MARKETING OF CAULIFLOWER IN PURNEA DISTRICT OF BIHAR

Ranvir Kumar and Suman Kalyani*

Bihar Agricultural College, Sabour, Bhagalpur (Bihar)

*Corresponding author *(Suman Kalyani)* **Email :** kalyanipbg@gmail.com

ABSTRACT

The present study was an attempt to examine the marketing of Cauliflower in selected district of Bihar and study raveled that producer receive 66.17 % of the consumer's price in channel II and 44.55 % in channel III while the producer receive 84.90 % of the consumer's price in channel I. This shows that if the producer is in position to sell his product directly to consumer it would be most profitable. Therefore it can be concluded that in case of marketing of cauliflower, producer share in consumer's rupees was lowest in channel III and highest in channel I, where 83.30% is producer's share in customer rupees found in channel-I so it is a best channel among all other channels. Wholesaler received margin in channel III was Rs 180. Retailer's margin in channel II and channel III are Rs 140 and Rs 212 respectively. The marketing cost incurred by various market intermediaries in channel I, channel II and channel III are Rs 80, Rs 90, and Rs 168 respectively. It can be observed that channel having more market intermediaries, also have high marketing cost and consumer's price.

Key word : *Marketing, channels, price spread, cauliflower*

Vegetables play an important role in balanced nutrition for human being as they are valuable source of carbohydrates, proteins, vitamins and minerals. The per capita consumption of the vegetables in India is 170g per day per person as against recommendation of 280gm per day per person. Cauliflower is one of the important vegetable which is low in fat and high in dietary fibres, foliate, water and vit.C, contain sulforaphane, an anticancer compound released when cauliflower is chopped or chewed. In addition, the compound indole-3-carbinol, which appears to work as an antioestrogen, appear to slow or prevent the growth of tumour of the breast and prostate. Cauliflower also contains other glucosinolates besides sulforaphane, substance which may improve the liver to detoxify carcinogenic substances. A high intake of cauliflower has been found to reduce the risk of aggressive prostate cancer.

Since cauliflower is high input requiring crop, so high profit margin depends largely how product sold. Marketing is an important aspect for farmer. It connects series of activities involved in the movement of goods from the point of production to point of consumption. The economy of crop production is determined by input price, output price, infrastructural and marketing system and so on.

The agricultural marketing system is a link between the farm and non-farm sectors. In fact one of the most significant indices of economic development is the efficiency of marketing of fresh vegetables are the bulky in nature, high degree of perishability, large chain of middle man, lack of marketing intelligence, price support and transportation. Thus, it was pertinent to enquire into the various aspects of marketing such as marketing functions and functionaries, marketing channel, price spread, and marketing cost.

RESEARCH METHODOLOGY

The study was conducted in Purnea district, Bihar in the year 2008-9 and covers a sample of total 20 farmers in two size groups i.e. below 1 ha. and 1-2 ha . Purnea district has 2 prominent vegetable mandis mainly Khushkibag and Harda mandi were selected because large amount of cauliflower trading takes place in both markets 2 wholesalers out of 10 were selected randomly from mandis after the preparation of list of all wholesalers.5 Retailers out of 25 were selected randomly from the market.

Collection of Data and Method of Enquiry : The data was collected from the pre –structured and pre tested schedule developed with regard to all possible marketing aspects. The analysis was carried out using appropriate analytical tools.

Marketing Channels : Marketing channels is a path traced in the direct transfer of little to a product as it moves from a producer to ultimate consumes to industrial users. Market channel is the structure of intra company agents & dealer. Wholesaler and retailers through which the commodity products are service is marketed.

Average : The average given in the present study related to the Average :

$$\text{Average} = \frac{X1 + X2 + X3 \ldots\ldots\ldots Xn}{N}$$

Where :   X = Value of an item.

N = No. of X

Producer's share in consumer's rupee : The producer's share in consumer's rupee has been calculated by using formula :

$$P = \frac{C \quad M}{C} \quad 100$$

Where :   P = Producer share In the consumer rupee

C = Consumers rupee

M = Marketing costs.

Marketing Cost : Marketing cost is the actual expenses incurred in bringing the good and services from the producer to the consumer marketing cost included, handling charges at local point, assembling charges, transport handling by whole seller and retailing charge to consumer. These cost are paid by the producer to marketing function arises.

Total Marketing Cost : Total cost incurred are marketing of Cauliflower by the farmer & the intermediaries Involved in the process of marketing was calculated as –

$$C = Cf + Cmi$$

Where – C = Total cost of marketing

Cf = Cost paid by the farmer from the time of produce to till he sale cauliflower

Cmi = Cost incurred by the middleman in the process of marketing (buying and selling cauliflower)

The average gross margin, absolute margin and percentage margin of middleman involved in the marketing of Cauliflower.

