

CHAPTER 3

MARKETING CHANNELS, MARKETING COST, MARKETING EFFICIENCY AND MARKET INTEGRATION

Marketing Channel

In this chapter, we discuss marketing agencies, marketing institutions and marketing channels through which farm products move from producers to consumers. A very small proportion of farm produce moves directly from farmers to consumers. Most of the farm products move to consumers through several agencies/institutions and channels. The role played by marketing agencies and institutions in the marketing system is quite indispensable as these perform important marketing functions. They also help in expanding the markets for farm products and add value to the products.

The production of a produce is complete only when it reaches the hands of those who need it – the consumers. All the commodities cannot be produced in all the areas because of variations in agro-climatic conditions. Hence, there is a need for their movement from producers to consumers.

There are two main routes through which agricultural commodities reach the consumers:

(i) Direct Route: Sometimes, agricultural commodities directly pass from producers to consumers. There is a complete absence of middlemen or intermediaries. But it is only a very small proportion of the agricultural commodities which moves directly from producers to consumers.

(ii) Indirect Route: Agricultural commodities generally move from producers to consumers through intermediaries or middlemen. The number of intermediaries may vary from one to many. In the modern era of specialized production, both the horizontal and vertical distance between the producer and the consumer has increased, resulting in a reduction of direct sales. The role of market middlemen has increased in the recent past because a substantial part of the produce moves through them.

The role, functions and other details of some of these institutions have been discussed in relevant chapters.

Marketing Channels

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

Definition

A marketing channel may be defined in different ways according to Moore *et al.*, the chain of intermediaries through whom the various foodgrains pass from producers to consumers constitutes their marketing channels. Kohls and Uhl have defined marketing channel as alternative routes of product flows from producers to consumers.

Factors Affecting Length of Marketing Channels

Marketing channels for agricultural products vary from product to product, country to country, lot to lot and time to time. For example, the marketing channels for fruits are different from those for foodgrains. Packagers play a crucial role in the marketing of fruits. The level of the development of a society or country determines the final form in which consumers demand the product. For example, consumers in developed countries demand more processed foods in a packed form. Wheat has to be supplied in the form of bread. Most enables have to be cooked and packed properly before they reach the consumers. Processors play a dominant role in such societies. In developing countries like India, However, most foodgrains are purchased by consumers in the raw form and processing is done at the consumer's level. Again, the lots originating at small farms follow different route or channels from the one originating in large farms. For example, small farms usually sell their produce to village traders; it may or may not enter the main market. But large farms usually sell their produce in the main market, where it goes into the hands of wholesalers. The produce sold immediately after the harvest usually follows longer channel than the one sold in later months.

With the expansion in transportation and communication network, changes in the structure of demand and the development of markets, marketing channels for farm products in India have undergone a considerable change, both in terms of length and quality.

Marketing Channels for Cereals

Marketing channels for various cereals in India are more or less similar, except the channel for paddy (or rice) where rice millers come into the picture. For pulse crops, *dal* mills appear prominently in the channel. The flow chart in Fig.5.1 enables us to know the marketing channels for general food grains in India.

Some common marketing channels for wheat have been identified as follows:

- (i) Farmer \longrightarrow consumers;
- (ii) Farmer \longrightarrow retailer or village trader \longrightarrow consumer;
- (iii) Farmer \longrightarrow wholesaler \longrightarrow retailer \longrightarrow consumer;

- (iv) Farmer → village trader → wholesaler → retailer → consumer;
- (v) Farmer → co-operative marketing society → retailer → consumer;
- (vi) Farmer → Govt. agency (FCI, etc.) → fair price shop → consumer;
- (vii) Farmer → wholesaler → flour miller → retailer → consumer.

The channels for paddy-rice and pulses are broadly the same, except that the rice millers or *dal* millers come into the picture before the produce reaches retailers or consumers.

Marketing Channels for Oilseeds

Marketing channels for oilseeds are different from those for foodgrains, mainly because the extraction of oil from oilseeds is an important marketing function of oilseeds. The flow chart in Fig.5.2 reveals the movement of oilseeds from producers to consumers in India.

The most common marketing channels for oilseeds in India are:

- (i) Producer to consumer (who either directly consumes the oilseeds or gets it processed on custom basis);
- (ii) Producer to village trader to processor to oil retailer to consumer;
- (iii) Producer to oilseed wholesaler to processor to oil wholesaler to oil retailer to oil consumer;
- (iv) Producer to village trader to processor to oil consumer;
- (v) Producer to government agency to processor to oil wholesaler to oil retailer to oil consumer.

Marketing Channels for Fruits and Vegetables

Marketing channels for fruits and vegetables vary from commodity to commodity and from producer to producer. In rural areas and small towns, many producers perform the function of retail sellers. Large producers directly sell their produce to the wholesalers or processing firms. Some of the common marketing channels for vegetables and fruits are:

- (i) Producer → consumer;
- (ii) Producer → primary wholesalers → retailers or hawkers → consumer;
- (iii) Producer → processors (for conversion into juices, preserves, etc.);
- (iv) Producers → primary wholesalers → processors;
- (v) Producers → primary wholesalers → secondary wholesalers → retailers or hawkers → consumers;
- (vi) Producers → local assemblers → primary wholesalers →

retailers or hawkers → consumers.

An important feature of marketing channels for fruits and vegetables is that these commodities just move to some selected large cities/centres and subsequently are distributed to urban population and other medium size urban market centres. The wholesale markets of these urban centres work as transit points and thus play an important role in the entire marketing channel for fruits and vegetables. Large wholesale markets for fruits and vegetables are concentrated in 10 major cities viz., Delhi, Kolkata, Bangalore, Chennai, Mumbai, Jaipur, Nagpur, Vijayavada, Lucknow and Varanasi. These cities account for 75 per cent of vegetables marketed in major urban areas in India. Further, the transit trade takes place through the cities with more than 20 lakh population which account for 68 per cent of the fruits and vegetables grown in the respective regions. There are 65 urban wholesale markets for fruits and 81 for vegetables. Each market, on an average, serves a population of about 7 lakhs.

Marketing Channels for Eggs

The prevalent marketing channels for eggs are:

- (i) Producer → consumer;
- (ii) Producer → retailer → consumer;
- (iii) Producer → wholesaler → retailer → consumer;
- (iv) Producer → co-operative marketing society → wholesalers
→ Retailers → consumers;
- (v) Producers → egg powder factory.

Sometimes, the wholesaling and retailing functions are performed by a single firm in the channel.

Marketing Channels for Pulses

Most of the studies on the identification of marketing channels for agricultural commodities have concentrated on a concept of marketing channel which defines the flow of the produce from the producer (farmer) to the consumer. But as the commercialization (market orientation) of agriculture is increasing and as the farmers and consumers are located in different states or different countries, the marketing channels that are emerging go across state or even national boundaries. This apart, unless quantities flowing into various channels are estimated, the relative importance of alternative channels cannot be assessed. Such an analysis was done by Acharya for gram grains in Rajasthan. According to this study, there are three points of entry of gram grain in the marketing channel, viz., farmer level, wholesaler level (from outside the

state) and processor level (also from outside the state). There are 28 marketing channels, village traders appear in 8 channels, grain wholesalers appear in 18 channels, processors appear in 15 channels, dal (split) wholesalers appear in 5 channels and retailers appear in 15 channels. Assuming the farmers' surplus entering the marketing channel as 100 units, the entry from outside the state at wholesaler and processor level was 4.24 per cent of the farmers surplus. The percentage quantities moving in 28 channels are given in Table 3.1.

