

## **The Economics of marigold flowers in Eastern Uttar Pradesh**

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### **Abstract**

*The present study entitled economics of marigold flower was conducted in Eastern Uttar Pradesh. The Floriculture has assumed a definite commercial status. Its potential as a viable agribusiness has also been recognized. Diverse agro-climatic conditions permit perennial production in one part of the country. This sector provides employment to millions. Floriculture was practiced only on small farms but now a few large ones have also set up. The study showed that making small size mala on small and large farms were higher than the large size mala. The return per Rupee of investment were estimated to the Rs. 1.66, Rs. 2.08 and Rs. 1.84, on small size, large size farms and overall, respectively. The percentage of total marigold produce sale indifferent marketing channels indicated that 90 percent produce sold in II marketing channel where as next 10 percent marigold flowers were sold directly to the consumer i.e. channel I. The retailer's sold the marigold flowers were sold to the consumers in different forms such as flower basket, bouquet and in other forms as demanded by the buyers. The marketing cost and marketing margin (Price spread) differ from the channel to channel. The marketing cost and margins also depend upon the form in which the product reaches the ultimate consumers.*

Key words: Marketing efficiency, marketing channels and price spread

### **Introduction**

India is a long tradition of floriculture. Flowers have been depicted in ancient paintings. However, the social and economic aspects of flowers growing were recognized only later. It is only in the last three decades with changing life styles and under increased urban affluence. Floriculture has assumed a definite commercial status. Its potential as a viable agribusiness has also been recognized. Diverse agro-climatic conditions permit perennial production in one part of the country or the other. This sector provides employment to millions. Floriculture was practiced only on small farms but now a few large ones have also followed. The area under flower cultivation in India is estimated to be 34,000 hectares, the major states being Karnataka Tamilnadu, West Bengal, Andhra Pradesh and Maharastra. Tamilnadu ranks first with 8,383 hectares. Small area for floricultural active states are like Maharastra, Uttar Pradedh and Madhya Pradesh.

Considering the powerful thrust that floriculture income can give the economy, the National Commission on Agriculture has recommended 5 lakh hectares of land under floriculture by 2000 A.D. to raise production. The floriculture continues to generate employment opportunities to people in rural area. An area under flower cultivation can support a family consisting of 5 to 6 members. It much valued flowers like rose, carnation, gladioli, marigold and orchids are

grown. Considering the tremendous export potential of floriculture, the government has accorded on extreme focus thrust area status to be floriculture industry and is giving various financial incentives to set up EOUs in floriculture in India. Among the flowers with good export potential are Rose. Chry-santhum, Cornation and Anthurium, eith rises topping the list. The market of roses in US 2 billion and the high cost of growing roses are causing northern countries to phase out production. West Bengal is well set to exploit the market potential in floriculture because of its proximity to Singapore, which is the Asian auction centre of flowers. Also are a like Bankura, Purulia and Darjeeling are good for rose cultivation due to their well drained soil prolonged winters. It is necessary to make a detailed analysis of the practice of how floriculture is practiced in successful countries before we are able to compete on an equal footing with them in the international market. Improved infrastructure, technology of green house cultivation, the latest development, in the post harvest treatment of flowers, condition between the biotechnology laboratories, the growers and fostering a good work-culture and harmonious labour practices in the state are the essential stepping stones to success. Flowers grown in Rajasthan are exported to Japan, Holland, Singapore, Mouritious, U.A.E. Germany and Switzerland. In eastern U.P. Varanasi, Allahabad, Sultanpur and Ghazipur districts are flowers cultivation districts in which Varanasi is very famous ancient and religious city, so having all over year demand of flowers

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and flower products. The present study has the following objectives:

1. To study socio-economic status of farmers.
2. To estimate the cost of cultivation of marigold
3. To study the benefit-cost ratio.
4. To study the marketing channels of marigold flowers

### Methodology

The present study pertains to Allahabad district of eastern Uttar Pradesh. The choka block was selected for present study. The study covered 5 village and two more markets. And it covered 100 growers in the selected villages.

