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AN ECONOMICS ANALYSIS ON MARKETING OF CAULIFLOWER IN PATNA DISTRICT, BIHAR

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ABSTRACT

India is the world's second largest producer of fruits and vegetables and produces a variety of crops such as mangoes, bananas, papayas, cashews, olives, potatoes and okra. The outlook for Indian horticultural crops has turned encouraging. Crops, fruits and vegetables grown in agriculture account for more than 30% of food production, and the urban population outnumbers the rural population. Cauliflower is considered an important food due to its delicious taste, mineral content (potassium, sodium, phosphorus, iron, calcium and manganese), vitamins B and C, protein, carbohydrates and fiber. The title of this study is "Economic Analysis of Cauliflower Marketing in Patna Region, Bihar". The study found that there are three ways to sell cabbage in the study area. Among these, Channel III (manufacturer-product-retailer-consumer) is the most popular channel among participants. In Path I, the producer receives an amount of Rs. 595, a customer buys a 50 kg bag of cauliflower for Rs. 630, the total market value generated by Channel I is Rs.35 Cr, the market share of Channel I is 18% and the producer share of consumer rupees of Channel I is 0%. Price Rs. 675. The price paid by the consumer for a 50 kg bag of cabbage is Rs 778, the total marketing cost of Channel II is Rs 35, the total revenue of Channel II is Rs 68, the marketing efficiency of Channel II is 6.89%. Developer- In Pathway II, the consumer share of Rs is 0.91% while in Pathway III, the share taken by the developer is Rs. 649, the beneficiary purchases a 50 kg bag of cauliflower for Rs. 850, the total market capitalization of Channel Three is Rs.56 Cr, the total market value of Channel Two is Rs.145 Cr, the market share of Channel Three is 3.40% and the share of Channel 2 company to the customer is Rs. 0.80%.

Keyword: Marketing Channels, Marketing Efficiency, Marketing Cost, Marketing Margin and Price spread

INTRODUCTION

India's economy benefits greatly from agriculture as it raises the incomes of those living in rural areas. India has a variety of soil types and climates, including diverse agro-ecological zones, offering growing opportunities for a variety of crops. Investments in agriculture by both the public and private sectors have increased and agriculture has achieved reasonable growth. In addition to controlling this growth, rapid

changes in agriculture need to be minimized. Agriculture is a labour-intensive sector that can create employment for people living in rural areas. To overcome the current situation, crop farming is a good way to increase local income, increase employment, provide good food and replace crops. Conversion of food into valuable products such as vegetables has become a strategy for agricultural development to increase income, increase productivity and prevent the destruction of natural resources. (Sekhon and Kaur, 2004). Increased demand for fruit and vegetables due to changes in income and consumption habits, combined with rising prices and poor food quality, has reduced the number of farmers, leading to the need for more productive crops. Because these important crops are labour intensive, there is potential to increase income and create more agricultural jobs. (Weinberg and Lumpkin, 2006). Among vegetable crops, cabbage (Brassica oleracea var. botrylts) is one of the most important and popular winter vegetables. It is an excellent vegetable that plays an important role in human nutrition due to its nutritional value and the taste it adds. Cauliflower is a three-year crop and is divided into early, mid and late autumn crops. Since then, input costs such as seed, fertiliser, manure, chemicals, water and labor have increased year by year. Global production of cauliflower (including green cauliflower) is 25.5 million tons, with China and India producing the most, accounting for 73% of world production. The second largest countries are the United States, Spain, Mexico and Italy, with an annual production of 0.4-1.3 million tons. In recent years, India's rice production has reached new heights, becoming the second largest rice producer in the world, with production reaching 169.478 billion tonnes; India is the world's second largest producer of cabbage. It constitutes about 6% of the total vegetable production (India Horticultural Database). West Bengal, Madhya Pradesh, Bihar, Punjab, Uttar Pradesh and Karnataka are the cauliflower growing states in India. Cabbage is grown in an area of 25,747 hectares in Madhya Pradesh with a production of 72,503 tonnes and an estimated yield of 28.16 litres/ha (MP Horticulture 2013-14).

RESEARCH METHODOLOGY

Patna in northern Bihar was chosen for this study due to the large area under cultivation in Bihar. A list of maize crops by land holding area has been compiled and is planned to increase. Among all the plantations in Patna district, Khusrupur block was selected. Once the block is selected, the list of each village is compiled and 5 villages are selected from the selected block. In this way, five percent of the villages in Patna city, i.e. ten villages, were selected. A list of all growers and their catchment areas was prepared for all 5% of the selected villages in each block. The list is rearranged from largest to smallest according to the land they own. 10 percent of the growers were selected from a list of all growers in the region. in similar conditions. In this way, a total of 110 breeders were selected for detailed study. Information on breeders was collected through a survey consisting of direct personal interviews. Use appropriate statistical tools to analyse data and present results. Information about agriculture in 2023-2024.

ANALYTICAL TOOLS

Cost of Marketing

C = Cf+ Cm1+ Cm2+ Cm3+ ..... + Cmn

Marketing Margin

AMI=Pri-(Ppi+Cmi)

Marketing Efficiency

MME = FP/ MC+MM

Price Spread
PS= MC + MM

A Producer's Share of the Rupee
PS= PFx100/Pr

RESULTS AND DISCUSSION

Table 1: Market revenue, market price, market share and producer share in consumer rupees when market interest comes from pathway I.