Table 3.1

Quantity of Marketed Surplus of Gram moving in Various Marketing Channels

| Channel No. | Agencies involved | | | | | | | Quantity (%) |
|-------------|-------------------|---|---|---|---|---|---|--------------|
| 1. | F | - | - | - | - | - | C | 0.17 |
| 2. | F | - | - | - | - | R | C | 0.76 |
| 3. | F | V | - | - | - | - | C | 0.91 |
| 4. | F | V | - | - | - | R | C | 0.17 |
| 5. | F | V | W | - | - | R | C | 0.65 |
| 6. | F | V | W | - | - | - | G | 0.13 |
| 7. | F | V | W | P | - | R | C | 0.02 |
| 8. | F | V | W | P | S | R | C | 0.70 |
| 9. | F | V | W | P | - | - | O | 1.68 |
| 10. | F | V | W | - | - | - | O | 3.30 |
| 11. | F | V | W | - | - | R | C | 8.80 |
| 12. | F | - | W | - | - | - | H | 1.76 |
| 13. | F | - | W | P | - | R | C | 0.32 |
| 14. | F | - | W | P | S | R | C | 9.44 |
| 15. | F | - | W | P | - | - | O | 22.80 |
| 16. | F | - | W | - | - | - | O | 44.88 |
| 17. | F | - | - | P | - | R | C | 0.04 |
| 18. | F | - | - | P | S | R | C | 1.02 |
| 19. | F | - | - | P | - | - | O | 2.45 |
| | Sub Total | | | | | | | 100.00 |
| 20. | O | - | - | P | - | - | O | 1.45 |
| 21. | O | - | - | P | - | - | C | 0.02 |
| 22. | O | - | - | P | S | R | C | 0.60 |

| | | | | | | | | |
|-----|-------------|---|---|---|---|---|---|--------|
| | Sub Total | | | | | | | 2.07 |
| 23. | O | - | W | - | - | R | C | 0.22 |
| 24. | O | - | W | - | - | - | G | 0.04 |
| 25. | O | - | W | - | - | - | O | 1.11 |
| 26. | O | - | W | P | - | - | O | 0.56 |
| 27 | O | - | W | P | S | R | C | 0.23 |
| 28. | O | - | W | P | - | R | C | 0.01 |
| | Sub Total | | | | | | | 2.17 |
| | Grand Total | | | | | | | 104.24 |

F = Farmer, C = Consumer, R = Retailer, V = Village Trader,
W = Wholesaler, G = Government Agency, P = Processor,
S = Dal Wholesaler O = Outside Rajasthan

Source: Acharya, S.S., Agricultural Production, Marketing and Price Policy in India,
Mittal Publication, New Delhi, 1998, pp.308-12.

Innovative Marketing Channels (Direct Marketing)

It has been realized that the marketing channel for farm products which are highly perishable (fruits, vegetables and flowers) should be as short as possible. Perishable farm produce should move quickly from farmers to consumers. If farmers directly sell their produce to the consumers, it will not only save losses but also increase farmer's share in the price paid by the consumers. Therefore, direct marketing by the farmers is being encouraged as an alternative channel. Some examples of these channels are given below:

(i) Apni Mandi / Kisan Mandi

An innovative concept of 'Apni Mandi' has been introduced in some states. Apni Mandi is also called 'Kisan Mandi', as it is different from the traditional mandi or market yard, where the produce moves to the buyer through either a commission agent or trader. In Apni Mandi there is a direct contact between the farmer producer and the buyer who is generally the consumer. This system does away with the middlemen. In Apni Mandi, farmers sell their produce directly to the consumers without involvement of the middlemen. The price spread in Apni Mandi is considerable low. These are working satisfactorily in the case of fruits and vegetables. These, 'Apni Mandi' are similar to the Saturday markets of United Kingdom and United States of America.

Objectives

The main objectives of popularizing the concept of Apni Mandi are:

- (i) better marketing of agricultural produce especially of fruits and vegetables;
- (ii) ensuring direct contact of the producer-farmers and the consumers and thereby enhancing the distributional efficiency of the marketing system;
- (iii) increasing the profitability of agricultural crops for the producers by minimization of marketing costs and the margin of the middlemen;
- (iv) ensuring the availability of fresh fruits and vegetables and other farm produce at reasonable prices to the consumers;
- (v) removing social inhibitions among the farmers for retail sale of their produce;
- (vi) encouraging additional employment to the producers and thereby enhancing their incomes;
- (vii) promoting rational integration by inviting the farmers of other states to sell the produce grown by them directly to the consumers in Apni Mandis of other states; and
- (viii) providing business techniques to the farmers so that in the long-run they may adopt this practice for other crops and enterprises too.

History

The first Apni Mandi was started in Punjab by the Punjab Mandi Board at Chandigarh in February, 1987. Punjab Mandi Board took the initiative with a view to providing small farmers around cities a direct access to consumers. Similarly, in Haryana, the first Apni Mandi was started at Karnal in 1988. In Rajasthan also, this scheme has been introduced in several district towns. The initiative is worth emulating.

Functioning

The market committee of the area where Apni Mandi is located provides space, water, sheds, counters, balances and other facilities to the farmers in Apni Mandis. The Market Committee Staff need to work hard with dedication for the success of Apni Mandis. The State Marketing Boards provide financial assistance to the Market Committees for these services rendered by them to the Apni Mandi. This scheme is being implemented with certain resistance from middlemen. Some farmers also have reservations about the success of the scheme as it assumes adequate skills of retailing on the part of farmers. However, farmers as well as consumers would benefit from the Apni Mandi Scheme and its popularity may pick up after sometime.

(ii) Hadaspar Vegetable Market

Hadaspar vegetable market is a model market for direct marketing of vegetables in Pune city. This sub-market yard is situated nine kms away from Pune city. This belongs to the Pune Municipal Corporation and the fee for using the space in the market is collected by the municipal corporation from the farmers. This is one of the ideal markets in the country for marketing of vegetables. In this market there are no commission agents/middlemen. The market has modern weighing machines for weighing the produce. Buyers purchase vegetables in lots of 100 kgs. or 100 numbers. The produce is weighed in the presence of licensed weighmen of the market committee and sale bill is prepared. The purchasers make payment of the value of produce directly to the farmer. The purchaser is allowed to leave the market place along with the produce after showing the sale bill at the gate of the market. Disputes, if any, arising between buyers and sellers are settled by the supervisor of the market committee after calling the concerned parties. The market committee collects one per cent sale proceeds as market fee for the services and facilities provided by the committee to the farmers and buyers.

(iii) Rythu Bazars

Rythu bazaars have been established in the major cities of Andhra Pradesh state with the prime objective to provide direct link between farmers and consumers in the marketing activity of fruits, vegetables and other essential food items. Both producers and consumers are benefited from Rythu Bazars as producer's share in the consumers rupee is more by 15 to 40 per cent and consumer's get fresh vegetables, fruits and food items at 20 to 35 per cent less prices than the prevailing prices in nearby markets. Further, marketing costs are at the minimum level as middlemen are completely eliminated from the marketing activities in Rythu Bazars. The maintenance expenditure of Rythu Bazars is being met from financial sources of Agricultural Produce Market Committee (APMC) nearer to the Rythu Bazars.