Survey method was used for collection of data. The primary data were collected from selected respondents by personal interview with the help of pretested schedules especially prepared and designed for the purpose. The collected information's were analyzed and presented in tabular form. The simple average and percentage were used to fulfill the

average of 5.96 and 5.65 respectively of male and female per farm. Status of education was found to be very low in both groups of farms. The total number of farms and different size of holding on different size group have been illustrated in Table 2. This table illustrated that the average size of farms holding was found to be near about 1.96 hectares. The average size of small and large farms was 0.33 hectare and 1.63 hectare.

Respectively. This table also revealed that the 60% farmers were small and 40% large. The cropping pattern is the important variable which determines the investment of different input on farm and income of the farmers. The crop grown by the farmers on different size groups is based on availability of resources. The total cropped area were distributed in different activities as like 20.70% area under flowers 34.98% area under vegetable crops and 44.32% area under other crops were found on below 1.0 hectare size groups. Where as, 10.31% area under flower crops, 40.02% area under

Table: 1 Family composition on the basis of sex, age and education

Size of farm	Average number of person in a family									
	Family composition				Illiterate			Education status		
	Gender		Age		Average size of family	Primary	middle & High school	Literate		Graduate & above
	Male	Female	<18year	>18year				Intermediate	Graduate	
Small farms(<1ha)	5.67	5.48	5.13	6.02	11.15	5.70	2.78	1.74	0.80	0.13
Large farms(>1ha)	6.25	5.82	5.95	6.12	12.07	4.30	3.71	2.13	1.72	0.21
Overall	5.96	5.65	5.54	6.07	11.61	5.00	3.25	1.94	1.26	0.17

objectives of the study.

### Results and Discussion

The farm is most important unit of present study. The farm is generally defined as a socioeconomic unit, which provides life and living of the farmer. It is the cultivated area owned by farmer or group of farmers. The farming prevailing in the tract, depend largely upon the local condition, type of soil, irrigation facilities and technical knowledge of the farm family as a matter of fact that the resource i.e. land, labour, capital and management control the farm business. The family compositions of the farm on the basis of sex, age and education have been given in Table 1.

Table showed that the average size of family was 11.61 in numbers. The number of male and female increases with increase in the size of farms with an overall

Table 2: Number of sample farms and their size of holding

Farms size group	Farms selected(No.)	Total holding(ha)	Average
Small farms(<1ha)	60(60)	20.0(23.53)	0.330
Large farms(>1ha)	40(40)	65(76.47)	1.625

Note : Figure in bracket shows percentage

vegetables crops and 49.67% area under other crops were reported on above 1.0 hectare size group of farms.

All the sample farms were growing flower which was suitable to their flowers demand, availability of credit, irrigation, land and other inputs as well as transport and the distance from the market. The Table 3 showed proportion of farms growing marigold was highest followed by Rose, Bela, Tengari and Chrysanthemum. The number of Chrysanthemum growers was lowest. The area under different flowers crops that was marigold accounts for the highest share in total area under flower, followed by Rose, Bela, Tengari and Chrysanthemum. It was also observed that the exception of marigold area under other flowers crop was lowest on large farms than on small farms. The operation cost of cultivation of marigold flowers is present in table 4. This table showed that overall operation cost was Rs. 28222.00. It was found to be greater in small size group in composition to large size group. The break up of per hectare overall operational cost revealed that the cost of application of manures and fertilizers was highest which come to Rs.4355.00 accounting for 15.43 percent of total overall operation cost. Flower plucking and collection, weeding or hoeing, transplanting, nursery raising were the other

Table 3: Proportion of sample farms growing different flowers

Farms size Group	Total Number of farms	Different flowers				
		Marigold	Rose	Bela	Tengari	Chrysanthemum
Small farms (<1 ha)	60 (60.00)	60 (60.00)	40(61.54)	30(60.00)	30(66.67)	20(66.67)
Large farms (>1 ha)	40(40.00)	40(40.00)	25(38.46)	20(40.00)	15(33.33)	10(33.03)
Total	100(100.00)	100(100.00)	65(100.00)	50(100.00)	45(100.00)	30(100.00)

Note : Figures in parenthesis show percentage

Table 4: Operational cost of marigold crop cultivation (In Rs.)

