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Marketing channels and price spread of marigold in Kolhapur district of Maharashtra: An economic analysis

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ABSTRACT

Marigold (*Tagetes* spp.) is an important commercial flower crop in Maharashtra and has considerable economic importance due to its demand for religious functions, festivals, decoration and other commercial purposes. The present investigation entitled "Marketing Channels and Price Spread of Marigold in Kolhapur District of Maharashtra: An Economic Analysis" was undertaken with the objective of examining the existing marketing channels, estimating the price spread and assessing the marketing efficiency of marigold in Kolhapur district. The study was based on primary data collected during the agricultural year 2024–25 from 90 marigold growers selected from six villages of Hatkanangale and Shirol tehsils of Kolhapur district. The required information was collected through a pre-tested structured interview schedule and analysed using tabular analysis and standard measures of price spread, producer's share in consumer's rupee and marketing efficiency.

The study revealed that the average flower production was 168.08 q/ha, of which 160.64 q/ha (95.60 per cent) was marketed, indicating a high proportion of marketable produce. Three major marketing channels were identified in the study area, namely Channel-I: Producer–Consumer, Channel-II: Producer–Wholesaler–Retailer–Consumer and Channel-III: Producer–Commission Agent–Wholesaler–Retailer–Consumer. Among the identified channels, Channel-III handled the largest proportion of marketed produce, indicating the predominance of intermediaries in the marketing of marigold. However, Channel-I was found to be the most efficient marketing channel. It recorded the lowest price spread of ₹258.24 per quintal, the highest producer's share of 92.78 per cent in the consumer's rupee and the highest marketing efficiency of 13.86. The relatively lower price spread and higher producer's share under direct marketing indicated that elimination or reduction of intermediaries can substantially improve the returns to marigold growers.

The study suggests that strengthening direct marketing linkages between producers and consumers, promoting farmer groups and collective marketing, improving access to market information, and developing efficient transportation and post-harvest handling facilities would help reduce marketing costs and price spread. Greater adoption of efficient marketing channels would enable growers to obtain a higher share of the consumer's rupee and improve the overall efficiency of marigold marketing in Kolhapur district.

Keywords: Marigold, *Tagetes* spp., Marketing channels, Price spread, Producer's share, Marketing efficiency, Kolhapur district

Introduction

Marigold (*Tagetes* spp.) is one of the important commercial loose flower crops cultivated in India. The flowers have considerable demand throughout the year due to their extensive use in religious ceremonies, festivals, marriages, social functions and decoration. The demand for marigold increases considerably during major festivals and marriage seasons, creating regular marketing opportunities for growers. Owing to its wide consumer demand, marigold has become an important commodity in the domestic flower market.

Marketing plays a crucial role in determining the economic returns received by marigold growers. Unlike many agricultural commodities, fresh flowers are highly perishable and deteriorate rapidly after harvesting. Therefore, timely disposal, efficient transportation, proper handling and access to suitable markets are essential for maintaining quality and obtaining remunerative prices. Any delay in marketing may result in physical losses, deterioration in quality and reduction in the price received by producers.

The marketing of marigold involves various market functionaries such as producers, wholesalers, commission agents, retailers and consumers. Depending upon the accessibility of markets and prevailing market conditions, growers may sell their produce directly to consumers or through different intermediaries. The major marketing channels generally observed in marigold marketing include Producer–Consumer, Producer–

Wholesaler–Retailer–Consumer and Producer–Commission Agent–Wholesaler–Retailer–Consumer. The number of intermediaries involved in a channel has an important influence on marketing costs, margins and the final price paid by consumers.

The efficiency of different marketing channels can be assessed through the estimation of marketing costs, marketing margins, price spread and producer's share in the consumer's rupee. Price spread refers to the difference between the price paid by the consumer and the net price received by the producer. It indicates the portion of the consumer's expenditure absorbed by marketing costs and margins of various market intermediaries. A lower price spread generally indicates a relatively efficient marketing channel, provided that the necessary marketing services are adequately performed.

The producer's share in the consumer's rupee is another important indicator of marketing performance. A higher producer's share indicates that a greater proportion of the final consumer price reaches the grower. Similarly, marketing efficiency provides an overall measure of the effectiveness of the marketing system by relating the value of the product to the costs and margins involved in its movement from producer to consumer. Identification of efficient marketing channels can therefore help growers make better decisions regarding the disposal of their produce.