Producer's price : This is the net received by the farmer at the time of sale. The producer price was work out as follow:

$$Pf = Pa - Cf$$

Where,

Pa = whole sale price in the market assembling market

Cf = Marketing cost incurred by the farmer.

Pf = The producer's price

Marketing margin of middle man : This is the difference between the total payments (cost + purchase price) and receipts (sale price) of the middle man. It was worked out as :

Percentage margin :

$$\text{Percentage margin} = \frac{PRI - (Ppi - Cmi)}{PRI} \quad 100$$

Where PRi = sale price of the middleman

Ppi = Purchase price of the middleman

Cmi = Marketing cost Incurred by the middleman

Price–spread : In the marketing of Agricultural commodities, the difference between the price paid by the consumer and price received by the producer for an equivalent quantity of farmproduce is known as farm retail spread or price spread.

Price spread includes the percentage farmer's share, marketing costs and marketingmargins in the price paid by the consumer were worked out using the formula–

Farmer's share (%)

$$= \frac{\text{Producer sale price (Rs./piece)}}{\text{Consumer purchase price (Rs./piece)}} \quad 100$$

Marketing cost (%)

$$= \frac{\text{Marketing cost (Rs./piece)}}{\text{Consumer purchase price (Rs./piece)}} \quad 100$$

RESULTS AND DISCUSSION

The present study covers a sample of 20 farmers in two size groups i.e. below 1 ha. and 1-2 ha . Distribution of area and size of farm has a greater importance in the study. It reveals that the land is probably the most important measure of size of farms because it is a primary input and is also relatively free from substantial annual fluctuation and constitutes the portion of fixed cost in farm business. The land holding size is supposed to be positively related with the volume of production.

Since Cauliflower is a perishable commodity, so it is necessary to market it quickly. In the selected sample farms majority of the cauliflower cultivators are small and marginal and most of them sale their produce in the local market. Wholesalers and retailers generally purchase cauliflower on farms.

Fluctuation in prices of cauliflower : In general, cauliflower produce is available from November to February for consumption purpose and prices fluctuate according to availability of produce in the market.

Table-2 : Shows that in the early season of

Table-1: Categories wise Distribution of sample.

S. No.	Farm size group	Farm selected	Percentage
1.	Marginal farms (<1 ha)	15	75.00
2.	Small farms (1-2 ha)	5	25.00
	Total	20	100

Table-2 : Fluctuation in prices of cauliflower.

	Fluctuation of prices of cauliflower during different month					
Particulars	November (per piece)		December (per piece)		January (per piece)	
	Producer's sale price	Consumer's purchase prices	Producer's sale Price	Consumer's purchase prices	Producer's sale Price	Consumer's purchase prices
Range (Rs.)	10-16	14-20	6-8	8-12	4-8	6-10

Source : Field survey

Table-3 : Channel – I (Producer – Consumer),

S. No.	Particulars	100 pieces of cauliflower	Percentage
1.	Net price received by producer	450	84.90
2.	Marketing cost paid by producer		
	(a) Transportation cost	45	8.49
	(b) Loading-Unloading charges	15	2.83
	(c) Market fee & Mandi expenditure	20	3.77
3.	Total marketing cost paid by producer	80	15.09
4.	Retailer's sale price/Consumer's purchase price	530	100

cauliflower marketing prices are generally high. In the month of November the producers sale price ranges between 10-16 Rs./piece and consumer purchase price varies between 14-20 Rs./piece in general. While in succeeding month that is from December to January cauliflower prices goes down in comparison to prices in the month of November.

Marketing cost, Marketing margins and Price spread : The analysis of price spread, marketing cost and marketing margin are important tools to examine the efficiency of marketing. Marketing cost includes actual expenses incurred in the process of marketing of cauliflower. Marketing margins are the net amount received by the marketing agency as their share of profit. Price spread shows the share of producer and various marketing intermediaries.

Marketing channels of cauliflower : A marketing channel is a route through which produce move from the producer-farmer to the ultimate consumer. The length of the channel varies from commodity to commodity, depending upon the quantity to be moved, the form of consumer, demand and degree of regional specialization in production. In the study area, cauliflower producers adopted fallowing three channels in marketing of cauliflower.

1. Producer – Consumer
2. Producer – Retailer – Consumer
3. Producer – Wholesaler – Retailer – Consumer

Marketing cost and marketing margin per 100 piece of cauliflower :

Table 3. shows that marketing cost paid by producer is Rs. 80. The producer receive 84.90 % of the consumer's price. This shows that if the producer is in the position to sell his product directly to consumer it would be the most profitable. Therefore, it can be concluded from the above table that channel I is the better channel adopted by farmers.

