Economics Analysis of Marigold Flowers in Baghpat District of Utter Pradesh

Lalit Kumar Verma*, Nitin Kumar Nag, Arun Solanki, and Pukhraj Singh
Department of Agricultural Economics, J.V. College Baraut, Baghpat, (U.P.)-250611

Abstract:
The Floriculture has assumed a definite commercial status. Its potential as a viable agribusiness has also been recognized. The present study was carried out in Baghpat district of Uttar Pradesh, with the objective to find out the study the cost and returns of Marigold cultivation and major constraints of marigold cultivation. Cost of cultivation showed an increasing trend from marginal to small farms for marigold crop. The overall cost of cultivation for marigold worked out as Rs. 84594 per ha. and it ranges from marginal farms Rs. 82344 per ha. to Rs. 85588 per ha. at small farms. The overall input-out ratio and B/C Ratio was 1:2.18 and 1:1.19 for marigold crop. Overall, family labour income was Rs. 105317 per ha. Family labour income and farm business income was higher at small farms Rs. 105317 per ha. and Rs. 113377 per ha respectively. Overall, farm investment income was found to be Rs. 108618 per ha. The response of farmers about marigold production constraints namely High Price of fertilizers and insecticides, Lack of Labour, Attack by pest and diseases, Lack of scientific knowledge and training, Environment related problem, Instability in yield problem in farm production.

Keywords : *Floriculture, cost of cultivation and cost concepts.*

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 is like Maharastra, Uttar Pradesh and Madhya Pradesh. 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. Marigold, belonging to family Asleraceae, is an important and popular flower of India and ranks third in number after roses and chrysanthemum. Most of the farmer's livelihood solely depends on the income from Marigold cultivation. The farmers in this area are having more than ten years of experience in marigold cultivation and in early days they were practiced only the conventional way of cultivation and also they don't have enough knowledge on the new advanced method of cultivation. Because of their lack of knowledge and awareness about modern management practices and inefficient and indiscriminant use of inputs they have faced the problem of reduction in productivity of Marigold. People sometimes use flowers all told their ceremonies like wedding, birthday, and marriage day greetings, religious offerings and sometimes in social, political, and historical occasions. The universal usage has created a real trend of producing flower on a commercial basis to fulfill increasing demand within the market. Flowers grown in Rajasthan are exported to Japan, Holland, Singapore, Mouritious, U.A.E. Germany and Switzerland. In U.P. Meraut, Baghpat, Saharanpur, 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 and flower products.

METHODOLOGY

The present study is based on an analysis of primary data at the Baghpat district of western Uttar Pradesh. The Binauli block was selected for present study. The study covered 3 village (Barnawa, Binauli, and Bijwara). And it covered 60 growers (each village 20 growers) in the selected villages. Data collected for study pertaining to the period 2017-18. Primary data was collected from selected Marigold growers through personal interview method with the help of pretested schedules. Collected data were tabulated according to need and purpose of study. Simple tabular analysis was made. To workout economics of marigold production, different cost concept such as cost 'A', cost 'B' and cost 'C' were used.

Cost A1 = All actual expenses in cash and kind incurred in production by the producer. The items covered in costs on:

i) Hired human labour, ii) Hired bullock labour, iii) Owned bullock labour, iv) Home produced/purchased seed, v) Plant protection chemicals, vi) Home produced/purchased manure, vii) Fertilizers, viii) Depreciation on farm machinery, equipment and farm building, ix) Irrigation, x) Land revenue, land development tax and other taxes, xi) Interest on working capital, xii) Interest on crop loan and xiii) Miscellaneous expenses.

Cost A2 = Cost A1 + Rent paid for leased-in land

Cost B1 = Cost A1 + Interest on value of owned capital assets (excluding land)

Cost B2 = Cost B1 + Rental value of owned land (net of land revenue) and rent paid for leased-in land

Cost C1 = Cost B1 + Imputed value of family labour

Cost C2 = Cost B2 + Imputed vale of family labour

Cost C3 = Cost C2 + 10 per cent Cost C2

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 farmering 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 economics of marigold crop is presented in table 1.1 It clearly shows that the cost of cultivation per hectare of marigold seed production. Over all, on an average the cost of cultivation per hectare of marigold was marginal Rs. 82344.48, small Rs. 85588.14 and overall Rs. 84594.04 per hectare.

