellectual Property Rights (TRIPS)

Trade related intellectual property rights include copyrights, trade-marks, geographic indications, industrial designs and patents. According to AoA, all the countries are required to provide for arrangements for protection of plant varieties. The developing countries were given a period of five years to evolve such arrangements.

The main features of the WTO Agreement on Agriculture (AoA), which are of concern to India, are:

1. India has been maintaining quantitative restrictions (QRs) on import of 825 agricultural products as on 1st April, 1997. Under the provisions of the Agreement, such QRs were to be eliminated. India had sought to remove them in three phases within an overall time frame of six year. i.e. upto 31st March, 2001. These QRs have since been replaced with appropriate tariffs.
2. The agreement also imposed constraints on the level of domestic support provided to the agricultural sector. In India's case, it may have, in future, some implications on minimum support prices given to farmers and on the subsidies given on agricultural inputs. However, the agreement allows to provide domestic support to the extent of 10% of the total value of agricultural produce. Our support to the Indian farmers continues to be less than permissible limit.

3. Disciplines on export subsidy do not affect us as India is not providing any export subsidy on agricultural products.
4. The agreement allows unlimited support to activities such as:
 - a. Research, pests & diseases control, training, extension and advisory services;
 - b. Public stock holding for food security purposes;
 - c. Domestic food aid.

Important terms related to external trade

(i) Quantitative Restrictions (QRs)

Quantitative restrictions are specific limits on the quantity or value of goods that can be imported or exported during a specific time period. Quantitative Restrictions are prohibited under GATT discipline. India has been maintaining QRs on imports of 825 agricultural products as on 1st April, 1997. These QRs have since been gradually removed from almost all products in phases. The Quantitative restrictions can easily be replaced with high import tariffs in case there is need to restrict import of these commodities for ensuring welfare of the farmers. Therefore, ability to restrict import of any commodity is not constrained in any manner by the provisions of GATT.

(ii) Dumping

Dumping is selling goods in a foreign country at a price which local producers regard as unfairly low. It means selling of goods at a price with which producers in the importing country cannot compete. Dumping is considered as unfair trade practice which can have a distortive effect on international trade.

(iii) Anti-Dumping

Anti-Dumping is a measure to rectify the situation arising out of the dumping of goods and its trade distortive effect. Anti-dumping duties are tariffs imposed in response to alleged dumping. The purpose of anti-dumping duty is thus to rectify the trade distortive effect of dumping. Anti-dumping duty as an instrument of fair competition is permitted by WTO. Anti-dumping is an instrument for ensuring fair trade and is not a measure of protection per se for the domestic industry. It provides relief to the domestic industry against the injury caused by dumping.

(iv) Green Box Policies

Green box policies is the term used to describe domestic support policies that are not subject to reduction commitments under the Agreement on Agriculture (AoA) under WTO. These policies are assumed to affect trade minimally and include support such as research, extension, foods security stocks, disaster payments and structural adjustment programmes. The subsidies under Green Box are not only excluded from any reduction commitments, but they are not subjected to any upper limit.

(v) Blue Box policies

Like the Green Box support, supports under Blue Box also exempted from any reduction commitment as they are also decoupled and hence considered to be least or minimally trade distorting. However, it differs from the Green Box support. The Blue box support has an upper limit.

These subsidies include direct payment given to farmers in the form of deficiency payment. In certain countries like United States, the difference in the government's minimum support price and the market price is paid directly to the farmers. This is called deficiency payment. Direct payment under production limiting programmes are also part of the Blue Box policy. Here the farmers are paid so that they do not produce (by setting aside land) beyond a certain level.

(vi) Amber Box Policies

These are those policies which are trade distorting and are covered under reduction commitment in WTO. These subsidies directly influence the market prices, they influence the farmer's decision about the choice of crop to be produced and quantity to be produced. Farmers enjoying relatively more of these kinds of subsidies can sell their products at a lower price than other competitive farmers of the same products can. Subsidies like input subsidies for fertilizers, electricity, subsidies in the form of lower interest rates, market price support fall under Amber Box category.