Particulars	Size group of far		Overall
	Small (<1ha)	Large farms (>1ha)	
Ploughing	2945	2400	2672.5(09.47)
Harrowing	1370	1140	1255.0(04.45)
Sowing	1600	1610	1605.0(09.54)
Nursery growing	3195	2180	2687.5(09.54)
Transplanting	5225	2345	3785.0(13.41)
Manures and fertilizers	4330	4380	4355.0(15.43)
Irrigation	1815	1060	1437.5(05.09)
Flowers plucking and colle	5324	3250	4287.0(15.19)
Other	2000	2000	2000.5(07.09)
Total	33029	23415	28222.0(100.0)

Table5: Material cost of marigold cultivation (In Rs.)

S. No.	Particulars	Size group of farms		Overall
		Small farms (<1ha)	Large farms (>1ha)	
1	Seed	340	340	340(00.98)
2	Manures and fertilizers			
	i FYM	8710	7155	7932.5(22.91)
	ii Urea	3945	3240	3592.5(10.37)
	iii DAP	3630	3655	1025.0(00.30)
	Total cost of manures and fertilizers	17325	15060	16192.5(46.76)
3	Irrigation	9265	6080	7672.5(22.16)
4	plant protection	3120	2725	2922.5(08.44)
5	Others	7500	7500	7500.00(21.66)
	Total	37550	31705	34627.50(100)

Note : Figures in parenthesis show percentage

major component of overall operational cost accounting for 15.19, 14.73, 13.41 9.52 and 9.47% of the overall total operation cost, respectively. In the study area majority of farmers were cultivated mainly the Katakana, Ganelia and Maghi variety of marigold flowers presented in table 5. This table & how's that the overall material cost of marigold production was observed to Rs.34627.50 it was highest on small farms and it decreased with the increase in the size of farms. Overall material cost on variable in puts revealed that the cost incurred on seed was Rs. 34.00 that was below one percent of total overall material cost. The cost of manures and fertilizer was observed highest that was 46.76% of the total overall material cost. Then

irrigation and plant protection that was 22.16% and 8.44%, respectively. In the cost of manures and fertilizer, FYM have important role that was highest near about 23% than Urea, DAP, and Potash cost. The cost of marketing of marigold flowers is presented in Table6. The overall marketing cost was observed Rs.5610.00. It was found that the marketing cost was more on small farms in compression to large farms in mala making. The farmers were plucking the flowers and sale the product after mala making. In the markets two types of mala were found. First small size of mala was found. In small mala, the marketing cost was Rs. 6 per10 pieces and second full size of mala, the marketing cost was Rs.10 per 10 pieces. The small size groups of farms were produced 41185 pieces mala small size and 7610 full size per hectare. The small size groups of farms paid Rs.1235.00 and Rs. 385.00 for small size and full size mala marketing cost. The

Table 6: marketing cost of marigold production (Rs.)

