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An Economic Analysis Of Marketing Efficiency Of Marigold Under Different Marketing Channels in Kannauj District of Uttar Pradesh

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Abstract

The aim of the present study was to analyse the marketing performance and price spread of marigold growers in Uttar Pradesh's Kannauj district. Primary data from 160 marigold farmers chosen from the study area served as the basis for the investigation. The study found six key marketing channels used to market marigold flowers. The marketing cost, market margin, pricing spread, producer's share of the consumer rupee, and marketing efficiency varied significantly amongst channels, according to the study. In part to the absence of middlemen, Marketing Channel-VI (Farmer-Consumer) was determined to be the most profitable channel, as farmers received the total consumer purchase price with a 100 percent producer's share in consumer rupee. With a marketing efficiency of 1.58 and a producer's share of consumer rupees of 61.29 percent, Marketing Channel-V (Farmer–Retailer–Consumer) was determined to be the most effective of the intermediary-based channels. On the other hand, because there were several middlemen involved, Marketing Channel-I (Farmer–Village Trader–Wholesaler–Retailer–Consumer) was the least effective channel, leading to the largest price spread and the lowest producer's share. The study found that by minimizing marketing costs and middleman margins, shorter marketing channels substantially improve marketing efficiency and farmer returns. Therefore, the income of marigold growers in the study's area may be increased by the promotion of direct marketing strategies, organized flower markets, and better marketing infrastructure.

Research objectives:

- To identify existing marketing channels in the study area.
- To estimate price spread among market intermediaries, marketing costs, market margins and producer's share in consumer rupees.
- To suggest measures for improving farmers income.

INTRODUCTION

India, being a tropical country and has diverse agro-climatic conditions allow for year-round commercial cultivation of flower crops, making it an important global player in floriculture, driven by both cultural and commercial demand. This, sector offers employment opportunities to millions. Given the potential market demand and the lucrative prices of flower crops, there has been a noticeable surge in their cultivation (Wali *et al., (*2024)).

In Uttar Pradesh, flowers cultivated in various districts creates employment opportunities for local communities, diversifying the state's agriculture sector,

enhancing revenue stream for farmers and entrepreneurs, flower-based perfume industry preserves traditional techniques, liking cultural heritage with economic development, enhance India's reputation in the global perfume market, local entrepreneurs in various districts of state established flower-based businesses, stimulating the local economy, environmental conservation and sustainability employment opportunities and livelihood enhancement. Flower cultivation often engages women in various stages of production, empowering them economically and socially, flower cultivation encourages entrepreneurship development, leading to the establishment of flower-related business and startups.

Marigold cultivation is popular in numerous regions of Uttar Pradesh because to suitable weather conditions and market opportunities. Kannauj district is also becoming a key centre for commercial marigold farming. During 2025-26, fresh flowers were grown over an area of around 1,900 hectares in Kannauj district, with marigold leading the way (700 ha), followed by rose (420 ha), jasmine (300 ha), chrysanthemum (210 ha), tuberose (160 ha), and other flowers. Marigold flowers are a major commercial flower crop in the district, providing livelihood prospects for a large portion of the farming community. The area under floriculture is gradually increasing year after year as market demand rises and revenue prospects improve. However, flower growers frequently encounter issues such as price swings, a lack of established flower markets, and the participation of middlemen in flower selling. Despite increased production, marigold growers frequently earn a lesser share of the consumer price as a result of intermediaries, high marketing costs, and price fluctuations (Acharya & Agarwal, 2011). Flowers are highly perishable commodities, so an effective marketing structure is required to prevent post-harvest losses and increase producer returns (Kohls & Uhl, 2005). Price spread and marketing efficiency are significant measures for measuring the success of agricultural marketing channels, as well as farmers' share of the consumer rupee (Shepherd, 1965). Therefore, the present study looked at the price spread and marketing effectiveness of marigold growers in Uttar Pradesh's Kannauj district.

