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CHAPTER 1

AGRICULTURAL MARKETING: AN INTRODUCTION

In modern day business world, the field of marketing has assumed pivotal importance and is considered a key for the success of any business. It facilitates the producers in supplying goods and services that satisfy wants of the consumers at profit. The knowledge of marketing guides the producers about what and how much to produce, and how, when, and where to deliver their goods and services. The producers driven by market knowledge are able to formulate superior and innovative strategies to serve the consumers with products and services in the most desirable and efficient way.

The marketing function creates awareness among customers about the availability, quantity, quality, price, service, and distribution of products. It employs various components of marketing mix i.e. product, price, place and promotion to access markets for satisfying needs and wants of consumers at profit.

1.1) MODERN DAY MARKETING CONCEPT

The modern day concept of marketing has evolved as an outcome of considerable developments over the years in the concepts/philosophies about marketing and its nature.

- a) **The Production Concept** is based on the assumption that the consumers prefer those products which are both accessible and affordable. The business organisations mainly focus on bulk production through improvements in production efficiency and product distribution system.
- b) **The Product Concept** assumes that products of finest quality for a given price are only preferred by the consumers. Hence, the firms should produce superior quality products and devote all their main resources for improving product quality.
- c) **The Selling Concept** lays emphasis on selling efforts for stimulating and generating customer interest in the products. This concept necessitates the use of sales force for selling the products and during the process the firms may use fair and foul tactics.
- d) **The Marketing Concept** revolves around satisfaction of customer needs and wants. The firms should tailor their marketing program by determining needs and aspirations of the target market. The customer satisfaction is considered a key to generate profits for the organisation.
- e) **The Societal Marketing Concept** is a broadened version of the marketing concept. It urges upon the companies to pay special attention to improvement in public welfare while fulfilling the needs and wants of target market.

Similarly, several definitions have been propounded to comprehend the scope of marketing by various marketing economists over the years. The old definitions mainly assumed that marketing is a post-production activity and the producers should look towards market only when production has taken place. However, the starting point of the factory/farm gate or point of loading narrows down the scope of marketing. For example, preparation of livestock and picking, packing and grading of fruits are performed before

loading. Essential decisions regarding the type and amount of packing material, labour to be hired when where and how to dispose off the produce are taken before actual sales. Hence, marketing starts with identification of requirements of consumers which passes back from the retailer to the producer. Customer focus, market orientation and integration of business functions and profit are the main constituents of modern day marketing concept. Consumption of goods and services is the end and consumer demands are the starting point in marketing. In this perspective, Etzel, et al, 2005 have defined the marketing in the following way:

“It is a total system of interacting business activities designed to plan, price promote and distribute want satisfying goods and services to target markets in order to achieve organisational objectives”.

1.2) AGRICULTURAL MARKETING

Agricultural products differ from other industrial products due to their perishable nature and special requirements during various farm and marketing operations. But, this does not imply that the field of agricultural marketing is something entirely different from marketing of industrial and other products. It is simply application of principles of marketing in agriculture sector and has been defined by various experts as under;

According to Thomson, “the study of agricultural marketing comprises all the operations and the agencies conducting these, involved in the movements of farm produced foods, raw materials and their derivatives such as textiles, from the farm to the final consumers, and the effects of such operations on farmers, middlemen and consumers”.

Acharya and Agarwal defined agricultural marketing as “comprising of all activities involved in supply of farm inputs to the farmers and movements of agricultural products from the farms to the consumers”.

First definition mainly focuses on product side of agricultural marketing and does not consider the farm supplies whereas second definition also does not adequately cover the scope of agricultural marketing.

A comprehensive definition of agricultural marketing may be as under;

“Agricultural marketing embraces all business activities involved in production planning, transformation, grading, storing, transportation and distribution of goods and services related to agriculture as desired by agricultural producers (farmers) and ultimate consumers”.

1.3) THE MARKET

A market represents aggregate demand of a particular product under specific set of conditions in terms of place, quality, price and time. In markets, various business activities are organised to answer basic economic questions i.e. what, where, when and how to distribute production. A market may be defined in various dimensions like location, product, time, institution. To a marketer, the term market means to actively promote product or market development or product sales. Generally, the word market is attributed to following;

- 1 A place or area where buyers and sellers interact to achieve their objectives.
- 2 Indicates an aggregate demand of potential buyers of a specific commodity or service.

- 3 An aggregate composed of potential buyers and sellers that bring to focus the conditions and forces which determine prices.
- 4 After a name of a commodity e.g. livestock market, poultry market, meat market, grain market, timber market, wood market etc.
- 5 As a verb market means to perform the business activities that direct the movement of goods and services from producers to consumers.

However, in solemn language of economics, "***an exchange process accompanied by the price making mechanism constitutes a market***".

1.4) TYPES OF MARKETS

Markets can be classified into various categories on the basis of their location, product and consumers etc. Some of the classifications of markets are as under:

1.4.1) ON THE BASIS OF LOCATION

a) Primary Markets

These are markets at primary level such as a village market, roadside market and small town market. The farmers bring their produce to these markets and sell it to itinerant dealer, a village shopkeeper, a broker representing some commission agent or a representative of a processor or manufacturer. The main reasons for his selling in these markets are small stock of produce, urgent need of cash and non-availability of transport facilities.

b) Secondary or Wholesale Markets

Secondary or wholesale markets carry out the function of assembling agricultural produce and disposing off it to consumers. These may be located at tehsil, town and district level to assemble marketable agricultural produce of the surrounding areas. In these markets, agricultural produce is brought mostly by local traders who have purchased it in the primary market. Some farmers also market their produce through these markets to obtain relatively a higher price. The product is usually sold through auction to wholesalers and retailers for onward transmission to the ultimate consumers. These markets exist for different products like food grains, fruit and vegetable, livestock and poultry etc.

c) Retail Markets

The small shopkeepers and street vendors who purchase agricultural produce from primary and secondary markets in bulk and sell it in small quantities to the consumers through their shops or other means constitute the retail markets. The markets are the last step in the chain through which agricultural produce is passed on from the producer to the consumer.

d) Terminal Markets

A market, which is mainly involved in the export of commodities, is called terminal market. These are generally situated in large urban centres. Terminal markets generally have dry port or sea port facilities and act as import and export trade centres through which the surpluses are exported and deficit products are imported. Karachi with sea port and Lahore, Peshawar, and Faisalabad with dry port facilities are examples of terminal markets.

1.4.2) ON THE BASIS OF REGULATION

a) Free Market

Free market is a market where demand and supply forces operate and interact freely without any restriction on price setting mechanism and as result perfect competition prevails in the markets.

b) Regulated Market

A market managed by an elected committee or local authorities is known as a regulated market.

1.4.3) ON THE BASIS OF NATURE OF COMPETITION

a) Perfect Market

A market is said to be perfect where following four conditions for perfect competition prevail;

- 1) Large number of buyers and sellers,
- 2) Homogeneous products,
- 3) No constraint on entry or exit: and,
- 4) Producer as price taker.

In perfect markets, all the potential buyers and sellers are immediately made aware of quality grades, transactions prices, and all the buying and selling offers made by the trading parties. Under such conditions, the price of a commodity tends to remain same all over the market and every quality of the commodity is regarded as a separate commodity.

b) Imperfect Market

An imperfect market is a market where one or more conditions of perfect competition are lacking. In imperfect markets, some or all the buyers or sellers may not be aware of the offers being made by others and different prices being charged or paid for the same commodity at the same time in a market. Imperfect markets may be monopolistic competitive, oligopolistic or monopolistic type of markets.

1.4.4) ON THE BASIS OF END USERS

a) Consumer markets

These markets consist of individuals and households who buy products for their direct/ultimate consumption.

b) Industrial/Business Markets

Industries and institutions that buy products for further processing form industrial markets.

1.4.5) ON THE BASIS OF PRODUCTS TRADED

a) Factor (Input) Markets

These are the markets where factors (inputs) used for agricultural production are bought and sold. Pesticide, fertiliser, seed, farm machinery and labour markets are examples of factor markets.

b) Product (Output) Market

In product markets, agricultural produce is traded. For example grain markets, fruit markets, vegetable markets etc.

1.4.6) ON THE BASIS OF COVERAGE

a) Domestic Markets

Domestic markets provide goods and services to the domestic consumers only. Only those items are traded which are in consonance with the domestic socio-cultural and economic requirements. Domestic markets include local, regional, and national markets.

b) International Markets

International markets serve the foreign consumers and are characterised by intense competition in terms of price and quality. Producers market their products considering the requirements of foreign buyers.

1.5) ROLE OF AGRICULTURAL MARKETING IN ECONOMIC DEVELOPMENT

Agricultural marketing plays a major role in the economic development of a country not only in less developed countries but in developed countries as well. In case of less developed countries, the development of agricultural marketing system assumes more importance as their economies largely rely on agricultural sector and almost half of the labour force is usually employed in agricultural sector. Rural poverty is a common phenomenon and consumer expenditure on food stuff constitutes major share of income. Therefore, it is argued in the literature that development of agricultural marketing system is at the heart of economic development.

A well-developed agricultural marketing sector may contribute to economic development of a country in following ways;

1. An efficient agricultural marketing system has a tangible impact on marketable and marketed output of the farmers and, hence, contributes to overall national income of a country.
2. The marketing sector assists in providing capital and necessary business skills for trading to the budding entrepreneurs and traders which are prerequisites for economic development.
3. It modernise farm production structure through development of a commercialised pattern of production and increased specialisation.
4. It improves the efficiency of resource allocation and expands the size of the market.
5. Marketing improvements increase the market orientation of the farmers by making them more responsive to market signals and thereby guide them in better production planning.
6. It provides an effective link between rural and urban areas by facilitating the movement of factors of production, goods and services.

7. The consumer is not disillusioned by multiple grades, multiple prices, misguiding labels, adulteration and the inadequacy of market service, which leads to the maximisation of aggregate social welfare in the context of an improved marketing system.
8. Improved market structure minimises the probability of the occurrence of produce losses, increases incentives for production and ensures favourable prices to the producers via reduced marketing margins.
9. It accelerates the pace of capital formation through a reliable marketing system which ensures a stable and favourable cost-return relationship for the producers and easier as well as quicker availability of a technology package.
10. The creation and development of marketing infrastructural facilities increase farmer's access to markets, improve efficiency of commodity movements and encourage market integration.
11. The improved market organisation transmits correct market responses and minimises the scope of distorted market signals.
12. A marketing system that promptly respond to changing conditions in world market improves the competitiveness of exports and contributes to foreign exchange earning of the country.

1.6) FACTORS RESPONSIBLE FOR THE NEGLECT OF AGRICULTURAL MARKETING

Despite the significant role of agricultural marketing in the overall development process, agricultural marketing has been a neglected area in developing countries. Some factors which are considered responsible for the neglect of agricultural marketing have been described below.

1. The gains from marketing improvements cannot be quantified objectively and concretely. Hence, the policy makers think that it does not provide tangible benefits and development of marketing component of agricultural sector is a wasteful activity.
2. Marketing is sometimes criticised as being inefficient and is often accused of creating high profits for the intermediaries between producers and consumers.
3. The development of agricultural marketing system requires direct investment of money which resource constrained subsistence/developing economies cannot afford.
4. Lack of skilled and trained manpower in the field of agricultural marketing that could be highly instrumental in the development of marketing system is a major limiting factor for the neglect of the this sector.
5. Apathy towards marketing due to certain social taboos also erects barriers in the development of agricultural marketing system. Farmers are hesitant to become shopkeepers and are not inclined to equip themselves with modern marketing tactics. Similarly, people do not want to be brokers because it is not considered socially respectable.

However, the recent wave of trade liberalisation under World Trade Organisation (WTO) has once again highlighted the importance of agricultural marketing. The developing countries have the potential to meet the challenges of WTO but non-availability of marketing related expertise and infrastructural facilities are the main hindrances in the way of realisation of this potential. Therefore, the developing countries will have to update their domestic agricultural marketing systems in line with changed domestic and international scenarios for economic development of their countries.

CHAPTER 2

AGRICULTURAL MARKETING SYSTEM

A system is a complex whole of interrelated and interdependent constituent parts or subsystems with pre-defined common goals and objectives. An agricultural marketing system comprises of various institutions that perform different functional activities essential for profitable exploitation of opportunities in the market place. The components of an agricultural marketing system may be independent of one another but a slight variation in any one impacts not only the individual components but the whole system as well.

2.1) ECONOMIC DEVELOPMENT AND AGRICULTURAL MARKETING SYSTEM

The characteristics of an agricultural marketing system and how it operates greatly depend on overall development stage of a country. Following three stages of development are useful in understanding the degree of sophistication of an agricultural marketing system.

2.1.1) TRADITIONAL SUBSISTENCE ECONOMIES

In traditional subsistence economies, majority of the people earn their livelihood from farming. Generally, agricultural production and income of farmers are low. They eat what they produce and little is left as marketable surplus. Agricultural production tends to be distinctively divided between commercial export crops and subsistence food crops.

The traditional subsistence economy produces a limited variety of agricultural crops. A few basic grains, root crops or pulses make up the diet of majority of the people. Consequently, a limited variety of commodities are brought to the market for trading. Marketing transactions are often made directly by the farmer or his wife sitting in the market place. The product can be seen, smelled, weighed and tasted and differences over price and product quality are discussed by both parties in a transaction. Thus chances of error, misunderstanding or other problems are minimised.

Often, there is an absence of governmental support for new technology to develop agricultural production. Changes take place slowly in agricultural sector and most crops are sold at very short distance from where these are produced. Marketing systems and facilities expand more or less immediately/automatically to meet marketable surplus. Major urban centres within these countries at this stage of development may have elements of a more advanced marketing system.

2.1.2) TRANSITIONAL AGRICULTURAL ECONOMIES

As countries develop, these become increasingly urbanised and more market oriented and often urban population is as large as rural population. The growth of agricultural production is a priority in development plans. Commercial agricultural increases and private and public capital starts pouring into farming and agribusiness. Temporary surpluses may appear for some crops that may lead to marketing and distribution constraints. With income advances and population shifts, more products move greater distances to market.

As major proportion of the country's food crop consumption starts going to urban markets and more production gets available for commercial markets, the need for general expansion of the marketing system is greatly felt. This requires additional services from facilitating agencies such as grading, financing, risk-bearing, crop reporting and market news.

2.1.3) MARKET ORIENTED AGRICULTURE

In market oriented economies, urban population is the dominant demographic characteristic. Commercial agriculture becomes a prominent producer of agricultural commodities and as result resource allocation problems emerge within agricultural sector. Problems of diversification in developing new markets are given high priority by the government. The problems of food supply begin to shift from issues of production to issues of distribution, and from commodities to nutrition. Improvements in income and technology continue to become more general throughout the economy. More food is processed and packaged. Consequently, a food industry focusing consumer preferences for new food products is developed and a national marketing system is emerged.

2.2) STAKEHOLDERS IN AGRICULTURAL MARKETING SYSTEM

An agricultural marketing system generally comprises of five main stakeholders or market actors i.e. producers, traders, trade supporters, trade planners/decision makers and consumers. Each of these stakeholders has its own specific marketing goals as described below.

2.2.1) PRODUCERS

The producers or farmers are main stakeholders in an agricultural marketing system. They produce wide variety of food items for self-consumption as well as for supply in the market. Agricultural producers are interested in maximisation of their net farm income and aversion of risks involved in production and marketing of their produce. Moreover, they want developed and guaranteed markets, improved market position, increased and stabilised prices for outputs besides stable supply and prices of inputs.

2.2.2) TRADERS

These are the people who mostly operate in the markets and relate producers with consumers. Commission men, brokers, wholesalers and retailers all belong to this group. Traders desire to have high volume and profit, time and cost efficient purchasing, no trade restrictions and minimum market risk.

2.2.3) TRADE SUPPORTERS

Trade supporters do not directly participate in trading activities of the market. They support and facilitate performance of trading activities and are interested in enhancing efficiency in exchange of goods. Smooth functioning of market systems and general support to market exchange function such as infrastructure and communication are the main goals of trade supporter.

2.2.4) TRADE PLANNERS/DECISION MAKERS

This group of stakeholders is responsible for making decisions relating to agricultural marketing. Planners and decision makers have social and political goals generally related to securing ample food supplies and expanding domestic agriculture markets. Other major objectives of this group include price stabilisation and promotion of export sector.

2.2.5) CONSUMERS

The last group in the marketing chain comprises of consumers but their influence is considered a derived function which is executed through traders and trade institutions. Major objectives of consumers include acquisitions of good quality products, low prices of products and better services.

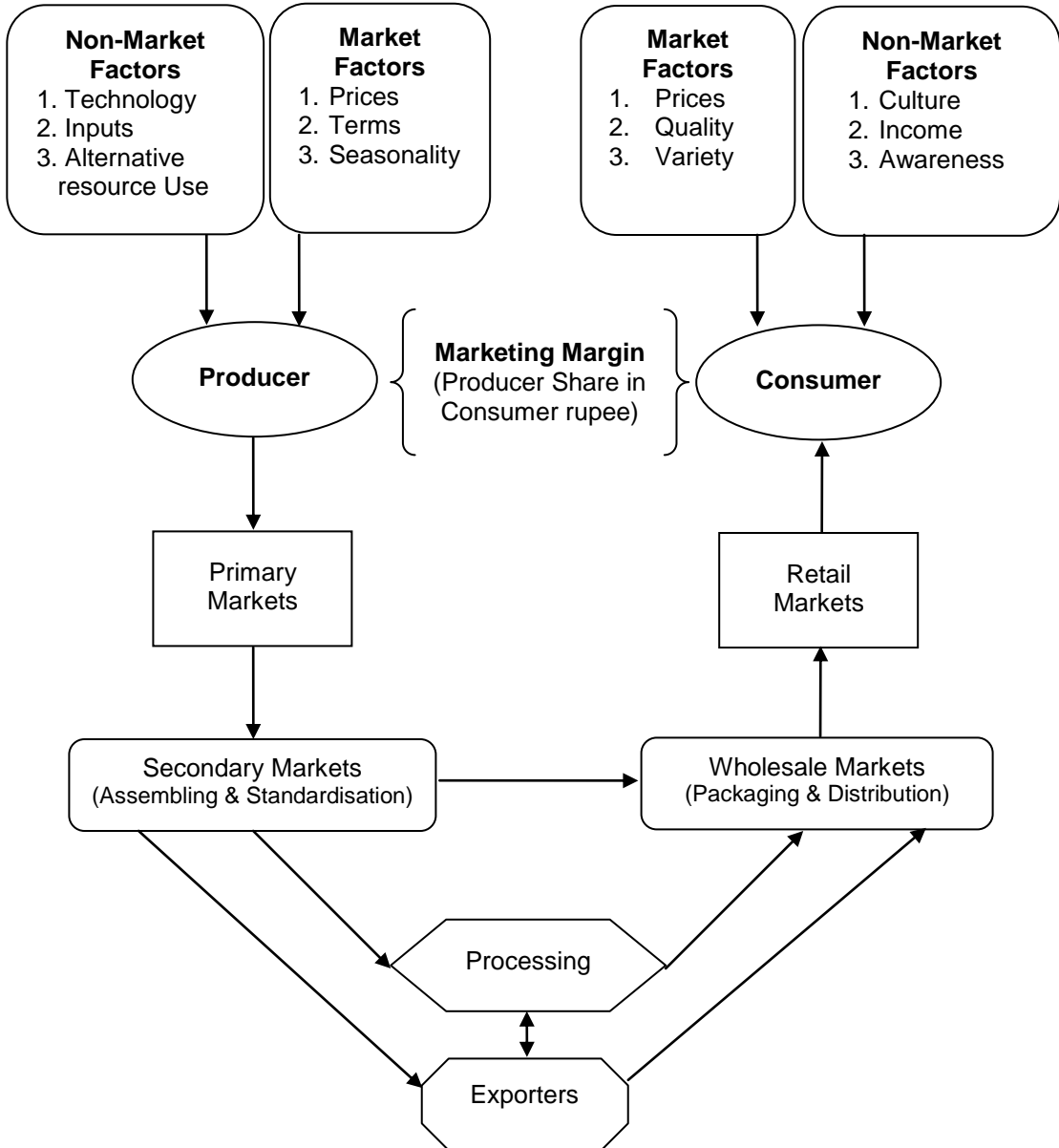


Figure 2.1: Typical structure of an agricultural marketing system

2.3) MARKETING SYSTEM PRODUCTIVITY

Marketing system productivity is usually measured by the amount of usefulness often referred to as “utility” that the system adds to the agricultural products. The marketing process add utility and hence value and desirability to a product for the satisfaction of customer needs and wants. Following types of utilities are added by a marketing system:

2.3.1) FORM UTILITY

Agricultural products cannot be consumed in raw form. Form utility is a conversion process through which raw products are transformed into form, style, appearance or quality as desired by customers. It is added by processing or other methods and is fairly recognisable. Conversion of wheat into flour and bread, fruits into jams and juices, and slaughtering of animals and cutting into smaller pieces all add form utility.

2.3.2) PLACE UTILITY

Agricultural commodities are produced at distant places mostly in the rural areas located at greater distances from the consumers in the urban areas. Place utility involves transporting the product to a location where it is desired by the consumer. Transportation serves this purpose and, hence, adds place utility.

2.3.3) TIME UTILITY

In case of agriculture, production is not spread evenly throughout the year rather skewed in specific seasons and considerable time lag exists between production and consumption. Storage function creates time utility that makes products available to the consumer at desired time. Wheat is generally produced only once in a year but it is consumed all year long. Storage function provides time utility by making wheat available during the entire year.

2.3.4) POSSESSION UTILITY

A farmer needs certain outlets to dispose off its surplus production. Agricultural marketing system provides means for willing sellers to interact with willing buyers to arrive at market transactions. Possession utility is created by the process of transferring ownership of the product from sellers to buyers at the right time. This utility is created and supported by many people in the marketing channel.

Box 2.1: Marketing Channel

Marketing channels is a flow or pipe line that depicts the movement of products from producers to consumers. It is comprised of specialised marketing institutions and agencies that relate producers with consumers. Marketing channels are generally of following two types;

- a) **A centralised marketing channel:** Through this channel, farmer's produce is brought in large central markets where it is purchased by processors or wholesalers from commission men who act as the farmer's selling agents e.g. our normal (traditional) commodities channels.
- b) **A decentralised marketing channel:** This channel does not utilise established large market facilities rather processors or other wholesalers purchase directly from the farmers or at small production area selling points. In this case, farmers usually act as their own salesmen. (e.g., sugar mills purchasing cane from farmers at purchase centres and PASSCO purchasing wheat at purchase centres.)

2.4) ANALYSIS OF AGRICULTURAL MARKETING SYSTEM

The analysis of an agricultural marketing system helps in understanding the components of the system and the interactions among these components. It also facilitates in identifying the nature, type and root cause of problems affecting the efficiency and effectiveness of the system.

There are various approaches to analyse agricultural marketing systems. These approaches are ways of breaking down a complex marketing problem into its parts so that it is better understood. Following approaches are generally used for this purpose:

1. The functional approach
2. The institutional approach
3. The commodity approach
4. The behavioural system approach
5. The market structure, conduct, and performance approach
6. The market mapping approach

2.4.1) THE FUNCTIONAL APPROACH

This approach classifies and breaks down various marketing activities and processes into various functions. ***A marketing function is a major specialised activity performed in the marketing chain for accomplishing certain marketing activities and processes.*** The three important characteristics of marketing functions are that these;

- a) affect costs and value to consumers
- b) cannot be eliminated and
- c) can be performed by anyone in the system.

The activities involved in agricultural and food marketing processes are generally classified in three sets of functions as under;

- 1) Exchange Functions.
 - a. Buying
 - b. Selling.
- 2) Physical Functions.
 - a. Storage
 - b. Transportation
 - c. Processing.
- 3) Facilitating Functions.
 - a. Standardisation
 - b. Financing.
 - c. Risk-bearing
 - d. Market intelligence.

2.4.1.1) Exchange Functions

The exchange functions refers to those marketing activities which are related to transfer of ownership of goods and are mainly related to price determination process in the marketing chain. The exchange function has two sub-functions i.e. buying and selling. The primary objective of both buying and selling functions is the negotiation of favourable terms of exchange.

1. **The Buying Function** is mainly concerned with finding out the sources of supply, assembling of products and the activities associated with purchase. This function may be the gathering of the raw products directly from the production areas or the collection of finished products by middlemen for meeting the demands of the ultimate consumers. This function is also performed by business and ultimate consumers who buy a wide range of goods and services to satisfy their needs and wants. Generally, price and quality are the main considerations in the buying function.
2. **The Selling Function** is not simply accepting the price offered by the buyer rather it includes all activities which are termed merchandising. Decisions concerning proper unit of sale, proper packages, the best marketing channel, the right time and place to approach potential buyers constitute the selling function. Besides these, physical arrangements for the display of goods, advertising and other promotional tools used to influence or generate demands are also important constituents of the selling function.

2.4.1.2) Physical Functions

The physical functions include all activities relating to handling, movement and physical transformation of agricultural commodities. These functions help in solving the problems of when, what and where in marketing and include the following sub-functions;

1. **The Storage Function** is a specialised activity that makes goods available at the desired time. Agricultural production is seasonal in nature and considerable time lag exists between production and consumption. Continuous demand of agricultural commodities necessitates the storage function for ensuring smooth and continuous flow of products into market. It includes the activities of elevators for holding large quantities of raw materials till further processing and the holding of supplies of finished goods by the processors, wholesalers, and retailers as inventories.



Picture 2.1: Open space storage of food grains in Pakistan

2. **The Transportation Function** refers to all those activities that ensure availability of goods at proper place. Agricultural commodities are generally produced in rural areas whereas these are consumed mostly in the areas which are located at distant places creating a distance lag. The transport function overcomes this distance lag. Adequate performance of this function demands weighing of alternative routes and modes of transportation as these affect transportation

costs. It also includes the activities involved in preparation for shipment, such as loading, unloading and crating.



Picture 2.2: Traditional mode of transportation inside an agricultural market

- 3. The Processing Function** is essentially an activity that changes the form of raw product. It includes all those activities that transform the basic raw product into final product as desired by the consumers. The examples of processing function include conversion of live animals into meat, fresh peas into canned or frozen peas, and wheat into flour and then bread.



Picture 2.3: Preparation of fish meat at a modern store

2.4.1.3) Facilitating Functions

The facilitating functions contribute in ensuring the smooth performance of the exchange and physical functions. These functions do not directly take part in the exchange of title or the physical handling of products. However, in the absence of these functions modern marketing system cannot work smoothly. These activities relating to facilitating functions are like a grease that makes the wheels of the marketing machine go round uninterrupted. The facilitating functions are:

- 1. The Standardisation Function** is the establishment and maintenance of uniform measurements of both quality and quantity. This function simplifies exchange process by making the sale by sample and description.

Effective standardisation is basic to an efficient pricing process. A consumer directed system assumes that the consumer will make his wants known largely through price differentials. These differentials must then be passed back through the marketing channel so that marketing agencies and producers can know what is wanted at different price levels. An effective pricing system can work only if a commodity is traded in well-defined units of quality and quantity. Standardisation also leads to grouping of similar lots of commodities early in the movement of commodities from production points. This benefits all stakeholders in commodity chains from producers to consumers.

The establishment, strict enforcement of standards through activities like quality control in processing plants and inspections to maintain the standards in the marketing channel are also part of this function. Besides this, certain aspects of packaging activity as being part of the merchandising activity within the selling function can also be grouped in this function.



Picture 2.4: Graded and packed meat with price and quantity tags placed on the shelves of a modern store.

2. **The Financing Function** is the advancing of money to execute various marketing processes and functions. Generally, there is a time gap between the sale time of raw products and sale time of finished goods to the ultimate consumer in case of agribusiness products. Anywhere in the marketing chain where storage or delay takes place, capital is tied up and someone must finance the holding of goods. The period may be one year or even more for the commodities which can be stored, but it may be relatively short time in case of perishables. Financing may take the easily recognisable form of advances from various lending agencies or the more subtle form of tying up the owner's capital resources. In either instance, it is a necessary activity in modern day marketing.
3. **The Risk-Bearing Function** is an acceptance of possibility of losses in the marketing of a product. Most of these risks can be classified into two broad types i.e. physical risks and market risks.
 - a) **The physical risks** may occur due to destruction or deterioration of the product itself by fire, accident, wind, earthquakes, cold and heat.
 - b) **Market risks** may arise due to changes in value of a product as it is marketed. An unfavourable movement in prices might result in high inventory losses. A

change in consumer tastes might reduce the desirability of the product. A change in competitors operations might result in a loss of customers. All these risks in varying degree must be borne in the marketing of a product.

Risk bearing may take a more conventional form such as the use of insurance companies in the case of physical risks or the utilisation of futures exchanges in the case of price risks. Often the entrepreneur himself may bear the risk without the aid of any of these specialised agencies.

The function of risk bearing is often confused with the function of financing but these are different functions. The need for financing arises because of the time lag between the purchase and sale of products, whereas the need for risk bearing arises due to the possibility of loss during the storage period.

4. ***The Market Intelligence Function*** includes all activities relating to collection, analysis, interpretation and dissemination of a wide variety of data necessary for the smooth and efficient operation of marketing processes.

The marketing operations and processes cannot be accomplished efficiently and effectively in an information vacuum. Effective pricing mechanism altogether depends on well-informed buyers and sellers. Successful decisions concerning pricing policy initiatives, adequate storage programmes, an efficient transportation service, and adequate standardisation programmes all depend on reliable and good information. A greater part of market research relating to evaluation of possible alternative marketing channels, different ways of performing market functions and market potential for new products falls in the domain of market intelligence. Marketing intelligence is mainly the job of experts who specialise in its performance. However, everyone who buys and sells products also evaluates market data and, hence, to some extent is also involved in performance of this function.

2.4.1.4) Uses of the Functional Approach

Following are the main uses of the functional approach;

1. The functional approach considers the jobs, which must be done in the marketing process irrespective of who performs this job. Some marketing agencies specialise in the performance of specific functions. For example, cold storage warehouses are operated to perform the storage functions. A potato broker may specialise in the selling and market intelligence functions. On the other hand, some marketing agencies may perform all marketing functions to some degree. The retailer is a good example of this latter group.
2. This approach is particularly helpful in evaluating marketing costs of various middlemen in the marketing chain. Retailing is usually much more costly than wholesaling. The functional approach points out the greater complexity of retailing by focusing attention on the increased extent to which the retailer must perform his various functions.
3. The use of functional concepts also aids in comparing the costs of two similar middlemen. Cost comparisons are meaningful only when these are related to some task. Retailer A may operate at lower costs than retailer B but they may not be performing the same functions. Retailer A is cash and carry merchant whereas B extends credit and deliveries. As such, retailer A probably performs

considerably less of the functions of financing, risk bearing, and transportation as compared to retailer B.

4. It greatly helps in understanding variations in the marketing costs of different commodities. For example, a perishable product is generally more costly to market as compared to less perishable products. This difference is mainly due to the complexities in the performance of transportation, storage, and risk bearing function. The extent to which the processing function is involved is also a major determinant of difference in marketing costs.
5. The breakdown of a complex marketing task into its component functions greatly aids in improving the performance of marketing system. In case of retailer, for example, retailer B may be losing money in comparison to competitors. A careful insight into functions performed by retailer B may reveal that the cost of its function is unduly high due to untapped accounts. Or a careful analysis of his selling function may show he has not kept up with new methods in merchandising his products and, thus, is losing out to his competitors.

Box 2.2: Marketing Functions and the of Middlemen of Marketing

Marketing functions are activities that must be performed in the marketing process. Changes may be made that will permit the performance of a function with less cost. Its performance may be simplified, excessive duplication may be corrected, and where or who performs the function may be changed. The performance of a function, however, can never be totally eliminated. A particular "middleman" may be eliminated, but the functions he was performing still must be done somewhere in the marketing process. In some commodities, farmers may sell their products with or without the services of a commission man. However, when the commission man is eliminated, the farmer himself must undertake the responsibility for functional tasks the commission man performed. Supermarkets have reduced the costs of retailing by reducing the use of sales clerks, delivery, and credit extension. However, this has been possible because the consumers themselves are now performing these functional tasks.

2.4.2) THE INSTITUTIONAL APPROACH

The institutional approach is a way to study various agencies and business organisations involved in the performance of marketing processes. The functional approach attempts to investigate the "what" in the question of "who does what", whereas the institutional approach analyse the marketing system by focusing attention on "who".

Marketing institutions refers to a wide variety of business organisations/structures, agencies, and people who operate the marketing machinery. The institutional approach is a way to investigate nature and character of various middlemen and associated agencies who are involved in the arrangement and organisation of marketing machinery.

Middlemen are those individuals/agencies who specialise in performing various marketing functions and are involved in the purchase and sale of goods along the marketing chain from producer to consumer.

In this approach, all emphasis is on human element and various roles performed by the middlemen are mainly focused. There is no limitation as to the way in which the middlemen have organised their business. They may operate as individual proprietors,

partnerships, or cooperative or corporations. The middlemen of particular interest in food marketing can be classified as follows:

- 1) Merchant Middlemen
 - a. Retailers
 - b. Wholesalers
- 2) Agent Middlemen
 - a. Brokers
 - b. Commission men
- 3) Speculative Middlemen
- 4) Processors and Manufacturers
- 5) Facilitative Organisations.

2.4.2.1) Merchant Middlemen

Merchant middlemen take title to, and therefore own, the products they handle. They trade for their personal gains and secure their incomes from a margin between the buying and selling prices. Retailers and wholesalers are two types of merchant middlemen.

1. **The retailer** buys products for resale directly to the ultimate consumer of the goods. Retailers purchase in bulk mostly from wholesalers and sell in small lots to consumers. From functional viewpoint, the job of retailer is very complex and he may perform all of the marketing functions like procurement, transportation, storage, display, packaging and sale of products. This group of middlemen is the most common in the marketing chain. The types of retailers vary from traditional to modern formats. Temporary and permanent shop holders, street vendors, retailers selling on donkey carts and bicycles are examples of traditional retailers whereas superstores, mega marts and super markets are modern forms of retailing in Pakistan.



Picture 2.5: A typical vegetable retail shop in Pakistan

2. **The wholesaler** sells his products to retailers, other small wholesalers, and business consumers, but does not sell in significant amounts to ultimate consumers.

Wholesalers make up a highly heterogeneous group of varying sizes and characteristics. One of the more numerous groups of wholesalers is comprised of

local buyers or country assemblers who buy goods in the production areas directly from farmers and then sell to other wholesalers and processors in large urban centres. Various agencies as grain elevators, poultry and egg buyers, and local livestock buyers are examples of this group.

Another group of wholesalers is located in the large urban centres. These may be “full-line” wholesalers who handle several products simultaneously or “limited line” those who specialise in handling a limited number of products. Wholesalers may be cash and carry wholesalers or service wholesalers who extend credit and offer delivery and other services.

2.4.2.2) Agent Middlemen

Agent middlemen act as representatives of their clients and do not take title to, and therefore do not own the products they handle. Agent middlemen receive their incomes in the form of fees and commissions.

Agent middlemen provide services to their principals/clients and do not sell physical goods to customers. The principal expertise of the agent middlemen is market knowledge and the knowledge that they use in bringing both buyer and seller together. Their services are often acquired by a buyer or seller of goods who may not bargain effectively due to lack of market knowledge of alternatives and opportunities.

Though the names may differ somewhat, agent middlemen can be categorised into two major groups i.e. commission men and brokers. The difference between these two types of agent middlemen is largely one of degree.

1. **The commission man** is usually granted broad powers by those who consign goods to him. He normally takes over the physical handling of the product, arranges the terms of sale, collects the revenue, deducts his commission, and remits the balance to his principal.
2. **The broker** is not given physical control of the product and he ordinarily follows the directions of his principal closely. He has less discretionary power in price negotiations than commission men and he receives a fee for his services.

2.4.2.3) Speculative Middlemen

Speculative middlemen take product ownership to seek profit due to price movements. They often emerge as a result of specialisation in taking risks and usually do a minimum of handling and merchandising. They often attempt to earn their profits from short run fluctuations in prices. Purchases and sales are usually made at the same level in the marketing channels. “Traders”, “Scalpers”, and “Spreaders” are also various terms used for speculative middlemen.

All merchant middlemen attempt to earn secure incomes through handling and merchandising of their products by holding the uncertain aspects and risk to a minimum. In this market situation, the speculator middleman performs a very important job and acts as a specialised risk taker. He can usually perform this function more cheaply. However, the existence of speculators may indicate that other merchant or agent middlemen are not performing their tasks effectively. In these situations speculators may represent unnecessary duplication of middlemen.

2.4.2.4) Processors and Manufacturers

Processors and manufacturers primarily exist to change product form. Apart from their main processing activities, they take an active part in other institutional aspects of marketing. Some processors, such as butchers, often act as their own buying agents in the producing areas. Many processors attempt to reach the ultimate consumer through advertising.

2.4.2.5) Facilitative Organisations

Facilitative organisations assist various middlemen in carrying out their tasks and do not directly participate in marketing activities and processes like buyers and sellers, commission men, brokers, processors, or speculators. Some of these organisations may arrange physical facilities for handling of products and bring buyers and sellers together. These may set the “rules of the game” to be necessarily followed by the market actors such as trading hours and terms of sale. These may also facilitate quality and quantity grading process, and transaction payments. These organisations earn incomes in the form of fees and assessments from the beneficiaries of their facilities.

An example of facilitative organisations is the trade associations who mainly gather, evaluate, and disseminate large variety of valuable information to particular trade groups in the marketing chain. Sometimes, these may also carry out marketing research for mutual benefit. In certain circumstances, these may also act as unofficial policemen in order to prevent unfair and unethical trade practices. Although these organisations do not directly take part in buying and selling of goods but often these have significant impact on the nature and pattern of marketing in certain localities and regions.

2.4.2.6) Uses Of the Institutional Approach

The study of various kinds of marketing organisations and the way in which these organise themselves furnishes another useful tool in analysing agricultural marketing systems and problems.

1. Often, the justification of certain marketing practices must be answered in terms of characteristics of the person who performs these practices. The institutional approach prevents personal and human aspects of marketing from being ignored in the study of marketing system.
2. The institutional approach helps in examining the attitudes towards marketing change or improvement in the light of characteristics of various marketing institutions with large vested interests in the status quo.
3. Marketing institutions give voice to the marketing machinery and may develop “pressure” and “education” groups to mould public opinion. One of the careful rules to be followed in the analysis of any marketing controversy or problem is first to ascertain which groups are vocal in the controversy and what they might stand to gain or lose out of it.

2.4.3) THE COMMODITY APPROACH

Agricultural marketing system can also be analysed by examining marketing processes commodity by commodity. Under this method, both functional and institutional aspects of marketing are analysed in detail for a particular commodity. This analysis helps in focusing attention on the differences in marketing, which arise due to differences in either the commodity or its production, perishability, seasonality, and the size of the basic production unit. These factors may influence the way various marketing functions are performed and the type and organisation of institutions that perform these functions.

The separate study of a large number of commodities also point out the similarities of many marketing problems in the system. For example, a commodity wise analysis points out that retailing is the most costly single step in marketing. This finding helps in emphasising the importance of a critical evaluation of the retailer as a middleman in terms of the efficiency and effectiveness of functions performed by him as an individual and in comparison with other retailers.

2.4.4) THE BEHAVIORAL SYSTEM APPROACH

The marketing process is continually changing in its organisation and functional dimensions and it is quite difficult to understand and predict this change. The behavioural system approach views a particular marketing firm or an organisation of firms, such as the marketing channel as a system of behaviour. Each firm is composed of people who make decisions in an attempt to solve particular problems. If these problems and their behavioural systems for solving these can be classified, a greater understanding of forthcoming changes may be obtained. According to this approach, following four major types of problems with their associated behavioural systems can be identified.

2.4.4.1) Input-Output System

Each marketing firm or organisation of firms produce something and thus have some input-output system. This is true whether it is a meat processor, a commission man, or a marketing channel consisting of many firms. Every organisation uses costly and scarce inputs/resources and hopes to find a satisfactory solution for combining these resources to secure a satisfactory output. This input-output system motivates to develop and adopt new technology, new products, and different forms of organisation that may be economically cost efficient. In this system, various physical and engineering sciences also make their major contributions to understand marketing process.

2.4.4.2) Power System

An in depth understanding of market power greatly helps in solving various marketing problems. All firms and groups of firms have status and a vested interest in the present role they are playing. These may have developed a reputation for quality, market leadership, social responsibility, rapid growth etc. These firms cannot take any decision flippantly that might deteriorate their particular niche of power. It is in this framework that we can understand the urge of many firms to grow and expand, to be innovators or followers and so forth. The economic theory of monopoly and imperfectly competitive behaviour as well as the political scientist's concern with power behaviour provides insights into this system of behaviour.

2.4.4.3) Communication System

Each firm or organisation of firms can also be viewed as a communications system. When the business organisations develop and expand their business, the problem of communication of appropriate information to the managers and subsequently transmitting their decisions into actions by other workers assumes greater importance. It is really a challenge for larger and complex organisation to establish effective channels of information and direction. Desirable actions may be frustrated due to problems in proper communication of right information or by the misinterpretation of the messages of action. At this point, an interaction of psychology, sociology, and business management sciences is desirable to develop and organise effective communication system for properly motivating and directing subordinate workers and units.

2.4.4.4) Adaptive Behavioural System

Change is an essential characteristic of marketing and one of the major problems of marketing firms and organisations is how to adapt to these changes. Hence, the behavioural system for adapting to internal and external change becomes a major component of organisation strategy. All the firms desire to survive and are prepared to pay some price to do so. The success of these firms depends on the mechanisms through which needed changes are identified and implemented which constitute an important dimension of operational behaviour.

2.4.4.5) Uses of the Behavioural System Approach

Input-output relationship, power, communications, and adaptive behavioural system are all components of the operation of the marketing system. An understanding of all of these systems is helpful in explaining actions which when viewed only in the context of one of the systems look irrational or unintelligent. A firm may forego an input-output solution because its communications system has broken down or because of considerations of its power situation. A firm may choose to acquire another related firm and integrate its activities into its own in order to improve its internal communications problems or to enhance its power in the market place. In another instance, it may acquire another firm because it thinks it foresees changes coming and the purchase of the know-how and management of the acquired firm may present the most feasible method of adapting to the new conditions.

