AGRICULTURAL MARKETING , CO- OPERATION AND FINANCE

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1. Marketing and Market

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.

Agriculture is a production activity involving conversion of solar energy into palatable/usable form in harmony with nature. In traditional varieties cultivation, seeds are used from previous year production. Land is ploughed with farm animals. Family labour does weeding, harvest and clean the grains. Usually the input used in production is mostly from own sources, purchased inputs are very minimum.

In the case of high yielding varieties cultivation input use is intensive. Take the case of ADT39 paddy production the following are needed. 1) Certified seed 2) water 3) machinery hours 4) special implements 5) inorganic fertilizer 6) fungicide/pesticide 7) herbicide 8) micronutrients, bio-fertilizers and 9) labour.

The non-availability or inadequate availability of any one or more of these inputs will affect paddy cultivation in a particular season. Hence, agricultural marketing studies both farm produce marketing as well as input marketing. The demand for farm inputs is derived demand. That is to produce paddy (primary demand) many inputs are required.

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.

1 .1 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 there by 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 there by 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.

1.2 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.
1. A reduction in the cost of marketing is a direct ,benefit to society.
2. Marketing process brings new varieties, quality and beneficial goods to consumers. It provides connecting link between production and consumption.
3. Approximately one third of all persons gainfully employed in the country are engaged in the field of marketing and about one forth of National Income is earned by marketing profession.

4. 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.
5. 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.
6. 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 modem farmers.

7. 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.

1.3 Market and its Classification

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.

Components of a **market**

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

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

The existence of 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. tv1ushroom 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:* There 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. Classifications of markets based on 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. Simmakkal market in Madurai.

ii) Specialized Markets: A market in which transactions take place only is 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.

1.4 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 .

1.5 Marketable Surplus and Marketed 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 farmers 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

Factors Affecting Marketable Surplus

The marketable surplus differs from region to region and with in 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. 1). Size of holding 2). Production of Commodity 3). Price of the Commodity 4). Size of family and 5). Requirements of seeds and feed

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. The marketed surplus may be more, less or equal to the marketable surplus.

Marketed surplus

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 requirements.

The marketed surplus is less than the marketable surplus when the farmer retains some of the surplus produce. This situation holds good under 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. Some times farmers retain the produce even up to the next production season b) Farmer 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, farmer may consume more of the first and less of the second crop.

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.

1. 6 Selling Behaviour of Farmers

The selling behaviour of farmers are determined by:

1.Financial condition of the farmer
2.Nature of commodity to be marketed
3. Marketable surplus
4. Binding of farmer to particular middleman.
5.Development of marketing institutions.
6.Transport and infrastructure facilities availability.
7.Market information
8.Government policies
9.Weather conditions at the time of harvest
10. Packing materials and destination of markets.

1) Financial Condition of the farmer :I

If the farmer is in need of urgent cash requirement he may have to sell the produce at a price less than the one offered in other markets. Usually small and marginal farmers sell their produce immediately after harvest

where as other big farmers wait for the market price to improve and then sell the produce.

2) Nature of commodities to be marketed :

***Cereals and Pulses*:** For cereals the marketable surplus will be less compared to other crops. Paddy can be readily sold at any time as it is the staple food crop In Tamil Nadu. Other cereals are usually consumed by poorer sections of the population so they have less demand.

Pulses production is less and also the marketable surplus as they are cultivated as mixed crop or rice fallows, so they are mostly sold within the village.

Oil seeds. The regulated markets attract very good amount of groundnut kernels in .Chingleput, North Arcot and South Arcot districts. The gingelly is widely cultivated in South Arcot and Trichy districts and they are mostly sold within the village, a very little quantity reach regulated markets.

***Sugar cane* :**Cane is supplied to private or co-operative sugar mills.

Jaggery: Sold In regulated markets.

Cotton : Regulated markets in Northern districts of Tamil Nadu and Private traders in other districts.

Turmeric : Commission agent in Erode

Vegetables and flowers : Mostly commission agents

Fruits like banana and mango: Sold to pre-harvest contractors.

Milk : Co-operative marketing society or private vendors

3) Marketable surplus

Higher the marketable surplus the produce is sold outside the village and a few months after harvest when the price is higher, 'Lower the marketable surplus sold within the village to itinerant merchant or brokers.

4) Binding of farmer to particular middleman

If the farmer has taken production credit or loan for some other purpose he will sell the produce to that particular middleman usually at a price less than the prevailing market price. Usually small and marginal farmers take credit and sell at lower prices.

Paddy: Rice Mill owners

Jaggery, Turmeric, Vegetables, Flowers :Wholesaler or commission Agent

Milk: Vendors

5) Development of marketing institutions.

Regulated markets are well developed in Northern districts of Tamil Nadu and attract paddy, groundnut, cotton and jaggery. Cooperative marketing society is well developed for sale of milk and areca nut.

Fruits Vegetables Flowers Turmeric -Commission Agent

6) Transport and Infrastmcture development

Rail, road, air and cargo shipping development influence the marketing of. agricultural produce.

Road : Vegetables, Fruits, milk -neighbouring states

Rail **:**wheat and rice throughout India ; Air : Other countries -cut flowers and cacti Flower from Madurai to Bangalore and Mumbai

7) Market infirmation s

At major cities within India and other countries market information availability in newspapers help to market the produce at higher price because of integration of markets.

8) Government policies

Sales tax, Commercial tax, export tax, export and import policies, monopoly procurement and restriction of agricultural produce between districts and, states affect the selling behaviour of farmers.

9) Weather condition at the time of harvest

If the weather at the time of harvest is humid, drying of produce will not be possible so fam1ers sell the produce at less price due to high moisture content e.g. Paddy sales after **kuruvai** harvest in Cauvery delta region.

10) Packing materials and destination of markets

Grapes : baskets and pots.

Cereals and Pulses : gunny bags

Tomato : wooden cases

Betel vine : banana sheath and coconut leaves.

Destination of markets

Local markets : Loose packing

Secondary markets : good and firm packing

Tertiary markets for exports: Attractive packing, Internal containers

Mushroom : dehydrated and tinned

Prawn : deep freezers

2. Marketing Functions

2.1 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 commodity. Also the same commodity will have different problems in different regions. Take the case of paddy in Cauvery delta region where the harvest of **kuruvai** paddy should be done quickly to take up second **thaladi** paddy. And also the humidity will be high at **Kuruvai** harvest so there will be drying problem. This is not the case in other paddy growing districts of Tamil Nadu where the harvest will fall after January month. Various approaches have been suggested and used to study marketing problems. These are functional, institutional, commodity and behavioural approaches.

i) Functional Approach

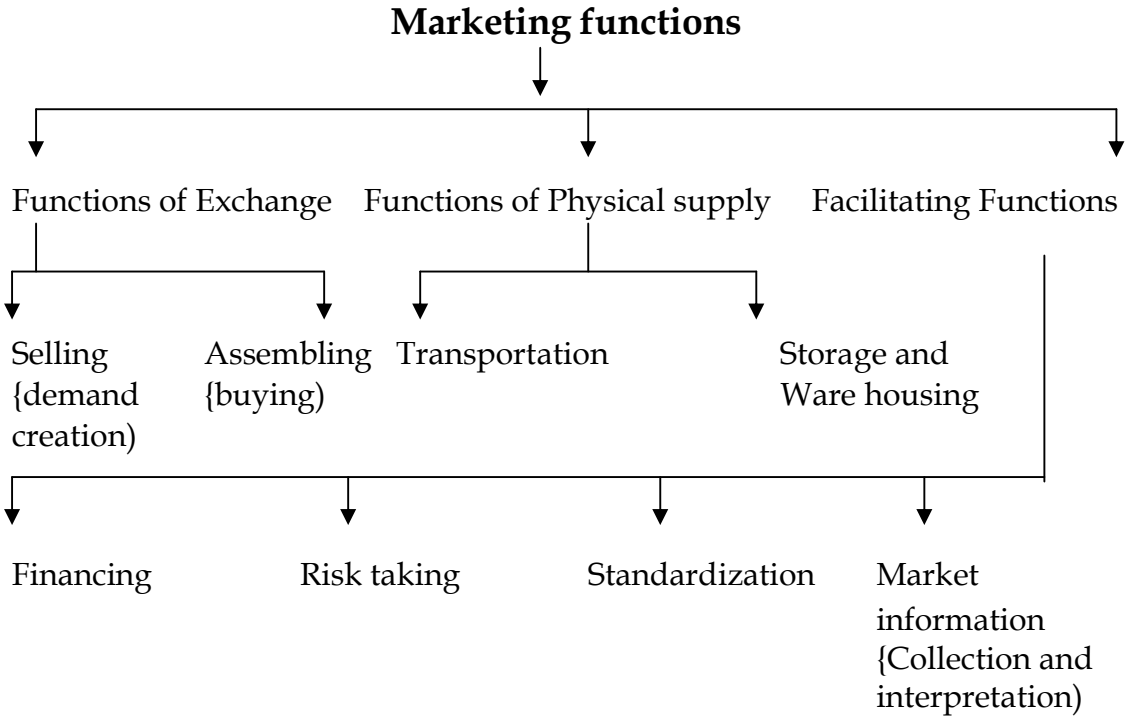
A marketing function is an act, operation on service by which the original producer and the final consumer are linked producer and the final consumer are linked together. Marketing consists of many operations and an operation may be performed several times in the marketing process. The functional approach splits down the field of marketing into a few functions. This method analyses in detail the specific functions of marketing such as buying, selling, transportation, storage, standardization, grading, financing, risk taking and marketing research.

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.

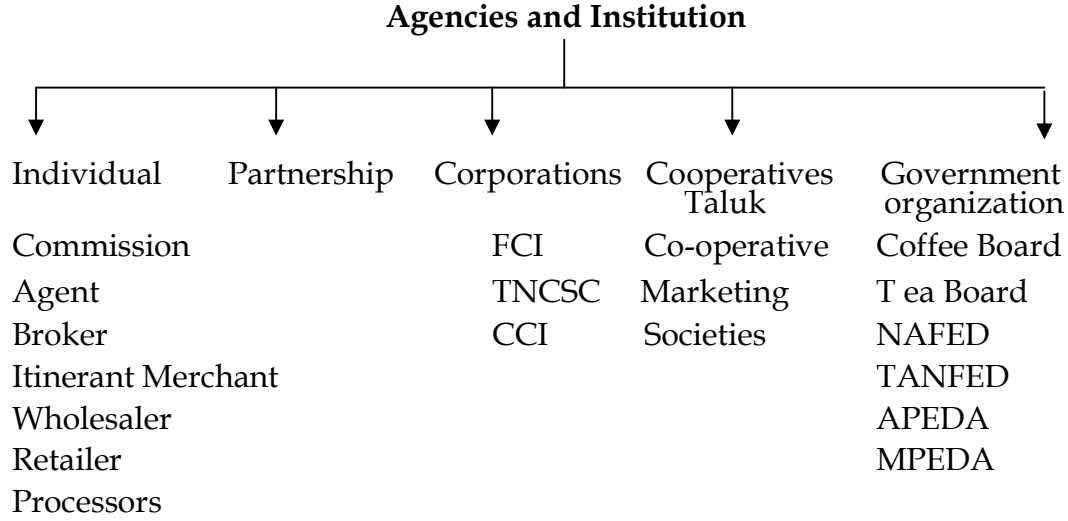
The defects of this approach are

1. An undue emphasis on functions of marketing does not permit one to know how these functions are applied to specific business operations.
2. The marketing functions are so numerous that it is difficult to eliminate the unnecessary from the necessary functions



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. The serious limitations of this method are that if leaves one with an inadequate understanding of marketing. Since the material presented is often largely descriptive and does not show effectively the inter-relations of the institutions studied.

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. The main advantage of this approach is that it is concrete since all work relates to a specific product but it is a time consuming 'process and often results in excessive repetitions.

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.

2.2 Marketing Functions

Under the approaches to study of marketing we have seen the marketing functions marketing functions can be broadly classified as:

1. Functions of exchange which includes selling and buying.
2. Functions of physical supply, which consist of transportation, storage and warehousing.
3. Facilitating functions, which comprise of financing, risk taking, standardization and market information.

Functions of Exchange

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

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.

What to buy (Product)?

1. When and how much to buy? (Time and quantity)

2. From whom and where to buy? (Source)
3. 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 where as assembling involves creating and maintaining of stock of goods purchased from different sources. The problems encountered in assembling of agricultural products are:

1) Seasonal production
2) Difficulties in controlling quantity and quality
3) Non- availability of information about sources of supply
4) Low quantity of marketable surplus.

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 good 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:

1) **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.
2) **By open auction:** The broker invites bids for the produce and to the highest bidder is sold the produce. e.g. vegetables by commission agents.
3) By private agreement
4) By quoting on samples
5} **Dara Sales** The heaps of grain of different quantities are sold at a flat price.
6) Close tender system: **In** regulated markets,
7) **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. e.g. Flowers and vegetables by Commission agents.

Functions of Physical Supply

Functions of physical supply/distribution includes determining warehouse locations '{establishing a material handling system, maintaining an inventory control system, establishing procedures for

processing orders) and selecting mode of transportation. Transportation and storage account for the major share in the total distribution cost.

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 function of transport is

1. It helps in the growth of industries whose products require quick marketing e.g. vegetables, flowers, milk and fish.
2. It increases the demand for goods through widening of market
3. It creates place utility. As such transportation bridges the gap between production and consumption centres.
4. By virtue of improvement in the speed of transport it offers time utility to products.
5. It helps in stabilization of prices by moving commodities from surplus area to deficit area.
6. Ensures even flow of goods Into the hands of consumers.
7. It enables to consumers to enjoy the benefits of many goods not produced locally.
8. 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.

Road Transport

Merits : It is cheap, safe and flexible.

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

Rail Transport

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

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

Water Transport

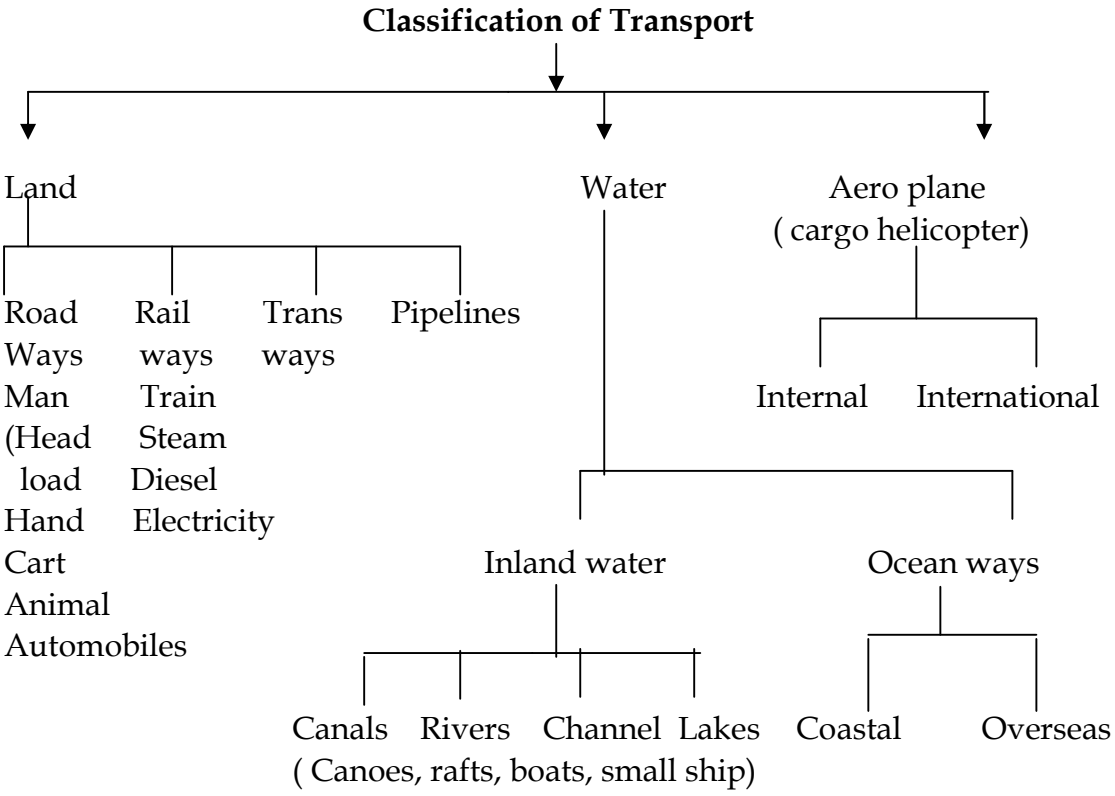
Merits : Cheapest means of transport, high carrying capacity, creator of international trade and especially suitable for certain areas (forest products).

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

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.



Railways as **on 1994-95**

Route length 62,660 Km of which electrified is 11,793 Km (18.8%).

Length of Railway lines	***Goods handled in 1994-95***
Broad gauge : 39,612 Km	Food grain : 20.7 million tonnes
Metre gauge : 39,612 Km	Fertilizer : 21.5 million tonnes
Narrow gauge : 3838 Km	Total haulage : 365 million tonnes

Road transport

Total Length **-**2.7 million km of roads

Length of National High ways 34,298 (1994-95) form less than 2% of total network which carries nearly 40% of total road traffic. Roads account for 60% of total goods traffic.

Shipping: India has 5560 Km long coastline with 11 major and 139 operable minor ports. Food grain 0.9 MT, Fertilizer and raw materials 8.5 and vegetable oil -0.6 Total 197.3 MT were handled in 1993-94.

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.

Storage and Warehousing

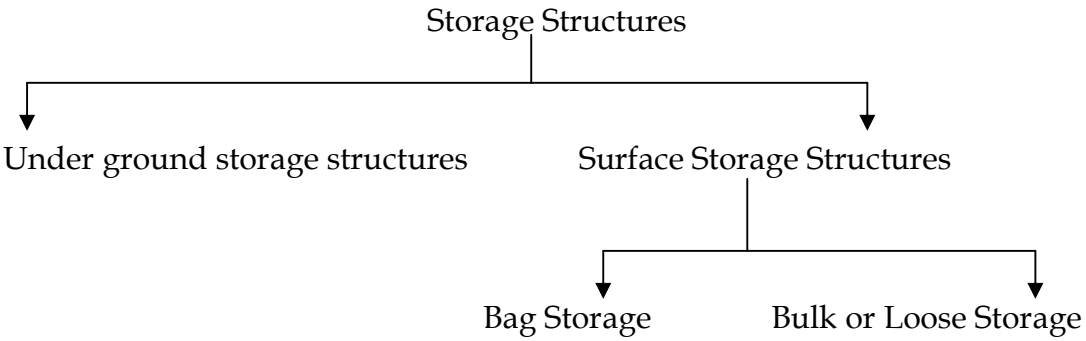
Storage is an important marketing function, which involves holding and preserving goods from the time they are produced until they are needed for consumption. While transportation is the process of transferring goods from one place to another, storage is a function, which helps in preserving goods in 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 detoriation.
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

Types of Warehouses

Based on ownership	On the basis of type of commodities stored
1) Private Warehouses	1. General Warehouses
2) Public Warehouses	2. Special commodity Warehouses (for cotton, wool, tobacco and petroleum products)
3) Bounded Warehouses (At see or air port)	3. Refrigerated warehouses the temperature is maintained below 300 to 50°F or even less

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

Table 2.1 Number and capacity of warehouses in India

(As on 31.3.96)

Particulars	India	Tamil Nadu
Central Warehouses(CWC)		
No. of warehouses	458	27
Capacity('000 tonnes)	6,975	605
State Warehouses (SWC)		
No. of houses	1,371	62
Capacity ('000 tonnes)	11,206	609
Food Corporation of India(FCI)		
Capacity ('000 tonnes)		
Covered		
Owned	12,414	588
Hired	8,252	111
Total	20,666	699
CAP (open)	5,744	
Co-operative Sector		
Rural godowns	50,555	-
Marketing godowns	8,710	120.70

Source: Central Warehousing Corporation, New Delhi Food Corporation of India, New Delhi.

Utilization of Warehouses by Farmers

The storage capacity available under different warehouses is furnished in Table 2.1. Only 29 percent of Central Ware housing Corporation and six percent of the State Ware "housing Corporations are used by farmers or their co-operatives. 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.

Rural Godowns

The Government of India launched a scheme for the establishment of National Grid of Rural Godowns (NGRG) in July 1979. The scheme aims at the creation of network or rural godowns in the states and union territories, primarily to take care of the storage requirements of the small and marginal farmers. The scheme was launched with the following specific objectives.

1. Prevention of distress sale of food grains and other agricultural commodities immediately after harvest.
2. Reduction in quantity and quality loss arising at present due to unscientific storage by fanners.
3. Reduction in pressure on transport system in the post harvest period. Creation of employment opportunities in rural areas.
4. Helping the fanners in getting loans against stored products.
5. Helping in easy procurement of food grains by Food Corporation of India.

The cost of construction of rural godowns is subsidized to .the extent of 50 percent is to be .shared equally by Central and State governments. The remaining 50 percent capital is arranged by the implementing agency such as co-operative marketing society in the form of loan from the commercial banks.

Cold Storage

The term cold storage refers to a refrigerated chamber for the storage of perishable commodities such as fruits, vegetables, fish, eggs, ,meat, dairy products etc. In a cold storage, the temperature is maintained in the range of 30 to 50° F. The other form of cold storage is freeze storage in which the temperature is kept below 30° F and the product remains at frozen state.

As on 1995-96 there is 3253 number of cold storage units in operation with a storage capacity of 87.3 lakh tonnes. Nearly 86 per cent of cold storage units are privately owned which account for 93 percent of the total cold

storage capacity. The direct involvement of government is negligible in cold storage sector. Potato is the main product, which is stored in the cold storage. Out of total capacity utilization 88 percent is used for storing potato.

The construction of a cold storage requires heavy investment in terms of building and machines. Similarly to run the cold storage, the cost on electricity amounts to 50 per cent of operation cost . As such there is need to develop low cost and energy saving cold storage units. The available capacity of cold storage is much less than the requirement . It is barely sufficient for 15 per cent of potato production and far less than one per cent of fruits, vegetables and fish production. The cold storage facility has to be further increased in view of the need to promote export of processed foods.

2.3 Facilitating Functions

Apart from function of exchange and function of physical supply there is a third group of functions whose involvement in the process of marketing is rather indirect and remains as an undertone. Their importance and necessity cannot be ignored because they are helpful in minimizing various lags between production and consumption created by time, place, quantity and quality elements. These facilitating functions are financing, risk -bearing standardization and marketing information.

Financing

Between production and consumption ownership of commodities shifts many times, middlemen need finance not only for the purchase of stocks but for performance of various marketing functions such as processing, storage, packaging, transport and grading. The process of arranging necessary finance for marketing is termed as "Marketing Finance".

Risk bearing / Taking

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.

I) 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.

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.

The size of India's food industry estimated at Rest. 2,50,000 crores is expected to double by 2005 AD of this, value added processed foods are forecast to rise three times from the present Rest. 80,000 crores worth to Rs. 2,25,000 crores during the same period. Thus there is good opportunities for employment generation, particularly in the rural areas.

In India, the agro-based industrialization has gained momentum during the last few years and the degree of processing has been intensified to get the higher value added products. Value added as well as processing of by-products from agro raw materials can be seen in Table 2.2.

Table 2.2 Agro based value added products and processing by-products for domestic and foreign markets .

SI No.	Commodity	Value added products		By-products processing
		Domestic market	Exports	
1	2	3	4	5
01	Paddy/Rice	Packaged & branded rice (including *Basmati* rice) ready to eat snacks (or fry & papers eat), to eat meals	Packaged and branded *Basmati* rice	Rice-husk particle boards, rise 'bran oil,), ready. straw boards and papers
02	Wheat	Fortified *atta,* bread biscuits, vermicelli, pasta products, . (noodles, macromo, spaghetti pizza base) . *suji* based.	Pasta products biscuits	Straw board paper
03	Maize	Starch, syrups, dextrose, cosmetics	Starch	Furtural from maize cobs, oil from maize cobs
04	Barley	Atta, beer	-	-
05	Pulses	Branded and processed	-	-
06.	Oil seeds	Double filtered and	Oil -cakes	Soya-based

		refined branded consumer packs		products (Soya milk, Soya flour, Soya based snacks and nuggets)
07	Sugarcane	Sugar cubes	Sugar	Alcohol (industrial & portable from molasses, paper boards and paper t from bagasse.
08	Potato	Potato chips, flour, concentrates, vodka, starch	Wodka, potato chips	-
09	Cotton	Yam and Textiles	Oil cake	Cotton seed oil (branded and refined) ,oil-cakes, cattle feed
10	Fruits	Slices, juices, squashes, jams, jelly, fruit based drinks, pickles	Pulp, slices, juices, - squashes, jams, jelly, fruit based drinks and concentrates, pickles	-
11	Vegetables and flowers	Dried frozen, cut vegetables, ink branded consumer packs, cooked and ready to eat vegetables, carry, frozen snacks.	Dried, frozen vegetables cut flowers and branded flower seeds	-
12	Spices	Processed and branded consumer pack, for the whole range of spices	Processed and branded consumer	-

			packs for the whole range of spices	
13.	Fish	Frozen and dried fry & eat fish products products (fish cutlets fish fingers, minced. fish meat, fish burger, prawn kababs, fish pickles)	Processed fish and fish products (IQF & block frozen from fry & eat consumers packs)	Fish oil & fish meal
14.	Poultry	Branded chicken in consumer products packs (chicken legs, breasts, ready to eat chicken curry , chicken burgers, chicken cutlets)	Branded chicken Products in frozen and consumer packs	-
15.	Other animal	Milk and Milk based products (cheese, chocolates, *shrikhand,* sweets)	Fresh and frozen mutton and beef products based products (leather based shoes, bags, fashion farming etc.)	Mutton based Products & beef based products in frozen form & leather based value added products
16.	Other plantation crops	Tea & Coffee in and processed branded consumer branded silk materials packs,	Tea & coffee in processed and consumer packs, silk based products .	-
17.	Forest products	Paper, honey, bamboo based products, resins	Honey	Gum

Source: U.K. Srivastava and N. T. Patel, *Managing Food Processing Industries in India,* Oxford & **IBH** Publishing Co. Pvt. Ltd., pp. 18-19.

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, Past~ 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
6. Processing serves as adjunct to other marketing functions such as transportation, storage and merchandising.

Processing of Wheat and Rice

About 90% of wheat is taken as *chappathis*, 10% is converted to bread, biscuits, bun and cakes. There are about 500 flour mills in India.
As on 1994, there are about 1,40,000 rice mills in India (Table 2. 3)

Table2 .3. Number of Rice Mills in India

Type	Number	Percentage
Huller Mills	90,091	66.2
Sheller Mills	4,237	3.1
Huller-shellerMills	8,362	6.1
Modern rice Mills	33,557	24.6
Total	1,36,247	100.0

The composition of food processing industry for IX Five Year Plan is given in Table 2. 4

Table 2.4 Composition of Food Processing Industry by the end of IX Five Year Plan

Products	Percentage
Oils and fats	36.0
Dairy products	18.9
Cold beverages	15.6
Beverages	15.3
Indian Food	1.4
Western food	1.5
Bakery products	6.5
Confectionery	3.5
Processed fruits & vegetables	1.3

Source: Report of Working Group on Food Processing Industry for the Ninth Five Year Plan, Ministry of Food Processing, Government of India.

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

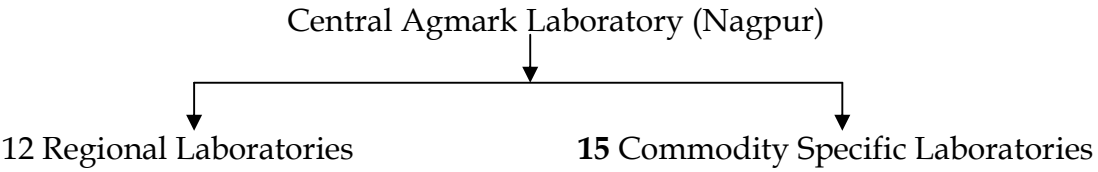
1. Grading before sale enable farmers to get a higher price for their produce.
2. Grading facilitates marketing
3. Grading widens market, without inspection the sale can be effected over phone at distant places.
4. Grading helps consumers to get standard quality products at fair price shops.
5. Grading 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.

Progress in India

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. Ti111991, 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)



There are 566 approved grading and or testing laboratories

State owned	110
Cooperatives	8
Private commercial	35
Private Packers	413

Value of grading done in 1998-99

In 1998-99, the commodities valued at Rs. 65 crore were graded under Agmark for export. For domestic trade, the Directorate Marketing also undertakes grading for ensuring purity and quality of agricultural commodities valued at Rs. 3484 crore were graded under Agmark. Commodities worth Rs. 5200 crore during 1998-99 were graded at producers level; programme of which is being implemented by the States/UTs under the supervision of the Directorate. Cotton Classing Certificates for 3,00,843 bales of cotton valued at Rs. 297.29 crore during 1998-99 were issued. Under the Meat Food Products Order Scheme, 275.70 tonnes of Meat Food Products valued at Rs. 33.80 crore were manufactured by 159 licensed manufacturers during1998-99.

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 1t is not so for agricultural produce because agriculture production is done in harmony with nature. Farmer has little or no control over nature.

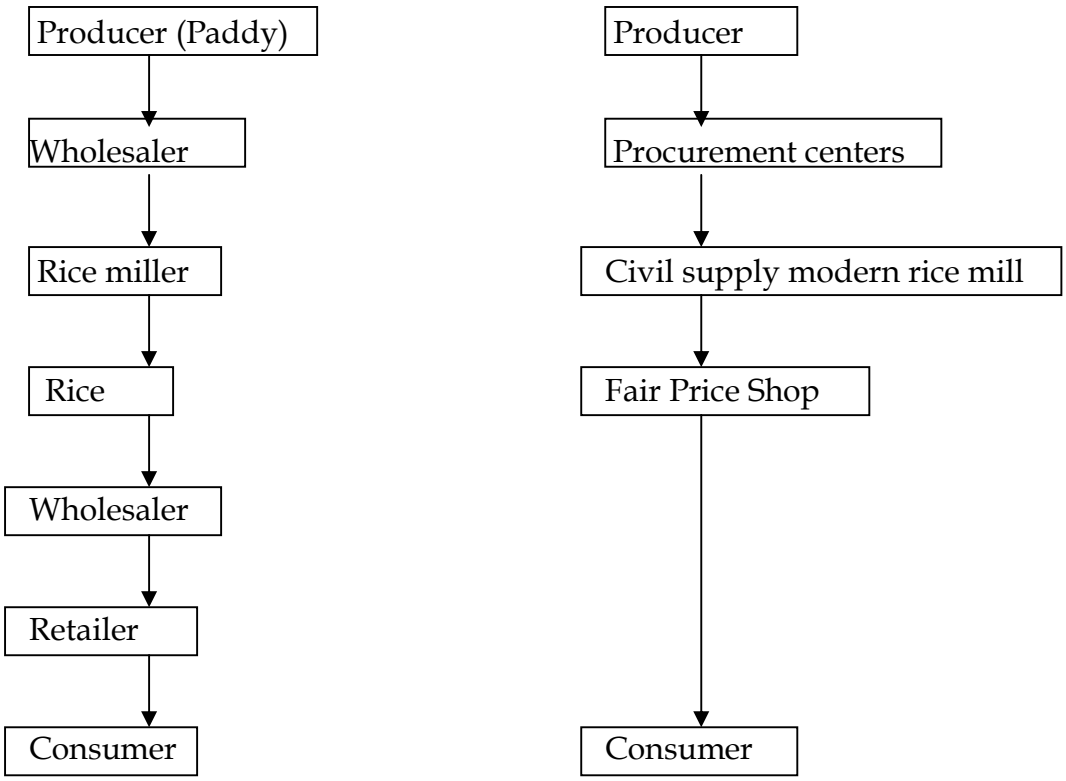
The possible source of quality deterioration during production are pest and disease attack, weed, seed mixing, non filling of grains due to late flowering, mixture and off types and other varieties, inclusion of foreign matter. These. Quality-deteriorating factors can be reduced at the time of harvest 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 there 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.

