



## PRODUCTION AND MARKETING OF MARIGOLD FLOWERS IN UTTAR PRADESH WITH SPECIAL REFERENCE TO KANNAUJ DISTRICT

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**ABSTRACT:** The study was undertaken during the season of 2009-10 to estimate the cost of cultivation of marigold flower and returns and marketing margins of different middleman involved in marigold flower trade in Kannauj district of Uttar Pradesh. The study was based on information collected from randomly 60 marigold flower growing farmers, commission agent cum wholesaler and retailers. The overall cost of cultivation of marigold flower was estimated as rs. 7365 per hectare. The overall gross income and average net income from marigold crop was estimated to be Rs. 121792 and Rs. 48141 per hectare, respectively. The average return per rupee investment was estimated as Rs. 1.66, which shows that marigold cultivation was highly profitable in the selected area. Out of two marketing channels, Channel-I (producer-commission-retailer-consumer) was the important channel from producers point of view, where producers received more percentage share (35.68 per cent) in consumer's rupee than the channel-II (31.95 per cent). The total marketing cost was Rs. 6.90 and Rs. 8.63 per kilogram of marigold flower for channel-I and channel-II, respectively. The major item of marketing cost were the value of quantity loss and labour charges. In channel-I retailers earned a margin of 10.35 and 34.69 per cent of the price paid by the consumers.

**Keywords :** *Marigold, channels, middleman, margins, production cost.*

Flowers are inseparable from social fabric of human life as they play an important role in recreation and keeping the mind in good spirit. Therefore, in present time social functions remain incompleting without the use of flowers in our society. According to the ministry of agriculture, GOI, the area under flower cultivation in 2009-10 was 0.13 million hectares and production was 0.21 million tonnes. The floriculture in India has emerged as a fast growing sector in the recent years. Uttar Pradesh has an area of 2512 hectares under flower cultivation. Kannauj is one of the important flower growing districts in Uttar Pradesh. The area under flower crop in Kannauj district was 872 hectares in 2009-10. Marigold and rose flowers are mainly cultivated in the district. In the study area Sarai Meera block of Kannauj district was ranked first in area and production for marigold cultivation, where the area under marigold was 276 hectares with 264 metric tonnes of production. Marigold is a high value and labour intensive crop and it is cultivated by most of the farmers on small

scale (Sharma, 3). The knowledge of cost of cultivation and returns from marigold cultivation is very useful for the cultivators to adjust and coordinate the available resources in a profitable manner. The present study was taken up with a view to examine various aspects of cost of cultivation and marketing of marigold flower in Kannauj district. The specific objectives of the study were: 1. To estimate the cost of cultivation of marigold flower, 2. To identify the marketing channels of marigold, and 3. To estimate the marketing costs and margins.

### MATERIALS AND METHODS

The present study was conducted in purposively selected Sarai Meera block which has the largest area under marigold cultivation. Four villages of selected block, which had highest production of marigold flower, were purposively selected for the study. In order to select the sample of the farmers, separate list of flowers in each farm holding category i.e. small (less than two hectares), medium i.e. (2 to 4 hectares), large (4 hectares &

above) were prepared for all the four selected villages. Finally six marigold growing farmers were selected randomly in proportion to the number of farmers in each category in each village.

Further, to study the marketing aspects, a list of commission agent-cum-wholesaler and retailers of Kannauj *phool* mandi was prepared.

## RESULTS AND DISCUSSION

### Cropping pattern

The cropping pattern of sample farmers during 2009-10 (Table 1) shows that higher proportion of gross cropped area was put to necessary and high value crop i.e. cereals and flowers in the study area. Cereal was the major crop group which accounted for 70 per cent of the gross cropped area, but flowers had also important position in cropping pattern. These flowers occupied about 20 per cent area in the cropping pattern of selected farmers. A number of flowers were cultivated by the sample farmers such as marigold, rose etc. Marigold had accounted 11.61 per cent share in total cropped area at sample farms.

**Table 1: Cropping patterns of sample farmers during 2009-10.**

Crops	Area (ha)	% of the total area
Bajara	31.20	19.20
Jowar	11.45	7.05
Maize	1.35	0.83
Moong	4.75	2.67
Til	1.25	0.71
Marigold	18.85	11.61
Wheat	54.90	33.82
Gram	0.62	0.42
Barley	15.92	9.80
Rose	17.85	1.92
Vegetables	2.63	1.06
Total cropped area	162.2	100.00

### Cost of cultivation

It was observed (Table 2) that the overall cost of cultivation of marigold was Rs. 73650.69 per hectare. It was the highest on small farms (Rs.