2.4.5) THE MARKET STRUCTURE, CONDUCT AND PERFORMANCE APPROACH

This approach analyses the overall structure of the market and evaluates the conduct and performance of operating firms within the markets.

2.4.5.1) Market Structure

The word structure implies “form, or manner of building, arrangement of parts in a substance or body etc.” In other words, the structure of any complex entity refers to the pattern in which its constituent parts are organised or put together.

Market structure refers to the organisational characteristics of a market which mainly determine (a) seller relationships to each other in the market; (b) buyer relationship in the market to each other; (c) seller-buyer relationship; and (d) relationship of established sellers in the market to potential new entrants in that market. For practical purposes market structure means those characteristics of the organisation of a market that have a strategic influence on the nature of competition and pricing within the market. The most

salient aspects or dimensions of market structure include seller concentration, buyer concentration, product differentiation, and entry conditions to a market.

a) Seller Concentration

The extent of seller concentration is described by the number and the size distribution of sellers in the market. Seller concentration refers to the number of sellers in a market which may be one, few or many (monopoly, oligopoly and monopolistic competition) and to the relative size of sellers with any given number. Theory and observation suggest that the character, intensity and effectiveness of competition among sellers are significantly influenced by the degree of seller concentration.

b) Buyer Concentration

The extent of buyer concentration is also defined in parallel fashion. Buyer concentration has a similar significance in determining the character of competition among buyers and the character of the relationships between buyers and sellers which may affect ultimate market performance.

c) Product Differentiation

Product differentiation is a strategy through which competing firms try to distinguish their products on account of differences in quality, design, packaging and other attributes. Buyers have various degree of preference for these products as compared to others. The extent to which competing products in a market are differentiated may clearly be expected to influence the competitive interrelationships of sellers in the market, their conduct and their market performance.

d) Entry Conditions to a Market

The condition of entry to the market refers to the relative ease or difficulty with which new sellers may enter the market and is generally determined by the advantages which established sellers may have over new entrants. It, thus, points out the relative strength of potential competition that may have an impact on the conduct and performance of sellers who are already operating in the market.

2.4.5.2) Market Conduct

Market conduct refers to the behavioural patterns that enterprises pursue in adapting or adjusting to the markets in which these perform trading activities.

In case of selling firms, the market conduct encompasses mainly;

- A) The “price policies” of firms, whether acting individually or collectively and how effectively these firms pursue the aims and methods applied in establishing what prices to charge, what output to produce, what product designs to choose, what sales promotion costs to incur etc.;
- B) The process or mechanism of interaction, cross adaptation, and coordination of the policies of competing sellers in any market.

There are numerous dimensions or aspects of market conduct; a few significant ones are discussed below.

- a) **The objective pursued and the method employed by a firm or group of firms in calculating or determining price and output.** The objectives may include maximum group profits, maximum individual profits or for a conventional

or fair profit margin. As regards to method, price may be estimated by adding a certain margin to costs, or by other devices. Besides this, firms also have to take decision whether to charge a single price or a set of discriminatory prices to different buyers.

- b) **The product policy of the firm or group.** Is product improvement or variation over time (via changing design) a part of the individual or collective market policy? If so, what is the character and orientation of the product variation policy?
- c) **The sales promotion policy of the firm or group.** Do advertising and other sales promotions tools play significant role in the individual or collective market policy and how to determine the volume of advertising and sales promotional expenditures?
- d) **Means of coordination and cross adaptation of price, product, and sales-promotion policies of competing sellers.** For example, is there:
 - 1. Express collusion or agreement to arrive at common prices, or products, or sales-promotion outlays?
 - 2. Tacit collusion based on established patterns of imitation, or of leading and following as in the case of price leadership?
 - 3. Defection from collusive agreements (express or tacit) by some or all sellers, via secret price cutting and the like, leading to incomplete collusion?
 - 4. Interdependence of pricing and related adjustments in the context of anticipation of reaction by rivals?
 - 5. Complete independence, with individual adjustments undertaken without considering possible reactions?
 - 6. Exercise of predatory or exclusionary tactics targeted against established rivals and potential entrants?

The aforementioned aspects exemplify the dimensions of behaviour comprehended under the market conduct of sellers. Similar dimensions of market conduct of buyers may also be recognised. There are wide variations in conduct among different markets or industries, and markets might be classified according to the dominant patterns of conduct found in these. However, main thing in this approach is to analyse the extent to which the pattern of conduct is systematically associated both with market structure and performance.

2.4.5.3) Market Performance

Market performance refers to the composite of end results which firms in any market accomplish by pursuing certain lines of conduct. The firms may desire to achieve better and effective end results in terms of price, output, production and selling cost and product design etc. In case of selling firms, these results measure the character of the firm's adjustments to the effective demands for their outputs. In case of buying firms, these measure the quality of adjustments made by firms to the supply condition of the goods purchased. For example, conduct refers to whether a group of sellers arrive at process through collusive agreement or through strictly independent action. Market performance refers to what extent the margin of price was above the cost of production and whether output was restricted in order to reap an excess profit and how the result was achieved.

The principal aspects of dimensions of market performance of an industry include prominently:

- a. The relative technical efficiency of production as far as this is influenced by the scale or size of plants and firms (relative to the most efficient) and by the extent if any, excess capacity.
- b. The magnitude of selling price relative to the long-run marginal cost of production and to the long-run average cost of production (usually above the same as long-run marginal cost), and the resultant profit margin.
- c. The size of industry output relative to the largest attainable consistent with the equality of price and long-run marginal cost.
- d. The size of sales promotion costs relative to the costs of production.
- e. The character of the product, or products, including design, level of quality, and variety.
- f. The rate of progressiveness of the industry in developing both products and techniques of production, relative to rates which are attainable and also economical view of the costs of progress.

Common measures of market performance are;

- a) The farmer's share of consumer food expenditures.
- b) The gross marketing margin, sometimes called the farm-retail price spread.

These statistics can be easily misunderstood if these are not presented in a meaningful manner. For example, a gross marketing margin may be low because the marketing activities are carried out efficiently at low cost. However, the margin may also be low because the marketing system provides few services.

2.4.5.4) Uses of market structure, conduct and performance approach

The market structure, conduct and performance approach is useful in the following ways;

1. The performance of individual industries has an obvious bearing on the extent to which the economy as a whole operates effectively in providing goods and services and distributing incomes. However, this performance varies significantly among markets, being more satisfactory in some and less so in others.
2. Firms market various sorts of adaptations of their outputs, and some adaptations have better or worse impacts on the operation of the whole economy. The character of these adaptations is measured by various dimensions of market performance.
3. In order to measure and appraise enterprise performance in many markets of the economy, and to classify markets according to the performance relevant knowledge is needed. This sort of measurement, appraisal and classification is also important for purposes of public policy, as a means of identifying those areas in which public interference or influence is needed in the interest of general welfare and of determining the appropriate goals of such interference.
4. The study of market structure and conduct is interesting from a scientific standpoint for explaining observed variations in market performance among industries in terms of accompanying variations in structure and conduct. This

helps to learn to what extent different sorts of market structure and conduct lead to different levels of performance.

5. The knowledge of association of market structure and conduct to performance is important for the purposes of public policy. Performance is an essential thing from the standpoint of social welfare and once it has been measured and appraised, and cases of unsatisfactory performance have been identified, appropriate means of public interference can be employed to secure more satisfactory performance.

2.4.6) THE MARKET MAPPING APPROACH

Market mapping approach has been designed to describe the overall market systems involving small-scale producers and the value chain actors together with support services and the business environment that affect the marketing chain.

This approach to marketing problems was propounded by Mike Albu and Alison Griffiths of Practical Action (formerly called Intermediate Technology Development Group Ltd.) UK (www.practicalaction.org). Practical Action conceived The Market Map initially in 2002 at an international workshop involving staff from Africa, Latin America and South Asia.

2.4.6.1) The Market Map Framework

The market map describes the overall market system for any given value chain. The map depicts income flow from market along the chain to primary producers contrary to conventional flow of goods in the opposite direction. The market map framework is intended to serve two purposes;

- a) It serves as a conceptual framework for the policy makers and rural development planners who are interested in investigating the commercial and institutional environment under which small scale producers operate.
- b) It is a practical and potentially a participatory tool for the practitioners who can use it to represent and communicate knowledge about specific producers, market chain, institutional environment and service needs.

The Market Map is made up of three interlinked components.

- I) Market chain actors and their linkages
- II) Enabling business environment factors
- III) Business and extension services providers

I) Market chain actors and their linkages

The main part of the framework is designed by first mapping the economic actors who actually trade a particular product as it flows across the market chain from primary producer to ultimate consumer for example smallholders and larger scale producers, traders, processors, transporters, wholesalers, retailers etc.

The schematic used (see figure 2.2) presents the 'normal' flow of the chain in opposite direction. It depicts the flow of income from markets along the chain to primary producers, opposite to the conventional flow of goods. This reverse flow is introduced deliberately to encourage a demand led scenario. It reveals that how greater shares of urban expenditure on any product reach the farmers. This mind-set can help preclude negative presumptions about the role of intermediaries, and increase understanding of competitive pressures from other channels.

An important early stage in the application of the market map is the selection of the best markets and channels that are essential for improving livelihood of poor producer. After finding out the potential of specific market channel(s), the analysis is focused on a more detailed investigation of the reasons of value accumulation along the market chain. A detailed insight in value accumulation process and share of each market actor in the chain helps in pointing out inefficiencies, inequities and losses. By this way, the identified problems in the chain can be remedied and producers particularly small scale and poor producers can capture added value. A clear goal of the market map approach is to aid all stakeholders gain mutual benefits by enhancing the 'systematic efficiency' of the chain.

II) Enabling business environment factors

The next component of the market map is investigation and description (charting process) of the critical factors and trends that shape the market chain environment and operating conditions, but may be adaptable to change. These "enabling business environmental" factors are identified through the structures (national and local authorities, research agencies etc.) and institutions (policies, regulations and practices). These factors are beyond the immediate direct control of economic actors in the market chain. The factors that are likely to be important in the enabling environment for specific agricultural market-chain include:

- a) Relating to Market Demand
 - Consumption trends (volumes, prices & quality expectations)
 - Tax and tariff regimes
- b) Relating to Transformation Activities
 - Infrastructure (constraints and investments policies)
 - Technological development (seeds, breeds, inputs, processing etc.)
 - Transport licensing and regulation
- c) Relating to Transaction Activities
 - Systems for agricultural finance
 - Gender roles in business and financial affairs
 - Registration of land and property
 - Commercial law and practices (including contract enforcement)
 - Business licensing and regulation
 - Product standards and quality assurance.

Strategies and tactics for the improvement of enabling environment usually rely on concerted and coordinated lobbying and advocacy campaigns. Preferably, participatory approach should be used for charting the enabling business environment in order to build trust, coordination and collaboration among market actors in the chain.

III) Business and extension services providers

In effective market chains, the economic actors who constitute the chain (i.e. exchange the main product) are supported by other enterprises and support organisations for certain inputs and services. Some of the services that can contribute value in the chain are as under:

- Input supplies (seeds, feed, pesticides, fertilisers etc.)
- Market information (price trends, commodity traded and traders)
- Financial services (such as credit, savings or insurance)
- Transport services

- Quality assurance (monitoring and accreditation)
- Technical expertise and business advice.
- Veterinary services
- Support for product development and diversification

The goal of the approach is to enable small businesses to buy the services of their choice from a wide selection of (primarily) unsubsidised private sector supplies in a competitive and evolving market. The role of governments and donors is then seen to be facilitating this process through intervention that build sustainable market institutions and social structures but not to undermine the emergence of these institutions and structures by delivering or subsidising services.

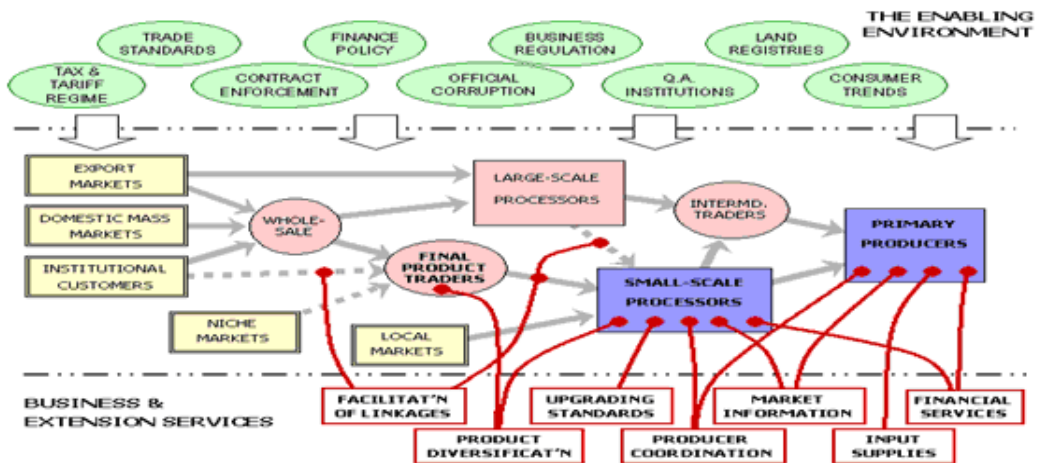


Figure 2.2: The complete market map (a generic schematic)

Note: adapted from, "Mapping the Market: A framework for rural enterprise development policy and practice" by Mike Albu and Alison Guffith (2005) Practical Action, UK, Markets and Livelihoods Program.

2.4.6.2) Participatory Market Chain Analysis (PMCA)

Participatory market chain analysis (PMCA) is a fundamental step for making the market map operational. It facilitates market development process for different products in different contexts.

The key approach of PMCA is to bring together a wide array of market actors. This helps in identifying threats and opportunities offered by the market system. Subsequently, appropriate strategies can be framed to counter these threats and capitalise on opportunities. The foundations of PMCA strategy are as under:

- elimination or minimisation of critical blockages responsible for marginalising poor producers through structural transformations of market system
- producer empowerment with autonomy, influence and profitability for ensuring their effective participation in markets.

The operation of the PMCA involves a sequence of stages which is supposed to be followed in sequential order. For PMCA to be effective, following three stages are followed.

1. Preliminary mapping

A facilitator (a government employee or a representative of an NGO or donor) undertakes the preliminary mapping. In this process, relevant primary and secondary information about the market system is gathered. On this basis of this knowledge and experience, a preliminary map of the market system is drawn. Another purpose of the preliminary mapping is identification of initial actors who will be invited later on in the PMCA workshops.

2. PMCA workshops

These workshops are organised to bring together different actors involved in market chain. These workshops help in identifying problems, blockages, opportunities, threats and challenges in the market system. The main purpose of holding these workshops is to develop mutual understanding and trust among all stakeholders in the market system.

3. Action plan

Actions plans are framed for coordinated and strategic actions. These plans facilitate the resource allocation process and sharing of responsibilities amongst stakeholders in the market system. It is an important step that transforms analysis into coordinated applied actions for improvements in the market system.

Box 2.3: Key Concepts Used in Participatory Market Chain Analysis

Key concepts used in PMCA facilitation process are Market Opportunity Groups (MOGs), Interest Groups (IGs) and hooks. These concepts are highly helpful in the PMCA facilitation process and improve chances of sustainable collaboration among stakeholders in the market system.

- **Market Opportunity Groups:** Small scale producer groups who are interested in exploiting opportunities offered the market system.
- **Interest Groups:** These may be individuals, organisations or institutions that have stakes in market system developments. Interest groups generally operate in the business environment and may be involved in service provision. Examples of interest groups are trainers, extension workers, policy makers and input suppliers.
- **Hooks** are avenues or issues that attract and involve chain actors (particularly private sector) for participation in the PMCA workshops. An example of powerful hook is profit which attracts not only poor producers but also other private sector chain participants.

2.4.6.3) Uses of the Market Mapping Approach

Following are the main uses of the Market Mapping approach;

1. The Market Map is a very useful tool for visual representation and comprehensive communication of market linkages and connections among specific chain actors, their needs and operations.
2. It promotes collective action and dialogue among different stakeholders in market chain and facilitates them in understanding and solving their problems together.
3. Through this approach, people may come to know about their mutual conflicts, their causes and ramifications. As result, people try to resolve these issues for the development of market system.
4. This approach is quite useful for the producers of developing countries like Pakistan where majority of the farmers are small in size. The earnings of small farmers are greatly influenced by the factors like market institutions, market operations, linkages and information and trade rules which are the focus of market mapping approach.

CHAPTER 3

MARKET ORGANISATION

Market organisation describes how the business operations are organised to carry out various functions involved in transforming the raw product into finished form and moving it from the producer to the consumer. The agricultural marketing system has both horizontal and vertical dimensions. At one extreme, all marketing functions can be fully integrated under the management and ownership of one firm and on the other extreme side, the business operations can be disintegrated with each marketing function being under the management of separate firms.

3.1) TYPES OF BUSINESS ORGANISATIONS

A number of different types of business organisations can be used to manage and own the business operations in agriculture such as corporations, cooperatives and private enterprises. In each case, the market organisation activity is carried out to obtain a specific goal such as obtaining a market share and higher price for products sold, seeking low prices for supplies purchased, or performing marketing functions more effectively and efficiently. The way the individual business is organised determines who owns controls and receives returns from the business.

Generally, three broad organisational systems have been used to provide marketing and associated services to farmers in the developing countries.

1. Private enterprises
2. Farmers' association or cooperatives
3. Marketing boards

3.1.1) PRIVATE ENTERPRISES

The private enterprise firms are formed under private ownership and operate under profit incentive. Each privately owned firm competing against other firms tries to entice customers with competitive prices and quality products. These can be very efficient in countries having relatively free commerce.

According to Abbott (1987), these enterprises operate at very low cost. Only staffs that make positive contribution to the enterprise are employed. Full use is made of family labour that is available at no cost. Outlays on equipment and other capital expenditure are commonly kept to the minimum and are delayed until proved indispensable. Because decision making is concentrated, these enterprises tend to show ready initiative and respond quickly to a changing situation. Family ties and kinship linkages can often be used to extend the marketing operations with high confidence and low risk. A private enterprise has a continuous incentive to remain efficient as without barriers to the entry of new firms, it will lose customers and go out of business.

However, with free commerce and availability of capital and assets, one firm may dominate in a product area and charge higher prices and deliver a low quality product. In comparison, it is difficult for small competing firms to accumulate the requisite capital to grow to a size necessary for availing economies of scale. In this regard, the government policy should encourage the development of competing enterprises by facilitating access to information and to capital.

Private enterprise may operate under three organisational structures i.e. sole proprietorship, partnership and company/corporation.

a) Sole Proprietorship

Sole (single) proprietorship is simplest form of business organisation. It may be termed as one man show wherein all the business operations are carried out mostly by a single person. In Pakistan, most of the small businesses are carried out under sole proprietorship. Farmer holdings are mostly small to medium and, hence, they start their own farming operations on small scale. Food retail shops in rural and urban areas, street vendors and roadside small village dealers are various types of businesses under sole proprietorship.

The main advantage of sole proprietorship is its easy formation in terms of less capital and technical requirements. This type of business can be initiated with smaller sum of money and all rewards of the business are enjoyed by the sole proprietor.

However, this form of private enterprises cannot expand too much due to limited availability of capital. One man may not invest too much and cannot perform all the business functions efficiently. Furthermore, sole proprietor has to assume all the risk as well.

b) Partnership

Private enterprises may be established under partnership arrangements wherein two or more persons may join together to earn profit from business venture. Partners pool their resources and expertise for their business venture. This arrangement is based on oral or written agreement among the partners. In Pakistan, this form of business organisation is also quite visible in agricultural wholesale and retail, poultry and livestock, and agricultural input distribution business.

The major benefit of partnership is the greater availability of capital and technical expertise. Pooling of resources help partners to expand their business and earn reward. Partners may share/divide managerial responsibilities for efficient performance of business functions. Profits are also relatively high in case of partnership type of business.

Unlimited liability is the chief disadvantage that may be cause of holding one partner responsible for the payment of all financial obligation of the partnership firm. Mutual trust is a key for the success of partnership and any breach of trust may bring cleavage in the partnership leading to failure in business.

c) Company/Corporations

The company type of business organisation allows private ownerships wherein the required capital is divided into shares and sold to individuals. An individual may buy as many shares as desired and receives return in the form of dividend from the company profits. Each share carries voting rights for the election of board of directors (the executive group for company). The board of directors selects the executive officers for the management of company and approves all major investment decisions and any other business strategies or operations.

The company form of business organisation can be used to conduct export marketing, production, processing, distribution and wholesaling. It can be used to integrate marketing services by holding and owning companies at different levels in the marketing system. For example, a company can hold and operate a processing firm, a distribution

firm and a wholesaling firm. It can also be used for selected service functions such as grading, standardisation or packaging.

A company has the advantage of accumulating capital from the sale of shares (stock). It can expand by issuing additional stock and selling it to raise capital or can reduce its size by buying back its own stock. The stock can be traded freely and the value of the stock can vary depending on the fluctuating profit potential of the corporation. Furthermore, the company has a profit incentive that is returned to shareholders as dividends (payments for each share of stock held) or held by the company for further expansion or accumulation of equity.

The level of taxation and the responsibilities of the company depend on the legal system of the country in which it is located. In most countries, the company is recognised as a legal person (separate business entity) implying that company is responsible for debts and other obligations of the business instead of individuals owning shares of the company.

The more advanced form of corporations is multinational or transnational corporations with operations and assets located in several countries. In developing countries, the government is often the key institution that offers the incentives to attract multinational corporations to carry out marketing functions for domestically produced products. The arrangements will depend on the individual government and the multinational corporation involved.

The multinational corporations have number of advantages:

1. The ability to obtain financing from a number of sources
2. The accumulation of business experience
3. A background of technical knowledge and experience
4. The ability to evaluate and obtain markets.

Disadvantages of multinational corporations may include:

1. Problems with domestic regulations
2. Using its power to the disadvantage of the domestic government
3. Requiring relatively high profit margins to obtain a fast pay-out period.

3.1.2) FARMER'S ASSOCIATIONS / COOPERATIVES

A farmer association or cooperative is a collective organisation owned by people who benefit from its services. The members elect a governing body to administer the affairs of the cooperative. Shares of the cooperative are divided equally among its members. Each member has only one vote for the election of governing body and other major financial decision as outlined in the charter. The business operations are conducted on a cost basis and any returns above cost are returned to the members. Each member is paid a patronage return on his usage of the cooperative and not on the shares of stock owned or equity accumulated. Although returns on capital are limited but when the cooperative accumulates equity, the member who uses the cooperative more will have a proportionately larger share of the equity allocated to him. However, regardless of the levels of equity or patronage refunds accumulated by individual members and the weight of each individual's voting power is equal i.e. one person, one vote.

The cooperatives business organisation can be used to perform many functions that involve servicing large numbers of producers or consumers. According to Crawford (1997) cooperatives have the potential to operate like development institutions and can greatly contribute to economic development process. Their contribution is generally positive and measurable in terms business asset accumulation, wide range of services rendered, management skills acquisition and staff employment. Moreover, the flexibility of cooperative organisation leads to collective action among the stakeholders which generates support and strengthen local initiatives for agro-industrial enterprise and rural development.

Unfortunately, cooperatives could not flourish and develop and their performance has fallen short of expectations in Pakistan like many other developing countries. The main factors that have inhibited the development of cooperatives in developing countries include poor performance, mismanagement, corruption in the use of financial assets and funds and use of cooperatives for political goals.

3.1.2.1) Types of Cooperatives

The cooperatives can be formed to perform many functions as under;

a) Marketing cooperative

A marketing cooperative is a democratically controlled voluntary business organisation established by its members to market farm produce or to purchase farm supplies collectively for their direct benefit. Marketing cooperatives can be used to assemble, store and sell a number of commodities like food grains, horticultural and livestock products. The marketing efficiency of a group of farmers is increased by selling together due to economies of scale in availing transport, storage and other services. Furthermore, greater volume of commodity handled together raises bargaining and staying power of farmers in sales transactions.

b) Purchasing cooperative

Purchasing cooperatives are established to supply farm supplies to its members. These cooperatives purchase farm supplies from the source in volume and then sell in small quantities to their patrons. Farmers through the purchasing cooperatives can purchase quality inputs at lesser price because marketing margin of many intermediaries is eliminated.

c) Service cooperative

Service cooperatives can be used to provide financial (credit or insurance) or technical service for its members. These can be used as a business organisation for owning electrical power, telephone, irrigation or other facilities for the benefit of members.

d) Processing cooperative

Processing cooperatives are organised to carry out the processing and packaging of farm products. For example, a processing cooperative can on a fee basis to the patron provide livestock slaughter and packaging, grain milling or vegetable canning.

3.1.2.2) Levels of Cooperative Organisations

Cooperatives may be organised at following four levels.

a) Local independent association

The cooperative is organised locally by producers or consumers. This is the simplest type and most cooperatives are organised as local independent associations.

b) Federated association

The federated association is comprised of many local associations operating like an integrated unit and performing similar functions or integrating several functions. Under a federated association, the local cooperatives are organised under a governing board elected by the individual local cooperatives.

A federated association may include a marketing cooperative that assembles and stores grains or a processing cooperative that mills the grains and another processing cooperative that uses the milled grain for baking purposes.

c) Centralised cooperative association

Under the centralised cooperative association, each local patron becomes direct member of a central organisation which exercises control through election of delegates. The centralised cooperative association is particularly useful for centralised purchasing; for making investments in the production of inputs such as fertiliser plants, fuel refining and machinery manufacture; for processing and marketing, such as slaughtering, milling, packaging, and standardisation; and for product pooling.

d) Mixed association

The mixed association is a combination of the federated association and the centralised cooperative association. Associations which are federated in nature may undertake new operations which are organised on a centralised basis.

3.1.3) MARKETING BOARDS

Marketing boards are the public bodies or institutions constituted through government action and are granted legal powers to achieve their objectives. These boards may work for and with producers and handlers of primary or processed agricultural commodities. Official delegation of responsibility and power of compulsion distinguish marketing boards and similar agencies from cooperatives.

Marketing boards are established to perform following objectives.

1. Obtain funds for sales promotion, research and extension
2. Raise the bargaining power of agricultural producers on domestic or export markets.
3. Improve marketing organisation and methods by regulation of quality and packing standards, market procedures, sales practices by raising the scale of operation and setting up needed marketing and processing facilities, and facilitating a more precise adjustment of the quantities and types of produce sold in particular markets.
4. Equalise returns from sales to different markets or outlets.
5. Shelter producers and consumers against the impact of sharply fluctuating internal and external prices.

To sum up, marketing boards are established to improve economic position of targeted agricultural producers. In developing countries, overall development of agricultural production, protection of consumers, expansion of export earnings and extension of government control over important parts of the national economy are broader considerations in the establishment of these boards.

3.1.3.1) Types of Boards

a) Advisory Boards

The simplest type of board is one set up for advisory and promotional purposes. The functions of these boards are to carry out market research and sales promotion relating to specific commodities including pilot programmes to develop new uses and outlets. These may advise on the varieties of product, choice of packing methods and grade standards that best meet market requirements and trends. These may conduct quality analysis and arbitrate on disputes. These boards do not own marketing installations and equipment rather engage in trade or maintain direct controls over volume of sale or prices. The existing pattern of marketing enterprises and channels remain unchanged except for modifications under free market pressures. The only element of compulsion is usually a compulsory levy on sales to finance the board's operations.

b) Regulatory Boards

These boards are established to develop and apply uniform quality standards to export produce facing increasing competition. These types of boards are usually empowered to enforce the application of standardised grading and packing procedures.

Some regulatory boards also provide permanent installation for weighing, grading, storage, packing and processing, and sales facilities such as central auction markets for the use of producers and traders.

c) Price Stabilisation Boards

Price stabilisation boards are introduced to accumulate reserve funds during prosperous trade years and draw from these funds to make up internal prices when markets are less favourable. These boards implement price stabilisation policies either through quantity regulations and / or by purely financial methods such as fixed prices and schemes backed by stabilisation of funds, pooling schemes and regulation of the total quantities sold in particular markets.

In developing countries, price stabilisation boards are normally used for export of crops produced mainly by the peasant farmers. These must be able to maintain a strict check on all exports and, if necessary, on imports, by licensing. These types of boards are also used to negotiate prices with large processors, wholesale buyers and distributors on behalf of a large number of producers and / or consumers. These may also be used to assure certain guaranteed prices for a given volume of output, leaving additional output to find its own market.

d) Special Boards

These boards are developed to maintain buffer stocks of basic food such as grains and to stabilise internal prices to producers and consumers. These boards own marketing installations and equipment and trade extensively on their own account. Usually, these operate in competition with the pre-existing marketing structure, buying from farmers through licensed agents or the board's own purchasing stations and selling to existing

wholesale distributors, to existing (or, in some cases through a board's own) retail outlets or retailers under special contract. Such boards may need a monopoly on imports and exports to help these implement domestic stabilisation programme.

e) Monopoly Export Marketing Boards

These boards are made sole buyer and seller of specified products primarily produced for export, including sales to domestic enterprises for processing into products for export. Domestic purchases are made through licensed agents, which may be private firms or cooperatives, and / or the board's own buying stations. Export sales are made directly by the board or through selling agents. Such boards possess comprehensive powers of compulsion.

f) Monopoly Boards for Trading and Processing

These types of marketing boards are given monopoly of trading and processing a commodity in specified areas or market channels within a country. These boards are generally used as a means of maintaining the price of a commodity primarily produced for domestic consumption but where surpluses over local needs at the desired price level must be exported at a lower price. Prices are fixed for producers and retailers. Independent wholesale buyers and processors may be replaced by direct board senders or employed as agents of the boards.

All of the above mentioned boards may not fall into such clearly defined categories. In practice, a board may combine several sets of responsibilities and powers according to the evolution of events in particular countries.

3.2) ORGANISATION OF AGRICULTURAL MARKETING SYSTEM

The process of developing an agricultural marketing system includes the development of market organisations to perform all functions necessary to make agricultural products available at the time, place and in the form appropriate for consumption.

The organisation and performance of an agricultural marketing system is usually more complicated than it first appears. It is a remarkable commercial venture which begins with, for example, a farmer producing a tonne of wheat and ends with a thousand consumers owning the bread and other products made from the wheat. In the more developed agricultural systems, consumers spend two third of their money on food items to pay for the costs of exchange, storage, transportation, processing and standardisation. It is estimated that raw agricultural products leaving the farm gate change hands at least seven times before reaching the ultimate consumer. These exchanges are necessary to put the raw product in the hands of the various individuals who perform the marketing functions. The market exchange function is beneficial in creating economic activity if some value is added to the product as it is exchanged. However, to simply exchange with no value added is a worthless activity.

It is possible for one individual or firm to perform all the functions necessary to provide agricultural products to consumers. In such a case, no exchange is necessary except with the final consumer. Usually, specialisation in one or several functions is advantageous to firms, individuals or government institutions. For example, one firm might specialise in storage, another in processing, and another in retailing, etc. By specialising, businesses can concentrate on one or two tasks. Focusing its intelligence and management skills on a single task and practicing it repeatedly enables the firm to perform the task better than other firms.

The number of functions performed in an agricultural marketing system depends on the level of development of the system and the nature of consumer groups. A fully developed agricultural marketing system performs comparatively more functions than less developed agricultural marketing system (Box 3.1). Nonetheless, each marketing function must add to consumer satisfaction otherwise the consumer will not pay for the added services.

Box 3.1: Agricultural Marketing Systems and Marketing Functions Performed		
System	Marketing Functions	Type of Utility Generated
Developed Agricultural Marketing System	Production Storage Processing, Packaging, Standardisation, Storage & Wholesaling Distribution Retailing	Form utility Time utility Form utility Time utility Place utility Time, form and place utility
Less Developed Agricultural Marketing System	Production Central Market Product Assembly Processing Retailing	Form utility Place utility Form utility Time, form and place utility

3.2.1) ORGANISATIONS FOR THE PERFORMANCE OF MARKETING FUNCTIONS

In every market, a number of functions are performed. Specific functions can be carried out under several business forms. In the following, various possible forms of business organisation for the performance of various marketing functions have been described.

a) Grading

The sorting of a product into quality classifications according to standards that are agreed upon by the industry is called grading. Quality also has a particular meaning in commodity grading and refers to a particular set of attributes of a commodity that increases its acceptability among the consumers and for which consumers are willing to pay high price. The need for grading is often evident because buyers demand products that meet specific standards. The producers also want to obtain the price differentials that are possible with different grades. It is usually true that total revenues from graded product with price differentials are greater than revenues from a non-graded product with a fixed price.

Grading can be done by a cooperative that collects a fee for its services based on the cost of facilities, labour and other costs. Even a private entrepreneur or corporation can carry out grading based on present standards. The entrepreneur or corporation can charge fees for grading based on costs plus mark up. Governments have also successfully performed the grading function when standards have been set and followed. In some cases, the government has completely subsidised the grading operation while, in other cases, it has charged a fee for the grading.

b) Packaging

Packaging is an integral part of the marketing of agricultural products. Packaging is usually carried out in order to:

- a. Protect and preserve the product
- b. Facilitate handling of the product
- c. Make the product more attractive to the buyer
- d. Educate the consumers
- e. Comply with government regulations

It is usually appropriate for the wholesale or retail firm to package the product because the firm is in direct contact with buyers and receives first-hand information regarding the attractiveness of the product to the buyer and the most appropriate form for handling the product.

c) Financing

Financing plays a major role in the marketing process because the value of the volume of product handled usually far exceeds the asset value of the market organisation. Financing for cooperatives is often a problem because cooperatives cannot obtain financing through the usual channels. The usual financing channels often do not recognise cooperatives as a business because these do not operate under a direct profit incentive. In some instances, government support of banks for cooperatives has been successful.

3.2.2) ORGANISATIONS FOR THE INTEGRATION OF MARKETING FUNCTIONS

The major reason for integrating market functions is to extend centralised management control over several related business operations such as processing, packaging and selling. Management control is extended to the integrator so that savings derived from performing all the functions involved will be passed back to the producer. In addition, risks due to price variation may be slightly reduced.

The motivation for anyone thinking of becoming an "integrator" is enhanced profit position. However, there are certain conditions which make an enterprise a logical candidate for successful integration. An affirmative answer to the following questions means a favourable climate exists for some agencies to attempt to integrate a farm enterprise operation with some non-farm activity.

a) Is there a potential for the application of standardised and specialised management?

Scientific advances tend to make farm production more of a science and less as an art. Standardisation in work routines is feasible and it is possible to specialise in various tasks. Planning has become the most critical management function and much of management is now amenable to centralisation and specialisation. Obviously, this transferability of management is the key and limiting question. If the technology of production of an enterprise has not become standardised, then the essence of integration (i.e. the transfer of management) cannot take place.

b) Is there a real possibility that the farm product can be produced in a specified form and / or a predetermined schedule of supply?

Many farm products are currently variable in quality and uncertain in supply. This is contrary to effective functioning of modern food processing concerns and mass merchandising institutions. However, if by using prescribed technology and management practices these products can be standardised in form, package, quality, time, and amount of delivery, then mass processors and merchandisers would find such changes advantageous.

c) Is the enterprise facing a situation of rapid and / or continuous major change in technology?

Now a days, technology is changing at fast pace and firms may know or believe that new technology is available which is currently unused. The integrators might see opportunity for profit by either controlling the speed of adoption of new developments or by trying to retain the benefits of such new developments for themselves. Such a situation would also make the farmer-producer quite receptive since he recognises that better ways are available but lacks the necessary ability or resources to put these into effect.

d) Is there scope for applying better technology?

In farm enterprises, this usually takes the form of potential for increased equipment, operating capital, and increased managerial and technical know-how. New developments frequently require substantial additional capital investment. Scientific developments may be so complicated that the management ability of the average farmer may not be enough.

e) Is there a possibility of reducing market risks?

Farm enterprises are faced with uncertain outlets and price situations. Closer control and coordination over the farm enterprise may permit the reduction of these buying and selling costs. Obviously, this situation exists to some degree for all commodities. However, when the risks are especially severe and accompanied by some of the other favourable conditions, then this encourages integration.

f) Is there a special market opportunity for a new or different product?

Risks are high for a farmer marketing his own output or a product new to his area. He may experiment with a product new to him and his area if a guaranteed market exists. To guarantee that market, the merchandiser would, of course, want to see a profit opportunity in the venture. Farm enterprises not typical of an area may come into production in this manner. Integration in these circumstances, however, would only occur if many of the above questions could also be answered affirmatively.

g) Is there a chance to increase control over a large share of the supply and improve price-bargaining power?

The closer control of a large portion of the supply may result in price advantages to the controller. This may occur because of the ability either to secure the supply cheaper from the farmer-producer or to sell it at higher prices to consumers. This cannot be denied as a possible motive for integration. However, if decided advantages were realised because of such control, the integration might be in violation of antimonopoly laws.

3.3) MARKETING POOLS

Pooling means putting together of many small amounts of a product to form one larger amount. A marketing pool gathers the product of many farm producers. The accumulated product is then marketed by a knowledgeable professional group.

The objectives of pooling are to improve price stability and promote orderly marketing. A pooling arrangement can:

- a. Market in large volume to large-volume buyers and obtain higher prices.
- b. Offer an added marketing function such as grading or packaging to obtain higher net returns.

Pooling can be used as a device to control supplies in connection with marketing orders, but supply control does not have to be an objective of pooling. In general there are two types of marketing pools:

- a. **The seasonal pool** which places total authority for marketing the product in the hands of the professional group.
- b. **The contract pool** where the producer has the right to set the price and / or time of sale for his product.

In each type, the producer receives payment based on the average price received for his product.

The cooperative business organisation is appropriate for most types of pools and pool objectives. Each producer has an equal voice in setting the policies of the pool. The accumulated resources of the pool can be used to hire a professional staff for carrying out the marketing activity. It is important to maintain professional staff that knows how to gather and use market information to the pool's best advantage. In addition, the storage and transportation operations require professional managers.

The two major problems in the way of beginning a pool include:

1. Organising the farm producers so their individual production can be marketed from a single pool.
2. Acquiring financial resources to build or lease storage facilities for all or a portion of the accumulated pool.

The problem of organising is often approached through one or several existing agricultural organisations. Through the existing organisation, an educational programme can be carried out to explain the objectives of a pool to the farm producers and to discuss alternative facilities, costs and regulations.

Example: Market Pool Membership Agreement

1. The grower appoints the association as agent to sell market and pool rice delivered by him to a warehouse for the account of the association, or by delivery of a negotiable warehouse receipt to the association.
2. The association determines or have determined the trade, weight, milling yield, class, quality, and variety of the rice.
3. The association agrees to make an advance as soon as possible after delivery, in an amount determined by the board of directors.
4. The grower agrees to allow the association to pledge the rice as security for loans, and /or borrow money on any accounts receivable from sale of the rice.

5. The association retains the right to reject rice delivered in a non-marketable condition, and to stop member delivery after all storage space has been filled.
6. The association may sell rice anywhere at its complete discretion, in either its natural or the processed state. All rice of the same variety, grade, and quality shall constitute one pool, whether sold rough or clean, unless placed in a separate late-delivery pool as designated by the board.
7. Deductions from the net proceeds of sales may be made for costs and expenses of the association, amounts for the purchase of revolving capital certificates as specified in the by-laws, and reserves not to exceed certain percentage of the gross selling price of all rice.
8. The grower agrees to notify the association of any and all lines against rice delivered.
9. The agreement continues in force from year to year, unless cancelled in writing by either party prior to August 1 of any year.

The above regulations are for a seasonal pool where marketing of the product is controlled by a professional group. A contract pool would require regulations for the producer to set the price at which the product would be sold and an arrangement for the producer to designate the time of sale. Regulations for a contract pool should also include provisions for handling products that are not sold within a given period.

Some disadvantages of pooling are:

1. Loss of freedom to the individual producer in decision making
2. Loss of the chance of windfall profits
3. Lower sale prices for large volume producers who have professional marketing training and / or experience
4. The danger of increased administrative costs

CHAPTER 4

MARKETING EFFICIENCY, MARGINS AND COSTS

The agricultural marketing system in any country evolves to serve the needs of all stakeholders, particularly the consumers and producers. It is dynamic in nature and updates itself according to the requirements of society. Due to changes in consumption and production pattern, the stakeholders expect higher output and services from the system. This can happen only when the system has optimal marketing efficiency, margins and costs.

4.1) MARKETING EFFICIENCY

Efficiency is a common measure of performance of any activity and generally connotes to optimisation of output to input ratio. Agricultural marketing can also be viewed as a system of input and output where in marketing services and resources are inputs to the system and the utility that consumers gains is the output of the system. Any change that reduces the input cost of performing a particular marketing service without reducing consumer satisfaction is regarded as an improvement in efficiency. Contrary to this, a change that reduces consumer satisfaction represents a reduction in marketing efficiency.

4.1.1) TYPES OF MARKETING EFFICIENCY

Marketing efficiency is divisible into economic (or pricing) efficiency and technical efficiency.

a) Economic (Pricing) Efficiency

Economic or pricing efficiency requires the realisation of maximum output in money terms of a given output with the minimum resources. This is achieved when markets create and transmit signals to buyers and sellers on how to allocate resources. Prevalence of competitive conditions like large number of buyers and sellers, market and product information, and no barriers to entry or exit is required for pricing efficiency. Such conditions prevent market actors from earning excess or monopoly profits which result in distortion of incentives and misallocation of resources. Marketing efficiency is concerned bringing improvements in the marketing processes like buying, selling and pricing in order to make responsive to consumer needs. The pricing efficiency concept is reliable when:

- a) consumers are provided with viable alternatives in the market place
- b) prices of the alternatives adequately reflect the cost of providing these
- c) business firms are relatively free to enter and leave the market in response to profits or losses based on prices bid by consumers in the market place.

The economic efficiency can be measured by determining whether the costs of marketing functions are in accordance with the performance. For example, the prices of a commodity in different geographic areas should differ only by the cost of transportation from the point of production to the place of use.

b) Technical Efficiency

Technical efficiency means how effectively physical functions involved in marketing of agricultural products are executed. To be technically efficient, a marketing system would have to utilise, with maximum effectiveness, the best technology available for each marketing activity and focus on reducing the cost of providing these. For example, substitution of a less expensive but more durable and lighter package increases the number of packages that can be shipped in a truck.