3.Marketing Efficiency

3.1Marketing 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



Marketing Costs

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 for the service rendered.

The cost involved in marketing plus the profit margin changed by the market functionaries for the service rendered constitute market margin.

3. 2 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 i^{th} intermediary

Pi = Purchase value paid by the i^{th} intermediary

Qi = Quantity of the product handled by the i^{th} intermediary

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

Difficulties in using this method are

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.

The difficulties in the use of the this method are

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 .

3. 3 Marketing efficiency

The term marketing efficiency refers to the effectiveness or competence with which a market structure performs its designated function.

Efficient marketing

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 out weighs 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 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).

3. 4 Market Structure

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

Components of a **Market Structure** which together determine the conduct and performance of the market are concentration of market power, degree of product differentiation, conditions of entry of firms in the market, flow of market information and degree of integration. The market structure determines the market conduct and performance.

Market Conduct refers to the patterns of behaviour of firms, specially in relation to pricing and their practices in adopting and adjusting to the market in which they function. Market conduct includes Market sharing and Price setting policies, polices aimed at coercing rivals and policies towards setting the quality of products.

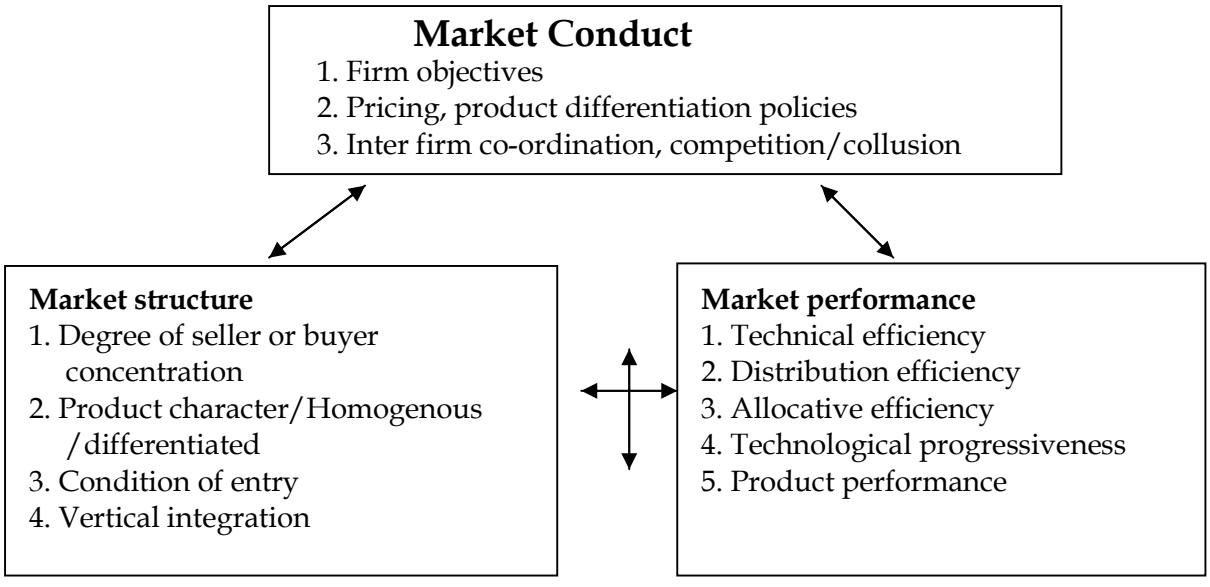
Market performance refers to the economic results that flow from the industry as each firm pursues its particular line of conduct.

Defects of Agricultural Marketing Systems

1. Lack of organization among farmers.
2. Forced sales by farmers.
3. Superfluous middlemen: more middlemen are engaged in marketing than it can actually engage in.
4. Multiplicity of Market charges
5. Malpractices in weights and measures adopted by middlemen in the markets.
6. Multiplicity of weights and measures.
7. Adulteration
8. Inadequate storage facilities.
9. Inadequate transport facilities from villages to *taluks* or district head quarters.
10. Lack of financial facilities at .Cheaper interest rates.

Needed Strategies to improve the Agricultural Marketing System

1. Improvement of facilities ,available at Regulated markets and attraction of farmers to use the facilities.
2. Use of metric system of weights and measures.
3. Increased provision of storage facilities at the village level. Encouraging farmers to make use of Rural godown, SWC and CWC godown.
4. Improvement in Transport facilities between *taluk*/district head quarters and villages. Provision of bus facilities to all villages.
5. Provision of market news through mass media in vernacular language.
6. Restructuring the functioning of co-operative marketing societies by periodically conducting elections.
7. Announcement of remunerative support prices before the commencement of season.



5. Diversification

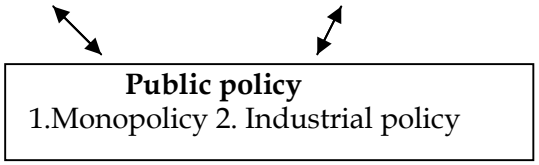
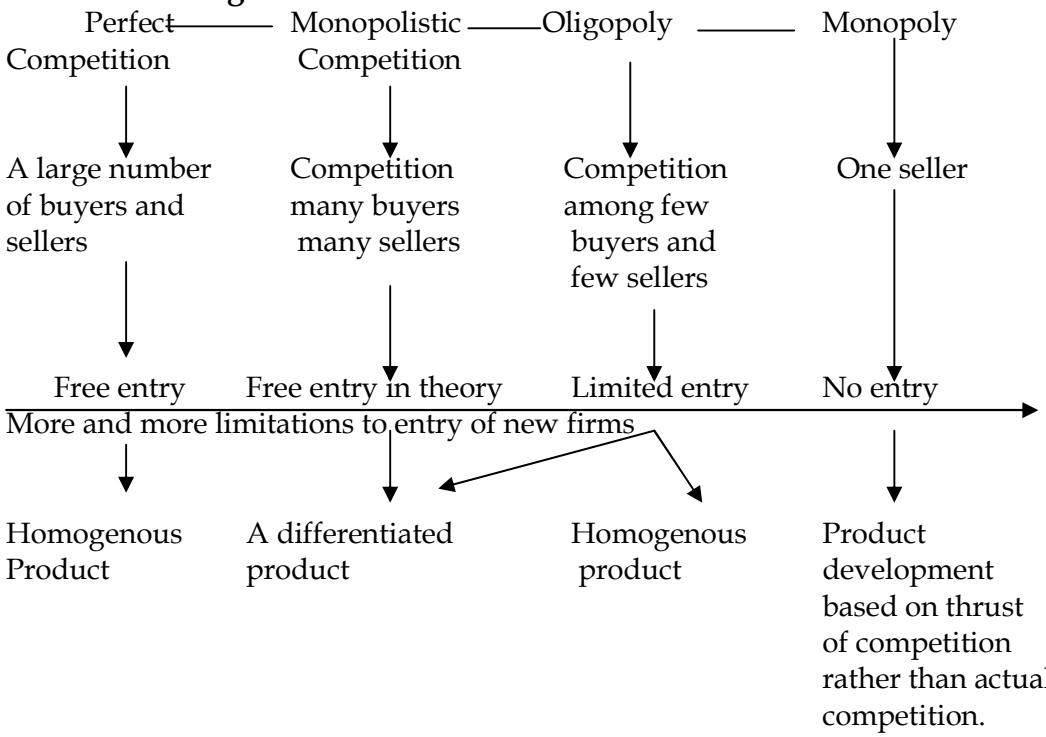


Fig 3.1 Influence of Market Structure on Market Conduct and Performance

3. 5 Price Determination

Fig. 3.2 Characteristics of different markets



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 3. 3. Given the supply the shifts in demand curve and its intersection with supply curve determine the equilibrium price. When demand is D1D1 the equilibrium price is P1 at that market determined price the individual firm is a price taker and equates P1 (which is also the Marginal revenue and Average Revenue for the firm)with its Marginal Cost . Then the firm produces q1 quantity of output and sells it at P1 price and earns super normal profit (Fig 3.4.) When the demand curve shifts to D2D2 the market equilibrium price is P2 and firm equates this price to MC and produces q2 quantity. But P2 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 D3D3 the new equilibrium price is P3. At that price , P3 =MC=AVC which is just sufficient to cover Average Variable Cost. If the price falls below P3 the firm will pull down its shutters since the price does not cover AVC.

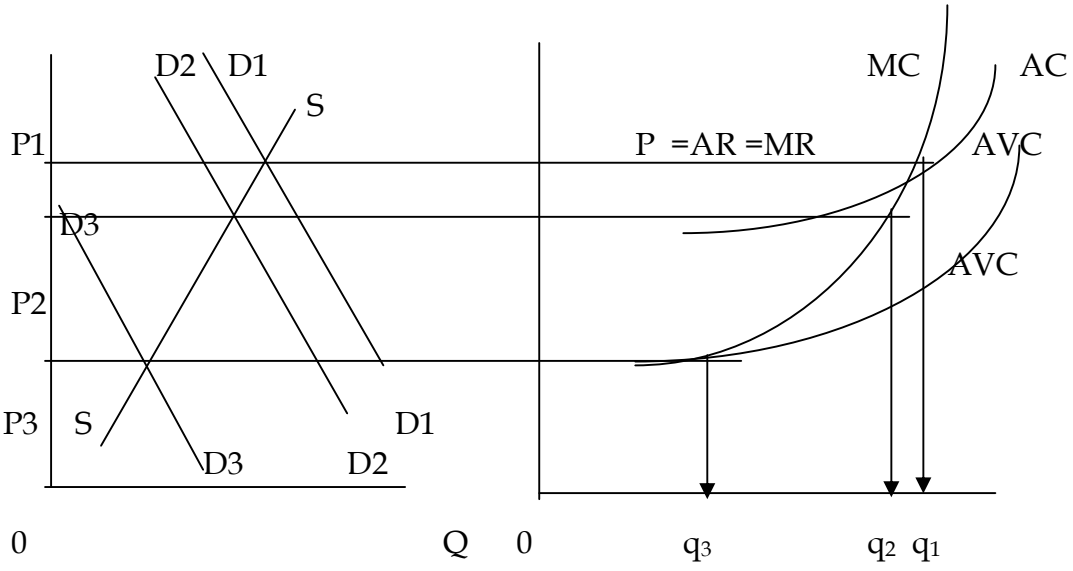


Fig 3.3 Equilibrium price in the market

Fig 3.4 Firm's equilibrium production in short run

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. 3. 5.

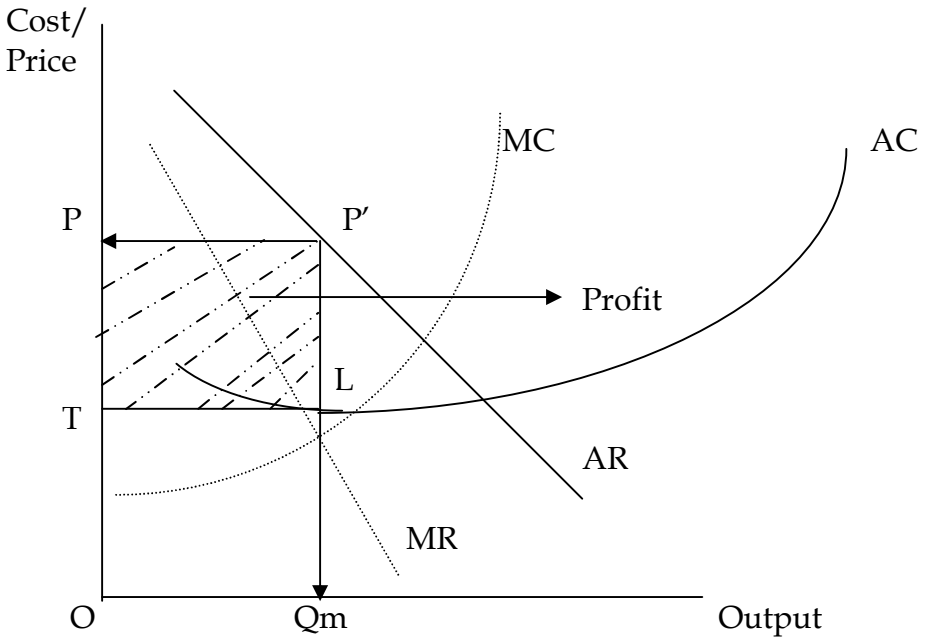


Fig. 3. 5 Price determination under monopoly

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 Qm 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). Where as under perfect competition MC = MR = AR.

3. Price determination under monopolistic competition

An industry (a group firms producing identical product) 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 (Fig 3.6a).

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 is shown in Fig 3.6.

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(Fig 3.6b).

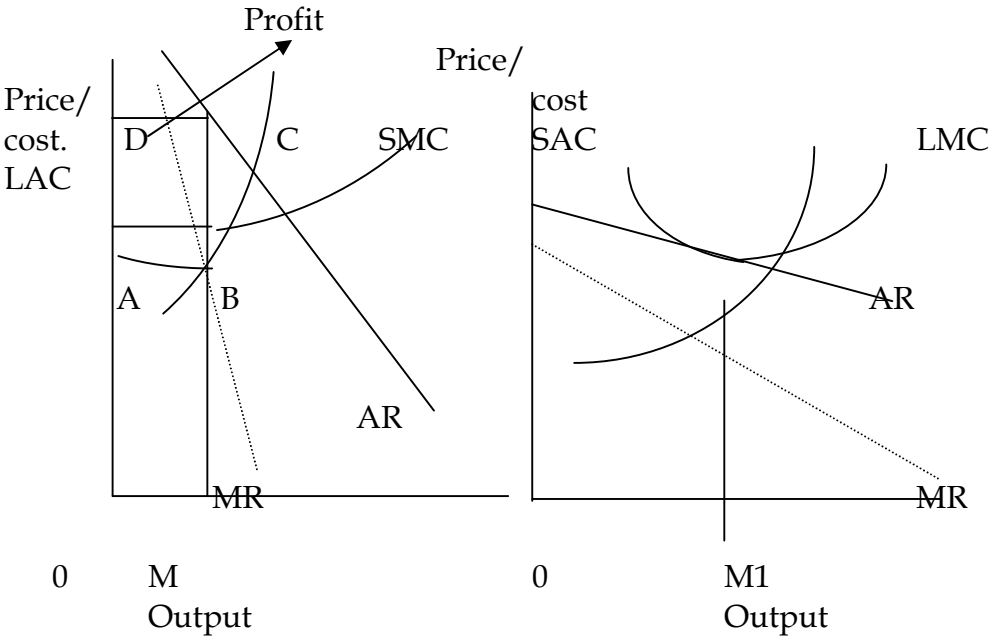


Fig 3. 6a Short period equilibrium **Fig 3.6b Long period equilibrium**

Fig 3.6 Monopolistic competition : Equilibrium of the firm in Short run and

Long run

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(Fig 3.6b).

4. Marketing Institutions and Government Intervention

Marketing institutions are big business organizations, which have come to operate the marketing machinery. In addition to individuals, corporate, co-operatives 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. Some important institutions in the field of agricultural marketing are:

1) State Trading Corporation (STC) 2) The Food Corporation of India.
2) The National Agricultural Co-operative Marketing Federation (NAFED).
3) Cotton Corporation of India (CCI)
4) Jute Corporation of India (JCI)
5) National Dairy Development Board (NDDB).
6) National Oil seeds and Vegetable Oils Development (NOVOD) Board.
7) Tobacco Board.
8) Agriculture Processed food Products Export Development Agency (APEDA).
9) The Directorate of Marketing and Inspection, Govt. of India, State level Agricultural Marketing Departments and Agricultural Marketing Board.
10) State and Low level co-operative marketing societies, fair price shops, Consumers Co-operative stores, milk union etc.

4.1 Regulated Markets

Markets in which business is done in accordance with the rules and regulations framed by the statutory market organization and represent different sections involved in markets. The marketing costs in such markets are standardized and practices are regulated. As on 1995-96 there are 6968 regulated markets in India.

It is **not compulsory** for the farmer to sell his produce. in the regulated market yard. Instead **voluntary** action on the part of the farmers to take advantage of such a market is assumed. It acts as an **alternative marketing** system. 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, but only 13 percent of regulated markets have grading facilities.

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.

The **market committee** consists of representatives of all sections i.e.. farmers, traders, co-operative marketing societies, co-operative or commercial banks, autonomous bodies (*Panchayat Samithi* and Municipal Board of the area) and government officials. The number of farmer members is more than that of other interest groups.

The sources of funds to market committee for meeting administrative expenditure, to create additional facilities in the market area are market fee, license fee/renewal fee and subsidy from the government.

Settlement of Disputes: Disputes arising between producer- seller and traders by reason of the quality of the produce, sub- committee of the market committee solves account and deductions of unauthorized charges. This avoids legal complications and unnecessary expenditure.

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 road and approach roads to the markets, construct market yard and sub- yard, establish and maintain the Board office and others as specified;
2) To tender advice to the government on the functioning of market committee and on improvement in agricultural marketing as and when referred to, and
3) To frame byelaws, help in the functioning of market committees and supervise their operations.

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.

4. 2 Co-operative 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 hot 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) T o 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 member's produce. T o 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

↓

Primary co-operative marketing societies(*Taluk* Level)

Three-tier structure

State level marketing Federation

↓

District marketing societies

↓

Taluk Primary Cooperative marketing societies.

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

Membership

There are two types of members in co-operative marketing societies.

a) **Ordinary Members.** Individual Farmers, Co-operative farming societies and service societies of the area may become the ordinary members of the co-operative marketing society. They have the right to participate in deliberations of the society share in profits and participate in decision-making process.

b) **Nominated members.** Traders with whom the society establishes business dealings are enrolled as nominated members, Nominated members do not have the right to participate in decision-making and share in profits.

Sources of Finance

i) **Share Capital** : Farmer members and state government subscribe to the share capital of the marketing societies.
ii) **Loans:** The societies can avail loans from the Central and State cooperative banks and Commercial banks by pledging and

hypothecation and also by advancing credit to the extent of 50 percent of owned capital.

iii) **Subsidy:** Societies get subsidy from the government for purchase of grading machines and transport vehicles to meet their initial heavy expenditure. They also get a subsidy for a part of the cost of the managerial staff for a period of 3 years to make them viable.

Progress

The value of agricultural produce marketed through the cooperative marketing societies increased from Rs.53 Crores in 1955-56 to Rs.6274 Crores in 1989-90. The produce marketed through these societies account for 8 to 10 percent of the marketed surplus. The progress of marketing societies varied from state to state and within each state from commodity to commodity. Food grain, cotton, sugar cane, oil seeds, fruits, vegetables and plantation crops were important commodities marketed ~ these societies. Maharashtra, U.P, Gujarat, Punjab, Karnataka, Tamil Nadu and Haryana together account for more than 80 percent of the total agricultural produce marketed through cooperatives in the country.

Over 70,000 retail outlets of these societies deal in agricultural inputs. The value of agricultural inputs marketed by marketing societies has increased from Rs.36 Crores in 1960-61 to Rs. 2117 crores in 1989-90. During the last 30 years (1960-61 to 1989-90) the number of Primary Agricultural Co-operative Marketing Societies increased from 3108 to 6908.

Reasons for Slow Progress of Co-operative Marketing Societies

The main reasons for slow progress are

i) Fanners do not make use of cooperative societies since they are situated at distant *taluk* levels, fanners need cash after harvest to meet personal obligations and also they are indebted to local moneylenders.

ii) In some cases rivalries among fanner members result in indecision, which retards the progress of societies.

iii) Societies do not provide facilities of food and shelter to fanners when they visit the market for the sale of the produce.

iv) Managers of societies do not offer business advice to fanners, and they often get linked with local traders and become impersonal to the needs of the majority of small and marginal fanners.

v) Lack of funds with societies to meet the credit needs of the fanners 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 weight age should be given to business experience and qualification. After selection proper thinking should be given.

Forward Trading / Future Trading

Forward Trading is a device for protection against the price fluctuations, which normally arise in the course of the marketing of commodities. Stockiest, processors or manufacturers utilize the futures or contracts to transfer the price risk faced by them.

Speculation involves purchase or sale of a commodity at the present price with the object of sale or purchase at future date at a favourable price. Speculator is concerned with profit making from price movements. He purchases when prices are low, so he is not a normal or regular trader. The difference in the prices prevailing at two times constitutes his profit. Speculator may lose in this process.

Hedging refers to the purchase or sale of a commodity in a futures market accompanied by a sale or purchase in !'the cash market.

Benefits

i) It protects the hedger from sustaining loss and enables him to earn his normal trade profit.
ii) Hedging enables him to keep the trade margin at a lower level because there is no risk.
iii) Hedging facilitates the financing of inventories of stored commodities to the maximum possible extent.

Speculation	Hedging
Purchase and sales in the cash as well as in futures markets are made with the objective of making profit.	The purchases and sales in the cash and futures markets are made to protect one against excessive price fluctuations.
The activities of buying and selling are not necessarily opposed to each other.	The activities are always opposed to each other.
It is not necessary that the two types of transactions should be equal in quantity.	It is obligatory to buy and sell the goods in equal quantities in two markets.
Under speculation, the speculator purchases goods and sells them when price rise as per his expectation.	Traders do not store the commodities only the difference in the price is given or taken on the due date.

4. 3 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 maybe direct or indirect, and it may take anyone 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. Its 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. 5. State trading
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 established in 1958.

Monopoly Procurement

By this method, the government acquires monopoly rights, for purchase of food grains from .farmers. Traders are not allowed to enter the market for purchase from farmers. This method postulates an adequate infrastructure on the part of the government in terms of manpower, storage, finance and transport facilities.

The monopoly procurement of paddy was operational in Cauvery delta region of Tamil Nadu unti11992. Apart from minimum support price the government gave a bonus amount of Rs.35 per quintal of paddy sold through government procurement centres.

Food Corporation of India (FCI)

An efficient management of the food economy with a view to ensuring an equitable distribution of food grains at reasonable prices to the vulnerable sections of society is essential in the present socio-economic environment of the country, Food Corporation of India (FCI) was born on January1, 1965. It has initially served only four states in the southern part of the country. Later it extended its services throughout the country.

Functions

The main functions of FCI are

a) To procure a sizeable portion of the marketable surplus of food grains and other agricultural commodities at incentive prices from the farmers on behalf of the central and state governments.
b) To make timely releases of the stocks through the public distribution system (fair price shops and controlled item shops) so that consumer prices may not rise unusually and unnecessarily.
c) To minimize seasonal price fluctuations and inter-regional price variations in agricultural commodities by establishing a purchasing and distribution network and
d) To build up a sizeable buffer stock of food grains to meet the situations such that may arise as a result of shortage in internal procurement and imports.

Growth and structure

The FCI has now five zonal offices, 19 regional offices, four sub-regional offices, four offices of joint managers (operational) and 173 district offices and thousands of operating points through out the country for its purchase and distribution operations. The progress of FCI in various areas may be asserted from the following.

Procurement

The FCI undertakes procurement of food grains on behalf of the Government of India and State Governments of various states where it ahs been entrusted with its responsibility as a sole agency or jointly with other public procurement agencies. It also handles huge stocks of food grains procured by other agencies for the central pool and utilizes the services of co-operative societies with the maximum extent possible. It purchases food grains from producers during both the seasons , directly or through the agency of co-operatives or purchasing agents and from millers under various arrangements of procurement determined by different state governments.

Storage

The provision of adequate and proper scientific storage facilities for food grains from the time of procurement till their distribution is another important function performed by corporation. With the onset of green revolution there was an urgent necessity of augmenting substantially the storage facilities for food grain production and consumption centers. Therefore the corporation launched a crash programme for the construction of godowns on a guaranteed occupation basis. The technical experts of the corporation have developed new and cheap methods for preservation of stocks. Constant and effective inspection treatment of food grains in storage ensures that the stocks are kept in good condition. Storage losses in FCI godowns have been brought down to less than one per cent as against 10 per cent earlier. It has constructed 22.59 million tones of storage capacity in i.e. well built godowns, silos and Cover and plinth (CAP) located at strategic points near production and consumption centers.

Transportation

It organizes swift and massive movement of food grains both by rail and road to ensure timely arrivals in the areas of consumption and of storage.

Imports

FCI handles the entire quantity of imported food grains at all major ports since 1969-70. The imported food grains are speedily dispatched to various destinations to avoid congestion at the ports and to augment supplies to the public distribution system.

Redistribution

Another important function of the corporation is the distribution of procured / imported food grains through nearly 4.43 lakh fair price shops all over India food grains are issued on the basis of the allocation made by the Central Government. It makes food grains available to the vast majority of population at reasonable prices.

Processing

The FCI has set up 24 modern rice mills in different states to increase the availability of rice and extract oil from rice bran. It has also set up a paddy processing research center at Thiruvarur in Tamil Nadu in Collaboration with the Government of Tamil Nadu and the union Ministry of Agriculture with a view to evolving new technology for extraction of edible oils and proper use of by-products. It has set up paddy drier, maize drier, dhal mills and also solvent extraction plant in different parts of the country.

Consultancy

FCI has taken a new function of consultancy service and provides technology and scientific assistance to other public/private undertakings as well as corporations in the country and abroad. The consultancy service offers assistance in the modernization of rice mills and other agro-processing units. The services include conduct of feasibility and techno-economic studies, management systems and optimization studies and market surveys.

Buffer Stock

The term buffer stock of food grains refers to the stock of food grains 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 war, food, famine, earth quake and from the influx of refugees.

The main advantages of maintaining a buffer stock are :

1. It helps in stabilization of prices by counteracting the effects of activities of speculators and hoarders.
2. Safeguards the producers against low prices, specially during the surplus production years; and
3. It imparts stability to the country's food economy.

The food grain stock visa-a-vis minimum stock held by Food Corporation of India is furnished in Table 4.1.

Table 4.1 Food grain stocks vis-à-vis minimum stock norms

(Lakh tonnes)

Date	Min norm	1995-96	1996-97	1997-98
Rice				
April 1	108	180.82	130.60	131.70
July 1	92	164.43	128.82	109.50
Oct 1	60	130.00	93.40	70.38
Jan 1	77	154.09	129.40	114.86
Wheat				
April 1	37	87.20	77.62	32.40
July 1	131	192.21	141.31	114.20
Oct 1	106	169.46	105.42	83.04
Jan 1	77	131.47	70.82	67.56

Source: Business Line,21.7.1998.

Public Distribution System (PDS)

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.

Local traders who function as agents on specified terms and conditions distribute mainly through pair price shops, cooperatives societies and food grains. Seven essential commodities are supplied by central government to state governments and union territories for distribution through public distribution system. They are wheat, rice, sugar, edible oils, soft coke and controlled cloth. The off take of food grains from central pool is given in Table 4. 2. The off take has reached a peak of 268.18 MT and there after it has declined.

The public distribution system (PDS) a key component of supply management of essential commodities ensures availability of grains -mainly rice, wheat, sugar, edible oils and kerosene -through a network of outlets or fair price shops (FPS) numbering about 4.37 Lakhs. There are about 3.48 Lakh FPS operating in rural areas, and 0.89 Lakh in the urban areas. Each FPS is envisaged to serve a population of 2000. The percent of population dependent on PDS is furnished in Table 4. 3.

Table 4. 2 Food grain off-take from Central Pool

(Lakh Tonnes)

Year	Rice	Wheat	Total
1991-92	102.57	104.79	207.36
1992-93	98.94	80.64	179.58
1993-94	94.64	91.43	186.07
1994-95	88.49	105.93	194.42
1995-96	139.99	128.19	168.18
1996-97	124.41	132.55	156.96
1997-98	113.57	77.62	191.19

Source: Business Line, 21.7.1998

Table 4. 3. Population depended on PDS

(percent)

Commodity	Rural			Urban		
	Wholly on PDS	Partly on PDS	Wholly on Market	Wholly on PDS	Partly on PDS	Wholly on Market
Rice	14.18	25.56	60.26	11.14	27.97	60.89
Wheat	26.49	4.81	68.70	29.48	7.21	63.31
Sugar	36.08	34.86	32.60	29.19	46.41	24.37
Kerosene	44.09	6.91	49.00	56.20	8.24	35.55
Edible Oils	4.57	12.11	83.32	5.74	20.89	73.57

Source: Bhattacharya et al (1991) Poverty, Inequality and Prices in Rural India, New Delhi: Sage Publications.

A revamped public distribution scheme (RPDS), which supplies additional items like tea, soap, pulses and iodized salt to households located in tribal, hill and arid areas having poor infrastructure, was operating in 1775 blocks. Under RPDS, food grains -rice and wheat - are allocated to States / UT s for RPDS blocks at prices lower by Rs.50 per quintal. than the issue price for normal PDS. The need for restructuring PDS has been debated for quite sometime. Towards the end of December 1996 the government has announced measures for streamlining the PDS.

Following the recommendations of the Chief Ministers' Conference in July 1996 the government decided to provide families below the poverty line (BPL) who will be issued 10 Kgs of food grains per month per family at prices less than the Central Issue Price (CIP).

Population above the poverty line (non-poor) now under PDS to continue to receive normal entitlement at the full CIP .

Supply of food grains for the BPL at 10 Kgs per month per family shall be guaranteed to States by the Centre. Additional quantities required by States would dependent on the availability of stocks in the Central Pool.

States will be free to add to the quantum, coverage and the subsidy from their own resources. Subsidized food grains will also be issued to all

beneficiaries under the Employment Assurance Scheme (EAS)/ *Jawahar Rojgar Yojana* as per guidelines at the rate of 1 Kg per man day for which food coupons would be issued to beneficiaries for exchanging at .FPS.

Problems

1. The number of fair price shops is inadequate in the sense that consumers have to travel long distances to get their supply and have to wait for long hours.
2. The supply of food grains through fair price shops is inadequate i.e. about 12-20 kg per month where as the requirement is 50 Kg/month.
3. Retailers are not interested in becoming the agents because of the poor commission they receive and the number of formalities they have to observe in the maintenance of accounts.
4. The percentage of utilization is not unifon11 across the country. In northern India it is around 10 per cent where as in southern states it is 70-80 per cent.
5. The food subsidy is growing every year and in 1994-95 it was Rs.4000 Crores, which is a burden on the exchequer. Many are utilizing the PDS, to make it cater to the needs of people living below poverty line is lacking political decision due to fear of loosing votes.