RESEARCH METHODOLOGY

The current study was based on primary data collected from sample farmers, flower growers, and market intermediaries in Uttar Pradesh's Kannauj district. The sample was chosen at the block level using a simple random sampling technique, while the district was chosen purposively. The respondents were chosen using a multistage sampling process. Due of the significance of floriculture in the region, the Kannauj district was chosen on purpose. The district consists of eight blocks namely Chhibramau, Gugrapur, Haseran, Jalalabad, Kannauj, Saurikh, Talgram, and Umarda. To assure accurate representation of the region, all eight blocks were included in the study. A list of flower growers was created after villages with flower cultivation were identified. After that, 160 farmers were chosen using simple random sampling method. The sample size was determined by taking time, money, and information accessibility into account. Averages and percentages were used to assess the data that was gathered. Standard methods were used to assess marketing cost, marketing margin, price spread, producer's share in the consumer's rupee (PSCR), and marketing efficiency.

Marketing system existing in the study area

Marketing channels:

Marketing Channels Adopted in Marketing of Marigold In the study area six marketing channels were identified, and marketing cost, price spread was computed to understand the marketing of Marigold. The sample respondents marketed Marigold through the following channels.

Marketing Channel-I : Farmer- Village Trader- Wholesalers-Retailer- Consumer
Marketing Channel-II : Farmer - Pre-harvest contractor-Retailer- Consumer
Marketing Channel-III: Farmer - Wholesalers -Retailer- Consumer
Marketing Channel-IV: Farmer – Wholesalers- Consumer
Marketing Channel-V: Farmer – Retailer-Consumer
Marketing Channel-VI: Farmer – Consumer

Analysis of Price Spread under Different Channels

PS= Price paid by the consumer-Net price received by the farmer

Producer's share in consumer's rupee

$$PS=\frac{PF}{PC}100$$

Where,
PS=Producer's share in consumer's rupee
PF=Price of the produce received by the farmer
PC=Price of the produce paid by the consumer

Marketing cost:

Marketing costs are incurred by the various functionaries in the market starting from farmers, middlemen, wholesaler and retailer. Marketing cost for farmers includes sorting cost, packing cost, grading cost, transportation cost, loading and unloading chargers, storage cost, commission charges, market fee, weighing charges, labour charge & others (e.g., bribing or paying fees for undisclosed reason). Total marketing cost = cost incurred by farmer + cost incurred by the middleman

$$MC = C_F + C_{VT} + C_R + C_{PHC} + C_W +, C_T + \ldots$$

Where,

MC = Total marketing cost,
C_F = Cost incurred by farmers
C_{VT} = Cost incurred by village trader
C_W = Cost incurred by wholesaler
C_R = Cost incurred by retailers
C_{PHC} = Cost incurred by farmers
C_T = Transportation and other costs

Marketing Efficiency: Acharya's modified marketing efficiency formula (Acharya and Agarwal, 2001) is used for calculating marketing efficiency.

$$ME = \frac{NP_F}{MM + MC}$$

Where,

NP_F is net price received by the farmers (Rs./ kg),
MM is the marketing margin,
MC is marketing cost,

Marketing margin

Marketing margin of the middleman = Sale price per unit- (Purchase price per unit + cost incurred on marketing)

Price Spread

It is the difference between the net price paid by the consumer and the price received by the producer for an equal quantity of product. It consist marketing costs and marketing margins.

Price Spread = Tc + Tm

Where,

Tc= Total marketing cost

Tm = Total market margin

Producer's Share: It shows the percentage share of producer in the price paid by the consumer.

Ps = Pf / Pc * 100

Where,

Ps = Producer's share in consumer's rupee

Pf = Price of the produce received by farmer

Pc = Price of the produce paid by the final consumer

Results and Discussion

The analysis of different marketing channels variations was found in marketing cost, market margin, price spread, producer's share in consumer rupees, and marketing efficiency among the various marketing channels used by marigold growers in the Kannauj district. The findings revealed that marketing channels with fewer intermediaries were more profitable and efficient than those with multiple intermediaries.