Technical efficiency usually depends on using new or known technology from diverse disciplines such as engineering, food technology, business management and economics. As the technology of marketing is improved, costs are lowered while the output of products and services remain unchanged or significantly increased. Marketing forms and agencies operating in a competitive environment constantly seek to improve technical efficiency to compete. Although a business goal may be to improve profits, the benefits from improved technical activities are shared by consumers in the form of economies of scale and lower unit cost.

Although marketing efficiency is a reasonable sounding concept, it is difficult to define in practical terms. For example, few sellers (or buyers) in a market do not necessarily imply inefficient price formation if they compete with each other rather than colluding. In such cases, high concentration ratios would be a misleading indicator of market inefficiency. The definition of market efficiency as the optimisation of an input-output ratio also has practical limitations because of the intangible nature of marketing outputs. Unlike the input costs of providing marketing services which can be measured fairly accurately, marketing outputs are difficult to quantify in value terms.

4.1.2) INDICATORS OF MARKETING EFFICIENCY

Following measures are some commonly used indicators of marketing efficiency:

- 1) Size of marketing margins
- 2) Market competition
- 3) Physical product losses

1) Size of Marketing Margins

The measurement of marketing margins is frequently employed to trace inefficiencies in the agricultural marketing system. Large marketing margins (the spread between farm price and consumer prices) are usually regarded as evidence of inefficiencies in the marketing system. However, these margins should be examined in relation to the cost and the level of services provided by the marketing system before any firm conclusions regarding inefficiency can be drawn. For example, large marketing margins may reflect the fact that the marketing system offers many services rather than that marketing activities are being carried out inefficiently. Conversely, low marketing margins may be due to few services being provided by the marketing system rather than its efficiency.

Marketing margins consist of two elements: explicit costs and profits.

- a) **Explicit costs** refer to the actual costs incurred in the performance of various marketing functions such as assembling, transportation, storage, processing, etc. Physical losses which occur as products move from the farm to consumers are a part of these explicit costs. These costs are often high in developing countries

where roads and communications are poor, interest rates high, and processing facilities poorly maintained and operated.

- b) **Profits** refer to the income earned by marketing intermediaries after all explicit costs incurred in performing various marketing functions are accounted for. These profits are normally calculated as a percentage of the total amount of capital invested in the business. In developing countries, middlemen profits are thought to be very high and mainly held responsible for the large marketing margins. This view, however, often does not adequately examine actual costs incurred on various direct and indirect services provided by middlemen. Much of what is termed profit in fact reflects middlemen's costs. Studies of middlemen's profits in developing countries particularly tend to ignore or underestimate the following cost items:
- a. the cost on the money loaned out to farmers and other stakeholder by the intermediary;
 - b. the cost of working capital employed;
 - c. the cost of product losses and waste;
 - d. the cost of bribes or gifts needed to effectively do business;
 - e. the cost of social help extended to farmers; or
 - f. the cost of risks and uncertainties assumed.

2) **Market Competition**

Market efficiency can also be gauged by finding out to what extent characteristics of a competitive market are prevalent in a specific marketing system. If the conditions of perfect competition like large number of buyers and seller, market knowledge, homogeneity of product, no barrier to entry or exit are fulfilled, it is assumed that market functioning will be efficient. In such case, there will be no scope for monopoly and abnormal profits.

A problem with this indirect approach is that lack of these conditions does not necessarily imply that a market is inefficient. Efficient price formation can also take place in a market dominated by two or three large firms if the latter compete with each other rather than resorting to price fixing. Nevertheless, an examination of the structure of a market can often provide important clues as to whether it is operating efficiently. In most cases, however it needs to be supplemented by in depth analysis of the behaviour of market participants as well as by direct evidence from information on marketing margins, prices, etc.

3) **Physical Product Losses**

Another indicator of marketing efficiency is the extent of physical product losses which occur as a commodity moves through the marketing channels from producers to consumers. Product losses are normally measured as percentages of the original volume of the product. By identifying at what stage (i.e. transportation, storage or processing) the largest physical losses take place, it is possible to pinpoint where the main inefficiencies in the marketing system are located. These can then be addressed by appropriate investments or policies.

Marketing efficiency is often measured by yields and physical productivity, much like production efficiency. An example of product loss or waste efficiency in the marketing system might be a slaughter plant which adds rendering facilities for higher utilisation of

animals being processed through the plant. The efficiency is calculated in the amount of useful product produced.

4.2) MARKETING MARGINS

In retail market, ultimate consumer pays the price which is sum total of the amount of money received by the farmer for his produce, all marketing costs incurred and returns for the performance of various marketing functions. Marketing margin refers to actual percentage share of the final price which is taken away by the marketing intermediaries.

Marketing margin may also be defined as the;

- (1) difference between the actual price received by producers (farm gate price) and the price paid by consumers (retail price), or
- (2) sum of costs incurred on the performance of various marketing functions and services as a commodity moves along the marketing chain from producer to consumer.

Marketing margins consist of assembling costs, processing costs, storage costs, transportation costs, wholesaling and retailing costs, government taxes, and profits etc.

Irrespective of the stage of development of a country, distributive margins have universally been subjected to severe criticism. Two criticisms are frequently associated with the subject of distributive margins.

- 1) These are 'too high' and this criticism is usually phrased in following forms:
 - a. "the spread between producer's and consumer's price is unjustifiably wide".
 - b. "distribution costs are a far heavier burden than society will permanently consent to bear".
 - c. "the channels of disposal are antiquated, circuitous and excessively costly, giving the producer an inadequate share of the price of his produce".
- 2) Due to their sticky nature, these amplify the proportional effect of wholesale, or retail or other off-farm price variations on the farm prices. This in turn accentuates year to year variations in production.

4.3) MARKETING COSTS

Agricultural commodities pass through various intermediaries while moving along the marketing chain from farmer to the consumer. The consumer may be located very close to the producer or there may be considerable distance between them. Various market activities/functions are performed to bridge the gap between producers and consumers that incur costs of simple and complex nature. If a farmer moves to a nearby market and stays there for some time to sell his produce, he is paying cost in terms of time spent in the market. Besides these simple costs, product may be required to store for longer periods, transport at greater distances and process many times till it is transformed into a product desired by the ultimate consumers.

Generally, consumer or retail prices are much higher than the prices received by the farmer. People mostly compare these prices ignoring various costs that are involved in transferring the product to the consumer. Apparently, this simple comparison leads to the conclusion that traders exploit consumers. Indeed, traders sometimes earn abnormal high profits but in some case or times, they have small profit margin or may even sustain losses. However, it is the profit incentive that forces the traders to continue their business of relating both consumers and farmers.

A superficial comparison of farm gate and retail prices is a poor and inadequate indicator of marketing efficiency. Sometimes, it altogether ignores various marketing costs incurred on product movement from farmer to consumer along the marketing chain. The extent of these costs depends on type and nature of product and complexity and length of marketing chain. Marketing costs are generally higher in case of long and complex marketing chains. Farmers who live close to the markets due to lower transportation cost normally receive greater shares in the final price as compared to those who live at greater distance from the market places. Producers of less perishable crops like grains may receive higher share in final price. However, in case of perishable crops, share of producers in final price may be relatively low due to the fact that some of the produce may not be in saleable condition by the time it is to be placed in the market. Some crops can be stored for a longer period of time and can be sold throughout the year. But in order to store agricultural produce, the traders have to incur storage costs that affect farmer share in the final value of the produce. Hence, a simple comparison of farmer and consumer price does not reveal the true picture. An in depth understanding of nature, extent and type of various marketing costs is very essential to reach to some conclusion about profit margins of traders and efficiency of agricultural marketing system.

4.3.1) TYPES OF MARKETING COSTS

In the marketing of agriculture produce, many types of costs are incurred. The calculation of these costs is not easy since as such any fixed methodology is not available for this purpose and these costs are worked out according to specific situations. Generally, following costs are incurred in the marketing of agricultural products;

a) Product Preparation Costs

The first cost incurred by a market oriented producer is on produce preparation. The producer has to spend money on the following activities.

1. Cleaning of the produce like removing the dirt and inert matter
2. Trimming to remove unnecessary roots, leaves and stems
3. Sorting to separate marketable and non-marketable produce
4. Grading i.e. piling up in lots on the basis of quality attributes
5. Any other activity like curing, waxing and wrapping for preservation and enhancement of market value of the produce

b) Packaging costs

Packaging costs are incurred on packing materials that may differ according to the nature of agricultural commodities and mode of transportation. Packaging material used may be very simple like jute and plastic bags that cost almost negligible amount. Now a day, highly sophisticated packaging stuff that contribute significantly to overall marketing costs is also used in supermarkets for direct shipment of raw and processed agricultural commodities to consumers.

c) Handling costs

The movement of agricultural commodities along the marketing chain involves many handling costs like packing and unpacking, loading and unloading and placement in store and subsequent withdrawal. Separately, the cost of these activities is generally negligible but the sum total of all such handling costs can be quite significant.

d) Transport costs

Transportation costs are incurred on transferring agricultural commodities from one place to another. In developing countries, mostly farmer himself or his labour transport agricultural produce to the nearby markets by using animal-drawn carts. Sometimes, traders directly or through agents may collect agricultural produce from several farmers and then assemble in one central place. Transportation costs mainly depend on distance between farmer field and market, quality of roads and transportation vehicles used. A farmer located close to market or a main highway will incur less transport costs as compared to one who is located at distant place with rough roads.

c) Product Physical Losses

Quantitative and qualitative product losses are a common phenomenon in the marketing of agricultural commodities due to physiological processes, perishability and time lag between production and consumption. Costs are incurred to avoid/minimise these losses and even some times product lost is also considered a cost item.

d) Storage costs

Considerable time lag exists between production and consumption of agricultural commodities and storage function bridges this gap by making available produce evenly across the season after harvest. Storage costs mainly depends cost of storage facilities, storage time, and capital cost incurred on the purchase of stored produce.

e) Processing costs

Processing costs are incurred on the transformation process as most of the agricultural commodities cannot be consumed directly and need some form changing activities according to the requirements of end users. Wheat grains are milled into flour, live animals are converted into meat, and fruits are processed in to juices and jams. These costs depend on nature and frequency of processing and technical efficiency level of concerned organisation. Other factors like fuel cost, government duties and taxes and cost of machinery and depreciation also contribute significantly to overall processing costs.

f) Capital costs

Capital is an essential component of any business and is required in the performance of various marketing functions related to agriculture. The traders and other stakeholder may have to borrow from credit sources for which they pay cost in the form of interest rate. Even if someone uses his own funds, then opportunity costs are worked out to arrive at capital costs.

g) Fees, commissions and unofficial payments

Besides the above, some minor costs also contribute to overall marketing costs like fees, commissions and unofficial payments. People who use market facilities and infrastructure have to pay market fees, weighing fees and license fees. Wholesalers charge commissions for their services and government also levy various taxes. Sometimes, bribes are given to move through road blocks and to seek permission to start any business. All these costs should definitely be considered in the calculation of overall marketing cost.

4.4) SIZE OF DISTRIBUTIVE MARGINS IN PAKISTAN

In Pakistan, the size of distributive margins considerably varies from commodity to commodity. It is generally estimated that producers of farm products in Pakistan get 65-70 % of the consumer price for their non-perishable commodities and 25 to 55% for perishables. The conclusions implicit in the studies on marketing margins are:

- 1) The distributive margins are 'too high'.
- 2) The high margins result from:
 - a) functional inefficiencies in marketing particularly due to inefficient transport, and
 - b) institutional inefficiencies which result from certain unnecessary intermediaries between the producer and the consumer, who serve to push apart the consumer and producer prices;
- 3) Whereas, except for the improvements in transport, there seems no scope for lowering the distributive costs, a considerable reduction in margins can be affected by eliminating at least a few of the intermediaries.

An objective analysis of the first conclusion requires an explanation of the phrase 'too high'. Does this imply that distributive margins for fruits in Pakistan are higher than those prevailing in some other countries? Is there an implication that distributive margins for fruits are higher than their cost of production? Or are the distributive margins bigger than the farmer's share of the consumer price? Does this mean that profits or wages in fruit distribution are higher as compared to those in other commodities?

With regard to the inter-country comparisons of distributive margins, it is quite likely that their size in developed countries may be bigger than in Pakistan. Would this mean that fruit marketing in developed countries is less efficient than in Pakistan? In reality, the conclusion will be the other way round, because we have to take a careful note of the wide disparity in the various types of utility created by marketing systems in different countries. The same thing will have to be considered when comparing the size of the distributive margins for different marketing channels for the same commodity in the same country.

Table 4.1: Farm Value Share of Retail Price of Selected Foods in Pakistan

Item	Farm Value Share of Retail Price (%)	Item	Farm Value Share of Retail Price (%)
Wheat flour	71	UHT Processed milk	26
Farm chicken	79	Mango (kalmi)	27
Gram pulse	67	Banana	33
Mutton	63	Potato	56
Refined sugar	37	Onion	57
Vegetable ghee	37	Tomato	25
Fresh milk	46		

Source: Government of Pakistan. 1990. Food Marketing Margins. Ministry of Food, Agriculture & Cooperatives, Islamabad.

Comparisons of the size of the distributive margin with the cost of production of fruits may be very unsound simply because of the excessive costs involved in the effective creation of utilities in the field of distribution. These costs may be quite essential and willingly paid by the consumer. Moreover, the rapidly declining costs of production due to technological improvements in farming may explain the relative size of the distributive margins. The important technological improvements which suggest a lowering of the costs of production of fruits in Pakistan are the cultivation of improved varieties, control of plant pests and diseases and improved intercultural operations.

A simple comparison of the size of distributive margins with those for other commodities may also be vague largely because of the differences in such aspects as perishability, the bulk-value ratio and seasonality of production. The high distributive margins may largely be due to more wastage as compared with those of relatively less perishable commodities.

The only alternative for diagnosing functional inefficiencies is to look for obvious and less obvious inefficiencies in various marketing functions. For institutional inefficiencies, the criterion would be to judge how near a marketing system for a particular commodity is to a state of perfect competition. Then it could be decided whether there exists considerable, small or no scope for affecting improvements in a particular marketing situation. An important point needing clarification is that an efficient marketing system does not imply the mere excision of distributive margins; it implies the minimisation of margins consistent with the effective fulfilment of consumer's fundamental utilities of form, time and place.

In fact, as a general rule, the phrase 'too high' is meaningless in itself, because it is difficult to apply objectively a criteria in judging whether, at a certain period or for a certain commodity, distributive margins are 'too high', 'too low', or 'just right'. Whether there exists large, small or no scope for reducing the size of distributive margins involves an in depth consideration of the functional and institutional marketing situation in the country.

4.5) DISTRIBUTIVE MARGINS AND MARKETING FUNCTIONS IN PAKISTAN

The scope for cutting the distributive margins through improvements in marketing functions can be analysed under three headings: (a) exchange functions, (b) physical functions and, (c) facilitating functions.

4.5.1) EXCHANGE FUNCTIONS

The exchange functions relate to the methods of price formation. The price formation for both perishable and non-perishable agricultural commodities takes place by either the open auction, through under cover bidding or by the use of private negotiation methods. Of these methods, the open auction is the most frequently adopted. Auctioning in Pakistan starts from a low price; the process of bidding and outbidding results in closing the deal in favour of the highest bidder.

Under cover bidding and private negotiation, which are not very important methods of price formation in Pakistan, are open to various criticisms. Under cover bidding is probably the most unsound method, since it could be used as an effective tool by middlemen to exploit buyers and / or sellers. Private negotiation is also less competitive

in nature and for a fair deal requires a good knowledge of market information by the individual buyers and sellers.

On the whole, however, the exchange functions in the agricultural marketing system of Pakistan are operating quite efficiently. In other words, there seems little scope for reducing margins incurred in exchange. Nonetheless, whenever deficiencies are perceived their rectification will contribute to the achievement of reductions in marketing costs.

4.5.2) PHYSICAL FUNCTIONS

The physical functions of transport and storage are frequently held responsible for widening the price spread between the producer and the consumer in developing countries. Parallel with the inadequacies in transport, the storage facilities in Pakistan are also highly inadequate and inefficient. Although no statistical evidence is at hand to show the contribution of storage costs in the total distributive margins for agricultural commodities, the short supply of storage facilities, its under-utilisation due to irregular supply of farm commodities, lack of popularisation and the high wastage of commodities due to faulty storage, suggest that its improvement may contribute a lot to the achievement of efficiency in marketing.

4.5.3) FACILITATING FUNCTIONS

The facilitating functions serve to accelerate the efficient operation of both exchange and physical functions and their neglect can result in an unnecessary widening of the price spread between the producer and the consumer. An essential facilitating function is the grading and standardisation of farm commodities. The grading and standardisation of agricultural commodities in Pakistan is in its infancy, both in domestic and the export markets. Whether grading is conducive to efficiency in marketing or not requires a consideration of the value it adds to the product as compared with its cost. Obviously, in spite of all its perceptible advantages, grading must be regarded as economically wasteful if it costs more than it adds to the value of the product.

With regard to the other facilitating functions, it is rather difficult to quantify their contribution to the marketing margins. However, their inadequacies do tend to increase the size of the marketing margins. For instance, the exploitation of growers is the often voiced hazard resulting from the lack of market intelligence in the marketing of various commodities.

Lack of finance may also seriously impede marketing efficiency, largely by rendering the services of small intermediaries unnecessarily costly. Moreover, lack of finance forces farmers to dispose off major part of marketable surplus of their produce immediately after harvest which lowers the prices (and hence the share of the farmer).

Similarly, high risks and uncertainties which have to be covered by enhanced costs also result in increasing the size of distributive margins. Finally, the slack market legislation in Pakistan has encouraged fraudulent practices which add to the cost of marketing. For instance, the pilferage of fruits and vegetables by the commission agent in the market, and the deduction of variable amounts of food grains by 'Arhtias', invariably increase the size of the distributive margins for those commodities.

It is clear that, except for the exchange functions, the rest of the marketing functions in Pakistan are highly inefficient. These lead to unnecessarily high costs of marketing. Hence, there is considerable room for achieving efficiency through the improvement of most of the marketing functions.

4.6) DISTRIBUTIVE MARGINS AND ROLE OF MIDDLEMEN IN PAKISTAN

In developing countries like Pakistan, high marketing margins are generally attributed to inefficiencies in the institutional framework. Middlemen are usually held responsible for farmer's low share in the consumer rupee and are blamed for exploiting the farmers. Government is usually urged to eliminate or minimise the role of middlemen from the marketing chain in order to increase the welfare of both consumers and producers.

This assumption is most probably an outcome of the predominance of the profit element in the total marketing margin. As the profit element is the major component of the marketing margins in the developing countries, any increase in the number of intermediaries will have a strong effect on the size of the aggregate margin. It is clear that the profit element is an increasing function of the number of intermediaries in the distribution of both perishable and non-perishable agricultural commodities.

The high profits are alleged to be taken by market intermediaries who are completely unnecessary and others who are exploitative. The existence of unnecessary/redundant intermediaries between a necessary middleman and the consumer or between two necessary middlemen may be contended. Hence, the pertinent question arises that why these superfluous intermediaries are not by-passed by those whom they exploit. In theory, the services of an intermediary will be utilised only if the margin he claims is less than the value his customers set on services provided by him. This means that any intermediary asking for an extra margin will eventually be eliminated.

The utility of the institution of middlemen in the marketing system can neither be denied nor eliminated. The main problem stems from two things i.e. multiplicity of middlemen and abnormal profits. In the agricultural marketing system of Pakistan, the prevalence of middleman exceeds than their required level. Following factors justify their presence in large numbers

a) Provision of Credit facilities

One of the acute problems confronting Pakistan's marketing structure is the lack of finance at various levels. The commercial banks and other public institutions do not mostly meet the credit requirements of the market because of the absence of suitable security against loans. Credit requirements necessitate employment of services of some particular intermediaries in the market. For example, in fruit and vegetable marketing, the grower is financed by any one or more of the people with whom he deals namely the itinerant dealer, the pre-harvest contractor, the commission agent or the processor. The extension of credit may be direct or indirect through buying the produce at a pre-harvest stage. The commission agent also finances the retailers and, occasionally, the pre-harvest contractor. The retailer also sometimes sells on credit to the ultimate consumer.

The financial commitments may result in a strong bargaining position for the lender with the possibility of reaping excessive profits. Whereas bargaining at the prevailing market prices will follow the normal behaviour of demand and supply interaction, pre-fixed prices result in an ensured income for the grower/borrower and stable expenditure for the middlemen. However, the borrower in Pakistan is certainly in a weak bargaining position

largely because of his inability to pay the loan in time. This obliges him to transact the business with the same lender for long periods.

It must be stressed, therefore, that dispensing with the services of certain money lending middlemen does not eliminate their function. The compulsory reduction in the number of money lending middlemen, without building an effective and cheap credit structure, would tend to reduce competition and could operate against the interests of producers and / or consumers. In other words, the reduction in the number of money lending intermediaries, to cut down the size of distributive margins, is not likely to be an effective way of reducing margins because this would increase the supply prices of the surviving intermediaries. The greatest benefit arises through competition which ensures the survival of those who offer credit services at the lowest supply prices, to the ultimate advantage of both producer and consumer.

b) Assumption of risks

In the present inadequate marketing structure, risks and uncertainties are very high. The farmer being mostly poor and illiterate cannot bear or safeguard effectively against risks and uncertainties in the distribution of his farm produce. He, therefore, finds it worthwhile to pledge the crop or sell it at pre-harvest to some middlemen. For instance, the pre-harvest sale of fruits (in addition to the provision of credit) saves him from various troubles and uncertainties involved in their marketing. It is, therefore, comprehensible that the high profit margin of the intermediaries is largely necessitated by the great risks and uncertainties relevant to the present marketing structure in Pakistan.

c) Facilitation to farmer to focus on production operations

A farmer in Pakistan (as also in other developing countries) is more conversant with the techniques of cultivation than with those of the relatively more specialised field of marketing. In most cases the marketing period of some farm commodities clashes with the major farming operations of other commodities. For example, in the citrus distribution period (November to March), most of the farmers are busy in one or more of the following major farming operations: crushing sugar cane (from October/November to February/March), picking cotton (October/November), sowing wheat (November/December) and sowing winter ('Rabi') fodder crops (October). They have only limited time available to attend to the various operations associated with the marketing of their citrus enterprise. The same is true to varying degree in the marketing of other farm commodities.

It can be argued that it is more in their interest to allocate their labour resources to those parts of the agricultural business which produce the greatest profits, and to delegate the marketing operations to a marketing intermediary. The price loss (if any) due to sales to other intermediaries may thus be more than compensated for by the concentration of resources into more important farm enterprises.

d) Provision of storage and transport facilities

The lack of storage facilities owned by farmers necessitates the employment of some middlemen which could otherwise be eliminated (e.g. the commission agents who provide storage facilities for some fruits and vegetables). Even if the grower possesses storage facilities, for effective price gains he will need swift and adequate modes of transport, particularly for the perishable agricultural commodities.

e) Provision of market information and skills

Farmers in Pakistan are mostly illiterate and lack market information or commercial skill. The parties dealing with the redundant middlemen are ignorant of cheaper alternatives. The collection and the dissemination of market information in Pakistan are deficient both in quantity and quality. This has served to maintain some intermediaries, notably the brokers, who in most cases just sell market information to sellers and / or buyers. These information selling middlemen usually exact their fee from both the sellers and the buyers.

f) Social ties

Another factor, which may require a grower to sell, and a middleman to sell or buy through a particular intermediary, is the effect of social ties. In such a situation, there is found a conflict of interest between economic gains and social gains. In the predominantly rural economy of Pakistan the impact of the latter aspect is quite substantial.

4.7) OPTIONS FOR MINIMISING THE ROLE OF MIDDLEMAN

The role of middlemen in the marketing of farm produce may be optimised by adopting the following systems.

a) Group Marketing

In developing countries, marketable surplus of individual farmers is quite small in size and individual marketing does not generate adequate returns for small farmers. Group marketing can greatly facilitate individual farmers to joint plan, price, share risk and cost and sell their produce. This increases collective bargaining power of the farmers and as result not only the returns to farmers are increased but also marketing costs are economised. Furthermore, it is also greatly helpful in building entrepreneurial skill among the farmers who are then capable of reducing the market risks and costs.

b) Cooperative Marketing

The foundations of cooperative marketing system rest on the principle of self-help (i.e. one for all and all for one) and is owned and managed by the farmers themselves for their own economic betterment and enhancing marketing efficiency. Through this system, farmers can access quality inputs, credit and collective marketing infrastructure like grading, storage and processing facilities. It also assists farmers in developing backward and forward marketing linkages. This system, if implemented properly, can improve economic conditions of the farmers by lowering marketing costs, enhancing staying power and ensuring fair distribution of returns. This system can also contribute in enhancing marketing system efficiency. In the implementation of this system, cooperative societies can be highly instrumental particularly due to entry of marketing cooperatives markets tend to become more competitive.

c) Direct Marketing

Direct Marketing is a very useful tool that is performed to reduce length of marketing channel and marketing costs. Through this process, direct communication between buyers and sellers is established that leads to mutual gains particularly farmer share in consumer rupee can significantly improve. Minimum infrastructure, understanding of

consumer demands and ensuring fresh and good quality supplies within consumer's shortest reach are the prerequisites for direct marketing.

In Pakistan for the facilitation of farmers and reduction of middlemen role, government should encourage and promote the concept of direct marketing. Farmer markets in the country should be established where farmers and consumers can directly accomplish the exchange process for mutual gains.

d) Contract Farming

Contract farming is another option that needs special attention of policy makers. In contract farming, interested firm or perspective buyer contracts with the farmer who agrees to sell his produce at a pre-negotiated price subject to certain quality conditions. In some cases, the buyer also agrees to ensure timely supply of requisite farm inputs to the farmer. This arrangement is beneficial for both the parties as farmer is assured of an established market and a minimum price for his produce and for buyer consistent supply of produce of a specified quality at lower rate is ensured.

In Pakistan, the new wholesaling and retailing concepts are also taking root and multinational companies like Metro and Makro have started their business. Other investors particularly sugar mills, maize and tobacco processors should also be encouraged to step into this business that in turn shall encourage contract farming culture in the country.

CHAPTER 5

AGRICULTURAL MARKETING IN PAKISTAN

Pakistan can be characterised as a transitional agricultural economy where agriculture sector has pivotal importance for economic growth and development. In national Gross Domestic Product (GDP), the agriculture sector contributes more than one fifth share and its share in export earnings of Pakistan is also significant. More than half of population is directly and indirectly related with this sector for their livelihood. Agriculture sector not only meets food demand of population but also provides raw material for industry besides providing surplus for exports. The growth of this sector witnessed many ups and downs in the recent past but the overall growth has remained satisfactory.

Agricultural production is fairly diversified and market oriented in Pakistan. The main sub-sectors of agriculture include crops, livestock, fishery and forestry. The proportion of area under different crops varies according to the size of farm. On most of the small farms, major cropped area is under food grains. The production of agricultural crops is organised by a large number of farmers spread over a wide area and their marketing activities involve multifarious stages and problems. Besides growing crops, livestock and dairy are other major activities undertaken by the rural population.

5.1) DEMAND FOR AGRICULTURAL COMMODITIES

Pakistan's population has doubled in the past three decades. Majority of the population still lives in rural areas although the number of people living in towns and cities has increased in both absolute and relative terms. Entire urban population and part of rural population have to meet their requirements of agricultural produce through purchasing. This is not to say that farmers are completely self-sufficient with respect to the demand for agricultural commodities. Often due to emergent cash needs, farmers are compelled to sell their crop at harvest time and later on purchase small amounts during the year to meet the household needs. In this case, the marketed surplus exceeds the marketable surplus. In some cases, this may even involve products moving first from rural to urban areas and then back again to rural areas.

Since agriculture is spread all over the country while industries are concentrated in a few areas, the bulk movement of industrial raw materials to these consumption centres is necessary. Multiple marketing operations are also necessary where processing is essential to convert the raw material to a form suitable for use by consumers. Nearly all of Pakistan's exports are routed through the port of Karachi. Some commodities are also exported from the Makran coast and other land routes in the country.

5.2) AGRICULTURAL MARKETED SURPLUS

Marketable Surplus refers to that surplus part of producer's production which is available for disposal after fulfilling domestic requirements like family consumption, seed, feed and the payment of wages in kind etc.

In order to avoid conceptual ambiguity, it is important to differentiate the term "marketable surplus" from the term "marketed surplus". Marketed surplus represents that part of marketable surplus which is actually sold in the market and placed at the disposal of non-producers i.e. traders or other stakeholders in the marketing chain.

Agriculture produces a sizable marketed surplus in Pakistan. Private and public sector perform a gigantic task in handling this surplus. These surpluses support a large and growing urban population and much of Pakistan's industry. These also contribute substantially to the country's export earnings. In Pakistan, a wide variety of major and minor crops, fruits and vegetable, livestock and poultry products, fisheries and semi processed farm products enter the market before reaching in the hand of ultimate local and foreign consumers. The magnitude of marketable surplus varies commodities wise (Table 5.1).

Table 5.1: Estimated Marketable Surplus of Agricultural Commodities (2000-01)

Commodity	Production (000 Tonnes)	Estimated Marketable Surplus (000 Tonnes)	Percent of Total Production
Wheat	19522	9761	50
Cotton	1844	1752	95
Sugarcane	46346	37077	80
Rice	4584	3438	75
Gram and pulses	1345	1143	85
Oilseeds	455	409	90
Potatoes	1740	1392	80
Onions	1587	1270	80
Other Vegetables	2906	2325	80
Fruits	6027	5424	90

Sources: Mukhtar, M. M. 2004. *Agricultural Marketing System and Trade Enhancement—Issues and Policies*. *Pakistan Journal of Agricultural Economics*, Vol. 5, No.1. Agricultural Prices Commission, Islamabad.

The proportion of marketable surplus varies by the size of farm. Generally, large farmers market a greater percentage of their production than small farmers. Most farms in Pakistan are small in size and produce equally small marketable surpluses. Of an estimated total of 6.62 million farms, nearly 86 percent farms are less than 5 hectares and about 95 percent are less than 10 hectares (Table 5.2). These growers have usually small marketable surpluses which are to be collected from far flung areas (often lacking marketing infrastructure) and supplied to the domestic consumers as well as export markets. The large number of small farms makes efficient marketing of agricultural products difficult since these prevent economies of scale in various marketing processes.

5.3) PHYSICAL MARKETING FACILITIES

It is reported that Pakistan has around 650 markets serving the needs of about 45,000 villages. In terms of areas, each market covers over 450 square miles though this is misleading since large areas of the country are uninhabited. Nevertheless, the ratio of markets to both area and population is low as compared with other countries. This situation is aggravated by the absence of an adequate rural road network connecting producing areas to existing market centres.

At present in Punjab, 325 agricultural markets are functioning out of which 149 are grain markets, 95 are fruits and vegetable markets and 81 are feeder markets. A large number of regulated markets exist in all the provinces of Pakistan. However, unregulated markets still exist, particularly in the provinces of Khyber Pakhtunkhwa and Balochistan.

Table 5.2: Number and Area of Farms by Size of Farm-2000

Size of Farm (Hectares)	Farms				Cultivated Area	
	Number (000)	%	Area (000 Hectares)	%	Area (000 Hectares)	%
All Farms	6620	NA	20438	NA	16498	NA
Govt. Farms	*	NA	31	NA	21	NA
Private Farms	6620	100	20407	100	16477	100
Under 0.5	1290	19	363	2	339	2
0.51 to under 1	1099	17	821	4	765	5
1 to under 2	1425	22	1981	10	1838	11
2 to under 3	966	15	2257	11	2056	12
3 to under 5	891	13	3443	17	3011	18
5 to under 10	580	9	3891	19	3239	20
10 to under 20	261	4	3324	16	2583	16
20 to under 40	78	1	1955	10	1344	8
40 to under 60	15	**	689	3	422	3
60 and above	14	**	1683	8	880	5

* = Value less than 500 ** = Value less than 0.5

Source: Government of Pakistan. 2005. *Pakistan Statistical Year Book 2005*. Statistics Division, Federal Bureau of Statistics, Islamabad.

The marketing system has developed through the decades and a number of improvements have been brought in it by enforcement of various rules and regulations. Moreover, a large number of processing units, such as, flour mills, cotton gins, rice husking mills, oil extracting factories and sugar mills have been established overtime which purchase the produce directly from growers. Due to this development, not only an alternate source of marketing has become available to producers but the pressure on existing agricultural markets has declined considerably.

5.4) PREVALENT AGRICULTURAL MARKETING SYSTEM

According to the constitution of Pakistan, agricultural marketing is a provincial subject. However, agricultural policies including agricultural marketing receive the attention of the federal government due to importance of agriculture in national economy. The broad framework of agricultural policies including those relating to marketing is laid down by the federal government in consultation with the provinces.

In Pakistan, the marketing structure for agricultural produce is fairly diversified. It ranges from marketing arrangements where private enterprises are free to operate to the substantial government intervention in the form of fixation of floor prices and procurement of agricultural commodities. The private sectors as well as the public sector agencies handle millions of tonnes of marketable surplus of various farm products.

5.4.1) ROLE OF PUBLIC SECTOR IN AGRICULTURAL MARKETING

In Pakistan, public sector plays significant role in the marketing of various agricultural commodities. Government announces support price for various agricultural commodities and act as second buyer in the market to safeguard the interest of growers particularly during glut periods when prices tend to fall. Surpluses of agricultural commodities bring lower return to the farmers particularly the small farmers who are compelled to dispose off the produce at lower price due to weak staying power in the market.

In the past, government had been fixing and implementing the support price of important agricultural commodities i.e. wheat, seed cotton, cotton, lint, sugarcane, rice (paddy), cleaned rice, gram, potatoes, onions, oilseeds and tobacco. The support prices were designed to provide a floor to the market and were not meant to replace the open market mechanism and functioning.

Different regulatory measures have also been taken for directing the smooth functioning of agricultural markets. The seventies were characterised by the increasing role of public sector and its intervention in the input and commodity markets. A number of procurement/export organisations, such as, Rice Export Corporation of Pakistan (RECP), Cotton Export Corporation (CEC), Agricultural Marketing and Storage Limited (AMSL) and Ghee Corporation of Pakistan (GCP) were established but in nineties all these institutions were disbanded due to structural changes in national and international economic environment.

Recently, the coverage of support price programme has been curtailed to wheat, rice, raw cotton, and sugarcane. Government intervenes heavily in the wheat market by procuring a sizable part of wheat produced in the country at the announced support price. In case of rice, cotton and sugarcane, government marginally intervenes only in worst situation and exhibits its existence as second buyer in crisis like situations to streamline market forces and safeguard the interest of stakeholders.

Specialised agencies and organisations are working in the public sector to look after various aspects of marketing and procurement of these commodities. At federal level, agricultural marketing is the responsibility of the Agricultural and Livestock Products Marketing and Grading Department (ALPMGD) under the Ministry of Food and Agriculture (MINFA). This department advises the federal government on all matters relating to agricultural marketing in the country. It also provides guidance to the provinces on marketing and coordinates provincial activities at the national level. The ALPMGD is specifically entrusted with the following responsibilities:

1. Grading of agricultural commodities for export,
2. Undertaking commodity research to establish standards for agricultural products; and,
3. Providing market intelligence services through collection and dissemination of agricultural commodity prices.

The Agricultural Policy Institute (API) formerly Agricultural Prices Commission (APCOM) was created in 1981 with the mandate to provide policy input to the government particularly related to pricing of agricultural commodities. The main objective of APCOM was to ensure support price mechanism for guaranteeing a minimum price to the farmers for their produce. Now, the API has the mandate to examine/evaluate domestic and international agricultural policies; estimate and analyse marketing costs of agricultural commodities; and suggest policy measures for reduction of production and marketing costs and improvements for increasing competitiveness of agricultural commodities.

Pakistan Agricultural Storage and Services Corporation (PASSCO) was set up in 1973 to stabilise prices of selected agricultural commodities through direct purchases from the growers and subsequent stock releases in the markets when prices are at reasonable level. Currently, PASSCO is responsible for implementation of support prices of wheat and rice (paddy).

Pakistan Horticulture Development & Export Board, renamed as Pakistan Horticulture Development and Export Company (PHDEC), plays pivotal role in boosting exports of various horticultural products (fruits and vegetables) in export markets of many developed countries. Trading Corporation of Pakistan (TCP) handles the cotton marketing issues. Government does not buy sugarcane but it is mandatory for the sugar mills to purchase sugarcane from the growers at the price announced by the government. Livestock and Dairy Development Board (LDDDB) operates in the area of livestock and dairy development in Pakistan. Major initiatives undertaken by the Board include milk collection and dairy development programs, livestock and meat production, food security and productivity enhancement of small farmers. Pakistan Tobacco Board is involved in fixation of grade prices as well as making necessary arrangements with tobacco companies in the private sector for marketing of tobacco.

At provincial level, the marketing of agricultural products is managed by provincial agricultural departments. Provincial Food Departments are apex bodies and procure many agricultural commodities especially staple food stuff like wheat. In Punjab, agricultural marketing is managed by Directorate of Agriculture (Economics and Marketing). In addition, Punjab Government has established Punjab Agri. Marketing Company (PAMCO) which works on public-private joint initiative and is entrusted with the task to enhance storage, processing and transportation facilities in Punjab. Punjab Institute of Agri. Marketing (PIAM) has also been established for training the stakeholders and suggesting policy recommendations for improving agricultural marketing system in the province.

Private trade in agricultural commodities is regulated through the provincial agricultural produce marketing acts. These acts regulate the sale and purchase of farm produce through the establishment of market committees composed of producers, trader and consumer representatives. Market committees in each area fix the commission rates and market fees which can be charged in transactions involving agricultural produce, license traders and inspect the weights and measures used by the latter. These committees are also responsible for the provision and maintenance of basic infrastructure such as drinking water, sanitation, lighting, platforms etc. Local administrations may fix the prices of items like milk, eggs, and meat within the areas of their jurisdictions.

Government also provides support to the private sector through its various organisations working for market promotion. In this respect, the Trade Development Authority of Pakistan (TDAP) formerly Export Promotion Bureau (EPB), Pakistan Standards and Quality Control Authority (PSQCA), Federal Bureau of Statistics, and Agricultural and Livestock Products Marketing and Grading (ALPMGD) are making valuable contribution towards the fixation of quality standards, grading, market intelligence, export promotion and maintaining liaison with international organisations, such as, Food and Agricultural Organisation (FAO), United Nations Development Programme (UNDP), World Trade Organisation (WTO) etc.

5.4.2) ROLE OF PRIVATE SECTOR IN AGRICULTURAL MARKETING

At present, the marketing of agricultural commodities is largely performed by the private sector based on age old customs and practices of assembly, distribution, and transportation, selling and buying. Private sector plays a key role in the development of agriculture sector right from production activities to the disposal of farm produce. Production of agricultural commodities is altogether a private activity and carried out by farmers who are mostly small farmers with landholdings less than 12.5 acres. The inputs

for agricultural production are supplied by the private sector companies with meagre involvement of public sector.

The private sector virtually transports entire farm produce from farmers to consumers through various means of transportation. All transportation activities from production areas to markets and processing units like wheat flour mills rice husking plants, cotton ginneries and sugar mills are undertaken by the private carriers.

A large number of processing units such as flour mills, cotton ginning factories, rice husking mills, oil extracting factories and sugar mills have been established overtime. These purchase the produce directly or indirectly from growers and add utility in marketing system by transforming the raw product into eatable form as desired by the consumers.

Private sector has significant participation in the storage activities of farm produce. At farmer's field level and village level storage arrangement are relatively less developed. However, at market level, storage arrangements are altogether privately owned. Private sector has established many storage facilities particularly cold storage facilities for perishable commodities.

The marketing of a large number of agricultural commodities and livestock products are completely in the hands of the private sector. Commodities flow from producer to consumer through various marketing channels and as such there is no restriction on their movement. Agricultural prices are freely determined on the basis of supply and demand situations except the commodities for which government has price support system. Marketing of coarse grains, spices and condiments, fruits and vegetables, sugar, pulses, tea, milk and eggs is carried out by private sector.

Table 5.3: Major Agro-Based Industries in Pakistan in 2000-01

Industries	Establishments (No.)	Value of Production (Million Rs.)
Food Manufacturing	880	188610
Dairy products except ice cream	10	10877
Canning of fruits and vegetables	10	1516
Canning of fish and sea food	9	1729
Vegetable ghee	56	43962
Cotton seed oils	39	2019
Rice milling	228	4255
Wheat and grain milling	300	27475
Refined Sugar	62	55585
Tobacco Manufacturing	12	23959
Leather & Leather Products	82	18655
Ginning and Baling of Fibres	334	55573

Source: Government of Pakistan. 2008. Agricultural Statistics of Pakistan 2007-08. Ministry of Food and Agriculture (Economic Wing), Islamabad.

5.5) AGRICULTURAL MARKETING PROBLEMS IN PAKISTAN

An efficient marketing system is essential for the welfare of both producers and consumers. It maintains farm prices at reasonable level and food items remain within reach of consumers. Rapid urbanisation, rising food demand due to population pressure, changes in global economic environment and commercialisation of the agriculture sector have revealed several inadequacies in the prevalent agricultural marketing system in Pakistan. Furthermore, the system is termed exploitative, collusive, and economically inefficient operating with high profit margins.

Although several measures have been taken over the years to improve agriculture marketing system and the related infrastructure, but the system is not fully equipped to meet the requirements of a modern developing agricultural economy. The legal and institutional framework is out-dated and is based on laws framed as far back as in the 1930s. In the following, marketing related problems faced by various stakeholders have been described:

5.5.1) SMALL SCALE FARM OPERATIONS AND MARKETABLE SURPLUS

Agricultural production in Pakistan is mainly production oriented and an outcome of small scale operations. A vast majority of farmers in Pakistan are small farmers with landholding less than 12.5 acres and hence marketable surplus generated by these farmers is quite small. Furthermore, production is scattered and accessibility to the production area by road transportation and efficient modes of transport in most of cases is quite difficult. Small farmers are unable to directly market their produce owing to high transportation and other marketing costs.

The farmers start a production programme without foreseeing the market potential. Without the proper return for their produce, no farmer is going to be convinced to produce more and to produce quality products. Price stability through orderly marketing is the prime factor for enhanced production and quality improvement. And yet, the farmers think about marketing only after the produce is ready for market as their production is primarily aimed for subsistence.