4. 4 Stabilization of Agricultural Prices

In an agricultural count~, like India, the prices of agricultural commodities, especially of food grains, hold a key position in the price structure of economy. Any dist9rtion 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 he incomes of the fanners.
b) Besides distress sale, the fanners 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 step 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

b) Other alternative measures.

Full Price Control

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.

As an alternative the following measures are adopted for price stabilization of agricultural produce.

- Buffer stock operation.
- Minimum support or Procurement prices.
- Public distribution system.

Price Fixation

The price fixation is undertaken by the government such that the productive resources are channeled into production of required food commodities and also generates enough income to farmers for decent living and provide for capital formation in agriculture for future production. For the consumers, especially people living below poverty line, it should be at affordable prices. To advice the government to fix minimum support prices and procurement prices the Agricultural Prices commission was set up in 1971. Later its name was changed to commission for Agricultural Costs and Prices (CACP) in 1980 by broadening the terms of reference. The Commission is a statutory body . The commission submits separate reports recommending prices for *Kharif* and *Rabi* season crops. The Central government after considering the report of the commission and views of the state governments and keeping in view the demand and supply situations in the country, takes decision on the level of administered prices.

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

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 at and all those transactions or purchase at 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.

Table 10.4. Minimum Support Prices for *Kharif* & *Rabi* Crops

(Rs/qtl)

Commodity	Variety	1998-99		1999-2000	
		Recommended by CACP	Fixed by Govt.	Recommended by CACP	Fixed by Govt.

Kharif					
Rice	Common	440	440	465	490
Coarse cereals		390	390	410	415
Arhar, Moong & Urd		960	960	1100	1105
Gram		815	815	895	895
Groundnut in shell		1040	1040	1150	1155
Soya bean	black	795	795	750	755
Soya bean	yellow	815	815	840	845
Sunflower		1060	1060	1150	1155
Safflower seed		910	910	990	990
Cotton	F414, H777 & 320 F variety	1440	1440	1550	1550
	H4 long staple	1650	1650	1750	1750
Rabi					
Copra	Milling	2860	2900	3075	3100
Copra	Balls	3125	3125	3325	3325
Mustard		1000	1000	1000	1000
Wheat		455	510 *	490	550
Sugarcane statutory minimum price at 8.5 % recovery		52.70	52.70	56.10	56.10

* Including bonus Rs. 55/qtl

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 at reasonable prices to the weaker sections of the society. 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 fanners 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.

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 ~ 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, so that relative price levels do not get distorted involuntarily.

Commodity Boards

With a view to help the organization of the industry and trade along proper lines, particularly in the case of commodities for which constitution of an Export Promotion Council has not been thought desirable, Commodity Boards have been ~t up. One of the important functions of these boards (other than Rubber Board) is to promote export of the commodities with which they are concerned and in this respect they conduct themselves as if they are Export Promotion Councils. Such commodity Boards have been constituted in respect of commodities viz. Coffee Board, Tea Board, Tobacco Board, Spices Board, Cashew Board, Rubber Board, Cardamom Board etc. National Dairy Development Board. (NDDB).

With a view to provide marketing support to milk products, a sound network of dairy cooperatives has taken shape in the country. The network consists of milk producers' co-operative societies at the village level, District Milk Co-operative Unions at the district level, State Co-operative Diary Federations at the state level and National Dairy Development Board at the national level. Apart from providing market support to the producers in rural areas, this network has been instrumental in supplying liquid milk and dairy products to the urban consumers at reasonable prices.

NAFED

At the national level, The National Agricultural Co-operative Marketing Federation (NAED) 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 Madras 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.

Objectives

The main objectives of NAFED are

a) To co-ordinate and promote the marketing and trading activities of its affiliated co-operative institutions.
b) To make arrangements for the supply of agricultural inputs required by member institutions .
c) To promote interstate and international trade in agricultural and other commodities; and
d) to act as an agent of the government for the purchase, sale, storage and distribution of agricultural products and inputs.

Activities

The NAFED perfom1s the following 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.

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.

The objectives of state trading are

- T o make available supplies of essential commodities to consumers at reasonable prices on regular basis.
- T o 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 distributing, whenever and wherever necessary.
- To arrange for storage, transportation, packaging and processing.
- T o 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.

Private Marketing Agencies

a) 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 two types wholesaler and retailers.

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.

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.

Itinerant traders are petty merchants .who move from village to village and directly purchase the produce from the cultivators. They transport it to the nearby primary or secondary market and sell it there.

Village merchants have their small establishments in villages. They purchase the produce of those farmers who have either taken finance from them or those who are not able to go .I 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.

Agent Middle men 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 sere 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 .

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.

Speculative Middlemen 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.

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

Facilitative Middlemen. Some middlemen do not buy and sell directly but assist in the marketing process. Marketing can take place even if they are not active. But the efficiency of 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.

5. Agricultural Inputs Marketing

5.1 Fertilizer 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 modem 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 modem inputs by farmers largely depends upon the spread of information about them. Dynamic and efficient channels for marketing of farm inputs are essential for the popularization of knowledge about modem inputs among the farmers.

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

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) (Table 5 .1) .The production is not enough to meet the demand for fertilizers. We produce only N and P fertilizers and entire K fertilizers are imported (Table 5 .1). We import about 3.145 MT of **NPK** fertilizers to meet our demand. The subsidy for fertilizers is increasing year after year since 1995-96andtouchingRs.12,000crores.

Consumption Pattern

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 conform to ideal norms (Table 5 . 2) . 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 and reduced to 7.9 : 2.8 : 1 in 1997-98.

Table 5 .1 Fertilizer Production, Imports and Subsidy

Year	Production (N+P '000 tonnes)	Imports N+P+k ('000 tonnes)	Subsidy in Crores of Rupees		
			Domestic Fertilizer	Imported fertilizer	Total
1960-61	150	419	-	-	-
1970-71	1,059	629	170	335	505
1980-81	3,005	2,759	3,730	659	4,389
1990-91	9,045	2,758	8,000	3,200	12,500
1995-96	11,335	4,008	4,300	1,935	6,235
1996-97	11,155	2,014	4,743	1,350	6,093
1997-98	13,062	3,174	6,600	3,320	9,920
1998-99	13,621	3,145	7,473	4,123	11,596

Source: Economic Survey of India 1999-2000

Table 5 .2 NPK Consumption ratio

Year	Nitrogen	Phosphate	Potash
1960-61	7.2	1.8	1
1970-71	6.5	2.0	1
1980-81	5.9	1.9	1
1991-92	5.9	2.4	1
1995-96	8.5	2.5	1
1996-97	10.0	2.9	1
1997-98	7.9	2.8	1

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

Table 5. 3. Fertilizer Prices before and after decontrol

(Rs. / tonne)

Particulars	Effective Date	Subsidy	
		Indigenous	Imported
DAP	1-4-1999	4,600	3,200
Muriate of Potash			3,250
Single Super Phosphate			900
Complex fertilizers			2,588-4,282 *

* Depending upon the nutrient content of the complex fertilizers

The increase of subsidy (Table 5. 3) 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.

Marketing Margin for Fertilizer

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.

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 19605, 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.

The Working Group on Fertilizers has estimated total demand of 572,090 tonnes of different micronutrients for the Ninth Five Year Plan as revealed in Table 5.4

Table 5. 4. Requirement of micro-nutrient for the Ninth Five Year Plan

('000 tons)

Micro -nutrients	Consumption	
	1995-96	Ninth Plan
Zinc sulphate	56.85	308.05
Ferrous sulphate	17.00	92.62
Manganese sulphate	5.50	29.94
Copper sulphate	12.50	68.03
Borax	13.50	73.74
TOTAL	**105.35**	**572.09**

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%), Azatobacter (26.4%) and Phosphates Solubilizer (37.4%). At present, there are 62 Bio-fertilizer units with a production capacity of 8115 tons (as on 31.3.95). However, the total production was 5177 tons only. The potential demand for bio-fertilizers by 2000 AD is estimated to be 39165 tons.

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 effective extension programmes.

5.2 Marketing of Seeds

Seed quality 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), 13 State Seeds Corporations and about 100 private seed organizations. There are 19 State Seed Testing Laboratories to ensure/check the quality of seeds.

Since 1969, till date, 1898 varieties of agricultural and 340 varieties of horticultural crops have been notified. Another major achievement has been the implementation of Seed Control Order, 1983. It seeks to regulate supply, distribution and trade in seeds.

National Seeds Project -World Bank assisted Project -provides assistance to NSC, SFCI, State Seed Corporation and State Seed Certification Agencies for their restructuring. As a result of these efforts 65 lakh quintals of certified / quality seed distribution, during 1994-95, was achieved.

It could be observed from Table 5. 5 that breeder seed production has increased from 23.64 thousand quintals in 1985-86 to 46.13 in 1997-98 and declined to 38.99 thousand quintals. 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

Table 5.5. Production of breeder, foundation and certified seed (1985-86 to 1998-99)

Year	Breeder seed (' 000 quintals)	Foundation seed (lakh quintals)	Certified / Quality seed(lakh quintals)
1985-86	23.64	N.A.	55.01
1990-91	33.89	3.35	57.10
1991-92	33.90	3.74	57.50
1992-93	35.96	3.93	60.33
1993-94	36.82	4.06	61.00
1994-95	44.50	4.73	65.00
1995-96	44.61	4.76	69.90
1996-97	46.06	5.76	73.27
1997-98	46.13	6.87	79.29
1998-99	38.99	6.70	83.00

The progress of area under HYV seeds under different crops and their share in the total area is shown in Table. 5.6. 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.

Table 5.6 Are under high yielding varieties of seeds

Crop	Year				
	1990-91	**1994-95**	**1995-96**	**1996-97**	**1997-98**
Paddy	27.4 (64.2)	31.0 (74.6)	31.08 (72.04)	31.40 (72.35)	33.40 (76.96)
Wheat	21.0 (86.9)	23.3 (90.7)	23.29 (93.10)	23.10 (89.19)	23.70 (88.76)
Jowar	7.1 (49.4)	7.1 (60.2)	7.49 (65.50)	7.49 (65.70)	8.30 (76.85)
Bajra	5.7 (54.4)	5.4 (53.4)	5.44 (58.00)	5.50 (55.00)	6.10 (62.89)
Maize	2.6 (44.1)	3.4 (54.9)	3.53 (54.20)	3.60 (57.14)	3.80 (63.33)
Ragi	1.2 (55.3)	1.1 (58.4)	1.2 (60.0)	1.20 (61.02)	1.10 (62.15)

Figures in parentheses indicate % of HYV area to total area under the crop.

Hybrid seeds, which have high yield potential, are available for Jowar, Bajra, Maize, Cotton, Sunflower, castor and rice. Their production has increased from 85,900 tons in 1992-93 to 1,19,000 tonnes in 1996-97 (Table 5.7)

Table 5.7. Production of hybrid seed (1992-93 to 1995-96)

('000 tonnes)

Crop	Production			
	1992-93	1993-94	1994-95	1995-96
Maize	16.6	17.8	18.4	19.7
Jowar	30.0	34.7	36.6	39.3
Bajra	21.0	22.6	24.0	26.5
Sunflower	9.8	11.4	12.8	12.7
Castor	2.9	3.6	3.8	3.9
Cotton	5.6	6.2	6.4	6.7
Total	85.9	96.3	102.0	108.0

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, of coarse cereals, oil seeds and planting material has been increasing in recent years. About 460 tons of seed was imported in 1994-95 as compared to 83.5 tons 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. Greater coordination between public and private sector is required in the field of research on plantation crops.

The Expert Group on Seeds (1987} estimated requirements of 1,275,600 tons for certified seed by 2000 AD. However, the working group on "Critical Agricultural Inputs-Seeds" for the formulation ,of Ninth Five Year Plan has estimated the seed demand in 2001-0 2 as follows:

Breeder Seed : 14,906 tonnes

Foundation Seed : 93,400 tonnes
Certified Seed :1,996,600 tonnes

Demand estimates for hybrid seed alone are as follows:
Breeder Seed : 18 tonnes
Foundation Seed : 2,890 tonnes
Certified Seed : 1,49,900 tonnes

5. 3 Marketing of Pesticides

Disease 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. In 1990-91, India imported 40 types of pesticides weighing 7000 to 8000 tonnes.

The annual losses caused by Insect pests, disease, weeds, nematodes, rodents, etc. in India are estimated between Rs. 100,000 to 200,000 millions. 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. Total consumption of all pesticides which was only 2836 tons in 1955-56 increased to 86,330 tons during 1997-98 {Table 5. 8).

Table 5 .8 Domestic Consumption of Pesticides in India

Formulations	1995-96	1996-97	1997-98
Insecticides	59,487 (66.67)	38,111 (54.95)	45,226 (52.43)
Fungicides	19,197 (21.51)	20,976 (30.07)	28,782 (33.83)
Herbicides	10,557 (11.83)	10,651 (15.27)	12,782 (14.22)
Total	89,241 (100.00)	69,737 (100.00)	86,330 (100.00)

(Figures in parenthesis are percentage to total)
s

The state-wise and crop-wise consumption of pesticides is furnished in Table 5.9.

Table 5 .9. State-wise and Crop -wise Consumption of Pesticides

States	Consumption of Pesticides in per cent	Crops	Pesticide application in percent
Andhra Pradhesh	33	Cotton	45
Punjab	14	Pulses	4
Karnataka	11	Rice	22
Tamil Nadu	9	Vegetables	9
Maharashtra	7	Plantation crops	7
Haryana	6	Wheat	4
Uttar Pradhesh	5	Other crops	9
Others	19	-	-

The highest pesticide consuming state is Andhra Pradhesh 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.

5. 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 109 (1991-92). The reduction is more pronounced in northern region from 156 to 58 while it remains almost the same in eastern region (Table 5.10).

Table 5 .10 Use of draught animal energy for crop production

(Animal -pair--hour-per hectare per year)

Region	1971-72	1981-82	1991-92
Northern	156.5	102.2	58.0
Southern	143.2	129.8	117.5
Western	132.6	118.9	93.9
Eastern	213.0	251.2	220.5
All-India	159.0	139.0	100.

Farm modem 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.

The overall pictures that emerges from Table 5.11 is that of 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 19705 to 1,43,145 MW in 1996.

Even as far as the mechanical portion of 1,01,592 MW goes, it is significant to note that a bulk of this (around 62 percent) is accounted for by the stationary sources. The phenomenal growth of diesel engines and electric

motors with a combined share of 44 percent in total farm traction in 1996 as against less than 16 percent in 1971.

Table 5.11 Source-wise power availability on Indian Farms

Source	1971			1996		
	No. (millions)	Power (MW)	Per cent of power	No (millions)	Power (MW)	Per cent of power
I. Animal Power		39,288	78.9		41,553	29.0
1.Humans	125.80	9,385	18.8	206.0	15,368	10.7
2.Draught animals	80.17	29,903	60.1	70.2	26,185	18.3
II Mechanical power		10,487	21.1		1,01,592	71.0
1. Tractors	0.11	2,462	4.9	1.71	38,268	26.7
2.Power tiller	0.001	6	0.0	0.11	660	0.5
3. Diesel engines	1.54	5,747	11.5	5.10	19,023	13.3
4. Electric Motors	0.61	2,275	4.6	11.70	43,461	30.5
III Total		**49,775**	**100.0**		**1,43,145**	**100.0**

The growth of tractor drawn implements is more perceptible than the animal operated implements (Table 5.12).

Table 5.12 Growth Of Animal And Tractor Drawn Implements

(Hundreds)

Implements	1976-77	1995-96	Annual Compound growth (%)
Animal operated			
Wooden plough	4,10,300	4,41,600	0.36
Steel plough	65,200	1,27,200	4.43
Sowing implements	48,600	81,800	6.79
Puddler	20,600	62,500	2.87
Power operated	1,292	9,826	9.90
Disc harrow	1,766	18,444	10.76
Cultivator	1,201	15,912	11.97
Leveler	640	12,912	13.57
Seed -drill fertilizer	851	12,609	7.33
Sprayer duster	5.6	3,756	11.86
Harvester combine	3.0	109	8.67
Self propelled combine	-	-	-
Thrashers	5,041	22,104	8.19

6. Agricultural Exports and Imports

6.1 Exports of India

The growth of exports in India and the World is furnished in table 6.1. The exports of India were about US $ 33 billion since 1995. The World exports were about US $ 5300 during the same period. The share of Indian exports was only about 0.60 per cent of the world exports**.**

TABLE 6.1 Exports of India and the World (In US $ billion)

Country	**1995**	**1996**	**1997**	**1998**	**1999**
India	30.6 (22.4)	33.1 (8.1)	35.0 (5.7)	33.4 (-4.5)	36.3 (8.6)
World	5103.6 (19.6)	5322.5 (4.3)	5505.8 (3.4)	5416.9 (-1.6)	5577.2 (3.0)
Percentage share of India' s Exports to World exports	0.60	0.62	0.64	0.62	0.65

Figures within brackets show the percentage change over previous year.
Source: International Financial Statistics, February 2001.

The performance of merchandise exports and its broad components into exports of agricultural & allied products and manufactured goods, during the period 1980-2000, as per the DGCI&S data, is given in Table 6.2. The agricultural and allied products have shown a growth rate of 8.1 per cent in 1990s as compared to 3.3 in 1980s. But the percentage share of exports has decreased in the former period as compared to the latter period.

Direction of Indian Exports

The direction of Indian exports is furnished in Table 6.3 since 1960-61. In Value terms the Indian exports has increased from Rs. 642 crores in 1960-61 to Rs. 1,41,604 crores in 1998-99. The share of trade with LDCs and OPEC countries has increased during the above 14.8 to 24.6 and 4.1 to 10.5 respectively.

Table 6.2 Growths of Exports 1980-2000

	Growth Rates*		Percentage Share	
	1980-81 to 1991-92	**1992-93 to 1999-00**	**1980-81 to 1991-92**	**1992-93 to 1999-00**
1. Agricultural & Allied Products	3.3	8.1	24.2	18.3
2. Manufactured goods	10.1	10.6	62.0	76.6
3. Total Exports	7.4	10.1	100.0	100.0

***Annual average.**

Table 6.3 Direction of Trade : Exports

Year	Value/ share	OECD	OPEC	Eastern Europe	Others LDCs	Others	TOTAL
1960-61	Rs.crore	425	26	45	95	51	642
	% share	66.1	4.1	7.0	14.8	8.0	100.0
1970-71	Rs.crore	769	99	323	3.05	40	1,535
	% share	50.1	6.4	21.0	19.8	2.6	100.0
1980-81	Rs.crore	3,126	745	1,486	1,286	68	6,711
	% share	46.6	11.1	22.1	19.2	1.0	100.0
1990-91	Rs.crore	17,428	1,831	5,819	5,465	2,010	32,553
	% share	53.5		17.9	16.8	6.2	100.0
1997-98	Rs.crore	72,418	13,138	4,204	34,870	6,261	1,30,101
	% share	55.7	10.1	3.2	26.2	4.8	100.0
1998-99	Rs.crore	82,104	14,902	3,875	34,870	5,852	1,41,604
	% share	58.0	10.5	2.7	24.6	4.1	100.0

6.2 Agricultural Exports

The total exports of agriculture and allied products and also share of agriculture exports to total export of the country is listed in Table 6.4. 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.

TABLE 6.4 India's Agricultural Exports

(Rs. Thousand Crore)

Year	India's total Exports	Agriculture and Allied Exports	Per cent Share of Agricultural Exports in Total Exports
1994-95	82.7 1	3.7	16.6
1995-96	106.4	21.1	19.8
1996-97	118.8	24.2	20.4
1997-98	130.1	25.4	19.5
1998-99*	141.6	26.2	18.5

* Provisional..

India's 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 to total exports of the country has been ranging between 15 to 20 per cent. Whereas marine products export has exhibited some up trend, this advantage was more than offset by sharp decline in export prices of soyameal, which of late has been a major export item. (Table 6.5).

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.

6.3 Agri-Imports

Agri-imports constitute only a small proportion of the country's total imports. 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 products, 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 (Table 6.6).

TABLE 6.5 India's Export of Agricultural Products

(Million Dollars)

	1996-1997	**% to total Agri.**	**1997-1998**	**% to total Agri.**	**1998-1999**	**% to total Agri.**	**1999-2000**	**% to total Agri.**
Tea	292	4.3	505	7.7	538	9.0	407	7.4
Coffee	402	5.9	456	6.9	411	6.8	315	5.7
Cereals	1104	6.2	910	13.8	1495	24.9	718	13.1
Tobacco	213	3.1	288	4.4	181	3.0	229	4.2
Spices	339	5.0	379	5.8 3	88	6.5	393	7.2
Cashew	362	5.3	377	5.7 3	87	6.4	566	10.3
Sesame and Niger Seeds	78	1.1	81	1.2	78	1.3	86	1.6
Guargum Meal	100	1.5	14	7 .2	173	2.9	189	3.5
Oil Meals	985	14.4	924	14.0	461	7.7	370	6.8
Fruits & Vegetables	208	3.0	204	3.1	183	3.1	202	3.7
Processed Fruits & Juices	59	0.9	73	1.1	69	1.1	113	2.1
Meat & Preparations	200	2.9	217	3.3	187	3.1	180	3.3
Marine Products	1129	16.5	1207	18.3	1038	17.3	1180	21.6
Others	1359	19.9	824	12.5	422	7.0	527	9.6
Total Agri-Exports	**6828**	**100.0**	**6594**	**100.0**	**6014**	**100.0**	**5475**	**100.0**
Total Country Exports	**33470**		**35006**		**33218**		**37599**	
% of Agri. to Total Export		**20.4**		**18.8**		**18.1**		**14.6**

It is generally the policy 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 were 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. Current tariff rate for import of some agricultural products are listed in Table 6.7.

TABLE 6.6 Import of Agricultural Products

(Million Dollars)

	1996-97	Per cent to total Agri.	1997-98	Per cent to total Agri.	1998-99	Per cent to total Agri.	1999 2000	Per cent to total Agri.
Cereal	137.2	9.6	291.5	15.8	287.7	9.9	133.6	5.1
Pulses	250.8	17.6	321.4	17.4	168.5	5.8	63.2	2.4
Milk & cream	0.7	Neg.	1.4	0.1	2.9	0.1	22.4	0.9
Cashew nuts	193.7	13.6	206.4	11.2	230.3	7.9	220.0	8.4
Fruits & nut	18.3	1.3	154.7	8.4	159.3	5.5	84.2	3.2
Sugar	0.9	0.1	126.5	6.9	264.1	9.0	255.2	9.7
Oil seeds	1.3	0.1	0.7	—	2.0	0.1	3.1	0.1
Veg. Oils	825.1	57.8	743.9	40.3	1803.9	61.8	1842.5	**70.2**
Total Agri. Imports	**1428.0**	**100.0**	**1846.7**	**100.0**	**2918.8**	**100.0**	**2624.1**	**100.0**
Total Country Import	**39132.9**		**41484.5**		**42388.7**		**47212.1**	
% Agri. to Total Import		**3.7**		**4.5**		**6.9**		**5.6**

TABLE 6.7 Import Tariff Rate on selected Agricultural Commodities, 2000-01

Food grains	**Item Tariff (per cent) (Basic + Surcharge**
Wheat	50
Rice in husk	80
Polished rice	70
Millets	50
Pulses	0
Fruits	
Apple	50
Peas & quinces	35
Other Fruits	25
Nuts	
Areca nut	100
Cashew nuts (shelled)	40

TABLE 6.7 (Contd.)

Food grains	**Item Tariff (per cent) (Basic + Surcharge)**
Edible Oil	
RBD Polyolefin	71.6
Other refined oil	50.8
Crude palm oil (for vanaspati)	25
Crude palm oil (for uses other than vanaspati)	55
Crude coconut oil	45
Other vegetable crude oil	35
Other Products	
Spices	58.5
Sugar	60 per cent+ Rs.850 as CVD
Chicken meat	100

Spices Exports

India is world famous for its spices. The spices exported from India during 1997-98 are furnished in Table 6. 8 . Pepper continues to be the major part of spices exported from India.

Table 6.8 Export of spices from India in 1997-98

Spices	**Quantity in M.T.**	**Value in Rs. Lakh**
Pepper	35,907	49,636
Cardamom (small)	370	1,267
Cardamom (large)	1,648	1,264
Chilies	51,779	15,890
Ginger	28,268	7,263
Turmeric	28,875	8,304
Coriander	23,734	6,435
Cumin	16,281	8,135
Celery	3,317	799
Fennel	12,368	3,582
Fenugreek	6,806	987
Other seeds	4,056	935
Garlic	3,975	797
Other spices	14,918	5,567
Curry powder	5,132	2,973
Mint oil	3,018	9,693
Spice oils	2,419	23,153
Total	**2,42,071**	**1,46,682**

6.4 Export-import Policy (EXIM Policy)

The Exim Policy (1997-2002) has the following objectives

i) To accelerate the economy to derive maximum benefits from the expanding global market opportunities.

ii) To stimulate sustained economic growth by providing access to essential raw materials, intermediaries, components, consumables and capital goods required for augmenting production.

iii) To provide consumers with good quality products at reasonable prices.

iv) To enhance the technological strength and efficiency of agriculture, industry and services. There by improving their competitiveness while generating employment opportunities and encouraging the internationally accepted standards.

The policy states that the above said policies will be achieved through the coordinated efforts of all government departments, and the Ministry of Commerce and Directorate General of Foreign Trade (DGFT) with its network of regional offices. The new Exim Policy has shifted 1, 308 products from restricted to free imports or special imports list. These items cover a wide range of agricultural and processed products, computers cosmetics and so on.

The Exim Policy reduces quantitative curbs on imports, simplifies procedures, reduces multiplicity of schemes, provides special incentives for agro and allied sectors and encourages domestic sources of inputs. The policy has abolished the Value Based advance license (VBAL) and pass book schemes. In their place introduced a new duty entitlement pass book (DEPB). Reduced the duty payable under export promotion capital goods (EPCG) scheme from 15 to ten per cent.

Several measures have been taken to ensure simplification of procedures. The time taken for administrative costs will be reduced. The policy aims at openness, transparency and globalisation so as to facilitate sustained growth of production and exports. The Export Processing Zones (EPZ) and Export Oriented Units (EOU) have been extended to several sectors. The EPZ/EOU can now sell 50 per cent of their production in domestic market without stipulation of any value addition and only have to ensure positive net foreign exchange.

Weaknesses

The policy does not reflect the challenges and opportunities arising out of the new world Trading System. It should have identified a few strategic exports that need priority, nourishment and promotion to help India strengthen its position in the global market. It has not provided for phased cuts and dismantling on non tariff barriers.

Export Processing Zones (EPZs)

EPZs were conceived of as special enclaves separated from the domestic tariff area by special fiscal barriers. The idea was to provide an ideal setting for production at low costs, so that exporting units could compete in the international matters. There are seven EPZs functioning in India. They are Chennai, Mumbai, Kandla, Vizhakapattinam, Cochin, Noida, and Falta.

6. 5 APEDA

APEDA- stands for the Agricultural and processed Food Products Export Development Authority. APEDA is an autonomous organisation attached to the Ministry of Commerce of the Government of India.

The main function of APEDA is to build links between Indian producers and global markets. APEDA undertakes the briefing of potential

sources on government policy and producers. Along with providing referred services and suggesting suitable partners for joint ventures. Besides arranging buyer-seller meets. The scope of Agricultural exports is discussed below. The export potential of agriculture and horticultural products is furnished in Table 6.9

Floriculture & Seeds

India has an ancient heritage when it comes to floriculture. And today, this rich heritage has yielded a bouquet of colours and perfumes, which have become synonymous with the smell of success overseas. Today, there are over 30 export oriented units in operation. With roses, carnations, orchids, gladioli and anthurium being well received in Japan , Netherlands, USA, Germany and France. Besides flowers, India also exports seeds, bulbs, dried flowers, ferns, leaves and grass. The details of floriculture exports are given in Table 6.10.

Fresh-Produce

With a bewildering tapestry of terrain and clime, India could well have been a kitchen garden to the world. Our fresh produce is unmatched for diversity and abundance. India is famous for its Alphonso mango, morel mushrooms and strawberries. Our red onions constitute 20% of the world trade. Which is why India is known as the world's second largest producer of fruits and vegetables.

Cereals & Grains

Indian has moved rapidly from an importer of food grains to an exporter. Today, it is the second largest rice producer after China. And is ranked tenth amongst the world's wheat growers. Currently India is one of the largest producers of cereals and grains. With the long grained Basmati rice leading the rest. Basmati is the costliest rice in the world and was a favourite of the emperors

Processed Food

Cashing in on an immense production base of fruit, vegetable and cereals: processed food export is one of the fastest growing areas of the Indian economy. In the processed food industry the principle of GIGO (garbage in, garbage out) is as firmly etched as a commandment. Which is why nothing but the best of raw materials are used. And a marriage of a traditionally high quality raw materials and an established techno-industrial base contributes to standardised, hygienically packed products. So it's hardly surprising that Indian processed foods are being recognised world-wide for their quality.