In Maharashtra, marigold is marketed through local flower markets as well as regional and urban markets. The marketing system is influenced by seasonal demand, market price fluctuations, transportation costs, perishability and the involvement of intermediaries. During periods of high demand, prices may increase substantially, whereas during periods of excess supply, growers may face considerable price reductions. Such price fluctuations make efficient marketing particularly important for ensuring better returns to producers.

Kolhapur district has considerable potential for commercial marigold production and marketing. Farmers in Hatkanangale and Shirol tehsils market their produce through different channels depending upon market accessibility, quantity of produce, prevailing prices and availability of buyers. Marigold produced in these areas is marketed through direct sales as well as through wholesalers, retailers and commission agents. However, differences in marketing costs, margins and price realization among these channels may affect the share of growers in the final consumer price.

Despite the increasing importance of marigold marketing, there is a need to assess the existing marketing channels and determine their relative efficiency in the study area. Estimation of price spread and producer's share can help identify the extent of price realization by growers and the share retained by different market intermediaries. Such information is useful for identifying opportunities to reduce

avoidable marketing costs and strengthen more efficient marketing arrangements.

Therefore, the present study entitled “Marketing Channels and Price Spread of Marigold in Kolhapur District of Maharashtra: An Economic Analysis” was undertaken to examine the existing marketing channels, estimate the price spread, determine the producer's share in the consumer's rupee and assess the marketing efficiency of marigold in Kolhapur district. The study is expected to provide useful information for improving marketing practices, strengthening direct marketing linkages and enhancing the returns received by marigold growers.

2. Methodology

The study was conducted in Kolhapur district of Maharashtra. Hatkanangale and Shirol tahsils were purposively selected based on the concentration of marigold cultivation and marketing. From each tahsil, three villages, namely Rukadi, Male and Herale from Hatkanangale and Danoli, Kothali and Kavthesar from Shirol, were selected purposively.

A total of 90 marigold growers were selected through multistage sampling, with 15 farmers from each village. The respondents were classified into small, medium and large farm-size groups, comprising 30 farmers in each group.

Primary data for the agricultural year 2024–25 were collected through a pre-tested interview schedule. Information on quantity marketed, marketing channels, prices, marketing costs and margins was collected from growers and market intermediaries.

Three major marketing channels were identified:

- Channel-I: Producer → Consumer
- Channel-II: Producer → Wholesaler → Retailer → Consumer
- Channel-III: Producer → Commission Agent → Wholesaler → Retailer → Consumer

The data were analysed using tabular analysis, averages and percentages. Marketing performance was evaluated in terms of marketing cost, marketing margin, price spread, producer's share in consumer's rupee and marketing efficiency.

Price spread was estimated as the difference between the consumer's price and the net price received by the producer. Producer's share was calculated as the ratio of net producer price to consumer price, expressed in percentage. Marketing efficiency was estimated using Acharya's modified method.

Results and discussion

Table 1. Production and Disposal Pattern of Marigold. (qtl./ha)

Sr. No	Particulars	Group			
		Small	Medium	Large	Overall
1.	Total Production	170.31 (100.00)	168.40 (100.00)	165.54 (100.00)	168.08 (100.00)
2.	Home consumption	0.03 (0.02)	0.13 (0.07)	0.35 (0.21)	0.14 (0.08)
3.	Gratis	0.08 (0.05)	0.14 (0.09)	0.46 (0.28)	0.23 (0.14)
4.	Losses due to transit	4.42 (2.59)	7.44 (4.42)	10.10 (6.10)	7.07 (4.21)
5.	Marketed quantity	165.79 (97.34)	160.70 (95.42)	155.44 (93.41)	160.63 (95.57)

(Figures in parentheses indicate percentage to total production)

Table 2. Channel-wise Marketed Quantity of Marigold (qtl/ha.)

(Figures in parentheses indicate percentage to total production)

Table 1. shows the production and disposal pattern of marigold. The overall average production was 168.08 q/ha, of which 160.63 q/ha (95.57%) was marketed. Transit losses accounted for 7.07 q/ha (4.21%), while home consumption and free distribution were negligible at 0.14 q/ha and 0.23 q/ha, respectively. Among the farm-size groups, marketed quantity was highest for small farmers (165.79 q/ha) and lowest for large farmers (155.44 q/ha). Overall, a major proportion of marigold production was marketed, indicating a high marketed surplus.