5.5.2) HIGH MARKETING COSTS AND MARGINS

One measure of the efficiency of a marketing system is the farmer's share of consumer food expenditures. There is a widespread belief in Pakistan that the farmer's share of the final retail price of most agricultural commodities is low due to excessive margins absorbed by a long chain of market intermediaries. The long marketing chain basically stems from the small farm characteristic of Pakistan's agriculture which requires large numbers of middlemen to collect the small surpluses produced by many farmers scattered all over the country. It is reported that the farmer's share of consumer expenditures averages about 65% in the case of less perishable commodities and 30-50% in the case of perishable commodities. These margins are not high compared with those in other countries but the level of marketing services provided by the marketing functionaries is very low. Marketing costs are very high due to poor farm to market road, inefficient means of transportation and lack of storage facilities etc.

5.5.3) POOR FARM TO MARKET ROADS

Majority of farms in Pakistan are not linked through proper road network with the markets. The condition of existing road network at several places is also very poor. Such roads are often unusable during rainy months. Owing to poor and bumpy roads, transporters

charge high freight rates which are ultimately passed on to the consumers or borne by the poor producers. Non-existence of good roads limits the use of economic means of transport such as trucks and the agencies involved in agricultural marketing have to depend upon less efficient and expensive modes of transportation.

In many cases, due to lack of farm to market roads, farmers just discard their produce which otherwise could bring returns to farmers. For example, low grade dates are fed to cattle in Balochistan since farmers are unable to transport these to the market.

5.5.4) INADEQUATE STORAGE FACILITIES

Storage facilities greatly help in stabilising highly volatile agricultural prices. Due to storage, supply is evenly spread throughout the consumption time period. In Pakistan, adequate and efficient storage facilities both in public and private sector (farm and market level) are severely lacking. Storage facilities at farm and market level are particularly lacking that erodes the staying power of farmers. Inappropriate storage causes losses during different handling operations from farm to market. Farm produce, especially perishables due to specific properties and structures, require different storage conditions.

Generally, agricultural produce is stored in an unused portion of a room without ventilation and proper sanitation and preventive measures for insect and disease control. This mostly happens in case of non-refrigerated storage. The refrigerated storage can prolong the shelf life of produce but it is not always practically feasible for short time storage of small quantities. The fragmentary structure of the production and marketing system also makes refrigeration prohibitive and even not feasible in many instances.

Public storage facilities also are not adequate enough to store surplus production for subsequent release in case of shortage like situations for price stabilisation.

Table 5.4: Government Storage Capacity in Pakistan ('000' tonnes)

Agency	2006	2007	2008
1.WHEAT	4339	4339	4339
Provincial	3780	3780	3780
Punjab	2483	2483	2483
Sindh	709	709	709
Khyber Pakhtunkhwa	365	365	365
Balochistan	223	223	223
Federal	559	559	559
AK&NA.	64	64	64
Def. Division	54	54	54
PASSCO	441	441	441
2. RICE	826	826	826
3. Cotton (In 000 Tonnes)	77	77	77
Total Capacity	5242	5242	5242

Source: Government of Pakistan. 2008. *Agricultural Statistics of Pakistan 2007-08*. Ministry of Food and Agriculture (Economic Wing), Islamabad.

5.5.5) POOR PHYSICAL HANDLING OF THE PRODUCE

Typically, farm produce in Pakistan is handled from 4-10 times and initial handling is done in the field during harvest. The produce is subjected to various handling operations such as picking, piling, trimming and packaging, leading to great losses. Careless loading and unloading of perishable farm produce also leads to heavy losses. In the analysis of marketing costs, often marketing loss is found one of the prominent items. Marketing loss refers to losses caused by shrinkage, damage and bruising, or result from the removal of spoiled or impure parts during the marketing process.

5.5.6) POOR POST-HARVEST MANAGEMENT

Postharvest management of agricultural commodities is quite poor in Pakistan and incurs significant postharvest losses during harvesting, handling, grading, packing, storage, transportation and processing of agricultural commodities. Estimates of such losses run as high as 20-30 % for perishable commodities such as fruits and vegetables.

Despite continuous advances in research enormous quantitative and qualitative losses still occur. The extent of loss depends on how the commodity is handled from farm to the market. The studies indicate that post-harvest losses are far greater than production losses. Damage resulting in post-harvest losses is usually in the form of bruising, breakage, crushing, infestation by fungi and insects, destruction by rodents and moisture damage. Such damage not only reduces the volume of the produce but also leads to a reduction in the quality and hence the price which the product can command in the market place.

These losses attributed to multiple factors in post-harvest operations. The main factors responsible for the high physical product losses reported in Pakistan are traditional harvesting methods, inadequate on-farm and transit storage facilities, deficient packaging, a poor farm to market road network, excessive handling, inadequate transportation and processing facilities and poor management. For example due to lack of storage facilities large quantities of wheat are placed in open places under plastic covers or tarpaulins. This results in considerable losses during storage. Absence of refrigerated transportation and storage facilities limits the amount of milk which can be transported from surplus rural area to urban areas or even is processed into low value added products such as “khoya” (evaporated milk) and “desi ghee”. The lack of refrigerated transport and storage facilities also affects the quality of the milk which eventually reaches urban areas since middlemen frequently add ice and chemicals to preserve the milk during the hot summer months.

Post-harvest losses can be reduced as more and improved storage facilities, transport and processing infrastructure are built. By overcoming or minimising losses, food requirements of millions of people can be addressed and significant foreign exchange can be earned through exports.

5.5.7) INADEQUATE AND OLD AGRICULTURAL MARKETS

Existing agricultural markets are inadequate in number and poorly designed to meet the requirements of population. Agricultural produce in most of the cases routed through rural and wholesale markets so as to reach to the ultimate customer. These markets have their own peculiar problems.

The rural markets are operated periodically and are used mostly by the small and marginal farmers. The minimum basic physical facilities required for periodic rural

markets include a market yard, simple stalls, sanitary facilities, equipment such as a weighing scale and grading equipment, packing materials, etc. These facilities in rural markets of Pakistan are mostly lacking or inadequate for efficient market operations.

In large cities, central wholesale markets are the main centres for the sale of farm produce. These markets play an important role as major centres of price formation where coordination of production and marketing activities take place. Many wholesale markets were built many decades ago and have become functionally obsolete. These are now quite unable to cope efficiently with the present level of transactions. Buildings are small and normally in a state of despair. Storage facilities are limited and the produce is usually stacked outdoors on the ground. Little or no mechanical equipment is used and unhygienic conditions often prevail. Serious traffic congestion, insufficient space for the efficient in and out movement of produce and improper management methods are some of the other major factors leading to increased marketing costs and physical losses of farm produce.

Despite these conditions, the markets function and handle a substantial volume of produce. But as production and incomes increase and consumers demand high quality products, these markets are likely to come under increasing strain and will need to be properly renovated and developed on modern lines and scientific principles.

5.5.8) INAPPROPRIATE PACKING AND PACKAGING

Containers used for transporting and storing produce vary from place to place. The most popular containers for fruits and vegetable packing are wooden crates and sacks. Irrespective of the structure and properties of farm produce, a common practice is to use whatever container is available. As a result, often produce is pressed hard in bags or baskets or carried in oversized containers causing a serious loss.

5.5.9) NON-IMPLEMENTATION OF GRADES AND STANDARDS

Agricultural products show considerable variations in quality. Grades and standards greatly benefit producers and consumers. Unfortunately in Pakistan, little attention has been given to develop grades and standards of various agricultural commodities. Grades and standards specifications have been developed for certain products particularly exportable fruits but these are not properly enforced and implemented. Some grades and standards are also too complicated and difficult to apply. In the absence of simple grading systems, farmers being unaware of advantages of the grading system, simply pack everything in the container which causes damage to the produce and hence obtain a lesser price in the market.

5.5.10) INADEQUATE AGRICULTURAL MARKETING INFORMATION SYSTEM (AMIS)

Availability of accurate and timely marketing information plays a crucial role in promoting transparent transactions which help the establishment and negotiation of proper price levels for buyers and seller. Daily prices and market arrival information are vital for farmers in planning shipment of their commodities and in negotiating prices. In Pakistan farmers are handicapped by the lack of reliable information of prices and market conditions. Most of the farmers take the price dictated by traders. Even the trades who operate in the rural areas are not well informed about the prevailing prices at major wholesale markets. Even if the information is available; it is either too late or inaccurate. Although federal and provincial governments have undertaken certain measures to

provide information to stakeholders but the scope of measures is quite limited and majority of farmers lack access to this

5.5.11) LACK OF MARKETING CREDIT AVAILABILITY

Credit availability is also very important in performing marketing functions both by the farmers and market intermediaries. After harvesting the crop, farmer needs immediate cash to sow next crop. Meanwhile in the markets, prices are relatively low due to excess supply. The need of cash weakens the staying power of farmers. Marketing intermediaries too have cash requirements for purchase and storage of various commodities. Over the years, government has made efforts to increase credit availability to farmers but this facility is mostly limited to production operations. The availability of credit for marketing activities is quite limited particularly for small farmers in Pakistan. However, large farmers/dealers avail themselves of marketing loans not only from agricultural but also commercial banks.

5.5.12) LACK OF GROUP ACTION

Majority of farmers in Pakistan are small and produce small marketable surplus which cannot be marketed efficiently. Group action can enhance their returns significantly due to economies of scale in transportation, storage and other marketing activities. Unfortunately, these small farmers do not participate in group actions to achieve a better bargaining position and higher prices.

5.5.13) LACK OF MARKETING TRAINING

The training in agricultural marketing is far from satisfactory. The discipline of agricultural marketing has emerged as a specialised field to which due attention has not been given. Only at University of Agriculture, Faisalabad, in the Institute of Business Management Sciences (formerly Department of Marketing and Agribusiness) specialised training in the field of agricultural marketing and agribusiness is imparted. In rest of agricultural universities, it is taught as a part of agricultural economics and time devoted for marketing training is not sufficient enough. The result is that the majority of university graduates have little knowledge about the practical and management aspects of agricultural marketing which is a vital instrument for rural development. The key bottleneck in implementing various marketing improvement programmes is lack of professional trained manpower in the field of agricultural marketing who can implement various action plans and strategies.

5.5.14) LACK OF MARKETING EXTENSION SERVICE

The changing face of agriculture due to commercialisation and globalisation necessitates that marketing extension service should be provided to the farmers. In Pakistan, there is an agricultural extension service to train farmers in technical aspects of production and plant protection. However, marketing extension services for farmers are non-existent. The agricultural extension workers are, in general, not trained to provide marketing extension services. Due to lack of marketing extension services, farmers are unable to properly plan production and marketing of their produce and hence their returns are not optimised.

5.5.15) UNFAIR TRADE PRACTICES IN AGRICULTURAL MARKETS

The imperfections of the market have given rise to several unfair trade practices. These generally work against both the producer (seller) and the eventual consumer. Some of

these unfair trade practices as mentioned in the report of National Commission on Agriculture, 1988 include;

1. Short weighing of produce
2. Misquotation of rates
3. Exploitation of farmers in debt
4. Fake auctions due to strong nexus between commission agents and Pharias
5. Collusion amongst traders to suppress prices
6. Excessive rates of various services
7. Unreasonable quality and weight deductions
8. Uncalled for deductions for munshiana, mosque funds and charities, etc.
9. Hoarding and profiteering
10. "Topping" putting good quality produce in top layers and inferior quality underneath
11. "Under cover" methods of purchase.
12. Wilful adulteration and mixture of foreign matter
13. False records of transactions and accounts.

5.5.16) LACK OF MARKETING ADMINISTRATION AND DEVELOPMENT PLANNING

Owing to commercialisation of agricultural sector, the importance of agricultural marketing in national agricultural development programmes and policies is greatly enhanced. An out-dated marketing system usually poses bottlenecks to the further development of agriculture. Increased production, especially of perishable produce, unless otherwise accompanied by market expansion and marketing improvement, will usually result in a lower net income for farmers and thereby hampers their motivation for the production of sizable marketable surplus. In Pakistan, agricultural marketing suffers due to inadequate/improper legislative activities, lack of market-oriented administrative supports, lack of inter-ministerial coordination horizontally as well as vertically, and undue suppressing of private marketing sectors.

There are general problems being faced in marketing of farm produce. There may, however, be some special problems depending on geographical location and other local circumstances which need to be examined carefully.

Regulation of markets and the strict enforcement of rules are possible answers to cut down on these malpractices. It may be necessary to frame new laws that can be easily enforced to put an end to these malpractices. Moreover, improved infrastructure, free access to markets and producers marketing cooperatives would also contribute considerably to removing some of the imperfections. The organisation of marketing cooperatives would be particularly beneficial for producers of small marketable surpluses who cannot afford to take their produce to the organised wholesale markets and are, therefore, obliged to sell to local merchants at relatively low prices.

5.6) MEASURES FOR IMPROVEMENTS IN AGRICULTURAL MARKETING SYSTEM

In the past, agricultural marketing system improvements and innovation in Pakistan received less attention in governmental economic development plans and programmes and provision of organisational and institutional support to this sector remained virtually minimal. Due to this agriculture marketing is beset with several problems mentioned earlier.

Agriculture in Pakistan is experiencing rapid commercialisation and market orientation. Furthermore, there are drastic changes in global economic environment due to emergence of the WTO regime. These factors necessitate that agricultural marketing system should be updated and modernised to meet changing needs of farmers, consumers and other stakeholders. It is, therefore, necessary that national marketing systems development shares a substantial portion of the time, financial outlays and institutional arrangements of government policy. In this regard, some measures have been suggested as follows;

1. New model wholesale markets for fruits, vegetables, food grains and livestock with all modern facilities should be established at suitable places.
2. High priority should be accorded to construction of farm to market roads especially in the less developed regions and remote areas should be linked with these roads.
3. Accredited food safety labs for agricultural and livestock products should be established at the federal and provincial levels.
4. A national program for setting up of “Agro Food Parks” and Agro Export Zones for major clusters of agricultural commodities should be launched.
5. Agricultural Marketing Information System (AMIS) should be strengthened, upgraded and modernised to provide timely needed information to all stakeholders for effective decision making.
6. Public sector storage capacity should be expanded to maintain reasonable buffer stocks for price stabilisation. Private sector should be encouraged to set storage facilities at farm and market level. Modern ISO certified mechanised abattoirs with meat packaging and cold storage facilities should be established.
7. National program for the establishment of multipurpose farm services centres for input provision, output disposal, technical guidance and storage provision under public-private partnership should be launched.
8. Cool chain railway freight transport and NLC reefer transport system should be initiated.
9. Legislative framework is out-dated and mainly based on laws framed in 1930s. The provinces should introduce amendments in the Agricultural Produce Marketing Acts and allow the private sector to establish and manage farmers markets.
10. National and Provincial Programs for establishing pack houses in close proximity to major producing areas (clusters) to add value to raw agricultural commodities should be launched.
11. Market committees should be made more effective and training facilities should be arranged for the staff of these committees.
12. Grades and standards of agricultural commodities should be given due importance. There should be strict implementation of already established grades and standards and efforts should be made to develop grades and standards for those commodities for which these are not available.

CHAPTER 6

GOVERNMENT MARKETING SERVICES

The marketing of agricultural produce is unique due to seasonality, perishability and bulkiness of agricultural produce. Agricultural products are basic food stuffs and very important from food security and strategic perspectives. The marketing of agricultural products deserve special attention because effective marketing of agricultural products heavily relies on the prevalence of environment conducive for smooth commercial bargaining among all stakeholders. For this purpose, governments have to establish statutory arrangement and legal framework within the marketing sector for the provision of various marketing services.

As marketing system develops within a country and moves from a traditional subsistence to commercial economy, the demand for government services within the marketing system increases. The services usually demanded first are:

1. Standardisation and Grading
2. Agricultural Marketing Information System (AMIS)
3. Agricultural Extension Services
4. Marketing Legislation

The need for better services occurs as agricultural products move greater distances to urban markets. Informal information systems are no longer sufficient for commercial marketing. At this point in development, the agricultural marketing system requires widely known and accepted quality standards and reliable market information. Producer needs market extension service for production and market planning of their produce. Further legal framework is required in order to safeguard the stakeholders against the malpractices. Such services need not only be available, but must be consistent and trusted by all individuals involved in market transactions.

6.1) STANDARDISATION AND GRADING

The systematic development of a national market requires the consistent use of an accurate and intelligible trade language and terminology. Consumers and producers need to understand particular words, numbers and symbols used to describe an agricultural product when they cannot actually see, smell and touch the products. This becomes more important when products travel greater distance and in greater volume.

Standards and grades are defined parameters that separate similar agricultural products into different lots and describe these thorough commonly understood terminologies. Standardisation and grading improve efficiency and transparency in the markets.

In particular, standards are rules of classification and measurement established and recognised by public or private bodies through certain regulation. Standards are divided into two basic categories:

- a) Standards of weights and measures.
- b) Quality standards.

Standards of weights and measures are prerequisite for performance of exchange functions in the markets whereas quality standards are criteria which describe the attributes that give the product value in the market. Quality standards are subdivided into

several classes. Each class is called a grade and is usually given a number, word or letter. Grades are specific systems of classifications that uniformly and consistently sort the products into different lots.

Established standards and consistent product grading in terms of these standards allow buyers and sellers to refer to products in a realistic and meaningful way. These greatly help both buyer and seller in price determination process.

The advantages of using uniform standards are:

1. Products can be sold by weights and measures and description of quality in the form of grades.
2. Meaningful price quotations can be distributed throughout the marketing system.
3. Products can be pooled into large units through blending and upgrading.
4. Product financing can be facilitated since it is possible to obtain more accurate estimate of the value of the product.
5. Transportation costs can be reduced by shipping only the product that makes grade.
6. Standardisation can help maintain competition since all sellers and buyers are competing for grades which are understood by all.

The main objective of good standards is to aid the consumer in telling the producer what is desirable in a product. The best grading system is one that moves the largest amount of product to the consumers and obtains the highest price for the producers.

Good standards should be based on the following criteria:

- a. Classification should be based on the product characteristics which consumers consider important and valuable. These characteristics should be easily understood and recognised. Standards must be designed to reflect differences in consumer demand.
- b. The various classifications and the language used to describe these should make the grades meaningful to the largest segment of consumers possible.
- c. Characteristics used should be those which can be accurately and uniformly measured and interpreted.
- d. The cost of operating and maintaining the grading system must be reasonable.
- e. The grade classifications should be based on the quality variations of the product available for market. Grades have little value if the standards are set above or below the quality of the product being produced.

The best test for evaluation of, any grade, or standard associated with the grade, is the extent to which these are used in the marketing system. If the grading standards are widely used, it can usually be assumed that these are fairly adequate and economically meaningful to both consumers and producers.

6.1.1) INSTITUTIONAL ARRANGEMENTS FOR GRADING AND STANDARDISATION IN PAKISTAN

In Pakistan, Pure Food Laws (PFL) of 1963 serves as the main base of food quality and safety legislative framework. Standards relating to international trade are regulated and enforced by federal government and rest of food standards relating to domestic trading fall in the domain of provincial governments. At federal level, Agricultural and Livestock Products Marketing and Grading Department operates under the Agriculture Produce (Grading and Marking) Act 1937 enforced in 1939. In 1972, the aforementioned Act was

amended to curtail jurisdiction of the federal government to grading and marking of exportable agricultural produce and inter-province trade. In order to improve the quality of products, the department frames standards for agricultural and livestock products and implement these both on voluntary and compulsory basis. The department has so far enforced compulsory grading of 41 items of both agricultural and livestock origin.

Another institution The Pakistan Standard and Quality Control Authority (PSQCA) is an apex body in Pakistan to formulate standards domestically or adopt international standards. The standards devised by PSQCA are voluntary and indirectly complement implementation of mandatory regulatory framework under Pure Food Ordinance in the entire country. The authority has the mandate to enforce standards for industrial as well as food items throughout Pakistan.

Pakistan Horticultural Development and Export Company (PHDEC) has recently taken up the responsibility of setting grades and standards for various horticultural products. Although grades and standards for the exportable fruits, such as, mango, apple and kinnow have been established but not enforced in true letter and spirit. Not only the existing grading system covers few fruits but also their enforcement is poor.

6.2) AGRICULTURAL MARKETING INFORMATION SYSTEM (AMIS)

Agricultural Marketing Information System refers to a set of people, equipment and procedures for systematic and continuous collection, sorting, analysing, interpreting and disseminating timely and needed information for decision making to the stakeholders in the agricultural marketing system.

6.2.1) IMPORTANCE OF AGRICULTURAL MARKETING INFORMATION FOR STAKEHOLDERS

Information related to markets and commodity situation in markets is very important in modern day agriculture. Timely, reliable and pertinent information greatly aids in decisions. Information on agricultural current and expected prices in various markets, quantities available, forecasts of future supplies and demand of various agricultural commodities characteristics is essential in determining what, when and where to sell and in planning future marketing activities. Market system can operate efficiently and effectively only when relevant, accurate and up-to-date information is available to producers, market intermediaries and consumers to help them make decisions. The value of agricultural market information for different stakeholders is as follows:

a) Producers

Producers require information for planning their operations from production planning to dispose off their products. The market information helps the farmer to decide when, where and whom to sell. On the other side, the market information about the prices of inputs also helps him to make the best use of his money. Farmers can compare the prices offered by various marketing outlets. The knowledge that a farmer gains by comparing prices may influence buyers to offer fair prices.

b) Consumers

The consumer is always interested to purchase the goods at the minimum prices. The market information helps him to decide when to purchase and from where to purchase and at the same time it helps him to decide what quantity to purchase. Consumers can

buy in the most advantageous markets if price and quality information is conveniently available.

c) Government / Policy Makers

The market information is pivotal in formulating appropriate policies relating to agriculture, agricultural marketing, export and import of agricultural commodities in the interest of the farmers and consumers. Market information, particularly related to domestic demand and supply and price sensitivities of various commodities, is required to ensure food security in the country by making timely decisions to export and import agricultural commodities.

d) Traders

The traders watch the demand supply situation and fluctuations of prices in the market. On the basis of this information, they plan to sell or store the goods. The middlemen are interested in maximum bargains and act as agent for both the seller and the buyer. The market information helps them to take quick decisions and guide the buyer and seller on the basis of authentic market information.

With market information, wholesalers can be aware of consumer demands and producer supplies which in other case is difficult to know due to distant and scattered location of consumers and producers. It also helps in coping with business risks and improves profitability even on lower margins. Transportation and storage facilities also depend on advance information in planning their schedules to meet seasonal agricultural requirements. The processors of the agricultural products add utility to the raw product and market information helps them to purchase the required quantity for the purpose of processing so that they continue to earn profit in their business. They purchase raw goods for processing, on the basis of the market information available concerned with their product. The traders involved in export and import of agricultural goods decide about when, what and quantities and price to be charged on the basis of the market information.

6.2.2) TYPE OF INFORMATION NEEDED

The type of information required to serve the needs of the various individuals throughout the marketing system falls into three general categories.

1. Basic production and consumption statistics for the commodities traded in the country
2. Daily national and international prices and commodity supplies at various points throughout the marketing system as a guide for current transactions.
3. Data relating to the movement of these commodities, long-term trends and factors influencing future prices such as area cultivated in particular crops and expected yields.

Usually this type of information must be obtained by direct investigation of strategic markets in the immediate area it is intended to serve. The main requirements are accuracy and rapid collection and dissemination as timeliness is very important.

Market information should be presented by adapting it to local conditions and terminology so as to assist users in their decision making. Much of the information published by statistical departments is presented in a form most suited for use in academic studies, reviewing past condition or formulating government policies. Further interpretation and additional data on current and expected supply, demand and other price determining

factors are usually needed before the information can be effectively used by producers and wholesalers.

Price quotations have meaning only if these are related to product quality. The terminology used to describe the product must be clearly understood by the users of the information. Descriptions such as "local rice" have limited value since there are usually many varieties and qualities of "local rice". A rise in price from one week to the next may not adequately depict marketing trend but merely a reflect difference in quality or variety of product. Thus, uniformly applied grading standards are necessary in order to provide meaningful and accurate price information.

6.2.3) INFORMATION COLLECTION AND DISSEMINATION

Methods of collecting production estimates vary greatly in different countries. In many countries the central agencies rely on reports from district officers and village headmen who often are untrained in estimation process. They may quote the same figure every year or many have other interests such as the reduction of tax assessments. In some countries where yields vary sharply from year to year, mobile reporting teams are sent into key areas for increasing accuracy of the estimates. The output information is compiled very carefully for obtaining maximum accuracy at minimum cost and this process may employ sampling techniques and objective measurement procedures developed specifically for this purpose and tested prior to their adoption.

Price information is usually collected by reporters who go into the market during the early trading hours and take a random sample of early sales. A final report is also compiled of closing or end-of-the day prices. The information is generally averaged, giving the lowest, highest and most frequently occurring price distributed as rapidly as possible to potential buyers and producers.

The methods used to disseminate market information vary according to the need for speed in reaching the users throughout the marketing system. Fast and accurate communication is most important in the marketing of perishables. Access to such facilities as telegraph, telephone, teletype and radio is of critical importance.

The dissemination of market information has improved greatly since radios have become widely available. It is usually more convenient and economical to disseminate information by radio and there is little delay in getting the information to users. Local price quotations can also be disseminated through loud speakers set up in the market place. Announcements are usually made before markets open, at mid-day and at the closing of the market.

Regular series of statistics on output, prices, sales and inventories can be distributed by less rapid lower cost methods. These are usually issued weekly or monthly along with commodity situation reports. It is important that such reports are statistically reliable and made available simultaneously to all traders at strategic times throughout the season.

Administrative methods for collecting, appraising and disseminating each category of market information must be based on a realistic assessment of its purpose and value. It is most important, however, that a high level of integrity be maintained by those responsible for an information service and that they take great care in checking the validity of comments given wide distribution. General confidence in the information provided is essential if it is to be widely used.

6.2.4) PROBLEMS WITH MARKET INFORMATION SERVICES

Agricultural Market Information Systems (AMIS) are beset with the several problems in developing countries and some of these include;

1. Greater emphasis is laid on collection of a lot of information but little attention is paid to make this information available to farmers.
2. Quality of information collected is generally poor and does not accurately reflect market situations.
3. Collection and dissemination of information is not on regular basis and hence does not really help farmers to negotiate with traders or to decide whether or not to send produce to market.
4. Information is published in a form which is unsuitable for mostly illiterate farmers who cannot read and understand the information.
5. Wrong timing for broadcasting information through radio and other related medium.
6. Notice boards in villages or markets displaying information relating to prices are not properly maintained and updated.
7. Prices are quoted with reference to specific varieties and quality grades and thus creating confusion among the information users.
8. Units of measures used for reporting prices (e.g. "boxes," "tins," "sacks") are not properly explained as the size of such containers often varies within a country.
9. Price information is reported from urban wholesale markets, the meanings of which farmers sometime fail to understand.
10. Information collections and disseminations is mostly related to market prices and information related to demand and supply of agricultural commodities and other market functions and services is provided to stakeholders.

6.2.5) INSTITUTIONAL ARRANGEMENT FOR AMIS IN PAKISTAN

Several institutions are involved in collection, summarisation and dissemination of commodity prices in Pakistan. Mainly these include:

- a. Agricultural and Livestock Product Marketing and Grading Department (ALPMGD)
- b. Federal Bureau of Statistics, (FBS)
- c. Trade Development Authority of Pakistan (TDAP)
- d. Provincial government agencies
- e. Agricultural Policy Institute (API)
- f. Universities and research Institutes
- g. Trade associations and producer groups

a) Agricultural and Livestock Product Marketing and Grading Department (ALPMGD)

The department headed by Agricultural and Marketing Advisor (ALMA) works under Ministry of Food and Agriculture (MINFA). It has a major responsibility for agricultural commodity research and market intelligence in the country. The department collects, sorts, analysis and disseminates agricultural and livestock produce wholesale prices regularly. Mainly, wholesale price information published by this agency is provided by local market committees through the provincial departments of agriculture. The ALPMDG also employs enumerators for reporting prices prevailing in major markets and those markets where market committees do not operate. It collects retail prices in many

markets but depends on the FBS for retail prices in the Karachi market. Wholesale and retail price series are also published by the department in the form of monthly and annual reports.

The analysis of prices so collected from different markets is then supplied to various end-users and stakeholders. A summary of monthly price is prepared for consideration of Economic Coordination Committee (ECC) of federal cabinet. In addition, Ministry of Commerce, Federal Bureau of Statistics, Planning Unit are supplied with the prevailing prices of agricultural and livestock items. This department serves as primary source of information to make recommendation for Agricultural Produce Price Policy at national level.

b) Federal Bureau of Statistics (FBS)

To provide information on the agricultural sector of the economy, the FBS collects price data of a wide variety of wholesale and retail food items exchanged in markets. FBS, which reports the prices in a monthly statistical bulletin, has offices in many major cities and maintains a large staff of enumerators who collect price data. It also obtains some agriculture wholesale prices from ALMA and, through ALMA, from selected trade associations. The FBS is strictly a data gathering and reporting agency and does not conduct price analysis. It prepares and presents a weekly set of "sensitive price indicators to the cabinet based on 30 essential food items.

c) Agricultural Policy Institute (API)

Agricultural Policy Institute (API) previously known as Agricultural Prices Commission (APCOM) collects its own village and farm level price data in the process of estimating farm production costs. It chalks out domestic and international sectoral/commodity-specific policies and examines and evaluates various costs incurred on agricultural and livestock commodities as these move along supply chains from producers to consumers.

d) Trade Development Authority of Pakistan (TDAP)

The Trade Development Authority of Pakistan an updated version of Export Promotion Bureau (EPB) disseminates market information to exporters and importers. It provides computerised information to exporters and importers relating to market parameters along with comparative market statistics of global markets.

e) Provincial Institutions

The provinces in Pakistan have their own institutional arrangements relating to agricultural commodity prices. Sindh has given this responsibility to the Bureau of Supplies and Prices which has a staff of trained enumerators. The Sindh Bureau of Statistics publishes Agriculture Statistics Book of Sindh annually. The Punjab has three agencies that collect prices: the Crop Reporting Service gathers farm level prices for selected commodities: the Directorate of Agriculture (Economics and Marketing) controls the market committees and compiles price data through its inspectors: and the Bureau of Statistics collects both wholesale and retail prices on a variety of commodities. In Khyber Pakhtunkhwa Province, Bureau of Agricultural Information of the Directorate of Agriculture collects prices data. The Bureau publishes weekly bulletin on market prices and supplies to concerned agencies. In Balochistan, the Directorate of Agriculture (Economics & Marketing) collects wholesale prices of agricultural commodities from Quetta. The monthly and quarterly reports are supplied to Government agencies.

f) Universities and Research Institutes

The universities and research institutes in Pakistan are also engaged in generating and preparing agricultural marketing information. Periodic cost of production and agricultural marketing studies are conducted by agricultural economics and marketing departments of various universities. These studies usually include estimates of farm gate or harvest price, marketing margin analysis and profitability of agricultural commodities under investigation. These kinds of analyses are intermittent and have not produced a price series.

The Punjab Economics Research Institute (PERI) is also engaged in cost of production studies. This has been done for many years. Since farm level prices are gathered by the PERI in its annual surveys, these surveys do provide a source of historical prices for selected crops.

g) Trade Associations and Producer Groups

A number of trade associations and producer groups have their own system for collecting price data. Among these are the chambers of commerce, growers associations, food grain merchants, poultry producers, cotton ginners, and sugar manufacturers. Some of these organisations provide price data to ALMA and through ALMA to the FBS for inclusion in its published series.

6.2.6) DISSEMINATION OF MARKET INFORMATION

The objectives of AMIS can only be achieved if collected information is properly and timely disseminated to the stakeholders. In Pakistan, following media are used for dissemination of market and related information to the farmers and other stakeholders.

- Radio
- Television
- Newspaper
- Telephone
- Mobile Messaging
- Digital Electronic Rate Board

The Punjab government has launched a website named agricultural marketing information (www.amis.org) to disseminate information. Another privately maintained web site www.pakissan.com is a useful source of market and other related information for stakeholders.

6.2.7) APPRAISAL OF AGRICULTURAL PRICE STATISTICS IN PAKISTAN

The policy planning and decision making process of many public and private institutions heavily depends of agricultural price information. Government institutions particularly agricultural ministries need price information for framing agricultural pricing policy and assessing producer and consumer welfare. Agribusiness industries required price information for planning their production and marketing.

Academic and research institutions use price data for economic analysis and forecasting purposes. Optimal production and marketing management decisions of producers are based on timely and accurate price information. Several other institutions and interest groups like media and consultancy firms also require agricultural commodity price data for their purposes on regular basis.

In general, Pakistan is fortunate to have a wide variety of agricultural prices data collected by large number of institutions in both the public and private sectors. Agricultural price data in Pakistan are collected at three major levels in the marketing chain i.e. farm gate or harvest prices, wholesale prices, and retail or consumer prices. The data on prices prevailing in wholesale and retail markets have been collected and published in time series format regularly for several years. However, there great dearth of farm level commodity price data. In provinces of Punjab and Balochistan farm gate prices during harvest season are collected but not published. Until the early 1980s, farm level prices were collected in the Sindh province but these were also never published. In Khyber Pakhtunkhwa province, farm gate prices are not collected.

The multiplicity of institutions collecting agricultural price data indicates a variety of special needs that have not been met in the past. The need for timeliness and accuracy of data, and insufficient geographical and commodity coverage by individual sources, appear to be the major factors causing duplication of collection activities. The strategy recommended in this regard is as follows.

1) Elimination of duplication

Duplication in the collection of agricultural price data should be eliminated, where feasible, to improve the cost efficiency of price collection within the country. In this regard, a committee should be formed of representatives from all agencies collecting agricultural price data and key users of price data to coordinate data collection, discuss methodology, and make recommendations on solutions to data collection problems and deficiencies.

2) Review

A review is needed of current price series to determine if unnecessary data are being collected or if important items, such as livestock and forestry products, are being overlooked.

3) Sales Volume

A system is needed to compile volumes of sales associated with reported prices so proper weighing can be done. If quantities are not available for a commodity, proxy weights should be developed.

4) Sampling Techniques

Sampling techniques used by all agencies collecting agricultural price data should be reviewed to assess deviations from scientific sampling procedures. Sampling should be modified to provide representative coverage of all geographic areas.

5) Training Programmes

Agencies involved in agricultural price data collection should hold regular training programs for enumerators to improve their techniques and assure uniformity in collection practices.

6) Monitoring

A program should be established to ensure regular monitoring of enumerators and inspectors reporting price data to maintain quality control.

7) Grading System

A comprehensive commodity grading system should be implemented to improve the accuracy of price quotations. In the absence of specific grades, closer attention should be given to defining the products being traded.

8) Computerisation

Computerisation of all price data summarisation and tabulation activities, where not presently done, will improve the accuracy and timeliness of price data.

9) Information for Farmers

A system is needed to make current price information available to farmers to assist them in marketing decisions. Market committees, chambers of agriculture, rural development departments and postal service should be engaged in the dissemination of MIS to the farmers in rural areas.

10) Systematic Price Analysis

There is no systematic programme in Pakistan for agricultural price analysis to assist policy makers on a continuing basis. For example, there is lack of current information on farm retail price spreads, price elasticities, seasonal price patterns and price forecasts etc. Respective governments should sponsor these types of studies to be conducted by the university or research institutes.

11) Establishment of Interlinked Market Information Clearing Houses

Market information clearing houses should be established in the Department of Agriculture and Livestock Products Marketing and Grading (Federal), the Bureau of Supplies and Prices (Sindh), the Directorate of Agriculture (Economics and Marketing) (Punjab), the Directorate of Agriculture (Economics and Marketing) (Balochistan), and the Bureau of Information of the Directorate of Agriculture Extension (Khyber Pakhtunkhwa). Initially the district level market committees should be provided with e-mail facility. The market information from these market committees should be communicated to all the clearing houses three times daily. Software should be developed for computerised analysis and monitoring of market information.

6.3) AGRICULTURAL MARKETING EXTENSION

The word extension in agricultural marketing means to extend the new innovations in the field of agricultural marketing to the farmers. The development of market-oriented production is sine qua non for a sustained farming particularly in the small farm sector with limited resources and low risk bearing capacity. The successful commercial farming depends largely on the orientation of farmers to plan their production according to market demand and to utilise market opportunities by countering the threats.

Agricultural extension is an important service that should be offered to the farmers. However, the role of the extension should be conceived with production techniques in mind. It is rare for an extensionist to assess the needs of the market and, with different consumers in mind, to advise on what and when to produce, how to obtain the best prices, how to reduce the quantitative loss, often considerable, of products deteriorating because of poor handling and lack of infrastructure and transport or for lack of an adequate level of effective demand.

6.3.1) NATURE OF AGRICULTURAL MARKETING EXTENSION

The agricultural marketing extension is different from production extension. Production extension is mainly reliant on the recommendations of Agricultural Research Stations. However, in providing marketing advice very often the extensionists have to find out the marketing information by themselves. This helps market extension officers in developing confidence that comes with information discovered first hand by them. In the following various areas have been described that an agricultural marketing extensionist needs to find out by himself.

For an agricultural marketing extensionist to be successful in the field, he is required to have knowledge of following things.

a) Market Knowledge

The extension worker starts by finding out what exactly is marketing, its role in improving farmer's income and functions performed in agricultural markets. Marketing is like a chain which starts with production and finishes with consumption. It involves identification of needs and wants of customers for supplying them with goods and services at profit. Finding out what customers want involves the extension officer talking to traders, wholesalers and retailers. The marketing extension officers should have the ability to identify weak links in the production/marketing chain. He should understand the importance of each link in the chain and how it functions so that he is in a position to give advice to growers.

b) Varieties to grow

The extension officer should have knowledge of all varieties grown and their demand in the marketing. They may need to advise on the best varieties to grow because the variety grown can have a big effect on price.

c) Market prices and price movements.

In agricultural markets, prices of commodities fluctuate on daily basis. One of the important jobs for the extension officer is finding out the prices the farmer is likely to receive. Hence, an updated knowledge of agricultural commodities prices and expected movements on the basis of demand and supply is essentially required for extension staff.

d) Marketing costs

The objective of successful marketing is to supply customers what they want at profit. The potential profit can then be worked out by deducting total costs from the likely price. The extension officer then needs to calculate all the costs incurred in the marketing process. He must have information on various costs like product preparation, packaging, storage and transportation.

e) Quality and post-harvest issues

Proper quality and post-harvest management of agricultural produce have major contribution in the profit maximisation of farmers. The extension officers are expected to provide advice on quality requirements and correct harvesting and post-harvest handling techniques.

f) Nature and extent of competition among buyers

Nature and extent of competition among buyers vary in different markets from perfect competition to monopoly. The extension staff must have knowledge of this factor as this greatly affects the profitability of stakeholders in agricultural marketing.

g) Modern Technology

The extension officer may need to advise on how technology can be used to help farmers in earning profit. He can recommend new packaging designs which are both cheaper and offer better protection for the produce. New processing technology can add value and make possible the supply of produce during the off season. Similarly modern storage technique can contribute to profit of farmers.

h) Community Organisation

The extension officer may organise farmers to take their produce to one place on a certain day when they have arranged for buyers to attend. This is called an assembly market or a farmers market. The income of farmers can be increased this way through group marketing.

6.3.2) PRESENT AGRICULTURAL EXTENSION SYSTEM IN PAKISTAN

In most developing countries like Pakistan, agricultural extension workers are considered unable to understand and solve marketing problems of the farmers. Sometimes, extension workers know the market related problems of the farmers but due to their lack of adequate marketing knowledge they are unable to extend any useful advice to the farmers.

In the past, the focus of agricultural extension system mainly remained on achieving higher productivity and very little attention was paid to develop infrastructure for marketing extension. However, commercialisation of agriculture and food security issues necessitates that farmers must be provided with agricultural marketing extension services. The production of farmers can increase only if adequate attention is paid to marketing of their produce at rewarding price.

Following are various institutional arrangements relating to extension services in Pakistan.

a) Federal Institutions

Agricultural extension in Pakistan is primarily a provincial subject. The federal Government, however, provides support in terms of research, infrastructural development, agricultural credit, marketing intelligence, market intervention and training etc. The federal government agencies involved in marketing related activities include mainly the Pakistan Horticultural Development and Export Company, Department of Agriculture and Livestock Products Marketing and Grading, Pakistan Agricultural Storage and Services Corporation, Trade Development Authority of Pakistan, Trading Corporation of Pakistan, Agricultural Policy Institute, Pakistan Agricultural Research Council and Zarai Trajati Bank of Pakistan. Their practical involvement in agricultural marketing extension is negligible.

b) Provincial Institutions

The provincial governments have more direct involvement in agricultural extension. Among the province, the Punjab has the most elaborate organisational set up for the

development and supervision of agricultural marketing. The Directorate of Agriculture (Economics & Marketing) is the entity specifically given this responsibility. Located under the Director General of Agriculture (Field), the directorate undertakes marketing surveys, collects and publishes price statistics, enforces marketing laws, frames rules and regulations and supervises the management of regulated agricultural markets in the province.

The primary organisation with in the province of Sindh regarding fruit and vegetable marketing is the Bureau of Supply and prices. The Bureau is an integrated organisational set up to plan, guide and ensure adequate marketing facilities, undertake price stabilisation for essential commodities, establish weekly bazaars, collect wholesale and retail market price information and ensure regular supply of essential commodities.

In Khyber Pakhtunkhwa province, an Economics and Marketing (E&M) section attached to the Directorate of Agriculture exists. However, the activities of this section are far more limited than these of the E& M Directorate in Punjab or the BSP in Sindh. A potentially more important organisation in Khyber Pakhtunkhwa is the Fruit and Vegetables Development Board. The Board has been given broad authority in the areas of research, extension, production, processing and marketing of fruits and vegetables.

In Balochistan, the Directorate of Agriculture (Economics & Marketing) is responsible to plan, guide and ensure adequate marketing facilities.

c) Private Extension Institutions

Except the input supplies especially the private enterprises dealing in fertiliser, pesticides and related equipment and farm implements, there are no private institutions active in agricultural production and marketing extension service in the country. Their activities are focused on the promotion and sale of their respective products. The methods applied by these agencies include media advertisements, leaflets, field demonstrations, personal contacts and exhibitions. The main beneficiaries are relatively big farmers who financially have access to improved production technologies.