Table 6.9 Export of Agricultural and Processed Food Products

QTY: IN MTS. VALUE: IN RS. LAKHS

	1996-97		1997-98		1998-99	
PRODUCTS	**QTY**	**VALUE**	**QTY**	**VALUE**	**QTY**	**VALUE**
FLORICULTURE & SEEDS						
Floriculture		6,339.86		8,120.67		9,721.93
Fruits & Vegetables Seeds	5,208.615	4,434.09	5,850.878	5,593.34	6,555.887	7,614.97
Subtotal :	**5,208.615**	**10,773.95**	**5,850.878**	**13,714.01**	6,555.887	**17336.9**
FRUITS AND VEGETABLES						
Fresh Onions	42,7011.8	26,521.18	3,33349	20,246.09	2,16,485.9	1,8078.18
Other Fresh vegetables	71,850.94	7594.43	98,348.91	11,407.08	7,92,727.8	11,194.91
Walnuts	5,807.939	7893.17	38,89.595	5,647.6	10,320.76	6,903.68
Fresh Mangoes	24,773.48	4487.64	42,894.93	7,359.61	45,193.5	7,937.41
Fresh Grapes	20,999.29	5264.66	23,808.12	6,601.28	1,0719.64	3,783.03
Other Fresh Fruits	16,6172.6	6471.26	64,605.09	7,265.84	80,154.83	7,380.01
Subtotal :	**71,6616**	**58,232.34**	**5,66,895.6**	**5,8527.5**	**1,15,602**	**55,277.22**
PROCESSED FRUITS& VEGETABLES						
Dried& Preserved Vegetables	88,675.54	23,107.54	2,00,262.7	47,988.99	15,87,321	38,024.99
Mango Pulp	40,302.22	10,500.63	45,874.53	1,2531.22	18,85,350	13,893.77
Pickles & Chutneys	18,390.31	5,643.23	24,372.27	7670.51	20,898.75	7401.48
Other Processed Fruits & Vegetables	27,884.42	8,126.36	28,421.8	7,958.95	19,36,038	11,267.29
Subtotal :	**17,5252.5**	**47,377.76**	**2,98,931.3**	**76,149.67**	**54,29,607**	**70,587.53**
ANIMAL PRODUCTS						
Buffalo Meat	1,57,574	61,903.59	1,76,328.7	72,930.39	1,55,316	69,169.42
Sheep/Goat Meat	8,691.191	7,103.53	7,546.598	6,265.66	24,03,295	7,716.16
Poultry Products	16,682.91	8,143.72	11,040.46	8,884.14	14,144.34	6,398.45
Dairy Products	2018.485	1,536.53	2,378.238	1,338.71	2,325.965	1,361.26
Animal Casings	446.382	1,227.04	371.218	1,195.84	1,150.705	1,409.83
Processed Meat	511.994	444.73	264.773	222.02	962.63	293.43
Subtotal :	**1,85,925**	**80,359.14**	**1,97,930**	**9,0836.76**	**25,77,195**	**86,348.55**
OTHER PROCESSED FOODS						
Groundnuts	1,51,354.9	33,159.3	2,45,129.3	56,629.96	55,574.04	13,847.95
Guar Gum	95,169.93	35,612.59	1,02,728.6	54,498.83	90,530.45	72,475.77
Jaggery & Confectionery	1,99,726.4	26,111.95	83,038.16	12,793.18	31,842.4	1,577.22
Cocoa Products	1,236.458	979.85	1,041.514	925.27	871.107	831.38
Cereal Preparations	27,150.26	10,886.26	22,703.91	11,595.23	18,699.84	10,138.45
Alcoholic Beverages	1,33,917.6	18,782.34	37,075.93	7,035.14	31,323.62	6,998.93
Miscellaneous Preparations	7,159.489	6,828.1	8,891.417	3,854.91	20,753.35	5,159.99
Milled Products	7,08,358.3	51,231.37	23,110.97	2,156.29	7,211.7	805.14
Subtotal :	**14,23,973**	**18,3591.8**	**5,23,719.8**	**1,49,488.81**	**2,56,806.5**	**1,11,834.8**
CEREALS						
Basmati Rice	5,23,126.8	12,4763.4	5,92,678.3	1,68,502.69	6,06,723.7	1,88,275.3
Non Basmati Rice	19,88,847	19,2472.2	17,96,280	1,68,596.89	43,95,871	4,36,590.2
Wheat	11,45,895	69,845.18	-	0	3,517.9	270.62
Other Cereals	71,035.12	4864.6	15,348.53	1,259.4	9,406.591	899.5
Subtotal :	**37,28,904**	**3,91,945.3**	**24,04,306**	**3,38,358.98**	**50,15,519**	**6,26,035.6**
Grand Total :	**61,35,980**	**7,72,280.3**	**39,97,634**	**7,27,075.73**	**1,56,84,944**	**9,67,420.7**

Table 6.10 Item wise export of Floriculture products from India in 1996-97

Products	Value (Rs. in Lakh)	Percentage share to total
Bulbs ,tubers Tuberous roots	89.66	1.4
Bulbs horticultural	10.49	0.2
Other bulbs/tubers	28.26	0.4
Uprooted cuttings	58.22	0.9
Edible fruit trees grafted or not	2.29	Neg
Cactus	1.00	Neg
Rhododendrons grafted or not	3.12	Neg
Roses grafted or not	87.88	1.4
Flowering plants	14.12	0.2
Other live plants	97.60	1.5
Cut flowers for bouquets/fresh	1808.60	28.5
Other flowers for bouquets	32339	51.0
Other foliages / buds for bouquets	0.53	Neg
Foliages/branches/fresh buds	256.2	14.04
Total	**6,339.96**	**100**

Animal Products

Did you know that the world's largest cattle population grazes in Indian pastures?

Today, India's free ranging, steroid and fat free meat is winning world-wide acceptance.

40,000 Veterinary centres and numerous research stations ensure, that India's meat products meet the most stringent quality checks worldwide. Which is why they are a favourite in Malaysia, UAE, Philippines, Iran and Oman.

Development programmes of APEDA

APEDA undertakes the following development programmes :

i. Development of Data Base on products, markets and Services
ii. Publicity and Informatio0n Dissemination.
iii. Invites official and business delegations from abroad.
iv. Organisation of product promotions abroad and visits of official and trade delegations abroad.'
v. Participation in International Trade Fairs in India and abroad.
vi. Organisation of buyer-seller meets and other business interactions
vii. Information dissemination through APEDA's newsletter, Feedback Series and Library.
viii. Distribution of Annual APEDA Awards.
ix. Provides recommendatory, advisory and other support services to the Trade and Industry.
x. Problem solving in Government Agencies and Organisations, RBI, Customs, Import/Export Procedures, problems with Importers through Indian Missions abroad.

Major product- agricultural groups & markets: Floriculture and seeds **: USA, Netherlands, Germany, France, Japan**

Fruits and vegetables : Malaysia, UAE, UK, Bangladesh, Saudi Arabia
Processed fruits and vegetables : UAE, USA, UK, Germany, Saudi Arabia
Animal Products : Malaysia, UAE, Philippines, Iran, and Oman
Other Processed food : USA, UAE, Indonesia, UK, Yemen Arab Republic
Basmati Rice : Saudi Arabia, USA, Kuwait, UK, and UAE
Non-Basmati Rice : Russia, Saudi Arabia, Sri Lanka, South Africa, and Bangladesh
Wheat : Yemen Arab Republic, Netherlands, UAE, Turkey, and Korea
Other Cereals : Malaysia, UAE, Bangladesh, and USA, UK.

APEDA offers financial assistance under various schemes, which seek to promote and develop agro-exports. Financial assistance under these schemes is available to exporters, growers, and trade associations, governmental agencies. Some of the activities, which are eligible for financial assistance, are :

- Strengthening of market intelligence and data base through studies and surveys
- Quality up gradation
- Development of infrastructural facilities
- Research and Development
- Development of packing quality
- Human resource development
- Up gradation of meat processing facilities.

Registration Procedure

1. All exporters of scheduled products are required by the APEDA Act to be registered with APEDA.
2. Actual and intending exporters can apply for registration in the prescribed from which can be obtained from the offices of the Authority free of cost.
3. The duly completed application form may be submitted with a payment of Rs. 5000/- and is required to be accompanied by a certificate form any scheduled bank regarding the applicant's financial status.
4. All payments are to be remitted by a Demand Draft or postal Order in favour of the Secretary of the Authority.
5. Registration once made continues to be in force till cancelled by the Authority. Registration Certificates are normally available after four weeks, required for completion of procedural formalities.
6. Others, not being exporters themselves, but desiring assistance for agro exports related activities can also get in touch to ascertain eligibility.

6. 6 MPEDA

Origin of MPEDA

The Marine Products Export Development Authority (MPEDA) was constituted in 1972 under the Marine Products Export Development Authority Act 1972 (No.13 of 1972). The role envisaged for the MPEDA under

the statute is comprehensive - covering fisheries of all kinds, increasing exports, specifying standards, processing, marketing, extension and training in various aspects of the industry.

Structure, Activities & Network

MPEDA functions under the Ministry of Commerce, Government of India and acts as a coordinating agency with different Central and State Government establishments engaged in fishery production and allied activities.

The plan schemes of the Authority are implemented under four major heads:

- Export production - Capture Fisheries
- Export production - Culture Fisheries
- Induction of New Technology and Modernisation of Processing Facilities.
- Market Promotion

Work programme of MPEDA

1. Registration of infrastructure facilities for seafood Export trade
2. Collection and dissemination of trade information .
3. Projection of Indian marine products in overseas markets by participation in overseas fairs and organising international seafood fairs in India.
4. Implementation of development measures vital to the industry like distribution of insulated fish boxes, putting up fish landing platforms, improvement of peeling sheds, modernisation of industry such as upgrading of plate freezers, installation of IQF machinery, generator sets, ice making machineries, quality control laboratory etc.
5. Promotion of brackish water aquaculture for production of prawn for export.
6. Promotion of deep sea fishing projects through test fishing, joint venture and equity participation.

The export performance of marine products is given in Table.6.11.

Table 6.11. Export Growth of Indian Marine Products

Year	Quantity in Tons	Value in Rs. Millions	Average Unit |Value Realisation	Growth Rate Quantity %
1990-91	139419	8933.7	64.08	25.78
1991-92	171820	13758.5	80.08	23.24
1992-93	209025	17685.6	84.61	21.65
1993-94	243960	25036.2	102.62	16.71
1994-95	307337	35752.7	116.23	25.98
1995-96	296277	35011.1	118.17	-3.6
1996-97	378199	41213.6	108.97	27.65
1997-98	385818	469748	121.75	2.01
1998-99	302934	462687	152.73	-21.48

The direction of marine products exports is furnished in Table 6.12.

Table 6.12 Market Wise Export of Marine Products

					Q:Quantity in M.TONS
					V:Value Rs.Millions
Markets		1998-99	Share%	1997-98	Share %
Japan	Q:	67,277	22.21	70,955	18.39
	V:	22,954.8		23,260.9	
U S A	Q:	34,472	11.38	32,914	8.53
	V:	6,173.20		5,837.5	
European Union	Q:	54,261	17.91	34,875	9.04
	V:	6,846.2		4,125.3	
South East Asia	Q:	1,16,610	38.49	2,18,263	56.57
	V:	7,660.6		11,390.9	
Middle East	Q:	17,274	5.70	17,618	4.57
	V:	1,479.7		1,446.6	
Others	Q:	13,040	4.31	11,193	2.90
	V:	1,154.2		913.6	
Total	Q:	3,02,934	100	3,85,818	100
	V:	46,268.7		46,974.8	

6. 7 Export Promotion Councils

Basic Objectives Role and Functions

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

Non-profit, Autonomous and Professional Bodies

The EPCs are non-profit organisations registered under the Companies Act or the Societies Registration Act, as the case may be. The EPCs shall be autonomous and regulate their own affairs. However, if the Central Government frames uniform bylaws for the constitution and/or for the transaction of business for EPCs, they shall adopt the same with such modifications as Central Government may approve having regard to the special nature or functioning of such EPC. The EPCs shall be required to obtain the approval of the Central Government for participation in trade fairs, exhibitions etc and for sending sales teams/ delegations abroad. The Ministry of Commerce and Industry/ Ministry of Textiles of the Government of India, as the case may be, would interact with the Managing Committee of the council concerned, twice a year, once for approving their annual plans and budget and again for a mid-year appraisal and review of their performance.

In order to give a boost and impetus to exports, it is imperative that the EPCs function as professional bodies. For this purpose, executives with a professional background in commerce, management and international marketing and having experience in government and industry should be brought into the EPCs.

Government support : The EPCs may be provided financial assistance by the Central Government.

Registration cum-Membership : An exporter may, on application, register and become a member of an Export Promotion Council. On being admitted to membership, the applicant shall be granted forthwith Registration-cum-Membership Certificate (RCMC) of the EPC concerned, subject to such terms and conditions as may be specified in this behalf.

6. 8 GATT

International Trade Order

In the period between the First and Second World Wars there was a marked deterioration in international economic relations. In the 1920s an attempt was made to bring back 'normalcy' by organizing world trade on liberal basis. But the system did not function well because of over valued currency and depression in 1930s have led to competitive devaluation by many countries to boost trade and imposition of trade restrictions to protect domestic industries. At the end of the Second World War the Bretton Woods Conference was held in 1944 to start a new order in world trade. The world economy was to be organized under three corner stones: the International Monetary Fund (IMF), the International Trade Organization (ITO), and the International Bank for Reconstruction and Development (IBRD). The IMF was designed to take care of short-term problems in connection with international

liquidity; the Ito would deal with the 'real' side of trading relations; and the IBRD would help to channel international investments along desired lines.

GATT

In 1946, while negations on the charter of the ITO were taking place. The United States took an initiative in preparing a general agreement on tariffs and trade (GATT) . In Geneva deliberations between the groups of 23 nations resulted in set of mutual tariff reductions, which were codified as GATT. The agreement was intended to be a 'stepping stone ' to the establishment of ITO but which never came into existence. This left the GATT as the frame work for trade relations. The member countries of GATT were to meet in Geneva (Headquarters) and negotiate multilaterally (rather than bilaterally) on matters of trade policy. It was also to act as a forum for the settlement of disputes between nations.

The structure of the GATT

The Agreements take the form of 38 'Articles' organized under four ' Parts'

- Part I (Article I and II) deals with the obligations of the contracting parties.
- Part II (Articles III- XXIII) provides the code for 'fair ' trade such as various technical procedures and conditions under which tariffs may be employed (e.g anti-dumping, for balance of payments reasons, to safe guard domestic industry).
- Part III (Articles XXIV- XXXV) deals with procedures for the application and amendment of the Agreement.
- Part IV (An amendment under Part III made in 1965) contains Articles XXXVI-XXXVIII which deal with the trade of Less developed Countries (LDCs).

Objectives

The three basic objectives of the GATT were a) to provide a frame work for the conduct of trade relations b) to provide a frame work for , and 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. It has been successful in meeting the first two objectives.

Principles

No-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 for as trade policy is concerned ,except vis-à-vis those not members of GATT or as allowed under other Articles (Article XXIV). 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.

Reciprocity

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

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.

Trade Policy and LDCs

The representatives of LDCs came to feel frustrated by the work done within the framework of GATT, and that the more consideration were needed to their specific problems.. It was the efforts roused by such feelings that led to the establishment of the **United Nations Conference on Trade and Development (UNCTAD)** and in 1964 the first UNCTAD conference was held at Geneva. The organization of the LDCs within UNCTAD is known as the '**Group 77'** (the group now numbers 128 LDCs). Despite wide political , ideological and cultural differences, this group has had some success in co-ordinating the attitudes of LDCs and has contributed toward the adoption of a common negotiating stance in other UN bodies.

6.9 World Trade Organization (WTO)

The WTOo's creation was agreed to at the end of the 1986-93 Uruguay Round(UR) of international trade negotiations. The agreement was formalised in the Final Act of the Round, which was signed by the trade ministers in Marrakesh, Morocco, in April 1994.. Launched on January 1, 1995, it replaced the old General Agreement on Tariffs and Trade (GATT), which had acted as the world trade watchdog since 1948.

It is officially defined as the "legal and institutional foundation of the multilateral trading system ". Unlike GATT , the WTO is a permanent organization created by international treaty ratified by governments and legislatures of member-states. It has a global status similar to that of IMF and IBRD. But unlike them it is not a United Nations agency, although it has a 'co-operative relationship' within the UN. Its underlying documents are the General Agreement – a 38 article code aimed at ensuring open and fair trade in goods, services, agricultural produce and textiles and 500 pages of specific accords reached in the Uruguay Round.

A Director –General, heads the WTO and who has four deputies from different member –states. The WTO ruling body is the General Council, comprising each member country's permanent envoys. It sits in Geneva an average of once a month. Its supreme authority is the Ministerial Conference to be held every two years. First conference was held at Singapore in 1998 and the second at Seattle in 2000. The General Council appoints the Director-General to a four year term after consultations among member countries. The

third Ministerial Conference was held on 19 the December 1999 at Seattle and declared the Draf Ministerial Text (DMT).

Currently 125 countries are the members of WTO. The membership applications of 28 others are being examined by working partners of present members. Notable among these are China, Russia, Taiwan, Saudi Arabia, and Ukraine. The membership applications of Iran, Iraq, Libya, Syria and North Korea are blocked by US.

The two key unite are the **Dispute Settlement Body(DSB)** and the **Trade Policy Review Body (TPRB).** The DSB, on which all member-countries can sit, usually meets twice a month to hear complaints of violations of WTO rules and agreements. It sets up expert panels to study disputes and decide if the rules are being broken. The DSB's final decisions, unlike those of a similar but less powerful body in the old GATT, cannot be blocked.

The TPRB is a forum for the entire membership to review the trade policies of all WTO states. Major trading powers are reviewed every two years, others every four years. Other major bodies are the council for Trade in Goods, the Council for Trade related- Aspects of Intellectual Property Rights(TRIPS)

TRIPS

It demands uniform rules on patents, copyrights, trademarks, protection for seed varieties and geographic appellations in all countries. Most economists now agree that implementation of TRIPS will be a loss for developing countries and a gain for developed countries. Demands against TRIPS are drugs classified as essential by Who should be exempted from the provisions of TRIPS. Living organisms should not be patented nor should traditional knowledge be patentable. The date of implementation of the agreement for developing countries should be pushed back by five years to 2005 and more.

TRIMs

The agreement on Trade Related Investment Measures (TRIMs) calls for notification and removal of all rules requiring firms to meet export targets, use a certain amount of local materials and link imports to exports. Developing countries are to comply by 2000.

Anti-dumping duties

The WTO rules permit a country to impose these duties if a product from a particular country is important at less than the 'normal' price. Both the developed and developing countries are increasingly levying these duties among themselves and at each other.

Subsidies and countervailing duties

Countries are allowed to provide certain subsidies for exports and not others. When 'actionable' subsidies are provided, the importing country can impose a countervailing duty. The developing countries are demanding an expansion in the number and volume of 'non-actionable' subsidies.

Technical Barriers to Trade (TBTs)

The WTO agreement on TBTs cover many technical and legal measures that could be that could be obstacles to trade. The most important is the one

that contains rules for standards on product quality. There is growing feeling that standards are replacing tariffs as barriers to developing countries exports. An agreement on health and safety standards for agricultural products is called the Agreement on the Application of Sanitary and Phytosanitary Standards (SPS).

Agriculture

The 1994 Ur agreement on agriculture committed the members of the GATT/ WTO to a) replace controls on imports (called quantitative restrictions or QRs) by customs duties and lower these tariffs over five to ten years, b) reduce subsidies depending on the value of the Aggregate Measurement of Support (AMS) if they were above a certain proportion of the value of production and c)lower export subsidies. The AMS is the total value of subsidies provided to agriculture on the basis of certain WTO methodology. The AMS comprises non-product and product subsidies. As the terms imply, the first cover subsidies of a general nature and the second cover support for specific crops. If the total AMS exceeds 10 per cent of the value of production (5 per cent in the case of developed nations) it has to be reduced by 13 per cent by 2004 (20 per cent by the developed nations). Certain subsidies – for research, food security, environment protection and low income farmers – are not included in the AMS. The WTO estimated that in 1996 in India the AMS in non-product subsidies was 7.5 per cent and product subsidies a negative 38.5 per cent that is , India on the whole did not subsidise its agriculture.

The General Council decided on 3rd May 2000 to hold Special Sessions to discuss various implementation related issues 2000. These negotiations are being conducted in the Special Sessions of the WTO Committee on Agriculture. Four Special Sessions of the Committee on Agriculture have already taken place in 2000 in which negotiating proposals submitted by different countries/group of countries were considered. While supporting the proposals which highlight the need for sufficient flexibility required by large agrarian developing economies to address their food and livelihood security, we have made it clear that India is not supportive of the attempts of certain developed countries to maintain their trade distorting subsidies. India has also co-sponsored a paper on 'Market Access' along with 11 other developing countries. This paper highlights the trade distortions prevalent in international markets and consequent hindrance to exports from developing countries. It has been demanded that the developed countries should effect substantial reductions in their tariffs on a weighted average basis and that the administration of tariff rate quotas (TRQs) should be transparent and equitable.

Textiles

The UR pact contained an Agreement on Textiles and Clothing (ATC) on dismantling restrictions, which for more than two decades had been controlling textile, exports by the developing countries. But in the ATC the phase-out over ten years is structured in such a manner that 49 per cent of products suffering restrictions are to be removed on the last day (December 31, 2004) of the transition period. This 'back loading' of liberalization as it

called protects the advanced economies at the expense of the developing countries. Indian textile exporters have been protesting at this slow phase-out . The demand now is therefore for an accelerated phase-out: on January1, 2002, 85 per cent of the textile products should be freed from restrictions in the developed country markets and by December 31, 2004 the remaining 15 per cent.

Services

While GATT always dealt only with trade in goods, the UR broadened the agenda by taking up the new area of services- example banking, insurance, telecom, maritime transport and the like. There are proposals to bring in health, education and technical services under General Agreement on Trade in Services (GATS).

Competition Policies

A number of countries have national laws governing competition. In India there is the Monopolies and Restrictive Trade policies Act that regulates competition. The US too has competition laws. If competition policies are put on the WTO agenda , it would mean a movement to a global treaty that sets uniform rules and regulations on competition in each country.

Trade and Environment

The developed nations are demanding that certain WTO rules should be framed to minimize the impact of trade on environment. This will inevitably mean that the developing countries should adopt stricter environmental standards in production for export.

Trade and Labour

The decline of some traditional industries such as steel, leather and textiles in the developed countries has been attributed by some cheap imports from the developing nations. The US and France attribute the greater competitiveness of developing country exports to payment of wages less than legal minimum, bans on trade union activity and even the use of prison labour. And also child labour being used by in some export oriented industries. The combined demand is therefore that the developing countries should follow certain minimum labour standards – otherwise there will be a 'race to the bottom' as a result of trade.

Government Procurement and Trade Facilitation

In a number of countries the value of government procurement – contracts for supply of goods and services , contract for civil works etc. adds up to 10 to 15 per cent of the economy. Most countries either keep out foreign companies or give a price preference to domestic suppliers. Developed countries want more transparency in award of government contracts. The trade facilitation involves working towards a uniformity of customs procedures, harmonization in the classification of products and the like.

7. Marketing Research, Finance and Risk

7.1 Marketing Research

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

Marketing Information System is defined as a set of procedures and methods for the regular and planned analysis and presentation of information for the use of marketing decisions.

Marketing Information System (MIS)	**Marketing Research**
1. It suggests methods to prevent and solve the problems for the whole organization under different perspectives e.g. sales advertising, cost of distribution etc.	It presents the problems pertaining to a particular field of activity
2. The past experiences form the basis for future and the results are future oriented.	It is only a post mortem of what had taken place already, in most cases.
3. It is fairly a wide concept and includes marketing research as one element.	It remains as a source for contributing necessary information to the MIS.
4. It is a continuous process	It operates more often on specific problems
5. It anticipates, prevents as well as solves problems related, to marketing	It is concerned with finding out solutions for marketing problems.

Elements of Marketing Research

- Market Research
- Sales Research
- Product Research
- Packaging Research
- Advertising Research
- Business Economics Research

- Export Marketing Research

Scope and uses of Marketing Research

It helps in a) production of marketable goods b) distribution of marketable goods c) size, nature and organization of sales and d) demand creation activities.

Forms of Research : Marketing research may be classified a) Ad hoc Research b) Continuous Research c) Exploratory Research and 4) Conclusive Research

Steps in Marketing Research

a) Problem formulation
b) Decision on Fact-gathering Procedure Data Collection
c) The Marketing Sample Data Evaluation
d) Interpreting the data Report preparation
e) Executive Report
f) Technical Report
g) Data Report
h) Popular Report

7. 2 Agricultural Marketing Finance

Finance required for agricultural marketing represent funds required for moving the crops from the farm to the consumer or the manufacturer for further processing. Thus there exists close relationship between agricultural production, and consumption and industrial production. The growth of agriculture is a precondition for industrial development.

Special features of Agricultural Marketing Finance

The agricultural marketing finance assumes importance because of certain special characteristics of farming. For instance, the farmer's credit worthiness is invariably not sound for obtaining necessary finance. They are often isolated and remote from the normal opportunities of obtaining credit.

The other special features are

a) The need for finance is recurring in nature.
b) Lack of commercial knowledge make it difficult to anticipate production prospects.
c) Sharing or shifting of risk in production is not possible
d) Small units of production
e) Changing climatic conditions are beyond the control of agriculturists and very often their expectations go wrong.
f) Organized marketing procedure is not adopted because of which forced sales take place in villages.

Kinds of Finance Requirement

Some of the finance requirements in agricultural marketing are

Farmer: Production -consumption -transport of produce to market is finance requirements
Middlemen : Working expenses, storage, transport finance requirement
Marketing Institutions : For building storage godowns, transport vehicle loan, working capital, to grant advance against pledge of produce.

Sources of Finance

1. Indigenous money lenders
2. Cooperative societies
3. Commercial Agencies

    a) **NABARD** (refinance facility)
    b) Agricultural Finance Corporation Limited
    c) Agricultural Refinance Corporation
    d) Regional Rural banks
    e) Commercial banks

4) Other sources: These include Nidhis, chit funds, and private financing agencies

7.3 Marketing Risk

Risk is defined as uncertainty about cost, loss or damage. Risk is inherent in all marketing transactions. The risks associated with marketing process are of three basic types.

i) Physical Risk

This includes a loss in the quantity and quality of the product during the marketing process. **It** may be due to fire, flood, earthquake, rodents, insects, pests, fungus, excessive moisture or temperature, careless handling and unscientific storage, improper packing, looting or arson. These together account for a large part of the loss of the produce at the individual as well as at the macro level. Such losses are loss to the society also and must be prevented to the extent possible.

ii) Price Risk

The prices of agricultural products fluctuate not only from year to year, but during the year from month to month, day-to-day and even on the same day. The changes in prices may be upward or downward. Price variation cannot be ruled out as the factors affecting demand for and the supply of agricultural products re changing continuously. A price fall may cause a loss to the trader or farmer who stocks the produce. Some times the risks are so great that it may result in a total failure of the business, and the person who owns it may become bankrupt.

iii) Institutional risk

These risks include the risk arising out of a change in Government's budget policy, in tariffs and tax laws, in the movement restrictions, statutory price controls and the imposition of levies.

Minimization of Risks

'The agencies engaged in marketing activities worry about the risks associated at every stage; and they continually try to minimize the effects

of these risks. A risk cannot be eliminated because it also carries profit. The risk can be minimized by adoption of some of the measures given below.

1. Reduction of Physical Loss

The physical loss of a product may be reduced by use of fireproof materials in the storage structures to prevent accidents due to fire;

1. Use of improved storage structures and giving necessary pre-storage treatment to the product to prevent losses in quality arising out of excessive moisture, temperature, attacks by insects and pests, fungus and rodents;.
2. Use of better and quicker transportation methods and proper handling during transit; and
3. Use of proper packaging material.

2. Transfer of physical losses to insurance companies

3) Minimization of price risks

a. Fixation of minimum and maximum prices for commodities by the government and allowing movement of prices only within the defined range.
b. Making arrangements for the dissemination of accurate and scientific price information to all sections of society over space and time.
c. Operation of speculation and hedging. The prices associated with commodities for which the facility of forward trading is available may be transferred to professional speculation through the operation of hedging.

8. Co-operation

8.1. Meaning of Co-operation

Generally speaking, co-operation means living, thinking and working together. In its technical sense it denotes a special method of doing business. In its formal sense, co-operation existed even before the existence of man. Right from the hunting age up to the present day the progress and development of human beings in all spheres, social, economic, religions and political is marked by a sense of thinking, working and living together. According to biologists co-operation has acted more powerfully towards the development of man than better competitive struggle for existence. Co-operation is, thus older than the co-operative movement. The co-operative movement is only one example of human co-operation among others, e.g. joint stock companies, cartels, trusts etc.

8. 2. Co-operative Movement

Germany was the first country in the world to apply the principles of co-operation in the field of credit. The co-operative credit movement was started in Germany in the middle of the 19th century. **Herr. F.W. Raiffeisen** (1818 - 1888) and **Herr. Franz Schulze** (1809 - 1883) was the pioneer in the field of co-operation. In 1852 Schulze founded a society at **Delitzsch** based on co-operative principles. He published a book in 1856, which contained the principles of co-operative banking as formulated by him.

Raiffeisen contributed the maximum to the spread of co-operative movement in Germany In 1849 he started, **`Union in aid of Impoverished Farmers'** at Flammers field and later **`Heddesdorf Beneficient Society'** The members of above two were well-to-do people. These people deposited money with the society on interest. Loans were given to deserving farmers and artisans for productive purposes. Although the society was a grand success, Raiffeisen did not somehow like the idea that the poor people should be at the mercy of rich. He therefore, enrolled these people as members of the society. Accordingly, a new society was constituted under the name of, **"Heddesdorf Credit Union"**. The memorable phrase **`each for all and all for each**' was coined here. The union worked on the principle of honorary service and unlimited liability. This movement gained momentum and in a short time many credit unions were organised. "The Grand Union of Rural Co-operative Societies" - also known as, "Raiffeisen Union" was set up in 1877.

History of Co-operative Movement in India

Co-operative movement is a twentieth century development in India. In 1882 the Madras (now Tamil Nadu) Government sent one of its officials, Sir **Fredrick Nicholson**, to study the movement in Germany. He submitted his report in 1885 in which he advocated the establishment of co-operative

societies on the Raiffeisen model. **In 1904**, the Government passed the **Co-operative credit Societies Act**. This Act laid the foundation of the co-operative movement in India.

The Act provided for the formation of credit societies only. The societies were to be rural or urban according as three-fourths of their members were agriculturists or not. The rural societies were to be organized on the Raiffeinsen model, while the urban societies on Schultz-Delitsch model in Germany. ***Unlimited limited liability was the rule in rural societies whereas in the case of urban societies it was limited liability***. But a number of difficulties were experienced in the working of the Act of 1904. It did not provide for of the formation of non-credit societies. The division of societies into rural and urban types was found to be unscientific. There was no provision in the Act for the establishment of central societies for supervising the work of primary societies and for supplying funds to them. **The Co-operative Credit Societies Act of 1912 removed these defects.**

In 1919 co-operation became a provincial subject. Many of the provinces passed separate acts to guide the movement in their respective areas. This period also saw the birth of the Co- operative Land Mortgage Banks. But the movement passed through considerable difficulties during the Great Depression of the thirties. The Second World War came as a boon to the movement. From 1939 to 1946 there were great increase in the number of societies and the range of their activities. Consumer co- operative societies got a special fillip during the war period.

Since independence, the co-operative movement has entered on a new phase of development. The principles of co-operation has been extended to all phases of human activities consumers' co-operative societies, Marketing societies for industrial production Consolidation of Holdings Societies, Educational Societies, Societies for Insurance and Banking etc. were developed in large numbers in different states.

8.3. Classification of Co-operative Societies

The Co-operative Societies in India can be broadly classified as 1) credit societies and 2) Non-credit societies.

Credit Societies

The earliest co-operative societies formed in India were credit societies. Even today they constitute the most important class of societies both in number and membership. Credit societies are of two types agricultural and non-agricultural societies Agricultural credit societies will be dealt in greater detail in later chapters.

Non -Agricultural Co-Operative Credit Societies

These societies are generally in urban areas. In contrast to the agricultural societies these have a large membership, limited liability and paid management and they pay high dividends to the shareholders. They are of the Schultz-Delitsch type whereas the agricultural credit societies are of the Reiffeisen model. These societies work under different forms. There are the urban banks meant for the benefit of the middle class. They have made good

progress in Bombay and Tamil Nadu. They are run efficiently. In Bombay, Punjab and Tamil Nadu thrift societies promote thrift by collecting regular savings every month for two to four years and invest them in proper channels. Besides, there are co-operative credit societies for employees of large firms and government departments. These societies are more successful as the members are educated. Their management is efficient. Artisans of the same occupation also farm such societies for self-help.

Non - credit Societies

It was the Co-operative Credit Societies Act of 1912 which for the first time provided for the setting up of non - credit societies. They are of two types a) Agricultural non-credit societies and b) Non - agricultural non - credit societies.