74505.13 per hectare) and lowest on medium sized farms (Rs. 71886.04 per hectare). The break-up of total cost of cultivation shows that cost of human labour was the important component on all size farms and it accounted for 29.44 per cent of the overall cost, as the marigold crop is a labour intensive crop. Value of manures, rental value of owned land and value of machine labour were the next important items of overall cost of cultivation on all size of farms. These items constitute 17.41, 27.20 and 6.30 per cent in the total cost, respectively.

Small size farms used more manures because of availability in abundance with these farmers. On the other hand, seed, irrigation, fertilizers and plant protection chemicals associated for 5.52, 3.54, 2.99 and 0.80 per cent of the total cost, respectively. Value of irrigation charges was more on small farms due to the flat rate of electricity.

### Costs and returns

Variable cost, fixed cost and returns from marigold cultivation are presented in Table 3. On an average, the total cost of cultivation (Cost C<sub>2</sub>) was Rs. 73650.71 per hectare. The operational cost exceeded the overhead cost on all size groups of farms with average of 67.22 per cent and 32.78 per cent, respectively. The higher paid out put cost was incurred by large farmers on account of higher use of human labour, Cost C<sub>1</sub> and Cost C<sub>2</sub> were the highest on small size farms than other size groups.

Average gross income from the marigold cultivation was Rs. 121791.64 per hectare. The value of gross income was high due to high value of flowers especially in winter season as this is the season of marriages and festivals.

From business income the disposable income obtained from the crop, the overall farm business income from marigold cultivation was Rs. 83782.16 per ha. This was found to be the highest on medium size of farm (Rs. 97216.49 per ha). Family labour income was also the highest on medium size of farm (Rs. 73247.32 per ha). The findings are in line of reports of Goyal (1).

**Table 2: Structure of cost of cultivation per hectare of marigold (Rs./ha).**

Particulars	Small	Medium	Large	Overall
Seed	4042.40 (5.43)	4024.90 (5.60)	4228.00 (5.76)	4065.57 (5.52)
Manure	13840.40 (18.58)	12234.0 (17.02)	9891.08 (13.46)	12819.63 (17.41)
Fertilizers	2074.00 (2.78)	12157.00 (3.00)	2787.31 (3.79)	2203.17 (2.99)
Value of insecticides	657.30 (0.88)	483.16 (0.67)	526.00 (0.72)	591.17 (0.80)
Value of irrigation	3389.18 (4.55)	1446.13 (2.01)	1848.57 (2.24)	2609.94 (3.54)
Value of machine labour	4798.00 (6.44)	4418.03 (6.15)	4398.07 (5.99)	4636.69 (6.30)
Value of hired human labour	8094.06 (10.80)	8181.57 (11.38)	10595.90 (14.42)	8492.67 (11.53)
Interest on working capital	947.38 (1.27)	823.62 (1.14)	826.87 (1.13)	896.30 (1.22)
Depreciation	1515.00 (2.03)	1850.00 (2.57)	2115.00 (2.88)	1694.33 (2.30)
Rental value of owned land	19368.50 (26.00)	21139.17 (29.41)	20643.56 (28.10)	20031.94 (27.20)
Interest on fixed capital	1800.00 (2.43)	283.00 (3.93)	4084.49 (5.56)	2417.34 (3.28)
Imputed value of family labour	13978.91 (18.76)	12298.32 (17.11)	11720.20 (15.95)	13191.94 (17.91)
Total cost (Rs. per ha)	74505.13 (100.00)	71886.04 (100.00)	73465.05 (100.00)	73650.69 (100.00)

\*Figures in parantheses are the percentage of total cost.

**Table 3: Size group wise different costs and returns of marigold.****(Rs./kg)**

Particulars	Small	Medium	Large	Overall
Operational cost	51821.63 (69.55)	46066.87 (64.08)	46622.00 (63.46)	49507.08 (67.22)
Overhead cost	22683.50 (90.45)	25819.17 (35.92)	26843.05 (36.54)	24149.61 (32.78)
Cost A <sub>1</sub>	39357372	25618.56	37016.80	38009.47
Cost A <sub>2</sub>	39357.72	35618.56	37016.80	38009.47
Cost B <sub>1</sub>	41157.72	38448.56	41101.29	40424.81
Cost B <sub>2</sub>	60526.22	59587.73	61744.85	60158.57
Cost C <sub>1</sub>	55136.63	50746.83	52821.49	53618.76
Cost C <sub>2</sub>	116211.07	71886.04	73465.05	73650.69
Gross income	76853.00	132835.05	123861.38	121741.64
Farm business income	55684.78	97216.49	86844.58	83782.16
Family labour income	41705.87	73247.32	62116.53	61332.89
Net income	1.56	60949.01	50397.33	48140.94
Returns per rupee investment	8.27	1.85	1.69	1.66
Cost of production (Rs./kg)		7.98	8.16	8.18