6.3.3) ESTABLISHMENT AND FUTURE NEEDS OF AGRICULTURAL MARKETING EXTENSION SYSTEM IN PAKISTAN

The following measures should be adopted to establish and operate an agricultural marketing extension system in Pakistan.

1. Review the existing role of production extensionist and expand it to accommodate agricultural marketing functions as well.
2. Impart specialised training to production extensionist in the field of agricultural marketing and agricultural marketing extension.
3. Provide adequate technical support and infrastructure particularly modern communication equipment to the extensionist.
4. Impart training to the farming communities in order to improve their marketing skills.
5. Acknowledge the role of other institutions both public and private (NGOs) in the development of agricultural marketing extension.
6. Improve operational linkages between Agricultural Extension, Economics and Marketing Directorate, NGOs and Farming Communities.
7. Prepare standardised information packages for dissemination through media to support the field extensionist.

8. Install marketing information service, preferably on radio to broadcast daily information on markets, prices, arrivals etc. to guide producers and traders.
9. Pre and in service training of extension staff, staff of the Directorate of Economics & Marketing and staff of market committees.
10. Appoint subject matter specialists in marketing and post-harvest technology at district level in order to assist the field extensionist.
11. Strengthen linkages between agricultural extension service and other public and private institutions such as Federal Department of Agricultural and Livestock Products Marketing and Grading, provincial marketing departments, research and training institutes, cold storages, packaging industry, trade organisations, farmer groups etc. to share experience and make joint efforts for improving agricultural marketing and agricultural marketing extension.

6.3.4) ACTIVITIES TO BE CARRIED OUT BY EXTENSION WORKERS TO SUPPORT FARMERS

Extension workers should carry out following activities to support farmers in their production and marketing planning.

1. Familiarise themselves with the marketing systems of agricultural commodities in order to advise farmers about optimal marketing of their produce at alternate market prices.
2. Acquire written reports of both public and private institutions published by their market information services. In particular, obtain any material prepared by the MIS to explain the information it disseminates and the meaning of this for farmers.
3. Be aware of the timing of MIS radio or TV broadcasts, and listen to these as often as possible.
4. Develop liaison with other stakeholders like agro- processor for market information.
5. Gather information about local commodity buyers, prices offered and their terms and conditions. The information about buyers like whether they make spot payment or deferred payment and whether purchase in bulk or in small lots is very important from view point of farmers.
6. Provide information about markets at distant places. Extension workers can contact their head office to obtain similar information about potential buyers in major urban markets.
7. Keep records of prices reported by the MIS, plot these on graphs, and analyse these. Ideally, this type of analysis should be provided by the market information service and where it is not done extension workers could consider asking the MIS to do it, as an alternative to doing it themselves.
8. Help farmers understand the meaning of price broadcasts. This means that extension workers must themselves have a detailed understanding of how the marketing system works and of factors affecting prices that farmers will get.
9. Arrange farmer visits to urban wholesale markets in order to enable them to watch and observe the market environment and terms and conditions under which their produce is traded. This provides an opportunity to them to understand marketing system and product requirements of traders.
10. Monitor local prices not covered by the MIS. Agricultural market information services at national level can only cover a few markets. Local extension services could consider monitoring prices in local assembly markets on the days when the

market operates and posting these on notice boards at their offices and at the entrance to the markets, or alternatively, of persuading the managers of the markets to do this.

11. Help farmers in understanding calculation of marketing margins, costs and profits. Generally, farmers in developing countries are not literate enough to estimate marketing costs and margins of traders and hence often are exploited by the traders. This help and advice of extension workers can be very beneficial for the farmers in their negotiations with traders.
12. Understand underlying causes of short and long term price fluctuations in the markets.
13. Guide farmers about modern production technologies and crop varieties. When farmers start using market information and decide that growing new crops or out-of-season crops may be a good idea, then, they need to know what is required to grow the crops, how much the inputs will cost and from where to get the inputs.
14. Identify and explore market opportunities first before advising farmers to diversify in to new crops.
15. Motivate farmers to develop local market information services. This is possible only when farmers develop social cohesion at village level and instead of acting as competitors they behave as collaborators.
16. Coordinate with local electronic and print media for timely communication of needed market information to local communities.
17. Organise visits of traders and wholesalers to farmer communities as farmers visit to markets are sometimes difficult and costly to organise.
18. Encourage farmers to work with traders to carry out trials using different types of packaging for proper transport of produce to market.
19. Organise grading demonstrations to persuade farmers for separating their produce into different lots according to specific grades. This point may be highlighted when MIS provide price information for several grades of the same product.

6.4) MARKETING LEGISLATION

The term “law” implies the rules of the formal legal system applicable in a country, predominantly expressed in legislation, that is, in written laws enacted by the parliament or other superior legislative organs, or by other institutions or officials with delegated legislative authority. The efficiency and effectiveness of agricultural marketing system greatly rely on laws pertinent to agriculture sector. Marketing legislation provides a framework to enable the farmers to sell their produce under certain rules and regulation both individually and collectively. An inadequate and deficient legal framework makes the system inefficient, incurs substantial costs to the stakeholders and inhibits the private sector development.

6.4.1) FUNCTIONS OF AGRICULTURAL MARKETING LEGISLATION

The legislation relating to agricultural marketing system performs following three main functions:

1. Enabling functions:

The main function of agricultural marketing legislation is to provide fundamental legal framework that is essential for the working of marketing system. The rules

and regulations set basic rights and liabilities of stakeholders in the system, establish property rights and govern transactions and contracts.

2. Economic regulatory functions:

An important purpose of agricultural marketing legislative framework is to regulate the operation of markets for smooth and efficient accomplishment of exchange process. Laws relating to quality and quantity standards, competition, food safety and quality and taxes and fees are designed to serve economic regulatory functions.

3. Constraining functions:

Agricultural marketing laws are also framed to constrain undesirable marketing processes and operations and social behaviour. Environment and consumer protection laws are examples of constraining function of agricultural marketing legislation.

A particular legislative frame work can simultaneously perform some or all of these functions. For example, quality standards are designed to perform both economic regulatory and constraining functions.

6.4.2) AGRICULTURAL MARKETING LEGISLATION IN PAKISTAN

Legislation on agricultural marketing related issues is a provincial subject in Pakistan. The basic legislative framework in all the provinces emanates from The Agricultural Produce Markets Act of 1939 and Agricultural Markets Rules 1940 promulgated by the British rulers on the recommendations of Royal Commission on Agriculture. The act was promulgated for better regulation of trading of agricultural produce and the establishment of agricultural produce markets.

Overtime, several amendments were made in this act according to changing environmental requirements but fundamental rules framed under remained as such. Currently, in Sindh and Balochistan, the same law with minor amendments is operating. In Punjab, Punjab Agricultural Produce Markets Ordinance of 1978 (amended-2002) and Agricultural and Livestock Produce Markets Act, 2007 in Khyber Pakhtunkhwa province is governing the marketing of agricultural produce.

The basic aims of agricultural marketing legislation in Pakistan are as under;

1. Protection of growers from unscrupulous business practices in the agricultural markets
2. Provision of facilities to growers so that they may obtain a fair price for their produce.
3. Establishment of standards of weights and measures and to regulate the use of these.
4. Arrangements for provision of grading and marking of agricultural produce.
5. Enforcement of regulations for trading of agricultural produce and establishment of agricultural markets.

The first two and last aims have been ensured to be achieved through the Punjab Agricultural Produce Markets Ordinance. 1978 and the third one through the Punjab Weights and Measures (International system) enforcement act, 1975 and the rules framed there under in the Punjab and similar acts in other provinces. The fourth objective is to be achieved through the Agricultural Produce (Grading and Marking) Act, 1937 as

further amended and called the Agricultural Produce (General grading and marking) (Amendment) Act, 1972. General Grading and Marking rules made there under are available and are applied to the agricultural produce exported abroad. Specific Grading and Marking rules can be framed in relation to the grading and marking of agricultural produce intended for trade and consumption within a province, for export or for trade between the provinces and the federal Government.

6.4.3) THE SYSTEM OF MARKET COMMITTEES IN PUNJAB

The Royal Commission of Agriculture in the pre-partition days recommended the creation of agricultural marketing bodies at the government level for regularisation of the wholesale markets of agriculture products. The recommendations of the Royal Commission of Agriculture resulted in the enactment of The Agricultural Produce Markets Act 1939 and promulgation of The Agricultural Markets Rules 1940, in order to eradicate the malpractices prevailing in marketing. Market committees under the act were established to regularise the sale/purchase of agricultural produce and to provide amenities in the markets (mandies). It was thought that market regulations, besides protecting the producer from the machination of shrewd and well informed market functionaries, would also produce a direct impact on resources of farmers. Higher net returns would lead to larger production, which in turn would stabilise prices. The system of market committees is now operating in all provinces of Pakistan.

The enactment made during 1939 continued till it was repealed by the Punjab Local government Act, 1975. Due to some legal and technical reasons, enforcement of provisions of the Act could not be materialised. As result, relevant provisions of the Punjab Local Government Act, 1975 were replaced by enactment of The Punjab Agricultural Produce Markets Ordinance, 1978 and promulgation of Punjab Agricultural Produce Markets (General) Rules, 1979. In Punjab, market committees are working under the Punjab Agricultural Produce Markets Ordinance, 1978 (amended-2002).

6.4.3.1) ESTABLISHMENT AND COMPOSITION OF MARKET COMMITTEES

Market committees means an institution established under Section 7 of The Punjab Agricultural Produce Markets Ordinance 1978. Under Section 8, the market committees comprise of 10 to 17 members. Government appoints one member from amongst the employees of the agriculture department. The appointment of remaining members is made by the Zila Council on the recommendations of Zila Nazim. In the absence of Zila Council, the District Coordination Officer (DCO) recommends to government the names equal to twice the number of available vacancies in consultation with Extra Assistant Director of Agriculture (Economics and Marketing), and associations of growers, consumers and the licensees.

The composition of remaining members is as under;

- a) If the total members of market committee are 10 then:
 - 5 members from growers of the notified market area
 - 2 members from persons licensed under Section 6
 - 1 member from persons licensed under Section 9 and working as weigh man, broker or palledar in the notified market area
 - 1 member from amongst the consumers resident in the notified market area, who is not a dealer or a grower
- b) If the total members of market committee are 17 then:

- 9 members from growers of the notified market area
- 5 members from persons licensed under Section 6
- 1 member from persons licensed under Section 9 and working as weigh man, broker or palledar in the notified market area
- 1 member from amongst the consumers resident in the notified market area, who is not a dealer or a grower

The market committee elects a chairman and vice chairman for tenure of three years. The chairman is the chief executive officer of the market committee who is assisted by a secretary market committee. The secretary advises the market committee and its chairman in the light of provisions of the ordinance, rules and bye-laws, earlier decisions of the market committees and directions given from time to time by the government.

6.4.3.2) Classification of Market Committees

In Punjab, currently 135 marketing committees are operating to regulate sale and purchase of agricultural produce. These market committees are classified into three categories on the basis of their average annual income mainly generated through market and license fees.

Class 'A' A market committee with an annual income of sixteen lac rupees or above.

Class 'B' A market committee with an annual income of more than eight lac rupees but less than sixteen lac rupees.

Class 'C' A market committee with an annual income of less than eight lac rupees.

All newly established market committees fall in class C for at least three years. Later on, government may determine their class on the basis of their average income of the preceding three years.

6.4.3.3) Duties of the Market Committees

Following are the duties of market committees as laid down in Section 9 of Punjab Agricultural Produce Markets Ordinance 1978 (amended 2002).

Market committees mainly function to enforce the provisions of the said ordinance and the rules and bye-laws framed under the ordinance in the notified market area. Sometimes, these committees also establish markets on the direction of governments for the facilitation of people engaged in purchase, sale, storage, weighing and processing of agricultural commodities.

Another important function of market committees is issuance, suspension and cancelation of licences according to rules made by the government. These licences are issued for carrying out occupation and business to market functionaries like brokers, weigh-men, measurers, surveyors, warehousemen, changers, palledars, boriotas, tokrewalas, rehriwalaa etc.

6.4.3.4) Functions of Market Committees:

The Agricultural Produce Markets Act, 1939 and the rules framed there under concentrated mainly on regulating market practices. The Punjab Agricultural Produce Markets Ordinance, 1978, and Punjab Agricultural Produce Markets (General) Rules, 1979 went further and in addition to regulating market practices entrusted the following development functions to the market committees:

1. Establishment of markets in towns and feeder markets in rural areas.
2. Construction of cold storage, warehouses and go-downs for the benefit of growers.
3. Provision of facilities such as cleaning sets, plants for grading, standardisation packing and processing of agricultural produce.
4. Purchase of load-carrying vehicles for bringing agricultural produce of the farmers to the markets.
5. Purchase of agricultural implements and machinery to be distributed among growers of the market area at subsidised rates.
6. Purchase/sale of essential agricultural commodities.
7. Holding of agricultural 'melas' fairs, exhibitions and shows for agricultural publicity and propaganda amongst farmers to improve production
8. Collection and dissemination of marketing information to facilitate adequate marketing of farm produce, better cropping patterns, research and planning.
9. Regulation of remuneration of functionaries.
10. Provision of amenities like rest-houses, cattle sheds etc. in the 'mandies'.
11. Constitution of 'Arbitration Boards' to settle disputes between growers and the commission agents.
12. Holding of 'Juma (Friday) Bazaars' to arrange consumer goods at fair price.
13. Construction of roads, sewerage, platforms, and provision of electric and water supply in the markets.
14. Construction of roads and culverts in the notified area with prior sanction of the government.
15. Training of members and staff of marketing committees and members of the Board of Arbitrators.

Apart from the above enlisted functions, some indirect advantages also emanate from these institutions especially when market committees are constituted by public representatives. In this way, a link is established between the consumers and trading class because both circles have their representation in the market committees.

6.4.3.5) Market Committee Funds

Market committees are self-financing units. Their income is derived principally from the levying of a license fee and market fee on the market functionaries. The growers of agricultural produce are not liable to pay any fee.

Market committees charge a market fee at prescribed rates which vary from Rs. 0.50 to Rs. 1 per 100 kg of the agricultural produce bought and sold. No fee is levied if the delivery is not actually made. Fee is also not applicable in case of any subsequent transaction of sale and purchase of an agricultural produce developed after manufacturing or processing within the same notified area. In case the buyer and seller are both licensees, the fee is paid by them in equal share otherwise it is paid in full by whoever is a licensee under Section 6 of the ordinance.

The market committees also recover annual license fee i.e. Rs. 50 from retailers, Rs. 200 from commission agents and Rs. 500 from processing units. Income from all these sources is deposited in a fund called "Market Fund". The market committees incur expenditure to discharge their functions out of these funds. In addition every market committee has to deposit not less than 10 percent of its income in a fund maintained and operated by the government for the salary of officers appointed to ensure efficient working of the market committees or for meeting expenditure to be incurred on carrying

out the purchases common to or for the overall interest of the market committees of the province. The market committees started contributing this amount from the financial year 1980-81.

6.4.3.6) Measures for Improvement in the Functioning of Market Committees

The market committees are required not only to supervise auctions and collect information about prices but also to disseminate the same to stakeholder. In principle the idea of market committees is quite sound. However, there are number of shortcomings in practice. There is an imperative need to collect and disseminate price information on scientific lines by issuing weighted prices on daily basis in printed form using the quantities sold. The National Commission on Agricultural, 1988 has suggested following measures to improve the working of market committees and regulated markets in Pakistan.

1. Congestion is experienced at certain places due to increased production, urbanisation, industrialisation and development of transport and communication. There is a need for a survey of potential market areas and for the establishment of new regulated markets.
2. The controlling authority should exercise due vigilance in checking the credentials of the nominees for memberships to ensure genuine representation of the growers' interest on the market committees.
3. A system for showing correct arrivals of farm produce in the market by the staff should be devised. This would help in checking the evasion of payment of market fees.
4. The market fee is charged on the basis of weights of the produce handled. This should instead be on the value of the transactions.
5. Since these are self-generating financial institutions involving receipts and expenditure of large sums of money, a proper minimum educational qualification should be prescribed for chairman, vice chairman and other members of the market committees.
6. Training facilities should be arranged for the staff of the market committees.
7. All markets which are being controlled by the municipal bodies should be transferred to the market committees.
8. Market committees should check malpractices and prosecute defaulters in courts. Although market committees resort to courts for prosecution of defaulters but due to inordinate delay in the decisions, the committees lose their impact. For the speedy disposal of such cases the officials of the Directorate of Economics and Marketing should be given magisterial powers.

CHAPTER 7

AGRICULTURAL PRICES

In developing countries, prices of agricultural commodities are very important both economically and politically. Majority of population is directly or indirectly linked with agricultural sector and hence agricultural prices have great impact on farm incomes, consumer welfare, domestic production, export earnings and resources allocation. Minor changes in the prices of agricultural commodities are likely to have severe welfare implications for the producers and consumers and may become a source of social unrest in the developing countries.

In an economic system, farm output prices perform three main functions which include;

1. allocation of farm resources,
2. distribution of farm incomes
3. Decisions relating to investment and capital formation in agriculture.

These functions are generally described as *signals*, *incentives*, and *instruments* for the allocation of resources and incomes.

7.1) CHARACTERISTICS OF AGRICULTURAL PRICES

The prices of agricultural commodities do not remain stable for a longer period of time and experience wide fluctuations on account of their following distinguishing characteristics.

A) HIGH VOLATILITY

The volatility of agricultural prices is much higher than the prices of most non-farm goods and services. The just outbreak of news of bird flu leads to a drastic decline in the chicken meat and egg prices.

B) BIOLOGICAL AND CYCLICAL PRODUCTION PROCESS

Agricultural prices tend to be instable mainly due to biological nature and cyclical production processes of agricultural commodities. Agricultural production may exceed or fall short of planned production by significant margin. Timely rains may enhance yields considerably that in otherwise situation may be drastically reduced. The attack of insects may affect production both quantitatively and qualitatively and hence can change prices.

C) SUBSTANTIAL TIME LAGS

Agricultural production is mostly skewed in certain part of the year. Farmers cannot promptly respond to price changes by increasing or decreasing their production. Considerable time lag exists between production planning and time of actual output due to which price fluctuations persists for longer period of time. Farmer's production planning heavily depends on last year price. Previous year higher price may entice him to cultivate more of that crop next year and lower price may end up in lower production. In Pakistan, the prices of wheat, sugarcane, rice and maize often fluctuate due to this reason.

D) INELASTIC DEMAND

Food is basic necessity and hence consumer demand is relatively insensitive to price changes. Due to inelastic demand of most of agricultural commodities, any shortfall in the supply of food items results in sharp rise in their prices.

E) INTERNATIONAL INFLUENCES

Domestic prices are also influenced by the changes in prices of agricultural commodities at international level. A rise in the price of wheat at international level may increase the domestic price through price transmission mechanism.

7.2) PRICE DISCOVERY

The prices are mainly determined by the interaction of demand and supply forces that varies in their influence according to various market structures and length of time periods. The process through which buyers and seller arrive at mutually acceptable prices is termed as “price discovery”. In organised agricultural markets, prices are mostly discovered through bidding process during auctions. However, some producer organisations negotiate with some public authorities in order to arrive at the price acceptable to them.

Price discovery in case of farm products may take place under various types of pricing arrangements or mechanisms” depending upon market structure varying from pure competition to absolute monopoly. In agricultural markets, as described by Tomek and Robinson (1990), prices mostly take place under the following pricing arrangements.

1. Informal negotiation between individuals,
2. Trading on organised exchanges or auctions, including both specific market places and electronic exchanges or auctions,
3. Pricing via formulas,
4. Bargaining conducted by producer associations or cooperatives, and
5. Administrative decisions, both in the private and public sectors.

7.3) AGRICULTURAL PRICE POLICY

Policy is defined as the course of action or inaction pursued by the governments relating to some specific sector of the economy. It mainly comprises of desired goals and action plans of the government to seek policy objectives.

Agricultural output pricing policy is designed to influence the level and stability of prices received by the farmers for farm outputs. The main objectives of agricultural price policy are to;

1. Enhance aggregate agricultural output across all crops and enterprises;
2. Raise the output of individual crops or outputs;
3. Maintain reasonable agricultural prices to reduce uncertainty for farmers to ensure stable food prices for consumers and stability in the macroeconomic price movements;
4. Stabilise farm incomes as distinct from price stability, since stable prices may or may not stabilise incomes depending on the cause of price fluctuations and the degree of market engagements of different types of farm household;
5. Achieve food self-sufficiency;
6. Generate government tax revenue either from export taxes or import taxes;
7. Add or save foreign exchange and thus to contribute to the balance of payments.

7.3.1) TYPES OF PRICE POLICY

Agricultural prices experience wide fluctuations across the globe. Price stabilisation is an economic and political desire of governments both in developed and developing countries. To achieve this objective governments try to intervene or control agricultural input and output prices. Generally, following types of policies pertaining to agricultural prices are available as strategic options.

a) Free Market Prices

These types of prices are determined by the market and shaped by the demand and supply forces. Government does not intervene and leave the market to discover the prices. Free market prices are advantageous to the farmers when demand surpasses the supply and push the prices up. Farmers incur loss due to low prices when they experience bumper crops and supply exceeds the demand. International market price also affects the prices of domestic and exportable products.

b) Support Prices

The minimum guaranteed prices to the farmers are called support prices. Governments announce the support prices to assure farmer of minimum price that he will receive for his produce. Producers are not bound to sell to government at the announced support price when market prices tend to be higher. However, if market prices tend to fall below the support price, farmers have an option to sell to the government at the announced support price. The prices at which governments purchase/procure the produce from the farmers are called procurement prices.

c) Administered Prices

The prices which governments administer and fix by intervening in markets are termed administered prices. These prices are obligatory to follow both for producers and consumers. These prices are generally lower than market prices. Government may administer the prices to ensure the welfare of certain sections of the society that may be farmers, consumers and traders.

7.3.2) DETERMINATION OF SUPPORT PRICES

There are various approaches available in the literature to determine support prices of agricultural commodities. Some of these approaches have been described below.

a) Cost of Production

This approach is aimed at guaranteeing a fair return of a certain crop to the farmers. Under this approach, total input cost of producing a crop is estimated and certain fair return is added to arrive at support price. However, there are certain problems associated with this approach. Calculation of opportunity cost of many inputs like labour and management and land rent is difficult to determine. The variations in technology and regional physical resource endowments also create problems in the choice of samples for calculating cost. Moreover, with rise in prices, the cost of production has to be periodically adjusted.

b) Parity Price

The parity price approach is used in order to correct imbalances in terms of trade between agricultural and other sectors. The 'parity price' is an output price that will yield income which will buy the same quantity of other products as it would in some specified

based period. Thus a balance can be maintained between the prices of commodities sold by the farmers and the commodities which they purchase. It can be calculated through a comparative index of agricultural and non-agricultural prices. In this approach, the effects of inflation which keep upsetting the income and expenditure structure of the farm household are accounted for. Although it is free from the usual objections of lack of scientific rigour and bias in favour of transfer of resources to a particular category of landholding, the choice of the base year for working out the parity ratio may introduce some distortion in the income distribution pattern of different tenure and size farm categories.

c) Open Market Prices

An assessment of the open market price, as determined by the supply-demand interaction, is essential and should be kept in mind while making decisions regarding the support price. It serves as a retraining factor since too much deviation from the open market price may make the price support programme unrealistic and ineffective. It is, however, difficult to make an accurate assessment of the open market price since the markets are highly imperfect, unstable and dominated mostly by a few buyers (Arhtias/sugar mills). In fact, an agricultural price policy itself represents an attempt to escape from the uncertainties and distortions of the so-called open market.

d) Inter Crop Parity Index

The inter-crop parity index reflects the relative positions of various agricultural products and the rates at which these are exchanged. Their main utility lies in monitoring the use of scarce resources for competing crops and calculating optimal resource allocation.

e) World Price

World prices are relevant in the case of export commodities or those commodities which are partly supplied from abroad. But world markets are not equally competitive for all commodities. The use of world price is limited due to the fact that certain products and some of the inputs for example, pesticides and fertilisers may have relevance to world market conditions while major elements in the cost structure (for example, canal water and labour) may have no linkage with the world prices.

7.4) PRICE MOVEMENTS

Commodity prices traced over time show regular movements and on occasions even appear to be rhythmic. The rhythmicity of less than a year is usually associated with seasonal changes in demand or supply. For example, ice cream sales are usually very high in summer months where it is very lower in winter months. Contrary to ice cream, prices and consumption of eggs decline during summer and increase during winter in Pakistan. During the summer, the demand for ice cream increases because ice cream is cold and considered as a “cooling off food”. Eggs on the other hand, are considered in the Pakistan culture as a “heat food” and demand for eggs increases during the winter and declines during the summer.

Supplies and prices of grain follow a regular pattern. For example, the wheat harvest usually occurs in the summer at which time wheat prices are low. Unlike wheat, most of the maize harvest is in the winter and prices of maize tend to be low during that period.

The regular movement of prices from season to season is called price seasonally and is depicted using seasonal indexes. The seasonal movement is less than a year and

contrasts with commodity price cycles that are a rhythm over several years, and a trend that is a continuous movement of price in the same direction over a five, ten or twenty years period.

Cycles often occur in commodity prices because the production response to higher or lower prices occurs in the production period. For example, producers of wheat in Pakistan cannot respond to higher prices of wheat until the following winter when wheat is produced. If oxen or buffalo prices increase, the producers of oxen and buffalo cannot respond until four or five years later. The gestation period for cattle is nine months and for buffalo even longer. After birth it takes at least three years to raise and train the animals for work. So even though the prices of work oxen and buffalo continue rising, nothing can be done to add new animals to the supplies of work animals until beef and buffalo cows have been bred and give birth to calves. After that, the animals must mature, be tamed and trained for work.

Once new work animals begin coming to market, the upward price rise will at some point be abated. The downturn in price will signal a need for reduced production of work animals but the pipeline of new supplies cannot be turned off until the young animals have matured. As a result, prices continue declining until reduced supplies of work animals once again cause prices to rise, which starts the price and production cycle over again. Cycles in livestock production and prices often take as long as 14 to 20 years to complete.

Seasonal and cyclical price movements may occur simultaneously with trend movements. For example, price may rise each year due to general inflation. In Pakistan, most commodity prices have risen each year as inflation has ensued and as economic development has continued. Also, the total consumption and production of most commodities have, on the average, risen because population continues to expand and new lands and water are being brought into agricultural production.

7.4.1) MEASURES OF REGULAR PRICE MOVEMENTS

For the purpose of anticipating and explaining market prices, it is necessary to depict the regular or systematic price movements by constructing seasonal indexes, cycles and trends. Seasonal indexes are developed by calculating each monthly price as a percentage of the mean price for the year. After that the mean of the monthly percentage for each month is taken for the period of years that the seasonal index covers. The trend is calculated using statistical procedures to estimate a straight line or a curve that compounds annually that runs through the annual prices for say ten or twenty years. The cycle is usually graphed as the annual deviations of prices from the trend or as a moving average of prices over, say, a three year period.

Series of successive observations of the same phenomenon over a period of time are called time series. It is customary to consider time series variations as being the result of four well-defined influences: the secular trend, the seasonal variation, the cyclical fluctuation, and the random or erratic variation.

a) Secular Trends

The secular trend is that characteristics of a time series which extends consistently throughout the entire period of time under consideration. The secular trend is the basic long-term tendency of a particular activity to grow or to decline. It indicates the presence of factors that persist for considerable duration such as population changes,

technological improvements, price level fluctuations, or various conditions that are peculiar to individual industries or establishments.

b) Seasonal Variations

Seasonal variations are variations that occur in regular sequence at specific intervals of time. Apparently, the word “seasonal” seems to imply particular seasons of the year but it refers to any kind of periodic variation with repeating cycles of relatively short duration. Seasonal variations are the result of such seasonal factors as climatic conditions, holidays, business operations, or human habits. Prices of perishable agricultural commodities show pronounced seasonal variation, being high early in the season, then declining sharply as supply is increased at the peak of the season, and finally rising again as supply is diminished.

c) Cyclical Fluctuations

Cyclical fluctuations exhibit long term price movements and are usually consistent in recurring rises and declines of trend lines. Cyclical fluctuations in time series of business activities are usually called business cycles. Although markedly less periodic than seasonal variations, cyclical fluctuations are characterised by considerable regularity.

d) Random Variations

Random or erratic variations are variations which occur in a completely unpredictable fashion. Random variations are due to unforeseeable causes and may be the result of wars, strikes, floods, fires, earthquakes, unusual weather, or some political events. More simply, random or erratic variations in a time series are variations which cannot be accounted for by the secular trend, seasonal variations, or cyclical fluctuations.

7.5) AGRICULTURAL PRICE POLICY IN PAKISTAN

In Pakistan, pricing policy is at present being used as an important instrument for achieving increase in agricultural production. An elaborate agricultural pricing system has evolved over time in Pakistan. In the past, the use of support prices for agricultural prices commodities has been a major instrument of pricing policy. Government started using this tool since 1950s and at that time only food grains (i.e. wheat and rice) were the main focus of this program. Main purposes of support prices were to provide incentives to growers for increasing production and ensure availability of food grains for domestic consumption. Besides announcing support price, government also used to procure these commodities but the scope of this program was very limited to bring any significant improvement for producers and consumers.

Support prices are announced to ensure a minimum guaranteed price to the growers in the harvest season when market prices have the tendency to fall due to excessive supplies. The growers have an option to sell their produce at support price announced by the government. In case market prices rule higher, farmers are under no obligation to sell their produce on announced support price at government procurement centres. The support prices were previously fixed for wheat, cotton, rice, sugarcane, gram, potato, onion and non-traditional oilseed crops i.e. sunflower, soybean, safflower, and canola but recently it has been decided to limit the support price programme to wheat, rice, sugarcane and cotton. Only in case of government regularly intervene in the market by procuring wheat directly from the farmers at the announced support price. For rice, sugarcane and cotton, support price is announced but ensured only in case of severe crises. Agricultural Policy Institute (API) previously named Agricultural Prices

Commission (APCOM) established in 1981 determines agriculture prices of selected commodities for the sake of announcement of support prices.

The price policy, as in vogue, in Pakistan has been primarily aimed at reducing price uncertainty for growers. In case of wheat, the major thrust of the price policy has been to maintain consumer prices at a reasonable level as the Government, in addition to announcing support price also fixes issue price, following a policy of pan territorial and uniform issue price. Moreover wheat imports have been by and large a government monopoly. The voluntary sale by the growers has often in practice been violated either by restricting commodity movements, and/or through compulsory procurement. In case of export crops, resource mobilisation through monopoly exports and export taxes also been the main objective of agricultural pricing policy.

The commodity coverage of support price programme, until recently, encompassing wheat, cotton, rice, sugarcane, oilseeds, potatoes, onions, gram and tobacco extended to over 70 per cent of the annual cropped area. Implementation of support price covering such a wide area had taxed the administrative capacity and the limited financial resources. This lately became quite apparent as in a number of cases market prices fell below the level fixed by the Government but either no or inadequate arrangements were made for market intervention. A number of organisations such as Rice Export Corporation, Cotton Export Corporation, Agricultural Marketing & Storage Limited etc., have been wound up. The provisions of Agreement on Agriculture (AOA) of World Trade Organisation (WTO) and pressure have also not been favourable to the government intervention. Under such circumstances, it may be advisable to limit the scope of the programme to those commodities which are crucial (pace setters) from food security point of view.

The essence of liberalisation reforms is to increase competition and improve competitiveness in the economy. The government policy of announcing the support prices of important agricultural commodities in such situations not only provides a floor to the market but also strengthens the bargaining position of the growers by providing a reference point. It is not meant to replace the markets but to correct the market failures in situations of market gluts in the harvesting seasons. The support price programme acts as a bulwark against the collusion of processors and traders and tries to improve the functioning of the marketing systems

No system comes without cost. But the benefits of the system in terms of increased production, higher productivity, and food security needs to be carefully weighed against the likely costs incurred in the process. At the same time, role of pricing policy in poverty alleviation via inducing higher growth rate in the agriculture sector through technological changes needs to be recognised. The benefits of the positive pricing policy in agriculture sector in terms of productivity, equity and contribution to the causes of food security and poverty alleviation, if properly quantified in a country like Pakistan, should considerably outweigh the costs attributed to the programme. Effective implementation of price policy would also help reduce the dependence of small and marginal farmers on high cost non-institutional credit.

CHAPTER 8

AGRICULTURAL WHOLESALE MARKETS

Food marketing bears an enormous impact on welfare of the poorer sections of the society particularly in less developed countries. The lower income families spend major part of their income on food items. These food items reach to them through a complex marketing chain comprising of several market actors who perform various market functions like production, processing, sorting, grading, wholesaling and retailing. Wholesale markets are very vital constituent of the food marketing system as it provides well organised place where farmers can meet directly or indirectly to a plurality of buyers.

8.1) WHOLESALE MARKETS: IMPORTANCE AND ROLE

Wholesale market is an institution or mechanism that establishes linkages between sellers and buyers for enabling sellers (mostly traders and sometimes farmers) to sell and buyers (mostly retailers and sometimes consumers) to purchase agricultural products in bulk.

Wholesale markets develop gradually and pass through several stages. Initially, these operate as general markets dealing in several commodities. In the next stage, specialised markets trading in a narrow range of produce are developed. Finally, wholesale markets transact only in graded produce. The recent emergence of mega stores has given rise to direct links with producers through contractual arrangement.

Wholesale markets play a crucial role in vertical coordination of food marketing due to spatial separation of food production and consumption. Agricultural commodities are produced in rural and peri-urban areas while consumption takes place mostly in urban areas. The agriculture marketing system overcomes this separation by directing the flow of produce from surplus areas to those in need of food. The wholesale markets act as a hub in agricultural marketing system where scattered agricultural produce from different villages is converged for subsequent divergence to the consumers.

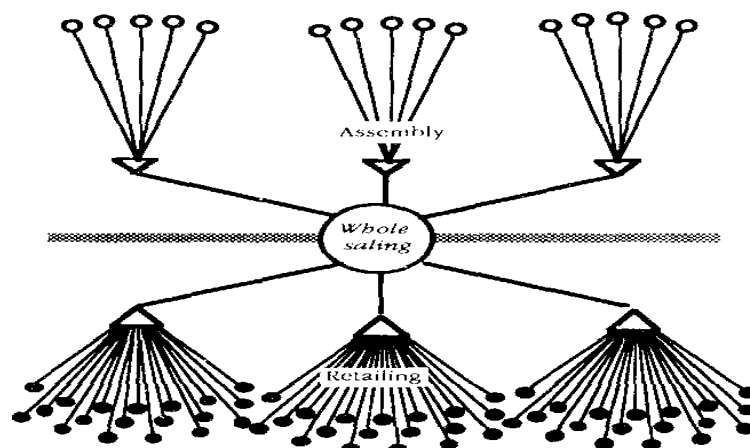


Figure 8.1: The operation of food marketing system (Adopted from FAO, 1991)

Wholesale markets not only help farmers in selling their surplus produce to earn profit but also encourage farmers to develop contractual relations with traders, thereby, integrate them into the marketing chain. These markets greatly facilitate the retailers in finding out the sources of supply for their businesses. In the absence of wholesale markets, retailer would have to directly approach individual farmers for securing their supplies and this might involve several small transactions. Due to assembly markets in rural areas and wholesale markets in urban areas, multiplicity of transactions is greatly reduced that results in simplified marketing process. The retailer is also relieved of many marketing functions like reassembly, cleaning, sorting and transportation and may concentrate on serving his customers.

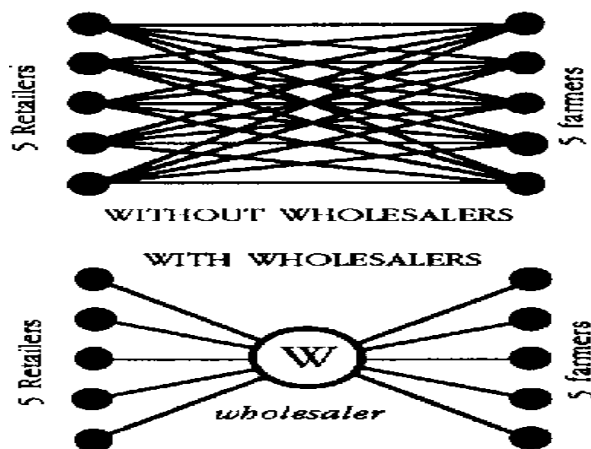


Figure 8.2: The impact of wholesaling (Adopted form FAO, 1991)

Wholesale markets provide following facilities to the stakeholders in agricultural marketing;

1. Provide an environment where supply and demand can meet in some balance to determine wholesale prices
2. Cater for the needs of all persons comprising the various links in the marketing chain from production to consumption particularly the needs of producers, transporters, wholesalers, retailers and consumers by;
 - a) making available adequate market space for various types of sellers and retailers
 - b) appreciating that wholesalers have an important coordinating function
 - c) encouraging proper packaging
 - d) providing market information
3. Have market management staff with appropriate skills, training and knowledge so that the market can be well managed;
4. Promote and assist the provision of education and training programmes for producers.
5. Spread its influence to the objective creation and maintenance of progress, efficiency and effectiveness of all links in the marketing chain.

8.1.1) FUNCTIONS OF WHOLESALER MARKETS

Wholesale markets perform following main functions;

a) Price Formation

The main function of wholesale market is to accomplish exchange function between buyers and sellers of agricultural produce. In these markets, price formation takes place due to convergence of supply and demand on a single price for a commodity.

b) Provision of Physical Functions

The assembler or wholesaler performs many physical functions like storage, warehousing and transportation. These markets also lower costs of performing various physical functions like transportation and storage as economies of scale is achieved in handling bulk produce from farm to market. In this way, these markets create time, place and form utility in the agricultural marketing system.

c) Employment Generation

Wholesale markets are a source of employment to many people. In wholesale markets, a large number of people earn their livelihood by rendering various services like merchants (buying and selling produce), brokers/commission agents (acting for the producers and buyers) and export/import agents (dealing only in foreign trade). Besides these, many other labourers are employed in handling of agricultural produce.



Picture 8.1: Auctioning of bananas in a wholesale market in Pakistan

8.1.2) TYPES OF WHOLESALER MARKETS

The wholesale markets are broadly classified into following two types.

a) Secondary Wholesale Markets

These secondary wholesale markets are located in district or small cities and have local catchment areas. These are in permanent operation instead of seasonal in nature. Rural assembly markets from production areas supply agricultural produce to secondary wholesale markets. Specialised market functionaries like commission agents and brokers are present in these markets and normally larger volume of agricultural produce is traded in these markets.

b) Terminal Wholesale Markets

These markets are based in major metropolitan areas and are with regional or national catchment areas. Agricultural produce is passed on to ultimate consumers through wholesalers and retailers. Export of agricultural commodities may also take place in these markets. Market intermediaries are relatively more organised and well established and for forward trading, commodity exchange may exist. Terminal markets located at major sea and air ports deal exclusively with import and export of produce.

8.2) DESIRABLE CHARACTERISTICS OF WHOLESALE MARKETS

Ideally, an agricultural wholesale market must be fully equipped with requisite infrastructure so that exchange process between buyers and sellers is accomplished efficiently and effectively. Following are some of the features by which an ideal market can be conceptualised;

1. Efficiently handling of input and output of large volumes of produce
2. Provide facilities for efficient sale of produce.
3. Produce offered for sale is properly cleaned
4. Different qualities of produce are separately sold
5. Commodities sold are graded before display
6. Produce is traded strictly by standard weights and packages
7. Market information particularly relating to prices is available to all
8. Adequate storage facilities are available.
9. Roads are wide and clean
10. Efficient system of sanitation and cleaning is in place.

In fact, wholesale markets in less developed countries lack most of these features. Therefore, main focus of any market development or reform programme should be on ensuring availability of these factors which in turn improve trade conditions for producers and consumers.

8.3) DEVELOPMENT OF NEW WHOLESALE MARKETS

Rapid urbanisation and population surge exerts pressure on public authorities to set up new markets. The new markets must be aimed at satisfying the needs, expectations and aspirations of all stakeholders like producers, consumers, transporters, traders, retailers, relevant consultants and government departments. New wholesale market development is a difficult task. Various design related and other problems like unsuitable location and market layout are encountered in this process.

In the following, various factors that are considered in the establishment of new markets have been described.

8.3.1) BASIC PURPOSE OF NEW MARKET

In deciding about the establishment of new wholesale market, it is very important to understand and explore the basic purpose of the new market. There may be several purposes for establishing or expanding the existing markets. Presumably, existing arrangements have been found inadequate due to increased population. There may be certain other problems like marketing and/or distribution difficulties, inappropriate size and design of buildings, traffic difficulties and transport problems, inadequate storage facilities at market level or lack of capacity of the existing market or arrangements to operate in an economic and efficient way.

This requires to identify casual factors and to collect reliable information as to why the new market is necessary. Information can be obtained from relevant government departments particularly the agriculture department and different stakeholders from production through to consumption. This information can be obtained from those who support the establishment of new market. An evaluation of collected information will clarify the basic purpose of the proposed new market.

8.3.2) SCOPE OF PROPOSED NEW MARKET

The scope of a wholesale market implies the magnitude of market functions and activities that new market intends to accomplish. Markets must be tailor made according to their intended scope. A huge market is not needed for a small rural village and similarly a small market will be illogical to build for a large city. The decision makers can determine the scope of the new markets by finding the answers of following questions.

- a) Is the market to serve a large city with or without support of other smaller wholesale markets in the city, or in other provinces or locations of the country?
- b) Is the market to serve needs of the whole country?
- c) Is the market to have involvement in inter-provincial or international trade?
- d) Is the market to receive produce directly or indirectly by road, rail, air or water?

8.3.3) SIZE OF PROPOSED NEW MARKET AND BUILDING

The purpose and scope of proposed new markets helps in determining the size of market site and of the building to be built for receipt, storage, sale, ripening (for some fruits) and cool storage of farm produce. Space requirements vary from market to market and from area to area. In calculating the size of proposed market the main things which are considered include storage and warehousing facilities, auction, display, packaging and related activities, traffic generation and space requirements for vehicles. Additionally other commercial purposes as banks, cafes and retail outlets, accounts and law firms, petrol and vehicle service station, and cleaning facilities should also be considered. The size should be sufficient enough to meet current as well as future needs of population the proposed market intends to serve.