Rythu Bazars started functioning in the Andhra Pradesh State from January 20, 1999. Presently there are 95 Rythu bazaars operating in all the 23 districts of the state. There is no government involvement in price fixation. This function is left to farmers who organize themselves into committees and these committee are fixing sale prices daily after taking into consideration the wholesale and retail prices prevailing in the nearby towns. Generally, in the Rythu Bazar, prices are fixed 20 per cent over the wholesale prices and 15 to 20 per cent less than local market prices. Prices fixed are displayed at several places all over the Rythu Bazar for the benefit of the consumers.

The major highlights of Rythu bazaars are:

- District collectors are making the land available for the Rythu Bazars.
- Permanent infrastructure with all support system are being constructed in the Rythu Bazars by the concerned Agricultural Produce Market Committee.
- The vegetable cultivators in the identified villages are provided the photo identity cards and only these cultivators are permitted to sell vegetables in these bazaars.
- State Government arranges special buses on most routes for transport of vegetables.
- Temporary storage facilities are on anvil.
- Coordination exists between revenue, marketing and horticulture departments for smooth functioning of these markets.
- A distinct and common identity of such markets across the state is being established.
- Other essential commodities like pulses and edible oils are also sold in these markets at reasonable prices.
- Vegetable production programme in the area is also undertaken by the horticulture department of the state to ensure regular supplies of vegetables to the consumers.

Rythu Bazars have generated a great deal of enthusiasm both among farmers and consumers as farmers get better prices for their produce due to curtailment of commission and overhead costs on account of the non-existence of middlemen and the consumers get vegetables at low prices compared to the prices in other markets.

(iv) Uzhavar Sandies

Uzhavar Sandies (Farmers' Market) were established in selected municipal and panchayat areas of the Tamil Nadu by the state government. In these markets, farmers enjoy better marketing infrastructure free of cost and also receive considerably high prices for the products than what they use to receive from middlemen at village or primary markets of towns. Farmers are additionally benefited in the form of interaction with other farmers and with departmental personnel. Farmers also get good quality seeds and other inputs in the market yard itself. The consumers in these markets are benefited by getting fresh vegetables at relatively lower prices.

(v) Shetkari Bazar

On the lines of Rythu Bazars in Andhra Pradesh and Uzhavar Sandies in Tamil Nadu, Government of Orissa has taken a programme of establishing Krushak Bazars in the state of Orissa in the year 2000-01 with the purpose to empower farmer-producer to

compete effectively in the open market to get a remunerative price for his produce and to ensure products at affordable prices to the consumers.

The government provides following incentives for opening of the Krushak Bazars in the state:

- (a) Provides 1 to 2 acres of land at suitable place, free of cost, for establishing the bazaar.
- (b) A cluster/group of villages within the proximity of market area and farmers growing vegetable are identified having the surplus produce for sale.
- (c) The identified farmers are allowed to use marketing facilities so that there is no intervention of middlemen and farmers get better prices for their produce.
- (d) Public utility facilities viz., drinking water, electricity, toilet, canteen and rest house are provided to farmers by the Krushak Bazars.
- (e) Identified farmers are provided inputs like seeds and fertilizer at the reasonable prices in the Krushak Bazars, and
- (f) Storage facilities in the market area are also provided to the farmers in Krushak Bazars.

(vii) Mother Dairy Booths

Mother Dairy, basically handling milk in Delhi, was asked to try its hand in retail vegetable marketing by direct purchasing vegetables from the farmers, moving them in specially built vehicles, storing them in air conditioned godowns and distribute them to the consumers through its retail outlets in 1989 after the notorious onion and potato price crisis. Mother Dairy management has opened retail outlets in almost all important colonies of Delhi for providing vegetables to the consumers at reasonable prices.

Market Integration, Efficiency, Costs, Margins and Price Spread

Market Integration

Meaning

Integration shows the relationship of the firms in a market. The extent of integration influences the conduct of the firms and consequently their marketing efficiency. The behaviour of a highly integrated market is different from that of a disintegrated market. Markets differ in the extent of integration and, therefore, there is a variation in their degree of efficiency.

Kohls and Uhl have defined market integration as a process which refers to the expansion of firms by consolidating additional marketing functions and activities under a single management. Examples of market integration are the establishment of

wholesaling facilities by food retailers and the setting up of another plant by a milk processor. In each case, there is a concentration of decision making in the hands of a single management.

Types of Market Integration

There are three basic kinds of market integration.

(i) Horizontal Integration

This occurs when a firm or agency gains control of other firms or agencies performing similar marketing functions at the same level in the marketing sequence. In this type of integration, some marketing agencies (say, sellers) combine to form a union with a view to reducing their effective number and the extent of actual competition in the market. In most markets, there is a large number of agencies which do not effectively compete with each other. This is indicative of some element of horizontal integration. Horizontal integration is advantageous for the members who join the group. Similarly, if farmers join hands and form co-operatives, they are able to sell their produce in bulk and reduce their cost of marketing. Horizontal integration of selling firms is generally not in the interest of the consumers of buyers.

The schematic arrangement of a horizontally integrated firm is shown in Figure 9.1. In this arrangement, there are four firms engaged in buying and selling of foodgrains under the direction of the parent agri-business firm. All the four business firms perform the same type of marketing function but their locations and areas of operations are different. Cases of such an integration are very commonly found. Frequently a firm will have a central headquarter with a large number of local branches that carry on operations at the local level. Such a network enables the organization to achieve the economies associated with size of the firm. It also helps the firm to organize some complex types of operations and services which are needed by the local units but individually, they may not be able to perform with ease and/or efficiency.

(ii) Vertical Integration

Vertical integration occurs when a firm performs more than one activity in the sequence of the marketing process. It is a linking together of two or more functions in the marketing process within a single firm or under a single ownership. For example, if a firm assumes the functions of the commission agent as well as retailing, it is vertical integration. Another example of vertical integration is a flour mill which engages in retailing activity as well.

The schematic arrangement of a vertically integrated firm is illustrated in Fig. 9.2. In this arrangement a firm is not only engaged in grain purchasing and storage of grains but also owns trucks for transporting the produce from threshing floors/villages to mandi and vice versa. In addition to trading in foodgrains the firm may also be processing the grain for making livestock feed which it sells to the livestock rearers or feed retailers.

There have been many reasons for the development of such integrated operations. This type of integration makes it possible to exercise control over both the quantity and quality of the product from the beginning of the production process until the product is ready for the consumer.

Vertical integration leads to some economies in the cost of marketing. A vertically integrated firm has an advantage over other firms in respect of greater market power either in terms of sources of supplies or distribution network. Vertical integration reduces the number of middlemen in the marketing channel. It is of two types, forward or backward, depending upon the stage at which the integration occurs.

(a) *Forward Integration*: If a firm assumes another function of marketing which is close to the consumption function, it is a case of forward integration; for example, a wholesaler assuming the function of retailing.

(b) *Backward Integration*: This involves ownership or a combination of sources of supply; for example, when a processing firm assumes the function of assembling/purchasing the produce from villages.

Firms often expand both vertically and horizontally. The modern retail stores are a good example of this. Retailing firms have grown horizontally by expanding either retail stores or a number of commodities they deal in. They have grown vertically by operating their own wholesale, purchasing and processing establishment.

(iii) Conglomeration

A combination of agencies or activities not directly related to each other may, when it operates under a unified management, be termed a conglomeration. Examples of conglomeration are Hindustan Lever Ltd. (processed vegetables and soaps), Delhi Cloth and General Mills (Cloth and Vanaspati), Birla Group, Tatas, J.K. Group and NAFED.