The most effective marketing channel was determined to be Marketing Channel-VI (Farmer–Consumer), since farmers sold produce directly to consumers without the necessity for middlemen. The maximum producer's share in consumer rupees (100%) was achieved in this channel since farmers were paid the full consumer purchase price (₹5300/qtl). There were no intermediate profits or marketing costs because no middleman took part in the marketing process. As a result, direct marketing reduced price spread and maximized revenues for farmers. However, only 45 farmers used this method due to transportation constraints, lack of direct access to market, and the longer time required for direct selling.

Marketing Channel-V (Farmer-Retailer-Consumer) was determined to be the most efficient of the intermediary channels, with a marketing efficiency of 1.58%. In contrast to the consumer purchase price of ₹6200/qtl, farmers obtained a net price of ₹3800/qtl. Among all indirect channels, the producer's share of the consumer rupee was the largest (61.29%), while the price spread was the smallest (₹2400/qtl). By using just one middleman, marketing expenses and intermediate margins were lowered, increasing marketing effectiveness and producer returns. The majority of farmers (53 farmers) preferred this channel due to its quicker access to markets and comparatively lower prices.

With a marketing efficiency of 1.00, Marketing Channel IV (Farmer–Wholesaler–Consumer) was the following effective channel. Consumer paid ₹6800 per qtl, whereas farmers earned ₹3400. Because there were no retailers, marketing costs were lower, and the producer's portion of the consumer rupee increased to 50%. The price difference increased however, because the wholesaler margin continued to be quite high. The marketing efficiency for Marketing Channel-II (Farmer–Pre-harvest Contractor–Retailer–Consumer) was 0.85. While consumers paid ₹6400/qtl, farmers received ₹3100/qtl. 48.44 percent of the consumer rupee was expected to belong to the producer. Although this channel

outperformed more intermediary channels, pre-harvest contractor and retailer margins reduced farmers' ultimate market share.

With a marketing efficiency of 0.80, Marketing Channel-III (Farmer–Wholesaler–Retailer–Consumer) was relatively less effective. Consumers paid the highest buying price (₹7100/qtl), while farmers received ₹3150/qtl. The pricing spread was significantly widened and producer returns were decreased due to the high marketing cost (₹2400/qtl) and the engagement of wholesalers and retailers. Among all indirect routes, Marketing Channel-I (Farmer–Village Trader–Wholesaler–Retailer–Consumer) was determined to be the least effective. While consumers paid ₹6800/qtl, farmers only earned ₹2800. The largest price spread (₹4000/qtl) and lowest producer's share in consumer rupees (41.18%) were the results of the involvement of village merchants, wholesalers, and retailers, which significantly raised marketing costs and intermediary margins. As a result, marketing effectiveness was likewise at its lowest (0.62).

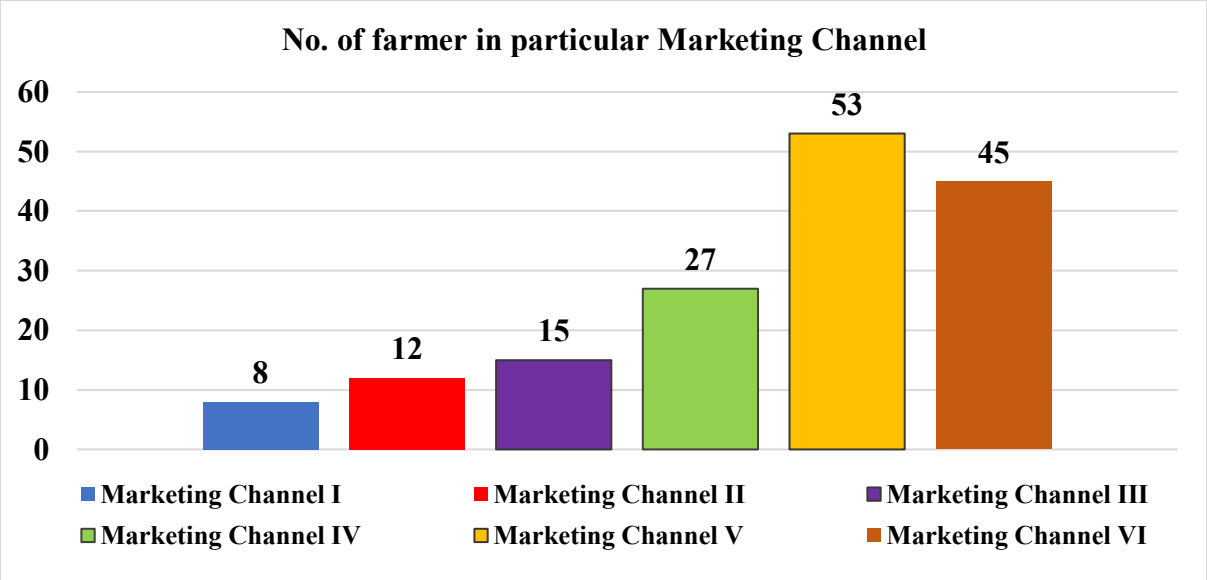
Overall, the study clearly revealed that for marigold growers in the Kannauj district, shorter marketing channels with less intermediaries were more effective and profitable. The producer's share of the consumer rupee increased and marketing efficiency improved as a result of a decline of middleman involvement, which also reduced marketing costs and market margins.