Agricultural non – credit Societies

These societies have been organized on various lines. There are co-operative irrigation societies, co-operative farming societies, consolidation of holding societies, co-operative better living societies etc. Other kinds of activities, which they have under taken with some success, are improvement of roads, digging public wells, opening dispensaries, schools etc. Organization of these societies is similar to that of credit societies, except that their liability is limited. The co-operative marketing societies and grain banks are the most important among the agricultural non-credit societies. The highlights of the societies as on 1994-1995 are furnished in Table 8.1. Both from the point of view of membership as well as extent of business done, sugarcane supply societies stand out as the important among non-credit societies. As on March 1995 there were 115 co-operative sugar factories with a membership of 16,333 agricultural credit societies and 17,96,381 cane growers as members. Ninety-five sugar factories with installed capacity of 3,24,971 tones of cane crushed 30 MT of cane per eight hours of crushing. The worth of sugar production was Rs.1734 crores.

Co-operative Farming

In India the size of unit of cultivation is extremely small and they tend to become more and more uneconomic with each succeeding generation. This is due to subdivision and fragmentation of holdings. Sub-division means the distribution of the land of a common ancestor among his successors usually in accordance with the law of inheritance. Fragmentation is allied to sub-division and is corollary to the manner in which sub-division is effected. These problems could be best solved through the introduction of the system of co-operative farming. It provides for the pooling of resources *viz,* land, labour and capital in cultivation.

Table 8.1 Highlights of certain agricultural non-credit societies

(as on 1994-1995)

Particulars	Agricultural marketing society			Irrigation societies	Dairy societies	Fisheries societies
	State	Central	Primary			
No. of societies	27	330	5,928	6,722	40,500	4,393
Membership	88,032	-	31,23,286	-	56,72,545	5,58,247
No. of societies making	-	-	-	1,857	-	1,649
A) Profit	-	-	-	3,552	-	1,501
B) Loss	-	-	-	1,313	-	1,243
C) No loss or no gain						
Value of business in crores of rupees	3,005	3,179	3,506	-	8,282	1,508

Arguments in Favour of Co-operation Farming

The general argument in favour of co-operative farming is that it will provide the means of bringing the benefits of large scale operation to small cultivators. By amalgamating the works and risks of individual farm, the introduction and use of technical knowledge and skill are made easier. The land wasted on boundaries can be put to economic use. In the non-economic sphere, the farmers develop a strong sense of security and cultivate the group spirit.

A Critical Analysis of Co-operative Farming in India

There is a large section of opinion, which sees no special merit in the system of co-operative farms. The fundamental weakness of the system of co-operative farming lies in the fact that such a co-operative farm would have to distribute the crops either on the principle of the need of each cultivate or on that of the amount of work performed by each of them. If the first principle is adopted, there would be a lack of incentive to work hand and so efficiency would suffer. If the share of each cultivator is to be determined on the basis of his contribution in land and labour, disputes are bound to arise regarding the relative intensity of work by different members. If the system of co-operative farming is to be introduced on a large scale, it would involve a considerable amount of compulsion, which is unsuited in a decorative set up.

Co-operative farming as practiced in India has failed to serve the end for which it was conceived. Co-operative farming may be worked successfully, if conditions are otherwise satisfactory. But before this is done, intensive propaganda has to be carried on to create necessary climate for

making such a method of cultivation successful. The information on co-operative farming (as on 1994-1995 is furnished in Table 8.2.

Non - Agricultural Non - Credit Societies

There are various types of these societies, such as co-operative consumer Societies, co-operative production societies etc.

Consumer Co-operation Movement

It is a voluntary organization of consumers organized to obtain their requirements of consumer goods and services on terms of greatest advantage to them. The main object of a consumer co- operative store is to serve its members and customers with goods required for their household consumption at reasonable price and to protect the interest of the members. These stores are also expected to stabilize the price line and check the exploitation of the consumers by the private business.

A scheme for establishment of consumer co-operative store in universities and colleges was launched to meet the requirements of essential items like textbooks, scientific instruments etc. At the all India level there is a National Co-operative Consumer's Federation (NCCF). It was registered in 1965. It is an apex organization of consumer co-operatives in the country.

Table 8 . 2. Co-operative farming societies

(as on 1994-1995)

Particulars	**Joint farming societies**	**Collective farming societies**
Number	2,254	1,595
Membership	1,67,128	96,253
Land under register (lakh ha)	170	140
Actual area sown (lakh ha)	0.56	0.61
Value of production (crores of Rs.)	8.5	-
Number of societies making		
a) Profit	373	356
b) Loss	1,086	905
c) No loss or no gain	795	334

At the State Level, State Co-operative Consumer Federations have been started and affiliated to NCCF. The main functions of a state federation are to co-ordinate the work of the consumer stores at state level and to obtain the supplies from NCCF and other sources and supply the same to the consumer stores. Consumer wholesale co-operative stores with a network of branches have been set up in all big cities. As on 1999-2000, the primary stores numbered 28,290 ,696 wholesale/central stores at the district level , and 29 State consumer co-operative federations . In addition more than 50,000 Primary Agricultural Co-operative Credit Societies and Large sized Adivasis Multi-purpose Co-operative Societies , 4180 student Co-operative stores and 1,25,00 fair price shops distribute essential commodities to consumers. In 1999-2000 consumer co-operatives have a membership of 16.5 million and

achieved a sales of Rs. 95 billions which constituted 2.5 per cent of total retail sales of consumer goods in India.

Department Stores

The beginning of Super Bazaars was made in India when on 15th July 1966, the biggest department store was setup in Delhi. The opening of this shore proved to be a landmark in the consumer co-operative movement in India. They are expected to serve as a price setters and act as market leaders in matters of fixing prices of consumer
goods. Most of these department stores deal in a wide range of consumer articles, which include groceries, cosmetics, household goods, textiles, ready made garments, drugs and medicines etc. There were 726 department stores in 1994-1995. Their sale valued Rs. 742 crores of which groceries and controlled commodities amounted to Rs. 557 crores and Rs. 442 crores, respectively.

8. 4 . Achievements of the Co-operative Movement

The various achievements and benefits of the co-operative movement sin in India can be summarized under the following four heads: 1) Economic benefits 2) Social and Moral benefits 3) Educational benefits and 4) Political benefits.

Economic Benefits

The co-operative movement has been rendering invaluable services for the economic betterment and well being of the rural and urban population. Some of the economic benefits provided by the co-operative movement can be stated as under

1.Cheap credit.
2.Freedom from moneylenders.
3.Better use of credit.
4.Development of banking habits.
5.Better price to farmers.
6.Distribution of essential commodities.
7.Improvement of agriculture **.**

Special and Moral Benefits

The co-operative movement has also brought about a number of social and moral benefits to the people.

1. It teaches the people the lesson of unity, brother-hood and corporate feeling.
2. The co-operative movement discourages litigation, extravagance, drunkedness and gambling.
3. It insists to its members the virtues of self-reliance, thrift, self - help, economy, honesty, integrity and diligence.
4. Unlimited liability makes all members supervise the activities of others. This acts as a check on the expenditure for unproductive purpose.

5. Co-operative societies spent part of their profit for community benefits and thus they promote better living and bring about improvement is social conditions.

Educational Benefits

A good co-operative society is a continuous source of education for the members. They provide valuable training in business methods and accounting. They create in the members a desire for education.

Political Benefit

Co-operation is educating people in self-government. The running of co-operative institutions give them sufficient training in running democratic institution. It is encouraging local leadership to take up and shoulder responsibility at local level.

Defects of the Co-operative Movement

In spite of the achievements of the co-operative movement, it has not lived up to the expectations of its founding fathers. It has been subjected to serious criticisms on various grounds 1. Small men not benefited, 2. Non-viable units, 3. Dormant societies, 4. Rising over dues, 5. Meager finances, 6. Absence of self-help, 7. Domination of vested interest, 8. Officially sponsored.

9. Agricultural Finance

9.1. Meaning and Importance of Agricultural Finance

Agricultural finance includes both macro and micro finance aspects of the agricultural economy. Agricultural finance is defined as the economic study of acquisition and use of capital in agriculture i.e. it deals with the supply and demand for funds in the agricultural sector of the economy. The investment on a farm is also considered as the combination of i) ability to invest; and ii) willingness to invest. Ability to invest is production finance while willingness to investment is development finance. There are many credit agencies which provide liberal credit for production purposes and there by inducing ability to invest. However, in the absence of willingness to invest these borrowed funds shall remain idle. Thus, certain level of infrastructure is essential to absorb the production - oriented loan, making the development finance a pre - requisite for the production finance. Agriculture finance is essential for the following reasons.

1. Agrarian Structure

Extreme inequalities exist in the distribution of operational holding and operational area. Indian agrarian structure is characterized by the preponderance of small and medium size holdings. Their economy is weakened by frequent onslaughts of floods, droughts, famines and price fluctuation. The adversities of the weaker section of agriculturists can be alleviated either by making their farms viable units or by providing alternative employment avenues through pragmatic plans, which would need finance.

2. Technological Break Through

Many of the high yielding varieties and hybrids of many crops are capital demanding technologies. So to reap the fruits of improved technologies farmers need finance for purchase of agricultural inputs.

3. Provision of Irrigation

To bring more arable area under irrigation and hence reduce variability in crop yields agricultural finance is required.

4. Agro-Industries

To improve employment opportunities processing and value addition of agricultural products require finance. Export of value added products will earn more foreign exchange than raw commodities in addition to generation of employment opportunities.

5. Capital Structure

The capital structure in agriculture differs from that of industry. While the fixed capital in agriculture is more, the working capital is less. It is *vice versa* in industry.

6. Gestation Period

Unlike industry, the returns on investment in agriculture can not be realised immediately. Between sowing and harvesting processing marketing period there is a big time gap. During this period, the farmer has to meet all cultivation and farm maintenance expenses. Almost all crops have a gestation period of two months (onion) to seven years. While expenditure is continuous process the income is seasonal in agriculture. Many a times the dearth of cash flow hampers the farming operations.

7. Infra Structure Development

The green revolution has increased the production of agriculture commodities. But this has not brought substantial increase in income due to farmer's bottleneck in infrastructure. Hence, infrastructure development like transport, cold storage requires investment to increase agricultural exports, processing and value addition to agricultural products.

Peculiarities of Farm Finance

Financing agriculture involves a thorough understanding of the farmers and farming conditions in the area. The important factors which differentiate agriculture from other lending are

1.Majority of the farmers are illiterates.

2.Farming is exposed to natural risk and uncertainties.

3.As the farms are scattered, supervision and follow-up is difficult and time consuming.

4.Farm products are perishable and they can not be stored for a long time.

5.Oral tenants are not able to receive credit from financing institutions, though they operate the farm for a long time.

6.Farmers are susceptible to external influence and hence some vested interest exploit them and guide them in the wrong direction.

7.Opportunities to divert the loan is more. Therefore, the end use of the loan has to be ensured at every stage of the release of the loan. Since income is essential, the repayment schedule has to be drawn in accordance with the income generation from investment.

9 . 2 . Rural Indebtedness in India

Rural indebtedness has deep roots in the country. The burden of rural debt has crippled the rural economy.

Extent of Rural Indebtedness

The problem of rural indebtedness has drawn the attention of many authorities even before the independence period. The Deccan Ryots Commission (1875), the Finance Commission (1890), the Finance Commission (1901) Central Banking Enquiry Commission (1931) were worth mentioning. Experts like M.L. Darling, Dr. P.J . Thomas, Dr. Radhakamal Mukherji have also studied the rural indebtedness in India .

Post Independence Period

All India Rural Credit Survey Committee (1951), Rural Debt and Investment Survey studies the depth and severity of rural indebtedness in India.

Nature of Indebtedness

In fact, volume of debt does not matter but it is the nature or purpose of debt that matter a lot. From the various studies conducted by experts it is evident that credit is being used not for productive purposes rather it is used exclusively for unproductive purposes like marriage, birth day celebration and other social obligations by the
cultivators.

Causes of Rural Indebtedness

Broadly, there are several factors responsible for indebtedness on account of which an Indian agriculturist incurs debt and remains indebted for ever. Some of the causes of rural indebtedness are

i) Chronic poverty of farmers
ii) Ancestral debts
iii) Excessive pressure of population on land has resulted in the reduction of per capita income. This meager income is not enough for meeting the family needs. Thus farmers are forced to borrow.
iv) Subdivision and Fragmentation of Holdings
v) Unfavourable climate
vi) Extravagance of farmers
vii) Litigation
viii) High interest rate

Evils/Effects of Indebtedness

Indebtedness has far-reaching economic social as well as political effects on the lives of farmers in India. It has lowered down their morale and made them fatalists, lowering their productive efficiency and dragging them into vicious circle of poverty. Some of the effects of rural indebtedness may be mentioned in brief as follows.

A . Economic Effects

1. The cultivators lose their productive efficiency as they do not take much interest in permanent improvement of level.
2. It results in the transfer of land from cultivators to non-cultivators (Absentee land lords).
3. Farmers are called upon by their creditors to sell their produce through them alone at low prices.
4. The terms of trade move against the farmers.
5. The farmer loses his property for which he has deep love and affection.

B . Social and Moral Effects

1. The landless farmers are called upon to do serf their creditors when the loan has been taken from land lords.
2. It causes frustration in the minds of debtors since it develops into a long worry from which, they know, they will not be able to relieve themselves.
3. The incentive to work hard, to take risks, to make improvements and to increase their income is reduced and the hole outlook is so changed as it goes to extinguish the spark of life. It proves a great impediment to the growth of rural life.

C . Political Effects

1. The indebtedness has greatly affected the political status of the marginal and small farmers.
2. Big land lords / money lenders indulge in mean and dirty practices in order to attempt to squeeze the debtors. This poisons the political atmosphere of rural areas which results in social tension. The rural areas which results in social tension.

Government Measures to Reduce Rural Indebtedness

The Government initiated a series of measures to reduce rural indebtedness keeping in view steady increase in the volume of debt and agrarian unrest in the country. In fact, Government took very serious view of the exploitation of poor peasants at the hand of merciless money lenders and initiated the following measures.

a)Debt relief measures.
b)Improvement in debt legislation.
c)Reduction on the ability of the cultivators to borrow.
d)Provision of alternative sources of credit.

9. 3. Sources of Agricultural Finance

The sources of finance can be broadly classified into i) Non - institutional Credit Agencies and ii) Institutional Credit Agencies.

Sources of Agricultural Finance

Non-institutional Credit Agencies			**Institutional Credit Agencies**
a.	Money lenders	1.	Government
i.	Professional money lenders	2.	Cooperatives
ii.	Agricultural money lenders	3.	Commercial banks
b.	Traders and Commission agents	4.	Regional rural banks
c.	Land lords	5.	Reserve Bank of India
d.	Relatives and friends	6.	Agricultural refinance and development corporation
e.	Others (indigenous bankers nidhis,, chit funds etc)	7.	Agricultural finance corporation
		8.	Rural electrification
		9.	National Bank of Agriculture and Rural Development

Non - Institutional Credit Agencies

Money Lenders

Village money lenders still dominate the scene they disbursed 16.1 per cent of the lone requirement. The reasons for the popularity of money lenders are.

i) They meet the demand for productive as well as unproductive purpose.
ii) He is an easily approachable person even at odd hours.

iii) The methods of advance are simple.
iv) Advances are given against land and promissory notes.

Money lenders enjoy the virtual monopoly in the field of agricultural finance. They can be classified into two categories.

I) Professional Money Lenders

A professional money lender is one whose main occupation is lending money. He combines it with trading in the village produce.

ii) Agricultural Money Lenders

They are also called as non - professional money lenders. Their main occupation is farming. They are owners of that type of land which produces more than their requirements. They possess enough funds. They combine money lending business along with the cultivation of land.

Defects of Money Lenders

The conditions under which the money lender works, the helplessness on the part of cultivators, their illiteracy and the grip of money lenders on them enable the money lenders to be a virtual monopolist in the field of agricultural finance. He adopts different tactics to take from cultivators as much as possible. Some of the malpractices followed by money lenders are

1. Deductions before disbursement of loan but charge interest for the total amount. He takes full advantage of illiteracy of farmers to alter the records.
2. High rate of interest is charged.
3. Repayments in kind is not taken into consideration.
4. In the event of non repayment of loan money lender use force to collect grain from threshing floor.
5. He lends for even unproductive purposes.

Traders and Commission Agents

Traders and commission agents advance loans to agriculturists for productive purposes against their crops without any legal agreement. They force them to sell their produce at low prices and they charge heavy commission for themselves. In case of cash crops like cotton, groundnut tobacco etc., this source of finance is very important. The loans disbursed by traders constituted 3.2 (1981) per cent of total loans disbursed to cultivator.

Land Lords

Most small farmers and tenants depend on land lords in order to meet their day to day financial requirements. The credit taken from the landlords bears exorbitant rate of interest. Land lords and other agencies provided 8.8 per cent of cultivator requirements.

Institutional Credit Agencies

Government

Government provides both direct and indirect finance to the farming sector. Extending financial assistance to farmers in the farm of ***taccavi*** loans in times of distress like famines, floods drought etc. has been traditional. As early as 1793, loans were given to farmers through various regulations and these regulations were followed by a series of enactments. The government ***taccavi*** loans formed 3.9 per cent of total credit given to cultivations (1981).

The merit of government loans are a) They are granted for a long period b) low interest is charged and c) the repayment plan is convenient.

The demerits of these loans are:

1. Farmers' actual need are not taken into consideration while making provision in the budget.
2. Quantum of loan is determined on the basis of the value of security offered, by which big and large land lords receive more credit than small and medium land owners.
3. The prime objective of the loan is relief in distress and not for production oriented purpose.
4. The landless labourers were left out in the lurch at the time of distress.

The extent of credit provided by institutional and non- institutional credit agencies is furnished in Table 9.1. since 1951-52

Table 9.1. Borrowings of cultivators from different agencies

	Agency	**1951-52**	**1961-62**	**1974**	**1981**	**1991**
A	**Non - Institutional credit agencies**					
i)	Money lenders	69.7	69.2	36.1	16.9	17.6
ii)	Traders	5.5	8.8	8.4	3.4	2.5
iii)	Relatives and friends	14.2	8.8	13.1	9.0	5.5
iv)	Land lords and others	3.3	14.5	10.7	9.5	7.2
	Unspecified	-	-	-	-	3.2
	Sub-total	92.7	81.3	68.3	38.8	36.0
B	**Institutional Credit Agencies**					
v)	Government	3.1	15.5	7.1	4.6	8.7
vi)	Co-operatives	3.3	2.6	22.0	28.6	21.6
vii)	Commercial Banks	0.9	0.6	2.6	28.0	33.7
	Sub-total	7.3	15.7	31.7	61.2	64.0
	Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

The flow of credit through institutional agencies has been progressively has increasing from 7.3 per cent to 64 per cent of total credit provided to cultivators.

10. Co-operative Credit Institutions

10.1. Classification of Agricultural Credit

According to Reserve Bank of India credit needs can be classified by purpose as.

i) Family Expenditure Needs

This type of credit is needed for purchase of domestic utensils and clothing; paying for medical, educational and other family expenses.

ii) Non - Farm business Purpose

Such credit is required for the repair of productions and transport equipment, furniture, construction and repair of buildings or non-farmhouses and other capital expenditures of non-farm business.

iii) Agricultural Purpose

Farmers need credit for the purpose of seed, manure fodder, payment of rent, wages, hire charges of pumps, purchase of livestock repair of agricultural implements, land improvement, for laying of orchard and capital expenditure on agriculture.

Agriculture Credit Needs Based on The Length of the Loan Period

The credit needs of the farmers can be classified into three, short term, medium term and long term credit. Disbursement of credit for different terms is furnished in Table 10.1.

Table 10.1. Disbursement of credit by institutional agencies.

(Rs. Crores)

Purpose of Agricultural Credit	1991-1992	1992-1993	1993-1994	1994-1995	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000
Short term	7,080 (63.20)	10,092 (66.53)	11,271 (68.33)	14,209 (66.32)	16,886 (67.95)	16998 (64.36)	20,640 (64.59)	23,633 (64.05)	27,210 (60.91)
Medium / long term	4,122 (36.80)	5,077 (33.47)	5,223 (31.67)	7,215 (33.68)	7,963 (32.05)	9413 (35.64)	11,316 (35.41)	13,264 (35.95)	17,465 (39.09)
Total	1,1202 (100.00)	15,169 (100.00)	16,494 (100.00)	21,424 (100.00)	24,849 (100.00)	26,411 (100.00)	31,956 (100.00)	36,897 (100.00)	44,675 (100.00)

(Figures in parentheses indicate percentage to total)

The short-term credit formed about 65 per cent of total credit and the rest formed medium and long-term credit.

Short Term Credit

These loans are needed for the purchase of seeds, fertilizers, and pesticides, feed and fodder for livestock etc. The period of such loans lies between 9 to 15 months. In 1998-99 Rs. 23,633 crores was disbursed as short-term credit by institutional credit agencies, which constituted 65 per cent of total credit disbursement.

Medium Term Credit

Farmers generally obtain these loans for the purchase of cattle sheep, goat, small agricultural implements, repair and construction of wells, farm building and fencing etc. The period of these loans ranges between 15 months to 5 years.

Long Term Credit

It includes the loans for making improvements on land, purchase of expensive machinery, purchase of additional land, digging of wells and repayments of old debts etc. The amount involved in such loans is very large. The rate of interest on such loans is generally low. These loans are advanced for a long period ranging between 5 to 20 years. A sum of Rs. 13,264 crores has been disbursed as medium and long-term credit by institutional agencies in 1998-99 and which formed 36 per cent of total credit disbursement by them.

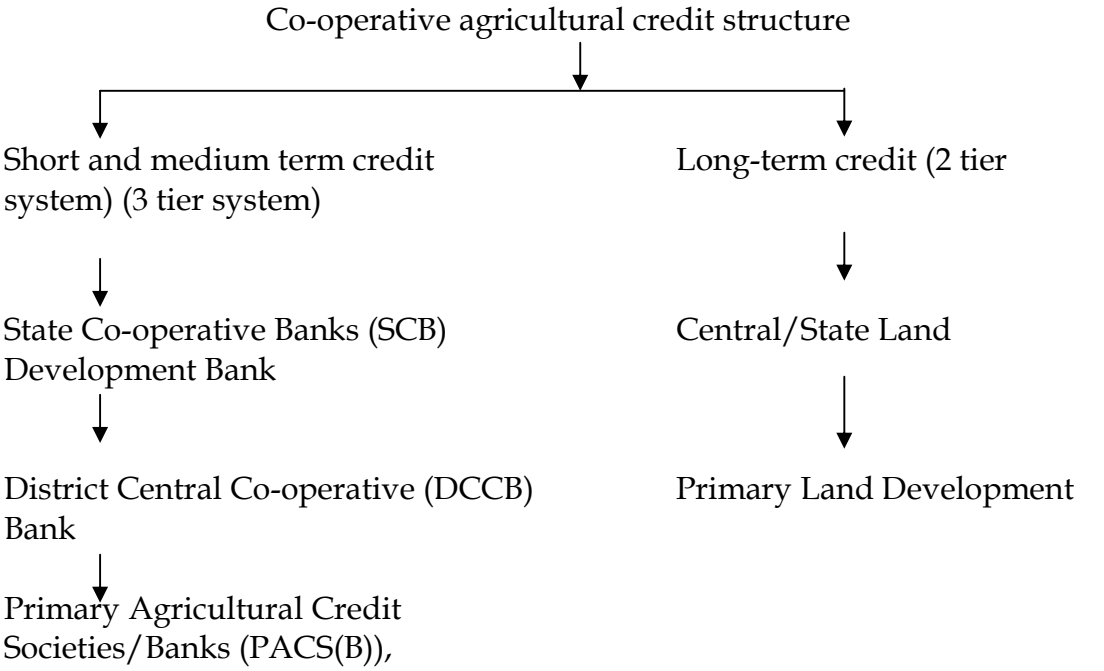
10.2. Co-operative Agricultural Credit Societies

Credit disbursed by co-operative agricultural credit societies form 55 per cent of total credit advanced by institutional credit agencies of cultivators.

Co-operative Credit Structure

The cooperative credit structure in India is characterized by two types of institutions; one involved in the dispensation of short and medium - term credit and the other in deployment of long - term credit. While the formed is constituted by three tier structure, the latter is formed by either two-tier structure or three tier structure.

Co-operative Agricultural Credit Structure



The agricultural primary credit society is the foundation stone on which the whole co-operative credit edifice is built. These societies are federated to Central Co-operative Banks (CCBs). The CCBs are federated to State Co-operative Bank (SCB), which is an apex institution serving the whole stat apart from establishing close link with the Reserve Bank of India (RBI) and National Bank for Agricultural And Rural Development (NABARD). Long- term credit is provided by Land Development Banks (LDB). The State Land Development Bank (SLDB) is the apex institution which operates through Primary Land Development Banks (PLDBs) at district / Taluk / block level in some states or through its own branches where PLDBs do not exist . As on March, 1999 there are 1,07,027 branches of co-operative banks functioning in India, of which 86 per cent are PACS branches.
(Table 10.2).

Table 10.2 Number of branches of co-operative credit institutions in India

Category	1995 - 96		1998 - 99	
	Number	Number of branches	Number	Number of branches
State Co-operative Banks	28	651	29	807
State Land Development Banks	20	1,060	19	745
District Central Co-operative Banks	361	10,775	367	12,217
Primary Agricultural Credit Societies	-	90,783	-	92,100
Primary Land Development Banks	747	1,153	747	1,158
Total		1,04,422		1,07,027

Primary Agricultural Cooperative Banks

Primary Agricultural Credit Societies (PACS) now called as Primary Agricultural Co-operative Banks (PACB) form the base of three tier cooperative credit structure i.e. retail shop for short and medium term credit to agriculturists. The progress of PACBs is given in Table10.3.

Table 10.3. Progress of PACBs

(**Rs. Crores)**

Particulars	1992-93	1993-94	1994-95	1998-99
No. of PACBs	83,400	84,905	89,000	92,100
Owned funds	2,224	2,273	3,239	3,329
Deposits	13,531	16,769	1,9711	5,255
Borrowings	565	496	563	13,299
Loans outstanding	10,132	12,172	14,520	19,586

Functions

a) To promote economic interests of its members as per the co- operative principles.
b) To provide short term and medium term credit.
c) To promote saving habit among members.
d) To supply agricultural inputs like fertilizers, seeds, pesticides and implements etc.

Apart from the above functions the PACBs also supply domestic requirements such as sugar kerosene etc. and associate itself with economic and social welfare programmes of the village.

Management

The management of the societies is vested with the general body, which meets at lease once a year. The general body elects a managing committee consisting of five to nine members. Managing committee elects a president and a secretary to look after day to day working of the society. All these office bearers render honorary service now the RBI has given a directive to appoint a full time paid secretary to each society.

Membership

All agriculturists, agrl. labourers, artisans and small traders in the village can be come members of the society. Total membership as on March,1999 is 1,016 lakhs of which borrowing members were 440 lakhs constituting 43 per cent of total membership.

Liability

Initially started with unlimited liabilities. The all India Rural Credit Review Committee pointed out that unlimited liability operates as a restraint on the willingness of the society to liberalise its loan policies, to admit new members and to extend its area of operations. Besides, it widens the society to receive Governments contributions from the State Govts. whose liability inevitably has to be limited. In view of this, societies were formed with limited liability and the existing unlimited liability societies were converted into limited liability societies.

Share Capital

PACBs issue ordinary share of each Rs. 10. The ownership of shares decides the rights and obligations of the holder to the society. Share capital forms an important part of the working capital. Members borrowing capacity is determined by the number of shares held by them.

Sources of Funds

Share capital, entrance fees, deposits, reserve funds and loans borrowed from higher institutions or government are the sources of funds to the societies. PACBs obtain loans from District Central Co-operative Banks and State Co-operative Banks. The maximum borrowing power of the society is based on its liability and it differs from state to state. It is generally fixed at $1/6^{th}$ to $1/8^{th}$ of the value of the total net assets of the solvent members. Credit limit is fixed by the Registrar of Co-operative Societies are CCBs on the basis of the factors viz., total assets of the members income and repaying capacity of members, owned funds of the society audit classification and repayment performance.

Loan Policies

The PACBs supply short and medium term credit to their members Short term loans are granted on the personal security of the borrowers and medium term loans are extended either by creating charge on their immovable assets or by mortgages. The repayment period is determined on the basis of the incremental income derived out of the loan.

Viability of PACBs

Many of the banks are non -viable. The PACBs were reorganized to make them viable through the following measures.

i) Minimum short term loan business of Rs. 2 lakhs for a PACB to became a viable unit;

ii) Coverage of villages with a gross cropped area of 2000 hectares to achieve this level of business; and

iii) Appointment of a suitably trained and full - time paid secretary to manage its affair.

The State Govts were also advised to take effective steps to ensure functional coordination between short term and long term cooperative credit structure, with a view to provide the package of credit at one contact point.

Merits and Demerits of Co-operative Credit Banks

Merits

Because of limited area of operation the PACBs posses intimate knowledge of villages.

1. It can instill strong feeling of responsibility for prompt repayment of loans and
   provide strong incentives for thrift and savings.
2. The procedure of deposit and withdrawal is far less complicated since identification and similar problems do not exist.
3. It has no rivals except money lenders

Demerits

i) Problem of over dues :Over dues increased from 22 per cent to 45 per cent between 1950- 51 and 1990-91. This affects the viability of societies.

ii) Diversion of loans from productive to non-productive purpose since no control by the co-operatives over the use of credit.

iii) Neglect of small, marginal farmers and rural artisans.

iv) Regional imbalance in development Co-operative movement made some progress only in certain states such as Punjab, Haryana, Gujarat, Tamil Nadu, Maharashtra and Kerala. In other states its impact remained very little until recently.

Measures to revive PACBs

1. Reorganization of PACBS as reported earlier.
2. Linking credit and crop insurance.
3. Autonomy and non-interference.
4. Linking credit and other services.
5. Proper assessment of repaying capacity of the borrowers.

6. Govt. must take serious action against defaulters.
7. Educating the members about proper utilization and repayment of loan.
8. Timely supply of credit to farmers.

Central Co-operative Banks (CCBs)

The CCBs form an important link between PACBs and SCBs their progress sin furnished in Table 10.4.

Functions

The main functions of CCBS are

i) To meet the credit requirement of member societies.
ii) To perform banking business.
iii) To act as balancing for the PACB by diverting the surplus funds from surplus to deficit societies.
iv) To under take non - credit activities.
v) To maintain close and continuous contact with PACBs and provide leadership and guidance to them.
vi) To supervise and inspect the PACB.
vii) To provide a safe place for the investment of the resources of PACBs.

Area of operation is generally a district while the membership is limited to individuals, it is open to all types of co-operatives.

Table10.4. Progress of Central Cooperative Banks

(Rs. crores)

District Central Co-operative Banks	**1950-51**	**1981-82**	**1991-92**	**1993-94**	**1996-97**	**1997-98**
Number	506	338	353	361	364	367
Owned funds	-	-	-	-	5,761	3,721
Deposits	37.79	2,758	10,357	16,251	30,381	36,558
Borrowings	-	-	-	-	10,505	11,805
Loans issued	83	4,444	11,122	17,788	32,311	31,801
Loans outstanding					28,373	31,237
Percentage of overdue to demand	8.7	35.3	43.0	38.0	30	30
Non-performing assets (gross %)	-	-	-	-	17.36	18.05

Sources of Finance

They raise funds by way of share capital deposits from public borrowing for SCB Govt, RBT, SBT and commercial banks. The borrowing power range from 12 to 15 times of their paid up share capital and reserve funds.