The schematic arrangement of a business conglomerate is shown in Figure 9.3.

The conglomerate is involved in a number of different and frequently unrelated activities. For example, the firm may be dealing in foodgrains trading; processing of horticultural products; cloth milling; selling and repairs of electronic equipments; and

manufacturer of vanaspati. Such a conglomeration of activities serves as a means of spreading the risk and helps in expanding the activities to additional markets.

Most of the business firms have some degree of vertical integration, horizontal integration and conglomerate character. The main objective of such an arrangement is to undertake closely related activities that will permit them to effectively meet the requirements of their customers. The most common type of integration which exists in our rural markets is that a firm which buys and sells the grains is also engaged in selling of fertilizers, insecticides and pesticides, feed and such other items with the main objective of meeting the multiple needs of their customers, most of whom are farmers.

Degree of Integration

There are two types of integration.

(i) Ownership Integration

This occurs when all the decisions and assets of a firm are completely assumed by another firm. The example of this type of integration is a processing firm which buys a wholesaling firm.

(ii) Contract Integration

This involves an agreement between two firms on certain decisions, while each firm retains its separate identity. When dal mills of an area jointly agree on the pricing of the dals and processed product, it is a case of contract integration. Another example of contract integration is tie up of a dal mill with pulse trades for supply of pulse grains.

Effects of Integration

Integration is an attempt at organizing or co-ordinating the marketing processes to increase operational efficiency and acquire greater power over the selling and/or buying process. Like decentralization, integration in the marketing process may have both advantageous and disadvantageous effects. Whether a particular case of integration is advantageous to society or the individual can be judged by the motive with which it has been undertaken.

The vertical integration of firms may be actuated by the following motives:

- (i) More profits by taking up additional functions;
- (ii) Risk reduction through improved market co-ordination;
- (iii) Improvement in bargaining power and the prospects of influencing prices; and
- (iv) Lowering costs through achieving operational efficiency.

Horizontal integration may be actuated by the following motives:

- (i) Buying out a competitor in a time-bound way to reduce competition;
- (ii) Gaining a larger share of the market and higher profits;
- (iii) Attaining economies of scale; and
- (iv) Specializing in the trade.

Horizontal integration in the food industry is limited because of its potential impact on competition.

Conglomeration integration may be actuated by the following motives:

- (i) Risk reduction through diversification;
- (ii) Acquisition of financial leverage; and
- (iii) Empire-building urge.

Marketing Efficiency

Marketing efficiency is essentially degree of market performance. In this sense the concept is broad and dynamic. It encompasses many theoretical manifestations and practical aspects. Broadly, one may look at efficiency of a market structure through the following:

(i)

(i) Whether it fulfils the objectives assigned to it or expectations from the system at minimum possible cost or maximizes the fulfillment of objectives with given level of resources (or costs); and

(ii) Whether it is responsive to impulses generated through environmental changes and whether impulses are transmitted at all levels in the system. Expectations from or objectives assigned to the system are of critical importance in assessing the efficiency because various participants have different expectations from the system, which quite often conflict with each other. For example:

(i) Farmers expect quick market clearance and higher prices for their produce. They expect the market to buy the products when they are offered for sale at reasonable prices;

(ii) Consumers expect ready availability of products in the form and quality desired by them at lower prices;

(iii) Traders and other functionaries expect steady and increasing incomes; and

(iv) Government expect the system to safeguard the interest of all the three sections and in a proportion which is considered to be fair so that overall long-run welfare of the society is maximized.

Definition of Marketing Efficiency

The concept of marketing efficiency is so broad and dynamic that no single definition encompasses all of its theoretical and practical implications. Some of the definitions are given below:

Kohls and Uhl: Marketing efficiency is the ratio of market output (satisfaction) to marketing input (cost of resource). An increase in this ratio represents improved efficiency and a decrease denotes reduced efficiency. A reduction in the cost for the same level of satisfaction or an increase in the satisfaction at a given cost results in the improvement of efficiency.

Jasdanwalla: The term marketing efficiency may be broadly defined as the effectiveness or competence with which a market structure performs its designated function.

Clark: Marketing efficiency has been defined as having the following three components:

- (i) The effectiveness with which a marketing service is performed;
- (ii) The cost at which the service is performed; and
- (iii) The effect of this cost and the method of performing the service on production and consumption.

Of the three components, the last two are the most important because the satisfaction of the consumer at the lowest possible cost must go hand in hand with the maintenance of a high volume of farm output.

Efficient Marketing

The movement of goods from producers to consumers at the lowest possible cost, consistent with the provision of the services desired by the consumer, may be termed as efficient marketing. A change that reduces the costs of accomplishing a particular function without reducing consumer satisfaction indicates an improvement in the efficiency. But a change that reduces costs but also reduces consumer satisfaction need not indicate increase in marketing efficiency. A higher level of consumer satisfaction even at a higher marketing cost may mean increased marketing efficiency if the additional satisfaction derived by the consumer outweighs the additional cost incurred on the marketing process.

An efficient marketing system for farm products ensures that:

(i) Increase in the farm production is translated into a proportionate increase in the level of real income in the economy, thereby stimulating the emergence of additional surpluses;

(ii) Good production years do not coincide with low revenues to the producers achieved through effective storage, proper regional distribution and channelising of latent demand; and

(iii) Consumers derive the greatest possible satisfaction at the least possible cost.

An efficient marketing system is an effective agent of change and an important means for raising the income levels of the farmers and the levels of satisfaction of the consumers. It can be harnessed to improve the quality of life of the masses.

Approaches to the Assessment of Marketing Efficiency

Traditionally, efficiency of the marketing system has been looked at from the following two angles:

(i) Technical or Physical or Operational Efficiency

This aspect of the efficiency pertains to the cost of performing a function. Efficiency is said to have increased when cost of performing a function for each unit of output is reduced. This can be brought about either by reducing physical losses or through change in the technology of the function viz., storage, transportation, handling, and processing. A change in the technique may result either in the reduction of per unit cost (storage cost for a month, transportation cost to a distance of 100 kms or the cost of converting 100 kg of oranges to orange juice) or the increase in the output for a given level of cost.

(ii) Pricing or Allocative Efficiency

Pricing efficiency means that the system is able to allocate farm products either overtime, across the space or among the traders, processors and consumers (at a point of time) in such a way that no other allocation would make producers and consumers better off. This is achieved via pricing of the product at different stages, at different places, at different times and among different users and hence called pricing efficiency. In simple terms, the pricing efficiency is achieved when following conditions hold:

- a. Price differences between spatially separated markets do not exceed transportation cost;
- b. Intra-year price rise is not more than storage cost; and

- c. Price differences between forms of the product (pulse grain and split dal or wheat grain and wheat flour) do not exceed processing cost.

The pricing efficiency refers to the structural characteristics of the marketing system, where the sellers are able to get the true value of their produce and the consumers receive true worth of their money.

Whenever functions of transportation, storage and processing are performed, cost is incurred, value is added and the product is priced again. The efficiency of marketing is concerned with the extent to which the prices (after these functions are performed) deviate from what the cost of performing these functions warrant. The pricing aspect of marketing efficiency is affected by the extent of competition, dissemination of market information and attitude of the functionaries.

Marketing efficiency in this context may be termed as the pricing efficiency of the marketing system. The relationships between marketing costs and marketing margins and that between gross margins and prices in spatially separated markets between or at different stages of marketing reflect this aspect of marketing efficiency.