8.3.4) LOCATION OF THE PROPOSED NEW MARKET

The location of wholesale market is a key decision and is bound up with transportation and road network system. Ideally, a market should be located where it is accessible by various means of transportation i.e. (road, rail, air and water) and should never be in some remote inaccessible place. An unsuitable site can stop a new market from succeeding and deny the market the industry support it needs. Preferably, wholesale market should be located where it is accessible by both buyers and sellers. Such locations reduce the financial costs of transportation for both sellers and buyers, lower marketing margins, and ultimately decrease the costs to consumers.

8.3.5) MARKET LAYOUT AND DESIGN

The layout of market building should be designed in a way to provide all modern facilities to stakeholders. The building should provide sufficient capacious halls and places to avoid congestion where buyers and sellers interact for optimum price formation. It should have adequate arrangements for efficient handling, storage, grading and display of the produce. Market buildings should be built with the provision of extension to meet future needs. An unobstructed traffic movement plan along parking arrangement should be part

of layout of proposed market. The building design should have same floor and road levels for unobstructed use of simple hand carts and other produce handling facilities.

8.3.6) COSTS OF CONSTRUCTION, MAINTENANCE, OPERATION

In the establishment of wholesale markets, cost, of course, is often decisive factor but not so important as to stop the planning process. Efforts should be made to prepare a careful lowest possible cost plan especially plenty of money is not available to build a market as planned. In such circumstance, some parts of the work plan may be eliminated, changed or deferred. In the cost estimation, maintenance and operations costs should be given due considerations as these may influence some decisions in planning.

In selection of building types and materials a proper balance should be made between function and beauty. Market building may not be masterpieces of architectural beauty rather it should best serve its purpose of establishment. Efforts should be made to design building in such a way that it may be used for different purposes and so can increase their income earning capacity.

8.3.7) MARKET CLEANING AND DRAINAGE SYSTEM

Agricultural produce is mostly perishable in nature and generates a lot of waste material. Therefore, there should be well planned and efficient system for cleaning and drainage. Market cleaning can be very costly and inconvenient so planning should provide for cleaning procedures that will be low in cost but high in efficiency. Drainage system should be worked out with the local drainage and pollution control authorities. Vegetable matter deteriorates quickly. It can block drains and cause unpleasant smells. Drainage inspection pits and clearance points should be adequate in number and easy to access. The personal hygiene of market users is also very important along with pollution control. The support of local pollution control authorities should be sought in this regard. The market should have adequate public toilets and, if financially possible, market stores for selling should be equipped with toilets and hand basins.

8.3.8) VEHICLE AND PEDESTRIAN TRAFFIC

Markets are vehicle and pedestrian traffic generators and care should be taken to plan to cope with these problems. It is a good idea to have a "traffic impact study" prepared and then consult with the relevant traffic control authorities to ensure that every effort is made to reduce traffic impact inside and outside the market to the lowest possible level. If this is not done traffic authorities may impose all sorts of restrictions which, in turn, may interfere with market trading hours. An organised approach for traffic control and parking arrangement should be adopted for maximising market efficiency and reduction of congestion. This may be achieved by segregating pedestrian and hand-cart movement from heavy delivery vehicles.

8.3.9) LIGHT AND TEMPERATURE

Light and temperature affect humans as well as perishable products and designers of market buildings should be fully instructed about these matters. Adequate arrangements for temperature control and lights should be ensured.

8.4) AGRICULTURAL WHOLESALE MARKETS IN PAKISTAN

In Pakistan, wholesale markets of agricultural commodities play a pivotal role in establishing links. These markets are located at tehsil/town and district level and are mostly controlled and managed by provincial agricultural departments through market committees. Locally, these markets are termed 'mandies'. In each district, mostly separate wholesale markets exist for food grains, fruits and vegetables, livestock and other commodities. In these markets, relatively standardised model of transactions is followed with precisely defined roles for key market players in the supply chain and a largely uniform set of rules is followed with slight variations depending upon the nature of commodities traded and location.

8.4.1) TYPICAL WHOLESALE MARKET OPERATIONS AND FUNCTIONARIES

In the wholesale markets, traders and growers from the surrounding areas bring their produce for selling purposes. In wholesale markets, particularly in fruits and vegetables wholesale markets, agricultural produce is sold through auction to the wholesalers and retailers. The auction is arranged by the commission agents who have permanent shops in the markets. The products are placed in front of the commission shops in bags, crates or in loose form. The interested buyers assemble before the shop and take part in the bidding process. Mostly, open bidding method is followed in the auction process. However, sometimes under cover method is followed. The auctioning of fruits and vegetables take place early in the morning whereas food grains and other non-perishables are offered throughout the day for auction.



Picture 8.2: Activities in a Typical Fruit and Vegetable Wholesale Market in Pakistan

In wholesale markets of Pakistan, the following market functionaries operate and facilitate the marketing process.

a) Commission Agents (Arhtia)

Commission agents do not purchase the agricultural produce rather charge commission from the growers for usage of their facility and services in selling produce to the buyers. Having auctioned the goods, the Arhtia pays off the growers after deducting his commission. There are two types of Arhtia i.e. 'Kacha' and 'Pacca' Arhtia. Sometimes a

single firm performs the function of the both. The Kacha Arhtia is concerned with assembling while Pacca Arhtia plays a role in distributing the product.

b) Brokers

Brokers facilitate buyers and sellers of agricultural produce in bringing together and accomplish transactions. He charges a fixed fee for the services rendered. Generally, brokers assist the commission agents in arranging transactions.

c) Wholesalers (Beopari/Tajir/Pharia)

Wholesalers buy in lots through an auction arranged by the commission agents. The wholesalers then sell to individual retailers ranging from street vendors (Rehriwaala/Chabriwala) to shopkeepers in retail markets.

d) Weighmen (Tola)

In wholesale markets, weigh men are separate entity. These people perform the function of weighing as a profession.

(e) Labourers (Palledar, Rollas, Boriottas, Chrohas etc.)

Labourers play several other important functions in the wholesaler markets. These include

- i. Palledar is porter
- ii. Changhar who helps in handling and weighing of produce
- iii. Rolla who roughly dresses the produce as it is in the scale pan
- iv. Borriotta holds open the mouth of the bag during the weighing and packing
- v. Chroha fills the scale pan during the weighing
- vi. Sweepers, waterman and watchman and munshis are the employees of the commission agents

8.4.2) PROBLEMS OF WHOLESALE MARKETS

Wholesale markets have assumed critical importance in the development of modern food system in any country due to rapid commercialisation of agriculture, urbanisation and population pressure. However, in Pakistan wholesale markets are mostly inefficient in their functioning due to which both producers and consumers incur welfare losses. The problems generally associated with wholesale markets in the country are as under;

1. Many of the wholesale markets were built years ago and are now quite unable to cope efficiently with the present increased transactions between growers and buyers.
2. Wholesale markets are mostly unplanned, unorganised and devoid of basic infrastructural facilities like roads, storage, warehousing and civic amenities etc.
3. Serious traffic congestion is experienced in the wholesale markets due to large number of vehicles like lorries, cartloads, tractor trolleys and trucks. Insufficient space hinders the efficient movement of products in and out of the markets.
4. Display and auction plate forms are either lacking or improperly constructed to facilitate the exchange process.
5. Inadequate and improper packaging practices causing quantitative and qualitative food losses

6. Hygiene conditions particularly in case of fruits, vegetables and livestock are quite dismal due to absence of organised sanitation and drainage facilities.
7. Sometimes, these markets do not have proper boundary walls and well-designed entry and exit points.
8. Improper management and corruption is a common phenomenon that give rise to several malpractices in the markets
9. Parking areas and rest areas are totally missing that makes difficult for buyers and sellers to stay in the market for longer period of time.
10. Agricultural Marketing Information System (AMIS) is either missing or lacking in these markets that otherwise would greatly benefit the stakeholders in the markets.
11. Inadequate services and facilities for optimal grading, packing and storage of agricultural commodities being provided by market committees.
12. Traditionally, reinvestment into market infrastructure and operations is very little. Market Committees Funds are misspent and resultantly the markets have failed to meet the demands of the stakeholders.

8.4.3) SUGGESTIONS FOR IMPROVEMENTS OF THE WHOLESALE MARKETS

In Pakistan, wholesale markets provide an easy inlet into the market for the great majority of small farmers. Efficient wholesale markets play an important role in agricultural development of the country. Following measures may improve the functioning of these markets in the country,

1. New wholesale markets should be established in the areas where existing markets are inadequate to serve the needs of the population.
2. The decision regarding the location of wholesale markets should be based on participatory approach involving inputs from all stakeholders including farmers, consumers, transporters, retailers, traders, and wholesalers.
3. Wholesale markets should be linked with each other through AMIS and special arrangements should be made inside the markets to display information especially relating to prices for the benefit of all stakeholders.
4. A major part of funds generated by the market committees should be invested on the development of market infrastructure.
5. Following physical infrastructural facilities as suggested by National Commission on Agriculture, 1988 should be ensured in the wholesale markets in the country.
 - a) Provision of standard weighbridges and balances and arrangements to ensure correct weighing.
 - b) Provision of spacious display platforms for produce.
 - c) Provision of good quality packaging material at reasonable prices.
 - d) Provision of sufficient space for trading to take place without hindrances.
 - e) Provision of agricultural input outlets within the market premises
 - f) Arrangements for speedy cleaning of the market places and removal and disposal of waste material, particularly in case of fruits and vegetable markets.
 - g) Provision of adequate power and water supplies to the markets.
 - h) Construction of go-downs and covered storage places.

CHAPTER 9

COMMODITY MARKETING IN PAKISTAN

Agricultural commodities include a wide range of raw and processed products which are produced by agricultural enterprises scattered throughout the country. Pakistan is blessed with agro-climatic conditions suitable for the production of many types of farm and horticultural crops and rearing of animals. Commodity marketing is mostly carried out by the private sector that bridges form, time, place gaps between producers and consumers by rendering useful marketing services to them. Government mostly provides infrastructural facilities to stakeholder for the smooth functioning of the commodity markets. However, in order to ensure food security, government intervention is quite sizable in case of some of the commodities particularly food grains.

Typically, an agricultural commodity in Pakistan in order to reach to ultimate consumer has to pass through several market intermediaries like village dealers, commission agents, wholesalers, processors, and retailers. Nonetheless, their type and presence in the marketing channel vary commodity wise. This chapter explains the marketing system of various agricultural commodities in Pakistan.

9.1) WHEAT MARKETING

Wheat is an important food grain crop of Pakistan. Its grains are used for human consumption. Its bhusa is an important dry fodder for animals. It is also used for the manufacture of various products such as maida, sugi, bran and flour.

Being the main food grain and staple food in Pakistan, it assumes a pivotal position in agricultural policies. In 2008-09, the contribution of wheat to value added in agricultural was 13.7 percent whereas it contributed percent to GDP. Per capita availability of wheat in Pakistan is 113.42 kgs / annum. In the production of wheat, Pakistan is almost self-sufficient and occasionally exports surplus wheat and imports when domestic production falls short of total demand.

Table 9.1: Production and Availability of Wheat in Pakistan (000 tonnes)

Sr. No.	Production and Availability	2005-06	2006-07	2007-08
1.	Production	21612	21277	23295
2.	Deduction for seed, feed and wastage @ of 10%	2161	2128	2330
3.	Import	815	133	1700
4.	Export	-	518	500
5.	Government procurement	4515	4422	5000
6.	Off-take from Govt. stocks	4000	5000	4000
7.	Available with private sector	14465	13751	15465
8.	Net availability (6+7)	18465	18751	19445
9.	Population (million)	154.00	156.77	160.40
10.	Per capita availability(kgs/annum)	119.9	119.61	121.35

Source: Government of Pakistan. 2008. *Agricultural Statistics of Pakistan 2007-08*. Islamabad. Ministry of Food and Agriculture (Economic Wing), Islamabad.

In Pakistan, wheat marketing activity is carried out both by the public and private sector. Government intervenes in wheat market by establishing procurement and release prices and subsequent storage, transportation and distribution of wheat. For this purpose Federal and Provincial governments provide heavy subsidy. The government announces support price of wheat and ensure its implementation by procuring wheat directly from farmers through Pakistan Agricultural Storage and Services Corporation (PASSCO) and Provincial Food Departments.

Besides various government departments other market actors in the wheat market are farmers, private traders (village dealers, commission agents, wholesalers, retailers and outside buyers), private millers and rural and urban consumers of wheat and wheat products. Wheat farmers sell their surplus wheat to local grain traders (Beoparies), or commission agents (Arhtias) or local procurement centres established by the provincial food departments and PASSCO. Local grain traders supply wheat to wholesale markets or sell it to the procurement centres of the government. Flour mills may purchase directly from farmers through their agents or from commission agents at local grain markets. The provincial food departments also supply wheat to flour mills at the subsidised fixed issue price. Flour mills after milling wheat grains into flour supply it to food industry for further processing and retailers so as to reach to ultimate consumers. According to a report of Govt. of Punjab the producer share in the wheat sale price varies from 90 to 95 percent.

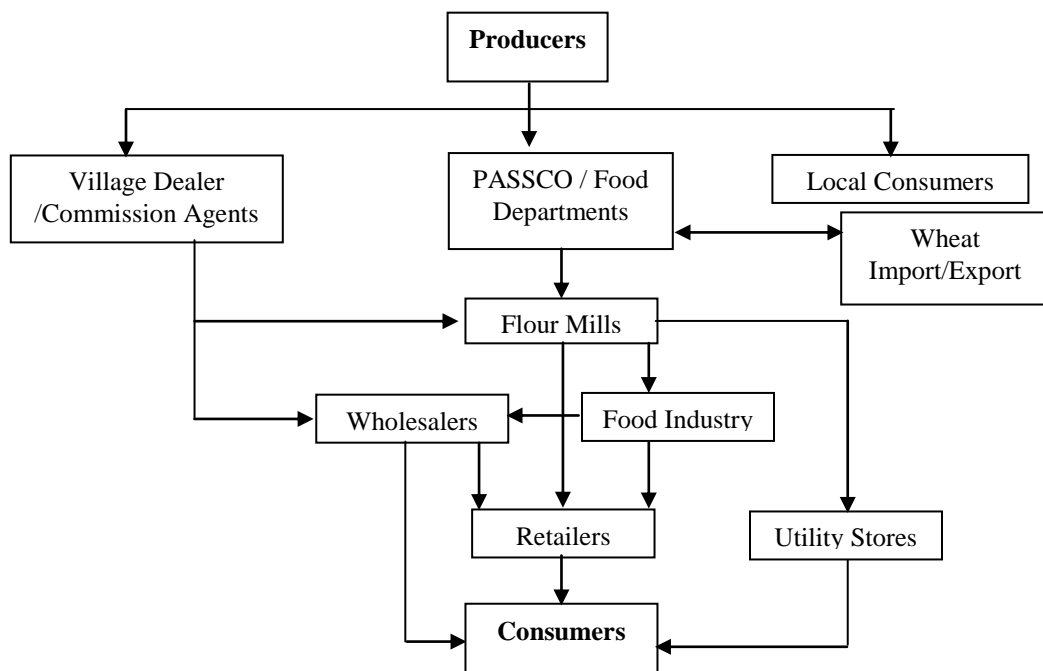


Figure 9.1: Wheat marketing channel in Pakistan

9.2) RICE MARKETING

Rice is highly valued cash crop and a major export item of Pakistan. Rice is used mainly for human consumption and is one of the starchy foods of the world. It's grain is an excellent poultry feed. Its husk is fed to poultry and straw is used as packing material and fodder for animals.

In Pakistan, rice is second staple food and contributes significantly to food and foreign exchange requirements of the country. Rice industry provides employment and is a source of income for a large number of rural people. Pakistan grows sizeable quantity of high quality rice which is not only sufficient enough to meet domestic demand but also exported to other countries. Pakistani Basmati rice is known globally for its aroma and superior quality. In 2008-09, rice accounted for 5.9 percent of value added in agriculture and 1.3 percent in GDP. The per capita availability of rice in Pakistan in 2007-08 was 13.38 kgs per annum.

Marketing channels for rice differ across the regions in Pakistan. Usually, in marketing large commercial rice miller seem to be the dominant actor. In Pakistan rice may pass through two or three hands before being milled. Agent gets finance from rice millers and buys on their behalf for a commission. In turn, agents finance local buyers who assemble commercial quantities for the agents. Farmers may sell directly to mills and mills may make contract milling on behalf of farmers, who are then responsible for marketing their own rice. Rice mills sell its surplus to the deficit area or may sell to a large wholesaler who, in turn, will sell to smaller wholesalers from whom retailers make their purchases. Consumer is then benefited in the end.

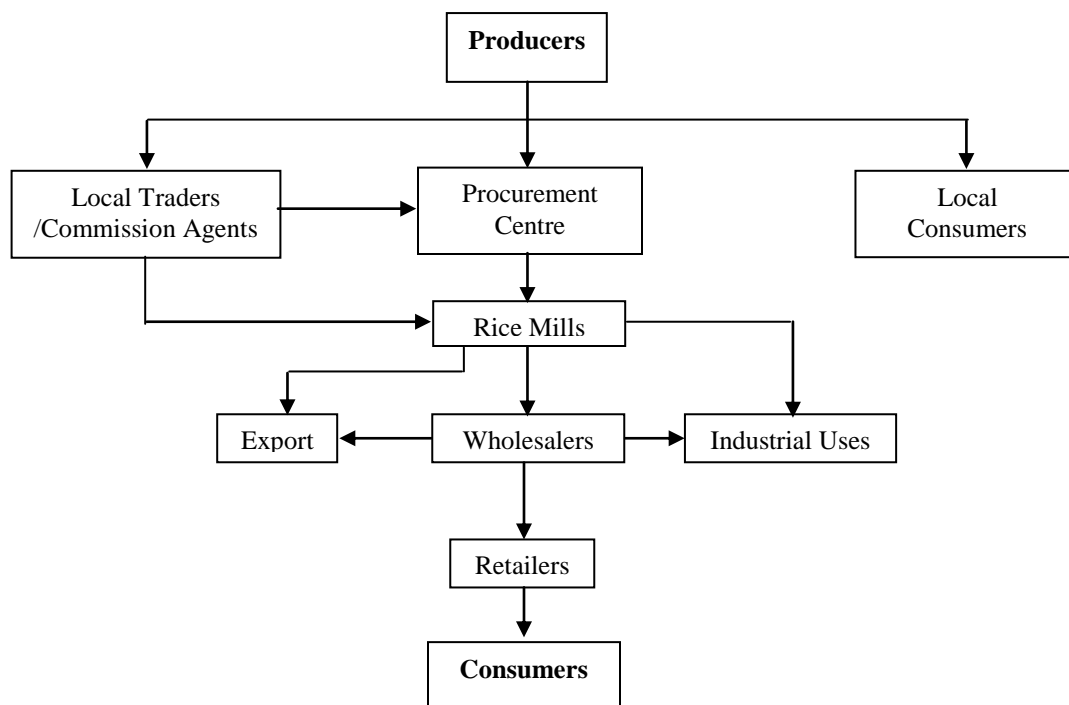


Figure 9.2: Rice marketing channel in Pakistan

Table 9.2: Production and Availability of Rice in Pakistan (000 tonnes)

Sr. No.	Production and Availability	2005-06	2006-07	2007-08
1.	Local production	5547	5438	5561
2.	Deduction for seed & wastage @ 6%	333	326	334
3.	Procurement by the Govt.	-	-	-
4.	Exports	2891	3089	3129
5.	Net availability	2323	2023	2098
6.	Per capita availability (Kgs/annum)	15.08	12.90	13.38

Source: Government of Pakistan. 2008. *Agricultural Statistics of Pakistan 2007-08*. Islamabad. Ministry of Food and Agriculture (Economic Wing), Islamabad.

9.3) COTTON MARKETING

Cotton is a major non-food cash crop and a leading source of foreign exchange earnings in Pakistan. It contributed 7.3 percent of the value added in agriculture and about 1.6 percent to GDP. The share of cotton and cotton based textile products in the total export earnings of the Pakistan is more than 60 percent. Cottonseed is used for extraction of edible oil and its cake is used for feeding livestock.

In the marketing chain of cotton growers, village dealers, commission agents and cotton ginners are the main actors. Cotton growers sell their produce to village dealers and commission agent who sell it to the cotton ginners. Large farmers usually sell their produce to the cotton ginners directly. Cotton ginning factories process cotton into cotton lint and cotton seed. These factories are operating throughout the cotton production areas.

Cotton ginners sell lint directly or through brokers to spinners located in large urban areas where mostly textile and allied industry is located. Exporters also purchase cotton lint from these ginners. Later on through further processing garments and various textile products are prepared for domestic consumption and export purposes.

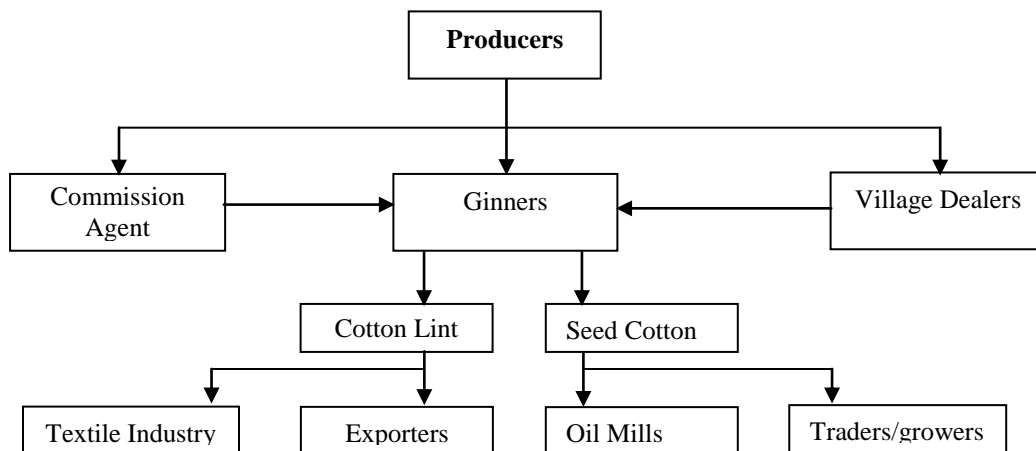


Figure 9.3: Cotton marketing channel in Pakistan

Table 9.3: Production of Cotton in Pakistan ('000' bales)

Year	Production
2005-06	13018.9
2006-07	12856.2
2007-08	11655.1

Source: Government of Pakistan. 2008. *Agricultural Statistics of Pakistan 2007-08*. Islamabad. Ministry of Food and Agriculture (Economic Wing), Islamabad.

9.4) SUGARCANE MARKETING

Sugarcane is an important sugar and cash crop of Pakistan. It is a main source of input to sugar industry and accounts 3.4 percent of value added of agriculture and 3.4 percent of GDP. Sugar industry is the second largest industry in the country after textiles. It has immense economic implications for our industrial sector. It generates income and employment opportunities for a large number people engaged in sugar industry particularly in rural areas.

Although major part of sugarcane is supplied to the sugar mills but at farms it is also processed into gur, shaker and desi sugar by traditional methods. Major bye products include baggase used for the manufacture of paper and feeding stuffs; molasses used in the manufacture of alcohol and cattle feed; sugarcane wax used for making shoe polish; surplus trash used for making compost manure.

Table 9.4: Sugarcane and Sugar Production in Pakistan

Year	No. of Mills	Cane Production (Mill. tonnes)	Cane Crushed (Mill. tonnes)	Sugar Produced (000 tonnes)	Recovery %age from cane
2005-06	74	44.66	30.09	2587	8.6
2006-07	79	54.75	40.49	3516	8.7
2007-08	79	63.92	52.75	4740	9.0

Source: Government of Pakistan. 2008. *Agricultural Statistics of Pakistan 2007-08*. Islamabad. Ministry of Food and Agriculture (Economic Wing), Islamabad.

Farmers, sugar mills and commission agents are involved in marketing process of sugarcane. Sugar mills establish their purchase centres in the surrounding areas of their territory. Village dealers or local traders purchase sugarcane from farmers from field or at centre. Majority of the farmers sell it directly to the sugar mills. After processing of sugarcane, sugar is sold to consumers through wholesalers, utility stores and retailers. Bye-products obtained while refining of sugar are provided to paper mills, and confectioners. A small number of farmers produce 'Gur', 'Shakkar' and 'Desi Sugar' from sugarcane and sell in the secondary market.

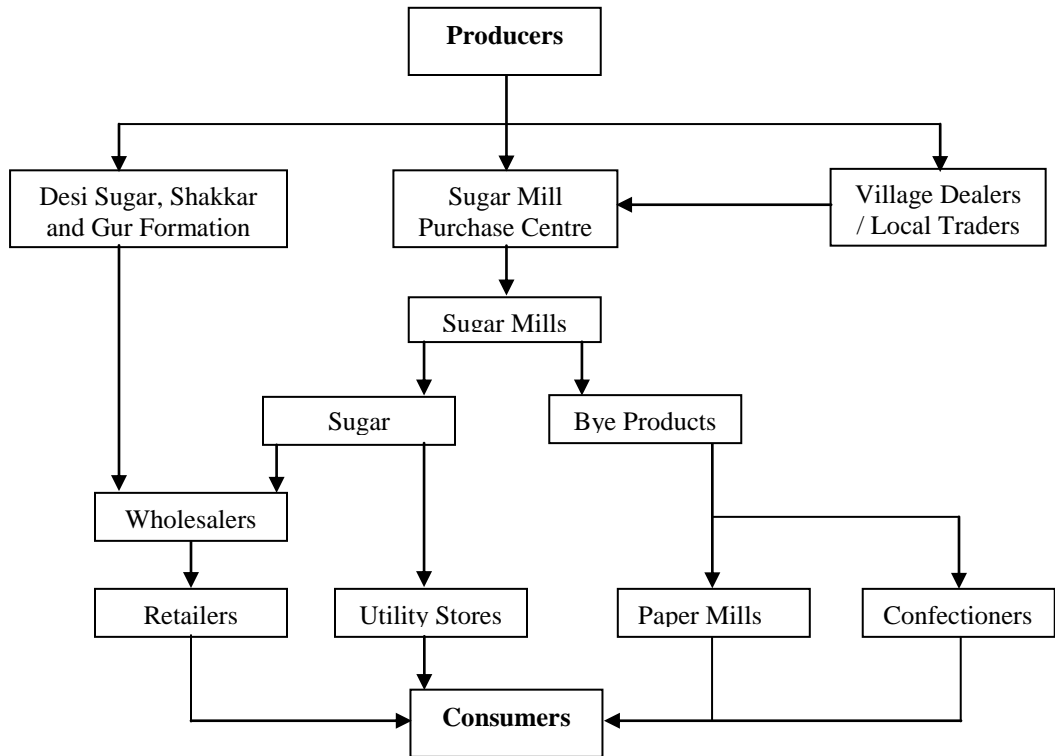


Figure 9.4: Sugarcane marketing channel in Pakistan

9.5) FRUIT MARKETING

In Pakistan, a great variety of fruits are produced in different parts of the country. Mango, citrus, apple, bananas, guavas, dates, grapes, peach, and apricot are the major fruits grown in Pakistan. Mango and citrus fruits are major export items of Pakistan.

In the marketing of fruits, both pre-harvest and post-harvest sale methods are prevalent in Pakistan. In case of pre-harvest method, fruit growers sell their fruits in advance when it is still in the orchard to pre-harvest contractor who then assumes the responsibility of picking fruit from trees, packing, transporting and supplying to the market directly or through commission agents. Price between producer and pre-harvest contractor is determined through bargaining. In case of post-harvest sale, when fruits reach maturity, growers pick these from orchards, pack and transport to the markets. Growers sometimes also grade their produce before packing. Fruit growers as well as contractor in most of cases maintain permanent links with commission agents (Arhtias) in markets to whom they send their fruit consignment for further sale. Normally, growers or contractors do not accompany their consignment which is transported to particular commission agent through available means.

Table 9.5: Production of Fruits and Vegetables in Pakistan (000 Tonnes)

Year	Vegetables	Fruits
2005-06	3124.8	7147.6
2006-07	3138.0	6011.3
2007-08	3136.8	7178.8

Source: Government of Pakistan. 2008. *Agricultural Statistics of Pakistan 2007-08*. Islamabad. Ministry of Food and Agriculture (Economic Wing), Islamabad.

Commission agents, on receiving the consignment from growers, sell the fruits through auctions and pay sale proceeds to the growers and contractor after deducting their commission. Commission agents arrange auction at their shops where fruit packed in crates with weights is placed for the information of bidders. The bidders who are mostly retailers and wholesalers offer their bids and the highest bidder purchases the fruit. The petty retailers unable to buy in bulk in the auction buy their requirements from petty wholesalers or big retailers. Later on, fruits is transported by these retailers to their shops and sold to the consumers.

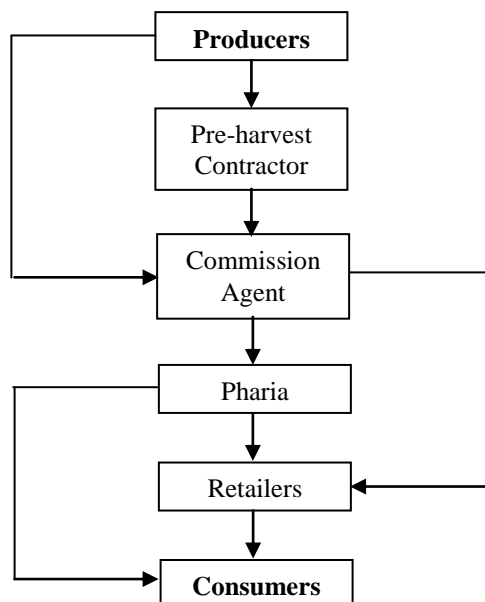


Figure 9.5: Fruit marketing channel in Pakistan

Marketing system for major fruits in Pakistan is as under;

a) Citrus

Citrus fruits are major fruit crops growing in Pakistan. Citrus fruits include oranges, mandarins (Kinnow), grapefruit and limes, of which mandarins (Kinnow) receives significant importance in Pakistan. The export of citrus fruit from Pakistan has significantly increased over the years and in the citrus category, kinnow alone contributes around 97 percent. The exports of kinnow are mainly directed to Dubai, Iran, Russia,

European Union, Philippines, Afghanistan, Sri Lanka and some South East Asian countries.

Marketing of citrus fruit starts with the involvement of pre-harvest contractor who purchases the contract of an orchard on annual basis after estimating the possible returns from the orchard. Commission agent who works in the market has close ties with contractors and producers. He is often assumed to perform a dominating role which sometimes is exploitative in nature. In the citrus marketing and its export, an important link is processor.

b) Mango

In Pakistan, mango is a very popular fruit and occupies second position in terms of production and area after citrus. Major varieties grown in Pakistani include Chaunsa, Doshehri, Malda, Langra, Sindhri, Fajri, and Anwar Ratool. Other varieties also produced in Pakistan are Swarnarika, Siroli, Alphonso, Gulab Khas, Golden, and Began Phali. Chaunsa and Sindhri are preferred by the industry as excellent varieties owing to taste and demand in domestic and export markets. Mango exports from Pakistan are highly concentrated in few markets and mainly directed to Middle East Countries like United Arab Emirates and Saudi Arabia.

Marketing of mangoes in Pakistan is in private hands. Pre-harvest contractor is the starting point in the marketing of mango but he does not perform significant functions in terms of product quality improvements. The major player in mango marketing chain is the commission agent who mainly controls many chain activities. He extends finance to contractors and guides scheduling and flow of mango fruit from contractor to wholesale market. Processors mainly serve as a dumping ground for poor quality mangoes where in fact they require sound and fully mature mangoes. Retailers are at the last stage in the marketing of mango. They work as stall holders, vendors in urban areas and sometimes road side sellers in production areas.

c) Apple

Like mango and citrus, apple is also a major fruit grown and consumed in Pakistan. Various varieties of apples (Top Red, Red Spur, Kala Kulu, Super Gold, Red Chief, Apple Elite, Stark Crimson, Oregon Spur, Red Rom Beauty, Royal Gala, Spartan and Double Red) are grown in the country. Balochistan has the largest share (with production of 313.6 thousand tonnes over an area of 103.2 thousand hectares) followed by Khyber Pakhtunkhwa (with production of 124.5 thousand tonnes over an area of 9.4 thousand hectares) while in the provinces of Punjab and Sindh, it's production is almost negligible. Apple per capita consumption in Pakistan is estimated at 2.88 Kg per annum

Although mainly private sector carry out marketing of apple but government ensures its smooth marketing. The marketing channel of apple involves growers selling crop to contractors prior to harvest, typically during the flowering stage. As the product is sold, all marketing costs (transportation, handling and storage costs) are deducted and net price paid to grower or pre-harvest contractor. A typical social relationship exists between growers/pre-harvest contractor and commission agents (provision of credit and marketing advice). Apple produced in Balochistan and the Khyber Pakhtunkhwa is generally transported to Punjab and Sindh by traditional mode of transportation.

d) Dates

Pakistan is one of the main growers of dates. It follows Egypt, Saudi Arabia, Iran and UAE in the list of major dates producing countries with ten percent share in global production. Dates are grown in all provinces of Pakistan. Balochistan is however the major date producing region followed by Sindh, Punjab and Khyber Pakhtunkhwa.

Like other horticultural crops, trade of dates mainly rests with the private sector. Marketing of dates starts with pre harvest contractor who brings produce in fresh condition from orchards to wholesale markets. Commission agents have strong ties with farmers and pre harvest contractors. Grading and standardisation practices are not strictly followed especially in its export.

9.6) VEGETABLE MARKETING

Major vegetables grown in Pakistan include potato, onion, chillies, melons, cucumber, tomato, turnip, okra and pea. Vegetables not only contribute to overall agricultural production but also provide income support to people living in rural and peri-urban areas. These are also important from food security perspective due to their significant contribution in human diet.

Like fruits, in the marketing of vegetables, growers have option for pre-harvest or post-harvest sale. Pre-harvest or advance sale is practiced on smaller scale and is not popular among farmers. In case of post-harvest sale farmers may sell their produce directly or through commission agents. Sometimes, farmers particularly peri-urban vegetable growers may directly bring their vegetables to the nearby urban areas so as to sell directly to the consumers or to the retailers. Although by direct selling to consumers per unit return of different vegetables may be high but due to limited quantity sold overall profit is reduced. Direct selling to retailers is preferred by the vegetables growers. This brings relatively more profits and save their time to focus on their production related activities. In this method, the farmer sells out a sufficient quantity of the product to the retailers.

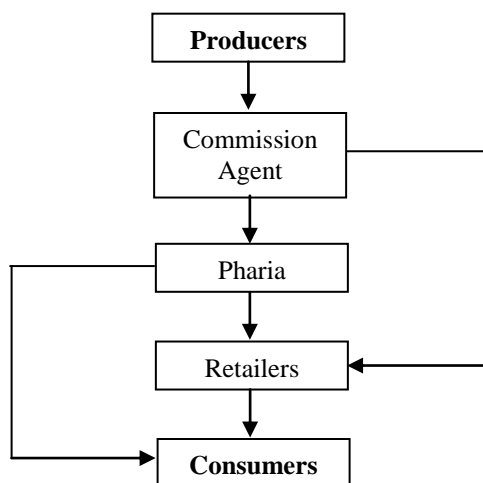


Figure 9.6: Vegetable marketing channel in Pakistan

The major proportion of the vegetables is sold through commission agents. These sales are made in urban wholesale markets. The farmers heavily depend on the wholesale market functionaries for disposal of their vegetables in the urban markets or mandies. The commission agents operating in the vegetable wholesale markets arrange the bargain. The normal practice is to do this through auction. For his services, he charges commission from the buyer or /and the seller depending upon the custom prevalent in the mandi (market). Retailers purchase the vegetables mostly through auction method from the commission agent or pharias and bring their produce to their selling shops by various transport means. Some of the retailers have permanent shops and customers visit them to purchase vegetables. However, majority of retailers move through the streets on donkey carts, hand driven carts, and bicycle to supply fresh vegetables to the customers.

9.7) OILSEED MARKETING

Edible oil in Pakistan is extracted both from conventional and non-conventional oilseed crops. Conventional oilseed crops include cotton, rapeseed, mustard, groundnut, and, sesame. These have been grown traditionally in Pakistan and contribute major part of domestic oil production. Sunflower, soybean, and safflower are non-conventional oilseed crop which were introduced during green revolution in mid-sixties but still area under these crops is not very significant. Edible oil in Pakistan is predominantly obtained from imported vegetable oils and to smaller extent from traditional and non-traditional oils seeds. Local production accounts for around one third of the domestic requirement while rest of the requirements of the country are met through imports.

Oilseed growers sell their produce to village level dealers or commission agents and sometime directly to private oil extraction plants. Oilseeds purchased by the oil extractions plants are then crushed and processed into edible oil which reaches to the consumers through wholesalers and retailers.

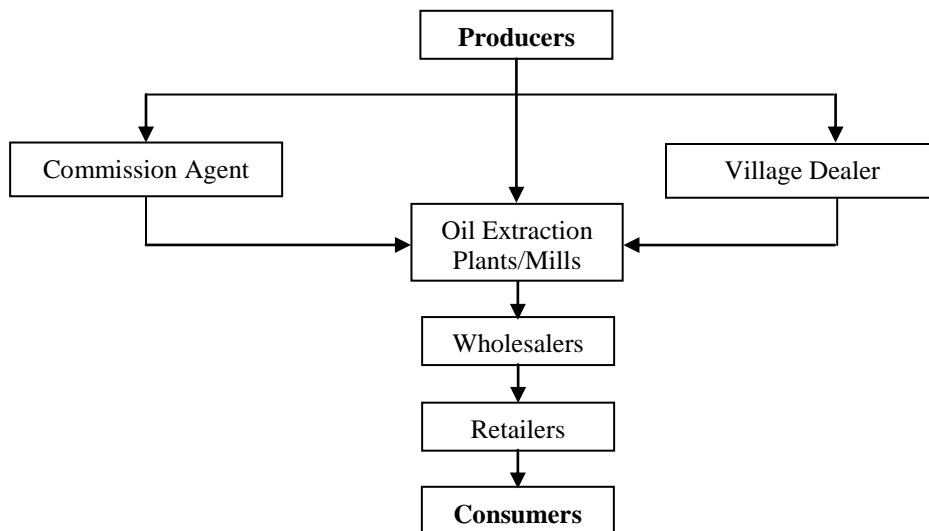


Figure 9.7: Oilseed Marketing Channel in Pakistan

Table 9.6: Production and Availability of Edible Oil in Pakistan (000 tonnes)

Production and Availability	2005-06	2006-07	2007-08
A. Edible oil availability			
1. Local production	487	565	505
2. Import	1695	1724	1740
Total availability	2182	2289	2245
B. Uses			
1. Industrial use (est.)	218	229	224
2. Net availability for ghee & oil	188	1964	2021
3. Per Capita availability (kgs/annum)	12.75	12.93	12.62

Source: Government of Pakistan. 2008. *Agricultural Statistics of Pakistan 2007-08*. Islamabad. Ministry of Food and Agriculture (Economic Wing), Islamabad.

9.8) PULSES MARKETING

Pulses are an important component of human diet particularly of low income groups. Pulses grown in Pakistan comprised of gram, masoor, mash and mung. Besides contributing to agricultural GDP in Pakistan, pulses processing firms provide employment opportunity to many people. Overall availability of pulses in Pakistan is 7.94 Kg per annum.

Table 9.7: Production and Availability of Pulses in Pakistan (000 tonnes)

Sr. No.	Production and Availability	2005-06	2006-07	2007-08
1	Production of Pulses			
	(a) Gram	868	480	838
	(b) Other pulses	205	250	275
2	Deduction for seed, feed & wastage			
	(a) Gram at the rate of 31 %	269	149	260
	(b) Other pulses at the rate of 11%	23	22	29
3	Imports	479	521	450
4	Net availability of pulses	1260	1075	1274
5	Per capita availability (kgs/annum)	8.18	6.86	7.94

Source: Government of Pakistan. 2008. *Agricultural Statistics of Pakistan 2007-08*. Islamabad. Ministry of Food and Agriculture (Economic Wing), Islamabad.

In the marketing of pulses, village dealer, commission agent, processor (Dal Mills) and retailers are the common market intermediaries. After harvesting, sorting and packing, farmers sell their produce mostly to commission agents and village dealers and sometimes sell their produce directly to pulse processing mills. Village dealers purchase pulses crop from farmers and sell through commission agent or directly to processing plants or use in the plants they own. Onwards, pulses reach to the consumers via wholesalers and retailers.

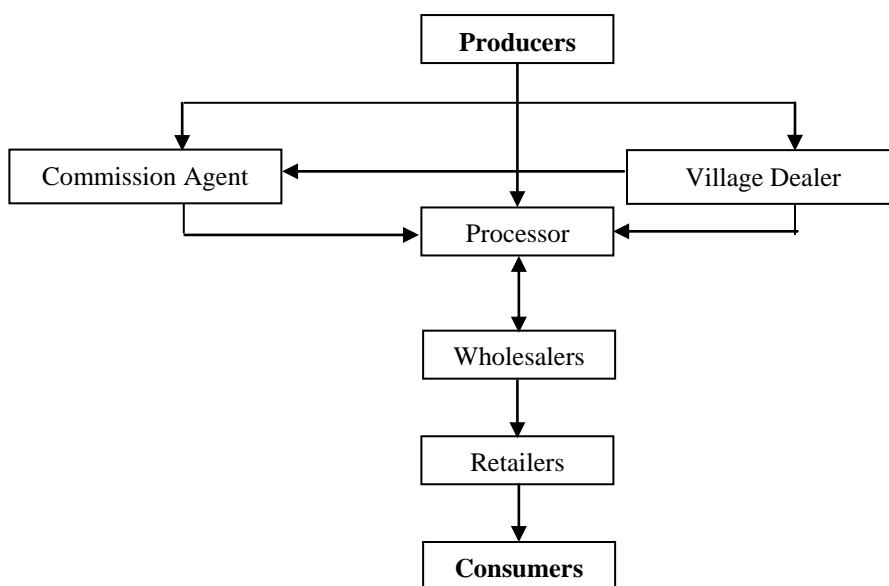


Figure 9.8: Pulse marketing channel in Pakistan

9.9) LIVESTOCK MARKETING

Livestock is an important sector of economy of Pakistan. Its contribution in agriculture value added is 51.8 percent whereas it accounts 11.3 percent of national GDP. The value contributed by livestock is 6.1% higher than the total value of major and minor crops. The major animals of Pakistan comprised of sheep, goat, cattle, buffalo, camels, horses, asses and mules. Milk and meat are major livestock products which are obtained from various animals like buffalo, cow, goat, sheep etc. Minor products obtained from livestock include eggs, hides, skins, wool, hair, edible offal's, blood, guts, casings, horns and hooves, bones, fats, dung, urine, head and trotters, ducks, drakes and ducklings

Table 9.8: Livestock Population in Pakistan (Million No.)