Loan Policies

These banks generally extend short term and medium term loan to PACBs for financing agriculture. Loans are granted against proper security Of land, house mortgage, Cattle, agricultural produce, gold ornaments, fixed deposits, receipts, life insurance polices, Govt. promissory notes and promotes extended by the borrowing societies.

Reasons For the Mounting Over Dues

i) Inadequate supervision and follow up
ii) Lack of prompt action against willful defaulters and
iii) Slackness in the efforts to recover loans.

Management

The management of these banks is vested with board of directors consisting of 12 to 18 members. These banks supervise PACBs. One supervisor looks after 20 societies and one senior supervisor control 80 supervisors.

Rehabilitation of CCBs

Based on the recommendation of AIRCSC, the principle of one Central Bank for each district was followed in all states. Weaker units were amalgamated with stronger ones. As a result of this reorganization policy, the number of central banks decreased from 506 in 1950-51 to 367 in 1999.

State Co-operative Banks (SCB)

It is the apex institution at the state level which links widely scattered PACBs with money market. The main objective of the bank is to coordinate the work of central banks and to link PACB with the money market and RB. The progress of SCBs is given in Table 10.5.

Functions

1. They act as bankers bank to the CCBs in the district. They mobilise financial resources needed by the PACBs and deploy them properly among the various sectors of the country.
2. They coordinate with various development agencies and help the Govt. in drawing plans for co-operative development and their implementation.
3. Uniform credit policies for the co-operative movement are formulated and executed by them.
4. They supervise control and guide the CCBs in their activities; and
5. They also perform banking functions such as issuing drafts, cheques, letter of credit, collecting and disbursing bills etc.

Table 10.5. Progress of SCBs during 1951-52 to 1991-92

(Rs. in crores)

State Co-operative Banks	1950-51	1981-82	1991-92	1993-94	1996-97	1997-98
Number	16	27	28	28	28	28
Owned funds					2,947	3,319
Deposits	21.18	1,888	6,708.08	11,305	17,491	22,201
Borrowings					8,033	8,524
Loans issued	55.22	3,540.5	7,853.38	9,801	28,665	27,805
Loans outstanding					18,312	19,586
Percentage of over due to demand	10.09	7.20	18.0	15.5	14	16
Non-performing assets (gross %)	-	-	-	-	10.20	11.76

Area of Operation and Membership

Each state has one apex bank. Some states like Maharashtra, Madhya Pradesh, Punjab and Andhra Pradesh have more than one. Membership is open to all CCBs and such other societies, which have direct dealings with SCBs. In some states individuals are allowed to become members. State Govts. have become shareholders with a view to give them strength, influence and borrowing power.

Management

While the main authority of SCBs is vested with general body, powers of day-to-day functions rests with the board of directors. As a shareholder, the Govt. nominates some directors and rest are selected by General body and it meets once in a year.

Sources of Finance

Sources of finance are share capital, reserve funds, deposits from members and non - members, borrowings from NABARD SBI, State Govt. and direct state contributions. The ceiling on borrowings varies from 12 to 20 times of the owned funds.

Loan Policy

1. SCB provides ST loans to meet agriculture operations, marketing the agriculture produce and distribution of controlled commodities.
2. They grant MT loans for purchase of cattle, machinery, reclamation of land, renovation of wells, tanks and channels, construction of farm sheds, go downs and replacement and repairs of agricultural machinery.
3. Loans are granted to the member societies through their branches

10.3. Land Development Banks (LDBS)

Reasons for Establishment of LDBS

1. Bulk of credit was given by institutional agencies at higher rate of interest indebtedness of the farmers was so acute that it did not allow them to receive long-term credit.
2. The organizational structure of PACB did not permit them to deploy long-term credit.
3. Commercial banks could not disperse long-term credit because of ST nature of their deposits.
4. The Govt. was not considered as an ideal agency for supply of finance as stated in the AIRCSC Report (1954).

Hence ,the need for special type of credit institutions to meet long-term credit demand for farmers had arisen. Therefore, Land Mortgage Banks (LMBs) were established under the cooperatives credit societies Act. AIRCSC (1954) recommended the establishment of a Central Land Mortgage Bank (CLMB) in each state at the apex level and strengthening the Primary Land Mortgage Banks (PLMB) at the district level.

Objectives

To promote the development of agriculture and increase the agriculture production, SLDBs provide long-term credit to PLDBs affiliated to them or finance directly through their branches.

Organizational Structure

The long-term cooperative credit structure is not uniform throughout the country. The structure pattern of land development banks fall into one of the following four categories.

1. Federal type with SLDB at the top and PLDB at the base. This is followed in Andhra Pradesh, Assam, Haryana, Kerala, Karnataka, Maharashtra, Punjab, Rajasthan, Tamil Nadu, and West Bengal.
2. The State Land Development Banks advances loans directly to individuals through its branches. This pattern prevails in Bihar, Gujarat, J & K and Uttar Pradesh.
3. SLDBs operating through its branches as well as PLDBs.
4. SLDBs operates through separate department of CCBs of the area. These separate departments shall be replaced by independent PLDBs.

Primary Land Development Banks (PLDBs)

All landowners are eligible to become members and borrow funds by mortgaging their land. The principal borrower is enrolled as `A' class member and others who have interest in the mortgaged property are admitted as `B' class members. Total ground level membership as on March, 1999 is 130 lakhs.

Area of Operation

The area of operation of PLDBs shows very wide variation and it ranges from a few taluks to the whole district though no hard and fast rules are laid down with regard to area of operation, it should neither be too large

as to become unwidely nor too small as to be uneconomic. The RCRC (1969) has suggested that size of the unit at the primary level should be such as to make compact enough to maintain close touch with the borrowers and at the same time large enough to render the unit viable in terms of available and potential business. A PLDB to be an economically viable unit, should handle a minimum business of Rs. 20 lakhs a year with a margin of 1.25 per cent employing requisite staff for the purpose.

Management

The management of PLDBs is vested with an elected board of directors consisting of 9 to 12 directors.

Source of Finance for PLDBs

Share capital, loan from State Land Development Banks, admission and other fees, grants and subsidised loans from the government and borrowing from other agencies. It also raises their share capital by issuing shares to the members in certain properties to their borrowings from the banks (1.5 to 10 per cent). The position of PLDBs as an 1998-99 is furnished in Table 10.6. Now the name of PLDBs has been changed as Primary Co-operative Agricultural and Rural Development Banks (PCARDBs)

Table 10.6 Position of PLDBs /PCARDBs as on 1998-1999

(Rs.crores)

Particulars	**1997-98**	**1998-99**
Number	745	745
Owned funds	986	1,169
Deposits	99	152
Borrowings	5,888	6,849
Loans issued	1,527	1,692
Loans outstanding	5,840	6,819
Percentage of overdue to loans advance	45	40
Non-performing assets (gross %)	10.78	16.08

State Land Development Banks (SLDBs)

1. The members of the State Land Development Banks are the PLDBs and a few individual promoters.
2. It grants long - term loans to agriculturists through PLDBs and its own branches.

Sources of Finance for SLDBs

Share capital, issue of debentures, loans from SBI and other commercial banks, raising funds on the guarantee of state government, admission and other fees, grants subsidies, deposits and other funds. SLDBs raise finance through issue of ordinary rural and special development debentures.

The ordinary rural debentures are issued to the general public institutions and individuals. These are treated as trusted securities and are guaranteed by the state governments. They are subscribed by RBI, SBI,

Cooperative Banks, Commercial Banks and LIC. Rural debentures are issued to raise funds for sanctioning loans to agriculturists for productive purposes. Special debentures are floated for providing finance to the agriculturists under special agricultural development or land development programmes.

Management

1. The management of SLDB is vested with a board represented by 7 to 9 directors.
2. Government nominates 2-3 directors in some states.
3. Members of the board work for three years.
4. The general body of the bank is the ultimate authority in all matters relating to administration of the bank.
5. Every SLDB has an executive committee consisting of 9 members. Among them president, vice - president, nominee of the apex and cooperative bank, Registrar (four members) are ex officio members.

Administration

The administration of SLDB vests with the executive committee. It has powers to admit members, sanction loans, make investments, borrow funds and approve transfer of shares and debentures.

Lending Programmes of SLDBs

1. SLDBs were advised to ensure that 90 per cent of loan issued by them were for increasing agricultural production, not less than 75 per cent being devoted for easily identifiable productive purposes.
2. Further they are required to ensure that at least 20 per cent of the loans granted under normal lending programmes goes to small and marginal farmers and weaker sections of the societies. The position of SLDBs is furnished in Table 10.7.

Table 10.7 Position of SLDBs/SCARDBS88 on 1997-1998

(Rs. crores)

Particulars	**1996-97**	**1997-98**
Number	19	19
Owned funds	1,653	2,022
Deposits	200	240
Borrowings	9,786	11,093
Loans issued	2,295	2,437
Loans outstanding	9,182	10,442
Percentage over dues to advance	39	38
Non-performing assets (gross %)	19.44	19.19

Report of the Task Force to Study the Cooperative Credit System and Suggest Measures for its Strengthening

- Government of India constituted a Task Force in April, 1999 under the Chairmanship of Shri Jagdish Capoor, Deputy Governor, Reserve Bank of India to study the cooperative credit system and suggest measures for its strengthening. The other members of the Task Force were Shri

Shekhar Agarwal, Joint Secretary, Ministry of Finance, Shri Govindan Nair, Joint Secretary, Ministry of Agriculture and Shri Y. C. Nanda, Managing Director, NABARD.

- The terms of reference of the Task Force included a review of the functioning of the cooperative credit structure for suggesting measures to make cooperatives member-driven professional business enterprises, rationalisation and improvement in costs, spreads and effectiveness at various tiers of cooperative credit structure and with a view to improving their financial health so that they can become efficient and cost effective instruments for delivery of rural credit and a review of the existing supervisory and regulatory mechanism for cooperative credit institutions and suggest measures for strengthening the arrangements.
- The Task Force submitted its report to the Finance Minister on July 24, 2000 in Delhi.
- The report has emphasised the need for reducing Government control over cooperatives, giving maximum autonomy to these institutions and recommended that they should be regulated under the Banking Regulation Act. The report has suggested development of staff and local leadership for cooperatives. Structural changes recommended include an exit route for unviable units and merger of Long Term and Short Term cooperative credit structures. In case a merger is not possible, both type of institutions be allowed to handle long term as well as short-term credit. The report has concluded that strengthening of base level institutions would be the key for strengthening the entire structure and recommended rehabilitation of potentially viable units through a package of measures, which encompasses financial, operational, organisational and systemic aspects. The Task Force has recommended that rehabilitation should be unit-specific and not across the board and should be taken up after studying its viability and possibility of turnaround in five to seven years. The financial burden of rehabilitation will be shared by members contributing 20 percent of the costs by mobilising additional share capital. Balance amount will be provided by Central and State Governments by way of interest bearing bonds to be redeemed in a phased manner. Share capital contribution from the State/Central Governments has not been recommended.
- The report exhorts state governments to adopt Model Cooperative Societies Act or dovetail the essential features of the Model Act in their respective State Cooperative Societies Acts so as to ensure democratic functioning of cooperatives with least interference from state government and leaving banking functions clearly under the governance of Banking Regulation Act. It has called for effective supervision of lower tiers of the cooperative credit system by the higher tiers and introduction of audit of cooperatives by chartered accountants.

- It has recommended that societies should be run professionally on business principles and that interest rate spread available to them should be adequate to meet costs, leaving some surplus. Cooperative banks should have freedom to take investment decisions without the prior clearance from Registrar of Cooperative Societies.
- Task Force has further recommended that Government should provide support to the cooperative banks in their recovery effort and should desist from providing across the board interest subsidy or making loan waiver announcements. A committee approach to write off what is clearly not recoverable and compromise settlements is suggested. It has suggested that the provisions of the existing Debt Recovery Tribunals may be made applicable to cooperative banks also where loan size is more than Rs. one lakh so as to expedite recovery of chronic overdue.
- It has suggested setting up a Cooperative Rehabilitation and Development Fund at NABARD by contribution from Government of India and another Mutual Assistance Fund at State level by contribution from cooperative institutions in the state concerned.

10.4. Special Type of Co-operative Banks

10.4.1. Large sized Adivasis Multipurpose Cooperative Societies (LAMPS)

Large sized adivasis multi purpose co-operative societies was set up on the recommendation of the study (Bewa) Team appointed by Govt in 1971. These societies operate mainly in hill and tribal areas

Objectives

1. All types of credit (meeting social obligation and consumer requisites) shall be provided under a single roof.
2. Providing technical guidance in the intensification and modernization of agriculture.
3. Supply inputs and essential commodities.
4. Arranging for the marketing of agriculture and minor forest produces besides the products of other subsidiary occupation.

Source of Finance

Borrowings from commercial banks, share capital and Government contributions. The Committee to Review Arrangements for Institutional Credit for Agricultural and Rural Development (CRAFICARD) observed certain constraints for staggered growth of LAMPS as.

1. lack of aggressive investment lending,
2. non availability of trained and experienced personnel for manning executive position,
3. absence of effective marketing organization and market intelligence, lack of infra-structural arrangements for storage and transportation and
4. inadequate agency commission to the societies for distribution activities.

Performance

There were 2646 LAMPS as on 30th June 1991 with Madhya Pradesh, Bihar, Maharashtra and Orissa together accounting for 78 per cent of the total.

Total members of these societies were 39.91 lakhs of which 29.68 lakhs were scheduled castes and scheduled tribes. The paid up share capital stood at Rs. 74.38 crores. The Government contribution being Rs. 30.70 crores and the working capital was Rs. 453.55 crores. Over dues of LAMPS stood at Rs. 163.61 crores which formed 65.20 per cent of
their demand. The non - credit business of these societies were restricted to marketing of products, distribution of farm requisites and consumer goods.

Members

It is formed in a compact area of having a population of 10,000 (approximately)
and the majority of whom should be tribal. Membership restriction is there 70% from tribal and 30% of the members should be non-tribal.

Board of Management

The management comprises of whole time managing directors and other staff and Board of Directors consisting of members of whom five shall be elected from tribal members, two from amongst non - tribal members, two nominees of the Registrar of co-operative societies, one nominee of the financing bank and the Managing Director ad Ex-officio member.

10.4.2. Farmers Service Co-operative Societies (FSS)

The National commission on Agriculture found that the existing institutional
structure as inadequate to meet the special needs of weaker sections i.e. small and marginal farmers and agricultural labourers. Consequently, the commission in their Interim Report on Credit Service December 1971, recommended the organization of Farmer's Service Societies (FSS) to provide integrated services to weaker sections particularly SFDA / MFAL project areas.

Management

The farmer's service society is a registered cooperative body with bye - laws to ensure autonomy and have an eleven-member board; 5 representatives of small farmers, two representatives of other members, two nominees of the Govt. and one from the financing bank. The board mainly lays down policies and approves the programmes. A Managing Director appointed by the Registrar in consultation with the financing bank, administers credit as well as transactions of both inputs and services. A commercial bank or central co-operative bank can launch Farmer's Service Society.

Functions of FSS

The society is the sole agency for all development needs of weaker sections, either directly or by special arrangements with other agencies charged with the following functions.

1. All the credit requirements of members (ST, MT and LT credit) are to be provided from the nearest branch of commercial bank.

2. FSS would either directly involve in ensuring the inputs as well as use of farm and transport equipment, veterinary services, marketing, storage facilities etc. or may enter into contract with other agencies.
3. FSS is expected to take up the construction of wells, minor irrigation works, godowns and even roads, for its members as well as for others to fill the gap in availability of services at reasonable cost and reliability.
4. To encourage and assist for mobilization of deposits and small savings in nearest branch of the bank.
5. To encourage the provision of facilities for developing subsidiary occupations like dairying farm forestry etc.
6. To help the artisans and crafts men in obtaining credit supply of raw materials and services to modernize their trades.

Thus, FSS take the total responsibility for farming operations of its members, utilize the advantage of co-operative form of organization at the ground level and the business experience of commercial bank i.e. enabling the commercial banks to reach a large number of members.

Performance

There were 2140 FSS in India as on 30-6-1991. The total membership was 67.74 lakhs of which small farmers and marginal farmers and agricultural labourers constituted 83.54 per cent. The paid up capital stood at Rs. 97.19 crores of which Rs. 17.79 crores was contributed by state governments. The FSS has issued loans to the tune of Rs. 252.28 crores. The overdue was 40.86 per cent of their demand.

11. Crops and Livestock Insurance

Insurance is a contractual arrangement by which a large uncertain loss is transferred to another individual or agency for a known small cost called the premium. Hence insurance is a social device, which aims at reducing the uncertainty of loss or risk through distribution of burden of loss by the use of funds accumulated in advance. Like any other production process agriculture too involve risks, hence a farmer is constantly being subjected to different farms of risks. Generations of farmers have developed certain time tested managerial and institutional strategies to cope with such with risk situations. Crop insurance is one such defense mechanism, which plays an important role in shifting risk in farming. The most attractive feature of crop insurance is that each farmer pays the premium when he is capable of paying and reserves the indemnity when he needs it most.

11.1. Pilot Crop Insurance Scheme (PCIS)

The Reserve Bank's study team on overdue of co-operative credit institutions (1974) under the Chairmanship of Shri C.D. Datey recommended the introduction of a scheme of credit cum loan insurance in order to provide relief to members of cooperative societies during crop failure.

The Government of India in 1979-80 launched credit linked Pilot Crop Insurance Scheme (PCIS) in selected low risk areas of Tamil Nadu and West Bengal for paddy, and groundnut and cotton in Gujarat. The General Insurance Corporation (GIC) was to act as the lead insurer with the State Governments acting as co-insurer. An annual Ceiling of Rs. 2000 per farmer was fixed to limit the financial liability under the scheme. Only farmers who availed institutional credit in the selected area were eligible for the coverage. The indemnity and premium rates were worked out on the basis of yield data furnished by the concerned State Governments on the basis of crop cutting experiments.

Changes were introduced in the PCIS from time to time to make it more effective and attractive to the farmers and to increase its coverage. During 1981-82, a subsidy component was introduced where by 50 per cent of the premium is to be paid by the small and marginal farmers were to be borne equally by the central and concerned State Governments. Medium risk areas were also included in the purview of coverage during 1982-83 and per farmer annual ceiling was enhanced from Rs. 2000 to Rs. 5000.

11.2. Comprehensive Crop Insurance Scheme (CCIS)

By the end of Eighth Five-year plan period PCIS came operational in 12 states. Up to March 1985, the scheme benefited 6.22 lakh farmers covering 6.92 lakh hectares with a mean premium - loss ratio of 1:0.78. Encouraged by the modest success of the PCIS, the Govt.of India replaced it with Comprehensive Crop Insurance Scheme (CCIS) on national level in 1985.

The CCIS was a built in crop insurance cover to crop loans only. The basic objectives of CCIS were

1. To provide a measure of financial support to the farmers in the event of crop failure due to natural calamities.
2. To restore the credit eligibility of farmers after a crop failure for the next crop season, and
3. To support and stimulate production of cereals pulses and oil seeds.

Features of CCIS

1. All crops covered by the commercial banks, cooperatives and the regional rural banks are covered by the scheme.
2. The amount of insurance premium is included as an additional in the scale of finance for the crop loan and the insurance charge is deducted at the time of loan disbursement.
3. The major crops covered under the scheme were paddy, wheat, maize, jowar bajra, ragi, green gram, black gram, red gram bengal gram, peas, soybean, groundnut, mustard, sunflower, safflower, sesamum and castor.
4. The sum assured is 150 per cent of the amount of crop loan disbursed for the eligible crop. The insurance premium is one per cent for rice, wheat and millets and two per cent for oilseeds and pulses. In the case of small and marginal farmers the insurance premium will be subsidized to the extent of 50 per cent, the subsidy being shared equally by the `Central and State Governments.
5. GIC would administer the scheme on behalf of the Govt. of India and it will be the leading insurer.
6. The respective State Governments are the co - insurers of the scheme. The GIC and the State Govts. would share the premium income and loss in the ratio of 2:1.
7. The `Central Crop Insurance Fund' and `State Crop Insurance Fund' financially support the scheme.
8. The indemnification is on area basis with the tehsil/taluk being kept as the unit. If there is a short fall in actual average yield per hectare of the insured crop as a result of crop failure (below 50 per cent of the normal) each of the insured farmer growing that crop in the defined area is eligible for indemnity calculated with respect to the threshold yield.

Table 11.1. shows that since the inception in 1985-86 Kharif season, 5.85 crore farmers have been covered under the CCIS, with the cumulative insurance sum amounting to Rs. 16,598 crores claims totaling Rs. 1,456.75 crores have so for been disbursed, as against a premium income of Rs. 271.65 crores. The center's payment to GIC (implementing authority) under the scheme worked out to Rs. 110 crores in 1997-98.

Table11.1. Performance of CCIS from *Kharif* 1985 to *Rabi* 1997

States	No. of farmers (lakhs)	Sum assured	Insurance charges	Claims paid
Gujarat,	77.28	3,602.44	44.07	790.57
Andhra Pradesh	97.55	4,122.77	71.25	268.85
Maharashtra	131.43	2,228.50	36.91	151.41
Madhya Pradesh	81.88	1,525.79	22.82	45.29
Orissa	29.27	750.34	14.59	41.90
Bihar	30.27	819.51	16.39	40.71
Tamil Nadu	22.41	1,006.5	18.56	32.73
Karnataka	21.38	787.17	11.79	28.67
Rajasthan	5.35	82.97	1.60	22.93
West Bengal	51.94	1,044.89	20.88	20.25
Uttar Pradesh	27.62	431.82	8.53	5.00
Kerala	4.34	154.56	3.06	6.44
Others	3.99	40.88	1.17	2.20
Total,	**584.71**	**16598.14**	**271.65**	**1456.75**

A striking feature of CCIS has been its dominance in a few states such as Gujarat and Maharashtra and its total absence in Punjab and Haryana. Crops grown in Haryana and Punjab, under irrigated condition - paddy and wheat embody little risk. But they grow `risky' crops like cotton, which are not covered under CCIS. In recent years safe crops such as paddy are not immune to damage even in Punjab.

Limitations of CCIS

1. The CCIS restricts the eligibility of insurance coverage to borrowers of crop loans from commercial banks, regional rural banks and co-operatives making it a Crop Loan Insurance Scheme, instead of a Crop Insurance Scheme.
2. The Government in order to achieve income stability and to stimulate the production of cereals, pulses and oilseeds, extended benefits of crop insurance only to the borrowers of institutional credit agencies at the cost of a vast majority of farmers who do not borrow from financial institution or are out of their reach. In fact it is the vulnerable section of the farmers who are more insecure due to income instability than the better placed farmers who come in contact with financial institution. Extending the coverage of scheme to a large number of farmers would help the implementing agency to spread risk through the `law of large

numbers'. Such efforts may have spill over social benefits by inducing risk - averse farmers to operate at an optimal level on the one hand and the cross subsidization of high risk farmers by low risk farmers on the other hand.

3. The indemnification on area basis also causes adhocism in crop damage estimation.
4. All the farmers in area paying the same rate of premium and receiving the same indemnity is not scientific when viewed against the fact that crop output varies largely from farmer to farmer and even from plot to plot.
5. Another shortcoming of CCIS was that instead of covering all the crops grown by farmer, the scheme considering only special crops. If it covers all the crops taken together it will involve the calculation and collection of single premium and assessing a single indemnity on the basis of the insurable value of crops actually raised per operational holding per year.

11.3. Experimental Crop Insurance Scheme (ECIS)

Experimental Crop Insurance Scheme was implemented by united Front Govt. for one year from 1997 to 1998 and restricted to 24 districts ECIS covered both loanee as well as non-loanee small and marginal farmers. The entire insurance charge burden was borne by the Central and State Governments in the ratio of 50:50.

11.4. Modified Crop Insurance Scheme (MCIS)

Modified Crop Insurance Scheme was proposed to be implemented from 1999 *Kharif* season on a pilot basis in 24 districts. It would cover all the farmers irrespective of their land holding size MCIS would extend insurance for cash crops where the past yield data are available. The premium payment will be on dual premia system under which ordinary farmers would have to pay the entire premium amount as per actual calculations. Small and marginal farmers would have to pay a nominal insurance charge fixed by the Government which will in turn foot the difference between the actuarial premia and the fixed insurance charge. Thus the Govt. will only partially subsidise the small and marginal farmers under MCCIS.

National Agricultural Insurance Scheme : 1999-2000

To meet the demand for bringing in more crops into the purview of Crop Insurance, extending its scope to cover all farmers (both loanee and non-loanee) and lowering the unit area of insurance, the Government has introduced a new Scheme titled "National Agricultural Insurance Scheme" or "Rashtriya Krishi Bhima Yojana" in the country from Rabi 1999-2000. It has replaced the earlier Comprehensive Crop Insurance Scheme(CCIS). The scheme envisages coverage of all the food crops (cereals and pulses), oilseeds and annual horticultural/commercial crops, in respect of which past yield data is available for adequate number of years. The premium rates vary from

1.5 percent to 3.5 per cent (of sum insured) for food crops and cereals. These rates have been worked out by the technical agency under the General Insurance Corporation of India(GIC) keeping in view the determinants of actuarial rates. In spite of that, if the actuarial rates are found to be less than the prescribed flat premium rates, the lower rate will be applicable. In the case of commercial and horticultural crops, actuarial rates will be charged. Small and marginal farmers will be entitled to subsidy of 50 per cent of the premium charged which is to be shared equally between Central Government and the State Government. The premium subsidy will be phased out over a period of 5 years. The new scheme would operate on the basis of Area Approach, that is, defined areas for each notified crop for widespread calamities and on an individual basis for localized calamities such as hailstorm, landslide, cyclone and flood. Individual based assessment in case of localized calamities would be implemented in limited areas, on experimental basis, initially and shall be extended in the light of operational experience gained. Under the new scheme, each participating State/UT will be required to reach the level of Gram Panchayat as the unit of insurance in a maximum period of three years. The Government has also decided to set up an exclusive organization for implementation of the new scheme in due course. Until such time as the new set up is created, the General Insurance Corporation of India (GIC) will continue to function as
the Implementing Agency.

11.5 Livestock Insurance

Livestock insurance scheme was introduced to protect thee rural people from loss due to death of livestock. The various livestock covered under the insurance scheme include cattle, sheep and goat, horse/ pony/ mule/ camel/ elephant/ dog/ rabbit/ poultry and duck. The insurance cover is also available to brackish water prawn, inland fish, silk worms and honeybees. There are separate schemes, which are differing in valuation, premium and other conditions for each type of livestock.

Livestock insurance scheme is compulsory for animals purchased under institutional finance and for other animals it is optional. The policy covers the loss of animals due to death caused by accident, diseases, surgical operation and risk of breeding and calving. There are some provisions to cover permanent disability of cattle.

Sum Assured

The sum assured will not exceed 100 per cent of the market value of the cattle. For permanent disablement claims insurance cover is limited to 75 per cent depending upon the veterinarian's recommendations.

Premium

The premium rates vary depending on whether the animals are covered under schemes like IRDP or non-scheme animals and also between indigenous and crossbred or exotic animals. It varies from 2 to 5 per cent. The report of qualified veterinarian's certificate indicating the age identification health of the cattle must be attached with the proposal for insurance. For

renewal of cattle insurance fresh certificate is not necessary if it is done before the expiry of the original insurance.

One or more of the following methods should identify all insured animals.

a) Ear tag b) Branding with hot iron c) Tattooing

Claim Procedure

In the event of death of insured cattle the farmer or the bank, which has advanced the loan, should inform the insurance company immediately and the following documents have to be furnished.

1. Duly completed claim form (along with ear tag if there is one)
2. Death certificate obtained from qualified veterinarian on company's proforma.
3. Post-mortem examination report if required by the company.

The position regarding number of cattle covered, premium collected and claims paid since 1994-95, is listed in Table 11.2. The fall in the number of animals insured in last two years is due to reduction in the number of low value animals such as calves, sheep and goats which now constitute hardly of 25 per cent of animals covered.

Table 11.2 Livestock Insurance–Premium and Claims

Year	No. of animals insured (millions)	Premium collected (Rs.Crores)	Insurance claimed amount(Rs. Crores)	Claims to premium ratio
1994-952	14.3	108.87	71.63	66
1995-96	15.0	113.39	74.06	65
1996-97	14.7	122.54	74.83	61
1997-98	6.3	143.45	80.11	56
1998-99 (Provisional)	8.2	149.66	93.88	63

12. Nationalised Banks

The nationalization of 14 major commercial banks was a landmark in the history of banking in India. One of the objectives of bank nationalization in 1969 was to make the banking sector sub- serve the needs of the smaller people. The then Prime Minister Indira Gandhi set forth the following considerations as influencing the bank nationalization. "Nearly 14 years age, Parliament approved that we should set before ourselves the goal of a socialistic pattern of society. Since then, the Government has taken several measures towards the achievement of this goal. Financial institutions are the most important levers that any society has at its command for the achievement of its social and economic objectives. The nationalization of major banks is a significant step in the process of public control over the principal institutions for the mobilization of people's savings and channelising them towards productive purposes".

12.1. Objectives of Nationalisation of Commercial Banks

The major objectives of the nationalisation of commercial banks may be summarized as follows.

1. Removing control over commercial banks by few large industrial houses.
2. Providing adequate credit to the hitherto neglected sectors such as agriculture, small business, small scale and professional.
3. To introduce professional management to commercial banking.
4. To provide incentives and stimulus to young and qualified entrepreneurs.
5. To provide adequate training and reasonable service conditions for bank employers.

The commercial banks have become powerful institutions contributing for agricultural and rural development and also the upliftment of weaker sections of the rural community. Some of the significant achievements are rapid branch expansion, expansion of rural credit, strengthening of the cooperative sector and support to village and rural industries. The first nationalization of 14 major banks in 1969 and later another six major banks in 1980 together control 80-90 per cent of banking business.

The most impressive advancement of public sector banks is the branch expansion in rural and semi - urban areas (from 4000 to 23000) that facilitated mobilisation of rural savings and also credit delivery for rural activities. The gains accrued to the farmers by way of increased economic activities in villages are immeasurable, perhaps this level of branch expansion would not have been possible but for the state ownership of banks.

12.2. Priority Sector Lending

Government and the Reserve Bank of India fixed specific targets at various points of time to improve the flow of rural credit more particularly to the weaker sections. The banks were asked to lend 18 per cent of their advances to agriculture and were also expected to lend 40 per cent to the priority sector, which includes agriculture, exports and small business.