Table 1.1: Input wise cost of cultivation of Marigold Flower. (Rs/ha)

S/No.	Particular	Marginal		Small		Overall	
		Variable cost					
1	Family Labour	7011.08	(8.51)	3765.1	(4.40)	4759.95	(5.63)
2	Hired labor	20478	(24.87)	21491.6	(25.11)	21180.94	(25.04)
	Total Lobour Cost	27489.08	(33.38)	25256.7	(29.51)	25940.89	(30.67)
3	Machine charges	5902.07	(7.17)	7084.27	(8.28)	6721.94	(7.95)
4	Planting Material	18562.5	(22.54)	20062.6	(23.44)	19602.88	(23.17)
5	Manures & Fertilizer	14600.3	(17.73)	15799.4	(18.46)	15431.9	(18.24)
6	Plant protection	2877.11	(3.49)	3513.08	(4.10)	3318.16	(3.92)
7	Irrigation	3665.51	(4.45)	3771.42	(4.41)	3738.96	(4.42)
8	Interest on working capital	1542	(1.87)	1692.44	(1.98)	1646.33	(1.95)
	Total	**74638.57**	**(90.64)**	**77179.91**	**(90.18)**	**76401.06**	**(90.31)**
		Fixed cost					
1	Revenue	12	(0.01)	12	(0.01)	12	(0.01)
2	Depreciation	112	(0.14)	125	(0.15)	121.02	(0.14)
3	Rental value of land	7333.33	(8.91)	8000	(9.35)	7795.67	(9.22)
4	Interest on fixed capital	248.58	(0.30)	271.23	(0.32)	264.29	(0.31)
	Total	**7705.91**	**(9.36)**	**8408.23**	**(9.82)**	**8192.98**	**(9.69)**
	Grand total	**82344.48**	**(100)**	**85588.14**	**(100)**	**84594.04**	**(100)**

*Figure in parenthesis show percentage

1. Cost concept at sample households

The cost and returns on the basis of cost concept in the production of Marigold is presented in Table 1.2 On an overall Cost-A1, Cost-A2 Cost-B1, Cost-B2, Cost-C1, Cost-C2, and Cost-C3 as Rs. 71774.13 per ha., Rs. 71774.13 per ha., Rs 72038.38 per ha., Rs. 79834.09 per ha., Rs.76798.37 per ha., Rs. 84594.04 per ha., and Rs. 93053.44 per ha. for marigold respectively, on the sample farms. All costs were comparatively higher at small farms followed by marginal farms.

Table: 1.2: Cost on the basis of cost concept at sample households (Rs./ha.)

Break up cost	Marginal	Small	Overall
Cost A1(All actual expenses)	67751.49	73551.81	71774.13
Cost A2=Cost A1+ Rent paid for leased in land	67751.49	73551.81	71774.13
Cost B= COST A1+Intrest on fixed capital + rental value of land	75333.41	81823.03	79834.06
Cost B1=Cost A1+ Interest on value of owned fixed capital	67999.72	73823.53	72038.38
Cost B2= Cost B1+ Rental value of owned land & Rent paid for leased in land	75333.4	81823.04	79834.09
Cost C = Cost B + imputed value of family Labor	82344.49	85588.13	84594.01
Cost C1=Cost B1 + imputed value of family labor	75011.15	77588.14	76798.37

Cost C2= Cost B2 + imputed value of family labor	82344.48	85588.14	84594.04
Cost C3= Cost C2 + 10% of Cost C2 on account of managerial function performed by farmer	90578.93	94146.95	93053.44

2. Yield, cost and return of Marigold at the sampled farms

The yield, value of output per hectare and cost of production per quintal of marigold on the sample farms have been worked out in table 1.3. It indicates that the overall yield per hectare of marigold was 84.16 quintal on the sample farms. The overall cost of cultivation per ha was Rs. 84594.04. Net return was Rs. 100557.99. Family labour income was Rs. 105317.94. Farm business income was Rs. 113377.87 and Farm investment income was Rs. 108618.

Table: 1.3: Yield, cost and return of Marigold on the sample farm (Rs./ha.)