S. No.	Particulars	Size group of farms		Overall
		Small farms (<1ha)	Large farms (>1ha)	
1	Mala making			
	i Small size	1235	1130	1182.5(210.08)
	ii Full size	385	405	395.0(07.04)
2.	Transport cost	3245	2645	2945.0(52.50)
3.	Market entry fee	0645	530	587.5(10.47)
4.	Other	500	500	500.0(08.91)
	Total	6010	5210	5610(100.0)

Note : Figure in parenthesis shows percentage

Table 7: Cost and returns/ha of marigold cultivation  
(In Rs)

S. Particulars No.	Size group of farms		Overall
	Small farms (<1ha)	Large farms (>1ha)	
1. Production			
i. Small size mala no.	41158	37630	39407.5
ii. Full size mala no.	7610	8125	7867.5
Total production no.	48768	45755	47275.0
2. Prices Rs./ 100 pieces (Rs.160.00 small size and Rs.800.00 full size mala)			
3. Gross return (Rs.)			
i. Small size mala	65896	60208	63052.0
ii. Full size mala	60880	65000	62940.0
Total return (Rs.)	126776	125208	125992.0
4. Operational cost(Rs)	33029	23415	28222.0
5. Material cost (Rs)	37550	31705	34627.5
6. Marketing cost (Rs)	6010	5210	5610
7. Total cost (4+5+6)	76589	60330	68459.5
8. Net return (3-7)	50187	64878	57532.0
Output-input ratio	1.66	2.08	1.84

large size groups of farms were paid Rs.1130.00 and Rs.405.00 for small size and full size mala, respectively as marketing cost. The transportation cost covered major portion of marketing that is above 50 percent. The entry fee depends upon the amount of mala bring in the market. Per hectare cost and returns for marigold flowers presented in Table7. This table showed that the overall productions of small and full size mala were observed that the 47275.00 pieces per hectare. Making small size mala on small and large farms were higher than large size mala. The average price of per hundred small mala were estimated Rs. 160.00 and full size mala was Rs.800.00 overall gross return per hectare for marigold flowers crop was estimated Rs.12992.0, which was varied between Rs.126776.00 on small farm and Rs.125208 on large farms. In the total cost included operational cost, material cost and marketing. The total cost was estimated Rs.76589.00, Rs.60330 and Rs.68460 in account of small farms, large farms and overall, respectively. The net return per hectare was estimated Rs. 50187.00, Rs.64878.00 and Rs.57532.00 per hectare in account of small farm, large farm and overall, respectively. The return per rupee of investment were estimated that Rs.1.66, Rs.2.08 and Rs.1.84, in the account of small size, large size farms and overall, respectively.

Table 8: Percentage of farmers sold marigold through different channel

S.No. Marketing channels	%tage of cultivator
1. Channels I (Producer- consumer)	10
2. Channels II (Producer-retailer-consumer)	90
Overall	100

Table 9: Price spread of marigold in marketing channels II (In Rs.)

S. Particulars No.	Size group of farms	
	Small farms (< 1 ha)	Large farms (> 1 ha)
1. Net price received by producer	94.62	94.89
2. Marketing cost incurred by producer	1.68	1.43
3. Marketing cost incurred by retailer	0.80	0.78
4. Retailer net margin	2.88	2.88
5. Consumer price	100	100
6. Producer share in consumer price	94.62	94.89
7. Cost of marketing	5.38	5.11

The disposal pattern of marigold flower through different marketing channels were presented in table 8. This table revealed that the 90% of total marigold cultivator have sold marigold flower through channel II and only 10% sold through channel I. During the investigation, it was observed that the retailer's level the marigold flowers were sold to the consumers in different forms such as flower basket, garlands, bouquet and in other forms demanded by the buyers. The marketing cost and marketing margin (Price spread) may differ from the channel to channel. The marketing cost and margins also depend upon the form in which the product reaches the ultimate consumers. Since, the major amount was sold through channel II hence, marketing cost and price spread was estimated in II channel. The table 9 displayed the details of price spread of marigold flowers in channel II, i.e. producer to retailer to consumer. In channel II marketing cost incurred by the producer in consumer price was found 1.68% and 1.43% on small size and large size group of farms respectively. Total marketing cost comprising marketing cost incurred by the producer marketing cost incurred by the retailer and retailer margin was estimated to 5.38 percent and 5.11 percent on small and large size group of farms, respectively. Producer share in consumer price was 94.62 percent and 94.89 percent on small and large size group of farms respectively.

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