The above two types of efficiencies are mutually reinforcing in the long run; one without the other is not enough.

Empirical Assessment of Marketing Efficiency

Some simple measures to assess the efficiency of the marketing system for agricultural commodities are:

(i) Ratio of Output to Input

Conceptually, efficiency of any activity or process is defined as the ratio of output to input. If 'O' and 'I' are respectively output and input of the marketing system and 'E' is the index of marketing efficiency; then

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

A higher value of E denotes higher level of efficiency and vice versa. When applied in the area of marketing, output is the 'value added' by the marketing system and 'input is the real cost of marketing (including some fair margins of intermediaries)'. The measurement of 'value added' is not easy. The difference in the price at the farm level (price received by the farmer) and that at the retail level (price paid by the consumers) may be used to measure the 'value added' but it has limitations mainly because of market imperfections. Assuming that degree of imperfection is pervasive, this measure has been used to compare the marketing efficiency of two spatially separated markets,

of two commodities or at two points of time. Consider the following examples of marketing efficiency.

Marketing Costs, Margins and Price Spread

Market functionaries or institutions move the commodities from the producers to consumers. Every function or service involves cost. The intermediaries or middlemen make some profit to remain in the trade after meeting the cost of the function performed.

In the marketing of agricultural commodities, the difference between the price paid by consumer and the price received by the producer for an equivalent quantity of farm produce is often known as farm-retail spread or price spread. Sometimes, this is termed as marketing margin. The total margin includes:

(i) The cost involved in moving the product from the point of production to the point of consumption, i.e., the cost of performing the various marketing functions and of operating various agencies; and

(ii) Profits of the various market functionaries involved in moving the produce from the initial point of production till it reaches the ultimate consumer. The absolute value of the marketing margin varies from channel to channel, market to market and time to time.

Concepts of Marketing Margins

There are two concepts of marketing margins.

(i) Concurrent Margins

These refers to the difference between the prices prevailing at successive stages of marketing at a given point of time. For example, the difference between the farmer's selling price and retail price on a specific date is the total concurrent margin. Concurrent margins do not take into account the time that elapses between the purchase and sale of the produce.

(i) Lagged Margins

A lagged margin is the difference between the price received by a seller at a particular stage of marketing and the price paid by him at the preceding stage of marketing during an earlier period. The length of time between the two points denotes the period for which the seller has held the product. The lagged margin concept is a better concept because it takes into account the time that elapse between the purchase and sale by a party and between the sale by the farmer and the purchase by the consumer.

The method of calculating lagged margins is based on the same principle as that involved in the first in-first out method of accounting. However, it is difficult to obtain data on time lags between purchase and sale with a view to maintaining continuous series of marketing margins.

Importance of Study of Marketing Margins and Costs

Studies on marketing margins and costs are important, for they reveal many facets of marketing and the price structure, as well as the efficiency of the system.

(i) The magnitude of the marketing margins relative to the price of the product indicates the efficiency or otherwise of the marketing system. It refers to the efficiency of the intermediaries between the producer and the consumer in respect of the services rendered and the remuneration received by them. While comparing the efficiency of the marketing system by means of marketing margins over space or time, the difference in the value added to the product through various services/functions is taken into account;

(ii) Such studies help in estimating the total cost incurred on the marketing process in relation to the price received by the producer and the price paid by the consumer. The cost incurred by each agency in different channels and the share of each agency in the cost have been revealed. This knowledge ultimately helps us to identify the reasons for high marketing costs and the possible ways of reducing them; and

(iii) The knowledge of marketing margins helps us to formulate and implement appropriate price and marketing policies. Excessive margins point to the need for public intervention in the marketing system.

Estimation of Marketing Margins and Costs

Regular monitoring of marketing margins at regional levels are essential for the formulation and successful implementation of marketing and price policies. A study of marketing margins should include an estimation of the producers' share in the consumer's rupee, the cost of marketing functions and the margins of intermediaries. Marketing margins and costs vary from commodity to commodity, and depend on the amount of processing involved and the market structure for handling of the commodity. Even for the same commodity, the margin may vary from place to place and time to time. A number of factors, such as the method of assembling, the location of the market and the mode of transportation, influence marketing costs and margins. The method of sale, weighment and other facilities, too, affect the marketing costs. Because of a lack of standard grading in agricultural commodities, it is very difficult to make valid

comparisons of price data. Adequate precautions have, therefore, to be taken when comparing marketing margins for commodities under different situations.

In spite of these difficulties, various studies have been conducted in India to study marketing margins and costs with a view to assessing the farmers' share in the consumer's rupee and to suggesting measures for improvements in the marketing system. These studies have used different approaches, and vary considerably in their depth.

Three methods are generally used in the computation of marketing margins and costs.

(i) Lot Method

A specific lot or consignment is selected and chased through the marketing system until it reaches the ultimate consumer. The cost and margin involved at each stage are assessed. The difficulties or limitations of this method are:

(a) It is difficult to chase the movement of a lot from the producer to the ultimate consumer.

(b) Most of the lots lose their identity during the process of marketing, because either the product gets processed or the lot gets mixed up with other lots.

(c) There is no assurance that the lot selected is representative of the whole product.

This method is appropriate for such perishable farm commodities as fruits, vegetables, and milk, because the lag between the time the commodity enters the marketing system and time of its final consumption is very small.

(ii) Sum of Average Gross Margins Method

The average gross margin at each successive level of marketing is worked out by dividing the difference of the money value of sales and purchase by the number of units of the commodity transacted by a particular agency. The average gross margins of all the intermediaries are added to obtain the total marketing margin as well as the break-up of the consumer's rupee.

The following formula may be used to work out the total marketing margins:

$$M_T = \sum_{i=1}^n \left(\frac{S_i - P_i}{Q_i} \right)$$

where

M_T = Total marketing margin

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

P_i = Purchase value of a product paid by the i^{th} firm

Q_i = Quantity of the product handled by i^{th} firm

$i = 1, 2, \dots, n$, (number of firms involved in the marketing channel)

This method requires considerable effort in the location and examination of the records kept by the intermediaries. The main difficulties in using this method are:

(a) Traders may not allow access to their account books. It would then be difficult to obtain complete and accurate information. Moreover, some traders often make manipulated entries in their account books to evade sales tax and income tax; and

(b) This method necessitates adjustment for the difference between the quantities purchased and sold because a part of the product is wasted during handling.

(iii) Comparison of Prices at Successive Levels of Marketing

Under this method, prices at successive stages of marketing at the producer's, wholesaler's and retailer's levels – are compared. The difference is taken as the gross margin. The margin of an intermediary is worked out by deducting the ascertainable costs from the gross margin earned by that intermediary. This method is appropriate when the objective is to study the movements of marketing costs and margins in relation to prices and cost indices. The main difficulties encountered in the use of this method are:

(a) Representative and comparable series of prices for the same quality of successive stages of marketing are not readily available for all the products;

(b) Adjustment for a loss in the quality of the product at various stages of marketing due to wastage and spoilage in processing and handling is difficult;

(c) The price quotation may not cover the price of a product of a comparable quality; and

(d) The time lag between the performance of various marketing operations is not properly accounted for.

The following general rules may be adopted in selection of the method for calculating marketing margins and costs of various agricultural commodities:

| Commodities | Method Recommended |
|---|---------------------------------------|
| (a) For perishable farm products like fruits, vegetables and milk, where the time lag between the commodity entering the marketing system and the time of final | Chasing of lot or consignment method. |

consumption is very small.