S/No.	Particulars	Marginal Farmers	Small Farmers	Overall
1	Average yield (qt.)	80	86	84.16
2	Average price (Rs/kg.)	22	22	22
3	Cost of Cultivation(Cost C)	82344.48	85588.14	84594.04
4	Cost of production/qt.	1029.30	995.21	1005.16
5	Gross return	176000	189200	185152
6	Net return	93655.51	103611.87	100557.99
7	Family labor income (Gross income-Cost B)	100666.95	107376.97	105317.94
8	Farm business income=Gross income-Cost A1	108248.51	115648.19	113377.87
9	Farm investment income= Net income + rental value of own land + interest on fixed capital	101237.4	111883.1	108618
10	Input output ratio	1:2.13	1:2.21	1:2.18
11.	B/C Ratio	1:1.14	1:1.21	1:1.19

3. Income over different cost at sampled farms

The incomes over different costs were also worked out (Table 1.4). The overall per hectare income over Cost-A1, Cost-A2, Cost-B1, Cost-B2, Cost-C1, Cost-C2 and Cost-C3 calculated was Rs. 113377.87, Rs. 113377.87, Rs.113113.58, Rs. 105317.91, Rs. 108353.63, Rs. 100557.96 and Rs.92098.56 respectively.

Table 1.4: Income over different cost at sampled farms (Rs./ha.)

S/No.	Income over Different Cost	Marginal	Small	Overall
1	Income over Cost A1	108248.51	115648.19	113377.87
2	Income over Cost A2	108248.51	115648.19	113377.87
3	Income over Cost B1	107999.93	115376.96	113113.58
4	Income over Cost B2	100666.6	107376.96	105317.91
5	Income over Cost C1	100988.85	111611.86	108353.63
6	Income over Cost C2	93655.52	103611.86	100557.96
7	Income over Cost C3	85421.07	95053.05	92098.56

CONCLUSSION

1. The average size of holding of marigold growers was 1.12 ha. It calculated 0.72 ha for marginal farmers and 1.51 ha for small farmers.
2. The overall total cropped area was found to be 1.12 ha. The total cropped area for marginal and small farmers was observed to be 0.72 and 1.51 ha, respectively.
3. The cost of cultivation per hectare of marigold was calculated to be Rs. 82344.48 and Rs. 85588.14 for marginal and small farmers respectively. The cost of cultivation per hectare showed rising trend with the rise in farmer's size.
4. The average input-output ratio and B/C Ratio of marigold was calculated to be 1:2.18 and 1:1.19.
5. The farmers having less quantity of marigold sold their produce to the commission agents at the rate of Rs.2200.00 per quintal just after harvesting the marigold.

REFERENCES

[1] Ajjan N. and Selvary K.N. (1999). An Economic analysis of production and marketing of cut flower in Nilgiri district, Tamilnadu. India J. of Agriculture marketing, 13(2);52

[2] Dhilon A, Khatkar RK, Kumar A. (2005) Marketing Costs and Price Spread for Marigold Flower in Haryana. India Journal of Agricultural Marketing; 48(1):9-12.

[3] Gajanan T.M. and Suruhmayam K.V. (1999). Marketing of cut flower: A case study of Gladiolus in Karnataka. India Journal of Agriculture marketing, 13 (3) : 61.

[4] Goyal S.K. (1999). Economic of Rose cultivation and its marketing in Sonepat district of Haryana state. India Journal of agriculture marketing. 13 (3) : 44.

[5] Guledgudda, S.S. and Hosamaini S.B. (1999). Economic analysis of cut flower in Dharwad district, Karnataka, India Journal of Agriculture marketing, 13(2) : 36 .

[6] Gurg and Sharma (2000). Economics of marigold cultivation in Punjab. Floriculture Today,39 (1) : 39

[7] Kumar, A., Verma, S.C., Chaurasia, Shilpi. and Saxena, S.B. (2013). Production and marketing of marigold flowers in Uttar Pradesh with special reference to Kannauj district. HortFlora Research Spectrum Vol.2 No.3 pp.220-224

[8] Raju Gupta, Pawan K. Sharma, Ajay Kumar, Punit Choudhary and Poonam Abrol. (2018). Appraisal of Cost-Effective Return from Marigold Flower Grower in Jammu District, India. Int. J. Curr. Microbiol. App. Sci. 7(08): 4586-4591.

[9] Sharma M.K. (2014). Economic Analysis of economic Flower Cultivation in Sirmaur District of Himachal Pradesh. Agricultural Economics Project report, Chaudhary Sarwan Kumar Himachal Pradesh Krishi Vishvavidyalaya Palampur. 85-102

[10] Singh A.K., Singh M.K., Singh R.J. (2013). The Economics of marigold flowers in Eastern Uttar Pradesh, Journal of Rural and Agricultural Research; 13(2):75-78.