S. No	Particulars	Cauliflower Value in Rs. / 50 kg bag
1.	Price at which farmer sell	630
2.	Expenses on marketing	
i	Packing expense	2
ii	Expense over material of packaging	2
iii	Shipping expenses	7
iv	Fee of the market	4
v	Labour expense	3
vi	Loading and Unloading expenses	4
vii	Expenses for miscellaneous activity	13
	Total expenses	**35**
	Actual price received by farmer	**595**
	Consumers's acquiring price	**630**
A	**Total Marketing expenses**	35
B	**Total profit margin**	-
C	**Marketing Efficiency**	**18%**
D	**Producer's Share in Consumer's Rupees**	**0%**

Table 1, It is reported that the market price of Cabbage Canal-I supplied by the manufacturer is Rs. Cauliflower producers earn Rs 595 at a price of Rs 630. Meanwhile, consumers are purchasing 50 kg bags of cabbage and 630/50 kg bags of cauliflower from producers at Rs 100. Finally, the total market price of cabbage above 50 kg bag in Yol-I is 35 Cr, in Yol-II the producers' maximum spend on consumption of Rs is 0% and in Yol-II the market economy is 18%.

Table 2: Market revenue, market price, market share and producer share in consumer rupees when market interest comes from channel II.

S. No	Particulars	Cauliflower Value in Rs. / 50 kg bag
1.	Retailer acquiring cost by famer	710
2.	Expenses incurred by farmer	
i	Packing expenses	2
ii	Packing material expenses	2
iii	Shipping cost	7
iv	Fee of the market	4
v	Labour expenses	3
vi	Loading and Unloading expenses	4
vii	Expenses for miscellaneous activity	13
	Total expenses	**35**
	Actual price received by farmer	**675**
	Consumer acquiring price	**778**
	Profit of retailer	**68**
A	**Total Marketing expenses**	35
B	**Total profit margin**	**68**
C	**Marketing Efficiency**	**6.89%**
D	**Producer's Share in Consumer's Rupees**	**0.91%**

Table 2, The market price of Cauliflower Passage-II offered by the manufacturer is reported to be Rs. 710, the price charged by manufacturers is Rs. 675.Meanwhile, the market value obtained by the producers in the sector was 5 thousand TL. Meanwhile, beneficiaries purchased 50 kg bags of cauliflower from the market at a price of Rs 778/50 kg bags. The seller's profit is Rs 68 per 50 kg bag of cauliflower. Finally, the total market value of 50 kg bag of cabbage in channel-II is Rs 35, the total economic profit of marketing 50 kg bag of cabbage in channel-II is Rs 68, the human production share of canal-II is 0.91% . The commercial efficiency of Channel-II is 6.89%.

Table 3: Market revenue, market price, market share and producer share in consumer rupees when market interest comes from channel III.

S. No	Particulars	Cauliflower Value in Rs. / 50 kg bag
1.	Wholesaler buying price from farmer	684
	Marketing expenses incurred by farmer	35
	Actual price received by farmer	649
2.	Marketing expenses incurred by wholesaler	
i	Loading and unloading expenses	2
ii	carriage up to the store	3
iii	Weighing expenses	2
iv	Shipping expenses	5
v	Labour expenses	4
vi	Expenses for miscellaneous activity	5
	Total expenses	21
	Retailer acquiring price	784.75
	Profit of wholesaler	79.75
	Consumer acquiring price	850
	Profit of retailer	65.25
A	**Total Marketing expenses**	**56**
B	**Total profit margin**	**145**
C	**Marketing Efficiency**	**3.40%**
D	**Producer's Share in Consumer's Rupees**	**0.80%**

Table 3, It was reported by the vendors that 50 kg bags of cabbage were offered for sale at a market price of Rs. 684 The market value of the producer is Rs. The wholesaler sells a 50 kg bag of cabbage to the retailer at a price of Rs 784.75 and the wholesaler incurs a marketing cost of Rs 784.75 to market a 50 kg bag of cauliflower. 21. Income is Rs. $79.75 per 50kg bag of cauliflower. Finally, the seller sells a 50 kg bag of cauliflower to the customer for Rs. With an income of Rs 850. 65.25 O. The total cost of marketing a 50 kg bag of cauliflower through channel III is Rs. The total economic profit of marketing 50 kg bag of cabbage through Channel III is Rs. Finally, the market efficiency of 50 kg cauliflower in Pathway III is 3.40% per 50 kg bag of Cauliflower and the producer's share of consumer rupee in Pathway III is 5.40%. 0.80%.

CONCLUSION

Cauliflower is one of India's most important winter vegetables. Brought for head racing or curling. India is the world's second largest producer of cauliflower after China. It is employment and short-term investment that provide income and good employment to farming families. Research shows that when farms grow, productivity increases and workers earn more. Additional income helps farmers use more technology, thereby creating employment. Incomes are higher than for small farmers. The increase in the profit-cost ratio due to the increase in investments in areas such as agriculture shows that profits are increasing in these areas. Since vegetables are low quality products, marketing of these products plays an important role. Research shows that companies in the first channel have the majority of rupee users, while manufacturers in the second channel have fewer rupee users because they are away from business. The method was determined to have a higher market value due to the influence of business intermediaries. In order for agriculture to be more profitable, cooperatives must be strong and the state must offer cheaper prices to farmers. Although farmers produce enough to meet consumer demand, they face problems in marketing their products. Commercial intermediaries make more money by reducing costs and services. Therefore, research should be conducted to develop necessary procedures for selling goods in the state to manage operating, transportation and packaging costs.

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