Out of the total advances to the priority sector, 25 per cent was to go to the weaker sections, which comprise small and marginal farmers and agricultural labourers. In addition, one per cent was to be given to the weaker sections at four per cent interest. In order to improve credit flow to rural areas, it was stipulated that the credit - deposit ratio at the rural and semi - urban branches should reach at least 60 per cent. So also in the case of differential rate of interest loans, it was specified that two thirds of the lending should be through rural and semi - urban branches and 40 per cent of the credit should go to scheduled castes and tribes. All these norms have been taken by banks seriously and almost of all of them have nearly reached the targets. The growth of priority sector lending by commercial is furnished in Table 12.1

Table 12.1. Share of Priority Sector in Bank Credit

(Per cent)

Year	Agriculture		Small Scale Industries	Other Priority Sector	Total Priority Sector
	Direct	Indirect			
June 1969	1.3	4.0	8.6	8.7	14.6
December 1976	7.6	2.5	13.0	2.6	25.7
June 1990	16.9	1.3	15.6	9.0	42.3
March 1996	12.4	1.9	16.0	7.5	37.8
March 1997	11.1	1.8	9.4	6.4	28.7
March 1998	10.7	1.8	8.7	6.3	27.5

*Source: V. Pugazhendi and B. Jayaraman (1999) `Rural Credit Delivery: Performance and Challenges before Banks**: Economic and Political Weekly**, XXX IV (3&4) PP.175-194.*

12.3. Innovative Schemes

The banks, which are totally strangers to the rural areas, devised many innovative methods to get into the heart of rural India.

12.3.1. Village Adoption Scheme

State Bank of India adopted a novel method known as `village adoption `scheme'. The scheme aims at deriving in full the advantages accruing from concentrated and coordinated efforts in areas with significant agricultural development potential and having a large number of small and marginal farmers. Although the ideology behind the village adoption scheme is commendable, acclaiming a village as adopted by a bank after servicing the

interests of few residents of the village only cannot be accepted. Therefore the RBI advised the adoption of a village by a bank would mean that it had declared its intention to do intensive farming in the area and would not preclude other banks from financing that area. It is for the bank to take special interest in the development of the village it has adopted in coordination with other agencies functioning in that area.

12.3.2. Special Branches

Following the foot steps of SBI, other banks have also devised schemes such as Gram Vikas Kendra (GVK) of Bank of Baroda, Rural Service Centre (RSC) of Dena Bank, Farmers clinic (FC) of the Syndicate Bank and Rural credit and Development Division (RC DD) of Indian Overseas Bank have facilitated better understanding between the banks and farmers.

12.3.3. State Bank of India

It has played a pioneering and dominant role in the agricultural finance and rural development. Its total credit for agriculture as at the end of March 1996 was Rs. 7000 crores. This was achieved by opening a large number of rural and semi - urban branches and also by opening more than 400 agricultural development branches (ADBs) specially equipped to handle agricultural finances. The bank has also appointed several technical persons in the cadre of rural development officers to help the bank in its activities and the farmers in adopting modern techniques. The bank also launched a special programme known as *Gramodaya* project covering about 300 villages. Under this approach, the village is selected by a branch usually the agricultural development branch which conducts a survey of the village and draws a plan for its development covering agriculture, rural industries, health, sanitation education and the like.

12.3.4. Govt. Sponsored Programmes

In the cause of rural development, the govt. has launched a number of programmes like small farmers development agency (SFDA), drought prone area development project (DPAP) tribal area development project (TADP), integrated rural development programmes (IRDP), twenty point economic programme (TPEP), command area development programme (CADP) and Training rural youth for self - employment (TRYSEM). These are all ambitious programmes of the Government for socio - economic development of rural areas. The programmes involved substantial outlays and also arrangements for supply of various inputs and marketing of produce. The loan disbursed and families benefited under IRDP lending are furnished in Table12.2.

12.3.5. Differential Rate of Interest Scheme

The Differential Rate of Interest (DRI) was introduced in 1972 on the recommendations of RBI committee headed by Dr. R.K. Hazari to overcome the limitations of the interest rate policy on account of its general and indiscriminate nature.

` Under the scheme banks were asked to finance certain specific productive activities undertaken by economically and socially backward classes of the people and social welfare organization at a lower rate of interest

of four per cent per annum as against the normal rates of interest changed by banks on the loans advanced by them.

Table 12.2 Loan disbursement under IRDP

Year	No. of families assisted (lakhs)	Disbursement of term credit (Rs. Crores)
1985-86	30.61	730
1991-92	25.17	1138
1992-93	20.69	1037
1993-94	26.38	1408
1994-95	22.15	1451
1995-96	2090	1701
1996-97	18.89	1953
1997-98	16.97	1991
1998-99	12.68	1642

The beneficiaries of the scheme are

1. Scheduled tribes, scheduled castes and others engaged in a modest scale in agriculture or allied activities.
2. People occupied in the collection or elementary processing of forest produces.
3. People collecting fodder in difficult areas and selling them to farmers or traders.
4. People physically engaged in a modest scale in cottage and rural industries.
5. Poor students of merit going for higher studies.
6. Physically handicapped person pursuing a gainful occupation.

The scheme introduced on an experimental basis in selected backward district of the country in 1972 was slowly extended to other regions of the country in the succeeding years and was made to cover the whole country by December 1976. The public sector banks and three non - nationalized banks initially implemented the scheme with lead responsibilities in certain districts. It was however modified in 1976 so as to enable the private sector banks also to participate in it on a voluntary basis.

In 1979, the public sector banks were advised to lend at least one per cent of their aggregate advances under this scheme and to give a minimum of 40 per cent of person belonging to SC & ST. Under this scheme public sector banks have extended credit to the tune of Rs. 702 crores of which Rs. 438 crores were given to SC/ST borrowers.

12.3.6. Lead Bank Scheme

The lead bank scheme is yet another significant step taken by the commercial banks in the task of rural development. The banks realized that credit absorption in rural areas cannot be systematic and stream lined unless backed up by a well-drafted credit plan. The lead bank scheme was introduced in 1970 with the objective of promoting banks' role in the over all development of various districts. As on date, the lead bank scheme covers 512 districts. Each district allotted to a particular bank and the bank known as

lead bank becomes the leader of a consortium of banks. It is the responsibility of the lead bank with the support of RBI, National Bank for Agriculture and Rural Development (NABARD) and state and central governments to draw a district credit plan for the over all development of the district, more particularly rural and semi - urban, areas. The scheme has been in operation for more than 25 years in 1994- 95 the banks achieved a credit disbursal target of Rs. 26,500 crores. This is a an unique experiment of commercial banks which in normal circumstances only play the role of purveyors of credit and not the additional role of area planners.

12.3.7. District Credit Plan (DCP)

It is prepared in line with the development strategy worked out for the district by the government and national plan objectives. After the preparation of credit plan, plan targets were allotted among different financial institution in the districts.

A credit plan is a development plan consisting of technically feasible and economically viable schemes, which can be taken up for financing by financial institutions. These schemes are drawn based on the natural resources, principle economic activities, aspirations, skill of the people in the district. The following short falls were observed in implementation of credit plans.

1. Allocation of credit plan targets disregarding branches' networks and manpower constraints.
2. Lack of coordination between development agencies and credit agencies and lack of involvement of district level officials in the implementation of the credit plan.
3. Lack of infrastructure facilities and entrepreneurship in rural areas and heavy over dues.

12.3.8. District Credit Consultative Committee (DCC)

It is an important forum at the gross root level for the coordination of the activities of the financial institutions. Meetings will be convened once in three months. The members of DCC are representatives from Lead Bank, Commercial Banks (including co-operatives LDBs) operating in that area, officials of the Development Departments and NABARD. The District Collector is the chairman.

The Functions of DCC

1. Allocation of credit plans targets among various financial institutions.
2. Monitoring the implementation of the credit plan.
3. Serving as a forum for discussing the development needs of the district.

12.3.9. Multi-agency Approach in Rural Credit

The multi - agency approach came to be adopted as over all national policy since 1970 as no single financial institution has the necessary organizational structure or financial strength to meet the total credit requirements of Indian agriculture.

The acceptance of multi - agency approach to agricultural finance brought first the commercial banks in the sphere of agricultural finance. At present, many agencies are significantly operating in the field of agricultural finance such as cooperative credit banks, commercial banks, regional rural banks etc.

Problems

RBI constituted a working group in 1976 under the chairman ship of E.C. Kamath to go into the problems of inefficiency in disbursal of credit under multi - agency approach in agricultural financing.

The main findings

1. The existence of a number of financial agencies in a common area of operation and disbursement of credit in an uncoordinated manner has resulted in multiple financing, over financing, under financing, financial indiscipline and diversion of scarce resource to unproductive purposes.
2. Credit agencies could not formulate a meaningful agricultural development plan on an area basis.
3. Recovery of loans became difficult as more than one credit agency have claims on the same income / security.
4. Problems arise due to different systems, procedures problems and policies in lending by different agencies. Differences exist in the spheres of timeliness of credit assistance, sanctioning powers, security norms, services and supervisory charges, recovery performance and procedures etc.

12.3.10. Service Area Approach (SAA)

It is in operation from April I ,1989. It is designed to every village in the country. This provides for rectifying the defects of multi - agency approach and also for integration of five-year plans with the village level plans.

Stages of Implementation of SAA

1. Identification of the service area for each bank branch.
2. Survey of the villages in the service area.
3. Preparation of credit plans on an annual basis for the service area by each branch.
4. Coordination between credit institutions and development agencies for effective implementation of credit plans and continuous system of monitoring the progress in the implementation of plans.

A block level bankers committee is constituted for effective implementation, which included technical officers of all the banks operating in the block including cooperatives and RRBs, and Block Development Offices. The chairman of the committee is lead bank officer. The officials of NABARD and RBI will also be associated with this committee. The committee meets once in a quarter. The functions of the committee are

1. To discuss the action plans of different bank branches and their aggregation into the block credit plan.

2. To consider operational problems in implementing the credit programmes of banks particularly with regard to ensuring the availability of inputs and linkages.
3. To review the progress in implementation of govt. sponsored schemes like IRDP, TRYSEM etc.
4. Allocation of service area to a new branch in the blocks as and when the RBI grants licenses for opening new branches.

12.3.11. Policies on Farm Credit

1. Institution building.
2. Massive branch expansion and reduction in regional disparities.
3. Advances to priority sector.
4. Development with equity.
5. Project approach lending.
6. Budgetary resources and credit.
7. Resources support.
8. Service Area Approach.
9. Reduction in Credit - Deposit ratio.

12.3.12. Problems in Rural Lending

1) Major problem is the recovery of loans. Recovery varied from bank to bank and region to region. The agency-wise proportion of over dues to demand is furnished in Table. 12.2.

Table 12.2. Agency-wise proportion of over dues to demand

Agency	1994-95	1995-96	1996-97	1997-98
DCCBs	30	31	30	30
SLDBs	43	38	39	50
RRBS	54	49	39	60
Commercial Banks	43	38	37.2	33.3

Factors, Which Lead To Poor Recovery

a)Internal factors

a. Defective lending policies and procedures.
b. Inadequate or poor supervision and follow up over the end use.
c. Untrained staff.
d. Poor quality of assets financed.

b)External factors

i) Natural calamities.
ii) Investment resulting in non-generation of adequate income.
iii) Willful defaulters particularly by influential farmers.
iv) Misutilization of loans.
v) Absence of proper political climate for recovery of over dues.

2) Inadequate staff strength.

3) Inadequate infrastructure facilities.

4) Deterioration of quality lending and non-observance of technical and financial discipline due to emphasis on targets for certain groups.

12.3.13. Capital Rationing

Capital rationing refers to allocation of scarce capital resources among competing ends. The concept of credit rationing is applicable to both borrower and lender limit imposed by lender - external capital rationing limit imposed by borrower - internal capital rationing

Credit Widening and Deepening

Credit widening refers to bringing more and more farmers within the fold of institutional credit while credit deepening refers to larger amount of credit per hectare supplied over time in accordance with the progress in the adoption of improved agricultural technology. The demand for credit during Ninth Five Year Plan is furnished in Table 12 . 3.

Table 12.3. Estimation of demand for credit during the Ninth Plan.

Demand

Year	ST	MT/LT	Total
1997-98	22,500	10,875	33,375
1998-99	23,650	12,195	35,845
1999-2000	29,250	15,530	44,780
2000-01	33,500	18,608	52,108
2001-02	38,500	22,342	60,842
Total	**1,47,400**	**80,350**	**2,26,950**

12.3.14. Deposit Insurance and Credit Guarantee Corporation (DIGGC)

It is subsidiary of RBI which guarantees the deposits of customers and the priority sector loans given by the lending agencies to safeguard the interest of both depositors and financial institutions under the deposit insurance scheme, insurance coverage per depositor per bank is Rs. 300,000 and rate of insurance premium is four paise per Rs. 100 per annum. There are six credit guarantee schemes to given guarantee for small loans financial corporations, cooperative credit societies and commercial banks.

12.3.15. Conversion / Rescheduling of Credit

The farmers face the risk of crop failures, price fall, which weakens the repaying capacity of the farmers. Crop and price risks are beyond the control of farmers and hence they need certain special help to continue the farming activities.

2) If a crop loan is not repaid due to genuine unforeseen events the loans may be converted into a term loan, there by extending the repayment period.
3) In case of term loan, the repayment period is rescheduled to help the farmer. Also farmers will not be branded as defaulters and will be eligible to get further loans to continue the farming operations.

Supervisory Credit System

It strengthens the farmer-banker relationship, creates moral understanding among them, prevents misutilization of credit and ensures end

use of credit, facilitates the recovery of loan, assists in mobilization of deposits and thus helps in over all development.

12.3.16. Crop Production Loan

The financing institutions grant crop production loans to farmers for growing crops. The loan amount depends on the inputs requirements of the crop and hence it varies with the crop. The loan is recovered out of sale proceeds of the crops.

Scale of Finance

The scale of finance per acre is determined on the basis of the cost of cultivation. Since the cost of cultivation varies with the regions, uniform scale of finance cannot be adopted. The credit requirement is worked out as per the scale for the proposed area under different crops to be grown by the farmers.

The disbursement of loan is made in cash and kind. A major part of the loan is dispersed in the form of inputs such as improved seeds, fertilizers and pesticides, which ensures its proper utilization. The repayment of loan is fixed as to enable the farmer to repay the loan after marketing the produce. Whenever facilities are available the credit is linked with marketing to enable the farmer to get better price for his produce. This would help the bank to recover the loans promptly. The crop for which the loan is granted should be hypothecated to the institution. The loan is also granted based on the personal security of the farmer.

Procedure to Get Loan

The farmer who needs credit has to meet the banker. The banker will asses integrity, honesty and indebtedness and credit requirements of the farmer by friendly talks with him. If the banker is satisfied with the credit worthiness of the person he will issue the loan application form. The farmer has to submit the following documents along with filled up application form.

1. Certified extracts from the village register of holdings, i.e. chitta.
2 Certified extracts from the village register to show the possession of land i.e. *adangal*
3. Map showing the location of the land.
4. `No due' and `No objection' certificates from the village cooperative society.
5 Certificate of the Sub-Registrar to show the existence or otherwise of the encumbrances on land.
6. Proforma invoice (when the loan is meant for the purchase of agricultural machineries).
7. Estimate of the work if the loan is meant for well digging or deepening a well, construction of threshing floor etc.
8. Affidavit from the farmer that he has not borrowed or mortgaged his land elsewhere and that he would not do so in future without the consent of the bank if the loan were granted.
10. For composite loan, a project report is necessary for poultry shed and working capital. The banker will verify the ownership and extent of land through original deeds of `*Patta Book' chitta extract*' and tax receipts.

The technical officer makes pre-sanction visit to the farm to gather additional information and to verify the statements made by the farmer and submits a pre-sanction farm inspection report to the authority (manager) who sanctions the loan. The branch manager considers the proposal on the basis of its technical feasibility, economic viability, repaying capacity, risk bearing ability, security offered, capacity to bring in margin money and management ability to execute the proposed plan. If the loan is to be sanctioned by the Regional officer of Head Office, the branch manager forwards the application with the technical report incorporating his recommendations. The loan sanctioning authority takes decision to sanction or reject the proposal as the case may be and communicates to the branch manager. The branch manager informs the applicant about the bank's decision.

12.3.17. Instant Credit Scheme

This system was introduced during 1991 with the aim of purveying credit without delay to the persons who repay the loan regularly. Under this system green card is issued to those members who had repaid the loan promptly in the last three years. By showing the green card the member can the credit immediately without waiting for the sanction of loan by the concerned officials. It is expected that this system will induce the farmers to repay the loan promptly and avail fresh loans instantly. The possession of the green card will give the social status. On pilot basis it was implemented in Primary Co-operative Banks and Commercial Banks.

Kisan Credit Card Scheme

The Kisan Credit Cards Scheme, introduced in 1998-99, is an innovative mechanism for facilitating short-term credit to farmers. The scheme has gained popularity and 27 Commercial Banks, 334 Central Cooperative Banks and 187 Regional Rural Banks have taken up its implementation. The progress in issue of Kisan Credit Cards and credit sanction up to December 2000 is listed in Table 12.4.

Table 12.4 Number of Kisan Cards Issued and Amount Sanctioned

(Rs. in crore)

Agency	1998-99		1999-2000	
	Cards issued (lakh No.)	Amount sanctioned	Cards issued (lakh No.)	Amount sanctioned
Co-op.Banks	1.55	8.26	38.50	4432
RRBs	0.06	11	1.80	416
Comm.Banks	6.24	1477	13.68	2548
Total	7.85	2314	53.98	7396

12.3.18. Loan Waiver

Problem of overdue found solution in several ways. One method was to allow the rescheduling of repayment period. Another method was the destraint proceedings to cover the amount due by attaching properties and

selling them out. In some specific difficult situations amount due was written off either fully or partly.

Writing off loan taken by farmers for productive purpose was termed waiver and it was viewed as a solution to the problem of genera indebtedness of farming community as a relief for the loss of income suffered due to unfavourable weather or due to bad debt management. Introducing Agricultural Debt Relief Scheme did the loan waiver.

12.3.19. Agricultural Debt Relief Scheme

This was introduced with the aim of helping farmers having little surplus or no surplus to repay the loan amount due to natural calamities. The extent of relief varies from state of state. It is Rs. 10,000 in Tamil Nadu. To avail this facility the farmers have to produce the *annawari* certificate issued by *Tahsildar.*

Impact of Loan Waiver

Waiver of loans included only penal interest on over dues, whole of interest due or interest with part or full of amount due. In any case it was a relief and served as a populist policy with various consequences.

The practice of waiving loans on a large scale encouraged willful default on the part of most of the borrowers. Most of the farmers were of the opinion that soon after write off they avail fresh loans and wait for another govt. to come and waive them. Loan waiver benefit was largely diverted to the section of borrowers who were in the good books of the institutional agencies. Though the scheme has helped the farmers who have been affected by natural calamities

i) It increased the number of willful defaulters
ii) It resulted in inadequacy of capital for normal business.
iii) Ineffective functioning of the bank staff
iv) Heavy burden to the government.

The flow of institutional credit to the agricultural sector has been affected by the overdue syndrome over a period of time, debilitated the process of recycling of funds. The agricultural and Rural Debt Relief Scheme, 1990 has accentuated the problem of recovery.

13.Regional Rural Banks (RRBs)

Based on the recommendations of Mr. Narasimhaman committee the first Regional Rural Bank was set up in October 2, 1975. The capital of RRBs is provided by the Govt. of India (50 per cent), the sponsor bank (35 per cent) and the State Govt. (15 per cent).

The RRBs were to combine the rural touch and the local feel, a familiarity with rural problems and altitudinal identification with the rural economy - which the co-operatives possess in large degree. The commercial banks have modern business organization, commercial discipline, the ability to mobilise resources and access to central money markets. The concept of RRBs was that of low - cost structure catering to the needs of the poor rural masses. The National Bank of Agriculture and Rural Development (NABARD) is the apex body which monitors the functioning of the RRBs.

The idea behind the establishment of RRBs is neither to replace cooperative nor to duplicate the credit structure. The area should be comparatively backward where the coverage of commercial banks and cooperatives is relatively poor. The main difference from the commercial banks is that the area of operation of the new institution confined to a new region comprising one or two continuous districts. It will confine its loan operation to small and marginal farmers, agricultural labourers, artisans and other people of meager resources. The salary structure of the staff was comparable to that of the state government employees. Each rural bank is headed by a nominated chairman as its chief executive.

13.1 Performance of RRBS

RRBs have a authorised share capital of rupees one crore and paid up share capital of Rs. 25 lakhs contributed by central govt., state govt., and sponsoring commercial banks. The management of each bank is vested with a nominated board of nine directors (three nominated by Central Govt. two by State Govt., four including the chairman by the sponsor commercial Banks). The chairman is a full time professional
executive who is an officer on deputation from the sponsor banks with
the approval of the Central Govt.

The progress of RRBs has been impressive in terms of branch expansion as shown in Table 13.1. There are about 196 banks as on date and the credit deposit ratio is 44 per cent (1998) . The performance of RRBs in term of banking norm is far from satisfactory. Out of 196 banks only 44 are showing profit. The average per branch deposit and advances are Rs. 153.56 lakhs and Rs. 68.24 lakhs. The net loss of the RRBs put together as on March 1996 was Rs. 425.58 crores which exceeded the combined total of the capital and reserves and surplus of Rs. 519.74 crores. The number of RRBs reporting profit and loss is furnished in Table 13 . 2. Until 1996-97 there were only 44

RRBs making profit and in 1997-98 a turn around has taken place in many banks and the profit making banks increased by three fold.

Table 13.1. Progress of RRBs

(Rs. crores)

Progress of RRBs	As on 1975	As on 1996	As on 1998
No. of banks	6	196	196
No. of branches	17	14,497	14,450
No. of operational districts	12	427	448
Total deposits	0.20	14,188	22,189
Total advances	0.10	7,505	9,861
Average deposits/branch(lakhs)	-	97.88	153.56
Average advances /branch(lakhs)	-	51.77	68.24
Average credit deposit ratio	-	53	44

Table 13.2 Number of RRBs reporting net profit

Year	No. of RRBS in profit	No. of RRBS in loss
1991-92	23	173
1992-93	24	172
1993-94	23	173
1994-95	32	164
1995-96	44	152
1996-97	44	152
1997-98	126	70

The purpose wise disbursement of loan by RRBs is furnished in Table 13 .3. A large chunk of the loan was given to agricultural investments & allied activities followed by short-term loan and retail trade.

Loss of Viability

The disturbing performance of RRBs is not new. Most of the RRBs have been incurring losses for years. The viability of this rural credit delivery system has been a major policy concern for the centre. During 1995-96, a sum of Rs. 223.57 crores was released for capital restructuring of select RRBs. The Union Budget for 1996-97 has made provision of Rs. 200 crores for the same purpose. The over due position of RRBs are furnished in Table. 13.4.

Review of RRBs Performance

The progress of credit disbursement by RRBs is given in Table.13.3. Reserve Bank of India has set up an expert group Dr. N.K. Thingalaya chairman, syndicate Bank) in June 1995 to examine the policy issues concerning the restructuring of RRBs under taken during 1994-95 and to maintain progress of this exercise.

Another committee (Chairman, Mr.K. Basu) set up by the NABARD for revamping of the RRBs submitted its report in December 1995 recommended selection of 66 RRBs for comprehensive monitoring under phase II.

Table 13.3. Purpose wise advances by RRBs

Particulars	As on March, 1995		As on March, 1998	
	Amount (Rs. crores)	Percentage	Amount (Rs. crores)	Percentage
1. Short term (crop loan)	1,154	18.54	1,913.92	19.41
2. Term loan for agriculture & Allied activities	988 814	1.587 13.07	2,769.09	28.08
4. Rural Artisan,, Village and Cottage Industries	585	9.40	1,229.61	12.47
5. Retail trade and self employment	1,601	25.71	1,894.70	19.21
6. Consumption loan	124	1.99	97.32	0.99
7. Other purposes	925	14.86	1,943.69	19.71
8. Indirect advances	35	0.56	12.49	0.13
Total	6,226	100.00	9,860.82	100.00

Table 13.4 Over due position of RRBs

(Rs. Crores)

Year	ST loan	MT loan	Total loan	Over due (per cent)
1994-95	688	395	1083	51
1995-96	849	532	1381	56
1996-97	1121	563	1684	57
1997-98	1396	644	2040	61
1998-99	1691	847	2538	60

13.2 Problems of RRBs

Lean Man Power Structure

The chairman and Managing Director and other specialised management (area of credit, personnel and operations), if required, are provided by sponsor banks. The chairman's deputation tenure is 3 years only. The junior management cadre directly recruited by RRBs or internally promoted. The middle management positions have been very thin and are filled in from the available manpower of RRBs. Most of the branches are manned by one person and in some (rare) cases more than one officer. In view of the lean man power structure and the restricted growth of branches, the career potential of the officers in RRBs are limited.

Increase in Salaries

Initially salary was on par with cooperative societies, over the years the trade union of employees fought and obtained the salaries equal to commercial banks which increased the cost of credit delivery system.

Lack of Competition

RRBs were not permitted to undertake most commercial banking activities
as they were set up mainly to serve as a low cost credit delivery system that would reach the poorest sections in the rural and semi - urban areas. Since 1993, RRBs have been permitted to do other banking business in a phased manner.

In entering the new business segments, the RRBs have faced considerable difficulty in terms of lack of exposure, experience and expertise. In the last few years RRBs have in general, been unable to reduce loss.

The proposal for setting of Local / Area Banks in the Finance Bill of 1996 has been opposed by trade union wing of RRBs.

Future

The working RRBs can be improved by

i) NABARD and All India Institutional can consider providing 90 per cent refinance to RRBs on investment loans which have maturity period of over 5-7 years.

ii) The deputation period of chairman can be increased from 3 to 5 years or the officers of RRBs can be promoted to chairman post which will increase their commitment to the viability of the RRBs.

iii) RRBs should be encouraged to finance or participate with other banks in financing high-tech activities including storage, preservation, transport and marketing. Agro - processing is another big avenue in rural areas which needs large credit support. All these projects which are necessary to step up agricultural production in rural areas, involve investments of longer maturity period and hence soft loans and refinance would be necessary.

iv) For improving the working of RRBs through maximum recovery, the following are required

   a) On the lines of cooperative banks, appointment of `recovery officers' in RRBs to concentrate solely on recovery of dues.
   b) Vigorous drive by revenue officials and district magistrate's for coercing maximum possible recovery through disposal of recovery certificates filed by RRBs.
   c) Appointment of retired Deputy Collectors in RRBs for effecting recovery of dues from disobedient defaulters.

Selected large - sized branches and head office should be mechanised and computerised for providing better service and building up business qualitatively and quantitatively. A prospective five year plan should be drawn this purpose.

14.National Level Rural Credit Institutions

14 .1 RBI

Reserve Bank of India (RBI) was established in 1935 in accordance with the provisions of the RBI Act 1934. The Agricultural Credit Department (ACD) was organised in 1935 to perform the following broad functions.

a) To maintain an expert staff to study all questions about agricultural credit and be available for consultation by the Central Government. State Governments, State Co-operative Banks and other organizations; and
b) To coordinate the operations of RBI in connection with agricultural credit and its relations with the State Co-operative Banks and any other bank or organization engaged in the business of agricultural credit.

The `Integrated Scheme for Rural Credit' based on All India Rural Credit Survey Committee Report (1954) suggested the "National Agricultural Credit (long term operations) Fund" to provide long term funds for state partnership in cooperatives and the National Agricultural credit (Stabilization) Fund to facilitate the conversion of short term loans into medium term loans whenever repayment becomes difficult on account of natural calamities.

The Department of Banking Operations and Development of RBI looks after the agricultural financing of commercial banks and that of Agricultural Credit Department to the cooperative credit sector.

The RBI also provides directives to the credit institutions for shaping their lending polices to meet the diverse needs of rural sector on the one hand and revitalising the existing structure viable and financially supportive to the apex level structure. RBI also takes up special measures such as the scheme for financing of primary cooperative societies by the commercial banks, launching of Agricultural Credit Intensive Development Scheme (part of the District Credit Plan under Land Bank Schemes) etc. Moreover, the regulatory functions to exercise the credit controls and maintaining credit discipline. i.e. Credit Authorization scheme for credit needs of changing agriculture are again under the purview of RBI.

14 . 2. Agricultural Refinance and Development Corporation (ARDC)

The Agricultural Refinance Corporation was established by an Act of parliament on Ist July, 1963. It is primarily a refinancing agency and essentially assumes certain development and promotional functions. It has been renamed as the "Agricultural Refinance and Development Corporation (ARDC) in 1975".

The corporation helps in augmenting resources for medium and long-term finances to agriculture. It helps to formulate the schemes, particularly in less developed states and hence it is able to influence the lending policies and procedures of agencies it assists. It is primarily a refinancing agency providing financial accommodation of long term nature for those major departmental projects which cannot be financed by the existing credit agencies or by the commercial banks either

a) On account of funds involved, terms and conditions of repayment, or

b) The projects are such as that cannot be brought with in normal rules of business

under which the land development banks are functioning. The corporation provides

refinance facilities for the following purposes:

i) Reclamation and preparation of land with a view to fully utilise the irrigation facilities.

ii) Development of special crops such as coffee, tea, areca nut, coconut, cashew nut, cardamom etc.

iii) Development of mechanized farming, use of electricity for tube wells, pump sets etc. and

iv) Development of animal husbandry, dry farming, pisciculture - including co-operative fisheries and poultry farming.

In special cases where a loan for financing the particularly activity is considered necessary the corporation might directly finance to those co-operative societies that are approved by the RBI for the purpose. The minimum amount of financial assistance that can be obtained from the corporation by way of refinance is fixed at Rs 1 lakh for a period of 15 years or 20 years in exceptional cases.

1 4 . 3. Agricultural Finance corporation (AFC)

For active participation of commercial banks and extensively development of agriculture, the Agricultural Finance Corporation Ltd. was formed on 10th April, 1968 with an authorized capital of Rs. 100 crores and paid up share capital of Rs. 5 crores. The corporation is to perform the following two specific functions: a) to promote the commercial bank's advances for agricultural development and b) to finance individuals, institutions and organizations undertaking agricultural enterprises.

AFC acts as a guarantee to banks in respect of projects suggested and cleared by it on one hand while establishes contacts with Central and State Govts, ARDC, Agrl. Universities etc. on the other to promote coordination efforts amongst agencies. AFC gains the experience in financing new projects and passes on to the commercial banks. The AFC formulates the project, works out their economic feasibility and invites banks to lend for the project or acts as a leader to the commercial banks. AFC also develops the infrastructure facilities for agricultural development and following projects are supported a) service units, b) Agricultural processing industries, c)

production, distribution and marketing of agricultural inputs, d) vertical integration of agriculture
i.e. bringing processing industries and farmers together by meeting credit requirements of these industries as well as supplying production requisites to farmers on credit, e) construction of warehouses, regulated markets, and f) minor irrigation.

Corporation sets up consultative committee at National level, State and district levels for building up the coordination between cooperative and commercial banking sectors, initiation of consultancy services for helping member banks to appraise and finance the agricultural projects as well as organizing workshops for formulating various projects and schemes for stepping up of agricultural production in selected high potential areas of the country.

14 . 4 . Rural Electrification Corporation (REC)

Loans are advanced for wells and electric pump sets yet the failure to provide power holds up the energisation of wells and adoption of improved agricultural practices planned rural electrification is very essential / necessary adjunct to the planned irrigation.