- | | |
|---|---|
| (b) Commodities which require processing before sale to consumers such as paddy, oil-seeds, etc. | Concurrent margins should be calculated by finding the differences in the prices prevailing on the same date at successive levels of marketing. |
| (c) Commodities not requiring processing before sale to consumers, such as wheat, maize, bajra, jowar, etc. | By comparing the prices prevailing at successive levels of marketing on the same date either for the same market or for a pair of markets. |

Irrespective of the method followed, the following information is required for computing marketing costs and margins:

- (a) Data on prices of the same variety and quality of the commodity at different stages of marketing, either for one market or for a pair of markets;
- (b) Data on marketing charges in cash or kind;
- (c) Cost of transportation of the produce at different levels of marketing;
- (d) Cost of processing and estimates of the conversion factor from the raw material to finished products;
- (e) Cost of all other operations in the marketing process.

Various measures of the price spread and for the computation of marketing costs and margins, and the procedures followed have been given in the paragraphs that follow.

Producer's Price

This is the net price received by the farmer at the time of first sale. This is equal to the wholesale price at the primary assembling centre, minus the charges borne by the farmer in selling his produce. If P_A is the wholesale price in the primary assembling market and C_F is the marketing cost incurred by the farmer, the producer's price (P_F) may be worked out as follows:

$$P_F = P_A - C_F$$

Producer's Share in the Consumer's Rupee

It is the price received by the farmer expressed as a percentage of the retail price (i.e., the price paid by the consumer). If P_r is the retail price, the producer's share in the consumer's rupee (P_s) may be expressed as follows:

$$P_s = (P_F \div P_r) 100$$

Marketing Margin of a Middleman

This is the difference between the total payments (cost + purchase price) and receipts (sale price) of the middleman (i^{th} agency). Three alternative measures may be used.

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

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

(b) Percentage margin of i^{th} middleman (P_{mi})

$$P_{mi} = \frac{P_{Ri} - (P_{Pi} + C_{mi})}{P_{Ri}} \times 100$$

(c) Percentage mark-up of the i^{th} middleman (M_i)

$$M_i = \frac{P_{Ri} - (P_{Pi} + C_{mi})}{P_{Ri}} \times 100$$

where

P_{Ri} = Total value of receipts per unit (sale price)

P_{pi} = Purchase value of goods per unit (purchase price)

C_{mi} = Cost incurred on marketing per unit

The margin thus calculated include the profit of the middleman and the returns which accrue to him for storage, the interest on capital and overhead, and establishment expenditure.

Total Cost of Marketing

The total cost, incurred on marketing either in cash or in kind by the producer seller and by the various intermediaries involved in the sale and purchase of the commodity till the commodity reaches the ultimate consumer, may be computed as follows:

$$C = C_F + C_{mi} + C_{m2} + C_{m3} + \dots + C_{mn}$$

where

C = Total cost of marketing of the commodity,

C_F = Cost paid by the producer from the time the produce leaves the farm till he sells it, and

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

Some of the costs are linked with the quantity marketed and some are linked with the value of the commodity. The former is a fixed charge, while latter is a variable one. The actual rates of charges are converted in terms of the weight unit or Rs.100 worth of

produce sold. The *ad valorem* charges are calculated on the basis of the actual market price for the physical unit or Rs.100 worth of produce sold.

Farmer's Share and Gross Marketing Margins

According to Acharya (2003), the gross marketing margins (GMM) can be broken down into three components viz., cost of performing various marketing functions, statutory taxes or levies payable in the marketing channel, and net marketing margins (NMM) retained by market functionaries.

Marketing cost varies from commodity to commodity and changes overtime and space. Marketing costs depend on the perishability of the commodity, need for cold storage facilities, need for processing before consumption, necessity of storage and transportation, distance for transportation and nature of packaging needed. The marketing costs are, therefore, generally high for fruits, vegetables, flowers, oilseeds, sugarcane and cotton compared to foodgrains. Statutory marketing charges include taxes and levies (sales tax, market fee, octroi, special duty or cess on commercial crops etc.) which are paid in the process of transactions of commodity at different stages of marketing. The rates of these charges vary from state to state, market to market and commodity to commodity. Most of these taxes and levies are on *ad valorem* basis and as such their incidence is higher on high value crops. The market players have no control on these taxes and levies as these are of statutory in nature. These statutory charges exert considerable effect on gross marketing margins and farmer's share in consumer's rupee. Net marketing margin (NMM) is the amount retained by different market functionaries. The size of net marketing margin depends on the nature of competition, structure of markets and scale of business. Larger the net marketing margin, greater is the inefficiency of the marketing system.

It is now increasingly realized that higher marketing costs do not always reflect inefficiency of the marketing system. The factors, which cause high marketing costs, could be geographical localization of production away from the markets, necessity of storage from production season to the lean season and involvement of processing function in the marketing process. Under such situations, the size of marketing costs reflects only one side of the coin and the other aspects viz., consumer satisfaction is not given any weightage.

Over the period, gross marketing margins (GMM) decreased in foodgrains and oilseed crops due to better competitive conditions in the trade of these commodities. On the other hand, GMM increased in fruits and vegetables due to the expansion in the

markets for these crops and their products. As against this, over the period, however, total cost of marketing in absolute terms have shown an increase due to:

- (i) increased necessity of packing all goods;
- (ii) increased availability of facilities of transportation, communication and storage leading to long distance transportation and storage from production to lean season of the year;
- (iii) widening of markets due to liberalization of trade and expansion in size of markets leading to movement of products to distant domestic and foreign markets;
- (iv) increase in the consumer's income leading thereby to higher demand of processed, packed and branded products;
- (v) increase in the general price level in the economy thereby leading to increase in the cost of marketing as many marketing charges are linked to the value of the commodity; and
- (vi) increase in the statutory marketing charges overtime by the government, which in some cases account for 12 to 18 per cent of the gross marketing margins.

A comprehensive review of Indian Literature reveals that studies on price-spread and marketing margins for the period 1960 to 1975 are available for only a few crops (wheat, rice, sorghum, pearl millet, chickpea and groundnut). However, in the later period i.e., 1975-2000 the studies have covered almost all agricultural products – foodgrains, oilseeds, cotton, fruits, vegetables and flowers. (For a summary of results see Acharya, 2003).

There is ample evidence of large variability of the producers share in consumer rupee as well as marketing margins and costs across the crops and study areas. Disregarding the extremities, the farmers share in consumers rupee has been estimated as 56 to 89 per cent for paddy, 77 to 85 per cent for wheat, 72 to 86 per cent for coarse grains, 79 to 86 per cent for pulses and 40 to 85 per cent for oilseeds. The farmer's share in consumer's rupee for perishable farm products (fruits, vegetables and flowers) is generally lower and varied from 32 to 68 per cent.

The studies in general reveal that the producer's share in consumer's rupee has varied with the marketing channel adopted by the farmers. The DMI studies reveal (Table 3.2) that the costs were higher when farmers adopted private channels in marketing of surplus produce compared to the institutional channels and hence farmer's share was lower when they sell through private channels.