Species	2006-07	2007-08	2008-09
Cattle	30.7	31.8	33.0
Buffalo	28.2	29.0	29.9
Sheep	26.8	27.1	27.4
Goat	55.2	56.7	58.3
Camels	0.9	1.0	1.0
Horses	0.3	0.3	0.4
Asses	4.3	4.4	4.5
Mules	0.2	0.2	0.2

Source: Government of Pakistan. 2008. *Agricultural Statistics of Pakistan 2007-08*. Islamabad. Ministry of Food and Agriculture (Economic Wing), Islamabad.

In Pakistan, livestock marketing is carried out at thousands of small rural markets which operate at regular intervals (usually weekly) around the larger urban areas. Most of these

markets are regulated to some extent by the local authorities, but particularly in urban areas and in Balochistan which has no regulated markets, these are unofficial or privately owned. Often the market rights vested with local authorities to manage and collect fees are sold to private contractors by tender. Typically, these markets are loosely controlled and provide few facilities for orderly marketing of livestock.

At daily markets the animals are generally held until sold, which in the smaller urban centres may be for several days. However, at the weekly markets unsold animals are either moved to the next market nearby or returned to the village. Typically, the sale is handled through a commission agent with the price based on the trader's estimate of the likely carcass weight of the live animal and his knowledge of the wholesale meat prices. Mostly no facilities are available for weighing the animals. In fact, the entire marketing of live animals is on a unit basis with weighing only at the meat wholesale and retailing stages.

Marketing of live animal specifically for slaughtering purposes is carried out by traditional private sector. Collectors, commission agents, and wholesale traders (small and large) are the main actors in the live animals marketing chain. These traders purchase livestock directly from producers and either sell it local market or transport these animals to urban terminal livestock markets. The system facilities have enabled some reduction in the number of intermediaries. Main stages in marketing of livestock and meat are as follows:

- Producer sells livestock directly in the local market or to a local collector or wholesale trader.
- Local collector or wholesaler resale in local markets to butchers or transport to urban consumption areas.
- Resale to butchers in urban terminal markets for slaughter. In some large centres, particularly Lahore, rewatees (wholesalers who sell meat to butchers) perform dual role wholesale trader and butcher.
- Wholesaling of meat and offal to retailers, and while other bye-products like hides, skins, casings, and blood are sold to other traders and contractors. In small centres or towns, the slaughtering and meat retailing functions are often combined.

The only livestock market legislation in force throughout the country is the West Pakistan Municipal Committee (Cattle Market) Rules of 1969 which empower a municipal committee to establish, maintain, and administer livestock markets, and collect market fees. However, the rules place no obligation on committees to equip the markets or regulate activities to the benefit of market users and in the interests of fair trading practices. Only in Punjab where the Agricultural Produce Markets Ordinance of 1978 includes livestock in the list of commodities, an adequate legislation is there to promote effective livestock marketing. But even in Punjab little progress has been made towards the setting up and control of markets along the lines envisaged in the ordinance.

9.10) MEAT MARKETING

In Pakistan, major sources of meat are cattle, buffaloes, sheep, goat and poultry. Total meat production was 2727 thousand tonnes in 2007-08 with 17 Kg per annum per capita availability of meat from all sources. The contribution of beef, mutton and poultry meat was 1548, 578 and 601 thousand tonnes respectively. Meat is mostly consumed after cutting in to small pieces or in minced form.

Table 9.9: Meat Production in Pakistan (000 Tonnes)

Species	2005-06		2006-07		2007-08	
Beef						
Cattle	702	(70)	729	(73)	756	(76)
Buffaloes	742	(74)	764	(76)	787	(79)
Camels	5	(1)	5	(1)	5	(1)
Total-Beef	1449	(145)	1498	(150)	1548	(156)
Mutton						
Sheep	207	(58)	210	(59)	212	(59)
Goats	347	(97)	356	(100)	366	(102)
Total-Mutton	554	(155)	566	(158)	578	(161)
Poultry						
Poultry Meat	512		554		601	
Total-Meat	2515	(300)	2618	(308)	2727	(317)
Eggs (Million No.)	9712		10197		10711	

Source: Government of Pakistan. 2008. *Agricultural Statistics of Pakistan 2007-08*. Islamabad. Ministry of Food and Agriculture (Economic Wing), Islamabad.

In the marketing chain of meat wholesaler and retailer (mostly butchers) are two major intermediaries. Wholesaling of meat and offal to retailers usually takes place at the slaughterhouse or on a consignment basis to the retail shops. Animal slaughtering is carried out in recognised municipal slaughterhouses, private slaughter houses, armed forces slaughter houses, and back yards. Recognised slaughterhouses usually provide separate buildings for the slaughter of large and small animals. Slaughter and dressing is done on a solo basis by slaughter men and flayers employed by butchers.

Meat transport from the slaughterhouse to retail shops is usually provided by the butcher or wholesaler by means of rickshaws, trucks, donkey carts, pickups, etc. These are very unhygienic conveyances with little effort made to protect the meat. However, in some urban centres the municipalities provide covered vehicles for transport.

Mutton, beef, and offal are sold in fresh condition mostly from separate small retail shops and stalls scattered around the towns and cities. Some of the larger centres also have retail meat markets with simple, though poorly maintained, stalls provided by the municipal authorities. In the large urban centres, meat and offal retailers normally buy their supplies from butchers or meat wholesalers, whereas in the smaller centres the retailer is usually also a butcher and purchases his own livestock. The retailers will normally adjust their daily supplies so as not to have any carryover, especially in the hot summer months since refrigeration facilities are not available. If necessary, a few may store overnight in ice, but this is expensive.

A few modern retail shops specialising in better-quality meat that also have cutting, packing, and refrigeration equipment can be found in Karachi, Islamabad, Lahore, and Faisalabad. Some meat processing companies have just started selling packaged, frozen meat cuts through modern mega stores/marts and few retail shops in major urban centres even by providing their own refrigerated display cabinets. Apart from these few exceptions, there is a lack of modern retail outlets, and the sector is characterised by the traditional small and very basic retail establishment.

9.11) MILK AND DAIRY PRODUCTS MARKETING

Milk is a major component of livestock sector. In Pakistan, cow and buffalo are the two main sources of milk production. However, some portion of milk in Pakistan is also obtained from sheep, goat and a little from camel. In terms of per capita consumptions, milk as a food item occupies second position after cereals in Pakistan. The annual per capita consumption level at the national level was 95.5 Kg in 2007-08. Total milk production was 42171 thousand tonnes in 2007-08.

Table 9.10: Milk Production in Pakistan (000 Tonnes)

Year	2006-07		2007-08	
	Gross Production	Human Consumption	Gross Production	Human Consumption
Cows	13912	11129	14435	11548
Buffalo	25455	20364	26214	20971
Sheep	35	35	35	35
Goats	682	682	701	701
She-camel	776	776	786	786
Total	40860	32986	42171	34041

Source: Government of Pakistan. 2008. *Agricultural Statistics of Pakistan 2007-08*. Islamabad. Ministry of Food and Agriculture (Economic Wing), Islamabad.

a) Fresh (Fluid Raw) Milk

In Pakistan, raw and fresh milk is the primary dairy product widely marketed due to preferences and price consciousness of consumers. Therefore, more than 95 percent of total milk production is marketed as such to ultimate consumers through traditional, extensive, multi-layered and middlemen dominated marketing system. A meagre quantity of milk (less than 5 percent) is processed and marketed through formal milk marketing channels.

The rural milk traders or 'Katcha Dodhis' are at present the most important middlemen who buy milk from many rural smallholders. Each may collect only 75-100 litres per day and negotiate milk prices, usually with the women, and may also extend substantial loans against future milk production. The trader normally adds ice to keep the milk cool and sells the milk to rural vendors or collectors.

The highway collectors of 'Pakka Dodhis' buy milk from a number of rural traders. Typically, they handle 2000 litres per day, but large dealers serving milk plants may collect more than 70,000 litres per day. None of them has chilling plants but most have a vehicle for transporting milk to the urban areas. More ice is usually added before transport. However, some dairy plants have set up their own collection centres in production areas for ensuring supplies and improvements in quality. The centres are equipped with chilling plants and insulated road tankers are used for milk transportation. Rural milk traders or cooperative organisations who collect milk from the producers sell milk at these centres. In order to avoid middleman, large producers and most peri-urban producers sell directly to vendors or milk plants on a contract basis.

b) Processed Milk and Other Dairy Products

Although a very small percentage of milk is processed in Pakistan but according to estimates, there is an increase of 20 percent per annum in processed milk consumption in the country. Among many dairy products, pasteurised and UHT milk in tetra packs is predominantly a popular product. Other products include powdered milk, yogurt, butter, cream, and lassi, etc.

In case of processed milk and other dairy products, the marketing chain is usually short. Milk and other dairy products are transported from processing plants to wholesalers/distributors who then distribute to retailers. These processing plants have their milk points in various areas to ensure consistent supply of milk. Processed milk is consumed mainly in the urban centres of Lahore, Rawalpindi/Islamabad, and Karachi and generally sold in tetrahedron or tetra brick packages of 200 ml, 250 ml, 500 ml, and 1.0 liter.

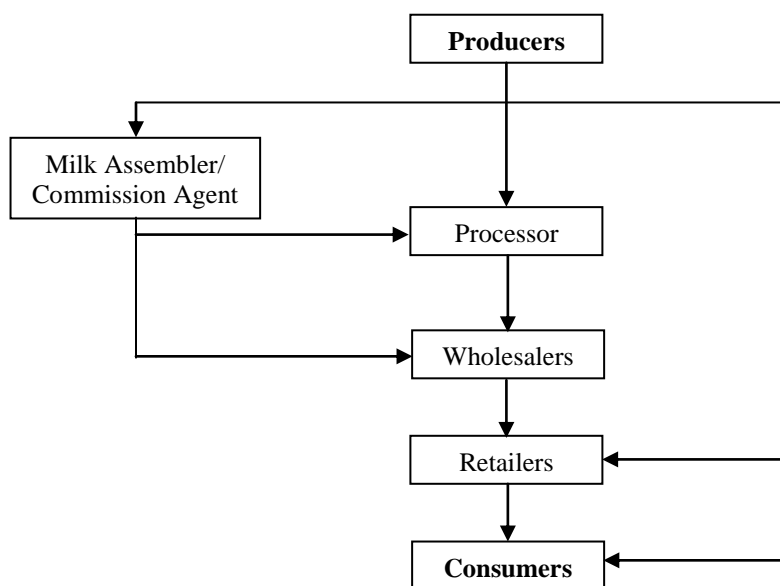


Figure 9.9: Milk marketing channel in Pakistan

In Pakistan, the supply of milk is not sufficient enough to meet domestic demand and powdered milk is imported to bridge this gap. Powdered milk is mainly imported from Eastern Europe and Centrally Independent States (CIS) and mainly in the forms of skimmed milk powder and vegetable fats-filled milk powder. The imported milk is marketed by milk marketing companies and rest of marketing chain is like processed milk marketing chain.

Traditional dairy products like dahi are traded widely throughout Pakistan at slightly higher price than fresh milk. In rural areas, small holders produce local or desi ghee for self-consumption or sale purpose in urban areas. Dairy shops and creameries also extract butter from milk cream and market it mainly in small packs of less than 200 g at

retail shops and bakeries in Pakistan. Processing companies also market other dairy products like yogurt (plain and flavoured), flavoured milk, cheese, and ice cream.

9.12) POULTRY MEAT AND EGG MARKETING

Poultry constitute a vibrant sector in the economy of Pakistan. It contributes 4.81 percent 9.84 percent in agricultural and livestock growth respectively. Poultry industry has exhibited a robust annual growth of 8-10 percent owing to rising demand of poultry meat in the country. It provides employment (direct/indirect) and income to more than 1.5 million people in Pakistan.

Poultry meat contributes around 19% of the total meat production in the country. It is available in the form of broilers, either live or processed, culled layer and breeding stock, and village birds. Per capita consumption of both chicken meat and eggs is much higher in urban than in rural areas. According to Household Integrated Economic Survey, 2004-05, in urban areas per capita monthly consumptions of chicken meat and eggs is 0.32 kg and 3.53 kg respectively whereas in rural areas it is 0.18 kg and 2.02 kg respectively. On overall basis, per capita monthly consumptions of poultry meat is 0.23 kg whereas 2.50 eggs are per capita monthly consumption.

Village poultry and eggs are produced predominantly for use by rural households, but any surpluses are purchased by collectors and marketed through urban wholesalers and retailers. Commercial poultry is marketed through urban wholesalers who distribute to retailers. Producers may sometimes sell directly to retailers. Poultry is sold dressed and alive. The retailers slaughter and dress the bird for charge for the services rendered. Retailers sell fresh poultry meat to the consumers. Few mega stores in major cities use refrigerated cabinets for storing the meat for subsequent selling to the customers. Now many meat processing firms have also emerged in Pakistan that provide processed frozen ready to eat meat. These firms purchase chicken from wholesalers and then sell through modern stores in urban cities.

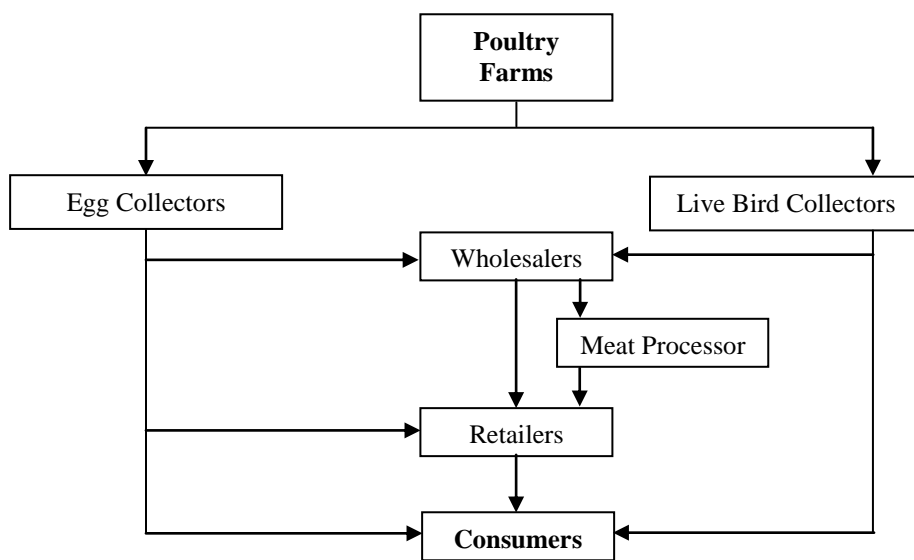


Figure 9.10: Poultry meat and egg marketing channel in Pakistan

Poultry eggs are collected from poultry farms and then sold through wholesalers and retailers to the ultimate consumers. There is no grading system for poultry eggs, and there are no price differentials for quality or size of eggs.

9.13) HIDE AND SKIN MARKETING

Hides and skins are by-products of livestock slaughter. The main sources of hides are cattle, buffalo and camels and its total production in 2007-08 was 12.2 million. Skins are mainly of three types i.e. sheep, goats and fancy skins and its total production was 45.4 million in 2007-08.

Table 9.11: Hides and Skin Production in Pakistan

Product	Unit	2005-06	2006-07	2007-08
Hides				
Cattle	Mill. No.	5.6	5.8	6.0
Buffalo	(")	5.7	5.9	6.1
Camels	(")	0.1	0.1	0.1
Total	(")	11.4	11.8	12.2
Skins				
Sheep	(")	10.0	10.1	10.3
Goats	(")	20.7	21.3	21.9
Fancy skin	(")	12.6	12.9	13.2
Total	(")	43.3	44.3	45.4

Source: *Government of Pakistan. 2008. Agricultural Statistics of Pakistan 2007-08. Islamabad. Ministry of Food and Agriculture (Economic Wing), Islamabad.*

In the traditional slaughterhouses, hide quality suffers because poor facilities mean that hides become soaked with blood and otherwise damaged. Pointed knives are used for flaying, often leading to cut damage. There are no facilities for handling raw hides and skins, and preservation is often inadequate.

In urban areas hides and skins are sold by butchers to wholesalers who supply to tanneries directly or through commission agents. In rural areas a collector usually buys small lots or individual pieces on behalf of the wholesaler.

There is no formal grading system for raw hides and skins, but these are classified according to type, quality, and size. Exported hides and skins are officially graded according to international criteria. There are over 300 tanneries in Pakistan, 25% of which are modern units employing chrome tanning processes. These tanneries account for about 80% of the total production of leather. These are oriented to producing export finished leather, or supplying manufacturers with leather goods. The remaining tanneries are semi-mechanised or cottage industries using vegetable tanning methods and these supply to the domestic market. Current utilisation of total capacity is estimated to be about 70%.

9.14) WOOL MARKETING

Raw wool is either fleece wool or pulled (slipe wool, recovered from the skin tanneries). Because of the many sheep breeds in Pakistan, there are many wool types and colours, though most are white. Sheep are usually shorn twice a year. The spring shearing yields predominantly white wool, whereas the autumn clip is yellowish, with a lower value. Local

wools are of coarse fibre and suitable only for carpets and rough textiles. Poor shearing technique often results in a short staple.

Table 9.12: Wool and Hair Production in Pakistan

Product	Unit	2005-06	2006-07	2007-08
Wool (sheep)	(000 tonnes)	40.1	40.6	41.1
Hair (goat)	(000 tonnes)	20.3	20.9	21.4

Source: Government of Pakistan. 2008. *Agricultural Statistics of Pakistan 2007-08*. Islamabad. Ministry of Food and Agriculture (Economic Wing), Islamabad.

Fleece wool is sold by the producer to a collector or wool merchant in the nearest urban centre. A wholesale trader then transports and resells the wool at large wool markets, usually to a commission agent working on behalf of a processor or exporter. Export wool is handled through the grading centres in Karachi, Multan, or Lahore, and is sorted, washed/scoured, baled, and graded in accordance with official grades defined by Wool Test House in Karachi. Slip wool is normally purchased by processors directly from the skin tanneries and most is exported.

9.15) LIVESTOCK AND POULTRY BYE-PRODUCTS MARKETING

The by-products of slaughter form a valuable source of revenue for the butcher and potentially represent around 20% of his total sales. Unfortunately, poor handling methods often reduce the level of recovery and value of the bye-products to the final consumer. Usually the edible offal is collected for human consumption and only the stomach contents are left behind. Disease and wastage during the summer months combine to significantly reduce utilisation and sales value. Animal casings and bladders are sometimes processed and exported in dried form, but this industry is small compared to the volume of production (less than 10% are processed). Blood is normally collected, but due to the inefficient methods used, e.g. scraping from the floor, large quantities are wasted. The conditions under which blood is dried contribute further to the loss of its value.

Wholesaling of meat and offal to retailers usually takes place at the slaughterhouse or on a consignment basis to the retail shops. Centralised marketing facilities for wholesaling are available only in Karachi. At the retailer's level, offal is sold at meat shops and stalls scattered around the towns and cities. In the large urban centres, meat and offal retailers normally buy their supplies from butchers or meat wholesalers, whereas in the smaller centres the retailer is usually also a butcher and purchases his own livestock.

9.16) FISH MARKETING

Fish is an important source of animal protein for human beings. It is a major source of earning for the inhabitants of coastal areas. Although share of fisheries in the GDP is not very significant but fish exports substantially contribute to national income of the country. The major buyers of seafood from Pakistan are China, UAE, Thailand, Korea, Malaysia, Indonesia, Hong Kong and some Middle Eastern countries. During the year 2008, total fish production was estimated at 685 thousand tonnes in which marine sector contributed 477 thousand tonnes and rest of the contributions came from inland fisheries.

Table 9.13: Production of Fish in Pakistan (000 Tonnes)

Year	Inland	Marine	Total
2006	179.9	425.0	604.9
2007	250.0	390.0	640.0
2008	208.0	477.0	685.0

Source: Government of Pakistan. 2008. *Agricultural Statistics of Pakistan 2007-08*. Islamabad. Ministry of Food and Agriculture (Economic Wing), Islamabad.

Many market intermediaries are involved in the marketing chain both in the case of marine and inland fish. Fish supplied by the producers pass through different channels before it reaches ultimate consumers. There are four intermediaries involved in the flow of fresh water fish viz., contractors, commission agents, retailers, processors cum retailers. Direct marketing as practiced by contractors is made possible only when there is direct contact between producers and consumers. In most of the cases, producers sell their catch through intermediaries particularly when consumer markets are distantly located from the production areas. The common practice of channelling the catch is through commission agents because of producer's desire to concentrate on production. The retailers purchase supplies from commission agents or contractors. Some sell fish to urban consumers, have permanent shops in the urban markets generally close to the commission shops.

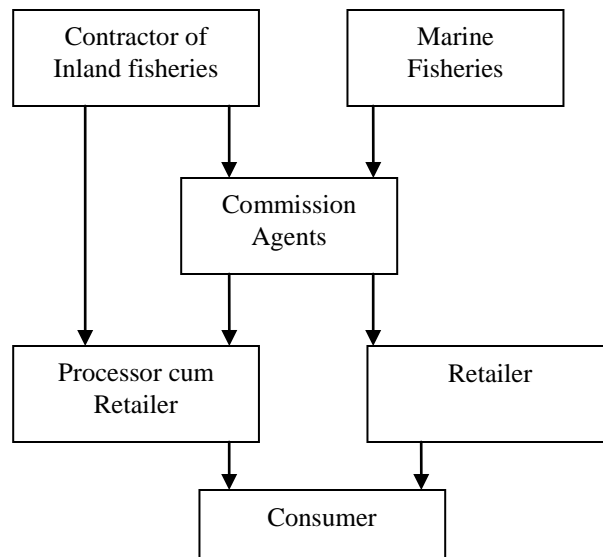


Figure 9.11: Fish marketing channel in Pakistan

CHAPTER 10

INTERNATIONAL AGRICULTURAL MARKETING

In developing countries, agriculture is a key economic activity and major portion of export earnings are generated through agricultural exports. Historically, agro-food exports of developing countries were confined to limited number of traditional products like cotton, tea, sugar, coffee etc. However, recent wave of trade liberalisation has opened up world markets for agricultural commodities. In developed countries, high income consumers demand high value added products like fresh/processed fruits and vegetables, floricultural products, nuts, spices, meat products, and fish and fishery products. This provides an opportunity to agro-food exporting firms particularly from developing countries to market their products beyond their national borders and earn profit.

The changed global scenario offers numerous advantages to agro-food exporting firms but it also necessitates that international agricultural marketing should be pursued in scientific way to meet the demands of foreign customers.

10.1) NATURE AND IMPORTANCE OF INTERNATIONAL AGRICULTURAL MARKETING

International agricultural marketing does not differ significantly from domestic marketing of agricultural products. It is basically an extension of domestic marketing and wherein agricultural products are sold to foreign consumers. However, it involves certain additional marketing functions. Agricultural export marketers are required to explore and analyse marketing opportunities internationally. Extra effort is required to find out pertinent information about needs, wants, tastes and preferences of the customers. A thorough understanding of economic, political, legal, technological, cultural and demographic environment of target markets is essential for designing marketing mix of agricultural products. Agricultural commodities are perishable and sensitive in nature and hence involve many standard related and technical issues like storage, packaging, labelling, preservation, and transportation etc. However, recent technological advances in communications and transportation have helped to overcome these issues to some extent and consequently there is a rising trend in agricultural trade.

Export of agricultural commodities yields benefits both at macro and firm level.

At macro level, agricultural exports

- Generate foreign exchange earnings which are vital for economic stability and to finance exports
- Contribute to employment and Gross Domestic Product (GDP)
- Help reduce trade deficit
- Promote image of a country in the importing countries

At firm level, these

- Raise company profits due to increase in sale
- Expand market size
- Enhance competitiveness
- Helps in utilising excessive capacity

- Increase in efficiency due to economies of sale
- Reduce dependence on domestic markets
- Improve technological capacity of firms
- Develop human resources through interaction with foreign firms

10.2) INTERNATIONAL AGRICULTURAL MARKETING OPPORTUNITIES

The agro-food firms interested in export business should first explore appropriate marketing opportunities. It requires detailed environmental scanning and market survey in order to decide to export or not.

10.2.1) ENVIRONMENTAL SCANNING

Environmental scanning is systematic collection, analysis and interpretation of pertinent information about economic, political, legal, cultural, social and demographic environment in the target export market. It is a relatively low-cost method of compiling market information. The recent advancement like internet and other computer technology have made it easier. Many businessmen collect information through internet, telephones, faxes, etc. The primary objective of this process is to find out whether the product has export possibilities and which countries are potential export markets. In this regard, information on following points is highly worthwhile for export decisions.

a) Potential Export Markets

Information about potential export markets that have developed a need or demand for the product that agro-food firm can export is very important. If foreign customers have not developed a taste or desire for the product, it may not be acceptable. The consumer demand in less developed countries revolves around basic agricultural products where as more developed countries desire processed agro-food products. Size of potential markets in terms of financial returns and amount demanded should be gauged by looking at the level and trend of purchases.

b) Political and Economic Stability of the Foreign Government

Information on overall economic and political stability is very important. Consumer demand is heavily linked with overall economic prosperity of the nation whereas political stability greatly affects export business. Since governments frame trade policies and regulation, an unstable government might result in uncertain trade. The export firms can obtain this information through interviewing knowledgeable people within their country, bank officials and other exporters. Information is available from such agencies as international banks, departments of agriculture and local offices of international agencies.

c) Trade Barriers in Export Markets

Tariffs or import restrictions such as product quotas and licensing may make exporting unprofitable. Agricultural products have to face stringent standards in the form of sanitary and phyto-sanitary measures. Monetary exchange controls may be another factor. Some countries set quotas for exchangeable amount of money. This information may be collected from relevant trade and agricultural departments and ministries.

d) Competitive Analysis

Before exporting a firm should investigate competitive sales trends and their effects on the market potential of exported products. The answers to questions like which countries are already marketing the product and whether effective competition is possible at a

reasonable cost must be explored. Furthermore, if the product is already being imported and market is saturated, it may be difficult to obtain customers. Knowledge of the competitive prices is necessary for comparison with the company costs.

e) Cost of Exporting

The export of agricultural commodities usually requires more expensive packaging for in-transit protection. Often, bulky, perishable and low-priced products cannot profitably move out of the domestic market because of the higher cost for transportation and preservation. Other costs may include document preparation for exporting and higher long-distance freight charges.

f) Distribution Channels

In the export business, indirect marketing through intermediaries is pursued. Exporting firms must have to develop distribution chains. Information about the number of retailers and wholesalers, and super stores and supermarket sales is very important.

10.2.2) MARKET SURVEYS

Market surveys are generally more expensive than environmental scanning and are usually conducted in the target market country. It often requires a visit to the country by the export firm's manager or a professional research team. A market survey is conducted only when adequate information is not available through environmental scanning which sometimes provides only limited information. However, for many agricultural products specific and needed information can be obtained only through market surveys. The Institutions and agencies which can provide information for the market survey include:

- a) Embassies or consulates of your country particularly the commercial or agricultural attaché can arrange additional appointments with potential exporters in the target export market and provide their contacts.
- b) Trade organisations for the product being considered.
- c) Commercial publications such as trade journals and export magazines
- d) Commercial and financial institutions
- e) Importers, agents, distributors, wholesalers, retailers and freight forwarders.
- f) Transportation companies like local offices of many carriers, such as steamship companies and airlines
- g) Advertising agencies, agencies with branches, affiliates or correspondents

A market survey should focus on following points.

a) Needs of the Foreign Consumers

This is very important information for determining the marketing mix desired by the foreign consumers. A research firm can conduct part of the survey to determine consumer acceptability and affordability of the product under consideration. Consumer testing is especially important for a competitive product.

b) Competitive Brands

An assessment of current market volume, marketing strategies and market share of competitors is very important. This greatly helps exporting firm to shape competitive strategies.

c) Packaging and Labelling Requirements

Every country has its own packaging and labelling requirements. This can be determined partially by finding information on relevant government regulations, carrier requirements and consumer preferences.

d) Distribution Channel

An important step in the survey is to explore potential firms or agents who will facilitate in marketing the product in importing country. An initial visit to the country is recommended to collect information about potential consumers and marketing intermediaries.

e) Entry Costs

Specific costs should be estimated by including all possible expenses in entering the targeted market. Expenditure incurred on promotional activities for establishing the product in new markets like advertising, sales promotion and agent and distributor fees need to be analysed. Furthermore, survey cost should also be included in the entry cost.

f) Probable Terms of Sale

Determining the price of exchange and whether the ownership of the product will change hands on a foreign dock or at a customer's door are both important for determining the cost entry. The terms of sale are usually the terms of the potential customer's firm. These terms can be determined by talking to foreign exporters and customers.

10.3) METHODS OF EXPORTING

There are several methods that exporters of agro-food products can use to market their product in overseas markets. Broadly, these fall into two categories i.e. indirect and direct exporting.

The differentiation between these depends on nature of transactions between the exporter and foreign importer or buyer. Usually new exporters use established middlemen to start their venture and in time with exporting experiences may switch over to other alternatives.

10.3.1) INDIRECT EXPORTING

Indirect exporting involves the use of independent export marketing middlemen. The responsibility for selling the product is transferred to another organisation. Some types of middlemen take title to the product while others do not.

I) Combination Export Manager

The combination export management firm serves as representative to several different organisations. An important advantage of using a combination export management firm is that it works with a group of clients. Thus, overhead and overseas travel costs can be spread over several firms when export sales of an individual firm could not support such activities.

II) A Buyer for Export

Established buyers of export products for resale in foreign markets act as specialised brokers. Flexibility is essential for the buyer's operation. They try to avoid entangling relationships and usually do not represent a product on a continuing basis. In general, the

buyer for export specialises in a particular line of goods. Such specialisation enables development of buying and handling skills for a particular line.

III) Trading Company

A trading company resembles with export buyer in that both buy products from firms to resell overseas. The trading company represents product lines on a continuing basis. Most trading companies are large organisations engaged in importing and exporting. These handle large volumes of commodities and are often integrated backwards into the production of various products and sometimes integrated forward into operation of retail outlets.

IV) Firms with Established Export Departments

Often, established firms use their overseas distribution facilities to handle products from smaller firms. Such an arrangement is most beneficial when the overseas distribution network of the established firm fits the needs of the smaller firm.

10.3.2) DIRECT EXPORTING

Direct exporting involves the use of permanent overseas offices of the exporting firm or overseas based middlemen. Many larger firms operate sales branches or subsidiaries in foreign countries. These wholly owned operations are expensive but permit direct control in branches rather than dealing with independent sales representatives.

I) Export Salesmen

Export salesmen are employed by some firms in foreign markets who solicit business from export firms. The advantage of using this type of salesmen is that these often contribute considerable time to sales than many foreign representatives will give to an exporter's product line. It is possible to exercise some control over such salesmen since they are dependent, to some extent, on the firm.

II) Foreign Manufacturers

Foreign manufacturers are frequently used by exporting firms to distribute their products. Manufacturers are often larger and have more technically qualified sales forces and resources than other distributors.

10.4) THE EXPORT PROCESS

The export process comprises of several steps and decisions that an export of agro-food products has to take. In the following, components of export process have been described.

10.4.1) ELEMENTS OF A SALE

Following are the main elements in an export sale between importer and exporter of agricultural commodities.

A) Product Sample

After a foreign buyer is selected, the specific elements of the sale must be worked out. The foreign buyer is interested in product, price and performance of the commodity and his profit in this process. The buyers usually want to examine a sample of the product offered for sale. The sample should be representative of the product that will be supplied on a regular basis later on. Many foreign buyers stress uniformity in quality, size and grade and labelling and packaging in each shipment. Foreign buyers also demand

exclusive rights for using brand name and a designated geographical area as a sales territory for agricultural products which are sold with some brand name of a particular firm. This enables the buyer to cash in on sales promotion or advertising efforts to promote the brand. Export firms might find it advantageous to grant buyers an exclusive lease to the brand name and a designated territory.

B) Agreement on Terms

Several details are involved in completing a sale process even after identifying markets and potential buyers. Major terms on which agreement is needed are.

- I. Preference of buyer in terms of product specifications like variety, quality, size, price range, shipping container type, desired time of delivery, shipment size per season and mode of payment.
- II. Import restrictions like quotas, licences, levies and documents such a product composition certificate
- III. Requirements for labels and marking on containers.
- IV. Shipping requirements, particularly temperature and humidity. Other requirements may include various modes of ocean and air transportation, frequency, and dependability of the method of shipping.
- V. Export shipment preparation costs incurred by the shipper and costs involved in the shipment movement from local shipping point to the place where it is handed over to buyer.

C) Delivery Terms of Sale

Delivery terms of sale should always be clear to all participating parties and should be considered carefully. The delivery terms of sale are used in domestic as well as export markets and in these both carriers and location should be specified.

The following list of abbreviations indicates the point at which shipment ownership is transferred from seller to buyer:

- a) **FAS** (free alongside ship) the commodity is alongside an ocean-going vessel or aircraft at a loading port. The buyer is responsible for having the goods loaded on board and paying the cost of shipping from that point on.
- b) **FOB** (free on board). The commodity is loaded into an ocean-going vessel or aircraft at a loading port. The seller assumes all costs until the goods are loaded on board.
- c) **C&F** (cost and freight). The commodity is delivered to a foreign port with the seller paying all cost except that of insurance of the cargo while it is en route from the point of departure. The seller's liability ends when the goods are loaded on board.
- d) **CIF** (cost, insurance and freight). The commodity is delivered to a foreign port and all costs up to that point are the responsibility of the seller.

D) Sales Offer and Contract

An export sale also requires an offer of sale and a sales agreement. However, as compared to sale in domestic markets, export marketing sales are more formal and require more precise documentation.

i) Sale offer

Main requirements of an export sales offer include price quotation, product description, and quantities available and specific shipping and payment arrangements. Foreign buyer requires detailed information like number, size and weights of individual items and overall shipment for transportation arrangements and cost estimations. Approximate date of shipment loading and expected arrival date at designated foreign port is also an essential requirement of sale offer and agreement.

The sales offer is usually made with an expiration date for its acceptance by the buyer or is subjected to his confirmation. This gives some flexibility to exporters in case of sudden rise in domestic or foreign commodity prices. It is customary trading practice that buyers make counter offers to seek commodity supplies at low price than exporter's offer.

A pro-forma invoice is usually provided to interested buyer which is a temporary document that describing tentative terms of sale mutually agreed upon by the buyer and seller. This invoice mentions information relating to shipping specifications, estimated costs and tentative dates and facilitates buyer in fulfilling his requirements. In case if the importer accepts pro-forma invoice terms, he makes a commitment to purchase and later on, submits a formal export order.

ii) Sales contract

An export sale contract is arrived at when both buyer and seller express their commitment in writing. It is a record of mutually agreed upon terms and conditions of sale and ensures safety to the parties against any violation in future.

10.4.2) MODE OF PAYMENT

In every export transaction, it is desirable to specify in the sales contract currency and mode of payment. In international agribusiness, hard currencies like dollars, euro, British Pound is frequently used. Following basic modes of payment are opted for in the international transactions.

a) Consignment

Under this type, commodity is first shipped to a foreign buyer who after further selling in the export market then makes payment to the exporter. The importer gives a detailed statement expressing the gross sale value, expenses and commission incurred by the importer and the net amount due to the exporter.

It is a high risk sale method for the exporter who can incur losses due to sharp drop in the prices in the foreign market, product damage, or wrong cost statements provide by the dishonest importer. Contrary to exporter in this arrangement, importer is in advantageous position who has very meagre chances of incurring loss only under exceptional circumstances when his expenses are more than his sale receipts.

b) Joint Account

In a joint account sale, the exporter is guaranteed a specific minimum price at a certain delivery point. All net proceeds received in excess of that price are divided equally between the exporter and the import buyer. For example, the exporter will calculate the price that should be received CIF port of destination. Then the importer will guarantee payment at that price. The sale is made and the net proceeds (gross proceeds from the sale minus certain expenses and payments to third parties such as import duties customs

charges and handling at the dock) are divided equally between exporter and importer. The principal risks, excluding loss due to quality deterioration are shared by the export seller and the import buyer. From the standpoint of the exporter, there is considerably less risk with this method than with the consignment sale.

c) Open Account

Under payment method, exporter sends shipment to the importer for taking title of the commodities according to delivery terms of the sale. Importer makes payment at some future date like one month after delivery date or at beginning or end of the month in case if frequent deliveries are made. In fact, this is a sort of interest free loan equivalent to the shipment value extended by the exporter to the importer from delivery to payment time. This payment method is used sparingly in sales of processed agricultural products and only in sales to reliable buyers with very high ratings for credit and performance. It is considered to have too high a risk for most export sales, especially to buyer located in foreign countries with unstable currencies and or governments.

d) Cash against Documents

This method of payment, which is often used in domestic trade, has an adaptation for use in international trade. In this case, generally small exporters rely on the agents for finding buyers with high performance and credit ratings. Commodities are sold to these buyers through agents on the basis of cash against documents. This method of payment has less risk than a consignment, open account or joint account sales, but there may be more risk for the exporter than with a draft or letter of credit.

e) Draft

A draft, also called a bill of exchange, is a financial document prepared by the exporter ordering the foreign importer to make prompt payment to a designated bank for commodities shipped. It is a “clean draft” if the documents that control the title to the goods shipped are not attached; and a “documentary draft” if these are attached. A site draft is payable upon showing the draft to the importer. A time draft is payable after a given period of time indicated on the draft such as 30, 60 or 90 days after site. The time period begins when the representative of the importer or the importer’s bank has signed their name on the word, accepted. When the time draft has thus been accepted, it becomes known as an acceptance.

The usual procedure is for the exporter to send the draft along with requisite documents like shipping and collection documents to the bank of importer. An original bill of lading is also included in the documents and is endorsed by the shipper if the negotiable form is used. The bank notifies the importer that the document has been received. When the site draft is used, the importer must promptly pay the amount of the draft to the bank. Then the bill of lading is given to the importer and he can take possession of the shipment. In the case of a time draft, the buyer can take possession of the commodity upon acceptance of the draft. Payment is made later based on the time specified in the draft.

This method of payment, especially the use of the site draft, has been commonly used for exports of bulk and packaged agricultural products. The risk to the exporter is less than for a consignment, open account, joint account, or cash against document sale but more than for a letter of credit. In case of dealings with financially reputable importers, it is not necessary to incur additional cost and paperwork of a letter of credit.

f) Letter Of Credit

It is a financial document providing for payment of commodities purchased. It is issued by a foreign bank on the request of importer and in favour of the exporter and is a promise by the bank make payment within a specified time when specified conditions are met. Preferably, it should be an irrevocable letter of credit. The importer cannot alter the terms in any way without agreement by the exporter. It should also be confirmed for the exporter by the exporter's local bank. The bank then has accepted responsibility to pay the exporter as soon as the documents are received regardless of the current financial condition of the importer or the foreign bank. This assures prompt payment to the exporter. The letter of credit presents the least risk to the exporter and is the method that should be considered for initial export sales.

10.4.3) PHYSICAL DISTRIBUTION

Most products in international trade are transported by ocean freight. Ocean transportation is a relatively low cost method and can easily handle large shipments. Air transportation at present is the least important means of transportation for international shipments in terms of total amount handled but it is growing rapidly. Air freight is usually more expensive but has the advantage of speed and direct access to inland customers. It is used mainly for highly perishable items such as fresh flowers.

A totally different set of requirements can be encountered in shipping agricultural products across an ocean by air or sea than those encountered in domestic shipments. Packing used in domestic marketing may not be adequate for shipments through ocean transportation. Ocean carriers usually bear less liability for loss or damage of goods than do inland carriers. Many factors affect the cost of ocean transportation and the rates charged by carriers are only a portion of the overall cost.

10.4.4) PACKAGING AND LABELLING

Proper packaging and labelling according to the requirements of the buyer is an essential requirement of export sale and this should be done according to the specifications agreed upon in the final sales contract. Product packages and containers should be very carefully designed and filled to avoid product damage and maintain product quality during shipment. Improper packaging causes excessive movement of product inside the container and exerts extra weight on the product and as result product losses take place. Excessive high or low temperature in the packing boxes can damage products particularly perishable agricultural commodities.

High value produce which can be consumed on the spot or moved for quick sale may be stolen and requires special packing and handling precautions. Special labels with information expressed in the language of the importing country rather than the language of the exporter may be needed on various sizes of packages. Weights may be needed to be expressed in the metric or the English system. Most foreign customers are in nations using the metric system. However, English, Canadian and United States importers require the English weights and measures.

10.4.5) INSURANCE

Cargo insurance is an important consideration for overseas delivery. Carriers are exempt by law from responsibility for certain types of losses. Thus, either the seller or the buyer (depending on the terms of sale) must insure the goods against any loss or damage that might occur during the transit time.

A sale of C&F delivery terms may be preferable to CIF if:

- a) The buyer has a low cost open or blanket policy to cover all his purchases.
- b) The exporter would have to obtain a special policy for a single shipment.

Individual policies, written for a single shipment, are rarely used by firms regularly engaged in foreign trade. Most firms insure under long-term contracts known as open or floating policies which automatically cover all shipments made by the insurer. This saves having to arrange for a separate insurance policy to cover each shipment.