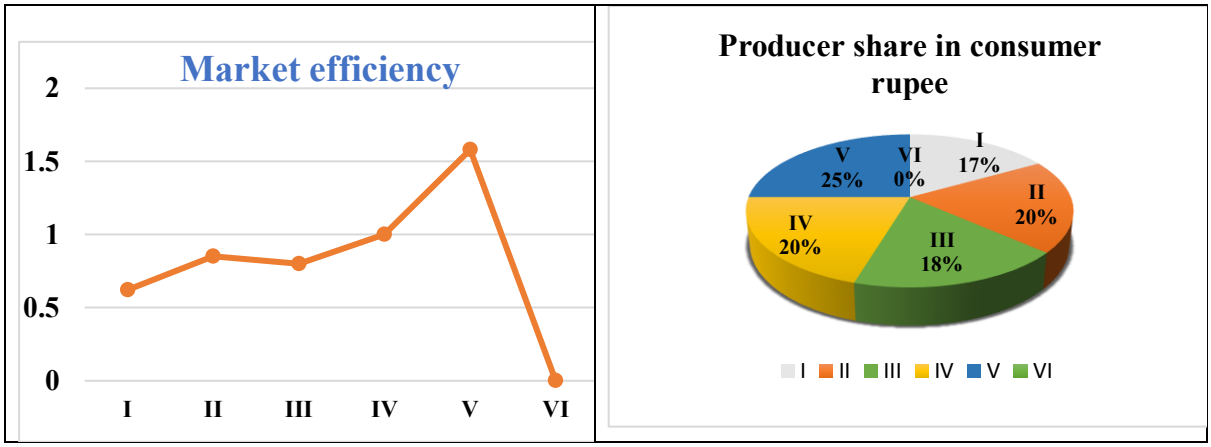
Marketing Channel		
Marketing Channel-I : Farmer- Village Trader- Wholesalers-Retailer- Consumer	**Units (In Rs. /Qtl (%)**	**Percent Percent share in consumer's rupee**
Net price received by farmers or Farmers sale price/village trader purchase price	2800	41.17
Total cost incurred by village trader	300	4.41
Village trader sale price/wholesaler purchase price	3700	54.41
Total cost incurred by wholesaler	450	1511.11
Wholesaler sale price/ retailer purchase price	4850	71.32
Total cost incurred by retailer	600	8.82
Retailer sale price/consumer purchase price	6800	100.00
Market margin:		
Village trader	600	8.82
Wholesaler	700	10.29
Retailer	1350	19.85
• Price spread	4000	58.82
• Total margin	3200	47.05
• Total marketing cost	1350	19.85
• Market efficiency	0.62	
• PSCR	41.18	
Marketing Channel-II : Farmer - Pre-harvest contractor-Retailer- Consumer		
Net price received by farmers or Farmer's sale price/ pre-harvest contractor purchase price	3100	48.43