Sr. No.	Channel	Size Group			
		Small	Medium	Large	Overall
1	I	115.72 (69.80)	15.91 (9.90)	10.26 (6.60)	47.29 (29.44)
2	II	30.34 (18.30)	60.10 (37.40)	44.92 (28.90)	45.12 (28.09)
3	III	19.73 (11.90)	84.69 (52.70)	100.26 (64.50)	68.22 (42.47)
	Total	165.79 (100.00)	160.70 (100.00)	155.44 (100.00)	160.63 (100.00)

Table 2 presents the channel-wise marketed quantity of marigold. The overall marketed quantity was 160.63 q/ha. Among the three channels, Channel-III accounted for the highest share (42.47%), followed by Channel-II (28.09%) and Channel-I (29.44%). Channel-III was predominant among medium-sized farmers (64.50%), whereas

Channel-I was relatively more important among small farmers (69.80%). Overall, the results indicate that a substantial proportion of marigold produce was marketed through Channel-III involving commission agents, wholesalers and retailers.

Table 3. Per Quintal Channel-Wise Marketing Cost of Marigold (₹/qtl.)

Sr. No.	Particulars	Channel I	Channel II	Channel III
1. Producer				
	Transportation charges	98.67 (38.21)	139.60 (30.11)	204.16 (36.96)
	Packing material charges	5.36 (2.08)	34.90 (7.53)	51.04 (9.24)
	Loading and unloading charges	92.56 (35.84)	17.45 (3.76)	25.52 (4.62)
	Others	61.66 (23.88)	271.66 (58.60)	271.66 (49.18)
	Total Marketing Cost	258.24 (100.00)	463.61 (100.00)	552.38 (100.00)
2. Commission Agent				
	Loading and unloading charges	(0.00)	0.00	51.04 (44.45)
	Weighing charges	0.00 (0.00)	0.00 (0.00)	25.52 (22.22)
	Market fee	0.00 (0.00)	0.00 (0.00)	38.27 (33.33)
	Total Marketing Cost	0.00 (100.00)	0.00 (0.00)	114.83 (100.00)
3. Wholesaler				
	Transportation charges	0.00 (0.00)	69.80 (45.33)	102.08 (47.98)
	Loading and unloading charges	0.00 (0.00)	30.39 (19.74)	43.76 (20.57)
	Weighing charges	0.00 (0.00)	17.45 (11.33)	28.64 (13.46)
	Market fee	0.00 (0.00)	36.33 (23.60)	38.27 (17.99)
	Total Marketing Cost	0.00 (100.00)	153.98 (100.00)	212.75 (100.00)
4. Retailers				
	Transportation charges	0.00 (0.00)	87.25 (37.84)	127.60 (47.10)

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Sr. No.	Particulars	Channel I	Channel II	Channel III
	Others	0.00 (0.00)	230.59 (100.00)	270.94 (100.00)
	Total Marketing Cost			

(Figures in parentheses are the percentage to the respective total)

Table 4. Per Quintal Channel-Wise Marketing Cost and Price Spread of Marigold (₹/qtl)**Table 5.** Channel-Wise Marketing Efficiency of Marigold

Table 3. presents the channel-wise marketing cost of marigold. The marketing cost increased with the involvement of intermediaries and marketing operations. Channel-I recorded the lowest marketing cost of ₹258.24 per quintal, as the produce was sold directly to consumers. In contrast, Channel-III involved the highest marketing cost, due to the participation of commission agents, wholesalers and retailers. Transportation, other expenses, loading and unloading, and market fees were the major components of marketing cost. Overall, the findings indicate that shorter marketing channels help reduce marketing costs and improve marketing efficiency.

Sr.no.	Particulars	Channel I	Channel II	Channel III
1	Gross price received by Farmer	3579 (100.00)	3633 (78.74)	3827 (74.07)
	i) Marketing cost	258 (7.22)	464 (10.05)	552 (10.69)
	ii) Net price realized	3321 (92.78)	3170 (68.69)	3274 (63.38)
2	Commission agent			
	i) Price paid	0.00 (0.00)	0.00 (0.00)	3827 (74.07)
	ii) Marketing cost	0.00 (0.00)	0.00 (0.00)	115 (2.22)
	iii) Marketing margin	0.00 (0.00)	0.00 (0.00)	191 (3.70)
	iv) Price received	0.00 (0.00)	0.00 (0.00)	4133 (80.00)
3	Wholesaler			
	i) Price paid	0.00 (0.00)	3633 (78.74)	4133 (80.00)
	ii) Marketing cost	0.00 (0.00)	154 (3.35)	213 (4.12)
	iii) Marketing margin	0.00 (0.00)	282 (6.10)	246 (4.77)
	iv) Price received	0.00 (0.00)	4069 (88.19)	4592 (88.89)
4	Retailer			
	i) Price paid	0.00 (0.00)	4069 (88.19)	4592 (88.89)
	ii) Marketing cost	0.00 (0.00)	231 (5.00)	271 (5.24)
	iii) Marketing margin	0.00 (0.00)	314 (6.81)	303 (5.87)
	iv) Price received	0.00 (0.00)	4614 (100.00)	5166 (100.00)
5	consumer			
	i) Price paid	3579 (100.00)	4614 (100.00)	5166 (100.00)
	Price spread	258.24	1444.61	1891.72
	MC+MM	258.24	1444.61	1891.72
	Marketing efficiency	13.86	3.19	2.73
	Producer share in consumer rupee	92.78	68.69	63.38