**Table 4: Marketing costs and margins in marketing of marigold flowers through different channels.**

Rs./ha

Particulars	Marketing channels	
	I	II
<b>Marketing cost incurred by</b>		
1. Producer	1.82 (5.42)	1.82 (4.85)
2. Retailer	5.08 (5.13)	5.22 (13.92)
3. Commission agent cum wholesaler	-	1.59 (4.24)
Total marketing cost	6.90 (20.55)	8.63 (21.01)
<b>Marketing margin received by</b>		
1. Commission cum wholesaler	-	3.88 (10.35)
2. Retailer	14.70 (43.77)	13.01(34.69)
<b>Total marketing margins</b>	14.70 (43.77)	16.89 (45.08)
Price spread	21.60 (64.32)	25.52 (68.08)
Producer's net share	11.98 (35.68)	11.98 (31.95)
Price paid by consumer	33.58 (100.00)	37.50 (100.00)

The average net income worked out to Rs. 48140.94 per ha. Among the various size group, it varied from Rs. 41705.87 per ha on small farms to Rs. 60949.01 per hectare on medium farms. On an average, one rupee invested in the cultivation of marigold paid Rs. 1.66 on the sample farms. Thus, cultivation of marigold was highly profitable on all the category of farms and more profitable for medium farms, where farmers received 1.85 on one rupee investment. The average cost of production of marigold was 8.18 per kilogram.

#### Sale of flowers

Flowers for sale are brought to the “*Phool Mandi*” by farmers at Janta Market. This is an unregulated market for flowers in Kannauj district. Seven commission agents and four commission agents cum wholesaler were operating in the *Phool Mandi*. These agents act as selling agent of the farmers and charge commission @ 10 per cent of the value of flowers from the farmers' sellers.

Marigold flowers were sold in *phool mandi* through private negotiation and payment was made immediately after sale or differed depending on the cash requirement of the farmers. In *phool mandi*, all the flowers were purchased by retailers through the commission agents and commission agents cum

wholesalers. These retailers are florists, engaged in retail selling of flowers as such or after value addition and also take contract flower decorations in marriages and parties. The following channels were identified in the marketing of marigold flowers in Kannauj district of Uttar Pradesh.

**Channel I:** Producer – commission agent – retailer - consumer.

**Channel II:** Producer – commission agent cum-wholesaler- retailer-consumer

#### Marketing cost, margins and producer's shares

Marketing costs, margins and producer's share in the marketing of marigold through different marketing channels is presented in Table 4. The producer sold the produce to the consumer through commission agents and retailers.

Total marketing cost in the state of marigold flowers accounted Rs. 6.90 per kilogram in channel I, while, in channel II the producer sold the produce to consumer through commission agent cum wholesaler and retailers. In this channel total marketing costs in the sale of marigold flowers came out to be Rs. 8.63 per kilogram. In the case of margins, producer's net share in consumer's rupee was the highest in channel-I (35.68 per cent) followed by channel-II, (31.95 per cent). In

channel-I, retailers retained 43.77 per cent margins, while in channel II commission agent cum wholesalers and retailers earned margins of 10.33 and 34.69 per cent in the price paid by the consumers. The total margins of different marketing functionaries was 64.32 per cent and 68.05 per cent of the consumer's rupee in channel-I and channel-II, respectively. Thus, it can be concluded that in both the channels, the share of middlemen was more than the share of producer confirming to finding of Guledgudola and Hosamani (2).

#### Conclusion:

1. The study on the production and marketing of marigold flower revealed that flowers were the major crops, next to cereals on the sample farms and marigold alone accounted for 11.61 per cent area of gross cropped area.

2. The average cost of cultivation of marigold was Rs. 7365.71 per hectare. Human labour was the major component of total cost. This shows that the flower cultivation is labour intensive.

3. The cultivation of marigold flower on the sample farms was a profitable activity.

4. Heavy commission charges were being charged by the commission agents *i.e.* at the rate of 10 per cent of the value of flowers.

5. The producer's share in the consumer's rupee was nearly 35 per cent, whereas retailers and

commission agents cum wholesaler got about 45 per cent margin in the sale of marigold flower.

#### Recommendations:

1. In Kannauj district, *phool mandi* is an unregulated market so, regulation of flower market is proposed.

2. A processing unit may be established in marigold producing area to ensure higher returns to the producers.

3. High commission was charged from producer sellers *i.e.* @ 10 per cent of the value of flowers in the *phool mandi*. It is advisable that the commission should be charged from buyers. This will increase the producer's share in consumer's rupee.

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