10.4.6) OCEAN FREIGHT

Ocean freight service is provided by three types of shipping lines: (a) carriers belonging to a conference; (b) non-conference or independent lines; and (c) tramp or break bulk carriers.

a) Conferences

Conferences are associations of shipping lines that have grouped themselves together for the purpose of establishing common freight rates, regularly scheduled departures and common shipping condition. These are represented on most trade routes. A common freight rate means that the conference members have agreed to compete only with respect to the quality and efficiency of their service. Shippers may sign an exclusive patronage contract in which they agree to send all their shipments on carriers belonging to the conference. The shipper then receives a low rate than that charged to shippers who sometimes deal with non-conference lines.

b) Non-conference lines

Non-conference lines operate and quota freight rates independently. These provide services usually less frequently than the conference lines but on the same trade routes and in competition with the conference lines. Generally, these do not require the signing of an exclusive patronage contract and will accept bookings from all shippers provided space is available.

c) Tramp vessels

Tramp vessels do not operate a scheduled service but their space is usually available on a "voyage" or "time" charter basis. When the chartering is for a series of voyages, the term "consecutive voyages" is used. In this case, one or more vessels are chartered to make fixed voyages, usually between two ports, in order to carry a large consignment.

In general, conference rates on regular runs are higher than tramp or non-conference rates on regular runs. However, this is less likely to be true for the mixed general cargo in which the liners specialise than for the bulk commodities that often move by tramp.

The ease of transport and the commercial value of the goods represent important elements in determining ocean freight charges. Shipping lines use a rating system based on weight and one based on volume in determining freight charges. These usually charge the higher of the two rates. Significant characteristics which influence rates are;

- a) Density of goods as this affects space per tonne.
- b) Shape of goods or packages as this affects storability.
- c) Susceptibility to damage of the goods being shipped, other cargo or the ship by breakage, fire, rust, spoilage, etc.
- d) Susceptibility to pilferage.

- e) Handling costs
- f) Need for special protection such as refrigeration

Foods that are more likely to cause transport problems usually have higher freight rates. Significant commercial characteristics influencing rates are:

- a) Intrinsic value.
- b) Difference in value of the product at the port of origin and the destination port.
- c) Manufacturing stage (i.e. raw semi, finished, etc.)
- d) Market competition with goods originating in another country.

Those goods which are finished, have a higher value or compete with other goods overseas tend to have higher freight rates.

10.4.7) FREIGHT FORWARDER

A foreign freight forwarder acts on behalf of other persons in sending onward a commodity moving in international trade. When used in reference to exporting, the term always refers to a firm located in the exporting country. These play a useful role in export marketing chain by furnishing important information like foreign market regulations and practices, and packaging and labelling requirements to exporters. These assist in arranging domestic and international transportation, preparation and handling of various export documents, arranging marine insurance and finding financial assistance sources. Freight forwarders are independent businessmen who have no financial interest in the merchandise. Their ability to give impartial advice on matters concerning transportation and documentation, such as the choice of carriers, can be of great value. These can handle most of the functions connected with export shipments except manufacture and sale of the product.

10.4.8) SHIPPING AND CUSTOMS DOCUMENTS

A number of documents are needed for exporting that differs from those required for domestic sales. Many countries have regulations and special requirements that must be considered when completing these forms. Here, again, a freight forwarder is a specialist and should probably take care of the documentation for a new exporter.

a) Bill of lading

The broad functions of bill of lading are as under;

- a) It is a receipt for the goods shipped,
- b) It serves as a transferable document of title of the goods enabling the holder to demand the cargo, and
- c) It is an evidence of the terms of the contract.

There are two main types of bill of lading i.e. received for shipment bill and on board lading. The received for shipment bill, or the received bill as it is sometimes called, acknowledges receipt of the goods by the carrier. The on board lading, sometimes known as the shipped bill, acknowledges receipt of the goods on board the stated vessel.

Upon receipt of the goods, the vessel's captain, owners or agent signs the bills of lading (three or more copies are often required). The exporter then presents the bills to the bank for collection. The bills are then sent by airmail to the consignee (buyer) for claiming

goods at the entry port. This procedure may vary but it will always be specified in the contract letter of credit.

b) Airway bill

An air waybill is issued by an airline. It is a receipt for the goods and documentary evidence that the contract of carriage has been concluded. It is a record of the consignment for the airlines and a means of ensuring the correct sharing for carrying such a consignment. Unlike a bill of lading for an ocean shipment, the air waybill is not a document of title and is not negotiable. It is completed by the shipper/forwarding agent.

c) Insurance certificate

An evidence of having insured a shipment under an open policy, the exporter prepares an insurance certificate on forms supplied by the insurance company. This form certifies that the shipment described on it is insured subject to the insurance terms shown on the certificate.

d) International forwarding agent's documents

These documents are the forwarding agents certificates of receipt (FCR) and forwarding agents certificate of transports (FCT). The essential elements are the same as for the individual forwarder's bills of lading. The FCR and FCT are documents of control and show the receipt of goods and the receipt of instructions to transport the goods to a specified destination. The FCR certifies that specified shipment is under the control of forwarder who has irrevocable instructions for dispatching it to the buyer indicated on the documents or to retain for some time at his disposal. The FCT certifies that the forwarder has taken control of the specified shipment for shipment and delivery in accordance with the buyer's instructions written in the documents. With these documents, the forwarder assumes a greater responsibility in the delivery of goods than with a simple bill of lading.

e) Certificate of health or sanitary certificate

This certificate is a requirement in many countries for shipping animals and plants and their products. This is to ensure that (a) the goods shipped are free from disease and insects, and (b) food products have been prepared according to prescribed standards. These certificates are usually granted by the appropriate public authorities in the exporting country. When the shipping documents require consular invoices or visas, the health certificate must be included with the documents submitted to the consul.

f) Certificate of origin

The basic purpose of the certificate of origin is to establish the right of the goods to preferential duties. For example, a certificate of origin is required for commonwealth. Such certificates are also required between countries that have customs or free-trade area agreements. Another purpose of the certificate of origin is for the control of export quotas that have been established by international agreement.

g) Commercial invoice

Generally speaking, an invoice is an itemised bill specifying price, terms of sale and terms of payment for goods shipped. The term commercial invoice as used in foreign trade has a somewhat broader meaning and serves some special purposes peculiar to export commerce such as determining the value for customs. The form arrangement of content and nature of information shown frequently is the same as for a domestic sale,

but often it is more complicated, written in a specified language, on a special form and conforming to detailed information requirements of the destination country as well as to specifications in the letter of credit. It is not just a document concerning buyer and seller but is used by a country of entry, as well as an insurance company and bank, to determine value. For firms that do not have an export department and depend on a forwarder, by consulting the country of destination's regulation and referring to the letter of credit and other pertinent documents, then prepares a commercial invoice that will allow the shipment to move to its destination and allow collection without delay.

If the shipper elects to prepare his invoices, he can obtain information and / or assistance from his freight forwarder, governmental offices which have information of individual foreign countries, the consular office of the destination country, the exporter's encyclopaedia, and export information published by the commerce and industry association of New York.

In addition to the special requirements of the letter of credit and destination country, each commercial invoice should include the following basic information:

- a) Date of order
- b) Order and invoice number
- c) Name and address of buyer and seller
- d) Insurance date (when available)
- e) Price per unit and total price
- f) Terms of sale
- g) Shipping date
- h) Port of shipment
- i) Name of vessel
- j) All fees and miscellaneous charges connected with the shipment and permitted by the letter of credit.
- k) Complete description of the goods, showing quantity, weight, number of packages, measurements and export marks.

h) Consular invoice

A consular invoice calls for complete product description including numbers, weights, value, and origin of goods along with a declaration certifying accuracy of the invoice contents. It is used for administering import regulations and is the most exacting document an export is likely to encounter. It must be prepared with particular care. It is most generally needed for exports to South America but a few other countries also require it.

10.5) THE WORLD TRADE ORGANISATION (WTO)

The exporters of agricultural commodities must be well versed with trade rules operating at international level. Now international trade is largely governed by the rules laid down by the World Trade Organisation (WTO). It is the only international organisation dealing with the trade rules and followed by a vast majority of countries across the globe. The system under WTO has been designed to liberalise trade among member countries.

This system is important for business community particularly exporters are highly benefited due to the security of access exportable goods and services. Due to WTO, all tariffs of developed countries and major proportion of tariffs of developing countries for trade in goods have been bound and cannot be further increased. These tariff bindings

ensures secured access to export markets by minimising uncertainty for the exporters who can then devise profitable investment and production plans. Furthermore, all the countries have to ensure appropriate and uniform applications of various rules and provisions of relevant WTO agreements for estimating customs duties, product inspections for conformity assessment and issuance of import licenses.

10.5.1) Establishment

The World Trade Organisation (WTO) was formally established on 1st January, 1995. The process for the creation of WTO started for almost half a century ago when due to Second World War, several countries faced the problems of destruction of physical infrastructure, monetary constraints and high trade barriers. At that time world leaders propounded to establish following three international economic institutions to overcome these problems in future.

1. The International Monetary Fund (IMF)
2. International Bank for Reconstruction & Development (IBRD, Currently The World Bank)
3. The International Trade Organisation (ITO)

The world leaders were succeeded in creating International Monetary Fund and International Bank for Reconstruction and Development but the idea of International Trade Organisation could not be materialised due to certain differences. However, an informal mechanism was evolved in the name of General Agreement on Tariffs and Trade (GATT) to continue the process and to hold rounds of negotiations among the trading nations. This protocol was entered into force on 1st January 1948

Box 10.1: Basic Facts of The WTO	
Location:	Geneva, Switzerland
Established on:	1st January 1995
Created by:	Uruguay Round Negotiations (1986-94)
Membership:	153 countries
Budget:	160 million Swiss Francs
Income Source:	Contributions by each member according to its share of international trade (%) minimum contribution is 0.015%
Secretariat staff:	600 persons
Official Languages:	English, French, and Spanish
Headed by:	Director General

Source: www.wto.org

The fundamental legal principles of GATT did not change too much in the next half a century and remained as such as were in 1948. In the initial years, main focus of the GATT trade rounds was on tariff reduction. The first five rounds of the negotiation were successful in lowering tariff from 50 to 12%. The sixth “Kennedy Round” dealt with problem of developing countries. The seventh “Tokyo Round” dealt with trade barriers and concluded with antidumping and subsidies agreement. The Eighth and last round under GATT was the “Uruguay Round (1986-94)” which finally led to creation of WTO.

10.5.2) OBJECTIVES

The basic objectives of WTO are almost same to those of GATT. However, these objectives have been expanded to include trade in service in the mandate of WTO and to pay adequate attention on environmental preservation and protection. The WTO has been set up to achieve the objectives of

1. Raising standards of living and incomes,
2. Ensuring full employment,
3. Expanding production and trade,
4. Allowing for the optimal use of the world's resources.

10.5.3) FUNCTIONS

According to the agreement establishing WTO, it shall;

1. Facilitate the implementation, administration and operation of the Uruguay Round legal instruments and of any new agreements that may be negotiated in the future
2. Provide a forum for further negotiations among member countries on matters covered by the Agreements, on new issues falling within its mandate, and on further liberalisation of trade
3. Settlement differences and disputes among trading countries
4. Carrying out periodic reviews of the trade policies of its member countries.

10.5.4) FUNDAMENTAL PRINCIPLES

The new multilateral trading system is working to liberalise the trade and achieve sustainable economic development. To accomplish its objective, the WTO follows the following principles.

a) Non Discrimination

The WTO works on the fundamental principle of non-discrimination. It has following two dimensions;

I. Most Favoured Nation

The members of WTO cannot discriminate among their trading partners under the clause of Most Favoured Nation (MFN) treatment. One country cannot restrict certain trade favour or benefit to his trading partner, it has to extend that favour or benefit to all members. The basic objective of the MFN treatment is to strengthen the multilateral process in international trade, so that the benefits of the multinational trading system are shared by all the participants.

II. National Treatment

A country cannot discriminate between domestic and imported products under national treatment clause. According to this principle, on entering the borders of importing country, an imported product shall be accorded treatment equivalent to same domestic product.

b) Trade Liberalisation

The new trading system aims to liberalise the world trade by lowering tariff and non-tariff barriers. The WTO recognises that trade liberalisation agenda cannot be accomplished at once. Therefore, progressive liberalisation and freer trade through mutual negotiations among member countries is a fundamental principle of WTO.

c) Predictability and Transparency

It is an important principle wherein the new multilateral system intends to create predictability and transparency for the trading partners. Member countries have made commitments by binding their tariffs so that exporters can have an idea about the tariffs and non-tariff barriers of their target export markets. In order to create transparency in the system the members have to disclose all relevant information and policies through notifications to WTO. Furthermore, regular trade policy reviews are carried out to examine the compliance of member countries rules and regulation with WTO system.

d) Promoting Fair Competition

The WTO intends to liberalise the world trade by promoting fair competition among countries. It does not allow the use of various unfair practices like dumping, grant of unnecessary subsidies and use of various restrictions. There are separate agreements on these issues. Furthermore, dispute settlement mechanism is to help resolve trade issues among member countries.

10.5.5) ORGANISATIONAL STRUCTURE

In the WTO, ministerial conference is the apex decision making body that comprise of representatives of all the member countries. It meets at least once in every two years and during intervals in the ministerial conference meetings; General Council conducts the functions of the conference. Generally, all decisions in WTO are taken by consensus. The General Council acts on behalf of the Ministerial Conference on all WTO affairs. It may meet as the Dispute Settlement Body and the Trade Policy Review Body. Three more councils, each handling a different broad area of trade, report to the General Council and are as under;

1. The Council for Trade in Goods (Goods Council)
2. The Council for Trade in Services (Services Council)
3. The council for Trade Related Aspects of Intellectual Property Rights (TRIPs Council)

10.5.6) THE WTO AGREEMENTS

The WTO works through agreements which were negotiated and signed by the bulk of the world's trading nations and ratified by their parliaments. Following are the WTO agreements

- A. Marrakesh Agreement Establishing the World Trade Organisation
- B. Multilateral agreements
 1. Trade in goods
 - a) General Agreement on Tariffs and Trade (GATT 1994)
 - b) Associate Agreements
 1. Agreement on Customs Valuation
 2. Agreement on Pre-shipment Inspection (PSI)
 3. Agreement on Technical Barriers to Trade (TBT)

4. Agreement on the Application of Sanitary & Phyto-sanitary Measures (SPS)
5. Agreement on Import Licensing Procedures
6. Agreement on Safeguards
7. Agreement on Subsidies and Countervailing Measures (SCM)
8. Agreement on Anti-Dumping Practices (ADP)
9. Agreement on Trade-Related Investment Measures (TRIMs)
10. Agreement on Textiles and Clothing (ATC)
11. Agreement on Agriculture (AoA)
12. Agreement on Rules of Origin

Besides these agreements, there are certain understandings and decisions on various issues and Trade Policy Review Mechanism.

2. Trade in services
 - General Agreement on Trade in Services (GATS)
 3. Intellectual property rights (IPRs)
 - Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)
- C. Plurilateral trade agreements
- Agreement on Trade in Civil Aircraft
 - Agreement on Government Procurement

These agreements prescribe the rights and obligations of governments which are enforceable within the multilateral framework. A brief description of some important WTO agreements is as under.

10.5.6.1) Agreement on Agriculture (AoA)

The agreement on Agriculture (AoA) is an important step towards liberalised trade of agricultural products. It has following three important pillars

1. Market access

Under this pillar the member countries have to provide access to other countries by lowering down the tariff and non-tariff measures (i.e. quantitative restrictions, voluntary export restraints, minimum import prices, variable import levies, discretionary import licensing, and other border measures). Furthermore, members through tariffication process have to convert non-tariff measures into tariffs. On an average the developed countries have to slash their tariffs by 36 percent where for developing countries this requirement is 24 percent.

2. Domestic support

The governments around the world provide various types of subsidies and direct or indirect measures of assistance to agriculture and rural development and hence become a source of distortions in international trade. Under WTO, member countries have domestic support reduction commitments under which developed countries have to reduce domestic support by 20 percent whereas for developing countries this reduction commitment is 13.3 percent. The AoA prescribes a measure for this quantification of domestic support termed as the Aggregate Measurement of Support (AMS). It is a monetary measure of total annual support provided to agricultural producers and AMS limit is based on the member state's agriculture support over the base period (i.e. usually 1986-88).

Under WTO, the domestic support has been annexed with three boxes i.e. green, amber and blue on the analogy of traffic lights.

- **Amber Box** includes payments and subsidies (like price support programs) given to producers which are to be reduced, but not eliminated. The amber box measures are considered to distort trade and hence subjected to reduction commitments.
- **Blue Box** embodies certain direct payments to farmers aimed at limiting production and are specifically exempted from reduction commitments.
- **Green Box** measures are non-actionable i.e. are permitted. This category includes those forms of support which are estimated to have no or minimal distorting effects on production or trade.

3. Export competition (export subsidy)

The commitment for reduction of export subsidy is also included in the schedule of the Member. Export subsidies are to be reduced by 36 percent by developed countries and 24 percent by developing countries.

10.5.6.2) Agreement on Textiles and Clothing (ATC)

The textile sector was integrated in to multilateral trading system under the ATC that replaced the Multi- Fibre Agreement (MFA). Previously, developed countries could curtail the annual imports of many fibres including cotton, from specific developing countries to specific predetermined levels (quotas). ATC has completely abolished quota system in a ten years period of time starting from 1 January 1995. Since January 1st, 2005, the normal WTO rules apply on textile trade.

10.5.6.3) Agreement on Technical Barriers to Trade (TBT)

Governments sometimes due to security reason or health and environmental concerns apply be mandatory technical regulations for products. Due to wider acceptance of these product standards, uniformity in designs, tools, machinery and inputs is achieved that leads to economy of production and quality assurance. The basic general principles for mandatory technical regulations are the following:

- a) In order to achieve legitimate objectives, these regulations shall not unnecessarily be highly trade restrictive.
- b) The principle of non-discrimination among members will be followed
- c) The principle of national treatment will be followed
- d) Technical regulations will generally be prescribed in terms of product performance rather than design or descriptive characteristics
- e) If international regulations for a specific product exist, Members will adopt them, except if such a step will be inappropriate for seeking the objectives.
- f) Members should try to accept the other member's technical regulations as equivalent to their own regulations even if these are different from their own.
- g) For standards, there is a Code of Good Practice for the development, adoption and application of standards in an annex to the Agreement on Technical Barriers to Trade. These disciplines are generally on the lines similar to those relating to technical regulations. This code can be accepted by standardising bodies of member countries.

10.5.6.4) Agreement on the Application of Sanitary and Phyto-sanitary Measures (SPS)

The agreement on the application of Sanitary and Phyto-sanitary Measures lays down rules and regulation relating to SPS measures which are prescribed by the member countries to safeguard their

- Human or animal life against food borne risks due to use of additives and contaminants or disease causing micro-organisms
- Human health from animal or plant carried diseases
- Animals and plants from pests and diseases

The term Sanitary Regulations' is used for the regulations which are designed to prevent animal borne disease from entering a country in order to ensure food safety. The regulations relating to protection of plant life are termed 'Phyto-sanitary Regulations'.

10.5.6.5) Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPs)

An intellectual property is creation of mind and the person/institutions behind must be rewarded for the creations and innovations. Like services, it is outside the disciplines in the goods sector. The Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPs) recognises intellectual property rights as copy rights, patents, trademarks, geographical indications, layout designs of integrated circuits, undisclosed information and industrial designs. The agreement prescribes for member countries a minimum level of protection in various areas. Member countries are under obligation to implement various provisions of TRIPs agreement by amending domestic legislation accordingly.

Besides these major agreements, there are some other agreements and provisions for the following elements/issues

10.5.6.6) Agreement on Safeguards

The provision of safeguard is an exception to the general rule of not exceeding the bound rate of duty and generally of not applying any quantitative restrictions on imports. These measures are permitted temporarily in situations when the domestic industry suffers because of increase of imports and needs some time to adjust itself. There are two pre conditions for taking safeguard action.

- There is an increase in import and this increase may either be an actual absolute increase over the past import or an increase relative to domestic production.
- Such increased import may cause serious economic injury to the domestic industry or threatens to cause serious injury.

10.5.6.7) Agreement on Subsidies and Countervailing Measures (SCM)

Subsidy is a financial favour/assistance granted by the government to improve prospects of production or exports .The following conditions have to be fulfilled for a measure to be termed a subsidy:

- a) It is a financial contribution extended by member country's government or some public authorities, or
- b) It is in the form of income or price support.

Certain subsidies under WTO are non-actionable i.e. permitted while others are prohibited. If it is proved that the subsidy provided by a member injures the

competitiveness of the domestic industry the countervailing duty can be imposed after having sufficient evidence of subsidy, injury and causal link.

10.5.6.8) Agreement on Anti-Dumping Practices (ADP)

A product is said to be dumped if its export price is less than its normal value. Exporting products at abnormally low prices is an unfair trade practice against which actions have been prescribed in the WTO agreements. Dumping practices in the WTO agreements are taken as a predatory practice to eliminate competition. Action against dumping can be taken after an investigation has been held following the prescribed procedure. Under the WTO rules, action against anti-dumping can be taken by the government and not by trade and industry, hence the trade and industry of a country has to approach the government for initiating such a move. The National Tariff Commission is such an agency in Pakistan which has imposed anti-dumping duties on the dumped products.

10.5.6.9) Various Agreements Relating to Non-Tariff Barriers

There are several agreements that deal with various bureaucratic or legal hurdles to free trade. Some of the agreements/provisions are as follows;

1. The agreement on import licensing procedures contains provision for ensuring simplification, transparency and predictability in import licencing procedures.
2. Normally the customs value is the transaction value as indicated in the invoice. A member has to frame rules and regulations and administrative procedures for determination of customs value.
3. Pre-shipment inspection refers to examination of shipment details like quantity, quality and price of exported goods by a specialised organisation. In developing countries, governments particularly employ this practice to protect their national financial interests (such as capital flight, evasion of custom duties and commercial fraud) and to compensate for administrative infrastructures inadequacies.
4. The rules of origin determine the country of product origin. These rules now constitute an important set of trade rules because trade policies often discriminate on the basis of exporting countries. Often, complexities arise when different parts of the manufacturing process have been carried out in different countries. For instance, in the manufacture of a garment supply chain, the manufacture starts with the conversion of cotton into yarn, which is in turn transformed into fabric and then the garment, is made out of it.
5. The Trade Related Investment Measures (TRIMs) Agreement provisions forbid the use of various trade related investment measures which are not consistent with the WTO rules. The governments of developing countries in order to attract or force foreign investment in some particular sector levy some conditions which may be trade distorting in effect. Local content requirements, exchange restrictions, and domestic sale requirements are some examples of TRIMs.

10.5.6.10) General Agreement on Trade in Services (GATS)

This agreement provides for specific commitments in particular sectors of services and also for some general obligations. All services like financial, tourism, telecommunication and other professional services fall in the domain of this agreement which defines trading services in following categories:

1. **Cross Border Supply:** The services provided from one country to other country like international telephone calls.
2. **Consumption Abroad:** The services rendered to consumers or firms in abroad away from their home (e.g. tourism)
3. **Commercial Presence:** The services extended by a foreign company through its subsidiaries or branches in another country (e.g. foreign banks)
4. **Presence of Natural Persons:** The services rendered by Individuals in another country after travelling from their country (e.g. fashion models or consultants).

10.5.7) Dispute Settlement Mechanism

The WTO Agreements provide for resolution of problems when any Member has a reasonable grievance against another Member regarding the rights and obligations contained in these agreements.

Settling disputes is the responsibility of the Dispute Settlement Body (DSB) which possesses sole authority to constitute panels of experts for case consideration and subsequently its acceptance and rejection. DSB ensures the implementation of rulings and recommendations and when some country does not abide by the rulings, it may authorise retaliation and other actions.

10.6) WTO IMPLEMENTATION IN PAKISTAN

Pakistan is founding member of the General Agreement on Tariffs and Trade (GATT) and subsequently WTO. At present, Pakistan is in full compliance with WTO regime and is following all rules and regulations by implementing various agreements of WTO. According to Pakistan' Trade Policy Review 2002 carried out by The WTO,

“Pakistan has acted significantly to improve the external transparency of its trade and investment regimes. It has largely met its regular GATT/WTO notification requirements and responded to most questions raised by WTO Members in a number of areas (e.g. state-trading and domestic support in agriculture); tariff information has been submitted to the WTO Integrated Data Base. In addition to regulatory reforms aimed at simplifying and introducing trade-related regulations, and the presence of Internet websites of several public sector agencies, Pakistan has made efforts to make legislation pertaining to trade (including the customs tariff) and investment publicly available in English through a web-based computer network”.

The Trade Policy Review 2008 of Pakistan states that,

“In Pakistan, trade policies have been liberalised in several important areas. In particular, customs procedures have been greatly improved, overall tariff protection considerably reduced, tariff bindings increased, and intellectual property rights strengthened.”

The important measures that have been taken for implementation of WTO in Pakistan are as under;

- Pakistan is completely in line with various provisions of Agreement on Agriculture (AoA) and its components like market access, domestic support and export competition. In the Uruguay Round, Pakistan had extended its commitment to bind more than 90 percent of the agricultural tariff lines. Due to religious reason, tariffs

were not bound for products like alcoholic beverages and pig meat. On domestic support front, the implementation of minimum support price policy of the government has been virtually curtailed to wheat only. Aggregate Measurement of Support (AMS) of Pakistan has been negative since the emergence of WTO and hence it has no reduction commitments. Only permissible domestic support under Green Box in the form of general services on research, marketing services, extension services, storage facilities, infrastructural services, flood protection, general services and water supply facilities is being provided to agricultural producers. Pakistan does not grant any export subsidy as such.

Table 10.1: Pakistan's tariff bindings & applied rates for major products (Percentage, Ad valorem)

Product	Bound rate	Range of applied rates						
		1995	1996	1997	1998	1999	2000-01	2002-03
Cereals	100-150 ¹	5-65	5-65	5-25	5-25	5-15	5-10	5-25
Oilseeds	100	10-70	10-65	5-65	5-45	5-35	5-10	0-10
Vegetable Oils ²	100	25-70	25-65	25-65	15-45	10-35	10-30	10-25
Live Animals	100	15-65	15-65	15-65	10-45	10-35	10-30	10-25
Meat	100	35-70	35-65	15-65	15-45	10-35	10-30	10-25
Dairy Products	100	25-70	25-65	25-65	25-45	25-35	20-30	20-25
Sugar	100	35-70	35-65	45-65	25-45	25-35	20-30	20-25
Coffee and Tea ³	100-150	15-70	15-65	0-65	15-45	20-35	20-30	20-25
Average ⁴	100.5	-	-	-	-	-	-	-

¹ 100% for rice and wheat flour and 150% for wheat.
² There were also specific rates of duty for some oils during 1995-97.
³ Bound rates for coffee 100% and tea 150%. Applied rates are also typically high for tea.
⁴ Average of roughly 708 tariff lines.
Sources: Bound rates: Pakistan's WTO Schedule; applied rates: compiled from various official sources

- In order to comply with various agreements dealing with standards, Pakistan has developed several standard for ensuring hygienic, adulteration free and good quality food production for domestic and export purposes. Although in some cases, national standards are inferior to international level due to lack of requisite technologies and infrastructure but largely Pakistan has made an effort to develop its standards in line with international standards. As such, these standards do not create any hindrance to free trade. Sometimes, due to inadequate technological infrastructure for the enforcement of SPS standards, exporting countries to Pakistan often take an undue advantage.
- Pakistan has undertaken institutional and legislative arrangements for the implementation of WTO Agreement on Trade Related Intellectual Property Rights (TRIPS). In this regard, Intellectual Property Rights Organisation, Pakistan (IPO-Pakistan) has been set up in 2005 in tandem with new international trading regime. Besides, amendments in patent legislation in 1997 have been made to comply with patent mailbox provisions of TRIPS and, in 2000/01, new legislation pertaining to patents, copy rights, trade marks and layout designs of integrated circuits have been passed.

10.7) WTO REGIME: CHALLENGES AND OPTIONS FOR PAKISTAN

Pakistan is economically an agrarian country largely drawing its economic strength from agriculture sector which plays a pivotal role in economic development of the country. In the recent past, the agriculture sector has initiated its journey towards commercialisation. However, this sector has not yet become fully self-supportive. Farming community lacks proper knowledge and is ill equipped to face the challenges of modern agriculture. Large number of the farmers is illiterate and is unable to make rational decisions on their own and need institutional support. Moreover, market mechanism is not well established and not capable enough to provide proper economic signals to all the stakeholders.

In compliance with WTO regime, Pakistan has substantially liberalised its agriculture sector by reducing tariff and non-tariff measures. This may pose severe challenges agriculture trade as well as domestic producers and consumers of agriculture products in Pakistan.

On export front, Pakistan faces a number of challenges posed by the strict enforcement of standards and fierce competition among the trading partners. The strict enforcement of standards like SPS/TBT measures constitutes major impediments to exports of Pakistan in the export markets in the developed countries. Huge investment on requisite technological and infrastructural development is required in order to comply with these standards. Therefore, these SPS/TBT measures are main hurdle in the way of Pakistan's exports. Some examples of SPS/TBT impediments to exports from Pakistan include ban on seafood exports and trade restrictions to super basmati rice exports to EU, quantitative restraints of combed cotton yarn exports to US and denial of market access to Pakistani fruits in many European countries.

In fact, developing countries like Pakistan substantially lag behind the developed world in the implementation capacity of SPS standards due to inadequate financial, technical and human capabilities. In this regard, the developed countries should support the developing countries in requisite technological and infrastructural development for making them compatible with the developed trade partners in due course of time.

In Pakistan, there is a need to boost up agriculture sector for making it internationally competitive without contravening the new international trading regime. In this regard, following measures are suggested.

1. In order to comply with SPS standards, a long term strategy should be chalked out to make various institutional arrangements. All the stakeholders should be guided to adopt international standards in a step by step approach and strict compliance of standards should be ensured. In this regard, government should seek requisite technical support from the developed countries particularly institutional infrastructure and human resource development
2. Pakistan has no reduction commitment on the provision of domestic support. Aggregate Measure of Support (AMS) throughout the implementation period as notified by Pakistan has been negative which means that agriculture sector did not receive any support under the Amber Box rather it was taxed. Therefore, Pakistan can utilise this cushion and provide permissible domestic support to agricultural producers without contravening the provisions of AoA. Furthermore, green box type of support should be substantially enhanced to research organisations, agricultural producers and other stakeholders in order to strengthen their capacity.
3. Agricultural exports of Pakistan consist primarily of primary commodities and export market is very limited. Efforts should be made to diversify the agricultural exports and

export markets. Value addition in the agricultural commodities should be undertaken. In this regard, modern marketing tools and techniques should be employed. Standardisation, quality improvements, labelling and packaging of export items should be accorded high emphasis.

4. In the WTO regime, agricultural producers are confronted with many challenges that call for an increased investment in rural public domain such as agricultural research to further improve agricultural technology and to provide producers with better production conditions that are comparable with their foreign competitors. In this direction, Govt. should (a) accord high priority to agricultural research and investment spending on agricultural research should be increased manifold immediately, (b) ensure that major proportion of budget of the various research organisations is incurred on the operational research (c) bring drastic institutional changes in the provincial research organisations in order to stem the current outflow of competent agricultural researchers. (d) fill all the vacant positions in the research organisations. Fresh recruitment, promotions and appointment against various administrative posts should be on merit and should be tied up with performance, (e) ensure agricultural research be problem solving and target oriented.
5. The access of farmers to timely and cheap availability of agricultural inputs like improved seed, fertiliser and pesticides should be enhanced. Modern infrastructure for seed storage should be developed and in case of natural calamity seed availability should be ensured to the farmers. Grants should be provided to both public and private seed organisation for maintenance of certified and foundation seeds. The core poor should be given improved seed and fertiliser at cheaper rates and in small packs. In this regard, the recent announcement by Govt. to provide subsidised fertilisers is timely step in right direction.
6. Infrastructural development should be accorded high priority in the budgetary allocations of the government. Public expenditure on the irrigation, and land reclamation should be further enhanced and spending on canal lining and laying down of water courses for overcoming water losses during conveyance of water to the tail end farms should be increased.
7. Owing to Sanitary and Phyto-Sanitary Agreement of WTO, the importance of pest and disease control measures such as early warning systems, quarantine and eradication has significantly increased. The government should ensure proper pest and disease control mechanism in line with the international standards if the object is to increase agricultural exports. A strict system of inspection like general and product specific inspection for safety and health, standardisation and grading purposes should be enforced and inquiry points at various places should be set up.
8. Agricultural marketing, in the past in Pakistan, has largely remained ignored but disposal of occasional surpluses of some of agricultural commodities; emergence of agribusiness sector and challenges posed to agrarian economy by WTO has increased its importance. The farmers in general and small farmers in particular lack modern marketing techniques that result in high post-harvest losses. Farmers should be facilitated in the product preparation, handling, storage, bargaining, grading, standardisation, packing and disposal of their produce. Market information system should be modernised and technologically strengthened in order to provide prompt and needed information to all stakeholders and to build linkages in agricultural markets.

GLOSSARY

Absolute advantage

An advantage that a country has due to total lower costs of production than another country

Adaptation

Adjustments or change of goods or service in any of product attributes distribution or advertising to fulfil specific needs and wants of consumers of certain localities

Added value

An improvement in the utility of a product or service represent added value

Advertising

A form of communication non-personal in nature carrying a structure and composed message sponsored by an identified sponsor through various media to consumers

Agent middlemen

Market intermediaries are representatives of their clients who do not take title of the products they handle and earn their income in the form of commission and fees e.g. commission agents and brokers

Agribusiness

Businesses or institutions concerned with production, processing, and distribution of agricultural commodities including farm supplies, agricultural services and various supporting economic institutions

Agricultural commodity

The products (raw or processed) which are an outcome of agricultural production related activities

Agricultural marketing

All business activities involved in production planning, transformation, grading, storing, transportation and distribution of goods and services related to agriculture as desired by agricultural producers (farmers) and ultimate consumers.

Airway bill

An air waybill issued by an airline is a receipt for the goods and documentary evidence that the contract of carriage has been concluded

Assembler

Individuals or traders who buy agricultural produce from individual scattered farmers and gather the purchased produce into larger lots for onward sale to wholesalers and processors

Auction

A sale method for selling commodities under the auspices of an independent auctioneer who invites bids for the products or produce offered for sale

Augmented product

A product containing value added services and benefits to the prospective customer in addition to the core physical product

Bargaining power

Relative power or strength of either buyer or seller in dictating terms of exchange in a transaction

Barter

An exchange of a commodity for another between two parties without money considerations

Bill of lading

The bill of lading is a receipt for the goods shipped and a transferable document of title of the goods enabling the holder to demand the cargo

Brand

A name, term, symbol, numeric, alphabet, design or a combination of these used by a seller for identification of his product in the market

Broker

An agent middleman who facilitates buyers and sellers of agricultural produce in bringing together for the accomplishment of transactions in consideration of a fixed fee for the services rendered

Business/Industrial markets

The markets comprising of Industries and institutions that buy goods as inputs for further processing

Cartel

A grouping or arrangement by the businesses to control the prices and production of commodities

Commission agent

An agent middleman who does not purchase agricultural produce rather charges commission from the growers for usage of their facility and services in selling produce to the buyers

Comparative advantage

A country enjoying a lower production ratio (input to outputs) due to specialisation in comparison to other countries

Competitive advantage

The relative efficiency of a producer in producing and marketing certain commodities due to some distinctive competency as compared to competing producer

Consumer markets

Markets comprising of individuals and households who buy products for their direct/ultimate consumption

Contract

An agreement enforceable by law between two or more parties

Cooperative

A voluntary organisation of people who pool their resources for gaining commercial or non-commercial advantage in buying, selling or processing goods and/or services

Differentiated product

A product with significant differences in terms of price, qualities, services, advertising and other attributes

Direct marketing

A marketing strategy of firms to directly sell to the consumers without involvement of market intermediaries

Distribution channel

Institution or agencies through which goods or services move from producers to consumers and hence generate time and place utilities

Dumping

A practice of selling a product in another country at price that is either below cost of production or lower than the price charged in domestic market

Entrepreneur

An individual or firm who creatively combines various factors of production by assuming risks for profit pursuit

Factor markets

Markets where factors (inputs) used for agricultural production are bought and sold. Pesticide, fertiliser, seed, farm machinery and labour markets are examples of factor markets

Future price

The price at which the parties to a futures contract agree to transact on the agreed date

Futures market

The markets for exchange of future market contracts and comprise of various stakeholders like buyers, sellers and traders

Grading

The process of sorting products in uniform categories and lots on the basis of certain quality standards

Gross Domestic Product (GDP)

The market value of all final goods and services produced by a country's domestic economy in one year

Gross margin

The difference between the price that a firm pays for the product/inputs purchased and the price of products it sells to customers

Gross National Product (GNP)

The market value of all final goods and services produced by the residents of a country in one year including income from abroad

Hedging

A mechanism to avoid risk of a decline in the future market of a commodity, usually by temporary substitution of a future market transaction for a cash transaction

Integration

Amalgamation of business firms in order to increase sales and profit and may be horizontal integration involving firms operating at same level of business or vertical integration involving firms engaged in successive stages of production in the marketing chain

Letter of credit (L/C)

A method of international payment whereby the buyer instructs his own country bank to open a credit with a bank in the seller's country specifying the documents which the seller has to present to the bank in order to receive payment

Market

An exchange process accompanied by the price making mechanism

Market committee

An institution established under Section 7 of The Punjab Agricultural Produce Markets Ordinance 1978 to regularise the sale/purchase of agricultural produce and to provide amenities in the markets

Market conduct

The patterns of behaviour that enterprises follow in adapting or adjusting to the markets in which they sell or buy

Market intelligence

The process of collecting, interpreting and disseminating the large variety of data necessary for the smooth operation of marketing processes

Market niche

A small homogenous segment of the market with distinctive needs or characteristics that can be profitably met by organisations and cannot directly challenge market leaders

Market power

The ability of an individual or institution within market chain to influence advantageously markets, market behaviour and market performance

Market prices

Prices determined by the market forces with free interactions between supply and demand

Market segmentation

The process of dividing the heterogeneous market into smaller homogenous groups with similar needs in order to develop market offerings for effectively serving consumer needs

Market structure

Organisational characteristics of a market which determine the relations of various stakeholders with each other

Marketable surplus

The surplus production which is theoretically available for disposal by the producer after meeting his genuine requirements for family consumption, the payment of wages in kind, feed and seed etc.

Marketed surplus

Part of marketable surplus which is actually marketed and placed at the disposal of non-producers

Marketing

A total system of interacting business activities designed to plan, price promote and distribute want satisfying goods and services to target markets in order to achieve organisational objectives

Marketing audit

An objective examination of marketing policies, strategies and tactics in order to assess their appropriateness in relation to the prevailing and future marketing conditions and opportunities

Marketing boards

Public bodies set up by government action and delegated legal powers of compulsion over producers and handlers of primary or processed agricultural products

Marketing channels

Alternate routes depicting product flows from producers to consumers

Marketing efficiency

A ratio of market output (satisfaction) to marketing input (cost of resources)

Marketing function

A major specialised activity performed in accomplishing certain marketing processes

Marketing Information System

An arrangement of people, technology and procedures with the purpose of collecting data from the external and internal marketing environment, and transforming this data into useful information to improve marketing decisions

Marketing infrastructure

Institutions, people, facilities and logistics that move commodities from producers to consumers

Marketing institutions

A wide variety of business organisations/structures, agencies, and people who operate the marketing machinery

Marketing logistics

Marketing logistics relate to the cost effective, physical distribution of goods and services to intermediaries and final buyers

Marketing margin

The difference between the price paid by consumers and that obtained by producers, and it is also the price of a collection of marketing services which is the outcome of the demand for and the supply of such services

Marketing mix

A mix of marketing variables expressed as 4Ps (product, price, place and promotion) that an organisation designs in order to achieve its business objectives within a target market

Merchant middlemen

The middlemen who take title to, and therefore own, the products they handle

Middlemen

The individuals/agencies that specialise in performing various marketing functions and are involved in the purchase and sale of goods along the marketing chain from producer to consumer

Most Favoured Nation (MFN)

Most Favoured Nation (MFN) treatment implies that one country cannot restrict certain trade favour or benefit exclusively to his trading partner and it has to extend that favour or benefit to all members of the WTO

National Treatment

The principle of national treatment means that an imported product, on entering the importing country, must be accorded treatment no less favourable than that accorded to the domestic product

Non-tariff barriers

Barriers other than tariff like physical restrictions, quotas and standards that restrict free international movement of commodities and hence cause intentionally traded goods or services to be allocated in such a way as to reduce potential real world income

Personal selling

The use of sales force for persuading potential customers (individuals or organisations) to purchase the product or service of the firm

Price discovery

A process through which buyers and seller arrive at mutually acceptable prices

Price spread

The price spread measures the gross percentage of the final retail price received by various participants in a marketing system in return for the marketing services rendered by them

Pricing efficiency

The realisation of maximum output in money terms of a given output with the minimum resources

Product

A good or service offered by an organisation which gives value both objective (physical) and subjective (image) to a user

Product life cycle (PLC)

The phases of a product's life span comprising of introduction, growth, maturity and decline stages

Promotion

Marketing function attempting to inform, persuade and influence the customers' purchase decision

Quality

An attribute of product relating its usefulness, desirability and value to customers

Quota

A specific limit imposed by one country on the import of certain commodity from another country

Retailer

A merchant middleman who purchases in bulk and sells in small lots to ultimate consumers

Risk

The probability of occurrence of loss during business activities

Sales promotion

Incentives intended to encourage immediate sales of a products or services

Standardisation

The process of establishment and maintenance of both qualitative and quantitative uniform measurements

Target markets

The market segments which an enterprise decides to serve

Technical efficiency

The effectiveness with which the physical functions of marketing are carried out

Trademark

A brand or part of a brand that to which a seller has a legally enforceable, exclusive, right to use

Value Addition

The process of adding value or the utility of a product or service

Wholesale market

An institution or mechanism that establishes linkages between sellers and buyers for enabling sellers (mostly traders and sometimes farmers) to sell and buyers (mostly retailers and sometimes consumers) to purchase agricultural products in bulk

Wholesaler

Merchant middleman who sells to retailers, other wholesalers, and industrial users, but does not sell in significant amounts to ultimate consumers

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