(continued on next page)

Table 4. revealed that Channel-I (Producer–Consumer) recorded the highest net price to the producer (₹3,321/q), the lowest price spread (₹258.24/q), highest marketing efficiency (13.86) and highest producer's share (92.78%). Channel-II and Channel-III recorded higher price spreads of ₹1,444.61 and ₹1,891.72 per quintal, respectively, with comparatively lower marketing efficiency of 3.19 and 2.73. The findings indicated that price spread increased with the number of intermediaries, while the producer's share and marketing efficiency declined. Thus, direct marketing through Channel-I was the most efficient and remunerative channel for marigold growers.

Channel	Price Paid by Consumer	Net price received	MC	MM	MC + MM	MME
Channel I	3579	3321	258.24	0.00	258.24	13.86
Channel II	4614	3170	849.00	595.61	1444.61	3.19
Channel III	5166	3274	1151.00	740.72	1891.72	2.73

Table 5. revealed that Channel-I (Producer → Consumer) recorded the highest marketing efficiency of 13.86, followed by Channel-II (Producer → Wholesaler → Retailer → Consumer) with 3.19 and Channel-III (Producer → Commission Agent → Wholesaler → Retailer → Consumer) with 2.73. The higher efficiency of Channel-I was mainly due to direct sale of produce to consumers, which reduced marketing costs and eliminated intermediary margins. Accordingly, Channel-I recorded the lowest price spread of ₹258.24 per quintal and the highest producer's share in the consumer's rupee (92.78 per cent). Among the indirect channels, Channel-II was more efficient than Channel-III, as it involved fewer intermediaries. Channel-III recorded the highest price spread (₹1,891.72/q) and the lowest marketing efficiency (2.73), mainly due to the additional involvement of a commission agent. Overall, marketing efficiency declined with an increase in the number of intermediaries, while marketing costs and price spread increased. Hence, Channel-I was found to be the most efficient and remunerative marketing channel for marigold growers.

Conclusion

Based on the findings of the present investigation, the following conclusions were drawn:

The study revealed that marigold growers followed three major marketing channels, namely Channel-I (Producer → Consumer), Channel-II (Producer → Wholesaler → Retailer → Consumer) and Channel-III (Producer → Commission Agent → Wholesaler → Retailer → Consumer). Channel-III handled the highest share of marketed produce (42.47 per cent), indicating considerable dependence on intermediaries for disposal of produce.

Marketing cost increased with the increase in the number of intermediaries. Channel-I recorded the lowest marketing cost of ₹258.24 per quintal, whereas Channel-III recorded the highest marketing cost, mainly due to the involvement of commission agents, wholesalers and retailers.

Channel-I recorded the lowest price spread of ₹258.24 per quintal and the highest producer's share in the consumer's rupee (92.78 per cent). In contrast, Channel-III recorded the highest price spread of ₹1,891.72 per quintal and a lower producer's share of 63.38 per cent. Marketing efficiency was highest in Channel-I (13.86), followed by Channel-II (3.19) and Channel-III (2.73). Thus, direct marketing was found to be the most efficient and remunerative channel, as it enabled producers to retain a larger share of the consumer price.

Overall, the study concluded that strengthening direct and collective marketing systems, improving market information, transportation and post-harvest facilities, and reducing unnecessary intermediaries would help to lower marketing costs and price spread and improve the income of marigold growers.

Suggestions

- Direct marketing should be promoted among marigold growers, as Channel-I was found to be the most efficient and remunerative channel with the lowest marketing cost and price spread and the highest producer's share and marketing efficiency.

- Farmer Producer Organizations (FPOs) and collective marketing should be strengthened to improve farmers' bargaining power, reduce dependence on intermediaries and lower transportation and marketing costs.
- Timely market information and better market linkages should be provided through digital platforms, extension agencies and organized markets to help farmers obtain prevailing price information and select remunerative markets.
- Post-harvest handling, packaging, storage and transportation facilities should be improved to minimize losses in highly perishable marigold flowers and improve the quality and price realization of the produce.

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