Table 3.2
Price Spread in Private and Institutional Channels in Selected Agricultural
Commodities in India (1982-83)

(Percentages of Consumer's Price)

| Commodities | Marketing Channel | Farmer's Share | Marketing Costs | Net Marketing Margins |
|-------------|-------------------|----------------|-----------------|-----------------------|
| Price | Private | 65.0 | 17.0 | 17.3 |
| | Institutional | 66.0 | 27.0 | 7.0 |
| Wheat | Private | 65.8 | 20.0 | 14.2 |
| | Institutional | 66.8 | 27.5 | 5.7 |
| Apple | Private | 41.9 | 35.0 | 23.1 |
| | Institutional | 52.2 | 26.2 | 21.6 |
| Onion | Private | 40.6 | 35.7 | 23.7 |
| | Institutional | 42.2 | 36.1 | 21.7 |
| Groundnut | Private | 63.6 | 19.0 | 17.4 |
| | Institutional | 87.6 | 11.2 | 1.2 |

Source: Directorate of Marketing and Inspection, Government of India, Faridabad (1985).

A recent comprehensive analysis of statutory charges/taxes and transport and storage costs of wheat by Ramesh Chand has shown that the mark up over farm harvest price prevailing during post-harvest season in a surplus state (like Punjab) needed to attract private sector in wheat trade is 74 per cent to 126 per cent (Goa) for the month of next March. This implies that for wheat supplied to a consumer in Goa in the month of next March, the share of a Punjab wheat grower (based on the price received in the preceding harvest month of May) in the consumer's price is 44.2 per cent. This also means that the statutory charges and marketing costs (storing wheat from May to next March and transportation from Punjab to Goa included) add up to 55.8 per cent of the consumer's price.

Sale of fruits through pre-harvest contractors is also common in fruit producing areas. The studies on estimates of marketing costs and margins reveal that farmers receive a lower price when they sell through the contractor.

The gross marketing margins in marketing of agricultural products have also been worked out from National Accounts Statistics by Acharya, S.S. (1998). In this approach, difference between the total consumers expenditure on a particular farm

product and the value of the output at the farm level has been used to estimate gross marketing margin. Based on an aggregate accounting, the gross marketing margin (GMM) as percentage of consumer's price is 19.2 in cereals, 7.2 in oilseeds, 32.9 in fruits and vegetables, 6.7 in milk and milk products, and 37.2 in sugarcane with an overall average of 19.3 per cent for all agricultural commodities. The estimates are shown in Table 3.3.

Table 3.3
Gross Marketing Margins for Major Agricultural Commodities in India Using
Aggregate Accounting Approach Based on data for 1986-87

(Percentages)

| Crop Groups/Crops | Gross Marketing Margin |
|------------------------|------------------------|
| Cereals | 19.2 |
| Oilseeds | 7.2 |
| Fruits & Vegetables | 32.9 |
| Milk and Milk Products | 6.7 |
| Sugarcane/Sugar/Gur | 37.2 |
| Overall | 19.3 |

Source: Acharya, S.S., Agricultural Marketing in India: Some Facts and Emerging Issues, Indian Journal of Agricultural Economics, 53(3), July-September 1998, pp.311-32.

Factors Affecting the Cost of Marketing

Studies on the cost of marketing reveal that there is a large variation in the cost per quintal or per Rs.100 worth of the produce. The factors which affect marketing costs are:

(i) Perishability of the Product: The cost of marketing is directly related to the degree of perishability. The higher the perishability, the greater the cost of marketing, and vice versa.

(ii) Extent of Loss in storage and Transportation: If the loss in the quality and quantity of produce, arising out of wastage or spoilage or shrinkage during the period of storage or in the course of transportation is substantial, the marketing cost will go up.

(iii) Volume of the Product Handled: The larger the volume of business or turnover of a product, the less will be the per unit cost of marketing.

(iv) Regularity in the Supply of the Product: If the supply of the product is regular throughout the year, the cost of marketing on per unit basis will be less than in a situation of irregular supply or supply restricted to a few months of the year.

(v) Extent of Packaging: The cost of marketing is higher for the commodities requiring packaging.

(vi) Extent of Adoption of Grading: The cost of marketing of ungraded product is higher than that of the products in which grading can be easily adopted.

(vii) Necessity of Demand Creation: If substantial advertisement is needed to create the demand of prospective buyers, the total cost of marketing will be high.

(viii) Bulkiness of the Product: The marketing cost of bulky products is higher than that of which are not bulky.

(ix) Need for Retailing: The greater the need for the retailing of a product, the higher the total cost of marketing;

(x) Necessity of Storage: The cost of the storage of a product adds to the cost of marketing, whereas the commodities which are produced and sold immediately without any storage attract lower marketing cost.

(xi) Extent of Risk: The greater the risk involved in the business for a product (due to either the failure of the business, price fluctuations, monopsony of the buyer or the prevalence of unfair practices), the higher is the cost of marketing.

(xii) Facilities Extended by the Dealers to the Consumers: The greater the facilities extended by the dealer to the consumer (such as return facility for the product, home delivery facility, the facility of supply of goods on credit, the facility of offspring entertainment to buyers, etc.), the higher the cost of marketing.

Reasons for Higher Marketing Costs of Agricultural Commodities

Generally, the cost of marketing of agricultural commodities is higher than that of manufactured products. The factors responsible for this phenomenon are:

(i) Widely Dispersed Farms and Small Output per Farm: There are innumerable producers of agricultural products, each producing a small quantity. Producers are widely dispersed. Hence the cost of assembling is high.

(ii) Bulkiness of Agricultural Products: Most farm products are bulky in relation to their value. This results in a higher cost of transportation.

(iii) Difficult Grading: Grading is relatively difficult for agricultural products. Each lot has to be personally inspected during purchase and sale – a fact which increases

marketing costs. The sale or purchase by contract or sample is not easy because an inspection of each lot of the product is required by reason of variation in their quality.

(iv) Irregular Supply: Agricultural products are characterized by seasonal production. Their market supply, therefore, fluctuates during the year. In times of glut, prices go down and the cost of marketing functions, on value basis.

(v) Need for Storage and Processing: There is a greater need for the storage of agricultural products because of the seasonality of their production. The processing of agricultural products is a necessity because all the agricultural products are not consumed in the raw form. Storage and processing add to the cost of marketing. Losses of agricultural products in storage are also high because of their perishability.

(vi) Large Number of Middlemen: In foodgrain marketing, the number of middlemen is larger because there is no restriction on their entry in the trade. Contrarily, there are mainly restrictions on the entry into the trade of industrial products. For example, the cumbersome licensing procedure, high risk and high capital requirement make entry into trade in non-farm goods somewhat difficult. The larger the number of middlemen, the higher the marketing costs.

(vii) Risk involved: The risk of price fluctuations is higher in agricultural products. The higher risk leads to higher risk premium, which adds to the marketing cost.

Marketing Cost in India and Other Countries

In India, the marketing cost of foodgrains is lower than in developed countries. The factors responsible for this difference are:

(i) Foodgrains are sold in a relatively unprocessed form in India, whereas in developed countries, consumers want them mostly, in a processed form. In India, the processing of foodgrains is undertaken at the consumers' level. Therefore, the cost of marketing is lower, and the farmers' share in consumer's rupee is higher in India.

(ii) Human labour is relatively cheap in India, a fact which keeps the labour component of the marketing cost lower in India than in the developed countries.

Marketing Costs of Foodgrains Over Time

Over time, there has been an increase in the marketing cost of foodgrains in India. Some of the factors which have been responsible for this increase are:

(i) Shifting Tendency from Subsistence to Commercialised Farming: Previously, each farmer used to produce foodgrains needed by him; but now, because of specialization in agricultural production and increasing urbanization, the distance

between producers and consumers has increased. The cost of moving foodgrains from producers to consumers has, therefore, increased.