Total cost incurred by pre-harvest contractor	350	5.46
Pre-harvest contractor sale price/retailer purchase price	4250	66.40
Total cost incurred by retailer	650	10.15
Retailer sale price/consumer purchase price	6400	100.00
Market margin:		
Pre-harvest contractor	800	12.5
Retailer	1500	23.43
• Price spread	3300	51.56
• Total margin	2650	41.40
• Total marketing cost	1000	15.62
• Market efficiency	0.85	
• PSCR	48.44	
Marketing Channel-III: Farmer - Wholesalers -Retailer- Consumer		
Net price received by farmers or Farmers sale price/ wholesalers purchase price	3150	44.36
Total cost incurred by wholesalers	800	11.26
Wholesalers' sale price/retailer purchase price	4750	66.90
Total cost incurred by retailer	1600	22.53
Retailer sale price/consumer purchase price	7100	100.00
Market margin:		
Wholesaler	800	11.26
Retailer	750	10.56
• Price spread	3950	55.63
• Total margin	1550	21.83
• Total marketing cost	2400	33.80
• Market efficiency	0.80	
• PSCR	44.37	
Marketing Channel-IV: Farmer – Wholesalers- Consumer		
Farmer's sale price/ wholesalers purchase price	3400	50
Total cost incurred by wholesalers	780	11.47
Wholesalers' sale price/ consumer purchase price	6800	100.00
Market margin:		
Wholesalers'	2620	38.52
· Price spread	3400	50
· Total margin	2620	38.52
· Total marketing cost	780	11.47
· Market efficiency	1.00	
· PSCR	50.00	
Marketing Channel-V: Farmer – Retailer- Consumer		
Net price received by farmers or Farmer's sale price/ retailers purchase price	3800	61.29
Total cost incurred by retailers	1250	20.16

Retailers' sale price/ consumer purchase price	6200	100.00
Market margin:		
Retailer'	1150	18.54
• Price spread	2400	38.70
• Total margin	1150	18.54
• Total marketing cost	1250	20.16
• Market efficiency	1.58	
• PSCR	61.29	
Marketing Channel-VI: Farmer – Consumer		
Net price received by farmers or Farmer's sale price/ retailers purchase price	5300	
• Price spread	5300	
• Total margin	0	
• Total marketing cost	0	
• Market efficiency	0	
• PSCR	100	

Marketing channel	I	II	III	IV	V	VI
No. farmers	08	12	15	27	53	45
Net price received by farmers	2800	3100	3150	3400	3800	5300
Price spread	4000	3300	3950	3400	2400	5300
Total market margin	3200	2650	1550	2620	1150	5300
Total market cost	1350	1000	2400	780	1250	5300
Market efficiency	0.62	0.85	0.80	1.00	1.58	0
Producer share in consumer rupee	41.18	48.44	44.37	50.00	61.29	0





Conclusion

The study concluded that marigold marketing in the Kannauj district was carried out through six separate marketing channels, each involving a different number of intermediaries. The investigation made it abundantly evident that the degree of intermediary engagement had a significant impact on a marketing channel's efficiency. For marigold growers, channels with fewer middlemen were more profitable and efficient in comparison to channels with more. Among all channels, direct marketing through Channel-VI (Farmer-Consumer) gave the most significant profit to farmers because producers received the total consumer purchase price with no intermediate deductions. Due to lower marketing costs, lower intermediate margins, a smaller price spread, and a larger producer's share in consumer rupees, route-V (Farmer–Retailer–Consumer) was determined to be the most effective indirect route. On the other hand, Channel-I (Farmer-Village Trader-Wholesaler-Retailer-Consumer) was found to be the least efficient because the existence of several intermediaries significantly increased marketing costs and market margins, which reduced farmers' returns. The study's findings show that reducing intermediary participation can greatly increase producer income and marketing efficiency in marigold farming. As a result, there is a need to expand direct marketing facilities, set up flower markets, develop transportation and storage infrastructure, and promote farmer-retailer linkages in the research area. Such measures would increase the overall effectiveness of flower marketing systems and help marigold growers get better rates for their produce.

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