Considering above the points the All India Rural Credit Review committee (1969) recommended that the Rural Electrification Corporation should be created as an autonomous body under the ministry of irrigation and power

a) Financing of rural electrification of schemes in priority areas in the states.
b) Subscription to special rural electrification bonds to be issued by the electricity boards on certain stipulated conditions; and
c) Provision of loans to the electric co-operatives proposed to be set up.

14 . 5. National Bank for Agriculture and Rural Development NABARD)

Sri B. Siva Raman, Chairman of the Committee to Review Arrangements for Institutional credit for Agriculture and Rural Development (CRAFICARD) in its interim report in November 1979 recommended the establishment of National Bank of Agriculture and Rural Development (NABARD) and it was established on 12th July 19882.NABARD took over the entire undertaking of ARDC as well as Agricultural credit Department and Rural planning and credit cell of RBI

14.5.1. Objectives

NABARD is an Apex Development Bank in the country for supporting and promising agriculture and rural development. It provides through the financial and banking system several lines of production and investment credit to agriculture, small-scale industries cottage and village industries, handicrafts and other allied economic activities. NABARD directs the policy

planning and operational aspects in the field of credit for agriculture and integrated rural development.

14.5.2. Functions of NABARD

Three major functions are

A) Credit dispensation

B) Development

C) Regulatory functions

A. Credit Functions

NABARD provides different types of refinance to the following eligible institution

1. Short - term Credit

Eligible Institutions

a) State Co-operative Banks (SCB)

b) Regional Rural Banks (RRB)

c) Other financial institutions approved by RBI

Purposes

a) Seasonal agricultural operations and marketing of crops
b) Marketing and distribution of inputs like fertilizers pesticides etc.
c) Any other activity connected with rural / agricultural sector.
d) Bonafide commercial trade transactions.
e) Production and Marketing activities of
i) Artisans
ii) Small scale industries
iii) Village and cottage industries.
iv) Handicrafts
v) Sericulture
vi) Handlooms

Period up to 15 months

Seasonal Agricultural Operations(SAO)

During 1998-99, ST credit limits for SAO aggregating Rs. 5,979 crore were sanctioned to 17 State Co-operative Banks (SCBs) on behalf of 267 District Central Co-operative Banks(DCCBs)/SCBs (up to March 1999). The credit limits sanctioned for the year 1998-99 included Rs 860 crore towards Oilseeds Production Programme (OPP), Rs 44 crore for National Pulses Development Programme (NPDP) and Rs 215 crore for the production credit requirements of the tribal in the predominantly tribal populated districts.

The short-term credit limits sanctioned for SAO to 150 RRBs during the year 1998-99 (up to March 1999) stood at Rs.1,034 crore,. The limits sanctioned for 1998-99 included Rs.110 crore for OPP (24 banks) and Rs.51 crore for DTP (40 banks). As in the past, the RRBs in Andhra Pradesh, with Rs.269 crore of credit limits sanctioned, accounted for the largest share followed by the RRBs in Karnataka with Rs.217 crore. The overall utilisation against sanction under ST(SAO) credit limits was 94 per cent. The aggregate sanction of credit limits for ST(OSAO) purposes during the year stood at Rs.201 crore. The maximum outstanding reached was Rs.190 crore forming 95 per cent of credit limits sanctioned.

2. Medium term credit

Eligible institutions are i) SCB ii) RRBS iii) State Land Development Banks (SLDBs) iv) Other financial institutions approved by RBI

Purposes

Any investment connected with agriculture and rural sector requiring MT credit assistance. Period between 18 months and 7 years.

A. Approved Agricultural Purposes (Non-Schematic)

The National Bank continued the general policy of encouraging banks to formulate schemes for financing investment in agriculture. This led to a further reduction in refinance given for non-schematic purposes. Thus, as against Rs.0.51 crore and Rs.10 crore sanctioned to SCBs and RRBs, respectively during January to December 1997, limits sanctioned in the corresponding period in 1998 aggregated Rs.0.35 crore and Rs.8 crore only. The limits were utilised up to 89 per cent by SCBs and 88 per cent by RRBs.

B. Conversion of ST (SAO) loans

Owing to natural calamities like flood, drought, etc., limits for conversion of ST(SAO) loans into MT loans aggregating Rs.430 crore were sanctioned during the year to 8 SCBs in Andhra Pradesh, Punjab, Orissa, Karnataka, Uttar Pradesh, Madhya Pradesh, Maharashtra and Tamil Nadu. The drawals against the limits were to the extent of Rs.274 crore constituting 64 per cent. Besides, conversion limits aggregating Rs.39 crore were sanctioned to 7 RRBs during the year against which drawals were at Rs.28 crore, constituting 72 per cent of the limits sanctioned.

3. Long Term Credit

Eligible Institutions

i) SCB ii) SLDB iii) RRB iv) Commercial banks iv) other financial institutions approved by RBI

Purposes

1. Refinance for investment in agriculture and allied activities
2. Refinance for artisans, small-scale industries / tiny sector industries, village and cottage industries handicrafts etc.
3. Loans to State Govts. for share capital contribution to cooperative institution
4. Investments in share capital securities of institution concerned with agriculture and rural development.

Period up to a maximum of 25 years.

The National Bank provides long-term loans to State Governments for contribution to the share capital of co-operative credit institutions subject to certain norms. During the year 1998-99, Rs.65 crore was sanctioned to 15 State Governments for contribution to the share capital of 3 SCARDBs, 101 PCARDBs, 2 SCBs, 39 DCCBs and 7,583 PACS/LAMPS/FSS

Credit Authorisation Scheme

During the year 1998-99, 264 proposals from 13 SCBs and 51 DCCBs for providing working capital assistance to 169 borrowing units and 107 proposals from 9 SCBs and 27 DCCBs for providing block capital finance to 36 borrowing units were received for credit authorisation. Authorisations aggregating Rs.4,143 crore were granted to 11 SCBs and 38

DCCBs in respect of 198 proposals for working capital assistance to 159 societies/units. Commodity-wise, out of the aggregate authorisations of Rs.4,143 crore, sugar accounted for Rs.2,757 crore (67 %), cotton Rs.809 crore (19 %), fertilisers Rs.388 crore (9 %), while other commodities accounted for Rs.189 crore (5 %). For block capital finance, authorisations aggregating Rs.274 crore were granted to 8 SCBs and 7 DCCBs in respect of 53 proposals during the year.

The agency-wise refinance disbursements during the year are shown in Table 14.1.

Table 14. 1 Agency-wise Disbursement (Rs crore)

	1997-98		1998-99		
Agency	**Disburse - ments**	**Relative Share (%)**	**Disbursements**	**Relative Share (%)**	**Growth (%)**
SCARDBs	2,100	54	2,168	48	3
SCBs	429	11	430	9	*
RRBs	668	17	714	16	7
CBs	725	18	1,206	27	66
ADFCs	-	-	3	*	-
TOTAL	3,922	100	4,521	100	15

* Marginal

Of the total refinance assistance provided by the National Bank during 1998-99, SCARDBs accounted for the largest share of 48 per cent followed by CBs (27 %), RRBs (16 %) and SCBs (9 %) . However, the relative share of SCARDBs, RRBs and SCBs in the total refinance disbursement during 1998-99 registered a decline compared to the previous year although in terms of absolute amount their share registered a moderate increase. The commercial banks have improved their share substantially by 9 percentage points.

The SCARDBs availed bulk of refinance for farm mechanisation (31%) followed by minor irrigation (18%), dairy development (15%) and non-farm sector (13 %). In the case of commercial banks, farm mechanisation accounted for 33 per cent of the total disbursements to them, followed by IRDP (31 %) and non- farm sector (11%). RRBs' major share continued to be for IRDP lending, which accounted for 41 per cent of their refinance, followed by farm mechanisation (24%) and non-farm sector (22%). In the case of SCBs, refinance availed under farm mechanisation accounted for 22 per cent followed by dairy development (16 %), non-farm sector (16 %), IRDP(14 %) and minor irrigation (14%).

Purpose-wise Disbursements

A comparative position of disbursements (purpose wise) during the year 1997-98 and 1998-99 is furnished in Table-14 . 2.

Coverage of Small Farmers

The National Bank continued to emphasize on wider coverage of small farmers under its refinance programme. During the year, 71 per cent of the investment credit refinance provided (excluding refinance in respect of loans for Farm Mechanisation and to institutions) by the National Bank was against loans disbursed to small farmers. Details of this are furnished in Table14 . 3

Table .14.2 Purpose wise Disbursements during 1997-98 and 1998-99 (April - March)

(Rs. Crore)

Purpose	1997-98	Share (%)	1998-99	Share (%)	Percentage Variation
Minor Irrigation	524	13.4	544	12.0	3.8
Land Development	59	1.5	64	1.4	8.5
Farm Mechanisation	1099	28.0	1345	29.7	22.4
Plantation & Horticulture	186	4.7	182	4.0	(-) 2.2
Poultry	105	2.7	118	2.6	12.4
Sheep/Goat/Jiggery	94	2.4	109	2.4	16.0
Fisheries	33	0.8	30	0.6	(-) 9.1
Dairy Development	353	9.0	457	10.1	29.5
Forestry	11	0.3	9	0.2	(-) 18.2
Storage/Market Yards	14	0.4	16	0.4	14.3
IRDP	611	15.6	735	16.3	20.3
NFS	616	15.7	654	14.5	6.2
SC/ST-AP	112	2.8	106	2.3	(-) 5.4
Others	105	2.7	152	3.5	44.8
TOTAL	3922	100	4521	100	15.3

Table 14 .3 Refinance Disbursed To Assist Small Farmers During 1998-1999

(Rs. crore)

Purpose	Total disbursements during 1998-1999*	Assistance to Small Farmers during 1998-1999	No. of SF Accounts (Lakhs)	Assistance to Small Farmers (%)
Minor Irrigation and Land Development	608	391	4	64

Diversified Purposes	2359	1730	36	73
TOTAL	2967	2121	40	71

* Excluding refinance for farm mechanisation, storage and market yards, Seed projects, forestry, etc.

Regrouping of Investment Refinance Projects

The sect oral flow of refinance indicated in the preceding paragraphs has been further regrouped to represent certain macro economic variables such as agricultural production, employment generation, etc. These are presented in Table14.4.

Table 14.4 Regrouped Investment Refinance activities

(Rs. crore)

Purpose	**1997-98**	**Per cent to total**	**1998-99**	**Per cent to total**
Agriculture Production Programme	1,780	45	2,043	45
Rural Employment Generation Activities	1,183	30	1,512	33
Small and Medium Enterprises	275	7	273	6
Small Size Rural Infrastructure	323	8	341	8
Livestock Sector	151	4	135	3
Commercial Agriculture Sector	101	3	100	2
Others	109	3	117	3
Total	3,922	100	4,521	100

4. Conversion and Rescheduling Facilities

NABARD provides refinance to eligible institutions normally SCB and RRBs for conversion and rescheduling of loans under conditions of drought, famine, or other natural calamities military operation, enemy action, etc. similar facilities are also available in respect of loans made to artisans, small scale industries.

Period Generally not exceeding a period of 7 years

5. Development Functions

Coordinates operations of rural credit institution.

Ensures institution building to improve absorptive capacity to the credit deliver system.

Develops expertise to deal with agricultural and rural problems.

Assists Govts. RBI and other institution in rural development efforts.

Acts as agent to Govt. and RBI in transaction of business in relevant areas.

Provide facilities for Training and Research and dissemination of information in rural banking and
Assists State Govts. to enable them to contribute to the share capital of eligible institution.
Provides direct loans in cases approved by Central Govt.

C. Regulatory Functions

i) The banking regulation Act 1949, empowers NABARD to undertake inspection of RRBs and Cooperative banks (other than primary cooperative banks)
ii) Any RRB or cooperative bank seeking permission of RBI for opening branches etc. will have to obtain recommendation of NABARD.

14 . 5. 3. Criteria for Financing

i) Technical feasibility of the project and adequate response from the prospective beneficiaries.
ii) Financial viability and adequate incremental income to the ultimate borrower to repay the loan within a reasonable period.
iii) Organizational arrangements to ensure supervision by the financing banks.

Ultimate Beneficiaries

While all funds are routed through the SLDBs / SCBs / Commercial banks / RRBs by NABARD. the ultimate beneficiaries of investment can be individuals, partnership concerns, companies state owned corporations or cooperative societies. The ultimate beneficiaries of production credit are generally individuals who are members of primary credit institution.

Lending Terms

NABARD refinances 70-90% of loans advanced by banks to beneficiaries and the rest being met by the banks or by the concerned State Govt/Govt. of India in case of SLDBs. To stimulate the credit flow to the rural non - farm sector in the context of the importance attached to the development of non - farm activities NABARD refinances up to 100% of the bank loans for cottage, tiny and village industries and rural artisans etc.

Rate of Interest : The rate of interest charged by NABARD is given in Table 14.5.

Table 14 . 5 NABARD's structure of interest rate for term loans

Amount(Rs)	**Rate of interest to ultimate beneficiaries**	**Rate of interest on refinance**		
		SCB	**CBs**	**RRBs**
Up to 25000	12.0	6.5	7.5	6.5
25000 to 2 lakhs	13.5	9.5	10.5	9.0
> 2 lakhs	Free to decide	@	@	11.6

@4, 4.5 per cent less than the rate charged to ultimate borrowers by SCBs and CBs

Production and Marketing Credit

The lending rate varies between 7.5% to 14% in the case of production credit and 13.5 to 17.5% in the case of marketing credit.

14.5.4. Security

The financing banks obtain the following securities

i) Hypothecation of assets created
ii) Mortgage land
iii) Personal property
iv) Government guarantee etc.

14.5.5. Margin Money

NABARD stipulates beneficiary's contribution to the project cost in order to ensure his stake in the investment. Such margin money varies from 5 per cent to 25 per cent according to the type of investment and the class of borrowers. It is nominal (5%) in the case of small farmers. This can be by way of contribution in cash or by way of own or family labour. Corporate borrowers, such as irrigation corporations, forest development corporation etc. provides higher contribution up to 25 per cent of the investment cost.

14.5.6. Resources

Capital

The paid up capital of NABARD is Rs. 300 crores at present contributed equally by the Govt. of India and RBI.

Other Funds

I. Internal

i) Short term General line of credit from RBI
ii) National Rural credit (LTO) fund
iii) National Rural credit (Stabilization) fund
iv) Issue of Bonds and Debentures (Guaranteed by Control Govt.)
v) Borrowings from Central Govt. and any other organizations as approved by central govt.
vi) Borrowings from central govt. and any other organization as approved by central govt.

2. External Borrowings through GOI

i) World Bank Group
ii) IFAD
iii) Other Countries like U.K., West Germany, EEC, Switzerland, Netherlands, Canada co-financing with World Bank Group.

14.5.7. Organizational Set Up

NABARD is managed by a Board of Directors comprising 15 members and consists of chairman, Managing Director, two experts from cooperatives and commercial Banks, three sitting Directors from the Board of RBI, three directors from Govt. of India and two members representing the state govts. The board of Directors can constitute an Advisory Council.

14.5.8. Promotional Role

NABARD plays a vital role in the reduction of regional imbalances and providing assistance to small farmers, marginal farmers and other weaker

sections. It pays special attention to exploring new and innovative investment opportunities in agriculture and rural development.

a. Research and Development Fund

NABARD maintains a R & D fund for supporting research - cum - action oriented projects in the field of Rural Development. The fund will also be for assisting the SLDBs / RRBs to build up their technical capabilities. Apart from annual contribution to the Fund out of NABARD's profits. The fund will be further supplemented by gifts, grants, donations etc. Which NABARD gets for the purpose from various sources.

B. Soft Loan Assistance Fund for Margin Money

NABARD has constituted Soft Loan Assistance Fund for Margin Money
out of its profits to facilitate grant of margin money assistance to the promoter / entrepreneurs to be assisted under the refinance schemes for cottage, tiny and village industries. The assistance is provided free of interest to be recovered in suitable annual installments after the repayment of the term loans.

c. Training

As part of the institution building efforts, NABARD provides comprehensive training to officers of other banks viz., commercial banks, RRBs, State and Central Cooperative Banks and State Land Development Banks as also its own officers. The facilities for training in the field of rural banking agricultural and rural development are provided at its own college BIRD and Academy for Agriculture and Rural Development Banking at Lucknow. Regional Training centres, at Bolpur and Mangalore and also at College of Agricultural Banking (CAB), Pune and the training establishments of various other banks.

d. Institution Building

One of NABARD's main functions will be institution building. Besides undertaking inspection of cooperative banks and RRBs, it also helps in their reorganization, restructuring or rehabilitation according to needs. With a view to assuring lending by banks NABARD links its refinance support to the recovery performance of banks.

The bank has also launched a scheme of borrower's education in repayment
ethics through it's Vikas Volunteer Vahini's operative in select areas. In this programme farmers and artisans who have successfully put into practice the principles of development through credit are drafted to disseminate financial discipline among the beneficiaries of the rural banking system. NABARD has launched pilot projects in 20 districts for improving the credit delivery system by strengthening its organizational structure and capabilities.

e. Monitoring and Evaluation

NABARD pays a special attention to monitoring the various projects in order to ensure their proper implementation and evaluate them so that, in the light of findings, the quality of the projects and their implementation can be improved. NABARD also reviews the performance of the on going

agricultural development scheme sanctioned by it through its district oriented monitoring studies.

14 .5.9. Future Role of NABARD

NABARD in the past 19 years identified specific, weaknesses in making micro credit available to the poor. Some of these are targeted programmes, delayed credit, poor quality of lending, leakages, cumbersome loan procedures and documentation and low recovery there by restricting the recycling of funds. NABARD has thus, identified the need for i) a suitable mechanism for meeting - the economic aspirations of the poor, location specific approaches for addressing the problems of the poor, an appropriate supplementary credit delivery system to make credit cost effective and transparent and a flexible and responsive micro credit delivery channel.

i) Motivating and training the grass root staff
ii) Linking the NGO's and credit outlets
iii) Simplifying the lending and documentation procedures
iv) Increasing bank's lendable resources through provision of refinance.

NABARD constituted a women's cell in 1992 to address issues relating to credit and other supportive needs of rural women through refinance. Towards this end it has collaborated with many NGOs actively involved in organizing women's groups, encouraging saving habits among women, promotion of self help groups for mutual help and benefit and linking them with banks for formalising the normal thrift and credit system.

It has also decided to extend grant/support for setting up 100 women development cells in the RRBs and cooperative banks for focused attention on gender issues in credit. From a modest beginning in 1992-93 with 255 SHGs in 10 states providing Rs. 28.9 lakhs as loans with a refinance facility of Rs. 26.8 lakhs the number of SHGs increased in 1995-96 to 4.757 in 16 states with loans of Rs. 6058 lakhs and refinance of Rs. 566.1 lakhs over 73 per cent of the SHGs were run exclusively by women.

A target of 25 million women in ten years could be reached if the credit outlets are allowed to identify and select eligible beneficiaries on their own, on given criteria, rather than involving the existing sponsoring agencies such as the DRDA or DIC.

Monitoring the flow and end use of funds should be done periodically on a concurrent basis at all levels particularly at the gross root levels.

Establishing and implementing an efficient impact study mechanism is a must which should be entrusted to universities, research institutes and reputed consultancies.

The monitoring mechanism itself should reveal the misuse of credit or the non-availability of micro credit supported activity or such other factors which show that the objectives of a micro credit scheme will not be achieved.

To increase the flow of supply of credit at micro level a) a Initiatives are undertaken to double the size of rural credit over the next five years, gambling to share capital from Rs. 500 crores to Rs. 1000 crores, establishment of state level development financial institutions to promote investments in commercial agriculture and setting of private local area banks (LABs) and

high technology agriculture. These measures long with setting of Rural Infrastructure Development Fund (RIDF) are designed to encourage the flow of resources to the rural sector. Since 1992-93, RBI with drew its long-term operation (LTO) fund to NABARD and hence the development banks have been suffering. The concessional assistance needs to be restored without further delay.

Allocation of Rs. 200 crores for recapitalisation and restructuring of RRBs, establishment of state level development finance institutions.

Construction of storage structure, cold storage chains, and refri -vans, agro - processing units, irrespective of their size or project outlay are some of the purpose oriented project to be development in future.

14 .6 Micro-finance

The incapacity of the institutional credit to penetrate the lower rungs of income group serve their needs were established in many instances. This was true even of co-operatives where small farmers faced restrictions in becoming members. The formal sector's thrust even within the priority sector-lending framework has been on productive activities. But the poor (large majority whom are landless and non-cultivators) need credit mainly for financing income-consumption gap or tiding over occasional crises and emergencies. The terms and modes of delivery do not mach. These could be the reasons for the increased dependence of rural people , more markedly of the non-cultivators, on informal credit sources like traders, contractors and moneylenders. A consensus has taken place, at least among the banking authorities and development professional, that development agencies in the non-government sector should be called upon to act as the intermediaries in delivery and management of rural credit. Interestingly, the formal sector took the initiative to develop a supplementary credit delivery mechanism by encouraging institutional arrangements outside the financial system (like NGOs) to act as facilitator or intermediaries.

The beginning was made with NABARD's pilot project in Karnataka (1991-92) of linking Self Help Groups (SHGs) with formal banks, mediated through the NGO, Mysore Resettlement and Development Agency. This project known as Bank- SHG Linkage Project, was expected to be advantageous to the banking sector from the angles of both fulfillment of its social goals (like reaching out to the poor) and achieving operational efficiency (by externalizing part of the transaction cost). The project's apparent success in building a bridge between the banks and the poor led to its institutionalization in 1996 by the Reserve bank of India as a formal lending activity of banks under priority sector and service area approach.

Self Help Groups (SHGs)

A SHG is defined as a 'homogenous affinity group of rural poor voluntarily formed to save small amounts out of their incomes both for consumption and small production activities at such rate of interest , period of loan and other terms which the group decides'. Such groups may be formal

or informal or registered and should not have membership of more than 20 if they were to be un registered.

Characteristics features of SHGs

1. Transparency in operation
2. Intimate knowledge of each other' problems, strengths and needs.
3. Have a common find
4. Have simple and responsive rules.
5. SHG is one of the effective methods of delivering credit to the unreached
6. Focus is on eradication of poverty through credit.
7. Collective decision making
8. Market driven rate of interest and decided by the group.
9. Collateral free loans on terms decided by the groups
10. External interference kept to the minimum
11. Conflict solving through collective leadership and mutual discussion.

Though the term 'micro-finance' essentially means provision of small credit, savings and allied activities to those operating at the lower end of the income group, it has also come to represent a system of decentralized financial service delivery, where people's organization act as facilitators or intermediaries. NABARD's initiative has clearly brought in an additional constituent in the financial sector in the country, namely NGOs and community organizations.

Structure of Micro-finance Sector

The emerging rural 'micro-finance sector' despite its initiative to promote linkages between formal and non-formal sectors has a dualistic structure. The formal banking institutions form the legal and regulated component of micro-finance sector and largely function as the providers of bulk credit and other services to the non-formal sector. The NGOs, SHGs and federation of groups who serve as non-formal intermediaries , operate outside the legitimized structure .

Flow of Funds

The major sources of credit for micro-finance are NABARD and Small Industrial Development Bank of India (SIDBI). There is also Government initiated NGO – The Rshtriya Mahila Khosh (RMK) under the department of women and child development – that extends credit support to NGOs and Women Economic Development Corporation.. Thus the funds of formal sector get into non-formal channels before they reach the targeted segment of poor people. The entry new set of players , NGOs and SHGs in the financial system has eased a lot of obstacles and externalizing a part of bank's responsibility in identification of poor people, assessment of their risk profile , loan monitoring and recovery which reduce the transaction cost.

NABARD's Micro-Finance Innovations

The National Bank's efforts towards increasing the access of the rural poor to formal banking services through promotion and credit-linking of Self-Help Groups (SHGs) of the rural poor and other micro-Finance (mF) initiatives gathered momentum during the last two years. The programme of

linking SHGs with banks, which was launched by the National Bank during 1992-93 had already covered almost 2.5 lakh poor households by March 1998 and needed greater attention. A separate department named Micro Credit Innovations Department (MCID) was set up in Head Office in June 1998 with Micro Credit Innovation Cells (MCIC) at all the Regional Offices of the National Bank to meet the emerging challenges. The major functions of MCID relate to formulation of policies, coordination with governments and government agencies, RBI and other national level micro-Finance practitioners, overseeing the state level operations, monitoring the progress of SHG-Bank Linkage Programme, innovating and supporting alternative credit delivery mechanisms, promoting and facilitating banks to act as self-help promoting institutions (SHPIs), documentation and dissemination and coordinating with external agencies.

Support under SHG-Bank Linkage Programme

The National Bank continued to provide hundred percent refinance to banks at an interest rate of 6.5 per cent per annum. Other support provided include facilitating training of bank officials and field staff of NGOs, capacity building support on selective basis to NGOs, SHGs, Federations of NGOs/SHGs and other related institutions through financial assistance, faculty support etc. Refinance disbursement at Rs.30.67 crore under the Programme during 1998-99 with linkage of 18,678 additional SHGs entailing bank loan of Rs.33.30 crore. The cumulative number of SHGs linked to banks rose to 32,995 with bank loan and refinance of Rs.57.07 crore and Rs.52.06 crore respectively (Table 14.6).

Table- 14.6 Cumulative Progress in SHG Linkage Programme

(Rs. Crore)

Year	No. of SHGs linked	Bank loan	Refinance Assistance
1992-93	255	0.29	0.27
1993-94	620	0.65	0.46
1994-95	2,122	2.44	2.30
1995-96	4,757	6.06	5.66
1996-97	8,598	11.84	10.65
1997-98	14,317	23.76	21.39
1998-99	32,995	57.07	52.06

During the year, 52 new banks joined the linkage programme. In all, 202 banks (38 CBs, 129 RRBs and 35 Co-operatives) are participating in the programme covering 24 states and UTs. As many as 550 NGOs are participating in the programme. As on 31 March 1999, women SHGs constituted about 84 per cent of the total groups linked. On the whole, the programme has benefited about 5,60,000 rural poor families in 280 districts of

the country. The southern region continued to dominate in the linkage programme with a share of 65 per cent, followed by eastern (11%), western (11%), central (10%) and northern regions (3%).

Financial Assistance to Partner Agencies

In addition to providing refinance to banks, the National Bank has been supporting various partner agencies for capacity building through grants and Revolving Fund Assistance (RFA). The table 14.7 describes the financial support provided by the National Bank during the year to different agencies for micro credit innovations.

Table 14.7 Financial support provided by the National Bank to different agencies during the year 1998-99 for various micro-credit innovations

(Rs.Crore)

		Amount Sanctioned				Amount Disbursed			
Sr.No.	**Financial Assistance for**	**During the year 1998-99**		**Cumulative as on 31-03-1999**		**During the year 1998-99**		**Cumulative as on 31-03-1999**	
		No. of Agencies	**Amount**	**No. of Agencies**	**Amount**	**No. of Agencies**	**Amount**	**No. of Agencies**	**Amount**
1	SHG Refinance	202	30.67	202	52..06	202	30.67	202	52.06
2	Revolving Fund Assistance	6	0.86	21	10.72	5	1.01	21	5.33
3	Grants								
(i)	Promotional Assistance	27	0.94	70	2.00	16	0.31	47	0.85
(ii)	Corpus Contribution	-	-	1	3.00	-	-	1	3.00
	Total	234*	32..47	280*	67.78	221*	31.99	257*	61.24

* After adjusting NGOs assisted for more than one type of assistance.

Revolving Fund Assistance (RFA)

The National Bank has been supporting select NGOs with RFA to finance individuals, SHGs, small NGOs, credit unions, etc. to help them build their financial intermediation capacities. During the year, RFA of Rs.85.5 lakh was sanctioned to 6 agencies (Table 14.8).

Assistance to SHG Federations

Federations of SHGs are the emerging structures in the micro-finance sector with the multiple objectives of providing support services to the member SHGs, channeling social sector interventions, resource balancing and

mobilisation, and strengthening the process of empowerment of the poor. NGOs promoting SHGs also perceive such federations not only as a cost effective delivery mechanism for extending financial services by the banking system but also as a component of their own withdrawal strategy. During the year, RFA of Rs.15 lakh was sanctioned to Vaigai Vattara Kalanjiam (VVK), a federation of SHGs promoted by DHAN Foundation in Madurai-East block, in Tamil Nadu, increasing the number of such assisted Federations to two.

Table. 14. 8 Revolving Fund Assistance - Bulk Lending to NGOs - As on 31 March 1999

(Rs. Crores)

Sl.No.	Particulars	No.of NGOs	RFA/Corpus sanctioned
I	BGB Replication	8	7.04
II	NGO Networking	2	5.10
III	SHG Federations	2	0.24
IV	Others	9	1.34
v	Total	21	13.72

Financial Review of NGOs supported with RFA

Keeping in view the importance of periodic review of the functioning of NGOs supported with RFA, a set of guidelines has been prepared in consultation with the Department of Supervision of the National Bank. The guidelines are being pilot-tested before circulation to the Regional Offices for their use. Initially, agencies with a sizeable RFA would be covered under the review.

Guidelines for Appraisal of NGOs seeking RFA

In consultation with eminent practitioners of micro-finance, a set of guidelines was formulated for appraisal of NGOs seeking RFA from the National Bank for taking up financial intermediation. The guidelines adopted four broad parameters, viz., (i) Character, (ii) Capacity, (iii) Credit worthiness and (iv) Credit - thrift management.

RRBs as Self Help Promoting Institutions (SHPIs)

As part of the National Bank's ongoing search for a sustainable institutional mechanism for widening the outreach of the financial services to the poor, an experiment to test the feasibility of an RRB working as SHPI was launched in the year 1994 involving five branches of Cauvery Grameena Bank (CGB), Karnataka in association with an experienced NGO viz., MYRADA. .

Initiative of DCCBs

The participation of DCCBs under the Linkage Programme has remained subdued due to the absence of any provision in many of the State Cooperative Societies Acts enabling membership of SHGs in PACS or DCCBs. The Acts have already been amended in some states, while in others, the proposals for amendment are under examination. Two DCCBs such as Hoogli DCCB in West Bengal and Bidar DCCB in Karnataka have so far promoted and linked a large number of SHGs.

Promotion of SHGs by bank branches

The National Bank's SHG-bank linkage programme has now gathered spontaneity. A number of RRBs in Karnataka, Uttar Pradesh, Andhra Pradesh, Orissa and Kerala have started promoting SHGs on their own. A few commercial banks have also taken up the role of SHPI, promoting and linking SHGs on their own initiative without involvement of any NGO. As on 31

March 1999, 17 per cent of the total groups linked were promoted and nurtured by bank branches without association of NGOs, which indicates the increasing involvement of banks in SHG linkage programme.

Task Force

In order to examine and address various critical issues for a healthy and orderly growth of the micro-Finance sector in the country and to evolve supportive policy and regulatory framework, a high-powered Task Force has been set up by the National Bank. The Task Force, with the Managing Director, National Bank as Chairman, has members drawn from various MFIs, banks, NGOs, RBI and GOI. The secretarial assistance for the Task Force is provided by the National Bank and the report is expected to be submitted shortly.