(ii) Technological Advances in Preservation and Storage: Formerly, many food products were consumed only during the season of production. Specialization in production and the evolution of short duration high-yielding varieties have resulted in large-scale production, thereby necessitating their storage. Technological advances in storage and preservation, though have facilitated handling of large volumes but have increased the costs and widened the spread between the producers' and the consumer's prices.

(iii) Change in the Form of Consumer Demand: There has been a change in the consumer's behaviour over time. Consumers now like the product in a processed and ready-to-use form following the increasing impact of urbanization. The desire for attractive packaging and home delivery system, too, has had its influence on consumer demand. Their demand for marketing service has, therefore, increased.

How to Reduce Marketing Costs

There are various ways of reducing marketing costs. No single factor can bring about any perceptible reduction in these costs. However, a combination of factors may bring about a significant reduction in the cost of marketing. Some ways of reducing marketing costs for farm products are:

(i) Increase the Efficiency of Marketing

An increase in the efficiency of marketing can be brought about by a wide range of activities between producers and consumers. Some major areas in which improved efficiency may result in a reduction in marketing costs are:

(a) Increasing the Volume of Business: By increasing the quantity to be handled at a time, one can effectively reduce marketing costs and increase marketing efficiency.

(b) Improved Handling Methods: The new methods of handling, such as pre-packaging of perishable products, the use of fast transportation means, the development of cold storages and an efficient use of labour are some of the methods by which efficiency may be increased and costs reduced.

(c) Managerial Control: The adoption of proven management techniques increases efficiency. By a constant monitoring of costs and returns, the efficiency at each stage in marketing may be stepped up.

(d) Change in Marketing Practices and Technology: Changes in marketing practices and technology (such as sale of orange juice instead of orange, retailing food services through super markets, and integration of marketing functions) reduce marketing costs and increase marketing efficiency.

(ii) Reduce Profits in Marketing

Profits in the marketing of agricultural commodities are often the largest because of the inherent risk at various stages of marketing. The risk may be reduced by:

- (a) The adoption of hedging operations, improvements in market news service, grading and standardization; and
- (b) Increasing the competition in the marketing of farm products.

A decline in marketing margins and costs generally benefits both the producer and the consumer. Only in extreme cases are all the benefits derived either by the producers or by the consumers (when there is no change in the price received by the producers). Apart from such cases, the gains in the efficiency of marketing practices are shared by both. The extent to which these benefits are shared is determined by the nature or characteristics of the supply of, and demand for, the product. For example:

- (a) If the supply and demand curves have the same elasticity, producers and consumers share the benefits equally;
- (b) If demand is more elastic than supply (e.g., for farm products in the short run), the producers get a larger share of the benefits; and
- (c) If the supply is more elastic than the demand (e.g., of many farm products over a longer period), consumers get a larger share of the benefits.

Relationship of Farmer's Price, Marketing Costs and Consumer's Price

The farmer receives what the consumer pays after the various costs of marketing have been deducted. This residual, expressed as a percentage of the price paid by the consumer (retail price), is the farmer's share. The farmer's share may be calculated as follows:

$$FS = \frac{(RP - MC)100}{RP} \text{ OR } FS = \frac{RF}{PF} \times 100$$

where

- FS = Farmer's share in the consumer price expressed as a percentage
- RP = Retail price of foodgrains
- MC = Marketing costs, including margins

PF = Price received by the farmer

The farmer's share in the amount of the consumer's outlay at the retail level is not static and undergoes change with the change in market conditions. An increase in the share is taken as an evidence of increase in the efficiency of the marketing system in favour of the farmer, while a decrease in the farmer's share is taken as evidence of the fact that middlemen retain a larger share. The effect of change in marketing charges or costs on the farmer's share are shown in Fig. 9.4.

In period t_3 (compared to period t_2), the farmer's share in the consumer's rupee has increased because of the reduction in marketing costs and margins. It is evident that all the factors which bring about changes in marketing costs affect the farmer's share as well.

Several items of the marketing costs are almost sticky, i.e., they do not move up and down with the movement in prices. The basic reason for sticky marketing costs is that many of the items in them are related to the physical volume handled rather than to the value of the product. For example, transport cost, labour cost, weighing cost, storage cost and octroi are charged on the basis of weight.

With any given level of sticky marketing margin or cost, the farmer's share (price received) moves directly with the retail price; that is, if the retail price increases, the farmer's share also increases. But the proportionate change in the farmer's share is more than the proportionate change in the retail price. To illustrate: let the retail price, the marketing costs/margin and the farmer's price be Rs.100, Rs.50 and Rs.50 per unit respectively in period t_1 . Suppose, in period t_2 , the retail price decreases to Rs.90 per unit, i.e., a fall of 10 per cent. If the absolute gross marketing margin remains the same, i.e., Rs.50 per unit, the farmer's price falls to Rs.40 per unit, i.e., a fall of 20 per cent. In other words, 10 per cent fall in the retail price results in a 20 per cent fall in the farmer's price. This has been shown in Table 3.4.

Table 3.4

Effect of Change in Retail Price on Farmer's Share

| Particulars | Period | | Absolute change (Rs.) | Percentage change |
|--------------------------|-------------|-------------|-----------------------|-------------------|
| | t_1 (Rs.) | t_2 (Rs.) | | |
| Retail price | 100 | 90 | 10 | 10 |
| Marketing margin (gross) | 50 | 50 | - | - |

| | | | | |
|----------------|----|----|----|----|
| Farmer's price | 50 | 40 | 10 | 20 |
|----------------|----|----|----|----|

Another point that emerges from Table 9.11 is that, in period t_1 , the price received by the farmer was 50 per cent of the price paid by the consumer but that in period t_2 , the farmer received only 44.4 per cent of the price paid by the consumer. To the extent that marketing margins or costs are sticky, the farmers lose more when the retail price decreases.

Model Quiz

1. A flour mill opening its retail outlet is an example for
 - a. Horizontal integration
 - b. Forward integration
 - c. Conglomeration
 - d. Backward integration

Ans: b
2. Pepsico company engaging in tomato procurement directly from farmers is
 - a. Horizontal integration
 - b. Vertical integration
 - c. Conglomeration
 - d. Forward integration

Ans: b
3. Calculating marketing margin and cost in fresh fruits marketing is meaningful when one follows
 - a. Lot method
 - b. Sum of average gross margins method
 - c. Comparison of prices at successive levels of marketing
 - d. Both b and c

Ans: a
4. Farmers' share in consumer rupee will be the least in marketing of
 - a. Rice
 - b. Milk
 - c. Cotton
 - d. Gram

Ans: c
5. Price spread will be the least in marketing of
 - a. Rice
 - b. Milk
 - c. Green leaves
 - d. Coconut

Ans: c

TRUE or FALSE

1. Vertical integration enhances specialisation in a particular trade. (False)
2. Enterprise diversification is an act of conglomeration. (True)
3. Pricing efficiency is beneficial to both traders and consumers. (True)
4. Marketing efficiency is enhanced by increasing both operational efficiency and allocative efficiency. (True)
5. Margin earned by intermediaries is not included in price spread. (False)
6. Marketing cost incurred by intermediaries forms part of price spread. (True)
7. Concurrent marketing margin method does not take into account the time that elapses between the purchase and sale of produce. (True)
8. Lagged margin method considers the price difference between traders in the same stage of marketing. (False)