Table-4 shows that the involvement of producer and retailer in marketing transaction. In this case producer get 66.17 percent of consumer's price. Marketing cost paid by retailer is Rs. 90 and marketing margin is Rs. 140. Consumer's purchase price is Rs. 680.

Table-5 revealed that involvement of producer, wholesaler and retailer in cauliflower marketing. Marketing cost paid by wholesaler and retailer are Rs. 80 and 88 respectively. The marketing margins received by wholesaler and retailer are Rs. 180 and

Table-4 : Channel – II (Producer – Retailer – Consumer).

S. No.	Particulars	100 pieces of Cauliflower	Percentage
1.	Net price received by producer	450	66.176
2.	Marketing cost paid by retailer		
	(a) Transportation cost	50	7.35
	(b) Loading-Unloading charges	15	2.20
	(c) Market fee & Mandi expenditure	25	3.67
3.	Total marketing cost paid by retailer	90	13.235
4.	Retailer's margin	140	20.58
5.	Retailer's sale price/ Consumer's purchase price	680	100

Table-5 : Channel – III (Producer –Wholesaler – Retailer – Consumer).

Sl. No.	Particulars	100 pieces of cauliflower	Percentage
1.	Net price received by producer	450	44.55
2.	Producer's sale price/wholesaler purchase Price	450	44.55
3.	Marketing cost paid by wholesaler		
	(a) Transportation cost	45	4.45
	(b) Loading-Unloading charges	15	1.48
	(c) Market fee & Mandi expenditure	20	1.98
4.	Total marketing cost paid by wholesaler	80	7.92
5.	Wholesaler's margin	180	17.82
6.	Wholesaler's sale price/retailer's purchase price	710	70.29
7.	Marketing cost paid by retailer		
	(a) Loading-unloading charges	15	1.48
	(b) Transportation cost	35	3.46
	(c) Market fee & mandi expenditure	38	3.76
8.	Marketing cost paid by retailer	88	8.71
9.	Retailer's margin	212	20.99
10.	Retailer's sale price/Consumer's purchase price	1010	100

Table-6 : Comparative price spread of all the three channels of cauliflower marketing.

Sl. No.	Particulars	Channel I		Channel II		Channel III	
		Per 100 cauliflower	%	Per 100 cauliflower	%	Per 100 Cauliflower	%
1.	Producer's share	450	84.90	450	66.17	450	44.55
2.	Wholesaler's Margin	*		*		180	17.82
3.	Retailer's Margin	*		140	20.58	212	20.99
4.	Cost of Marketing	80	15.09	90	13.23	168	16.63
5.	Consumer's Price	530	100	680	100	1010	100

212 respectively. The table further shows that net price received by producer is only 44.55 percent of consumer price.

Table-6 shows that the producer's share in consumer rupees is highest i.e. 84.90 % in the channel I. Margin received by wholesaler in channel III is Rs. 180. Retailer's margin in channel II and channel III are Rs. 140 and 212 respectively. The cost of marketing incurred by various market intermediaries in channel I, channel II and channel III are Rs. 80, Rs. 90, Rs. 168 respectively. It can be observed from the above table that cost of marketing and consumer prices increases with the increase in the number of intermediaries involved in the marketing channel of cauliflower.

CONCLUSION

The producer receive 66.17% of the consumer's price in channel II and 44.55% in channel III while the producer receive 84.90% of the consumer's price in channel I. This shows that if the producer is in position to sell his product directly to consumer it would be most profitable. Therefore it can be concluded that in case of marketing of cauliflower, producer share in consumer's rupees was lowest in channel III and highest in channel I, similar result found in the study of Raghavendra, R. Natikar, K.V. Jahagirdar (2008) where 83.30% is producer's share in customer rupees found in channel-I so it is a best channel among all other channels. Wholesaler received margin in channel III was Rs 180. Retailer's margin in channel II and channel III are Rs 140 and Rs 212 respectively. The marketing cost incurred by various market intermediaries in channel I, channel II and channel III are Rs 80, Rs 90, and Rs 168 respectively. It can be observed that channel having more market intermediaries, also have high marketing cost and consumer's price. Similar Founding result tally with Khunt, K.A. Desai, D.B. (1996) where producer's share of consumer price was quite low due to the large portion taken by retailers, which indicates low marketing efficiency in pointed guard.

REFERENCES

1. Khunt, K.A. and Desai, D.B. (1996) Economic feasibility and marketing of perennial vegetables in South Gujarat. *Financing Agriculture, 28(1):* 9-14, 1996

2. Raghavendra, R., Natikar, K. V. and Jahagirdar (2008). A study on marketing behavior of cauliflower growers in Belgaum district of Karnataka". *Mysore Journal of Agricultural Sciences, 42(1):* 92-96.